

Consumers Purchase Behaviour Towards Green Products in Cuddalore District, Tamil nadu

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ABSTRACT

Consumer engage in environmental behaviour as a result of their desire to solve environmental problem, to become role models and a belief that they can help to preserve the environment. However, consumers' indications of positive attitude towards environmental issues do not necessarily lead to actual environmentally friendly purchasing behaviour. Majority of consumers do not purchase products based on the environmental concern alone and they will not trade-off other product attributes for a better environment.

There is little empirical evidence to suggest that the environmental values and attitudes are congruent with the consuming public actions towards green products. In addition, most studies have focused on the general environmental behaviour instead of specifically on consumers purchasing behaviour towards green products. Therefore, gaps exist in the literature with regards to understanding consumers purchasing behaviour towards green products. This research empirically examines the factors impacting consumers purchasing behaviour toward green products in Cuddalore District. The research also identifies factors that discriminate between those who purchase green products and those who don't.

Keywords: Consumer Behavior, Green Marketing, Environmentally Friendly Products, Logistic Regression.

INTRODUCTION

Businesses and consumers today confront one of the biggest challenges – to protect and preserve the earth's resources and the environment. They have become more concerned with the natural environment and are realizing that their production and consumption purchasing behaviour will have direct impact on the environment. This awareness is congruent with the belief that the world's supply of natural resources is finite and the ecological balance of the environment may be at a critical disruption stage. In addition, the great majority of our environmental problems – excess garbage, pollution, waste of energy and material, etc. are the result of consumers' consumptive behaviours.

The preferred mechanism for preserving the global and local environment is internalizing producers and consumer's practices and activities that have a negative effect on the environment. This mechanism takes the form of environmental standards such as the polluter pays principle, environmental taxes and penalties, and ecolabelling on products (also called environmental friendly products). Ecolabelling (also known as green labelling) has grown and spread over a number of countries (e.g., Germany, Singapore, India, United States, and Japan) and could be an effective tool in mitigating environmental problems. At present, however, the role of ecolabelled products has been viewed as modest and is seen simply as a part of a broader environmental agenda in most government regimes. With a better understanding of consumers' attitudes and behaviours, it will help correct the problem currently facing the environment and create markets for green products and services.

Peoples engage in environmental behaviour as a result of their desire to solve environmental problem, to become role models and a belief that they can help to preserve the environment. However, the consumers' indications of positive attitude towards environmental issues do not necessarily lead to actual environmentally friendly purchasing behaviour. Majority of consumers do not purchase products based on the environmental concern alone and they will not trade-off other product attributes for a better environment.

Green environmental issues and green awareness in terms of food choice, green management, green branding, and green consumer choices have been of topical interest worldwide for some time now (Lin & Huang, 2012). Although the research on green awareness or green orientation is relatively limited, especially in developing countries such as India. India is big economy where the education level is relatively high and the economic condition is growing at a steady rate. Also, India is fast growing economy due to its huge market base and that is the reason, it attracts lots of industrialists and foreign companies. Interestingly, India once upon an agricultural based economy but it has advanced to a technologically advance economy in recent years as well.

Environmentally Conscious Consumer

The environment has become a critical issue that is influencing how products are developed, marketed, and disposed of. Previous research has shown that 84% of consumers expressed concern on issues related to the environment and some

consumers are changing their consumptive and purchasing behaviours because of their concern (Schlossberg, 1990; Fisher, 1990).

Consumers in general will purchase products and services with a mix of attributes including environmental attributes that maximizes their utility. However, not all consumers are willing to pay a higher price for green products. This implies that consumers derive greater utility from the price and quality attributes rather than environmental attributes alone. The consumers may be willing to purchase the environmentally friendly products within certain constraints. However, huge price differentials and inconveniences associated with environmentally friendly products may deter consumers in buying them.

Factors Affecting Consumer Purchasing

Consumers do not base their purchasing decision on environmental concern alone. Product attributes such as convenience, availability, price, and quality play a more important role in the consumers' purchasing decision process and also found that price was the most important attribute in American consumers purchase decisions for wood furniture. Their study also found that typical respondent is willing to sacrifice environmental certification for the sake of a lower price.

Review of literature

Ajzen (2022) points out that a performance of a behavior has some non-motivational determinants as well such as time and money which gives the people control over the particular behavior. (It has to be mentioned that time aspect is not suitable to study in this paper due to time limitation and the complexity of this factor.) In addition, believes that intentions itself is sufficient to predict behavior and it is explained particularly by the TRA. Furthermore, attitude to the target behavior and subjective norm predict the person's behavior.

