

# An Analytical Study on Consumer Behavior towards Green Products

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## **Abstract**

*The research and development department of industries are uninterruptedly working to progress products that are environment-friendly and cause fewer environmental destruction. Products which are proficient of being recycled and own healthy disposal are often labeled as green products. The manufacturing, marketing, and consumption of such products are being promoted by the government as well as non-governmental organizations. The present study aims to understand the concept of green product and consumer behavior towards it. The study also investigates the relationship of green product usage and purchase intention with demographic variables (age, gender, income and educational qualification). Primary data was collected using structured questionnaires and analyzed using descriptive statistics as well as Pearson's chi-square test for independence. The results reveal an important insight concerning the factors that are majorly responsible for motivating as well as de-motivating consumer behavior towards green products. Environmental sustainability and personal consciousness of consumers are found to be motivating factors while unavailability and unawareness are deemed de-motivating factors along with the cost of installation / usage. Consumers are intended to purchase green products irrespective of their demographics.*

**Keywords: Consumer Behavior, Environment, Green Consumerism, Green Marketing, Green Product.**

## **1. Introduction**

The current rapid growth in the economy and the pattern of consumption and behavior worldwide are the main causes of environmental degradation. Increasing consumption and production have burdened the environment with harmful and adversely affecting components. Grunert (1993) reported that the consumption patterns of private households account for around 40% of environmental degradation. This concern is being well addressed by the households, manufacturers, marketers as well as the government. Through research and development, new products and processes are being developed to decrease the adverse effects on the environment and build a sustainable future. Research was carried out during 2012 by Boztepe (Boztepe, 2012). Green product refers to a product that incorporates the strategies of recycling or is manufactured using recycled content and/or uses less toxic material to reduce the impact on the environment. Green product refers to a product that incorporates the strategies of recycling or is manufactured using recycled or recyclable content and/or uses less toxic material to reduce the impact on the environment. Accordingly, the situation in which consumers want to buy products that have been produced in a way that protects the natural environment is termed as green consumerism. Manian and Ashwin (2014, as cited in Kumar, 2015) have provided examples of green products and services in India.

## 2. Review of Literature

D'Souza, Taghian and Lamb (2006) attempted to empirically investigate how consumers who differ in terms of environmentalism respond to labels. The data was collected from 155 consumers through telephone administered questionnaires and analyzed it using descriptive measures and correlation. The findings suggest that there are consumers who would buy green products even if they are lower in quality but have environmental information on labels.

Kumar (2015) made an effort to know how we can create awareness among consumers about green marketing and to probe consumer attitude towards eco-friendly/green products. The study stressed that marketers need to emphasize on green marketing as consumers are ready to pay a premium price for green products. The major setback to green products in India is lack of education and insufficient research work in the field of eco-friendly products.

Gilbert (2007) examined the recent trends in green marketing offered insight into the future of green marketing. The study assessed the value that students and faculty members at the University of Wisconsin-La Crosse placed upon green marketing. It was found that UW-L does not place sufficient emphasis on green business practices. Thus, it was suggested that inclusion of green business topics in the curriculum would benefit students' attitude towards green business, ultimately benefitting the university.

R.Mahesh and P.Gomathi (2016) directed "A study on Rural Consumers Buying Behavior of Green Products with unique reference to chosen towns in Tirupur District". The analyst has scrutinized the environmental awareness and components impacting the consumers' purchasing behavior of Green products in Tirupur area. The experimental research was done among 200 respondents who had obtained green products. Essential information was gathered by a booked meeting strategy with an organized poll by embracing a helpful testing procedure. Rate examination, weighted positioning, Chi-square and

ANOVA test were utilized to gauge the interrelationship between the consumers' statistic factors and their environmental awareness. The outcomes revealed that the products initially developed with normal fixings and products which don't hurt and pollute the environment are the main considerations impacting the consumers to buy the green products. Subsequently, the study presumed that the consumers' dimension of awareness about green products is high. The marketers additionally have a duty to influence the consumer to comprehend the requirement for the advantages of green products when contrasted with non-green products.

