

# CONSUMER PREDILECTION FOR GREEN PRODUCTS WITH REFERENCE TO HOME APPLIANCE

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## ABSTRACT

*Green marketing process includes the activities that are designed to specify the human needs and wants by bringing eco-friendly friendly goods (Polonsky 1994: Soonthomsai, 2007). Different companies are the users of natural resources and are draining these resources in a large quantity. Protection of natural resources and prevention of the environment are the essential for the period. These present study aims to find out the reasons why people prefer eco- friendly products; The study is based on pragmatic data analysis of respondents from Vallabh Vidyanagar.*

*Key words : consumers , green products, home appliances*

## INTRODUCTION

Due to continuous efforts by government and companies, now a shift towards environmental concerns is in progress. The Companies are now engaged to decrease the waste products and carbon emission from the factories. They are also constantly working to produce eco- friendly products, not affecting society and made by best utilization of resources. Sachdev (2011) advocated that the society has become more apprehensive about the natural environment. So the industries have started to correct their behavior to address society's concerns for environment. Some industries quickly accepted concepts like environmental management into all organizational activities. It is customer's concern for environment and their want for their own wellbeing which drives demand for eco-friendly products, which in turn encourages improvements in the environmental performance of many products and companies. Increased awareness of customers regarding their health & environment has also made the companies to focus on manufacturing of eco- friendly products (Smith 2013). Ecofriendly products can be categorized as a product that will not pollute the earth or deplore natural resources and can be recycled or conserved (Shamdasani, Chon-Lin & Richmond, 1993). Products are household items manufactured with post-consumer plastics or paper, recyclable or reusable packaging,

energy efficient light bulbs and detergent containing ingredients that are biodegradable, non-polluting and free of synthetic dyes or perfumes (Mostafa 2007). In this globalized area the companies are adopting, Internet/Web Based Advertising as the best media for promotion by the green companies (Biloslavo, & Trnavcevic, 2009). The electronic home appliance companies are also working through Internet for their promotion. Most of the Home Appliance sites were found to be positive for working on environmental issues. They are promoting eco-friendly products; adopting recycling program; generating awareness of people towards the environmental issues; and are using the green promotional tools like internet and television as compared to traditional tools. The websites of LG, Panasonic, Sony, Godrej, Whirlpool, IFB are networked through the social networking sites like Facebook and twitter for their promotion. For a consumer green means sustainability of products with features like a fair price, renewability, less consumption of energy, health caring, having green label, made by recycling material, cause less pollution and waste, also with an environmentally friendly promotional tool like the internet (Shamdasani, Chon-Lin, & Richmond, 1993).

## **REVIEW OF LITERATURE**

Sachdev (2011) advocated that no consumer product has a zero environmental impact. Lin & Huang (2012) found that the main influencing factors on consumer choice behavior regarding green products include: psychological benefit, desire for knowledge, novelty seeking, and specific conditions. Functional values, price and quality did not influence on consumer choice behavior regarding green products. Irawan & Darmayanti (2012) advocated that environmental concern, perceived seriousness of environmental problems and perceived environmental responsibility significantly affect green purchasing behavior. Mohammad (2012) reviewed various factor like consumer belief (CB), social influence (SI), environmental attitude (EA), perceived quality (PQ) green purchasing behavior (GPB) that influence customers. Gan, Wee, Ozanne & Kao, (2008) found that consumers who are environmentally conscious are more likely to purchase green products. Traditional product attributes such as price, quality, and brand are still the most important attributes that consumers consider when making green purchasing decision.

## **OBJECTIVES OF STUDY**

- a. To assess the awareness, approach and predilections of people towards eco-friendly products.
- b. To examine the best promotional tool to generate the awareness of people towards eco-friendly products.
- c. To find out factors affecting predilections of people towards eco-friendly products.

## **HYPOTHESES OF STUDY**

- H1: There is no significant difference among male and female for predilections of different brands those manufacture eco-friendly products.
- H2: Knowledge about eco friendly products is not positively correlated with predilections for eco-friendly products.
- H3: Health Features/personal benefit using eco-friendly products have negative influence on predilections for eco-friendly products.
- H4: Type of Brand of eco-friendly products has negative influence on predilections for eco-friendly products.

