

GREEN PACKAGING AND BRAND IMAGE: AN ANALYSIS OF CONSUMER PREFERENCES AND LOYALTY

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ABSTRACT

This research paper investigates the relationship between green packaging and brand image, focusing on their influence on consumer preferences and loyalty. In an era marked by increasing environmental consciousness, businesses are increasingly adopting sustainable practices, including the use of green packaging, to align with consumer values and enhance brand perception. Understanding how consumers perceive green packaging and its impact on their perceptions of a brand's image is crucial for companies seeking to establish competitive advantages in today's market. The study aims to address two primary objectives: first, to examine the relationship between consumer perceptions of green packaging and brand image, and second, to analyse the influence of green packaging and brand image on consumer loyalty towards the brand. These objectives are achieved through a comprehensive analysis of consumer preferences and behaviours related to sustainability and packaging. The research methodology involves the administration of a structured questionnaire to a diverse sample of consumers, capturing demographic information alongside perceptions of green packaging, brand image, and loyalty towards brands. The questionnaire items are designed to assess various dimensions, including the importance of environmentally friendly packaging in purchase decisions, perceptions of brand image attributes related to sustainability, and the likelihood of remaining loyal to brands that prioritize green packaging. Data collected through the questionnaire are subjected to rigorous regression and correlation analyses to uncover the underlying relationships between variables. Regression analysis elucidates how consumer perceptions of green packaging and brand image predict consumer loyalty, providing insights into the drivers of consumer behaviour in the context of sustainability. Correlation analysis further explores the strength and direction of associations between different variables, shedding light on the interconnectedness of consumer preferences and attitudes towards green packaging and brand image. The findings of this study contribute to both theoretical understanding and practical implications for businesses operating in environmentally conscious markets. By elucidating the significance of green packaging in shaping brand image and consumer loyalty, businesses can formulate effective strategies to leverage sustainability as a competitive advantage. Moreover, the study offers insights into consumer behaviour dynamics, highlighting the importance of aligning brand values with consumer preferences to foster long-term relationships and brand loyalty.

Keywords: Green Packaging, Consumer Behaviour, Sustainable Practices, Brand Image, Consumer Preferences, Consumer Loyalty.

Introduction

In today's dynamic marketplace, characterized by heightened environmental awareness and shifting consumer preferences, businesses are increasingly recognizing the significance of sustainable practices in shaping brand image and consumer loyalty. Central to this paradigm shift is the adoption of green packaging – an eco-friendly approach aimed at minimizing environmental impact throughout the

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product lifecycle. Green packaging not only addresses growing environmental concerns but also serves as a powerful tool for companies to differentiate themselves in a crowded marketplace and resonate with environmentally conscious consumers. The importance of green packaging extends beyond its environmental implications; it also plays a pivotal role in shaping consumers' perceptions of a brand's image. As consumers become more discerning and socially responsible, they are increasingly drawn to brands that demonstrate a commitment to sustainability and environmental stewardship. Consequently, businesses are compelled to integrate sustainable packaging practices into their brand identity to align with consumer values and foster positive brand associations. Against this backdrop, this research paper seeks to delve into the intricate relationship between green packaging and brand image, with a specific focus on their impact on consumer preferences and loyalty. By examining the underlying dynamics of consumer behaviour in the context of sustainability and packaging, this study aims to shed light on the interplay between green packaging, brand image, and consumer loyalty. The objectives of this study are twofold: first, to explore how consumer perceptions of green packaging influence their perceptions of a brand's image, and second, to assess the extent to which green packaging and brand image shape consumer loyalty towards the brand. Through a comprehensive analysis of consumer preferences and behaviours, this research endeavours to uncover the underlying mechanisms driving consumer attitudes and behaviours towards sustainable packaging and its implications for brand loyalty. The methodology employed in this study involves the administration of a structured questionnaire to a diverse sample of consumers, capturing insights into their perceptions of green packaging, brand image attributes, and loyalty towards brands. The questionnaire items are carefully crafted to elicit responses related to the importance of environmentally friendly packaging in purchase decisions, perceptions of brand image attributes associated with sustainability, and the influence of green packaging on consumer loyalty. Data collected through the questionnaire will be subjected to rigorous regression and correlation analyses to examine the relationships between variables and uncover underlying patterns. Regression analysis will elucidate how consumer perceptions of green packaging and brand image predict consumer loyalty, providing valuable insights into the drivers of consumer behaviour in the context of sustainability. Additionally, correlation analysis will explore the strength and direction of associations between different variables, further illuminating the interconnectedness of consumer preferences and attitudes towards green packaging and brand image. Through this research, we aim to contribute to both theoretical understanding and practical implications for businesses seeking to navigate the evolving landscape of sustainable packaging and consumer behaviour. By elucidating the significance of green packaging in shaping brand image and fostering consumer loyalty, this study seeks to provide actionable insights for businesses to leverage sustainability as a strategic asset and cultivate stronger connections with environmentally conscious consumers.

