

# IMPACT OF GREEN MARKETING ON BUYING BEHAVIOUR OF CONSUMERS OF CHENNAI CITY - AN EMPIRICAL STUDY

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## ABSTRACT

This paper emphasises on Green marketing practiced by companies that are committed towards sustainable development and corporate social responsibility. Majority of the organizations are taking efforts for implementing sustainable business practices because they recognize that products can be manufactured by infusing green initiatives suitably to satisfy the consumers preferences and minimize expenses on energy/water usage, packaging, transportation, etc. Attitudes of the consumers are changing towards environment protection, with a view to encourage innovation for conservation and the benefits that are derived from this source of innovation are certain to outlive the current generation. Green marketing involves multiple activities. This paper investigates the attitudes and beliefs of the customers on environment protection and their buying behaviour of eco-friendly products.

The primary data was collected using Questionnaires from 120 Respondents which included questions associated with general information relating to assessment of factors impacting green marketing on buying behaviour of consumers in CHENNAI City. Under general environmental beliefs, the mean value of “Existence of plants and animals are primarily to be used by human beings” is 6.80 which is the highest. Whereas the mean value of “There are limits to which our industrialized society can expand” is 4.66 is the lowest. Under consumer environmental behaviour, the mean value of “Take your own bags to the supermarket” is 4.90 at the lower end and the mean value of “Use biodegradable products” is 4.180, the highest. Under consumer buying behaviour, the mean value of “I trust well-known brands to make products which work” is 6.90, the highest and the mean value of “How eco-friendly a product” is 4.14 which is the lowest.

It is inferred from this study that the consumers are not adequately informed regarding communication of green product marketing initiatives and recommends the greater use of marketing and promotional measures to sell products that are environment friendly and function effectively. This study also points out that the Indian market for green products could be exploited more within consumer groups that have pro environmental values. Regression Analysis exhibits that the Green behaviors are insignificantly influenced by the environmental beliefs. Consumer buying behavior (Green product performance beliefs) is not significantly influenced by the environmental beliefs.

**Keywords:** Green Marketing, Green Brands, Eco-Friendly, Consumer awareness, Environmental protection.

## 1. INTRODUCTION

### 1.1 Conceptual Sketch

Green marketing relates to the activities of selling products and/or services with greater focus on the environmental sustainability. Such products or services may be produced or processed in an eco-friendly manner as follows:

- Manufactured by sustainable fashion

- Abstinence from use of hazardous materials or ozone-depleting substances.

- Designed to be repairable or reusable and not "throw away".

Green marketing is practiced by companies that are committed towards sustainable development and corporate social responsibility. Many organizations are striving to implement sustainable environmental

oriented business practices. Eco-friendly products could be manufactured according to the consumer preferences and also minimize the costs, including packaging, transportation, energy/water usage, etc.

This study also examines the impact of consumers' values, beliefs, attitudes and their exposure to influences and information, shape their behaviour and perceptions of product performance by focusing on the influential role of marketing. So, if the market for eco-friendly sustainable products is to become main stream, it is important to consider the factors influencing the customers' selection process and preferences.

## 2. REVIEW OF LITERATURE

The term 'Green' or 'Sustainable' product often refers to products, services or practices that allow for economic development while conserving the ecological environment for future generations. A green product is less detrimental to human health and causes minimal damage to the environment.

The assumption of green marketing is that potential consumers will view a product or service's "Green Quality" as a benefit and move to make their buying decision accordingly. 52% of the people made at least one purchase over a six month period, from at least one socially responsible corporate and verified the product packaging to ensure the sustainability impact. According to the Nielsen survey of retail purchase statistics and the sales data, brands that advertised sustainability on packaging had 5% year-over-year increase in sales from 2010 to 2015, as compared with 1.5% for those that did not.

The role played by marketing has become a matter of discussion as lifestyles and consumption patterns in the industrialized world are a major source of environmental damage. On the one hand, marketing has been criticized for contributing towards the environmental degradation by focusing on consumption, consequently contributing to a throwaway society and emphasizing on satisfying short-term consumer needs. On the other hand, marketing can be viewed as an activity that concentrates on eco-friendly products too. Thus, marketing contributes to more sustainable forms of society. Marketing has developed and expanded its scope towards the ecological problems from focusing on the

production activities, transaction and exchange.