## **SAMPLING TECHNIQUE**

For the present study simple random sampling is used for selecting the sample from students of Sardar Patel University of Gujarat. The College students are taken for sampling because of not accessibility but these constitute a large population of environmentally conscious persons providing a picture of future green buying behavior (Paco, 2013)

## **ANALYSIS**

The majority of respondents are educated male and female; and people from age group between 18-25 years who enthusiastically participated in the study. 78% of people buy eco-friendly products due to environmental and health factors. The health factor as major concern being reported by 42% of respondents showing people are much more concerned towards their own health/personal benefits rather than the environmental concern.

About 82% people come to know about green marketing and eco-friendly products through Web Based Advertising/Internet and TV. The Web Based Advertising/Internet is best promotional tool for eco-friendly products. The results are supported with (Biloslavo, & Trnavcevic, 2009) & (Ottman, 2011) which shows that consumer trust for information in advertising on brand websites and consumer opinions published online, followed by ads on TV, newspaper, magazine and radio respectively.

Among 8 different Companies LG got 42% for green company adopting green marketing strategy for producing and promoting eco-friendly products followed by Godrej (16%). Website of LG revealed that LG is manufacturer of eco-friendly ACs, Refrigerators etc.

Radiff(2011) advocated that a large number of companies are working to save the environment including home appliances manufacturers, other e-appliances Companies etc. Among these companies LG is rated at first position followed by Haier, Samsung and Panasonic.

Top appliances Kitchen Brands in India also listed as most preferred and available Kitchen brand in India. Shah (2011) listed top home appliances manufacturing companies as LG, Samsung, Godrej, Philips, Sony, Panasonic, Bajaj etc. Among all these companies LG, Samsung found significantly place as top manufacturer of home appliances by most of the previous studies.

Table 1: Respondents personal and survey Information

	Frequency	Percent	Cumulative (%)
<b>Age</b>			
18-25 years	35	70%	70%
25-30 years	13	26%	96%
30-35 years	2	4%	100%
<b>Gender</b>			
Male	28	56%	56%
Female	22	44%	100%
<b>Educational Level</b>			
Graduate	29	58%	58%
Post Graduate	19	38%	96%
Doctorate	2	4%	100%
<b>I preferred eco-friendly products for:</b>			
Environmental factors	18	36.0%	36.0%
Health Factors/ Personal Benefits	21	42.0%	78.0%
Latest Technology	8	16.0%	94.0%
Others(Safety/Ease of Handling)	3	6.0%	100.0%
<b>Information source of green products</b>			
WBA/Internet	26	52.0%	52.0%
TV	15	30.0%	82.0%
Newspaper	4	8.0%	90.0%
Magazine	2	4.0%	94.0%
Radio	1	2.0%	96.0%
Reference groups	2	4.0%	100.0%
<b>Company adopting green marketing strategy and producing eco- friendly products</b>			

LG	21	42.0%	42.0%
Samsung	5	10.0%	52.0%
Godrej	8	16.0%	68.0%
Whirlpool	2	4.0%	72.0%
IFB	2	4.0%	76.0%
Sony	2	4.0%	80.0%
Philips	4	8.0%	88.0%
Panasonic	5	10.0%	98.0%
Others	1	2.0%	100.0%

The comparative analysis for these four brands revealed that 50% of individuals prefer LG electronics home appliances followed by Samsung 38%, Panasonic and Haier 6% each. Among these, 23 male preferred LG electronics and only 5 preferred Samsung, whereas 2 female prefer LG electronics, 3 female preferred Haier, 14 Female preferred Samsung and only 3 preferred Panasonic home appliances. This shows that people prefer for LG electronics the most because of its eco- friendly product manufacturing feature.

Table 2: Comparative predilections of the brands

	Male	Female	Frequency (Male + Female)	Percentage
LG	23	2	25	50%
Haier	--	3	3	6%
Samsung	5	14	19	38%
Panasonic	--	3	3	6%
Total	28	22	50	100%

Source: Primary Data

The Independent sample t-test shows that there is a significant difference among genders for predilections of different brands which manufacture eco-friendly products.

Table 3: Predilections of genders for different brands

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Predilections	Male	28	1.3571	0.78004	0.14741
	Female	22	2.8182	0.79501	0.16950

Table 3 shows the predilections of genders for different brands which manufacture eco-friendly products. The group statistic illustrates that there were 28 male and 22 female respondents in the study. The mean value for predilections of male respondents is 1.35 and for female 2.81 with standard deviation for male and female 0.78 and 0.79 respectively.

