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Consumer Buying Behaviour - Weapon for Prosperous Environment

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Abstract

In the face of increasing environmental degradation and pollution, understanding and transforming consumer behavior has become crucial for achieving sustainable development. Consumers are not only a backbone of marketing but also an environment. This study explores how consumer choices, attitudes, and purchasing patterns can be redirected toward eco-friendly practices that promote a pollution-free environment. It examines the psychological, social, and economic factors that influence consumers' willingness to adopt green products and services. This study examines attitudes and practices related to the use of polythene covers in rural market areas. Data were collected from 200 respondents using a structured interview schedule. The objective is to understand the patterns of usage, awareness of harmful effects, reasons for repeated usage, and willingness to avoid polythene. The study also provides templates and steps for conducting Chi-square tests, cross-tabulations and regression analysis using SPSS, and a full interpretive write-up for report inclusion.

Keywords: Consumer, Environment, Polythene and Sustainable Development

Introduction

Polythene covers have become an integral part of everyday consumer life due to their lightweight nature, durability, low cost, and convenience. They are extensively used in retail markets, supermarkets, street vending, and household activities for carrying goods and packaging. Despite their widespread use, polythene covers pose a serious threat to the environment as they are non-biodegradable and take hundreds of years to decompose. Improper disposal of polythene leads to land and water pollution, blockage of drainage systems, and harm to animals and marine life.

Attitude plays a crucial role in shaping consumer behavior. Understanding consumers' attitudes toward the usage of polythene covers helps in identifying the reasons behind their continued use despite known environmental consequences. This study focuses on analysing consumers' perceptions, awareness, and willingness to adopt sustainable alternatives. Understanding consumer buying behaviour towards environmentally friendly products helps companies promote sustainable consumption and contributes to environmental protection.

Statement of the Problem:

Environmental Pollution has occurred as one of the most pressing challenges of the 21st century. The issue has led to terrorisations to human health, ecosystems, and the overall well-being of our earth. Understanding the types of pollution, their causes, and implementing effective remedies is crucial to qualifying its impact and preservation our environment for future generations. Polythene plays an important role in pollution creation. Every day, millions of plastic bags, bottles, and other polythene products contribute to the amazing amount of waste that ends up in our oceans and landfills. The impact on human health and wildlife is upsetting – from overpowering sea creatures to contaminating our food supply and air quality. Polythene covers are widely used by consumers due to their accessibility, low cost, and easy availability. Excessive use of polythene has led to serious environmental issues such as land pollution, water blockage, harm to wildlife, and non-biodegradable waste gathering. It is necessary to study the attitude of consumers towards the usage of polythene covers, the factors influencing their continued use, and their level of awareness regarding environmental and health impacts. Therefore, it is important to study the factors that influence consumer buying behaviour towards environmentally friendly products. This study focuses on understanding consumer awareness, attitudes, and preferences related to products that help in saving the environment.

Objectives of the Study

1. To examine the level of awareness among consumers about eco-friendly products.
2. To analyse consumer attitudes towards green products and justifiable consumption.
3. To suggest measures to encourage consumers to adopt environmentally responsible buying behaviour.

Review of Literature

A study by Gupta and Ogden (2009) found that although consumers were aware of the environmental hazards caused by plastic bags, convenience and habitual usage significantly influenced their continued consumption. The study highlighted a gap between environmental concern and actual purchasing behavior.

Sharp, Høj, and Wheeler (2010) examined the impact of plastic bag bans and levies in various countries and concluded that regulatory measures combined with public awareness campaigns significantly reduced plastic bag usage. However, the study also emphasized that long-term behavioral change requires consistent enforcement and consumer education.

Philip Kotler (2017) explained that consumer buying behaviour is influenced by cultural, social, personal, and psychological factors. He emphasized that increasing environmental awareness has led to the growth of green marketing and eco-friendly consumer behaviour.

Jacquelyn A. Ottman (2011) highlighted that green consumers prefer products that are environmentally safe, recyclable, and energy-efficient. Her study shows that environmental concern plays a significant role in shaping purchasing decisions.

Michael R. Solomon (2013) stated that modern consumers are more socially responsible and often consider the environmental impact of products before purchasing them.

Nancy Lee and Philip Kotler (2008) emphasized that marketing strategies can influence consumers to adopt environmentally responsible behaviour through awareness campaigns and green product promotion.

Scope of the Study

The scope of the study is confined to understanding the attitude towards usage of polythene covers among consumers. The study focuses on evaluating consumers' awareness of environmental issues related to polythene usage, their opinion of convenience and necessity, and their willingness to adopt eco-friendly alternatives such as cloth or paper bags.

Methodology

Sample Size: 200 respondents.

Instrument: Structured interview schedule (Annexure includes full instrument).

Data Analysis: Frequency distribution, cross-tabulation, chi-square tests for independence, and regression analysis to predict willingness to buy without polythene using demographic predictors.

