© Krishi Sanskriti Publications

http://www.krishisanskriti.org/Publication.html

# **Green Purchasing of Personal Care Products**

# Hariharan Ganeshan<sup>1</sup> and P. Suresh<sup>2</sup>

<sup>1</sup>Bharathiar University, Coimbatore-641046 <sup>1</sup>Department of Management, Karpagam Academy of Higher Education, Coimbatore-641021 <sup>2</sup>Karpagam College of Engineering, Coimbatore- 641032 E-mail: <sup>1</sup>hari.hvbs@gmail.com, <sup>2</sup>drsureshcoe@gmail.com

# **ABSTRACT**

#### Purpose

The purpose of this paper is to analyse the perception of consumers towards green purchasing of personal care products which identifies the result through the analysis among the customers in Cochin.

# Design/Methodology/Approach

This paper belongs to descriptive analysis of a perception of consumer in green purchasing personal care products. This study undertakes quantitative approach and collects the primary data with the help of structured questionnaire. This study selects the respondents through the convenient random sampling method to fill up the open end and close end questionnaire. The journals, magazines and text books are considered as secondary data.

#### **Findings**

Findings prove that eco-motivation is an important factor to purchase eco-labeled products. The availability of space in shelf for eco-labeled products in retail stores which attracts the consumers to buy the products easily. The statistical evidence clearly exhibits that eco-knowledge and peer influence of consumers play a vital factor that induces them to purchase eco-labeled products.

# **Practical Implications**

The paper explores the factors that influence the consumers on green purchasing personal care products. This is an indication of human interest and obligation to stay healthy and to save and preserve nature for future generation. The outcome of this study becomes input for the customers, retailers and the manufacturers in strategizing their needs.

# Original/Value

This study reveals that green purchasing products of consumers to protect their environments and encourage the protection of the eco system.

**Keywords**: Green Purchasing, Retail, Purchase decision, Green Marketing.

# 1. INTRODUCTION

In general, the word sustainability denotes the continuous effort to enhance quality of human life, while living within the limits of supporting eco system. Human being always reconciles with the environment. The role of organizations plays a vital role providing eco friendly products and offering

eco friendly services. Business Organizations and customers have realized the need to be socially responsible in terms of using Green Products.

### 1.1 About the Present Study

The present study is undertaken to understand the Consumer Perception towards the purchasing of Green Products in Cochin, Kerala. The study will be helpful in finding out the factors influencing the green purchasing of eco-labeled personal care products among middle income group of customers in Cochin.

Thus the research question can be formulated as follow as: To understand the Consumer Perception towards the Green Purchasing of personal care products? In order to answer the research question, researchers have formulated an objective, aimed to increase the understanding of the Consumer perception towards the green purchasing and put limelight of the different perspectives of the issues. The objective is: To find the factors affecting the Green purchasing of eco-labeled personal care products.

# 2. LITERATURE REVIEW

# 2.1. Green Marketing

Peattie & Crane (2005) has come out with the idea of green marketing in the late 1980's. Early 1990's marketing research addressed that consumers were concerned about the using of environmental friendly products. Many organizations were taken care of environmental issues and worked towards the adjusting their promotional campaign (Peattie & Crane, 2005, 358-361). Growing concerns for the environment, companies have led to a considerable increase in number of products marked as environmental friendly (Jansson, Marell & Nordlund, 2010, p. 358). Many authors have different perspectives of green marketing. Green marketing integrates a various activities including modification of existing products, changes in production process and packaging changes as well as modifying the promotional activities. Green Marketing can be applied to tangible goods and intangible goods (Grundey & Zaharia, 2008, p. 130.) Green marketing involves in different aspects green design, production of green products for sale to

green consumers who are interested in recycling the waste from their consumption.

#### 2.2. Green Products

Green Products are better in performance to the environment and society. Green products are significantly better version related to traditional product offerings available in the market for its production, usage, and disposal (Peattie, 1995, p. 181). These green products are environmentally safe and preferable products and services.

