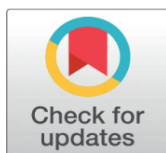
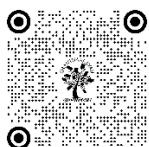


MEASURING GREEN / SUSTAINABLE CONSUMPTION HABITS AMONG E-SHOPPERS

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ABSTRACT

Green consumerism assures the sustainability in consumer behaviour by which they safeguard the environment by opting more eco-friendly products. It starts from the production of eco-friendly products and continues through its process, promotion and packaging all ensuring environment protection. Business concerns have started strategically claiming their offerings as environmentally friendly products. Today, it is noticed that a change in the social behaviour of the modern generation encouraged to consume products which dis-harm the environment. People became more responsible towards maintaining the health of nature and wellness of the environment. Green consumption habit brings a healthy balance between businesses' profit aims and customers' sustainable behaviour. The main focus of this study is to find out the changing preference in the behaviour of online shoppers towards green consumption. A well administered questionnaire is distributed to collect the data on how consumers perceive green consumerism and to find out their readiness to accept eco-friendly products. From this study it is clearly understood that the customers are aware of the green and organic products launched on the market and they accept those products for the environment as well as health reasons irrespective of their price. The proposed study can help out to understand the attitude, awareness level and drivers of customer behaviour towards green consumption and how these factors influence us to arrive at a purchase decision. Moreover, the primary data is being collected from a small sample in a small area. Future studies can be conducted and explore other important findings as well. Understanding and predicting human behaviour is a complex task, this was an attempt to figure out customer attitude towards sustainability. It is tried to find out answers to these questions like, how they behave towards green consumption and how much active they are to protect the environment etc. This is the first try out discussing the consumption habits of e-shoppers of customers in Coimbatore district.

Keywords: Green Consumerism, Customer Sustainable Behaviour, E Shopping and Purchase Intension

1. INTRODUCTION

The massive development of industries across the globe resulting in the increased pressure on environmental resources, managers are occupying themselves to fit for the environment and more focused on the 'sustainability'. The rapid increase in the production and distribution of products and services results in the drastic damage to the environment (Tiwari et al., 2011). These impacts are increasingly discussed and authorities proposing with feasible solutions to protect our environment. Therefore, Green Consumerism has got much attention (Kong et al., Paco and Raposo, 2010). GC or green consumerism means a consumer prefers goods or services which in every stage of production, promotion and distribution of goods protects environment. Besides, it benefits the entire globe. It also refers to

the responsibility of consumers towards environment to protect and nurture it for the coming generation [1]. Authorities at all levels has initiated green knowledge campaign programs for creating awareness framed educative agenda to encourage green purchase. a green consumer decides to purchase which cause less harm to all creatures (Kong et al., 2014; Luzio and Lemke, 2013).

Govt and other policy makers can inspire green habits by enhancing moral behavior of customers [8]. the main impacts are firstly the production of organic products and the willingness of poeple to buy green products. Studies shows that Consumer's irresponsible buying patterns hinder the sustainable growth of environment (Peattie, 2001). Companies urge to produce eco-friendly products and using this as a strategical movement to claim themselves an environment friendly company. Thereby creating a good impression that the company saves the environment. Because a firm exposure to green activities ultimately changing the responsible behavior of consumers and their rationality towards healthy choices [10]. Green consumption can enhance to a sustainable development of industry and ensure the optimum utilization of scarce resources [2] Eco friendly company and its products can enhance the overall competitiveness and financial performance in the market (Sushaiza et al., 2016). People became more aware of less harm products (Dangelico and Pujari, 2010; Eltayeb et al., 2011). Researchers say that social media coverage and online presence influence people's buying intensions [11]. Many studies agreed that there is a gap between consumer awareness about green products and their actual purchase decisions [3]. Although mere awareness is not resulting in actual purchase (Kanchanapibul et al., 2014). And taking consumer attitude is not a sufficient indicator of evaluating actual behavior of People [6]. attitude is not the only aspect of purchase behavior but, there are other determinants also (Chen and Chai, 2010; Tsen and Rita, 2006). Studies reveal that income level literacy and other psychological factors also determine green behavior [7]. Consumers' cultural belief also collectively influence their green behavior and healthy habits [9]. increased social status and social power also shaping the consumers' buying intension especially towards green products. Because they have a better control and access over those products [11].

2. RESEARCH GAP

After analyzing the available literature, it is the first study to understand the green consumption habits of online shoppers in the Coimbatore region. Studies have been conducted in other countries gender wise, based on price sensitivity, on motivational models, income levels and national cultural values. This paper focusing on the consumption pattern of young generation in the said region.