Welford (2022) described the green marketing as a management process of identifying, anticipating and satisfying the consumers' needs and wants while being sustainable as well as profitable. Despite the growing body of literature focusing on green marketing, a universal definition remains elusive with many heterogeneous definitions remaining in use, depending on the researcher's perspective.

Peattie (2021) analysed and classified green consumer needs in four categories including having knowledge and information, preserving their choice of lifestyle, desires to be substantive and the desire to control. These needs are classified in a way that they are met by what the market has to offer. To understand how people are motivated in their decisions to achieve their needs, Maslow's Hierarchy of needs includes motivational needs at different hierarchical levels in a pyramid. They can be classified as, physiological, safety, love and belongingness, esteem and self-actualization needs

Laroche et al., (2021) stated that the value that individuals hold would influence his/her behaviour. For example recycling is a behaviour that individuals must do, even though the immediate rewards for engaging this behaviour is low. Therefore, if an individual engages in recycling, it can be expected to be driven by strong values. Hence, the clearer understanding of environmental friendly behaviour can be gained by considering this value impact.

Haws et al. (2020) identified environmental consciousness like - consciousness about impact of products on environment, considering impacts of personal actions on environment, linking purchase habits with environmental protection, concerned about waste, commitment to environmental protection, and willing to take environment friendly actions. Earlier studies which have used the TPB model for green/eco-friendly purchase intention, have neglected the impact of environmental concern and environmental knowledge on consumer purchase decision.

Dahlstorm (2011) and Ottman (2011) have characterized green marketing as an integration of ecological concerns into marketing aspects including production, distribution and logistics, promotion and packaging along with marketing communications.

Research Problem

Report a gap in customers buying habits which is referred to a value action gap. This value action gap is typically where customers are concerned about environmental issues but have a hard time interpreting it when making a purchase. In the same way, there has been a slight growth on green purchasing since 1990, they also identified a significant gap between concerns and actual purchasing among customers.

It is important to increase people's environmental awareness and consciousness, because as customers, they can impact the environment through their positive purchasing decisions. further argues that the growing number of customers and consumers who prefer and are willing to buy Eco-friendly products are creating opportunities for businesses that are using "Eco-friendly" or "environmentally friendly" as a component of their value proposition.

Considering the fact that printers produce carbon foot prints, the authors have decided to conduct their research on the consumers purchasing behaviour towards green products. Thus, finding the factors that can influence the consumers green purchasing intentions towards green products in the market became the main problem statement for this research.

Research Objective

Understanding the consumer purchase behaviour towards green products within the Cuddalore District.

To identify the consumer expectations and purchasing trends related to green purchasing.
To study the consumer awareness in relation to social, environmental and age groups across the green consumers in studied area.

Research Methodology

Bryman and Bell (2007) believe that for studying the social facts, quantitative approach is suitable. Hence, in order to be able to answer the research question about the factors involved in green purchasing behavior towards buying Eco printers, which is categorized as social behavior, the “quantitative” research methods has been chosen by the authors. The aim of quantitative research is to classify features, count them, and construct statistical models in an attempt to explain what is observed; this approach involves analysis of numerical data. In this research, collecting and critical reviewing of the data that have found through the survey approach (which deals with numbers and statistical tools) and secondary data helped the authors in understanding, analyzing and interpreting to obtain the final result.

Data Collection Method

In general, there are two ways of collecting data, primary and secondary. In this research, both of these data collection techniques were used to obtain the best possible answer for the research question. Biggam (2008) says that it is not only the research approach that determines the quantitative or qualitative nature of research, but it is combination of research strategy, research purpose and data collection techniques

Primary Data

The authors gathered most of the data, which was needed for this research, based on primary data collection. The primary data were collected by the questionnaires. According to Ghauri and Cateora (2010), primary data is the one which is collected by the researchers at hand also defines primary data as one that is originated by the researcher for the specific purpose of addressing the problem at hand.

Questionnaire

A questionnaire can be presented in several forms such as by mail, where the questionnaire is sent to the respondent's mailbox and can also be handed out in certain locations or to certain groups (Bryman and Bell, 2007). This research questionnaire was distributed primarily online, using the university E-mail databases, social networks such as facebook and Gmail. Also the survey has been run offline by the authors in the target city centers and malls. The authors also considered the places where they could find potential consumers for printers like electronic stores at shopping malls etc in the target cities. The questionnaires were distributed among people of different age groups. To achieve diversity, the data has been collected from Cuddalore City.

