



## **A STUDY ON FACTORS AFFECTING BUYING BEHAVIOUR OF CONSUMERS FOR ECO - FRIENDLY PRODUCTS**

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**Cite This Article:** N. Anil Kumar & Dr. Mridanish Jha, "A Study on Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products", International Journal of Interdisciplinary Research in Arts and Humanities, Volume 2, Issue 1, Page Number 227-231, 2017.

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### **Abstract:**

Products are not the only thing which can be eco-friendly and actions are also friendly to the environment. Several people think that eco-friendly products are only the first step, and that people who are actually dedicated to the environment also need to change their lifestyles, diminishing the quantum of resources they use by living more competently. The exploratory factor analysis shows that price, quality, value, trust and easy to use are the factors that affecting buying behaviour of consumers for eco-friendly products. There is significant difference between socio-economic profile of consumers and factors affecting buying behaviour of consumers for eco-friendly products except gender of consumers and factors affecting buying behaviour of consumers for eco-friendly products. The regression analysis shows that price, quality, easy to use, value and trust have significant and positive impact on satisfaction of consumers towards eco-friendly products. The producers should provide eco-friendly products with superior quality which must meet consumer's expectations and the quality of eco-friendly products must be consistent and reliable. The producers must offer eco-friendly products at affordable prices and incentives for using eco-friendly products to the consumers. The marketers should use different distribution channels efficiently to improve the accessibility of eco-friendly products to consumers.

**Key Words:** Buying Behaviour, Consumer & Eco-Friendly Products

### **1. Introduction:**

The raising concern for environmental problems has contributed to increase in the demand for environment friendly products and services. The limelight on sustaining the environment has generated term namely offsetting and carbon footprint. Many companies have modified their marketing strategies to capitalize the desire of consumer for environment friendly products and services (Das et al, 2012).

Eco-friendly products are the products that must be environmentally well-suited having minimal effect on the environment. This is the accountability of the companies to produce eco-friendly products. The reason behind this concept is that consumer anticipates corporate culture should change toward the safeguard of the environment rather than profit maximization (Sehgal and Singh, 2010).

Products are not the only thing which can be eco-friendly and actions are also friendly to the environment. Several people think that eco-friendly products are only the first step, and that people who are actually dedicated to the environment also need to change their lifestyles, diminishing the quantum of resources they use by living more competently.

With growing environmental realization, companies need to understand not only buying behaviour of consumers but also the factors that affecting buying behaviour of consumers and their satisfaction towards eco-friendly products. This will not only assist the marketers for segmenting the market properly and developing production and marketing strategies to satisfy the needs of consumers but also the policy makers in impose sustainability in marketing of products and services. Therefore, the present study is made to identify the factors affecting buying behaviour of consumers for eco-friendly products in Kerala State.

### **2. Methodology:**

The Kerala State is selected for the present study and the consumers of eco-friendly products are selected by using convenience sampling method. The data are collected from 711 consumers of eco-friendly products in Kerala State through pre-tested structured questionnaire. To examine the socio-economic profile of the consumers of eco-friendly products, frequency distribution and percentage analysis are carried out. To identify the factors affecting buying behaviour of consumers for eco-friendly products, an exploratory factor analysis is done. To examine the difference between socio-economic profile of consumers and factors affecting buying behaviour of consumers for eco-friendly products, the ANOVA (Analysis of Variance) has been applied. To analyze the impact of factors affecting buying behaviour on satisfaction of consumers towards eco-friendly products, the multiple linear regression has been used.

### **3. Results and Discussion:**

**3.1 Socio-Economic Profile of Consumers of Eco-Friendly Products:** The socio-economic profile of consumers of eco-friendly products was analyzed and the results are presented in Table-1. The results show that

53.73 per cent of consumers are males and the remaining of 46.27 per cent of consumers are females. It is observed that 38.40 per cent of consumers are in the age group of 26 – 35 years, 26.44 per cent of consumers are in the age group of 36 – 45 years, 14.91 per cent of consumers are in the age group of below 25 years, 12.23 per cent of consumers are in the age group of 46 – 55 years and 8.02 per cent of consumers are in the age group of above 55 years.