# 2.3. The background of eco-labeling

An eco-label is a label which shows overall environmental performances of products and services. Eco-labeling is only one type of environmental labeling, and refers specifically to the provision of information to consumers about the relative environmental quality of products. It is one of the measures proposed to achieve the sustainability goals. It is having the potential to increase the consumers' awareness concerning with the environment (Erskine & Collins, 1997, p. 126). Ecolabels can be seen as an opportunity to increase sales through product differentiation, increased accountability or it can give an increased choice for the consumer in a store environment that is becoming greener (Horne, 2009, p. 180). The ISO (International Standard Organization) has put on efforts to standardize the principles, practices and key characteristics relating to three major voluntary environmental labeling types -- Type I - environmental labeling (i.e. Eco labels). Type II self-declaration claims and Type III - environmental declarations (e.g. report cards/information labels).

The Ministry of Environment & Forests, Govt. of India have organized a scheme on labeling of Environment Friendly Products i.e. Eco-mark – is a certification mark issued by the Bureau of Indian Standards to products. The eco mark scheme was started on 1991. The major objective of eco mark is to increase awareness among the consumers towards reducing environmental impact. The Eco-mark products are

**Table 2.1: An example of Eco-Products** 

| Soaps and detergents | Paints             | Paper            |
|----------------------|--------------------|------------------|
| Food items           | Food additives and | Wood             |
|                      | preservatives      | Substances       |
| Textiles             | Batteries          | Lubricating oil  |
| Packaging            | Plastics           | Aerosols         |
| Cosmetics            | Pesticides & drugs | Electronic goods |
| Vegetable Oils       |                    |                  |

Source: Ministry of Environment and Forest-Central Pollution Control Board

# 2.4. Factors influencing on Consumer Purchasing Behaviour

Thogersen's (2000) addressed "Causal path model" many factors were found that affecting while consumer purchasing the eco-labeled products. The factors are Motivation,

knowledge, availability and attitude. In addition to other studies also found that peer influence, price and demographics and shelf space factors influencing the consumer purchasing decision of eco-labeled products.

#### 2.4.1. Eco-Motivation

A need becomes a motive when it comes to a satisfactory level of intensity. A motive is a need that is affecting a person to seek fulfillment (Kotler, 2011, p. 146-147). Thogerson causal path model motivation consists of a pro-environmental attitude, PCE: (Perceived Consumer Effectiveness), trust and a belief in environmental friendly buying (Thogersen, 2000, p. 291-292). Sandra and et.al conducted the study on ecomotivational analysis study which has shown that respondents have high eco-motivation (Trustworthiness/credibility) which is 3.42 out of 5. Further, their study was found that 96.7 % of consumers have shown interest for buying the eco labeled products. Because they believed that eco-labeled products are beneficial for the environment and that it is important to be environmentally friendly.

# 2.4.2. Eco-Knowledge

Consumers should have good knowledge about the ecolabeled products. When Consumers are making green purchase decision one of the first and most important stages is to consider that their knowledge about the environmental issues (Young, Hwang, McDonald & Oates, 2010, p. 28-29). Study showed that eco-knowledge encouraging the consumer to purchase the eco-labeled products (Sandra and Arif, 2011).

### 2.4.3. Price

Price is one of the marketing mix. Price plays a vital role in the purchase decision. Pricing of eco-labeled products mostly influence the consumers to create potential interest towards the eco-labeled products. Earlier consumer research study indicated that consumers differ in their preferences with respect to product packaging, brand, price and the package resale ability (convenience of use). Larger customer segments are showing interest to the environmental friendly products (Rokka and Uusitaloo (2008). Greening could create cost savings many companies became enthusiastic about the environment. The cost/benefits could then be connected to more energy and material input efficiencies, packaging reductions and logistic rationalization which provided strong incentives to develop environmental programs. Although these products became cheaper to produce, it didn't affect the customers in form of cheaper and greener products.