Questionnaire Design and Sample Size

The questions in the survey were designed based on the conceptual framework. Each question has been analyzed from different aspects and also due to sensitivity of the topic (green behavior) authors designed few questions to distinguish the reliable responses.

Data Analysis.

The analysis of data is an ongoing and repetitive process (Miles and Huberman, 1994). Using a quantitative approach will help to perform the data comparison and data analysis. Analysis of primary and secondary data will give a proper answer to the research questions.

The data analysis has different phases. In the first phase, data collection, the data were gathered from primary and secondary sources. In the second phase, data reduction, the authors organized and transformed the data and the findings to draw the reasonable conclusions. In the third phase, data display, the authors organized the data into different categories based on the conceptual framework. The last phase, conclusion drawing, the verification, explanation, and writing process of the study were conducted.

Empirical Analysis

The 74.5% of the respondents indicated that they purchased green products, while 25.5% of the respondents indicated they did not purchase green products. The respondents were also asked to indicate their intention to purchase green products in the future. A significant proportion (63.2%) of the respondents indicated that they are somewhat likely or very likely to purchase green products in the future, while only 27% of them indicated that they are somewhat unlikely or very unlikely to purchase green products in the future. Impact of price consciousness, quality consciousness, environmental consciousness and brand loyalty on consumer purchasing decisions towards green products.

The estimated results are presented in Table 1. In general, the model fitted the data quite well. The chi-square test strongly rejected the hypothesis of no explanatory power and the model correctly predicted 82.2% of the observations. Furthermore, environmentally friendly and brand consciousness are statistically significant and the signs on the parameter estimates support the priori hypotheses outlined earlier.

Table 1. Impact of price consciousness, quality consciousness, environmental consciousness and brand loyalty on consumer purchasing decisions towards green products.

Variables	Coefficients	Std. error	t-test	Marginal effects
Constant	4.018	1.231	4.415 *	0.454
Brand	-0.306	0.144	-2.136 *	-0.052
Environmental	1.833	0.239	7.714*	0.311

Source: primary data computed (* significant at 0.05 level)

The results in Table 1 show that Environmental Consciousness and Brand Consciousness are statistically significant and the signs on the parameter estimates support the priori hypotheses outlined earlier. For example, Environmentally Consciousness positively impacts consumers' purchasing decision on green products and the marginal effect of Environmentally Consciousness on the probability of consumers purchasing green products is 31%. The result is consistent with Roberts's (1996) findings whereby environmentally conscious consumers are expected to score higher than those not so environmentally conscious.

On the contrary, Brand Consciousness negatively impacts consumers' green product purchasing decision and the marginal effect on the probability of consumers purchasing green products is -5.1%. Consumers who have developed brand loyalty to other conventional brands are also less likely to purchase green products. This may be because brand loyalty is hard to break; consumers who are brand loyal are less likely to switch to other brands or try new products. However, Price Consciousness, and Quality Consciousness are not significant. The results contradict that price and quality have significant effect on consumers' green purchasing decision. This finding may be attributed to that most consumers. In Cuddalore District customers are already price and quality conscious towards both green and non-green products, therefore not revealing significant consciousness of these two attributes on green purchasing behaviour the findings in the literature

Validity and Reliability

It is important to consider the available methodologies, which focus on reliability and validity. Reliability refers to the degree of the results' consistency under the same conditions was the same research to be repeated. Validity refers to the strength of the used research materials, which concludes the results of the research.

In terms of validity, for primary data, the authors of this thesis designed the survey with the strategically questions such as question 10 and 13, whereby the authors can identify the honesty level of the respondents. Hence, the authors disqualified untruthful responses which the disqualification process was easy due to using mostly online survey. In secondary data, the authors made a limit to mostly use the new literatures, with an exception about the established TRA theory.

Recommendations

In order to gain the people's trust and belief in green products' performance, green products manufacturers' can design and open the testing stores for general public to use the Eco products for free and unlimited in the store area. Testing stores provide both sales and opportunities of testing the devices to general public.

