

A Study on Consumer Awareness and Perception Towards Eco-Friendly Green Products and their Influence on Purchase Behaviour

Lokesh P¹, Shireen Fathima S²

¹Student, Department of MBA, Panimalar Engineering College, Chennai.

²Assistant Professor, Department of MBA, Panimalar Engineering College, Chennai.

Abstract: Increasing pollution, climate change, and resource depletion have made environmental sustainability a global priority. Eco-friendly goods have become a viable way to lessen the influence on the environment. The awareness, perception, and purchase behavior of consumers about green products are all examined in this study. Using structured questionnaires, 150 respondents provided main data for the descriptive study design. According to the report, despite widespread awareness of eco-friendly items, real purchasing behavior is still moderate because of things like high cost, limited supply, and mistrust. For analysis, statistical methods such the Friedman test, Kruskal-Wallis, Chi-square, and Spearman correlation were employed. The results show that while factors like price and impression are important, awareness by itself does not significantly affect purchase intention. To increase green consumption, the report recommends tactics including lower prices, advertising campaigns, and better product accessibility.

Keywords: Eco-friendly products, Consumer awareness, Consumer perception, Green marketing, Purchase behaviour, Sustainability

I. INTRODUCTION

Rapid industrialization, urbanization, and excessive resource consumption have made environmental sustainability a major global concern. The need for sustainable alternatives that reduce ecological harm has increased due to environmental problems such pollution, deforestation, climate change, and plastic waste. Because they are made to use recyclable, biodegradable, and energy-efficient materials throughout their existence, eco-friendly or green products have become an effective answer in this regard. Consumer attitudes have been impacted by growing environmental consciousness, which has prompted a slow transition to sustainable consumption. Consumer awareness of eco-friendly products has been greatly increased by a number of factors, including media exposure, government initiatives, and digital platforms. There is still a significant disconnect between customers' environmental concerns and their actual purchasing behavior, despite this increased awareness. When it comes to green product purchases, consumer perception is quite important. Consumer preferences are influenced by elements like cost, availability, quality, and confidence in environmental claims. Widespread adoption of eco-friendly products is frequently hampered by consumers' perceptions that they are costly or ineffective. Therefore, encouraging sustainable consumption choices requires an understanding of how awareness, perception, and buying behavior interact.

The purpose of this study is to investigate consumer perceptions and awareness of environmentally friendly products and analyze their impact on purchasing decisions. It is anticipated that the results will give marketers, legislators, and companies useful information for creating plans that promote the use of ecologically friendly products.

REVIEW OF LITERATURE

Previous studies highlight that consumer awareness of eco-friendly products is increasing, but it does not always lead to purchase behaviour.

- Sharma and Singh (2021) found that awareness positively influences purchase intention, but price and trust act as barriers.

- Kumar and Verma (2021) emphasized the role of green marketing in shaping consumer perception.
- Reddy and Rao (2022) noted that consumers perceive green products as healthier but expensive.
- Gupta and Mishra (2022) highlighted environmental concern and awareness as key factors influencing purchase intention.

Overall, literature shows a consistent gap between awareness and actual buying behaviour.

II. OBJECTIVES OF THE STUDY PRIMARY OBJECTIVE:

➤ To Study the Consumer Awareness & Perceptions towards Eco-friendly Green Products and their Influence on Purchase Behaviour

SECONDARY OBJECTIVES:

- To identify the level of awareness and sources of information among consumers.
- To analyze consumer perception regarding quality, price sensitivity & product effectiveness.
- To examine the relationship between awareness and purchase intention towards given products.
- To recommend strategies for improving consumer awareness about eco-friendly green products.

III. RESEARCH METHODOLOGY

Research Design:

Descriptive research design was used to analyze consumer awareness, perception, and purchase behaviour.

Data Collection:

Primary Data: Collected through structured questionnaires **Secondary Data:** Books, journals, and research articles

Sample size:

Sample size: 150 respondents

Tools and Techniques Used:

Percentage Analysis

Chi-square Test Kruskal–Wallis Test Spearman Correlation

IV. RESULTS & DISCUSSION CHI-SQUARE TEST

H0 (Null Hypothesis):

There is no significant association between demographic variables (age, gender, education) and awareness of eco-friendly products.

H1 (Alternative Hypothesis):

There is a significant association between demographic variables (age, gender, education) and awareness of eco-friendly products.

Test Statistics

	AGE	GENDER	EDUCATION	AWARENESS
Chi-Square	84.080a	1.707b	62.107a	29.040b
df	3	1	3	1
Asymp. Sig.	.000	.191	.000	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 37.5.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 75.0.

INTERPRETATION:

Chi-square value = 29.040 p-value = 0.000 (< 0.05)

The analysis reveals that age and education significantly influence consumer awareness, whereas gender does not have a significant impact on awareness of eco-friendly products.

KRUSKAL-WALLIS TEST

H0 (Null Hypothesis):

There is no significant difference in consumer perception across different income groups.

H1 (Alternative Hypothesis):

There is a significant difference in consumer perception across different income groups.

