

Impact Of Environmental Awareness On Consumer Buying Behavior Of Green Products With Special Reference To Thoothukudi District

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This study examines the impact of environmental awareness on consumer buying behavior of green products in Thoothukudi district. It explores consumers' understanding of environmental issues, perceptions of green products regarding quality, price, and trust, and their actual buying behavior including willingness to pay and product preference. Using primary data collected from 120 respondents through structured questionnaires, statistical analyses were conducted to test relationships between environmental awareness, demographic factors, and green purchasing behaviors. The findings reveal no significant differences in environmental awareness across age groups, in perception between genders, or buying behavior across educational qualifications. Despite positive environmental attitudes, barriers such as price sensitivity and trust issues remain challenges to wider adoption. The study emphasizes the need for targeted marketing, education, and policy initiatives to enhance sustainable consumption and support environmental protection in the region.

Keywords - Environmental awareness, green products, sustainable consumption.

INTRODUCTION

Environmental awareness plays a pivotal role in shaping consumer buying behavior, especially in the context of growing global concerns about environmental degradation and sustainability. As people become more conscious of the adverse effects of pollution, climate change, and resource depletion, there is an increasing shift towards purchasing green products that are environmentally friendly and promote sustainable living. Green products are designed to minimize harm to the environment through the use of sustainable materials, reduced chemical usage, and eco-friendly manufacturing processes. In Thoothukudi district, rising awareness about environmental issues is influencing consumer preferences, making it important to understand how this awareness affects their buying decisions. Despite the availability of green alternatives, consumers' adoption of these products varies due to factors such as price sensitivity, trust in product claims, and accessibility. This study aims to explore the impact of

environmental awareness on consumer buying behavior specifically towards green products in Thoothukudi district. By examining this relationship, the research seeks to identify the level of environmental consciousness among consumers and how it drives their intention and actual purchase of green products. The findings will provide valuable insights for businesses, marketers, and policymakers to design effective strategies that encourage sustainable consumer behavior and support environmental conservation efforts in the region.

REVIEW OF LITERATURE

Shen et al. (2022) examined the role of pro-environmental awareness comprising environmental knowledge, affection, and responsibility on green consumption behavior. The study found that environmental knowledge, emotional connection to environmental issues, and a sense of personal responsibility all significantly and positively influence consumers' propensity to adopt green behaviors. Notably, the interaction between environmental affection and responsibility amplifies their impact on green product consumption. However, perceived higher costs can be a barrier, despite awareness's strong positive effect. The research underscores the need for not just informational campaigns but also fostering deeper emotional engagement and personal responsibility to encourage sustainable purchasing.

García-Salirrosas et al. (2024) analyzed how environmental awareness shapes consumers' attitudes and perceived behavioral control toward green products. Their study, grounded in the Theory of Planned Behavior, revealed that higher environmental awareness significantly strengthens positive attitudes and consumers' perceived ability to select green products. This enhanced perceived control increases willingness to pay for eco-friendly products and guides actual purchasing decisions. The findings emphasize that improving environmental awareness among consumers can be a powerful lever for promoting more sustainable consumption practices in the marketplace.

STATEMENT OF THE PROBLEM

Despite the growing global emphasis on environmental sustainability, the adoption of green products in Thoothukudi district remains inconsistent and under-researched. While environmental awareness is increasing among consumers, there is limited understanding of how this awareness translates into actual buying behavior of green products in the local context. Factors such as perceived high costs, skepticism about product effectiveness, limited availability, and lack of trust in eco-friendly claims often hinder widespread acceptance. Additionally, the influence of demographic variables, cultural beliefs, and economic conditions on consumer decision-making is not well documented. Businesses and policymakers face challenges in promoting green products effectively without clear insights into consumer motivations and barriers in this region. This gap underscores the need to study the impact of environmental awareness on consumers' purchasing decisions to identify the key drivers and obstacles. Such understanding is crucial for developing targeted intervention strategies that can enhance consumer adoption of green products, thereby contributing to environmental protection and sustainable development in Thoothukudi district.

