

A STUDY ON PURCHASE BEHAVIOR TOWARDS GREEN PRODUCTS AMONG INDIAN CONSUMERS

Dr. Sandeep Bhanot*

ABSTRACT

Green marketing is a phenomenon which has assumed great importance today. Customers are concerned about the environment and want to buy those products which do not harm the environment. The paper tries to study the purchase behaviour of Indian customers towards green products. It uses a descriptive research and a sample of 168 respondents residing in Mumbai is taken which covers people of different age groups, incomes and gender. This sample is taken by judgement sampling method. It is intended to see whether demographic variables like gender, education and income are related to awareness about green products and their willingness to buy green products. Also, the influence of price on purchase of green products is studied.

Keywords : Green Product, Green Consumer, Environmentally safe, Eco Friendly, Green Marketing

1. Introduction

The American Marketing Association explains that green marketing is the marketing of environment-friendly products. Green marketing covers several things like product modification, changes in assembly, packaging and advertising. Today, people and organizations are becoming aware of global warming, waste disposal and the harmful effect of pollutants. Hence, they are turning to green products and services.

Need for green marketing :

There are many factors which influence the purchase behaviour of consumers towards green products. These factors are environmental knowledge (Mostafa, 2006), perception of price and quality (D'Souza et al., 2007), image of the company (Schwepker and Cornwell, 1991), concern for the environment (Phau and Ong, 2007) and authenticity of environmental advertising (Thøgersen J, 2000).

2. Literature Review

Kilbourne, W.E. (1998) explained the meaning of green marketing and identified economic, political and technological factors affecting green marketing.

Prothero, A. (1998) did a literature review on various studies pertaining to green marketing. Prothero, A. & Fitchett, J.A. (2000) explained that marketing done with the aim of safeguarding the environment can contribute to society in a useful way.

Oyewole, P. (2001) in his paper explained that there exists a relationship between green marketing, care for environment and industrial ecology.

Karna, J., Hansen, E. & Juslin, H. (2003) explained that interpreted that marketers who go for green marketing enjoy a competitive advantage over others.

Antonio et al. (2009) explained that awareness about the environment has led to several studies done on green marketing which helps to understand consumer behaviour towards green products.

Tweneboah-Koduah (2011) studied Ghanaian consumers and found that their awareness about green marketing was very low which influenced their purchase behaviour.

Cherian and Jacob (2012) found that consumers do not have knowledge of green products and hence companies are also not paying much attention towards

*Associate Professor - SIES College of Management Studies, Nerul, Navi Mumbai

development of green products.

Shafaat & Sultan, (2012) explain that people are not very clear about green products. Still, green marketing is becoming very popular because people are very concerned about global climate change.

Faizan Zafar Sheikh et al. (2014) in their study explain how customers buy green products and what affects their decision to purchase a green product.

Yatish Joshi & ZillurRahman (2015) identified various factors which have an adverse effect on purchase behaviour towards green products.

Yi Chang Yang (2017) explains that due to increased awareness about the environment, consumers lay more emphasis on safety of personal care items and products which are good for the environment.

Walailak Atthirawong & Wariya Panprung (2017) explain the various factors which motivate Thai consumers to buy green products.

Manveer Kaur & Ambika Bhatia (2018) try to study the influence of consumer's environmental concerns, awareness of green product, and brand image on their buying decision of green products.

3. Objectives of the study

- I. To investigate the relationship between demographic variables and awareness about green products
- ii. To identify the relation between awareness and willingness to pay more for green products.

4. Research Methodology

- (i) **Research Design** : First a secondary study was done on the green product market in India through magazines and the internet. Then a questionnaire was prepared to collect primary data from people of different age groups, educational background, occupations and gender to study their attitude regarding purchase behaviour of green products.
- (ii) **Sampling Design** : A sample of 168 respondents residing in Mumbai as taken which covers people of different age groups, incomes and gender. This sample is taken by judgement sampling method.
- (iii) **Data Collection** : The primary data was collected using a structured questionnaire.
- (iv) **Data Analysis** : The collected data was then analyzed using various quantitative tools.

