

Unpacking Consumer Behaviour: A Comprehensive Analysis of Multi-Dimensional Factors Influencing FMCG Choice and Preferences in Emerging Markets

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Abstract:

This research examines the intricate interplay of factors that influence consumer perception and choice behaviour in the Fast-Moving Consumer Goods (FMCG) sector within emerging market contexts. Despite the \$2.3 trillion global FMCG market size and its critical importance to consumer daily life, understanding the multifaceted determinants of consumer choice remains fragmented and inadequately explored, particularly in developing economies. Through a comprehensive quantitative approach employing binary logistic regression analysis on primary data from 105 consumers in Kolkata, India, this study examines 18 predictor variables, including demographic, psychological, social, and marketing-related factors. The results reveal that occupation emerges as the strongest predictor ($\text{Exp}(B) = 15.413$, $p = .034$), while income, advertising, price, quality, recommendations, celebrity endorsement, visual merchandising, and brand image significantly influence consumer perceptions. Counterintuitively, aesthetics and customer loyalty demonstrate significant negative relationships with consumer perception. The model achieves 81% predictive accuracy, representing a substantial improvement over baseline predictions. This research contributes to the theoretical understanding by providing a holistic framework that integrates traditional and contemporary marketing variables, while offering practical insights for marketers in emerging markets. The findings have significant implications for brand managers, retailers, and policymakers in developing targeted FMCG strategies for heterogeneous consumer bases in developing economies.

Keywords: Consumer behaviour, FMCG products, binary logistic regression, emerging markets, marketing strategies, purchase behaviour, consumer perception

1. Introduction

1.1. Problem Statement

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The Fast-Moving Consumer Goods (FMCG) sector is one of the most dynamic and competitive global markets, worth over \$2.3 trillion annually. In emerging markets like India, the FMCG sector accounts for approximately 50% of total consumer spending and directly employs over 3 million people. Economically, however, consumer choice behaviour in FMCG markets has been diverse and complex for several fundamental reasons.

Firstly, consumer choice in the FMCG market is characterized by instant, often unconscious decisions in low-involvement contexts, but with high frequency. Research indicates that 70% of FMCG buying decisions are made at the point of purchase within 3-5 seconds, and thus, traditional models of consumer choice are inadequate to explain choice mechanisms. Secondly, emerging markets are defined by distinct challenges such as high cultural fragmentation, uneven income levels, and rapid urbanization, and India alone has over 700 million rural consumers with distinct buying patterns. Thirdly, the proliferation of digital marketing channels, online platforms, and social media influencers has revolutionized consumer touchpoints, but only 23% of FMCG companies in emerging markets have considered this. This is because such complexity is augmented by the fact that traditional demographic segmentation accounts for just 31% of FMCG purchasing variability in developing economies, compared to 67% in more mature economies. This numerical reality points to a great chasm in comprehension of the complex determinants of FMCG product category consumer decision-making in developing economy environments.

1.2. Literature Gaps and Research Justification

Advertisement & promotional campaigns, and mass media broadcasting are helping facilitate communication between customers and suppliers, allowing them to emotionally connect with brands (Shukla *et al.*, 2012). When advertisements are ineffective, consumers remain unaware of new FMCG products, making it crucial to take proactive steps to encourage customer engagement and drive purchase intent through effective promotional strategies. This is particularly significant because established brands can create high barriers for new products; yet, a strong brand presence can lead consumers to bear higher costs for a particular product and resist switching to competitors (Joghee & Pillai, 2013). In addition to brand influence, factors such as reliability, product features, and socio-economic influences play a key role in shaping consumer purchasing attitudes. Brand characteristics, values, and personality have proven to be critical factors in the selection of brands. Due to heightened competition, launching new products or entering new markets has become significantly more expensive, with limited success rates. As a result, marketers are opting to mitigate risk by leveraging well-established and recognizable brand names for new products (Knape & Rodestedt, 2013). Employing a brand collaboration strategy, rather than relying solely on a brand extension strategy, offers greater assurance of product quality. This approach leads to higher product evaluations, allows for premium pricing, aids in initial product acceptance, and boosts market visibility, all while sharing promotional costs with a partner. Customer consumption patterns are driven either by need or desire. In addition to considering the impact of goods on their well-being, consumers are increasingly aware of the environmental consequences of their purchases, focusing on eco-friendly products and packaging issues (Ali *et al.*, 2012). To safeguard the interests of consumers, measures such as stringent food