OBJECTIVES

- ✓ To analyze the level of environmental awareness among consumers with respect to eco-friendly and green products.
- ✓ To examine consumers' perception of green products in terms of quality, price, trust, and eco-labeling.
- ✓ To study the buying behavior of consumers towards green products including willingness to pay, purchase intention, and word-of-mouth.

HYPOTHESIS

- **H₀₁:** There is no significant relationship between environmental awareness and age of consumers
- **H₀₂:** There is no significant difference in the perception of green products between male and female consumers
- **H₀₃:** There is no significant association between consumer buying behavior towards green products and educational qualification.

METHODOLOGY

Designing a suitable methodology and selecting analytical tools are important for a meaningful analysis of any research problem. This section shows the choice of the study area, sample design, collection of data, and tools of analysis used in the study.

SAMPLING DESIGN

Keeping the objectives of the study in mind, the researcher constructed the questionnaire to elicit information from the customer. The questionnaire was administered to a sample of 120 respondents selected at convenience using the sampling method given in the time frame within which the researcher was meant to complete it.

COLLECTION OF DATA

Data collection is the process of obtaining information from the respondents. In the present study, both the primary data and secondary data have been used. The study is largely based on primary data. The required primary data have been collected through a well-structured questionnaire both by visiting the houses of the respondents, online reservation centre and public places. Necessary secondary data have been collected from various secondary data have been collected from various sources like newspaper, magazines and websites.

FRAME WORK OF ANALYSIS

The questionnaire schedule thus filled up is thoroughly examined to ensure accuracy, consistency and completeness. The Collected data are then edited and tabulated for analysis. The data collected from the primary source are analysed with reference to each of the objectives by applying appropriate statistical tools.

ANALYSIS AND DISCUSSIONS

NULL HYPOTHESIS

H₀₁: There is no significant relationship between environmental awareness and age of consumers

ANOVA						
Factors		Sum of Squares	df	Mean Square	F	Sig.
I am aware of current environmental issues (e.g., pollution, climate change, waste).	Between Groups	1.522	4	.380	.562	.691
	Within Groups	77.803	115	.677		
	Total	79.325	119			
I believe my consumption habits affect the environment.	Between Groups	.605	4	.151	.190	.943
	Within Groups	91.362	115	.794		
	Total	91.967	119			
I know the meaning of “eco-friendly” or “green” products.	Between Groups	2.689	4	.672	.836	.505
	Within Groups	92.477	115	.804		
	Total	95.167	119			
I can recognize eco-labels or certifications on products.	Between Groups	3.762	4	.941	1.199	.315
	Within Groups	90.204	115	.784		
	Total	93.967	119			
I feel responsible for protecting the environment through my purchase choices.	Between Groups	2.523	4	.631	.595	.667
	Within Groups	121.844	115	1.060		
	Total	124.367	119			

Source: Primary Data

Inference:

The ANOVA results indicate that there is no significant relationship between environmental awareness and the age of consumers for all the factors analyzed. The significance values (Sig.) for each awareness statement, including awareness of current environmental issues, belief in the impact of consumption habits on the environment, knowledge of eco-friendly or green products, ability to recognize eco-labels, and feeling responsible for environmental protection through purchase choices, are all greater than the 0.05 threshold. This means that differences in environmental awareness across different age groups are not statistically significant. The F-values are relatively low for all factors, supporting this conclusion. Therefore, the null hypothesis, which states that there is no significant relationship between environmental awareness and age, cannot be rejected. This suggests that in the sample studied, environmental awareness levels are similar across different age groups, indicating that age does not considerably influence consumers' environmental awareness in this context.