5. Data analysis

(a) Demographic Profile

Table 1: Gender Profile

Frequency	Percent	Valid Percent	Cumulative Percent
82	48.8	48.8	48.8
86	51.2	51.2	100.0
168	100.0	100.0	

Table 2: Age Profile

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-22	26	15.5	15.5
	23-35	54	32.1	47.6
	36-50	48	28.6	76.2
	51-60	33	19.6	95.8
	>60	7	4.2	100.0
	Total	168	100.0	100.0

Table 3: Educational Qualification

	Frequency	Percent	Valid Percent	Cumulative Percent
Graduate	88	52.4	52.4	52.4
Postgraduate	48	28.6	28.6	81.0
Valid Undergraduate	25	14.9	14.9	95.8
Other	7	4.2	4.2	100.0
Total	168	100.0	100.0	

Table 4: Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Student	45	26.8	26.8	26.8
Employed	84	50.0	50.0	76.8
Valid Unemployed	4	2.4	2.4	79.2
Self-employed	28	16.7	16.7	95.8
Retired	7	4.2	4.2	100.0
Total	168	100.0	100.0	

(b) Formulation and testing of hypotheses :

- H0: There is no direct relationship between the gender of consumer and awareness regarding green products.

H1: There is a significant relationship between the gender of consumer and awareness regarding green products.

Table 5: Chi-square tests for Gender vs Awareness of green products

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.813 ^a	2	.245
Likelihood Ratio	2.905	2	.234
Linear-by-Linear Association	.893	1	.345
N of Valid Cases	168		

Since the significance value > 0.05, we accept H0 and conclude that there is no relation between gender of consumer and awareness regarding green products.

awareness regarding green products.

- H0: There is no direct relationship between the educational qualification of consumer and

H1: There is a significant relationship between the educational qualification of consumer and awareness regarding green products.

Table 6: Chi-square test for Educational Qualification vs Awareness of green products

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.234 ^a	6	.039
Likelihood Ratio	15.046	6	.020
Linear-by-Linear Association	5.528	1	.019
N of Valid Cases	168		

Since the significance value < 0.05, we reject H0 and conclude that there is a significant relation between educational qualification of consumer and awareness regarding green products.

3. H0: There is no direct relationship between willingness to pay more for green products and

being pulled towards a green competitor over non-green competitor.

H1: There is a significant relationship between willingness to pay more for green products and being pulled towards a green competitor over non-green competitor.

Table 7: Chi-square test for Willingness to pay more vs Pulled towards green competitor

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.489 ^a	4	.004
Likelihood Ratio	12.065	4	.017
Linear-by-Linear Association	9.262	1	.002
N of Valid Cases	168		

Since the significance value < 0.05, we reject H0 and conclude that there is a significant relation between willingness to pay more for green products and being pulled towards a green competitor over non-green competitor.

4. H0: There is no direct relationship between the

occupation of consumer and likelihood of continuing to purchase from a non-green competitor.

H1: There is a significant relationship between occupation of consumer and likelihood of continuing to purchase from a non-green competitor.

Table 8: Chi-square test for Occupation vs buy from non-green competitor

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.647 ^a	12	.042
Likelihood Ratio	21.995	12	.038
Linear-by-Linear Association	1.533	1	.216
N of Valid Cases	168		

Since the significance value < 0.05 , we reject H0 and conclude that there is a significant relation between the occupation of consumer and likelihood of continuing to purchase from a non-green competitor.

5. H0: There is no direct relationship between the occupation of consumer and willingness to buy green products at a reduced price.

H1: There is a significant relationship between occupation of consumer and willingness to buy green products at a reduced price.

Table 9: Chi-square test for Occupation vs willingness to buy at reduced prices

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.683 ^a	4	.794
Likelihood Ratio	1.788	4	.775
Linear-by-Linear Association	.334	1	.564
N of Valid Cases	168		

Since the significance value > 0.05 , we accept H0 and conclude that there is no significant relation between occupation of consumer and willingness to buy green products at a reduced price.

awareness of green products and willingness to pay more to purchase a green product.

6. H0: There is no direct relationship between

H1: There is a significant relationship between awareness of green products and willingness to pay more to purchase a green product.

Table 10: Chi-square test for Awareness vs willingness to pay more

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.985 ^a	8	.015
Likelihood Ratio	16.760	8	.033
Linear-by-Linear Association	13.812	1	.000
N of Valid Cases	168		

Since the significance value < 0.05 , we reject H0 and conclude that there is a significant relation between awareness of green products and willingness to pay more to purchase a green product.

regarding green products.