# 2.4.4. Importance of Shelf-space

Shelf Space (Availability) is the space availability for the ecolabeled products. Retailers face one of the challenges is allocation of shelf space to fill the stock of various products. Study addressed that allocating the space for various products are important factor in generating profit (Nierop & Franses, 2006. pp. 1065-1066). Consumers identify and understand the

product related environmental information on products which influences them to purchase the eco-labeled products. In addition, some other factors can also be influenced such as the availability of eco-labeled products, time and money, external stimuli, and motivation and understanding the relevance of different product choices (Leire & Thidell, 2004, p.1068). Earlier marketing studies have shown that in-store environmental stimuli such as shelf space allocation and product display has a great influence on consumer buying behavior and can create a considerable demand (Chen, Chen & Tung, 2006, p. 1503). Sandra and Arif were found that enlarging shelf space can increase the attention of consumers towards eco-labeled products.

# 2.4.5. Demographic factor

Research study addressed that consumers' demographic profile linked to their attitude and towards green label (D'Souza, Taghian, Lamb & Peretiatko, 2007, p. 373-375). The demographic factors included: Age, gender and employment were considered for this paper. Age: Early study indicated that the old aged group respondents who had highest dissatisfaction (53.8%) with eco label products, while the younger respondents (18-29 years) had only 3.8% dissatisfaction (D'Souza, Taghian, Lamb & Peretiatko, 2007, p. 373-375). Gender: Gender has some influence on purchasing the eco labeled products. Study addressed that women are more often being likely than men to have noticed the new eco-labels and to know what it means (Thogersen, Haugaard & Olesen, 2010, p. 1798-1796). Another study indicates the opposite result and revealed that there was no difference when it came to gender compared to understandability, past experience, accuracy of labels, and satisfaction with the labels and the quality of green products compared to other products (D'Souza, Taghian, Lamb & Peretiatko, 2007, p. 373) Employment: It was found that full time working respondents were less likely to need instructions on recycling to appear on product labels (D'Souza, Taghian, Lamb & Peretiatko, 2007, p. 374).

#### 2.4.6. Peer influence

Consumers influenced by other people to purchase the green products. The influence of social groups and family members could have an impact on the consumers purchase behavior (Kotler, 2011, p. 139-143). Thogersen. et. al addressed that peer influence is one of the factors influencing the consumers to purchase eco labeled products (Thogersen, Haugaard & Olesen, 2010, p. 1787-1801)

# 3. RESEARCH METHODOLOGY

In order to complete this research, a survey is conducted to collect data from middle income group of customers in Cochin District. This paper is a descriptive analysis the consumer perception the green purchasing of personal care products. A Structured questionnaire can be used to collect the Primary data; A Convenient random sampling (sample size 55) can be

asked respondents to fill up the open end and close end questionnaire. Secondary data were collected from journals, magazines and text books.

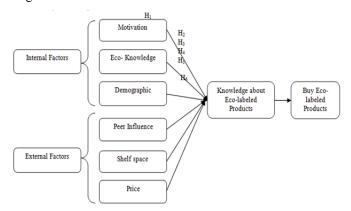


Fig. Error! No text of specified style in document..1: Fig. of Causal path model -Adopted from
Thogersen 2000

Hypothesis 1: There is no relationship between consumers' eco-motivation and purchase intention towards eco-labeled products.

Hypothesis 2: There is no relationship between consumers' eco-knowledge and purchase intention of eco-labeled products.

Hypothesis 3: There is no relationship between demographic factors and consumers purchase intention of eco-labeled products.

Hypothesis 4: There is no association between peer influence and interest to buy eco-labeled products.

Hypothesis 5: It is not an importance of shelf space (availability) and interest to buy eco-labeled products in the retail store.

Hypothesis 6: Price is not an important factor to buy the ecolabeled products.

# 4. FINDINGS AND ANALYSIS

Hypothesis 1: There is no relationship between consumers' eco-motivation and purchase intention towards eco-labeled products.

