Influence of packaging on consumer purchase decisions of cereal-based fast-moving consumer goods

Sanni-Bamigbade Sekinat Arike

Abstract

The cereal-based fast-moving consumer goods (FMCG) market in Lagos State, Nigeria, is experiencing rapid growth, driven by a rising middle class and increasing consumer awareness. Packaging has emerged as a key factor influencing consumer buying behaviour in this competitive environment. This study investigated the impact of packaging — specifically colour and background imagery — on consumer purchase decisions in Lagos State, using Nestlé's Golden Morn as a case study. Guided by the Theory of Planned Behaviour and Cue Utilisation Theory, the study adopted a descriptive survey design. Primary data were collected through a structured questionnaire administered to 133 consumers, selected through purposive and simple random sampling across retail outlets in Lagos State. Data were analysed in SPSS using descriptive statistics and correlation analysis to evaluate the relationships between packaging attributes and consumer purchase decisions. Findings revealed a strong positive correlation between packaging colour and consumer purchase decisions (r = 0.659, p < 0.001) and an even stronger correlation with background imagery (r = 0.685, p < 0.001). These results align with observed consumer behaviour in Lagos retail spaces, where packaging often serves as the first interaction between the product and the buyer. Beyond visual appeal, packaging communicates quality, trust, and brand identity. The study recommends that cereal-based FMCG brands adopt packaging strategies that are visually engaging and culturally relevant to their target audience to enhance product visibility, influence purchasing decisions, and encourage long-term customer loyalty.

Keywords: Background image, consumer purchase decisions, fast-moving consumer goods (FMCG), Packaging, Packaging Colour

Sanni-Bamigbade, S.A., <u>sannisarike@funaab.edu.ng</u>, Department of Business Administration, College of Entrepreneurial & Development Studies, Federal University of Agriculture, Abeokuta.

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1.1 Background to the Study

The fast-moving consumer goods (FMCG) sector provides products that are purchased frequently, consumed quickly, and are central to everyday life. Cereal-based products form a significant part of this sector because they are convenient and affordable. In Lagos State, Nigeria, the FMCG market has expanded rapidly due to urban development, a rising middle class, and greater consumer awareness (Stren & Blan Partners, 2024; Chikweche et al., 2024). This expansion has intensified competition among both local and international brands (Adurogbola & Onu, 2023; Iheanacho &

Moreover, imagery, in particular, stands out for creating quick first impressions (Gatti et al., 2025; Siddiqui & Karim, 2022). A consumer purchase decision is the process by which buyers evaluate alternatives and choose products that satisfy their needs. In FMCG markets, where price and content are often similar, packaging becomes a decisive factor (Bulama et al., 2021; Mehta et al., 2024). Bright colours such as red and yellow suggest energy and excitement, while natural tones like green and blue convey trust and health (Wang et al., 2025; Khandelwal et al., 2024; Kokiel et al., 2024). Similarly, background imagery communicates freshness, quality, or lifestyle associations that strengthen consumer confidence (Kang et al., 2020; Gil-Pérez et al., 2020). In Lagos State, where cereal brands compete at similar price points, packaging cues become decisive, and cultural differences shape how colours and images are interpreted (Iheanacho & Ogbechi, 2020; Danilola et al., 2019). This study, therefore, examined how packaging colour and background imagery influenced consumer purchase decisions for cereal-based FMCGs in Lagos State, using Nestlé's Golden Morn as a case study.

1.2 Statement of the problem

Packaging is one of the most critical marketing tools in the fast-moving consumer

Ogbechi, 2020). In this competitive space, packaging goes beyond protection. Ampuero and Vila (2006) and Silayoi and Speece (2004) showed early on that packaging cues, such as colour, shape, and information, strongly shape perception and purchase intention. Recent studies support this: Adesanya *et al.* (2024) in Osogbo and Anyadighibe (2024) in Calabar highlight packaging design and colour as drivers of FMCG choice and loyalty, while Liu *et al.* (2025) note that structural, visual, and informational elements remain central globally. Colour