Review of Literature

Kingston & Paulraj (2023), conducted a study that investigated the desire to purchase green packaging items based on three separate constructs: perceived green values, perceived health risks, and environmental concern. Structural equation modeling was utilised to examine responses of 468 customers, and the research found how these three factors significantly affected consumers' propensity to choose environmentally friendly packaging. Study also emphasised how crucial it was to distinguish between general environmental attitudes and particular environmental behaviours when calculating the effects of these variables. Overall, perceived green values, health consciousness, and environmental concern all have an impact on consumers' desire to buy. According to the study's findings, customers' environmental concerns, health problems brought on by plastic packaging, and perceived values about green packaging had a big impact on their purchasing behaviour.

Kapse, et al. (2023), aimed to look at how sustainable packaging impacted Indian consumer behaviour and product sales. A structured questionnaire was utilised for gathering data for the study, which employed a quantitative research methodology. According to the research, people choose products based on brand, price, and quality rather than the sustainability of packaging. Sustainable packaging, however, became more crucial for raising brand awareness and fulfilling environmental criteria. The analysis emphasised the necessity for authorities to take action to support sustainable packaging and rein in supply chain costs. Although its results could be different in other developed nations, the research offered manufacturers and policymakers useful information. Investigating the causal links between various factors and purchase decisions would require more investigation.

Amoako, Dzogbenuku, Doe, & Adjaison (2022), revealed in his study of customer reactions to business and marketing efforts centered on the Sustainable Development Goals. This study was carried out in the West African nation of Ghana. Using a questionnaire, 650 people participated in the study. The

article is broken up into many sections covering topics including role of pricing as mediator among green marketing initiatives and consumer behaviour, increasing brand loyalty, decreasing green marketing expenses, and advancing Sustainable Development Goals. However, the limitations in the research manuscript focused only on the single country Ghana which could have a wide range of inferences for many other countries in the emerging market sectors.

Khandelwal, Kolte, Veer, & Sharma (2022), investigated the use of credit cards, compulsive buying, money attitudes, and financial literacy in this study. The goal was to comprehend the elements that affected customers' financial security and debt loads. Utilising non-probability sampling and convenience sampling, the study polled 313 credit cardholders. Results exhibited as those having power-prestige money views were more prone to use credit cards for compulsive spending. Higher financial literacy was also associated with reduced levels of compulsive spending. In order to avoid amassing too much debt, the study emphasised the significance of financial literacy and wise spending decisions. The study recommended taking steps to increase financial literacy and consumer protection, such as offering personal finance seminars in high schools and universities.

Need of the Study

The growing emphasis on sustainability and environmental responsibility in today's global marketplace has underscored the need for businesses to adopt eco-friendly practices throughout their operations. Among these practices, green packaging has emerged as a crucial component for companies seeking to align with consumer values and enhance their brand image. However, despite the increasing adoption of green packaging, there remains a gap in understanding its impact on consumer behaviour and brand loyalty.

