# Consumer Attitude Towards Eco-Friendly Goods – A Study Of Electronic Products In Ahmedabad City

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## **Abstract**

The rapid growth in the technology has increased the use of electronic products worldwide. This has caused the deterioration of the environment. The increasing extinction of the natural resources and the global warming has raised the major concern for the environment. These growing social and regulatory concerns for the environment have lead to an increase in the number of customers to consider eco-friendly products as major criteria for the purchase of electronic products. As the environment continues to worsen, it has become a constant public concern which has resulted into awakening of green movement in developing countries like India. The purpose of the paper is to study the attitude and intention of people having different demographical background, towards the purchase of eco-friendly electronics in the city of Ahmedabad. The aim of this research work is to investigate the consumer behavior and attitude towards the eco-friendly electronic products and see how they take environmental factors in consideration while making choices on buying such products. Use of a quantitative study has been made among a conveniently chosen sample.

# 1. Introduction

The world is currently facing the environmental sustainability problems such as overcrowding, pollution of land, air, and water; loss of public spaces; loss of biodiversity and environmental justice issues, due to which environmental issues have influenced and changed the patterns of human life and their activities.

Consumer's growing education and awareness has given rise to increasing demand for eco-friendly products across the globe. Therefore, eco-friendly marketing or green marketing emerges from the ideology of understanding the environmental attitude of the consumers. Peattie defines Green Marketing as "the holistic management process responsible for identifying, anticipating and satisfying the requirements of customers and society, in a profitable and sustainable way" [4].

The home appliance industry has made great strides in developing energy efficient products to achieve EPA's Energy Star rating. For example, Energy Star refrigerators use at least 15 percent less energy and dishwashers use at least 25 percent less energy than do traditional models [5].

Consumer's apathy to green products is due to many factors, including inadequate information about levels of greenness, lack of credibility of firms' claims, the belief that individual actions alone cannot impact the macro picture and the tendency to free ride. [9].

This is a new area of work and very little research has been done in Ahmedabad city. There is also very little empirical evidence available to support that proenvironmental attitude and beliefs translating into environmentally conscious behavior such as buying of eco-friendly electronic goods. It is within the background of this research gap that the present research was conducted to assess Ahmedabad's consumers' pro-environmental concerns, knowledge of environmental issues, awareness of eco-friendly products, and any potential effect that these factors

may have on green buying behavior and also explain their attitude-behavior inconsistency.

The **Objectives** of this study are:

- 1. To understand the demographic profile of the respondents with respect to awareness of ecofriendly electronic products
- 2. To observe the relationship between demographic profile of the respondents and consideration of energy efficiency as purchase criteria of electronic products
- 3. To study the source of information regarding eco-friendly electronic products
- 4. To study the relationship between consumer's attitude on the environmental protection and their attitude towards eco-friendly electronic products.

# 2. Review of Literature

Business sustainability is the concept that has received substantial attention from both academicians and practitioners, and environmental concerns have brought about changes in consumer demands and behaviors [6].

### 2.1. Environmental Concern

Some researchers have found out that environmental concern denotes an individual's inclination towards purchase eco-friendly products, thereby, contributing significantly to improve the quality of the environment [2]. The quality of the environment depends critically on the level of knowledge, attitudes, values and practices of consumers [1]. Therefore, Environmental consciousness constitutes an action, or behavior.

## 2.2. Eco-friendly products

Green or environmental-friendly products are broadly defined as products "that will not pollute the earth or deplete natural resources, and can be recycled or conserved" [8]. The green or eco-friendly products of interest in this study are the electronic goods.

# 2.3. Environmental Attitude

Allport has defined attitude as: "A mental and neural state of readiness, which exerts a directing, influence upon the individual's response to all objects and situations with which it is related" [7]. Chyong in his research has suggested that attitudes are the most consistent explanatory factor in predicting consumers' willingness to pay for green products [3].

### 2.4. Green Purchase Behavior

Green buying can be defined as purchasing and consuming products that are not harmful to the environment. Some scholars believe that consumers are willing to pay premiums for green products consumers often prioritize green attributes over traditional product attributes such as price and quality [9].

Many study results indicate that a majority of sample respondents are aware of eco-friendly products and are knowledgeable about environment related issues. Approximately 98% responders stated that they had heard and were aware of eco-friendly products. 95% were aware of the fact that purchasing eco-friendly products will contribute towards a sustainable future [10].

# 3. Research Methodology

Based on the previously cited theoretical and empirical literatures, the following hypotheses referring to the attitude of respondents towards eco-friendly electronic products were proposed.