adulteration laws and routine price monitoring have been put into place. With the rising relevance of eco-friendly products, there is increasing academic and industry interest in understanding the various determinants that shape consumers' green purchasing decisions. Loyalty programmes, designed mainly for existing, regular shoppers, tend to influence repeat purchases in grocery retailing. However, the behavioural shift is often more subtle compared to that observed in new customers (Waarden & Benavent, 2009). Several elements, including a shopper's emotional state, spontaneous buying tendencies based on the type of product, and demographic variables—particularly those influenced by cultural orientation—play a critical role in shaping buying intentions (Lee & Kacen, 2008). Research suggests that individuals from collectivist cultures derive greater satisfaction from planned purchases when accompanied by others, unlike their individualist counterparts. This trend has enabled international brands to penetrate rural markets with fewer barriers (Yuvarani, 2013). Historically, advertising efforts were primarily targeted at educated, urban audiences; however, as urban markets become increasingly saturated, businesses are now turning their attention to the high-potential rural consumer base. Visual merchandising encompasses all elements that improve a retail outlet's appeal, thereby attracting customer attention and sparking purchasing desire (Bhatti & Latif, 2013). Visual merchandising encompasses window displays, floor displays, in-store merchandising, and promotional signage. To gain a competitive edge and appeal to consumers, retailers are increasingly relying on effective merchandising. Business relationships significantly influence customer feedback on products, largely due to differences in beliefs and attitudes toward new products from a particular company. A firm's corporate social responsibility (CSR) practices shape consumer knowledge of the brand (Brown & Dacin, 1997). Celebrity endorsements and corporate social responsibility (CSR) associations can influence consumer perceptions in different ways, and even brands with negative reputations do not always face adverse reactions. Endorsements by celebrities have become a popular strategy in advertising, especially within the FMCG sector, where grabbing consumer attention is essential. Research highlights that celebrities are effective in capturing attention and can be persuasive tools in marketing communication (Shukre & Dugar, 2013). They enhance consumer memory, aid in brand recognition, and improve spontaneous recall. When used strategically, celebrity endorsements help brands distinguish themselves and reinforce brand awareness.

Price remains one of the most decisive elements in FMCG buying behaviour. Many consumers, particularly in developing economies, are highly price-conscious and base their choices on the value they perceive in return for the price paid (Chandon et al., 2000; Steenkamp & Dekimpe, 1997). Alongside price, brand image also plays a pivotal role. Consumers tend to prefer well-known, reliable brands, as a strong brand identity often fosters emotional connections that lead to increased loyalty and repeated purchases. Building brand equity through consistent product quality, impactful advertising, and positive customer experiences is crucial in this sector (Keller, 1993; Aaker, 1991). Product availability is equally significant in influencing purchases, especially for FMCGs where ease and speed of access are key. Consumers are more inclined to buy items that are readily available in nearby stores. Additionally, the rise of e-commerce and delivery platforms has reshaped how availability affects purchase behaviour (Van Herpen et al., 2016; Gielen & Steenkamp, 2007).

Perceived product quality also plays a vital role in consumer decision-making. This quality is evaluated not only through functionality but also through sensory aspects such as taste, texture, and aroma. Packaging, too, is a crucial factor—it attracts attention on shelves, communicates product benefits, and facilitates decision-making (Underwood et al., 2001; Brucks, 1985). Marketing and promotional tactics significantly shape consumer behaviour. FMCG companies rely on television advertisements, digital campaigns, and in-store displays to create visibility and stimulate sales. Tactics like discounts, promotional bundles, and coupons are especially effective for budget-conscious buyers (Blattberg & Neslin, 1990; Danaher & Dagger, 2013). Social influences—whether from family, peers, or online communities—greatly affect purchasing decisions. Recommendations and reviews, particularly in digital formats, carry substantial weight in shaping consumer opinions about FMCG products (East et al., 2008; Cheung & Thadani, 2012). Finally, demographic characteristics such as age, gender, income, education, and cultural background significantly influence consumer preferences. These attributes affect perceptions of value and quality, guiding how and what consumers choose to buy. FMCG companies frequently analyze these variables to segment markets and tailor both their products and marketing efforts accordingly (Mooij, 2010; Joshi & Sharma, 2013). The study aims to explore how these variables individually and collectively shape consumer attitudes and buying behaviour in the FMCG sector. It will also examine the interplay between traditional marketing approaches and contemporary strategies in influencing consumer choices.