6. Results and findings

- i. There is no relation between gender of consumer and awareness regarding green products.
- ii. There is a significant relation between educational qualification of consumer and awareness

iii. There is a significant relation between willingness to pay more for green products and being pulled towards a green competitor over non-green competitor.

iv. There is a significant relation between the occupation of consumer and likelihood of continuing to purchase from a non-green competitor.

- v. There is no direct relation between occupation of consumer and willingness to buy green products at a reduced price.
- vi. There is a significant relation between awareness of green products and willingness to pay more to

purchase a green product.

Price Levels and Green Products :

69.6% feel that green products are worth the money, while 24.4% are unsure regarding worthiness of green products.

168 responses

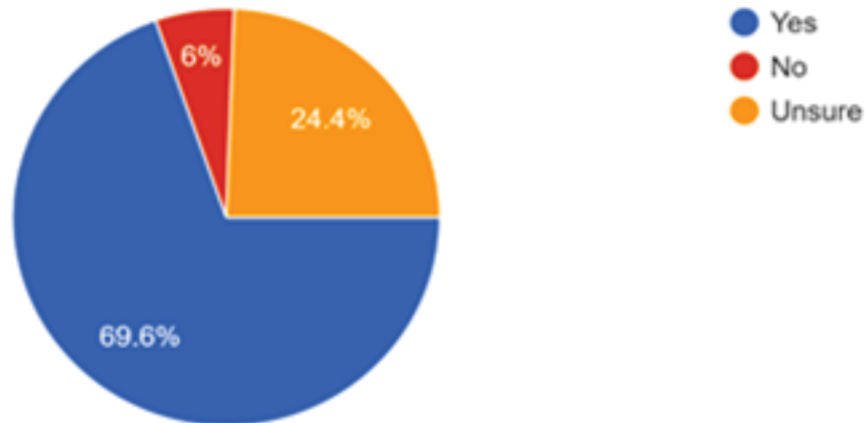


Figure 1 : Green products and their price worthiness

However, if green products are available at reduced prices, 86.3% of the people are willing to purchase green products.

168 responses

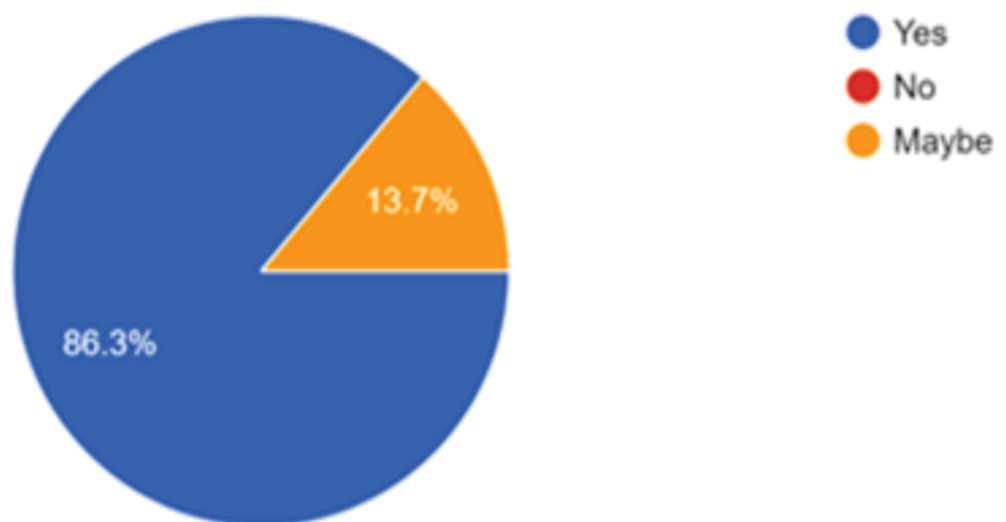


Figure 2 : Response to buying green products at reduced prices

Product Preferences :

78.6% people would purchase home items such as recyclable dustbin bags, recycled tissues, organic towels

etc., while others prefer to choose from consumer electronics, solar powered items, eco-friendly clothing and accessories etc. Complete statistics on consumer preferences is given below :