Cherian and Jacob (2012) examined consumers; frame of mind towards environment-friendly products. They displayed a theoretical structure of green marketing and different ways by which diverse consumer credits are identified with the idea of green marketing. It was inferred that there is a requirement for green marketing and for change in consumer behavior and frame of mind towards an environmentally clean way of life. The specialists prescribe investigating the elements that urge consumers to participate with green marketing, that is, through the use of green products.

## 3. Main Objectives

The main objectives this study are:

- i. To understand the concept of green product.
- ii. To know consumers' buying intentions regarding green products.
- iii. To know the relationship of green consumption behaviour with consumer demographics.

## 4. Research Methodology

The research design used for the study was a descriptive design that describes the concept of green product and the behavior of consumers with respect to it. The present study is based on primary data collected through questionnaires distributed to 170 consumers, out of which, 125 useful responses were received. The sampling was done using convenience sampling method. Descriptive statistics were used to analyze the data and Pearson's chi-square test for independence was used to test the hypotheses.

### 4.1. Hypotheses

#### Null hypothesis:

$H_{01}$ : There is no significant relationship between green product usage and gender of the respondents.

$H_{02}$ : There is no significant relationship between green product usage and age of the respondents.

$H_{03}$ : There is no significant relationship between green product usage and educational qualification of the respondents.

$H_{04}$ : There is no significant relationship between green product usage and income of the respondents.

#### Alternate hypothesis:

$H_1$ : There is significant relationship between green product usage and gender of the respondents.

$H_2$ : There is significant relationship between green product usage and age of the respondents.

$H_3$ : There is significant relationship between green product usage and educational qualification of the respondents.

$H_4$ : There is significant relationship between green product usage and income of the respondents.

## 5. Results

### 5.1 Descriptive Statistics

**Table 1: Demographic profile of the respondents**

Variable	Respondents	Frequency	(%)
Gender	Male	57	45.6
	Female	68	54.4
Age	15-25	44	35.2
	25-35	69	55.2
	35-45	12	9.6
Educational Qualification	Intermediate	10	8
	Graduate	20	16
	Post graduate	69	55.2
	Doctorate	26	20.8
Income	Below Rs 2 lakhs p.a	58	46.4
	Rs 2 lakh-Rs 4 lakhs p.a	33	26.4
	Rs. 4 lakhs-Rs 6 lakhs p.a	18	14.4
	Above Rs. 6 lakhs p.a	16	12.8

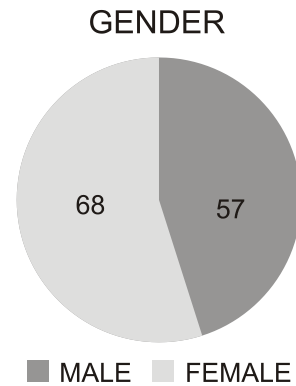


Figure 1: Gender of the respondent.

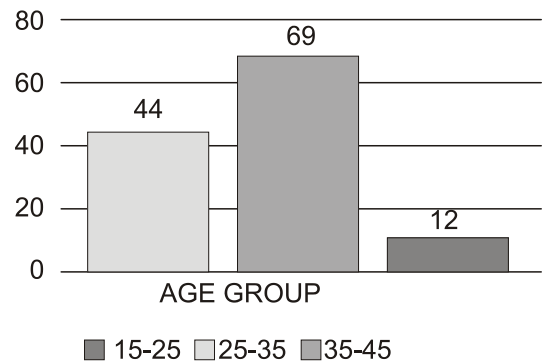


Figure 2: Age group of respondents

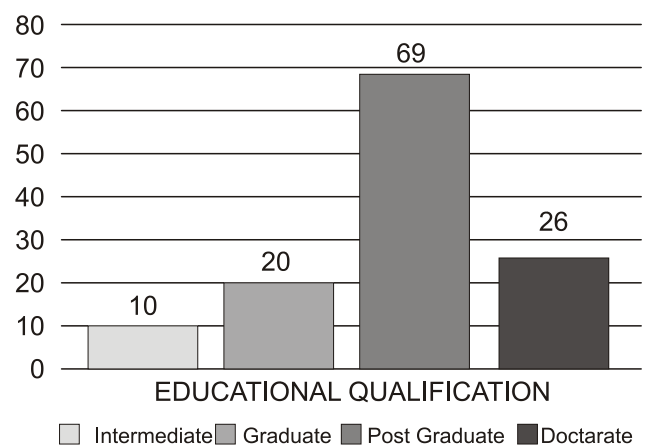


Figure 3: Educational Qualification of the respondents.