goods sector because it links products to consumers at the moment of purchase (Silayoi & Speece, 2004; Ampuero & Vila, 2006; Bulama et al., 2021). Studies show that elements such as colour, imagery, and labelling influence how buyers judge quality and make choices (Gatti et al., 2025; Bulama et al., 2021). For cereal-based FMCGs, these attributes matter even more since many products compete at similar prices and with comparable nutritional claims (Danilola et al., 2019; Iheanacho & Ogbechi, 2020). Despite this importance, most research has focused on packaging materials, eco-friendly designs, or general labelling (Sharma & Patel, 2024; Magnier et al., 2016; Branca et al., 2024). Far less attention has been given to visual cues such as colour and background imagery, even though international studies show they strongly influence perception and choice (Wang et al., 2020; Khandelwal et al., 2024; Kokiel et al., 2024; Kang et al., 2020; Gil-Pérez et al., 2020). In Lagos State, where Golden Morn and other cereals crowd retail shelves, packaging cues are obvious but under-researched. Nigerian studies have examined packaging mainly in dairy and labelling practices (Iheanacho & Ogbechi, 2020; Danilola et al., 2019), leaving cerealbased FMCGs unexplored. This informed the present study, which examined how packaging attributes, such as colour and

background imagery, shape consumer purchase decisions for cereal-based fast-moving consumer goods in Lagos State. Using Nestlé's Golden Morn as a case study, the research aimed to determine whether packaging colour and background imagery influence buying behaviour. Two null hypotheses were formulated to guide the investigation.

1.3 Scope of the Study

In examining the impact of packaging on consumer purchase decisions for cerealbased fast-moving consumer goods (FMCGs), focusing on Nestlé Nigeria Plc's Golden Morn, it is essential to delineate the study's scope and the statistical methodologies employed. The research encompasses analysis of various an packaging elements—design, colour, shape, sustainability features —and their influence on consumer perceptions and purchasing This focus behaviour. is particularly pertinent given Nestlé Nigeria's recent initiative to launch eco-friendly packaging for Golden Morn, reflecting the company's commitment to environmental sustainability. To assess these factors, the study utilised both descriptive and inferential statistical techniques. Descriptive statistics, including measures of central tendency and variability, were employed to summarise and elucidate the data collected from consumer surveys. These statistics provide a clear overview of consumer attitudes towards packaging attributes. Inferential statistics, particularly multiple regression analysis, were applied to test hypotheses concerning the relationship between packaging elements and consumer purchase decisions.

2.1 Conceptual Review

This section discusses the key concepts relevant to the study. It focuses on fast-moving consumer goods (FMCGs), packaging, and consumer purchase decisions, and explains how these concepts relate to one another. Since the study concerns packaging colour and background imagery, the review

reflects these attributes. The discussion is presented under two themes: product packaging and consumer purchase decisions.

2.1.1 Product Packaging

Well-designed product packaging serves as a silent salesperson, capturing consumer attention and shaping perceptions of quality and value. Research shows that aesthetically pleasing and creative packaging can trigger emotional responses in customers, thereby encouraging impulse purchases enhancing brand loyalty (Ampuero & Vila, 2006; Gatti et al., 2025). The selection of colour, style, typography, and material plays a critical role in evoking emotions and conveying attributes such as healthiness, trust, and quality, which are particularly important in cereal-based products. Packaging influences both initial and repeat purchase behaviour. Clear labelling, including nutritional information and health claims, fosters authenticity and appeals to health-conscious consumers. In addition, reusable or portable packaging enhances convenience and improves the overall experience, increasing consumer likelihood of repeat purchases (Iheanacho & Ogbechi, 2020; Danilola et al., 2019). Therefore, strategic packaging design is essential for marketing cereal-based FMCGs, as it directly impacts consumer preference, buying behaviour, and long-term loyalty.

2.1.2 Consumer Purchase Decisions

Consumer purchase decisions are influenced by various factors, with packaging playing a critical role, especially for cereal-based FMCGs. Packaging acts as a key touchpoint that communicates brand identity, values, and perceived product quality. Aesthetic appeal, functionality, and accessible information can significantly influence how consumers perceive and choose products (Bulama et al., 2021). Visual elements such as colour, logos, and layout can trigger emotional responses and increase product appeal. According to Gatti et al. (2025), consumers are more likely to purchase food

items with bright, eye-catching packaging that conveys trust and quality. Beyond visual appeal, functional features such as ease of use, resealability, and portability also affect consumer decisions. For cereal-based products, packaging that preserves freshness and offers practical storage or serving options enhances satisfaction and purchase intent. Additionally, growing environmental awareness has led many consumers to favour sustainable packaging materials. Products packaged using eco-friendly materials are more likely to attract environmentally conscious buyers who support brands aligned with their values (Branca et al., 2024).