The results indicate that 41.77 per cent of consumers have educational qualification of graduation, 34.04 per cent of consumers have educational qualification of post graduation, 9.99 per cent of consumers have educational qualification of diploma, 9.28 per cent of consumers have educational qualification of higher secondary and 4.92 per cent of consumers have educational qualification of secondary. It is clear that 76.23 per cent of consumers are working in domestic places and the remaining of 23.77 per cent of consumers are working in foreign places.

The results reveal that 37.27 per cent of consumers are in the monthly income of Rs.30,001 – Rs.40,000, 24.90 per cent of consumers are in the monthly income of Rs.20,001 – Rs.30,000, 18.28 per cent of consumers are in the monthly income of less than Rs.20,000, 12.80 per cent of consumers are in the monthly income of Rs.40,001 – Rs.50,000 and 6.75 per cent of consumers are in the monthly income of more than Rs.50,000. It is apparent that 77.64 per cent of consumers are married and the remaining of 22.36 per cent of consumers is unmarried.

Table 1: Socio-Economic Profile of Consumers of Eco-Friendly Products

Socio-Economic Profile	Number of Consumers	Percentage
<b>Gender</b>		
Male	382	53.73
Female	329	46.27
<b>Age Group</b>		
Below 25 years	106	14.91
26 – 35 years	273	38.40
36 – 45 years	188	26.44
46 – 55 years	87	12.23
Above 55 years	57	8.02
<b>Educational Qualification</b>		
Secondary	35	4.92
Higher Secondary	66	9.28
Diploma	71	9.99
Graduation	297	41.77
Post Graduation	242	34.04
<b>Place of Work</b>		
Domestic	542	76.23
Foreign	169	23.77
<b>Monthly Income</b>		
Less than Rs.20,000	130	18.28
Rs.20,001 – Rs.30,000	177	24.90
Rs.30,001 – Rs.40,000	265	37.27
Rs.40,001 – Rs.50,000	91	12.80
More than Rs.50,000	48	6.75
<b>Marital Status</b>		
Married	552	77.64
Unmarried	159	22.36

**3.2 Identification of Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products:** To identify the factors affecting buying behaviour of consumers for eco-friendly products, an exploratory factor analysis is done and the results are presented in Table-2. The outcomes of Kaiser-Meyer-Olkin (KMO test) measure of sampling adequacy (KMO = 0.758) and Bartlett’s test of Sphericity (Chi-square value = 0.0045; Significance = 0.000) shows that the factor analysis method is suitable. Five factors are extracted that account 58.26 per cent of variations on 20 variables and each of them contributes to 14.13 per cent, 13.32 per cent, 10.90 per cent, 10.16 per cent and 9.75 per cent respectively.

Table 2: Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products

Factor	Variables	Rotated Factor Loadings	Eigen Value	% of Variation	Factor Name
I	Price	0.69	4.93	14.13	Price
	Affordability	0.71			
	Attractive Packaging	0.70			

	Brand Image	0.68			
	Incentives	0.72			
II	Quality	0.59	2.25	13.32	Quality
	Anxiety for Environment	0.74			
	Knowledge on Environment	0.61			
	Product Information	0.71			
	Safety	0.62			
III	Nutritional Values	0.77	1.74	10.90	Value
	Personal Values	0.65			
	Cultural Values	0.59			
	Social Values	0.61			
IV	Health Conscious	0.73	1.45	10.16	Trust
	Beliefs	0.71			
	Peer Pressure	0.81			
V	User Friendly	0.76	1.28	9.75	Easy to Use
	Convenience	0.70			
	Easily Degradable	0.79			
	Cumulative % of Variation	-	-	58.26	-
	Cronbach's Alpha	-	-	-	0.83

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization, Rotation converged in 7 iterations.

Factor - I consists of price, affordability, attractive packaging, brand image and incentives. Hence, this factor is named as Price.

Factor - II includes quality, anxiety for environment, knowledge on environment, product information and safety. Therefore, this factor is named as Quality.

Factor - III comprises of nutritional values, personal values, cultural values and social values. So, this factor is named as Value.

Factor - IV encompasses health conscious, beliefs and peer pressure. Thus, this factor is named as Trust.

Factor - V consists of user friendly, convenience and easily degradable. Hence, this factor is named as Easy to use.

Cronbach's Alpha value of the scale is 0.83 revealing that each measure shows acceptable level of internal consistency. It is inferred that price, quality, value, trust and easy to use are the factors affecting buying behaviour of consumers for eco-friendly products.