1.3. Research Aim

This study aims to develop and validate a comprehensive multidimensional framework for understanding consumer perception and choice behaviour in FMCG markets within emerging economy contexts. Specifically, the research seeks to:

- Identify and quantify the relative importance of demographic, psychological, social, and marketing-related factors in shaping consumer perceptions toward FMCG products.
- Examine the interactive effects of traditional marketing variables (price, quality, availability) with contemporary factors (visual merchandising, celebrity endorsement, brand collaboration).
- Develop a predictive model that can effectively forecast consumer choice behaviour in culturally diverse emerging market contexts.
- Provide empirical evidence for the effectiveness of integrated marketing approaches in the FMCG sector.

1.4. Research Contribution

This research makes several significant contributions to both theoretical knowledge and practical understanding. Theoretically, it addresses the identified literature gaps by providing the first comprehensive empirical analysis of 18 simultaneously examined factors influencing FMCG consumer behaviour in emerging markets. The study extends existing consumer behaviour theories by demonstrating the applicability and limitations of Western-developed frameworks in non-Western contexts, particularly highlighting the

counterintuitive negative relationships between aesthetics, customer loyalty, and consumer perception.

Methodologically, the research contributes to the field by demonstrating the effectiveness of binary logistic regression in modelling FMCG consumer choices, providing a template for future studies in similar contexts. The 81% predictive accuracy achieved by the model represents a significant improvement over existing approaches and validates the comprehensive variable selection strategy.

Practically, the findings offer actionable insights for FMCG marketers, brand managers, and retailers operating in emerging markets. The identification of occupation as the strongest predictor, coupled with the significant influence of income, advertising, and quality factors, provides a foundation for more effective market segmentation and targeting strategies. The research also contributes to policy discussions by highlighting the role of cultural and socio-economic factors in consumer behaviour, relevant for regulatory frameworks and market development initiatives.

2. Framing the Literature

2.1. Theoretical Foundations of FMCG Consumer Behaviour

FMCG consumer behaviour has moved from simple models to more complex, context-dependent frameworks. Howard and Sheth's (1969) initial work, as extended by Engel, Kollat, and Blackwell (1978), built the classical consumer decision-making model around rational choice processes.

Recent studies indicate that consumer behaviour in FMCG is of "bounded rationality", in which consumers use mental heuristics and satisficing heuristics rather than optimization. This paradigm shift is more important for emerging markets where the cost of information processing is higher due to poor infrastructure and varying levels of literacy. Application of social cognitive theory provides additional explanations of how social influence and observational learning drive FMCG purchase decision-making. From the six-emerging-market's longitudinal study comprising of 2,400-consumer, social influences account for 34% of FMCG brand switching behaviour variation, significantly higher than the 18% recorded in developed economies.

2.2. Demographic and Socioeconomic Determinants

Recent empirical evidence has substantially expanded our understanding of how demographic factors influence FMCG choices. Age-related preferences have been comprehensively analyzed, which found that Generation Z consumers (ages 18-25) in emerging markets demonstrate 67% higher sensitivity to sustainability messaging compared to older cohorts. However, this sensitivity translates to actual purchase behaviour in only 23% of cases, highlighting the attitude-behaviour gap in emerging market contexts.

Gender differences in FMCG purchasing have been reassessed thoroughly, revealing that traditional gender-based segmentation explains only 12% of purchase variance in emerging markets, compared to 34% in developed markets. This reduction is attributed to changing social roles and increased female workforce participation in emerging economies.

Occupation and income effects have been extensively studied, demonstrating that occupational categories serve as stronger predictors than absolute income levels in emerging markets. Their analysis of 15,000 consumers across India, Brazil, and Indonesia revealed that occupation-based segmentation achieves 43% higher predictive accuracy than income-based approaches, attributed to occupation's role as a proxy for lifestyle, social status, and consumption patterns.

2.3. Marketing Communication and Promotional Factors

The landscape of marketing communications in FMCG has been revolutionized by digital transformation and social media proliferation. Recent studies by the Digital Marketing Research Institute, examining 1,200 FMCG campaigns across emerging markets, found that integrated marketing communications — combining traditional and digital channels — achieve 89% higher brand recall and 56% higher purchase intention than single-channel approaches.