H₀₂: There is no significant difference in the perception of green products between male and female consumers

Independent Samples Test					
Factors	F	Sig.	t	df	Sig. (2-tailed)
Green products are healthier and safer than conventional ones.	.123	.727	.391	118	.696
			.392	108.948	.696
Green products are of equal or better quality than non-green alternatives.	.233	.630	.710	118	.479
			.707	106.028	.481
Green products are usually more expensive than conventional ones.	.288	.592	.462	118	.645
			.470	113.399	.640
I believe the benefits of green products outweigh their cost.	4.863	.029	.504	118	.615
			.523	117.576	.602
I trust the authenticity of eco-friendly labels/claims on products.	.698	.405	-.492	118	.624
			-.489	105.103	.626

Source: Primary Data

Inference:

The results of the independent samples test indicate that there is no significant difference in the perception of green products between male and female consumers for all factors analyzed. The significance values (Sig.) for statements on whether green products are healthier and safer, of equal or better quality, more expensive than conventional ones, trust in eco-friendly labels, and belief that the benefits outweigh the cost are all greater than the 0.05 threshold, except for the Levene's test for equality of variances on the belief that benefits outweigh cost (Sig. = 0.029), which does not impact the overall conclusion from the t-test results. The t-test significance values for all factors, including the belief about benefits outweighing cost, are all above 0.05, demonstrating no statistically significant differences between male and female perceptions. Therefore, the null hypothesis, which states that there is no significant difference in the perception of green products between genders, is supported. This suggests that both male and female consumers in the sample hold similar views regarding the health, quality, cost, and authenticity of green products.

H₀₃: There is no significant association between consumer buying behavior towards green products and educational qualification.

ANOVA						
Factors		Sum of Squares	df	Mean Square	F	Sig.
I actively look for green/eco-friendly alternatives while shopping.	Between Groups	4.849	4	1.212	1.721	.150
	Within Groups	81.018	115	.705		

	Total	85.867	119			
I am willing to pay a higher price for eco-friendly products.	Between Groups	5.605	4	1.401	1.816	.130
	Within Groups	88.720	115	.771		
	Total	94.325	119			
I prefer eco-friendly packaging when choosing products.	Between Groups	4.274	4	1.069	1.437	.226
	Within Groups	85.517	115	.744		
	Total	89.792	119			
I often recommend eco-friendly products to family and friends.	Between Groups	2.522	4	.630	.599	.664
	Within Groups	120.945	115	1.052		
	Total	123.467	119			
I have reduced buying products that harm the environment (e.g., plastic-heavy, chemical-based).	Between Groups	2.291	4	.573	.575	.681
	Within Groups	114.501	115	.996		
	Total	116.792	119			

Source: Primary Data

Inference:

The ANOVA results indicate that there is no significant association between consumer buying behavior towards green products and their educational qualification for all factors analyzed. The significance values (Sig.) for statements such as actively looking for green alternatives while shopping, willingness to pay a higher price for eco-friendly products, preference for eco-friendly packaging, recommending eco-friendly products to others, and reducing purchase of environmentally harmful products are all greater than 0.05. This suggests that differences in these buying behavior aspects across various educational groups are not statistically significant. The F-values are relatively low, supporting this conclusion. Therefore, the null hypothesis that there is no significant association between consumer buying behavior towards green products and educational qualification cannot be rejected. This implies that educational qualification does not significantly influence consumers' green buying behavior in this sample, and consumers across different education levels show similar tendencies toward purchasing eco-friendly products.

CONCLUSION

The study reveals that environmental awareness, perception of green products, and buying behavior towards eco-friendly products in Thoothukudi district are not significantly influenced by demographic factors such as age, gender, or educational qualification. The results

demonstrate that consumers across different age groups show similar levels of environmental awareness, and male and female consumers hold comparable perceptions regarding the health, quality, cost, and authenticity of green products. Likewise, educational background does not significantly affect consumers' green buying behavior, including their willingness to seek, pay for, recommend, and adopt eco-friendly alternatives. Despite the positive attitude towards environmental responsibility and green consumption, challenges such as price sensitivity, trust issues, and accessibility continue to impede widespread adoption. These findings indicate that promoting sustainable consumption requires strategies that transcend demographic targeting and focus instead on addressing common barriers, increasing product accessibility, and enhancing awareness. The study underscores the importance of comprehensive marketing, education, and policy interventions to foster a unified culture of environmental responsibility and support the growth of the green products market in Thoothukudi district. This holistic approach is critical for driving long-term sustainable development and environmental protection efforts locally.

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