### 3.3 Socio-Economic Profile of Consumers and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products:

To examine the difference between socio-economic profile of consumers and factors affecting buying behaviour of consumers for eco-friendly products, the ANOVA (Analysis of Variance) has been applied and the results are presented in Table-3.

Table 3: Difference between Socio-Economic Profile of Consumers and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products

Particulars	F-Value	Sig.
Gender and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products	2.738	.098
Age Group and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products	6.620**	.000
Educational Qualification and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products	5.740**	.000
Place of Work and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products	5.549*	.019
Monthly Income and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products	4.720**	.000
Marital Status and Factors Affecting Buying Behaviour of Consumers for Eco-Friendly Products	6.405**	.012

\*\* Significant at one per cent level

\* Significant at five per cent level

The F-values are significant indicating that there is significant difference between socio-economic profile of consumers and factors affecting buying behaviour of consumers for eco-friendly products except gender of consumers and factors affecting buying behaviour of consumers for eco-friendly products. Hence, the null hypothesis of there is no significant difference between socio-economic profile of consumers and factors affecting buying behaviour of consumers for eco-friendly products is rejected.

**3.4 Impact of Factors Affecting Buying Behaviour on Satisfaction of Consumers towards Eco-Friendly Products:** To analyze the impact of factors affecting buying behaviour on satisfaction of consumers towards eco-friendly products, the multiple linear regression has been used and the results are presented in Table-4. The coefficient of multiple determination ( $R^2$ ) is 0.66 and adjusted  $R^2$  is 0.65 indicating the regression model is good fit. It implies that 65.00 per cent of the variation in dependent variable is explained by the independent variables. The F-value of 270.864 is statistically significant at one per cent level revealing that this regression model is significant.

Table 4: Impact of Factors Affecting Buying Behaviour on Satisfaction of Consumers towards Eco-Friendly Products

Factors Affecting Buying Behaviour	Regression Co-efficients	t-Value	Sig.
Intercept	36.225**	32.164	.000
Price ( $X_1$ )	2.375**	21.787	.000
Quality ( $X_2$ )	2.279**	20.805	.000
Value ( $X_3$ )	.804**	7.355	.000
Trust ( $X_4$ )	.316**	2.884	.004
Easy to Use ( $X_5$ )	2.118**	19.339	.000
$R^2$	0.66	-	-
Adjusted $R^2$	0.65	-	-
F	270.864	-	.000

\*\* Significance at one per cent level

The results show that price, quality, easy to use, value and trust have significant and positive impact on satisfaction of consumers towards eco-friendly products at one per cent level. Thus, the null hypothesis of there is no significant impact of factors affecting buying behaviour on satisfaction of consumers towards eco-friendly products is rejected.

#### 4. Conclusion:

The study reveals that more than half of (53.73 per cent) consumers are males and nearly two fifth of (38.40 per cent) consumers are in the age group of 26 – 35 years. More than two fifth of (41.77 per cent) consumers are graduates and more than three fourth of (76.23 per cent) consumers are working in domestic places. Nearly two fifth of (37.27 per cent) consumers are in the monthly income of Rs.30,001 – Rs.40,000 and more than three fourth of (77.64 per cent) consumers are married.

The exploratory factor analysis shows that price, quality, value, trust and easy to use are the factors that affecting buying behaviour of consumers for eco-friendly products. There is significant difference between socio-economic profile of consumers and factors affecting buying behaviour of consumers for eco-friendly products except gender of consumers and factors affecting buying behaviour of consumers for eco-friendly products. The regression analysis shows that price, quality, easy to use, value and trust have significant and positive impact on satisfaction of consumers towards eco-friendly products.

The producers should provide eco-friendly products with superior quality which must meet consumer's expectations and the quality of eco-friendly products must be consistent and reliable. The producers must offer eco-friendly products at affordable prices and incentives for using eco-friendly products to the consumers. The marketers should use different distribution channels efficiently to improve the accessibility of eco-friendly products to consumers.

The marketers should communicate effectively through their marketing and sales promotional campaigns on how their eco- friendly products could help to reduce environmental problems and also how the consumers are being responsible and accountable to the environment by buying their eco-friendly products. In addition, consumers must also put efforts to buy and consume eco-friendly products in order to reduce the damage to environment.

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