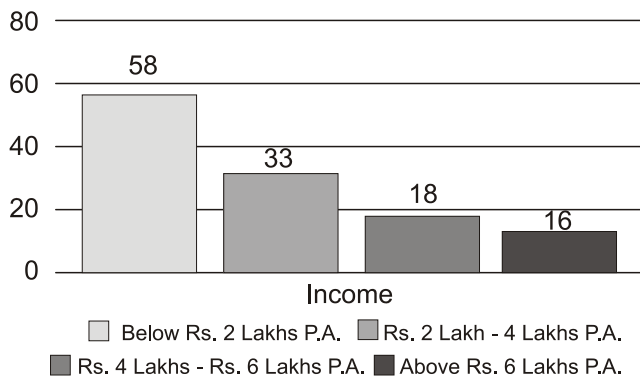


Figure 4: Income of the respondents

### 5.2 Pearson Chi-Square Test

Table 2: Results of Chi-Square Test

Variables tested	Pearson chi-square value	Degree of freedom	Sig.
Gender X usage	0.022	1	0.882
Age X usage	1.49	2	0.475
Educational qualification X usage	10.888	3	0.012
Income X usage	1.121	3	0.772
Gender X purchase intention	1.203	1	0.273
Age X purchase intention	1.856	2	0.395
Educational qualification X purchase intention	5.292	3	0.152
Income X purchase intention	1.164	3	0.762

Table 2 shows that significance of chi-square is 0.882, which is greater than 0.05 (5%). So, and then null hypothesis cannot be rejected at 5% significance level, concluding that there is no significant relationship between the green product usage & gender of consumers. Similarly, age & usage, income & usage, gender & purchase intention, age & purchase intention, educational qualification & purchase intention and income & purchase intention, the null hypothesis cannot be rejected. i.e there is no relationship between age & usage, income & usage, gender & purchase intention, age & purchase intention, educational qualification & purchase intention and income & purchase intention. Whereas, Educational qualification & usage, the value is lower than 0.05, hence the null hypothesis is rejected. i.e alternate hypothesis is accepted. There is relationship between educational qualification and usage of green products.

Table 3: Summary of Results

Hypothesis	Test Results
There is no significant relationship between green product usage and gender of the respondents.	Accepted
There is no significant relationship between green product usage and age of the respondents.	Accepted
There is no significant relationship between green product usage and educational qualification of the respondents.	Rejected
There is no significant relationship between green product usage and income of the respondents.	Accepted

### 6. Findings and Conclusion

In the present era of development and growth, environment is being degraded at a rapid rate. It is hence, necessary to worry now rather than regret later. Green products can lower the negative impact on environment and ensure a sustainable future for the coming generations. The study highlighted that except for educational qualification, other demographic variables such as age, gender and income have no relationship with consumers' purchase decision of green products. Moreover, irrespective of demographic variables, most consumers intend to purchase such products to safeguard the environment. The present study find out that, consumers are motivated to use green products because of environmental sustainability and their personal consciousness towards the environment. However, unavailability of such products and unawareness refrain them from using such products awareness and cost. So, if the quality of the green product is better, then the number of consumers will increase. And also, the consumers should have enough awareness about green products to improve the buying behavior. The cost of the green product also should be comfortable to be purchased by the consumer. It can be concluded that when the quality, awareness and cost of the green

products are good to the consumers then the intention of the consumers to buy the green products also will be increased simultaneously. The manufacturing companies should use Green Strategies to enhance the Green consumers' needs and also to protect the environment for the next generation.

### 7. Recommendation for future research

The results of the present study can be used by marketers, manufacturers as well as the government to promote green products efficiently. Unawareness and unavailability of the green products should be countered so as to remove the obstacle in its usage. Advertisements and promotional activities must be taken to make people aware, focusing on the environmental aspect as it is found to be the most influential factor motivating green product purchase and usage. Moreover, personal consciousness of consumers must be given due consideration, besides promotion, as it is also found to be a motivating factor. Awareness programs of environmental degradation and benefits of green products must be launched along with the different types of such products that consumers can use.

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