3. GOING GREEN

Environmental impacts are more pressure giving discussion of recent days. This earth is facing a lot of pollutions, food waste, plastic waste, e- waste and deforestation. These cause severe ecological im-balance. And also, the consumers become more environment conscious, it put pressure on the companies to produce environment friendly products and services. Customers are ready to adapt to the less- harm products despite of its high cost. Green marketing initiatives are getting a wide acceptance among the consumers. It brings positive influence on their health and whole well-being. Customer's attitude towards green products strongly changes after an environmental issue [5]. Environmentally pro-active customers take initiatives to protect the earth and help to balance the ecology [13]. Sustainable

design: it refers to paying attention to the products' design and how its materials are procured and processed and it's all about the entire life cycle of the product and should cause less harm to the environment. Green pricing: most of the eco- friendly products are priced at high cost because of its sustainable design. Company should intimate and prove to customers that the products are worth the price and involves such specialties. Sustainable packaging: another serious concern is happening due to plastic or non-degradable packaging materials [4]. packaging has a huge role to play with product demand. It attracts customers. While purchasing whether it is online or traditional, consumers want the products nicely packed and delivered. Due to mass commercialization, plastic is the essential component of packing. Plastic waste in packaging is expected to be double in just 3 years. But Studies reveals that only 14% of the entire plastic produce is properly recycled. Therefore, companies as well as consumers should re-think about no-plastic packaging or fully recycled packaging. Closed logistics is the alternative to this problem. instead of short-life plastic, reusable or circular packaging solutions are recommended. The consumers can return the product wrapping or packing to the company by postal service. This appears to be less practical in case of e- commerce. But they should implement this kind of circular logistics. Green consumer behavior: Consumers Purchase and utilize products having low environmental issues and buying organic products which are bio- degradable, recycled or with repeated use and more energy efficient. with the rising disposable income, people spend more on shopping goods and services which are environmentally safe (Schwepker and cornwell,1991). Decision of choice is directly affected from these environmental concerns.

4. OBJECTIVES

The main aims of the research are to find:

- 1) Whether eco- friendly products have any influence on purchase intention of e -shoppers?
- 2) How sustainable behavior encourage green consumption?
- 3) How significant is the customers sustainable behavior in ensuring green consumerism?

5. LITERATURE REVIEW AND HYPOTHESES

This study tries to understand the sustainable consumption habits among e-shoppers. Ecommerce platform now focusing more on harm free packaging. There are alternatives to plastic packing such as corrugated packaging, biodegradable foam packing from nuts and corn- starch and recycled paper and wood boards. The three constraints of the study and the respective hypotheses are shown below.

- 1) **CUSTOMER AWARENESS:** Creating a deep awareness of green products is also challenging for Companies. They make huge investment on the mass advertisement to gain the attention of customers. Companies should make the Customers informed about the green process and should build an image that the company is environment concerned. Proper Awareness of environment friendly products lead to confirmed purchase of the products. From this hypothesis is drawn.
 - **H1:** there is a significant direct relationship between customer awareness and purchase decision.
- 2) **CUSTOMER WILLINGNESS:** Generally eco-friendly products are high priced. Most of the customers are price sensitive. They switch their

choice according to the price fluctuations in products. Therefore, price has a bearing on the purchase of green products. But environmentally concerned customers are not price conscious, they demand green products irrespective of their cost. So, it is essential to find out whether customers show willingness to bear to the high price. The entire product should be easy to use, maintain and dispose. The product should have a green wrapping, and its packaging must have a recycling alternative. The whole sustainable design of the product incurs huge cost to company and ultimately shoulders on customers. Therefore, it is important to study the customer acceptance and willingness to buy green products. For the study this hypothesis is made.

- **H2:** there is a significant correlation between customer willingness and purchase decision.
- 3) **CUSTOMER SATISFACTION:** customer satisfaction is measured by how well their expectations are met by the products. Customer loyalty hugely impact on the success of a business. It helps to increase the chance of retention of customers with the company. If they are happy with the products, they will definitely re purchase and certainly recommend to friends and family. Concerned customers will substitute with green products and contribute to environment sustainability. Companies need to educate the importance of sustainability and satisfy them with suitable products. For better understanding, the following hypothesis is made.
- **H3:** there is a significant relationship between customer satisfaction and habitual purchase decisions.

