

**INFLUENCE OF PRODUCT PACKAGING ON IMPULSE BUYING
BEHAVIOUR OF WOMEN SHOPPERS IN KERALA**

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ABSTRACT

In today's retail world, product packaging is not just for protection; it also plays a key role in marketing and influences shoppers' purchase decisions. This study examines how various aspects of packaging, such as colour, design, shape, material, and labels, affect impulse buying among women in Kerala. The researcher has gathered data from 400 women shoppers at various organised retail outlets, specifically hypermarkets, using a structured questionnaire. Researchers used SPSS to explore the link between packaging features and impulse buying behaviour, using descriptive analysis, ANOVA, and regression. The results show a strong positive connection between product packaging and impulsive buying behaviour among women shoppers of organised retail shops in Kerala. Among packaging aspects, colour and design had the most tremendous impact, while labelling had a moderate effect. The study concludes that visually appealing packaging triggers emotional responses and encourages spontaneous purchases, underscoring the importance of incorporating psychological design elements into packaging strategies.

Keywords: *Product Packaging, Impulse Buying Behaviour, Women Shoppers, Visual Appeal, Consumer Psychology.*

1. Introduction

The modern retail landscape in India, particularly in urban areas like Kerala, is characterised by intense competition and diverse product offerings that have transformed packaging from a mere protective layer into a vital marketing tool (Underwood & Klein, 2002). With women consumers playing a critical role, their sensitivity to aesthetic and emotional appeals significantly influences their purchasing decisions, contributing to approximately 60-70% of impulse buying in the fast-moving consumer goods (FMCG) sector (Rook, 1987). Packaging elements such as colour, shape, and design serve as subconscious cues that elicit emotional responses, thereby enhancing product desirability and driving purchase intent (Silayoi & Speece, 2007). Understanding the unique retail environment in Kerala, marked by brand-conscious urban women and the rise of organised retail, offers a critical opportunity to explore how packaging impacts impulsive buying behaviours (Bennett et al., 2015). By examining this interaction, retailers and marketers can devise strategies that resonate with the preferences of this influential consumer demographic, making empirical research in this area both timely and necessary for aligning marketing efforts with evolving consumer desires.

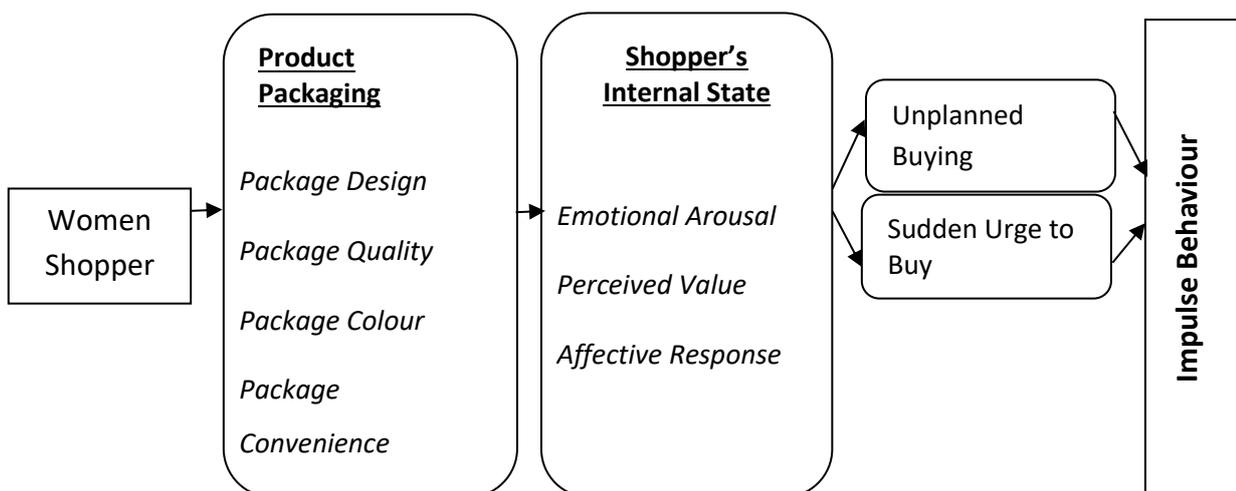
2. Theoretical background and conceptual framework

Packaging serves a crucial role in modern marketing, functioning as both a sensory and cognitive stimulus that captures consumer attention and elicits emotional responses (Silayoi & Speece, 2007). Drawing from the Stimulus-Organism-Response (S-O-R) model, it can be understood that packaging design operates as a stimulus that activates emotional and cognitive responses within shoppers, leading to impulse buying behaviour (Bagozzi, 1992). The visual elements of packaging, including colour, design, quality and convenience, directly influence a consumer's mood and arousal levels, which are key factors in the decision-making process (Khan et al., 2015).