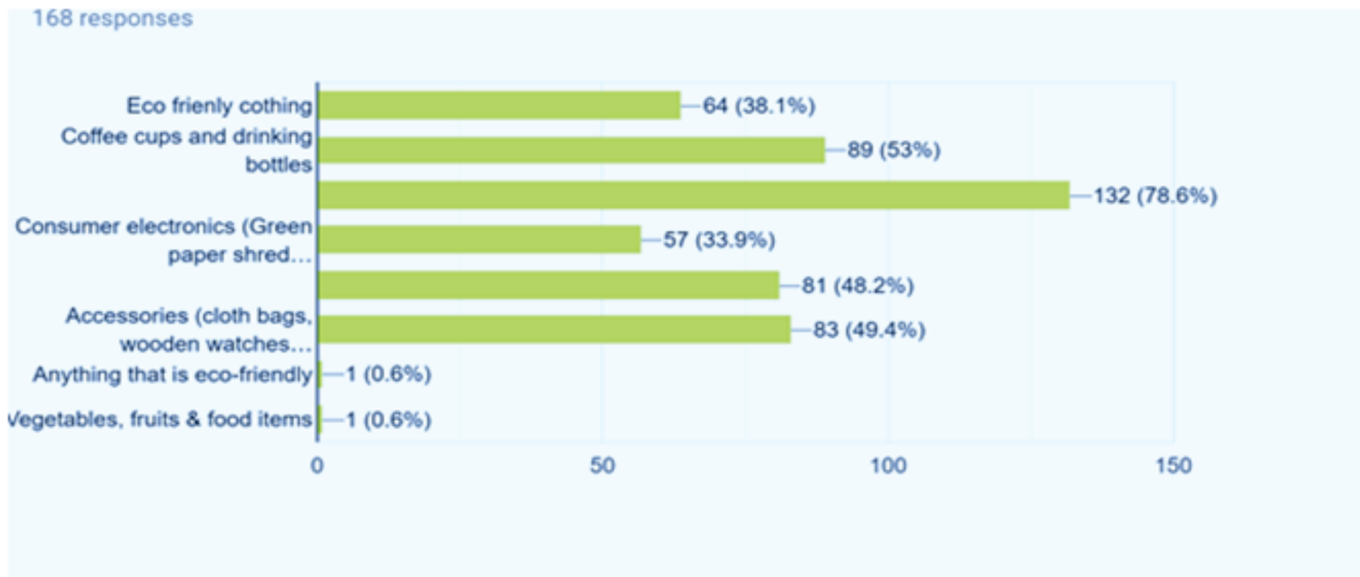


Figure 3 Green product preferences of consumers

The study has also shown that consumer buying behaviour is influenced by the 4Ps of marketing. While

36.3% of times buying is influenced by just the product itself, 48.2% of times it is influenced by a combination of all the 4Ps – product, place, packaging and promotion.

168 responses

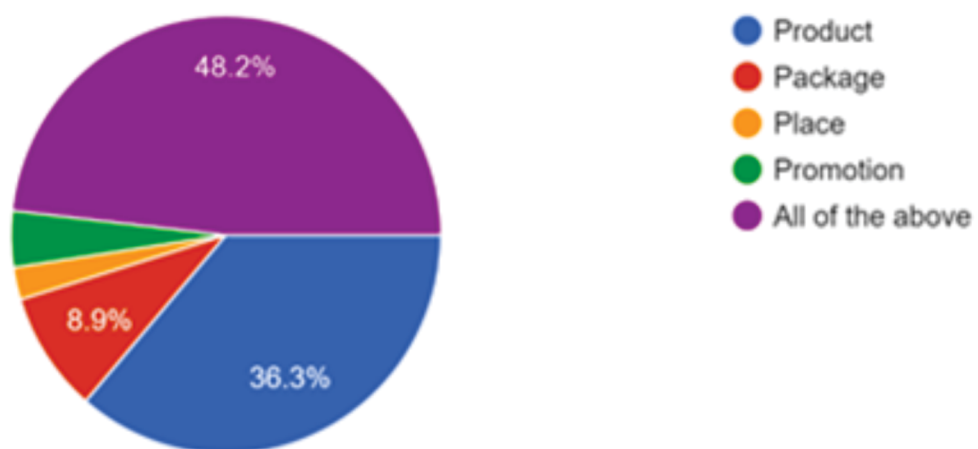


Figure 4 Consumer buying behaviour influencing factors

7. Conclusions

The consumers are highly aware of green products, but they are not very aware about the initiatives

undertaken by the government. Hence the government should highlight their efforts in this respect. Newspapers are an important source of information for consumers

regarding green products and practices.