The green products manufacturers should include the Eco labels and place them more appropriately on their products which can be easily viewed and identified by the consumers and customers

Limitation and Scope of Further Research

Due to the limited time frame, it was quite impossible to reach and fully study all the different factors that can influence the consumers green purchasing behaviour within the Cuddalore District market such as personal culture, financial issues. Also the authors have only spread the questionnaires by whatsapp, social networks or on the ground in the shopping areas. Another limitation that can be pointed out is about the green area sensitivity and its impact on people reaction, which the authors tried to distinguish actual and ideal respondents' personalities by different questions to get the more reliable answers.

In the future, the same research can be continued with a bigger sample size and more detail factors such as the society's and individual's culture in order to get a better understanding of the social pressure that has been made by the personal values and psychological issues. Financial influence on purchasing behavior can be studied in more detail to get a better analysis of the strength of this determinant. Moreover, detailed studies on Eco brand loyalty are suggested

Conclusion.

Summarizing the discussions, the authors have concluded by answering the research question that there are several other determinants which can influence the green purchasing intentions besides TRA determinants (individuals' attitude and social influences). Among these determinants, green knowledge and Eco literacy, attitude and green belief, environmental laws and guidelines and willingness to pay are identified as strong influencing factors followed by demographics. In purchase of green marketing products, consumers should have the awareness of the products marketed in green marketing. Marketers try to influence each of these decisions by providing information that can assist in the

product review. It is therefore of great importance for consumers to develop this green awareness. Preceding research studies have been conducted on the consumer's perception towards green products. However, subjective norms and social influence found as a weak one.

References.

1. Maslow, A.H. (1943) 'A theory of human motivation', *Psychological Review*, 50(4), 370–396.
2. Ajzen, I. (1991) 'The theory of planned behavior', *Organizational Behavior and Human Decision Processes*, 50(2), pp. 179–211.
3. Peattie, K. (2001) 'Golden goose or wild goose? The hunt for the green consumer', *Business Strategy and the Environment*, 10(4), pp. 187–199.
4. Welford, R. (2000) Hijacking Environmentalism. London: Earthscan. Furniture: A conjoint analysis approach", *Forest Product Journal*, 54 (3), 42-50.
5. Antil, J.H. (1984). "Socially responsible consumers: Profile and implications for public policy", *Journal of Macromarketing*, 4 (2), 18-39.
6. Assael, H. (1987). *Consumer Behavior and Marketing Action*, Third Edition, PWS-Kent Publishing Company, Boston, Massachusetts.
7. Balderjahn, I. (1988). "Personality variables and environmental attitudes as predictors of ecologically responsible consumption patterns", *Journal of Business Research*, 17 (August), 51-56.
8. Ben-Akiva, M. and Lerman, S. (1985). *Discrete choice analysis*, MIT Press, Cambridge.
9. Bigsby, H. and Ozanne, L.C. (2002). "The purchasing decision: Consumers and environmentally certified wood products", *Forest Product Journal*, 52 (7/8), 100-105.
10. Blamey, R.K., Bennett, J.W., and Louviere, J.J. (1999). "Validation of a choice model involving green product choice", In *Choice Modelling Research Reports*, School of Economics and Management, University College, The University of New South Wales, Canberra, Australia, No. 10, May, 1-28.
11. Blend, J.R. and van Ravenswaay, E.O. (1999). "Measuring consumer demand for ecolabelled apples", *American Journal of Agriculture Economics*, 81 (5), 1072-1077.
12. Thøgersen, J. (2002). Promoting 'green' consumer behavior with eco-labels, In Dietz, T. and Stern, P. (Eds). *New Tool for Environmental Protection*, National Academy Press, Washington DC., 335-348.
13. Cary, J., Bhaskaran S. and Polonsky, M. (2004). "Green marketing and EMS: Assessing potential consumer influence on EMS development in fresh food chains: A report for the Rural Industries Research and Development Corporation". RIRDC publication, No. 04/175. Barton, A.C.T.: RIRDC.
14. Parker, H., Rowlands, I. & Scott, D. (2003). Consumer Behaviour in Restructured Electricity Markets. *Journal of Consumer Behaviour*, 3(3), 272–283.
15. Peattie, K., & Crane, A. (2005). Green marketing: legend, myth, farce or prophesy? *Qualitative Market Research. An International Journal*, 8(4), 357-370.
16. CHAN, Ricky YK., and Loretta BY LAU. Explaining Green Purchasing Behavior. *Journal of International Consumer Marketing* [online]. 2002, 14(2-3), 9-40.
17. CHEAH, Isaac and Ian PHAU. Attitudes towards environmentally friendly products. *Marketing Intelligence & Planning* [online]. 2011, vol. 29, issue 5, pp. 452-472.