### **Green Marketing:**

Coddigton (1994, p.1) defines Green Marketing as "marketing activities that recognize environmental stewardship as a business development responsibility and business growth opportunity.

### **Green Consumers**

Research has shown that green consumers:

1. are sincere in their intentions, with a growing commitment to greener lifestyles,
2. have a greater tendency to judge their environmental practices as inadequate,
3. do not expect companies to be perfect in to be considered 'green'.

However, green consumers also:

1. Tend to overstate their green behaviour, including the number of green products they actually us,
2. Want environmental protection to be easy and not to entail major sacrifices;
3. Tend to distrust companies' environmental claims, unless they have been independently verified,
4. Lack knowledge about environmental issues and tend not to trust them to evaluate scientific information about environmental impacts. However simultaneously, they are eager to learn which indicates that consumer education is one of the most effective strategies that companies can adopt.

Majority of the age groups using green products are found to be adults, many of whom are influenced by their children. In addition, women are considered to be a key target for green products and continuously make purchases. The best 'green' customers are people expecting good quality and are willing to spend more money. As a result, the most promising products for 'green' consumers tend to be at the higher end of the market. The most famous outlets for green products are retail stores frequented by more shoppers. In general, green consumers have the education and intellectual abilities to appreciate the environment protection values of the green products.

In USA, children and teens are generally more concerned than adults in terms of environment and are more knowledgeable in terms of green alternatives. Increasingly, they influence their parents' purchasing decisions. Millions of consumers will reach adulthood stage in the

next decade and gain purchasing power of their own. On the opposite end of the age spectrum, US consumers born before 1950s are the least 'green'.

In Canada, children and parents are alike in their tendency to have strong environmental concerns. Older people also tend to be active green purchasers.

*The Global Oceanic Environmental Survey (GOES)* reports that a gradual intergenerational value shift in the post-war generation towards post-materialist priorities is likely to result in more pro-environmental behaviour (Bennulf and Holmberg, 1990; Betz, 1990; Hoffmann-Martinet, 1991; Inglehart, 1990). However, an individual who is concerned about the environment does not necessarily behave in a green way in general or in buying. This is referred to as the value-action gap. It has been concluded that there is no single definitive model which adequately explains the gap between Pro- Environmental Behaviour and Environmental Knowledge. A recent study depicts that the people who are environmentally conscious do not necessarily behave pro-environmentally, for example, people may throw rubbish away when most people around them do so (reactive process, as opposed to intentional decision making; Ohtomo and Hirose, 2007).

### 3. OBJECTIVES OF THE STUDY

1. To understand the Consumer's beliefs and attitudes about the green products.
2. To examine the Consumers' Awareness on the availability of environmental friendly products.
3. To know the marketing efforts undertaken by the marketers and its impact on the customers.

### 4. METHODOLOGY DESIGN

Both Primary and Secondary data have been collected and analyzed for investigating the research objectives. The first stage of the research process is an extensive search of articles, reports and professional information about the eco-consumer studies and eco-marketing strategies in general by using the

internet and academic databases. The secondary data provided the general context for collection of primary data, analysis and the interpretation of primary data. This study was conducted in CHENNAI City.

The primary data was then collected using questionnaires to measure the consumers' general environmental beliefs with the possible responses of strongly agree to totally disagree.

The next part of the questionnaire covered marketing and branding issues related to consumer awareness with the suggested responses from strongly aware to totally unaware. Five Point Likert Scale (4, 3, 2, 1, and 0) techniques were used to quantify the variables. Each proposition is considered as a variable and most of these propositions are framed in a positive scale. Respondents were requested to mention any type of green product based on their experience.

### Statistical Methods

The statistical methods used in the analysis were: Mean, Coefficient of Variation - to analyze the Average level of perception of the Respondents mean and standard deviation; Student's t-test - is used to explain the similarity of average level of perceptions; Factor analysis is used to reduce the number of variables into limited without losing the qualitative information; Multiple regression method is used to explain the variations in the dependent variable given a set of independent variables.