Therefore, the need for this study arises from several key factors:

- **Consumer Demand for Sustainability:** With rising environmental concerns and heightened awareness of ecological issues, consumers are increasingly demanding sustainable products and packaging. Understanding the factors driving consumer preferences towards green packaging is essential for businesses to meet these evolving demands effectively.
- **Brand Differentiation and Competitive Advantage:** In today's competitive landscape, brands are continuously seeking ways to differentiate themselves and gain a competitive edge. Adopting green packaging not only demonstrates a brand's commitment to sustainability but also provides an opportunity to stand out in the market and attract environmentally conscious consumers.
- **Impact on Brand Image:** Green packaging can significantly influence consumers' perceptions of a brand's image. By integrating sustainable packaging practices into their brand identity, companies can enhance their reputation as socially responsible entities and strengthen brand loyalty among consumers who prioritize sustainability.
- **Consumer Loyalty and Purchase Behaviour:** Understanding how green packaging influences consumer loyalty and purchase behaviour is critical for businesses to design effective marketing strategies and product offerings. By examining the relationship between green packaging, brand image, and consumer loyalty, companies can tailor their approaches to better resonate with their target audience and drive long-term customer relationships.
- **Strategic Business Decision-Making:** Insights gained from this study can inform strategic business decision-making related to product development, branding, and marketing. By understanding the factors that drive consumer preferences and loyalty towards green packaging, companies can optimize their packaging strategies to meet consumer expectations and achieve sustainable growth.

In summary, this study addresses a pressing need in the current business landscape by investigating the relationship between green packaging, brand image, and consumer behaviour. By bridging this gap in knowledge, the study aims to provide valuable insights for businesses to effectively leverage sustainable packaging practices and enhance their competitive position in the market.

Research Objectives

- To examine the relationship between consumer perceptions of green packaging and brand image.
- To examine the impact of green packaging and brand image on consumer loyalty towards the brand.

Research Methodology

- **Type of Research:** The proposed research is descriptive in nature and will follow a quantitative approach, focusing on the relationship between green packaging, brand image, and consumer loyalty among environmentally conscious consumers in Rudrapur, Uttarakhand, India.
- **Source of Data Collection**
 - **Primary Data:** The primary data will be collected through quantitative surveys conducted with consumers in the region.
 - **Secondary Data:** The secondary data will be collected from relevant literature, research papers, reports, and other published sources. This data will provide a theoretical framework and background information for the study.
- **Research Instrument:** The research instrument for data collection will be a structured questionnaire. The questionnaire will comprise closed-ended questions with response options that can be quantitatively analysed. Specifically, it will be designed to gather information on consumer perceptions of green packaging, brand image attributes associated with sustainability, and the influence of these factors on consumer loyalty and purchasing decisions.
- **Sampling**
 - **Unit:** Consumers in the area of Rudrapur region who buy and consume packaged goods will constitute the target group for sampling.
 - **Sample Size:** To ensure sufficient representation of various demographic groups and geographical regions within the region, a representative sample size will be chosen of 400 respondents.
 - **Sampling Technique:** Using random sampling techniques and snowball sampling, respondents will be chosen for the research based on their availability and desire to participate.

Research Hypotheses

Hypothesis 1 (H₁)

There is a positive relationship between consumer perceptions of green packaging and brand image.

- **Null Hypothesis (H₀):** There is no significant relationship between consumer perceptions of green packaging and brand image.
- **Alternate Hypothesis (H_A):** There is a significant relationship between consumer perceptions of green packaging and brand image.

Hypothesis 2 (H₂)

Green packaging and brand image positively influence consumer loyalty towards the brand.