## 3.1. Hypothesis

**Hypothesis 1**: There is a significant difference between demographic profile of the respondents and awareness of eco-friendly electronic products

**Hypothesis 2**: There is a significant difference between demographic profile of the respondents consideration of energy efficiency as purchase criteria of electronic products

Hypothesis 3: There is no significant relationship between consumer's attitude on the environmental protection and their attitude towards eco-friendly electronic products.

## 3.2. Sample & Data Collection

The respondents were selected from Ahmedabad city using convenient sampling techniques as it is less time consuming. Out of 200 people who had been approached, only 185 had given responses in considerable manner.

# 4. Findings & Analysis

Table - 1

Sr. No	Variable		Frequency	%
1	Age	18-25	94	50.8
		26-35	59	31.9
		36-45	24	13
		>45	8	4.3
2	Gender	Male	101	54.6
		female	84	45.4
3	Education	High school	2	1.1
		Graduate	37	20
		Post	119	64.3
		graduate		
		Professional	19	10.3
		Doctorate	8	4.3
4	Income	5000-15000	2	1.1
	(p.m.)	16000-	22	11.9
		25000		
		26000-	95	51.4
		35000		
		>35000	66	35.7

As mentioned in the above table, the characteristics of the sample vary across age, gender, education and income. The finding also suggests that out of these respondents, almost 89% have purchased electronic goods in last one year.

# 4.1. Data Analysis

Chi-square Statistics (test of independence) has been used to understand if there is any dependence among the demographic variables such as age, income, gender, education and occupation and the awareness about ecofriendly electronic products. The attempt also has been made to understand if there is any influence of above said demographic variables on the respondent's consideration for energy efficient products.

The following table shows the result of chi-square analysis.

Table - 2

Variable	Variable	p- valu e	Null hypothesis Accepted/Rejecte d
Age	Awarenes s of eco- friendly electronic products	0.299	Accepted

Gender		0.107	Accepted
Occupatio		0.364	Accepted
n			
Education		0.829	Accepted
Income		0.656	Accepted
			_
Age	Consider	0.032	Rejected
	energy		
	efficiency		
	criteria		
Gender		0.855	Accepted
Occupatio		0.047	Rejected
n			
Education		0.000	Rejected
Income		0.197	Accepted

As it can be seen from the above table that the awareness about eco-friendly products is indifferent from the demographic variables such as age, gender, occupation, education and income. It can be inferred that the awareness is not confined across a specific age group, or it's also not gender specific.

It is quite visible from test results that the consideration of energy efficient products shows some dependency on age, occupation and education while, the gender and income plays no significant role in the consideration of energy efficiency while purchase of electronic goods.

Since, chi-square statistics just helps in identifying the dependence between the two categorical variables, in order to understand and establish a definite relationship between the variables; we can utilize binary logistic regression.

# 4.2. Binary Logistics Regression

Binary Logistics Regression has been applied where the chi-square statistics showed some dependence between the variables i.e., education and consideration of energy efficient electronic products. The result of an attempt to formulate a model using BLR is not significant and the key regression coefficient shows very poor model fit.

Nagelkerke R square
.029

The results signify there maybe some dependence between the level of education and the consideration of energy efficient electronic products, but the relation between these two is not strong enough to convert it into a meaningful model.

4.3. Frequency table for source of information

Table - 4

Source	Frequency	%
Television	101	54.6
Newspaper	47	25.4
Radio	11	5.9
Educational	18	9.7
Institutions		
Government	8	4.3
commercials		
Total	185	100

From the above table it can be analyzed that respondent's source of information regarding eco-friendly electronic products are more from television and newspaper with 54.6% and 25.4% respectively. This may be so because many of the electronic goods manufacturing companies are creating awareness among the consumers by providing advertisements about their eco-friendly products on different medium of information.

Table - 5

Variable	p-value	Null hypothesis Accepted/Rejected
Environmental concern & attitude towards eco-friendly electronic goods	0.000	Accepted

As it can be seen from the above table that the null hypothesis has been accepted which implies that there is no significant relationship between consumer's environmental concern and their attitude towards ecofriendly electronic products.

# 5. Conclusion

The research indicates that the awareness about ecofriendly products is indifferent from the demographic variables such as age, gender, occupation, education and income. Also, consideration of energy efficient products shows some dependency on age, occupation and education while, the gender and income plays no significant role. The major sources of information regarding eco-friendly electronic products are television and newspaper. The companies have realized the growing need and demand of such products; therefore, they are investing heavily in creating such products and making consumers aware.

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