6. METHODOLOGY

- 1) **Research design:** the research methodology is the methodology used in the research process and techniques applied to find solutions for the problems at hand. It should confirm the whole research validity and reliability of the constructs made. Descriptive mode of analysis applied throughout the study. Smart PLS model is used to analyze the results. Primary data is directly collected from the respondents through a structured questionnaire. This paper also gone through several similar studies done previously. There is an increasing concern on this environment sustainability.
- 2) **Sampling technique:** a clear and structured questionnaire is distributed among the people who are in various age groups. Responses are collected from 116 respondents. Random sampling is not applied due to budget constraints. Therefore, Convenient sampling technique is applied to collect first hand data.
- 3) **Measures:** the study model consists of one independent variable and 3 dependent variables. All the variables are composed of 5 items each. All 5 variable are developed and measured through Likert scale questions. the number 1 stand for the low measure of agreeing and number 5 indicates the highest level of agreeing.

7. CONCEPTUAL FRAMEWORK

Figure 1

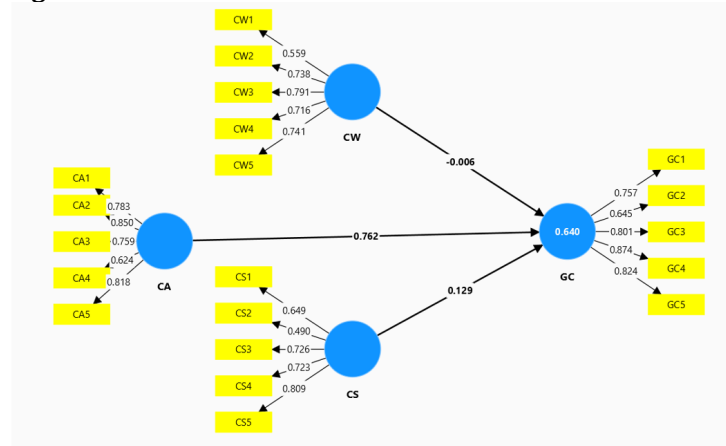


Figure 1 Proposed Model: How These Three Constructs Namely Consumers' Awareness (CA), Consumers' Readiness (CR) And Customer Satisfaction (CS) Influence Their Green Purchase Habits

Influence

Model Fitness: after the reliability and validity of the data got measured, the fitness of model is also to be determined. In smart-pls SRMR, Chi-square, NFI etc., among these, SRMR values are considered the best measure of fitness. Table 1 showing the values of SRMR below, the acceptable limit of < 0.08 therefore, it is concluded as the proposed model is justified with the study.

Table 1

Table 1 Model Fitness		
	Saturated model	estimated model
SRMR	0.874	0.102
d_UL S	1.872	2.198
d_G	0.818	0.873
Chi_square	380.535	393.741
NFI	0.62	0.607

8. MEASUREMENT MODEL

The reliability and validity reveal the study is worthy for further studies. Among the Two model tools, one is Cronbach's alpha and second one is composite reliability were used to test reliability i.e., item and construct reliability. Both indexes were more than the minimum limit i.e.0.7(hair et al.,2019) which signals that all constructs are reliable shown in table 2. Average Variance Extracted or (AVE) figures are all greater than 0.50, indicating all constructs are seem valid. In smart-PLS, tools like the FI criteria, HTMT matrix and factor loadings are used to determine discriminant validity. All the three measures shows that the data are discriminately valid. In short, the measurement model seems satisfactory and appropriate for the analysis of the structure model

Table 2

Table 2 Measures		
construct	codes	items
Green consumerism	GC1	Going green concept is relevant on today's world.
	GC2	Eco-friendly products bring environment sustainability.
	GC3	Green marketing helps to reduce waste and recycle the plastic.
	GC4	Eco-friendly choices can save the planet from the negative effects.
	GC5	It refers to the use of products with lower environmental impacts.
Consumer Awareness	CA1	I can easily identify the brand.
	CA2	I feel safe to use the products.
	CA3	I search for the company details and product genuity.
	CA4	Demote advertisements are Beneficial to society.
	CA5	I bring the advertisement to a social discussion.
Consumer Willingness	CW1	I am willing to use the product/ service.
	CW2	I am aware of the high cost because of its sustainable design.
	CW3	The product is nicely fit to my purpose.
	CW4	The company has a sound plan system of recycling the entire product.
	CW5	It is very convenient to use and dispose the product.
Customer satisfaction	CS1	I definitely share and recommend the product.
	CS2	I feel satisfied by using the product which has low environmental impact.
	CS3	I feel guilty to buy products which are less harm to earth.
	CS4	My preference for the product will be high and will not think of any other substitutes.
	CS5	I continue to use the products and become a loyal customer.