- **Null Hypothesis (H₀):** Green packaging and brand image do not significantly influence consumer loyalty towards the brand.
- **Alternate Hypothesis (H_A):** Green packaging and brand image significantly influence consumer loyalty towards the brand.

Conceptual Framework

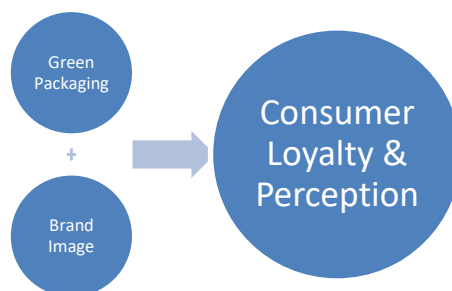


Fig. 1: The Impact of Green Packaging and Brand Image on Consumer Loyalty and Perception is the Focus of the Study

Data Analysis and Interpretation**Table 1: Demographic Profile of Respondents**

Characteristics	Frequency	Percentage
Age		
18-25	224	56.00
26-30	89	22.25
31-35	43	10.75
36-45	32	8.00
45 & Above	12	3.00
Total	400	100%
Gender		
Male	172	43.00
Female	228	57.00
Others	0	0
Total	400	100%
Educational Qualification		
High School	62	15.5
Bachelor's Degree	151	37.75
Master's Degree	147	36.75
Ph.D./Doctorate	30	7.50
Other Professional Degree	10	2.50
Total	400	100%

Interpretation

The data indicates that the majority of tourists in Nainital City are young adults, mainly between 18 and 25 years old. These visitors are often well-educated, with many holding Bachelor's or Master's degrees. While there's a slightly higher representation of female tourists compared to males, both genders are fairly evenly represented. Moreover, a significant portion of tourists are repeat visitors, suggesting a strong affinity for Nainital City and a familiarity with its attractions. This information helps us understand who the tourists are and what they might like when it comes to things like eco-friendly packaging and how happy they are with their visit.

Table 2: Associations among Environmentally Friendly Packaging, Perceptions of Brand Environmental Consciousness, and Consumer Loyalty

Test Statistics			
	How important is environmentally friendly packaging to you when making purchase decisions	Do you perceive brands that use green packaging as more environmentally conscious	Would you be more likely to remain loyal to a brand that prioritizes green packaging
Chi-Square	34.800 ^a	457.425 ^b	163.500 ^b
df	3	4	4
Asymp. Sig.	.000	.000	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 100.0.			
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 80.0.			

Interpretation

- **How Important is Environmentally Friendly Packaging to you when Making Purchase Decisions**
 - **Interpretation:** The chi-square test reveals a significant association between perceptions of the importance of environmentally friendly packaging and consumer preferences. The p-value of 0.000 indicates that the relationship is statistically significant at the chosen significance level (usually 0.05 or 5%). Therefore, we reject the null hypothesis and conclude that there is a significant difference in perceptions of the importance of green packaging among respondents.

- **Do you Perceive Brands that use Green Packaging as more Environmentally Conscious**
 - **Interpretation:** The chi-square test indicates a significant association between perceptions of brands using green packaging as more environmentally conscious and consumer attitudes. With a p-value of 0.000, the test suggests a strong relationship between these variables. Therefore, we reject the null hypothesis and conclude that there is a significant difference in perceptions of brand environmental consciousness among respondents.
- **Would you be more Likely to Remain Loyal to a Brand that Prioritizes Green Packaging**
 - **Interpretation:** The chi-square test indicates a significant association between loyalty towards brands prioritizing green packaging and consumer attitudes. The p-value of 0.000 suggests that the relationship is highly significant. Therefore, we reject the null hypothesis and conclude that there is a significant difference in loyalty towards brands based on their prioritization of green packaging.

In summary, all three chi-square tests show statistically significant relationships between the variables, indicating strong associations among perceptions of environmentally friendly packaging, perceptions of brand environmental consciousness, and consumer loyalty towards brands prioritizing green packaging.