Impulse buying behaviour is characterised by spontaneous and unplanned purchasing decisions, often driven by sudden urges rather than rational consideration (Hirschman & Holbrook, 1982). Research has shown that for female shoppers, the motivation to buy is frequently guided by emotional gratification and hedonic desires, overshadowing logical evaluations (Dittmar, 2005). Attractive packaging can significantly heighten this emotional engagement, particularly in categories such as cosmetics, confectionery, and apparel (Underwood & Klein, 2002).

The proposed conceptual framework for understanding impulse buying behaviour is firmly rooted in the S-O-R model. It posits that in-store product demonstrations act as stimuli that influence shoppers' internal states—emotional arousal and perceived product value (the Organism). These internal responses then lead to a Response in the form of impulse purchasing (Kumar & Mishra, 2018). This framework effectively integrates core components from consumer psychology and experiential marketing, elucidating how live product demonstrations can serve as significant catalysts for unplanned purchases within retail environments. The interplay between packaging elements, consumer emotions, and shopping behaviours is vital for retailers aiming to drive impulse purchases. Understanding these relationships can provide strategic insights for marketers looking to enhance the effectiveness of their packaging and promotional strategies.

Stimulus Organism Responses



Conceptual Framework

Source: Author

Research Problem

In Kerala, women take on a crucial role as decision-makers for household and personal care products. This makes it essential for marketers to understand how their psychological responses differ across different packaging designs. Packaging can include aspects such as design, quality, colour and convenience, all of which can influence a consumer's decision-making process.

The study aims to fill the existing knowledge gap by identifying which specific packaging cues are most effective in triggering unplanned purchases among women in this region. By understanding these factors, marketers can create more effective packaging strategies that resonate with women shoppers, ultimately driving sales and improving marketing effectiveness. Such insights can also enhance a broader understanding of consumer behaviour regarding impulse buying and packaging design.

3. Objectives and hypotheses

Objective

1. To analyse the influence of product packaging on impulse buying behaviour among women shoppers in Kerala.

Hypotheses

H0: Product packaging does not significantly influence impulse buying behaviour among women shoppers.

H1: Product packaging significantly influences impulse buying behaviour among women shoppers.

4. Research Methodology

A quantitative, descriptive, and causal research design was employed. Primary data were collected through a structured questionnaire from 400 women shoppers visiting hypermarkets in randomly selected districts of Kerala, including Trivandrum, Ernakulam, Kozhikode, and Kannur. The questionnaire used a 5-point Likert scale to measure perceptions of packaging attributes and impulse buying tendencies. A pilot test ensured reliability (Cronbach's $\alpha = 0.81$). Data analysis was performed using SPSS Version 26, applying descriptive statistics, ANOVA, and linear regression.

5. Data Analysis and Discussion

The data collected were analysed using SPSS, and the results were interpreted in line with the study's objectives and hypotheses.

6.1 Demographic profile of the respondents

The researcher has collected the demographic profile of the respondents, as shown in the following table.

Table 1: Demographics

Variable	Attributes	Number	(%)
Occupation	Employed	182	45.5
	Not Employed	218	54.5
Age	18-25	85	21.25
	26-35	112	28.0
	36-45	124	31.0
	Above 45	79	19.75
Shopping Frequency	Once	60	15.0
	1-2	152	38.0
	3-4	118	29.5
	5+	70	17.5

Source: Primary data

The demographic data shows nearly equal employment status (Employed: 45.5%, Not Employed: 54.5%), with respondents spanning all adult age groups. The largest age groups were 36-45 (31.0%) and 26-35 (28%), while older shoppers (45+: 19.75%) were the smallest group. Most participants were frequent shoppers, with 67.5% visiting stores 1-4 times per month and 17.5% shopping 5+ times per month. This distribution suggests the findings are particularly relevant for younger and middle-aged adults who shop regularly, though the results may be less representative of older, less frequent shoppers.