### Sampling Design

A convenient sampling design was adopted for data collection. One hundred and twenty women consumers, with an age ranging from 21 to 45 years, were approached with a structured questionnaire.

### 5. DISCUSSION AND RESULTS

#### Data Collection and Analysis

The first part of the questionnaire measures general environmental beliefs with the possible responses of strongly agree, agree, neither agree nor disagree, disagree and strongly disagree.

**TABLE – 1: GENERAL ENVIRONMENTAL BELIEFS**

S.No.	General Environmental Beliefs	Mean	Standard Deviation (SD)	Coefficient of Variation (CV)

1.	Our population size is growing to the limit of the number of people the earth can bear.	4.67	0.73	78.18
2.	The equilibrium of nature is very delicate and easily gets upset.	6.34	0.144	42.98
3.	Humans have the privileges to modify the natural environment to suit their needs.	6.40	0.164	50.120
4.	When humans interfere with nature it often has disastrous consequences.	4.170	0.89	64.16
5.	Mankind created to rule over the nature.	4.166	0.192	62.198
6.	Existence of plants and animals are primarily to be used by human beings.	6.80	0.118	34.58
7.	To maintain a healthy economy, we will have to focus on the industrial growth.	6.50	0.126	38.64
8.	Humans must live in harmony with nature with a view to survive.	6.70	0.156	46.40
9.	The earth is like a spaceship with limited room and resources.	4.194	0.152	50.112
10.	There are limits to which our industrialized society can expand.	4.66	2.22	94.156
11.	Mankind is severely abusing the environment.	6.56	0.128	38.100

**Source: Primary Data**

**Inference:** Out of eleven propositions on Consumers' General Environmental Beliefs, the Mean score of six propositions is five and above on Likert-5 point scale (for propositions 2,3,6,7,8 and 11). This indicates that most of the respondents have indicated strong agreement for these propositions and same is supported by relatively lower values of Standard Deviation

and lower values of Coefficient of Variation. Analysis of responses to propositions 4, 5 and 9 reveal mean scores ranging from 4.166 to 4.194 (coded as 0,1,2,3 & 4), which implies respondents more or less agreed on these propositions. Respondents have differences in their opinions on these propositions which are well supported by its Standard Deviation.

**TABLE 2: CONSUMER ENVIRONMENTAL BEHAVIOUR**

S.No.	Consumer Environmental Behaviour	Mean	Standard Deviation (SD)	Coefficient of Variation (CV)
1.	Use biodegradable products	4.180	0.172	58.114
2.	Avoid buying aerosol products	4.170	0.180	62.106
3.	Read labels to see if contents are environmentally safe.	4.150	0.150	54.60
4.	Buy products made or packaged using recycled materials.	4.174	0.158	54.120
5.	Buy products in packages that can be refilled.	4.160	0.150	52.190
6.	Take your own bags to the supermarket.	4.90	2.00	80.152
7.	Cut down on car use	4.176	0.176	56.124

**Source: Primary Data**

**Inference:** Out of the seven propositions on Consumer Environmental Behaviour Questions, the mean score of all the propositions ranges between 4.150 to 4.180,

except proposition 6 for which the mean score is 4.90 which indicates that the opinion of respondents varied to the greater extent, as the SD is two with high C.V.

**TABLE 3: CONSUMER BUYING BEHAVIOUR**

S.No.	Consumer Product Questions	Mean	Standard Deviation (SD)	Coefficient of Variation (CV)
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1.	I feel good about buying brands which are less damaging to the environment.	6.30	0.146	46.50
2.	It is easy for me to identify these products.	6.36	0.170	52.162
3.	Green products are inferior in performance to non-green products.	4.144	0.188	68.124
4.	I have formed this opinion because people I know and trust told me so.	4.166	0.162	54.120
5.	I have formed this opinion because of my own recent experience of a product.	6.36	0.136	56.90
6.	I trust well-known brands to make products which work.	6.90	0.140	42.48
7.	In the marketing communication about a product, I expect to be informed of new improved Formulae/design.	4.134	0.178	40.58
8.	In the marketing communication about a product, I expect to be informed of how environmental friendly a product is.	4.14	2.08	100.58
9.	Green products are marketed to me in a way which I never notice.	6.16	0.144	46.70
10.	Green products are marketed to me in a way which I find really engaging and relevant to my lifestyle.	4.46	2.12	94.124

Source: Primary Data

**Inference:** Out of ten propositions on Consumer Product Questions (CPQ), the mean score of five propositions - 1,2,5,6 and 9, is six or above on Likert-5 point scale ( coded as 0,1,2,3 & 4) which indicates that most of the respondents have strongly agreed for these

propositions and the same is supported by relatively less SD and less C.V.