The independent sample test shows the Levene's test for equality of variance and t-test for equality of means. Since the value of Levine's test is significant  $p=0.000$  ( $p > 0.05$ ), so statistics associated with equal variance not assumed has been used for further analysis. The value of t statistic for equal variance assumed is 6.504 with 44.833 degrees of freedom. The corresponding two tailed p-value is 0.0000, which is highly significant. Therefore we accept the alternate hypothesis at 5% significance level. This shows that there is a significant difference between genders for their predilections of different brands manufactured eco-friendly products. Hence alternate hypothesis (H1) is accepted.

Here a moderate positive correlation between two variables predilections & knowledge has been found which is significant at  $p < 0.05$  i.e. (0.000). Hence, alternate hypothesis (H2) is accepted which reveals that people buy eco-friendly products only if they have knowledge about them. The knowledge of people increases their predilections for eco-friendly products.

Table 4: Correlation between predilections and knowledge about eco-friendly products

		Predilections	Knowledge
Predilections	Pearson Correlation	1	0.554(**)
	Sig(2-tailed)		0.000
	N	50	50
Knowledge	Pearson Correlation	0.554(**)	1
	Sig(2-tailed)	0.000	
	N	50	50

\*\* Correlation is significant at the 0.01 level (2- tailed)

The regression coefficient value i.e.  $R=0.650$  or 65% which shows that correlation between dependent and independent variables is positive. The coefficient of determination values shows that 65% variance in dependent variable is caused by independent variable. The F value is 13.281 which is significant  $p=0.000$ . Therefore correlation between dependent and independent variables is statistically significant and valid. The regression model specifies that factors positively affect the consumer's predilections towards eco-friendly products except latest technology. The type of media and company name has a significant impact on consumer predilections towards eco-friendly products.

## RELATIONSHIP BETWEEN VARIABLES AFFECTING CONSUMER PREDILECTIONS

Based on the findings, the health/personal factors and types of brand positively affect the predilections of people towards eco-friendly products with p values of 0.034 and 0.000 respectively. It supports Hypothesis H<sub>3</sub> and H<sub>4</sub>. Further factor analysis is applied to find out which factors among these influences the people predilections.

Table 5: Mean standard deviation and reliability values

ID	Variable Name	Mean	N(Items)	Cronbach's Alpha
E	Environmental Features	3.91	5	0.571
S	Safety Features/ Personal Benefits	3.80	4	0.521
H	Health Features	4	4	0.582
LT	Latest Technology	2.833	3	0.605

Health Features /Personal Benefits yielded highest mean value (4.00) followed by Environmental Features (3.91), Safety Features (3.80) and Latest Technology (2.83). Since all variables yielded mean value of greater than 3, this shows that these factors are useful in assessing the people predilections towards different brands of eco-friendly products.

Table 6: Factor analysis

Sr. No.	Item	Factor Loading	Average Variance of Factor in Percentage	Factor
1	S1	0.704	13.46%	Safety Features(S)
2	S2	0.808		
3	S3	0.625		
4	H1	0.829	22.13%	Health & Personal Benefits (H)
5	H2	0.764		
6	H3	0.495		
7	E2	0.482	10.83%	Environmental Features (E)
8	E3	0.776		
9	E4	0.712		
10	E5	0.522		
11	LT1	0.495	9.69%	Latest Technology (LT)
12	LT2	0.728		

## **CONCLUSION**

The study shows that the respondents are aware of eco-friendly products; they prefer to buy these, because they are safe for health/personal benefits like reduction in electricity bills using eco-friendly appliances. The correlation analysis revealed that as the knowledge or awareness of people about eco-friendly products increases, their predilections for eco-friendly products also increases. The results of factor analysis revealed that people prefer for eco-friendly products because these products do not cause any negative effect on the health of user, reduces electricity bills, are easy to handle and safe for environment, and adopt latest technology. All these four factors accounts for 56.65% variance in predilections of people. The study also reveals that LG is the most preferred brand among all the home appliances as LG predilections is 50% and Samsung is next leading brand with 38%. Web Based Advertising(WBA) or internet is the best promotion tools for eco- friendly products.

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