Table 4.1: Chi-Square value of Purchase Eco labeled products and eco-labels products affect buying intention.

|                                 | Value | DF | Asymp. Sig. (2-sided) 5% level of Significance |
|---------------------------------|-------|----|--|
| Pearson Chi-Square              | 27.80 | 16 | 0.033  |
| Likelihood Ratio                | 33.78 | 16 | 0.006  |
| Linear-by-Linear<br>Association | 7.77  | 1  | 0.005  |
| N of Valid Cases                | 55    |    |  |

Interpretation: For understanding the relationship between eco-motivation and purchase intention towards the eco-labeled

products. The above table shows the chi-square value (27.80) which is significant at the 0.033 level. We therefore reject the null hypothesis that there is no association between the ecomotivation and interest to buy the eco-labeled products. Therefore, we can conclude from the chi-square test that there is strong association between the consumer's eco-motivation and interest to buy eco-labeled products. The result was found that respondents show a high interest to purchase the eco-labeled products. Earlier study has also indicated that consumer is using the products related to environmental friendly which is influenced by their motivation (Leire &Thidell, 2004, p.1068). Consumers also believed that the eco-labeled products are beneficial to the environment i.e. important to be environment friendly (Sandra et. al 2011).

Hypothesis 2: There is no relationship between consumers' eco-knowledge and purchase intention of eco-labeled products.

Table 4.2: Chi Square value of consumers' eco-knowledge and purchase intention of eco-labeled products.

|                                 | Value | DF | Asymp. Sig. (2-sided) |
|---------------------------------|-------|----|-----------------------|
| Pearson Chi-Square              | 24.09 | 16 | 0.088                 |
| Likelihood Ratio                | 26.72 | 16 | 0.045                 |
| Linear-by-Linear<br>Association | 0.00  | 1  | 0.977                 |
| N of Valid Cases                | 55    |    |                       |

Interpretation: The calculated value of Chi Square ( $\lambda^2$ ) =24.09 which is not significant at the 0.088 level. Consequently, we accept the null hypothesis that there is no relationship between consumers' eco-knowledge and purchase intention of ecolabeled products. According to the study results there is no association between the eco-knowledge and buy the ecolabeled products. The evidence shows that consumer knowledge and their awareness about organic products has been very high (86%) (Dahm, Samonte & Shows, 2009, p.196). This factor is addressing that the consumers should have a sound knowledge of eco-labeled products. Consumers. who are interested in these products, would gain the more knowledge about such products. Earlier study noticed that lack of eco- knowledge and problem with understanding information about eco-labeled products could be a problem for some consumers (D'Souza et al. 2006, p.168-170). This is true in our case.

Hypothesis 3: There is no relationship between demographic factors and consumers purchase the eco-labeled products.

Table 4.3 Chi Square value of Purchase Eco labeled products and Gender

| products and Schael          |       |    |                       |  |
|------------------------------|-------|----|-----------------------|--|
|                              | Value | DF | Asymp. Sig. (2-sided) |  |
| Pearson Chi-Square           | 10.16 | 4  | 0.038                 |  |
| Likelihood Ratio             | 10.86 | 4  | 0.028                 |  |
| Linear-by-Linear Association | 4.52  | 1  | 0.033                 |  |
| N of Valid Cases             | 55    |    |                       |  |

Interpretation: The calculated value of Chi Square ( $\lambda^2$ ) =10.16 which is significant at 0.038 level. We therefore, reject the null hypothesis. It shows that there is discriminate between genders to purchase the eco-labeled products. The study results indicated that the gender is important factor to buy the eco-labeled products. In the research result it was found that, 6.90 % of female respondents purchase and 3.85 % of male respondents purchase the eco-labeled products in every week. This is true in our case, earlier theory was found that female were to be more aware and more adaptable to try eco-labeled products than men (Thogersen, Haugaard & Olesen, 2010, p. 1798-1796).

Table 4.4 Chi Square value of Purchase Eco labeled products and Age group

|                                 | Value | DF | Asymp. Sig. (2-sided) |
|---------------------------------|-------|----|-----------------------|
| Pearson Chi-Square              | 24.11 | 12 | 0.020                 |
| Likelihood Ratio                | 22.98 | 12 | 0.028                 |
| Linear-by-Linear<br>Association | 4.17  | 1  | 0.041                 |
| N of Valid Cases                | 55    |    |                       |

Interpretation: The calculated value of Chi Square  $(\lambda^2)$  =24.11 which is significant at 0.020 level which is lower than the 0.05 at 95 % confidence level. We reject the null hypothesis. As a result, age group showing more concerns to buy eco label products. The age is also a crucial factor to buy eco-labeled products. According to Age group (31-40) 13.33 % of the respondents and 4.55 % of the respondents have fallen into age category of 21-30 showing interest to buy the eco labeled products in every week.