Analysis of the Study

This study aims to identify the extent of polythene cover usage, the level of awareness about its environmental impact, compliance with government regulations, and consumer willingness to shift towards eco-friendly alternatives.

Usage of Polythene Cover

The extent of polythene use among the public is a crucial indicator of environmental behaviour, especially in rural markets. This table assesses whether respondents in Sathankulam Taluk continue to use polythene bags, despite increasing awareness of environmental issues. Understanding the prevalence of usage is essential for formulating effective intervention strategies.

Table No. 1
Usage of Polythene Cover

Response	Frequency	Percent (%)
Yes	198	99.0
No	2	1.0
Total	200	100.0

Source: Primary Data.

The findings reveal that 99% of the respondents use polythene covers, while only 1% do not. This extremely high usage rate indicates that polythene bags remain a dominant part of daily shopping and carrying practices in the study area. The near-universal dependency highlights the challenge in reducing polythene usage unless practical and affordable alternatives are made available.

Reasons for Using Polythene Bags

Identifying the reasons behind the continued use of polythene bags helps in understanding the behavioural and practical factors influencing consumer choices. This table highlights the motivations of respondents for preferring polythene over other alternatives.

Table No. 2
Reasons for Using Polythene Bags

Reason	Frequency	Percent (%)
Comfortable	83	41.5
Easy to bring	45	22.5
Separation of goods	18	9.0
Available anywhere	23	11.5
Free of cost	11	6.5
Given by merchant	18	9.0
Total	198	100.0

Source: Primary Data.

The data shows that **comfort (41.5%)** is the leading reason for using polythene bags, followed by easy to bring (22.5%) and availability anywhere (11.5%). Smaller proportions use them for separating goods or because they are free or provided by merchants. These results indicate that convenience and accessibility are the primary factors sustaining polythene usage in Sathankulam Taluk.

Intention to Avoid Polythene

This table examines respondents' willingness to avoid using polythene bags in the future. Understanding their intention is crucial for planning awareness programmes and implementing policy measures to reduce polythene usage in Sathankulam Taluk.

Table No. 3
Intention to Avoid Polythene

Response	Frequency	Percent
Yes	157	78.5
No	19	9.5
Sometimes	24	12.0
Total	200	100.0

Source: Primary Data.

A significant majority, 78.5%, expressed a clear intention to avoid using polythene bags. About 12% indicated they would avoid it only sometimes, while 9.5% stated they would not avoid it at all. The findings show a positive shift in environmental attitude, suggesting that many respondents are willing to change their behaviour if suitable alternatives are available.

Descriptive Statistics and Reliability Analysis of Attitude towards Polythene Usage

This table presents the descriptive statistics and reliability analysis for the five attitude statements related to the use of polythene covers among respondents in Sathankulam Taluk. The selected items measure various aspects such as willingness to avoid polythene, awareness of environmental and animal impacts, perceptions about women's usage, personal environmental responsibility, and beliefs about diseases caused by polythene. The reliability of the overall attitude scale is assessed using Cronbach's Alpha to determine internal consistency.

Table No. 4
Combined Descriptive & Reliability Table

Variables	N	Minimum	Maximum	Mean	Std. Deviation
I can buy without Polythene	200	1.00	5.00	4.0550	1.13065
Affects the environment, also affects the animals	200	1.00	5.00	4.1700	0.98282
Majority of the ladies use the polythene	200	1.00	5.00	3.9050	1.17596
I am a responsible person to save our environment	200	1.00	5.00	4.1000	0.98225
Disease are created from the use of polythene bag	200	1.00	5.00	4.0900	1.09906
Scale Mean (Sum of 5 items)	20.3200				
Scale Variance	16.038				
Scale Std. Deviation	4.00472				
Cronbach's Alpha	0.798 (Standardized: 0.803)				

Source: Primary Data.

The mean scores of all five attitude items range between 3.90 and 4.17, indicating that respondents generally hold a positive and environmentally conscious attitude toward reducing polythene usage. The item “affects the environment, also affects the animals” recorded the highest mean (4.17), showing strong agreement about the harmful impact of polythene on nature and animals.

The item “Majority of the ladies use the polythene” has the lowest mean (3.90), suggesting comparatively lesser agreement, although still above the mid-point. The overall scale mean stands at 20.32, reflecting consistent positive attitudes across the sample.

Education and Awareness of Harmful Effects of Polythene

This table examines the extent to which educational qualifications influence respondents’ awareness of the harmful effects of polythene. This helps assess whether awareness campaigns have reached all education levels.

Table No. 5
Education and Awareness of Harmful Effects of Polythene

Education	Aware (Yes)	Not Aware (No)	Row Total
Primary (46)	45 (97.8%)	1 (2.2%)	46
Secondary (39)	37 (94.9%)	2 (5.1%)	39
Higher Secondary (19)	18 (94.7%)	1 (5.3%)	19
Degree (96)	94 (97.9%)	2 (2.1%)	96
Total	194 (97.0%)	6 (3.0%)	200

Source: Primary Data.