2.2 Theoretical Review

2.2.1 Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB), developed by Ajzen (2020), explains how three main factors — attitudes, subjective norms (social influences), and a person's sense of control — shape a person's decision to buy a product. In this study, these ideas help explain how packaging influences consumer choices. For example, when packaging features attractive colours. appealing images, and helpful information, it can elicit positive feelings and lead consumers to view the product more favourably (Khandelwal et al., 2024). People who care about health may also prefer packaging that clearly shows natural ingredients or health benefits (Yuan et al., 2023). Social pressure also plays a role. If people see others around them choosing ecofriendly packaging, or if sustainability becomes the norm, they are more likely to follow suit. Packaging that uses recyclable materials or promotes environmental values can influence consumers who want to make socially responsible choices (Rambabu & Porika, 2020).

Lastly, how easy or realistic a person feels to act on their decision matters. Packaging made with sustainable materials, like paperboard, often makes consumers feel more confident that they are making a responsible purchase (Sharma & Patel, 2024). So, packaging does not just inform or attract; it can shape how confident consumers feel about their decisions.

2.3 Empirical Review

Ndulue (2020) studied the effect of packaging on consumer buying behaviour for selected beverage products in Anambra State. The study found that packaging elements such as colour, material, shape, size, and printed information all had a significant influence on consumer decisions. These findings suggest that consumers pay attention not just to the contents of a product, but also to how it is presented. Similarly, Kesavan (2020) examined the impact of packaging factors on FMCG products in urban areas of Madurai District, Tamil Nadu, India. The study confirmed that features such as packaging material, shape, colour, and size positively affected consumer behaviour. Both studies point to the importance of visual and functional packaging features in attracting and retaining buyers in the fastmoving consumer goods market.

2.3.1 Packaging Colour

Several studies have confirmed packaging colour plays a significant role in shaping consumer purchase decisions. Huang et al. (2021) conducted a study in China to explore how different colours influence consumer perceptions of food products. Using a quantitative eye-tracking experiment with 20 participants, the study found that consumers tend to associate specific colours with certain product attributes. For example, red and yellow were found to evoke feelings of excitement and energy, making them particularly effective for cereals targeted at children. However, the researchers also noted that excessive use of bold colours could lead to consumer fatigue misinterpretation of the product's characteristics. The study highlighted the importance of choosing colour schemes that align not only with the brand image but also with consumers' expectations, particularly among health-conscious buyers who may prefer calmer, more natural tones.

2.3.2 Background Image

Background imagery on packaging plays an important role in shaping consumers' perceptions of a product's quality and value. Chang et al. (2019) conducted a study in the United States to examine the effects of visual elements on consumer purchase decisions, focusing specifically on the cereal market. In an experimental setup involving 300 the researchers participants, presented various cereal packages with different background images, including fresh fruits, grains, and natural landscapes. The findings showed that images associated with freshness and health increased consumers' likelihood of purchasing the product. However, the study also warned that overly complex or irrelevant imagery can confuse buyers or weaken the brand message. By using focus groups and surveys, the researchers emphasised the importance of aligning visual elements with the product's intended message, especially for items marketed as healthy or natural.

3.0 Research Methods

3.1 Research Design

This study adopted a descriptive survey research design to investigate the impact of packaging on consumer purchase decisions for cereal-based FMCGs, using Nestlé Golden Morn as a case study in Lagos State. A descriptive survey is appropriate because it allows systematic data collection and analysis, helping capture consumers' current attitudes. perceptions, and behaviours without manipulating variables. Since the study focuses on understanding how packaging elements, such as colour and background imagery, influence consumer choices rather than establishing cause-andeffect relationships, the descriptive survey method provides a suitable and practical framework.

3.2 Population of the Study

The population for this study consists of consumers of Nestlé's Golden Morn cereal in Lagos State, Nigeria. Lagos State was selected as the study area due to its high population density, diverse consumer demographics, and its status as a commercial hub where Golden Morn is widely available. The target population includes individuals who actively purchase and consume Golden Morn and are capable of making independent buying decisions.