Table 4.5: Chi Square value of Purchase Eco labeled products and Current Activity

|                                 | Value | DF | Asymp. Sig. (2-sided) |
|---------------------------------|-------|----|-----------------------|
| Pearson Chi-Square              | 40.09 | 8  | 0.000038              |
| Likelihood Ratio                | 34.12 | 8  | 0.00038               |
| Linear-by-Linear<br>Association | 0.14  | 1  | 0.7125                |
| N of Valid Cases                | 55    |    |                       |

Interpretation: The calculated value of Chi Square ( $\lambda^2$ ) =40.09 which is significant at 0.000038 level. Thus, we reject the null hypothesis. Hence the researcher concluded that there is relationship between consumer's demographic factors (age, gender and current activity) prefer to buy eco labeled products.

Hypothesis 4: There is no association between peer influence and interest to buy eco-labeled products.

Table 4.6: Chi Square value of Purchase Eco labeled products and Peer influence

|                                 | Value | DF | Asymp. Sig. (2-sided) |
|---------------------------------|-------|----|-----------------------|
| Pearson Chi-Square              | 28.40 | 16 | 0.0283                |
| Likelihood Ratio                | 22.95 | 16 | 0.115119              |
| Linear-by-Linear<br>Association | 0.37  | 1  | 0.543152              |
| N of Valid Cases                | 55    |    |                       |

Interpretation: From above table, the calculated value of Chi Square ( $\lambda^2$ ) =28.40 which is significant at 0.0283 which is lower than the 0.05 level at 95 % confident. Consequently, we reject the null hypothesis. Hence, we conclude that there is a strong association between the peer influence and interest to buy eco-labeled products. Earlier study indicated that peer influence place a crucial role to influence the consumers to purchase the eco-labeled products (Solomon et. al. 2006, p.155-156). Kotler (2011) addressed that the influence of social groups and family members could have an impact on the consumers purchase behavior (Kotler, 2011, p. 139-143).

Hypothesis 5: It is not an importance of shelf space (availability) and interest to buy eco-labeled products in the retail store.

Table 4.7 Chi Square value of Purchase Eco labeled products and available shelf space

|                                 | Value    | DF | Asymp. Sig. (2-sided) |
|---------------------------------|----------|----|-----------------------|
| Pearson Chi-Square              | 36.92    | 16 | 0.00215               |
| Likelihood Ratio                | 39.03714 | 16 | 0.001074              |
| Linear-by-Linear<br>Association | 2.09019  | 1  | 0.148248              |
| N of Valid Cases                | 55       |    |                       |

Interpretation: To understand the relationship between the shelf space and purchase intention towards the eco-label products, we run the Chi-square test. The calculated value of Chi Square ( $\lambda^2$ ) =36.92 which is significant at 0.00215 level. We therefore, reject the null hypothesis. As a result, the availability of shelf-space exclusively for eco-label products is important in retail sectors. Pervious theory was found that availability can have an influence towards the attention to eco-labeled products (Thogersen, 2000, p.307). This availability for eco-labeled product was one of the factors influencing the consumer during the situation of using environmental information (Leire & Thidell, 2004, p.1068). Exclusive Shelf space allocation and eco-product display could also influence consumer purchase behavior (Chen, Chen & Tung, 2006, p.1503).

Hypothesis 6: Price is not an important factor to buy the ecolabeled products.