For the propositions 3, 4, 7 & 8 respondents have given above average mean score which indicates that they have all agreed on these propositions.

**TABLE – 4: Relationship between Consumer Environmental Behaviour and Environmental Beliefs**

	COEFFICIENT S	STANDARD ERROR	T STATISTIC	P-VALUE
<b>INTERCEPT</b>	0.0000	0.2340	0.0000	1.0000
<b>X VARIABLE 1</b>	-0.502	0.2642	-0.4567	0.1702

Sources: Primary Data

#### Regression Statistics

Multiple R	0.02492458
R Square	0.00062123
Standard Error	0.90664
No. of Observations	120
The Degrees of Freedom	V=n-2 = 58

Critical Region at 1% > observed value of r = 0.035678 which falls outside the critical region. P – Value is -0.4567

**Inference:** Green Behaviors are not significantly influenced by Environmental Beliefs.

**TABLE – 5: Results of Regression Model between Consumer Buying Behaviour and Consumer Environmental Behaviour**

	COEFFICIENT S	STANDARD ERROR	T STATISTIC	P-VALUE
<b>INTERCEPT</b>	0.0000	0.2272	0.0000	1.0000
<b>X VARIABLE 1</b>	-0.00040	0.2684	-0.0290	0.18890

Sources: Primary Data

### Regression Statistics

Multiple R	0.00189771
R Square	0.00000360
Standard Error	0.90692
No. of Observations	120
The Degrees of Freedom	$V=n-2 = 58$

Critical Region at 1% > observed value of  $r = 0.00189771$  which falls outside the critical region.

P – Value is 0.18890

**Inference:** Consumer purchasing behavior (i.e.; beliefs in green product performance) is not significantly affected by Environmental Beliefs.

### 6. MANAGERIAL IMPLICATIONS

Three-fourth of the respondents strongly agree that they would choose ecofriendly products. 80% of the respondents reacted positively about buying products which are less damaging to the environment. Customers' expectations are not away from the effective functioning of green products as that of non-green products. Majority 60% of the consumers expressed that identifying environmentally products on the shelves of the store is slightly difficult. This highlights the consumer unawareness of green products. Marketing plays a vital role in bringing the awareness of the consumers. As the responses exhibit that the consumers would be more likely to choose eco-friendly products/brands and were unable to recall green products/brands. This indicates the gap existing in the marketing effort put forth by the green marketers in bringing greater consumer awareness on green products. This survey discloses that the market share for green products was significantly affected by the environmental beliefs.

### 7. CONCLUSION:

This study confirms the existence of an environmental value-action gap, a gap that exists between the beliefs of the consumers and their behaviors of being green. Products which have a greater exposure will be more likely to sell in greater numbers. Pro-Environmental values are more likely to result in more pro-environmental behavior when values and beliefs are specific.

The green action plan synchronizes with the consumers' subjective interests, and product attributes are positively perceived. A major

obstacle in the purchasing of green products is concerning whether the product will perform as expected or not. However, consumers generally believe the performance of well-known brands. The current low level of consumer awareness with regard to the global warming is India's brands need to raise the consumer consciousness.

It is clear that the Indian market for green products is under-exploitation by the marketers within the consumer groups with pro-environmental values. This finding suggests the there is a greater use of marketing brands to sell green products that are genuinely eco- friendly.

### 8. DIRECTIONS FOR FUTURE RESEARCH

Indeed, there is an avenue at large preview on this perspective over to design the analysis into Extend form. There are research gap existing in the study. It entails the point as follows:

1. A major area of further research lies in creating and emulating models to enhance the viability of reaching green products to a wider market share.
2. It is being suggested to extend the scope of the Research Study across the State and the Nation as a whole.

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