3.3 Sample and Sampling Technique

The study adopted a combination of purposive and random sampling techniques. At the first stage, five supermarkets in Lagos State were purposively selected from three areas: Ikeja, Surulere, and Lagos Island. These areas were chosen because they are among the locations where formal retail outlets and supermarkets selling Nestlé Golden Morn are concentrated. Other hightraffic districts, such as Mushin, Oshodi, and Mile 12, are dominated by traditional open markets rather than supermarkets and were therefore not included in the sampling frame. The selected areas provided access to a mix of supermarket shoppers, which was appropriate for this study's objectives (Adurogbola & Onu, 2023). At the second stage, individual consumers within these outlets were randomly approached and invited to participate in the survey. This random selection of respondents helped reduce bias and provided a fair chance for inclusion among shoppers present during data collection.

The sample size for the study was determined using Taro-Yamene's (1967) formula:

$$n = \frac{N}{1 + N^*(e)^2}$$

Where, n = sample size, N total population size "e" is the margin of error (0.05). N = 200, e = 0.05

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Given that the population of consumers in Lagos State who consume Nestlé Golden Morn is estimated at 200, and using a margin of error e = 0.05, the sample size calculation is as follows:

$$n = \frac{200}{1+200*(0.05)^2}$$

$$= \frac{200}{1+200*0.0025}$$

$$= \frac{200}{1+0.5}$$

$$= \frac{200}{1.5} = 133.33 \text{ respondents}$$

The calculated sample size was approximately 133 respondents, but was rounded to 130 for simplicity. This size was considered sufficient to provide accurate, generalizable insights while remaining feasible for data collection.

4.0 Data Analysis

Data analysis was conducted using IBM SPSS Statistics, a widely recognised statistical software package for social science research. Descriptive statistics were used to present the socio-demographic characteristics of the respondents (such as

gender, age, marital status, education and years of product consumption). This helped describe who the respondents were and interpret the test results more effectively.

Correlation analysis was then applied to identify the strength and direction of the relationships between variables. Finally, multiple regression analysis was employed to examine the combined effect of packaging colour. background image, packaging and printed information on material. purchase consumer decisions. These methods were chosen to align with the study's objective of understanding how various packaging elements simultaneously influence purchasing behaviour.

4.1 Testing of Hypotheses

Before presenting the hypothesis tests, it is important to describe the respondents' sociodemographic characteristics. This step gives a clearer understanding of who the participants are, the diversity they represent, and the experiences they bring to the study. Table 1 presents this distribution and provides valuable background for interpreting the statistical results that follow.

Table 1: Socio-Demographic Characteristics of Respondents (n = 130)

Variables Frequency (n) Percentage (%) Mean/Mon Gender Male 44 33.8 Female Female 86 66.2 Female Age 45 34.6 26-35 years 50.0 36-45 years 4 3.1 3.1	de_
Male 44 33.8 Female 86 66.2 Female Age 5 34.6 3	
Female 86 66.2 Female Age 45 34.6 34.6 36.0 <	
Age 18-25 years 45 34.6 26-35 years 65 50.0	
18-25 years 45 34.6 26-35 years 65 50.0	
26-35 years 65 50.0	
J	
36-45 years 4 3.1	
46 and above 16 12.3 26-35	
Marital Status	
Single 48 36.9	
Married 53 40.8	
Divorced 15 11.5	
Widowed 14 10.8 Married	
Education	
SSCE 4 3.1	
NCE/OND 10 7.7	
HND/B. Sc 10 7.7	
Postgraduate (M.Sc., MBA, Others) 106 81.5 Postgradu	ate
Consumption Rate	
Less than 1 year 8 6.2	
2-5 years 26 20.0	
6-9 years 84 64.6	
10-13 years 9 6.9	
14 years and above 3 2.3 6-9 year	š

Field Survey (2025). Percentages are based on valid responses.

The demographic results show that most respondents were female (66.2%) and young adults aged 26–35 years (50%), followed by 18–25 years (34.6%). About 41% were married, while 37% were single. Educational attainment was high, with 81.5% holding postgraduate degrees. In terms of usage, the

H₀₂: Background imagery on packaging has no significant impact on consumer purchasing decisions.

majority (64.6%) had consumed cereal-based FMCGs for 6–9 years.