Awareness levels are extremely high across all educational groups, with 97% of the total sample being aware of harmful effects. Even respondents with primary education show almost complete awareness. The results indicate that knowledge about environmental risks of polythene has widespread penetration and is not restricted by education level.

Findings

High Prevalence of Polythene Use

99.0% of respondents reported using polythene covers. Polythene remains the dominant packaging choice despite awareness.

Strong Awareness but Behavioural Gap

97.0% are aware that polythene is harmful, yet 99.5% of the aware respondents still use polythene (cross-tab & χ^2 : $\chi^2 = 10.82$; $p = .001$). Awareness alone is not driving behaviour change.

Broad Positive Attitude toward Avoiding Polythene

78.5% reported intention to avoid polythene and attitude scale means are positive (Grand Mean = 4.064). Respondents express willingness but face practical barriers.

Habit and Merchant Provisioning Sustain Usage

Main reasons for repeated usage: habit (34.5%) and being given at free of cost (25%) (Table 4.10). Merchant practices and habitual behaviour are primary obstacles.

Convenience and comfort dominate reasons for use

“Comfortable” (41.5%) and “easy to bring” (22.5%) are leading reasons for choosing polythene (Table 4.8), while functional drawbacks (damage, short life) are acknowledged (Table 4.11).

Socio-Demographic Patterns are Limited but Informative

Females are slightly more likely to intend avoidance (81.1% vs 75.3%) and express stronger concern for animals.

Income is the only significant predictor in the regression (Monthly Income $B = -0.894$, $p = .003$), indicating higher-income respondents are comparatively less eco-friendly in behaviour.

Suggestions

1. Behaviour Change & Awareness (Medium priority)

- **Targeted Behaviour-Change Campaigns:** Design campaigns that address the behavioural barriers identified: habit and merchant provisioning. Messaging should be pragmatic (how to carry, clean, and store reusable bags) and target groups where intention-behaviour gap is largest (merchants, habitual users, and higher-income consumers).
- **Gender-Sensitive Messaging:** Harness the stronger pro-environmental attitudes among women by engaging them as community champions for local peer-to-peer campaigns and school programmes.
- **School and Youth Programmes:**

Integrate polythene-free education into local schools and colleges; involve youth in reusable-bag drives and community tree-planting events (aligns with present/future steps).

2. Waste Management & Circular Solutions (Medium priority)

- **Improve Segregation and Collection for Recycling:** Strengthen segregation at source, provide designated collection points for recyclable polythene, and contract with licensed recyclers to create a circular stream for non-reusable plastic.
- **Promote Proper Disposal & Safe Burning Alternatives:** Disseminate guidance on safe disposal; discourage open burning by providing municipal collection alternatives.

Conclusion

The study of Sathankulam Taluk reveals a clear contradiction: near-universal awareness of polythene harms and a strong stated intention to avoid polythene coexist with almost universal actual use. The principal drivers of continued usage are convenience, habit, and routine merchant provisioning rather than lack of knowledge. Monthly income emerges as a statistically significant predictor of behaviour; higher-income respondents show relatively less eco-friendly behaviour. Given the strong public acceptance of the collector's ban (65% accept it) and expressed willingness for tree protection and waste management, Sathankulam Taluk is well-positioned for a successful transition away from single-use polythene if the District Administration coordinates the above policy, market and community actions.

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Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

References

1. Gupta, S., & Ogden, D. T. (2009). To buy or not to buy? A social dilemma perspective on green buying. *Journal of Consumer Marketing*, 26(6), 376–391.
2. Sharp, A., Hoj, S., & Wheeler, M. (2010). Proscription and its impact on anti-consumption behaviour and attitudes: The case of plastic bags. *Journal of Consumer Behaviour*, 9(6), 470–484.
3. Kotler, P. (2017). *Marketing Management* (15th ed.). Pearson Education.
4. Ottman, J. A. (2011). *The New Rules of Green Marketing: Strategies, Tools, and Inspiration for Sustainable Branding*. Berrett-Koehler Publishers.
5. Solomon, M. R. (2013). *Consumer Behavior: Buying, Having, and Being* (10th ed.). Pearson Education.
6. Lee, N., & Kotler, P. (2008). *Social Marketing: Influencing Behaviors for Good* (3rd ed.). Sage Publications.
7. Peattie, K. (2010). Green consumption: Behavior and norms. *Annual Review of Environment and Resources*, 35, 195–228.
8. Jackson, T. (2005). Motivating sustainable consumption: A review of evidence on consumer behaviour and behavioural change. Sustainable Development Research Network.
9. McKenzie-Mohr, D. (2011). *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing* (3rd ed.). New Society Publishers.