Table 4.8: Chi Square value of Purchase Eco labeled products and choosing between conventional and eco labeled products

| Value | DF | Asymp. Sig.<br>(2-sided) |
|-------|----|--------------------------|
|-------|----|--------------------------|

| Pearson Chi-Square | 46.79    | 16 | 0.00007  |
|--------------------|----------|----|----------|
| Likelihood Ratio   | 28.90684 | 16 | 0.024572 |
| Linear-by-Linear   |          |    |          |
| Association        | 0.16132  | 1  | 0.687944 |
| N of Valid Cases   | 55       |    |          |

Interpretation: The calculated value of Chi Square ( $\lambda^2$ ) =46.79 which is significant at 0.00007 level which is lower than the 0.05 at 95 % confident. Consequently, we reject the null hypothesis. It shows that the price is an important factor in choosing between conventional and eco labeled products.

# 5. CONCLUSION

The purpose of this study is mainly to understand the most important factors affecting the Green purchasing of ecolabeled personal care products. For this purpose, we select the six elements to understand the role of these factors towards the purchase behaviour of eco-labeled products such as ecomotivation, eco-knowledge, demographic factors (gender, age and current activity), peer influence, price and shelf space. The relationship between these six factors and purchase intention towards the eco-labeled products were tested in the first phase of statistical analysis.

As per the usual directions of various related studies, here also most of the hypotheses are tested true. Going by the objective of the study in relation to hypotheses, consumers' ecoknowledge to purchase the green personal care products adhere to claimed hypothesis, but for this rest of the hypotheses ranging from consumers' eco-motivation, demographic profiles, peer influences, available shelf space and green product prices have all no or very minimal influences over the purchase of green products. This is an indication that human interest and obligation to stay healthy and to save and preserve Mother Nature for future generation keeps increasing. Let us also apply this model to further sharpen and refine other related studies.

# REFERENCES

- [1] Chen, Y-L., Chen J-M & Tung, C-W. (2006), "A data mining approach for retail knowledge discovery with consideration of the effect of shelf-space adjacency on sales", *Elsevier-Decision* Support Systems, Vol.42, No.3, pp.1503-1520.
- [2] D'Souza, C., Taghian, M., & 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.
- [3] Erskine, C.C., & Collins, L. (1997), "Eco-labeling: Success or failure?" *The Environmentalist*, Vol. 17, No. 2, pp. 125-133.
- [4] Grundey, D., & Zaharia, R.M. (2008), "Sustainable incentives in marketing and strategic greening: the cases of Lithuania and Romania", *Baltic Journal on Sustainability*, Vol. 14, No.2, pp.130-143.
- [5] Horne, R.E. (2009), "Limits to labels: The role of eco-labels in the assessment of product sustainability and routes to sustainable consumption", *International Journal of Consumer Studies*, Vol. 33, No. 2, pp.175-182.

- [6] Jansson, J., Marell, A., & Nordlund, A. (2010), "Green consumer behavior: determinants of curtailment and ecoinnovation adoption", *Journal of Consumer Marketing*, Vol.27, No.4, pp. 358-370.
- [7] Kotler, P., & Armstrong, G. (2009), *Marketing an Introduction*, 9<sup>th</sup> edition. Prentice Hall, UK.
- [8] Kotler, P., Armstrong, G., & Parment, A. (2011), Principles of marketing, Swedish edition. Prentice Hall.
- [9] Leire, C., & Thidell, A., (2004), "Product- related environmental information to guide consumer purchases-a review and analysis of research on perceptions, understanding and use among Nordic consumers", *Journal of Cleaner Production*. Elsevier, Vol.13, No.10-11, pp.1061-1070.
- [10] Ministry of Environment & Forests (2014), "Central Pollution Control board Eco-mark products information", available at www.cpcb.nic.in/criteria\_ecomark.php (accessed on 15June 2015).
- [11] Nierop, E., Franses, P.H., & Fok, D., (2006), "Interaction between shelf layout and marketing effectiveness and its impact on optimizing shelf arrangements" *Marketing Science* Vol. 27, pp. 1065-1082.
- [12] Peattie, K., & Crane, A. (2005), "Green marketing: legend, myth, farce or prophesy?" *Qualitative Market Research: An International Journal*, Vol. 8, No. 4, pp. 357-370.
- [13] Peattie, K. (1995), Environmental marketing management: Meeting the Green Challenge. London: Pitman.