H₀₁: There is no significant relationship between packaging colour and consumer purchasing decisions.

Table	2:	Correlation	between	Packaging	Colour,	Background	Imagery,	and
Consu	mer	Purchase De	cision					

Variables	Packaging Colour	Background Imagery	Consumer Purchase Decision
Packaging Colour	1	.412**	.659**
Background Imagery	.412**	1	.685**
Consumer Purchase Decision	.659**	.685**	1

^{**}Correlation is Significant at the 0.01 level (2-tailed)

Table 2: The Pearson correlation coefficient (r = 0.659, p < 0.001) showed a moderate to strong positive relationship between packaging colour and consumer purchase decision. Since the p-value is less than 0.05, the null hypothesis (H_{01}) was rejected. This suggested that packaging colour had a statistically significant influence consumer purchasing behaviour. Similarly, the correlation result (r = 0.685, p < 0.001) indicated a strong positive relationship between background imagery and consumer purchase decision. Since the p-value was well below 0.05, the null hypothesis (H_{02}) was rejected. This confirmed that background imagery packaging on significantly influenced consumer purchasing decisions.

4.2 Discussion of Findings

This study explored the influence of packaging elements — specifically colour and background imagery — on consumer purchase decisions for cereal-based FMCGs in Lagos State. The findings revealed a strong positive correlation between packaging colour and consumer decisions (r = 0.659, p < .01), supporting the idea that visual appeal plays a key role in attracting consumers. This aligns with Wulandari and Setyaningrum (2021), who surveyed 270 Indonesian consumers of MSME-produced

dry foods and beverages using judgment sampling and Likert scales. Their study showed that packaging influenced buying interest indirectly through consumer taste, highlighting how creative design strengthens appeal. The second hypothesis also showed a significant positive relationship between background imagery and consumer behaviour (r = 0.685, p < .01). This finding supports earlier research by Gil-Pérez et al. (2020), who studied food products and demonstrated that packaging imagery, such as serving suggestions or freshness cues, affects consumer perception and response by enhancing brand associations and purchase likelihood. In particular, images that depict serving suggestions, freshness, or nutritional cues can build consumer trust and positively influence purchase intent. Overall, the findings show that packaging is more than just protection; it is a vital marketing tool that shapes consumers' choices. supports Nigerian studies such as Danilola et al. (2019) on food labels and Iheanacho and Ogbechi (2020), which found that visual and informational cues drive buying decisions. For Nestlé's Golden Morn, the bright yellow and red colours boost visibility and emotional appeal, while the image of a wellprepared bowl conveys convenience and nutrition. These features explain why consumers in Lagos State were strongly

influenced by packaging in their purchase decisions.

5.0 Conclusion and Recommendations
This study examined how packaging features
— specifically colour and background imagery — affect consumer purchase decisions for cereal-based fast-moving consumer goods, using Nestlé's Golden Morn as a case study in Lagos State. The results confirmed that both packaging colour and background imagery have a statistically significant and positive influence on consumer buying behaviour.

The analysis showed that Golden Morn's bright yellow and red packaging colours are highly effective at drawing attention on crowded shelves, while also conveying warmth, energy, and familiarity. The background imagery often shows a wellprepared bowl of cereal served with milk, reinforcing perceptions of freshness, convenience, and nutrition. These cues help consumers associate the product with nourishment and ease of preparation, which appealing particularly to households in Lagos State. These findings suggest that packaging in the cereal-based FMCGs sector functions as more than a protective covering; it serves as a strategic communication tool that shapes consumer trust and choice. In light of these findings, the following recommendations are made:

- i. Cereal-based FMCG brands should prioritise colour schemes that resonate with their target audience. For example, vibrant colours may appeal to children and youth, while calm and natural tones may better suit health-conscious consumers.
- ii. Simple, relatable background images (such as serving suggestions with milk or family-oriented visuals) should be prioritised, as they strengthen consumer trust and convey nutritional value.
- iii. To maintain consumer loyalty, the colour and imagery used on-pack should be consistent with promotional and advertising materials, ensuring a unified brand message.

iv. Before launching new packaging, companies should test options with consumers to understand visual preferences and emotional responses.

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