Table 3: Association between Importance of Environmentally Friendly Packaging and Loyalty towards Green Brands

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.685 ^a	12	.000
Likelihood Ratio	45.077	12	.000
Linear-by-Linear Association	.481	1	.488
N of Valid Cases	400		

a. 4 cells (20.0%) have expected count less than 5. The minimum expected count is 2.56.

Interpretation

The computed chi-square value of 43.685 is associated with a p-value of less than 0.001, indicating a highly significant association. Therefore, we reject the null hypothesis of independence and conclude that there is a significant relationship between the importance of environmentally friendly packaging and loyalty towards brands prioritizing green packaging.

The cross tabulation and chi-square tests collectively indicate a significant association between the importance of environmentally friendly packaging and the likelihood of remaining loyal to brands that prioritize green packaging. This suggests that consumers' perceptions of the importance of green packaging influence their loyalty towards environmentally conscious brands.

Table 4: Association between Perceptions of Brands' Environmental Consciousness and Loyalty towards Green Packaging

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	62.990 ^a	16	.000
Likelihood Ratio	54.851	16	.000
Linear-by-Linear Association	.011	1	.915
N of Valid Cases	400		

a. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .24.

Interpretation

The computed chi-square value of 62.990 is associated with a p-value of less than 0.001, indicating a highly significant relationship. Therefore, we reject the null hypothesis of independence and conclude that there is a significant association between perceptions of brands' environmental consciousness and loyalty towards brands with green packaging.

The cross tabulation and chi-square tests collectively indicate a significant association between perceptions of brands' environmental consciousness and the likelihood of remaining loyal to brands that prioritize green packaging. This suggests that consumers' perceptions of brands' environmental efforts influence their loyalty towards environmentally conscious brands.

Findings

- **Relationship between Green Packaging and Consumer Preferences:** The study found a strong correlation between customer preferences and their assessments of the value of ecologically friendly packaging. Chi-square testing revealed that customers are more inclined to prefer firms that use eco-friendly methods if they place a high value on green packaging.

In particular, there appears to be a strong correlation between customer preferences and the significance of ecologically friendly packaging, as indicated by the chi-square value of 34.800 and the p-value of 0.000. This suggests that buyers who place a high value on environmentally friendly packaging typically exhibit certain preferences.

- **Influence of Green Packaging on Brand Image:** The highly significant chi-square test findings (457.425 with a p-value of 0.000) show that consumers see brands that utilize green packaging as being more environmentally concerned.

The significance of sustainable packaging in influencing consumer attitudes and brand image is shown by this research. Consumers that care about the environment are more inclined to see brands that use green packaging favourably, which improves the brand's reputation overall.

- **Impact on Consumer Loyalty:** The survey found a strong correlation between customer views and brand loyalty when it comes to companies who prioritize using green packaging. The findings of the chi-square test (163.500 with a p-value of 0.000) show a significant correlation between loyalty and the reference for green packaging. This implies that customers are more likely to stick with companies that show their dedication to sustainability in their packaging choices.

Conclusion

To sum up, the results of this study highlight how important green packaging is in shaping customer choices, brand perception, and eventually, consumer loyalty. The study offers empirical evidence in favour of the claim that eco-friendly packaging not only reflects consumer values but also enhances brand loyalty and favourable brand perceptions. To take advantage of these results, companies who operate in areas where environmental consciousness is high should give priority to adopting sustainable packaging techniques. Businesses may grow their brand loyalty over time, draw in environmentally concerned customers, and strengthen their competitive position by including green packaging into their marketing plans. Overall, this research advances our theoretical knowledge and offers real-world applications for companies looking to use sustainability as a strategic advantage. Companies may successfully traverse the changing terrain of consumer expectations and position themselves as leaders in sustainable practices by realizing the significance of green packaging in influencing customer perceptions and behaviour.

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