Table 3

Table 3 Construct Validity and Reliability					
Constructs	FL	Cronbach's alpha	Composite reliability(rho_a)	composite reliability(rhc)	AVE
GC1	0.765	0.84	0.857	0.887	0.614
GC2	0.71				
GC3	0.803				
GC4	0.875				
GC5	0.829				
CA1	0.847	0.828	0.843	0.879	0.594
CA2	0.711				
CA3	0.832				
CA4	0.744				
CA5	0.725				
CW1	0.782	0.767	0.806	0.806	0.509
CW2	0.85				

CW3	0.759				
CW4	0.754				
CW5	0.819				
CS1	0.785	0.734	0.737	0.815	0.614
CS2	0.827				
CS3	0.813				
CS4	0.805				
CS5	0.843				

Table 4: the discriminant validity refers to unique of ness each factor from others constructs. (Hamid et al.,2017). It is obtained the factor loadings above the threshold limit for at least above 0.20, therefore conforms validity of factors.

Table 4

Table 4 Discriminant Validity-HTMT Matrix				
	CA	CW	CS	GC
CA				
CW	0.722			
CS	0.284	0.242		
GC	0.531	0.556	0.38	

Table 5

Table 5 Path Coefficients- Mean, STDDEV, T Values, P Values					
	Original Sample(O)	Sample Mean(M)	Standard Deviation (STDEV)	T Statistics	P values
GC -> CA	0.789	0.796	0.036	21.641	0
GC->CW	0.49	0.509	0.066	7.405	0
GC -> CS	0.312	0.348	0.101	3.089	0.002

Source Authors' Calculation

PLS-SEM model is applied to test the model.

9. STRUCTURAL MODEL

The aim of this paper is to find out the habitual buying pattern of customers whether they prefer green products irrespective of its high cost instead of conventional products. This study analyzed the relationship between customer attitude, how readily the customers are ready to buy the green products and whether the customers are satisfied with the green habits and will they continue to purchase environment safe products. The conceptual model showed a fitness of 0.64 which is far greater than minimum value of 0.36, shows the conceptual model framed is satisfactory with all null hypotheses drawn are accepted. among the three constructs taken for the study, it shows a high impact on Customer Awareness with a standard co-efficient of (beta= 0.789, p= 0.000 < 0.05). this means customer awareness plays an inevitable hand in shifting the choice to green products. Secondly, green consumption habits make customer ready to purchase eco-friendly products. emotional advertisement make influence on customer behavior (beta =0.49, p=0.000, <=.05) all other outcomes are displayed in table 5.

10. RESULTS AND DISCUSSION

The conceptual model was tested by applying smart-PLS. switching the choice to green products is possible only through proper product awareness, making them super convenient to use and dispose ready the products and continuously satisfying the customers. Companies strategically motivating the customers to prefer green habits and ethically make them feel doing good to the earth. Table 1 showing factor loadings, reliability & validity and AVE of all constructs. Factor loadings and composite reliability of all constructs are shown greater than the threshold limit i.e. 0.7 therefore, revealing the convergence validity according to (Hair et al.,2010). Coming to AVE, this study identified that the AVE values are at least above 0.50. as presented in table 2, the squared root of all AVE values is more than correlation of constructs. Hence says it has an adequate discriminant validity. According to the findings, customer awareness is the most influencing factor which leads to green purchases. Because proper education and accurate awareness about the available green and less harm products make customers more ethical and responsible towards the globe. Awareness and purchase decision are positively correlated.

11. FUTURE DIRECTION AND LIMITATION

This study has some taken only 3 constructs for analysis. here only one analysis model is applied to run the data tested. If any other model was applied. there would be changes in results also. Other determining factors are not considered. Finally, only a sample of 95 respondents from population are analyzed. If the sample size is taken large, the results will assume to change.

Green marketing is promoting environmentally safe products and having positive impacts on the earth. Consumer behavior is dynamic and very complex to predict and interpret. Several theories are developed from years ago to guide in analyzing customer purchase behavior in a better way. Although, Understanding the behavior and their motives require more scientific analysis in this field which better help to know the behavioral pattern or habits towards green consumption. Current study can be further expanded to various areas with more influencers to justify the result obtained. Profiling the responses of customers towards green practices based on gender wise or age wise or according to their spending pattern or cultural/ lifestyle values can also bring under study.

12. CONCLUSION

Green consumerism refers to encouraging sustainability through marketing of products right from the initial stage i.e., from environment safe inputs to final delivery of end goods to target consumers. This paper Ecommerce industry is improving its waste management system and focusing more on producing bio-degradable products and its package with less plastic. Companies morally encouraging customers to follow healthy and green practices. they are trying to make available eco-friendly products more affordable. Ultimately making customers responsible for the wellbeing of the plant. This current study was conducted to have a better comprehension of green consumption habits of online shoppers. It is found that customers are aware of new green or organic products available in the market, and they are willing to buy them even at high price. And once they are satisfied with products, will continue to become loyal customers of the company.

CONFLICT OF INTERESTS

None.

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