Ranks

INCOME	N	Mean Rank
PERCEPTION 1	61	75.91
2	42	88.70
3	23	84.28
4	24	42.94
Total	150	

Test Statistics^{a,b}

	PERCEPTION
Chi-Square	19.955
df	3
Asymp. Sig.	.000

a. Kruskal Wallis Test

b. Grouping Variable: INCOME

INTERPRETATION:

Since the p-value is less than 0.05, the null hypothesis (H0) is rejected. There is a significant difference in consumer perception across different income groups. The Kruskal Wallis test indicates that consumer perception significantly varies across income groups (p < 0.05). The mean rank values reveal that respondents in middle-income groups have higher perception towards eco-friendly products compared to other groups

CORRELATIONS

H0 (Null Hypothesis):

There is no significant relationship between awareness level and purchase intention of eco-friendly products.

H1 (Alternative Hypothesis):

There is a significant relationship between awareness level and purchase intention of eco-friendly products.

		AWARENESS LEVEL	PURCHASE INTENTION
Spearman's rho	AWARENES S LEVEL	1.000	.041
	Sig. (2-tailed)	.	.621
	N	150	150
	PURCHASE INTENTION	.041	1.000
	Sig. (2-tailed)	.621	.
	N	150	150

INTERPRETATION:

Since $p\text{-value} = 0.621 (> 0.05)$. The Spearman rank correlation analysis reveals that there is no significant relationship between awareness level and purchase intention ($p > 0.05$). The correlation coefficient indicates a very weak positive relationship, which is not statistically significant.

V. FINDINGS

- Awareness of eco-friendly products is high among consumers.
- Price is the biggest barrier to purchase.
- Quality and brand influence buying decisions.
- Awareness does not directly translate into purchase behaviour.
- Social media plays a major role in influencing consumers.

VI. SUGGESTIONS

- Reduce price of eco-friendly products
- Increase promotional campaigns through social media
- Improve product availability
- Strengthen eco-labeling and certifications
- Conduct awareness programs and education campaigns

VII. CONCLUSION

The study concludes that while consumer awareness of eco-friendly products is high, purchasing behaviour is influenced by multiple factors such as price, perception, and availability. There exists a significant gap between awareness and actual buying behaviour. To promote sustainable consumption, companies and policymakers must focus on reducing product costs, increasing awareness, and improving accessibility.

VIII. REFERENCES

1. Agarwal, R. and Sinha, D. (2021) "Consumer awareness towards green products in India", Indian Journal of Marketing.
2. Bansal, V. and Gupta, R. (2021) "Role of awareness in green consumption", Journal of Environmental Psychology.
3. Chatterjee, S. and Roy, D. (2023) "Green consumption behaviour in India", Indian Journal of Environmental Studies.
4. Das, S. and Banerjee, T. (2022) "Impact of environmental awareness on buying behaviour", Journal of Environmental Management Studies.
5. Desai, P. and Shah, K. (2023) "Green marketing and consumer behaviour", International Journal of Business and Management.
6. Gupta, N. and Mishra, A. (2022) "Factors affecting green purchase intention among Indian consumers", Journal of Consumer Behaviour Research.
7. Iyer, R. and Krishnan, V. (2023) "Consumer perception and green marketing", International Journal of Marketing Research.
8. Iqbal, M. and Khan, F. (2022) "Factors influencing eco-friendly purchase intention", Journal of Retail and Consumer Behaviour.
9. Jain, A. and Mehta, S. (2022) "Impact of awareness on green purchase behaviour", Journal of Business Research and Development.

10. Kulkarni, M. and Patil, S. (2022) "Green purchase behaviour among Indian consumers", Journal of Consumer Studies.
11. Kumar, P. and Verma, S. (2021) "Green marketing and consumer buying behaviour", International Journal of Multidisciplinary Research, Vol. 1, Iss. 7, pp. 62.
12. Menon, A. and Nair, R. (2023) "Consumer perception towards sustainable products", International Journal of Green Economics.
13. Nair, J. and Pillai, S. (2021) "Eco-friendly product awareness and behaviour", International Journal of Business Research.
14. Reddy, K. and Rao, M. (2022) "Consumer perception towards green products in India", Journal of Environmental Studies.
15. Reddy, S. and Kumar, A. (2021) "Awareness and green product adoption", Journal of Sustainable Development Studies.
16. Sharma, A. and Singh, R. (2021) "Consumer awareness towards eco-friendly products in India", Indian Streams Research Journal, Vol. 4, Iss. 7.
17. Sharma, P. and Gupta, L. (2023) "Awareness and purchase intention towards green products", Journal of Sustainable Marketing.
18. Singh, A. and Kaur, P. (2022) "Consumer attitude towards green products", Journal of Marketing Studies.
19. Singh, R. and Yadav, P. (2021) "Consumer perception and green products", Journal of Marketing and Sustainability.
20. Thomas, J. and Joseph, L. (2022) "Consumer attitude towards eco-friendly products", Journal of Consumer Behaviour