Also, if the price of these products can be kept reasonable, more people will be able to buy these green products.

8. Managerial implications : This study helps to understand what factors influence a consumer to buy green products and this will help businesses in their decision-making also. Marketers can understand the preference of people for green products at suitable prices and take up environment-friendly activities to attract more consumers.

9. Limitations of the study and scope for further research

The study is done on a limited geographical area and hence its results cannot be generalized even though it provides valuable information regarding behavior of consumers towards green products. In future, psychographic segmentation of consumers can be done to assess their green values and preferences. The sample size can be increased, and the study can be done at a larger scale.

10. References :

1. Antonio, C., Sergio, R., Francisco, M. J. (2009). Characteristics of Research on Green Marketing Business Strategy and the Environment. Vol. 18, pp.223-239.
2. Braimah, M and Tweneboah-Koduah, E. H. (2011). An Exploratory Study of the Impact of Green Brand Awareness on Consumer Purchase Decision in Ghana, *Journal of Marketing Development and Competitiveness*, Vol. 5, No. 7, pp. 11-18
3. Charles H. Schwepker Jr. and T. Bettina Cornwell (1991), 'An Examination of Ecologically Concerned Consumers and Their Intention to Purchase Ecologically Packaged Products', *Journal of Public Policy & Marketing*, Vol. 10, No. 2, Environmental Problems and Marketing (Fall, 1991), pp. 77-101
4. Cherian, J. and Jacob, J. (2012). Green Marketing: A Study of Consumers' Attitude towards Environment Friendly Products. *Journal of Asian Social Science*, Vol. 8, No. 12, pp. 117-126.
5. D'Souza C, Taghian M and Lamb P (2006), "An Empirical Study on the Influence of Environmental Labels on Consumers", *Corporate Communications: An International Journal*, Vol. 11, No. 2, pp. 162-173.
6. D'Souza C, Taghian M and Khosla R (2007), "Examination of Environmental Beliefs and its Impact on the Influence of Price, Quality and Demographic Characteristics with respect to Green Purchase Intention", *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 15, No. 2, pp. 69-78.
7. Elkington, J. (1994). *Toward the Sustainable Corporation: Win-Win-Win Business Strategies for Sustain-able Development*. California Management Review, 36(2), 90-100.
8. Karna Jari, Hansen N Eric & Juslin Heikki (2003), 'Social responsibility in environmental marketing Planning', *European Journal of Marketing*, 37(5/6):848-871
9. Kilbourne E. William (1998), 'Green Marketing: A Theoretical Perspective', *Journal of Marketing Management*, 14:6, 641-655
10. Mohamed M. Mostafa (2006) Antecedents of Egyptian Consumers' Green Purchase Intentions, *Journal of International Consumer Marketing*, 19:2, 97-126, DOI: 10.1300/J046v19n02_06
11. Ottman, Jacquelyn (1998) *Green Marketing: Opportunity for Innovation*. NTC Business Books, 2nd Edition.
12. Oyewole Philemon (2001), 'Social Costs of Environmental Justice Associated with the Practice of Green Marketing', *Journal of Business Ethics*, February 2001, Volume 29, Issue3, pp 239-251
13. Phau, I. and Ong, D. (2007), "An investigation of the effects of environmental claims in promotional messages for clothing brands", *Marketing Intelligence & Planning*, Vol. 25 No. 7, pp. 772-788. <https://doi.org/10.1108/02634500710834214>
14. Polonsky, M. J.(1994).An Introduction to Green Marketing. *Electronic Green Journal*, Issue # 2

UCLA Library, UC Los Angeles.
<http://escholarship.org/uc/item/49n325b7>.

15. Prothero Andrea (1998), Book review on 'Environmental Marketing Management: Meeting the Green Challenge' by Ken Pattie, 1995, Pitman Publishing
16. Prothero Andrea & Fitchett James (2000), 'Greening Capitalism: Opportunities for a Green Commodity', Journal of Macro-marketing, 20(1):46-55.
17. Shafaat, A.; Sultan, A. (2012). Green Marketing. Excel International Journal of Multidisciplinary Management Studies. Vol. 2, No. 5
18. Thogersen J (2000), "Psychological Determinants of Paying Attention to Ecolabels in Purchase Decisions: Model Development and Multinational Validation", Journal of Consumer Policy; Vol. 23, pp. 285-313.