6.2 Effect of Product Packaging

A simple linear regression analysis was conducted to examine the effect of Product Packaging on impulse buying behaviour among organised retail women shoppers. In this model, impulse buying behaviour was treated as the dependent variable, and product packaging served as the independent variable.

Table 2: Regression Model Summary

Dependent Variable	Independent Variable	R	R Square	Adj. R Square
Impulse Buying Behaviour	Product Packaging	.742	.565	.562

Source: Primary Data

The regression analysis reveals a strong positive correlation ($R = 0.742$) between the independent and dependent variables, indicating a substantial relationship between Product Packaging and Impulse Buying Behaviour. The R^2 value of 0.562 indicates that 56.2% of the variance in impulse buying decisions is explained by Product Packaging, demonstrating the model's robust predictive capacity. Furthermore, the adjusted R^2 (0.562) closely matches the R^2 , indicating that the model generalises well to the population with minimal overfitting. This consistency between R^2 and adjusted R^2 reinforces the reliability of the findings, confirming that the predictors significantly contribute to impulse buying tendencies. The model's high explanatory power ($R^2 > 0.5$) supports the hypotheses, suggesting that the organised retailers can strategically leverage Product Packaging to enhance impulse purchases by targeting emotional and product-specific influences.

The summary table of the regression model provides a reasonable basis for proceeding with further analysis using the ANOVA table.

Table 3: Regression Model – ANOVA

Dependent Variable	Independent Variable	Level of significance	F-Value	P-value
Impulse Buying Behaviour	Product Packaging	.05	347.86	.000

Source: Primary Data

The significance level for this study was set at 5% ($\alpha = 0.05$), meaning that a p-value (Sig.) below 0.05 would indicate statistical significance. The ANOVA results show a p-value of 0.000, which is well below the 0.05 threshold, confirming that the regression model is statistically significant. The F-value of 347.86 is substantially greater than 1, suggesting a strong improvement in predicting impulse buying behaviour when considering the influence of product packaging. This high F-value indicates that the model effectively explains the variation in the dependent variable compared to a model with no predictors. Since the p-value is below the acceptable significance level, we can reject the null hypothesis and support the alternative hypothesis that Product Packaging have a significant positive impact on impulse buying behaviour. The next step is to examine the coefficients table to assess the individual contribution of each predictor variable.

Table 4: Regression Model – Coefficients

Dependent Variable	Independent Variable	Std. Beta Coefficients	t-Value	P-value
Impulse Buying Behaviour	Product Packaging	.742	21.24	.000

Source: Primary Data

The standardised beta coefficient ($\beta = 0.742$) indicates a strong positive association between Product Packaging and Impulse Buying Behaviour. Since standardised beta values range between -1 and +1, a coefficient of 0.742 suggests a substantial effect, meaning that as Product Packaging exposure increases, impulse buying tendencies also rise significantly. The t-value of 21.24 (far greater than the typical threshold of ± 1.96 for $p < 0.05$) confirms that this predictor is highly statistically significant. Additionally, the p-value of .000 ($p < 0.001$) indicates that the relationship is not due to chance, allowing the researcher to confidently reject the null hypothesis.

These results support H_1 , confirming that Product Packaging has a significant positive effect on women's Impulse Buying Behaviour. The high beta weight suggests that retailers can strategically use product demonstrations to drive unplanned buying behaviour, particularly when combined with emotional triggers.

6. Conclusion

The study concludes that Product Packaging plays a pivotal role in influencing Impulse Buying Behaviour among women shoppers of organised retailers in Kerala. The package design, quality, colour and convenience significantly stimulate emotional engagement and unplanned purchases. The findings suggest that retailers should prioritise packaging innovation, especially in Fast Moving Consumer Goods (FMCG), to strengthen brand recall and spontaneous purchase intent. Thus, this study concludes that product packaging has a significant positive effect on impulse buying behaviour among women shoppers in Kerala.

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