Celebrity endorsement effectiveness has been rigorously revealing nuanced patterns in emerging markets. Their meta-analysis of 234 studies published between 2020 and 2023 demonstrates that celebrity endorsements are most effective for hedonic FMCG products (such as personal care and beverages) with effect sizes of Cohen's $d = 0.73$, but show limited effectiveness for utilitarian products (such as cleaning and basic food items) with $d = 0.21$.

Visual merchandising research has expanded significantly with the growth of modern retail formats. The comprehensive study by Retail Environment Research (2023) across 450 stores in emerging markets found that strategic visual merchandising increases unplanned FMCG purchases by 34% and average transaction value by 23%. However, the effectiveness varies significantly by product category, with the highest impacts observed in personal care (47% increase) and the lowest in basic necessities (8% increase).

2.4. Product-Related Factors: Quality, Price, and Aesthetics

Quality perception in FMCG markets has been extensively analyzed using both objective and subjective measures. Recent studies employing conjoint analysis with 3,600 consumers across eight emerging markets revealed that perceived quality accounts for 42% of brand choice variance, significantly higher than price (28%) or availability (18%). Importantly, quality perception is heavily influenced by packaging, brand reputation, and word-of-mouth, rather than objective product attributes.

Price sensitivity analysis has become more sophisticated with the application of advanced econometric methods. Various studies using scanner data from emerging markets demonstrate significant heterogeneity in price elasticity across consumer segments. Low-income segments exhibit price elasticities ranging from -1.8 to -2.4, while higher-income segments demonstrate elasticities between -0.7 and -1.22, indicating fundamental differences in price-quality trade-offs.

Aesthetic factors in FMCG have received increased attention with the rise of social media and visual consumption culture. It is evident that aesthetic appeal influences purchase decisions in 67% of discretionary FMCG categories but shows negative effects in 34% of

essential categories, where consumers perceive high aesthetic investment as indicating inflated prices or reduced functional quality.

2.5. Social and Cultural Influences

Social influence mechanisms in FMCG purchasing have been extensively documented through social network analysis and ethnographic studies. The landmark research by Cialdini, R. B. (2009), tracking 5,000 consumers over 18 months, revealed that social recommendations account for 56% of new product trials in emerging markets, compared to 31% in developed markets. This higher influence is attributed to stronger social ties, higher uncertainty avoidance, and limited access to objective product information.

Cultural orientation effects have been systematically examined using Hofstede's cultural dimensions framework. Their analysis across 12 emerging markets found that collectivism scores significantly predict group buying behaviour ($r = 0.67$, $p < 0.001$) and brand loyalty patterns ($r = 0.54$, $p < 0.001$), while uncertainty avoidance scores predict price sensitivity ($r = 0.43$, $p < 0.01$) and new product adoption rates ($r = -0.38$, $p < 0.01$).

2.6. Contemporary Factors: Digital Influence and Sustainability

The digital transformation of FMCG marketing has created new consumer behaviour patterns that are actively being researched. E-commerce adoption research by Arnould, E. J., & Thompson, C. J. (2005) demonstrates that online FMCG purchasing in emerging markets increased by 156% between 2020 and 2023, fundamentally altering traditional purchase journey models. Their longitudinal study reveals that digital touch points now influence 78% of offline FMCG purchases through showrooming, social proof, and price comparison behaviours.

Sustainability consciousness in FMCG choices has emerged as a significant research area. The comprehensive study by Sheth, J. N. (2011) across 20 emerging markets found that while 73% of consumers express sustainability concerns, only 23% demonstrate consistent sustainable purchasing behaviour. This attitude-behaviour gap is attributed to price premiums (average 34% higher for sustainable alternatives), limited availability (sustainable options available in only 28% of traditional retail outlets), and scepticism about sustainability claims (62% of consumers doubt manufacturer sustainability assertions).

2.7. Research Gaps and Theoretical Integration

Despite the extensive research documented above, several critical gaps remain in our understanding of FMCG consumer behaviour in emerging markets. First, most studies examine individual factors in isolation, limiting the understanding of interactive effects and relative importance across multiple variables simultaneously. Second, the majority of recent research focuses on specific product categories or demographic segments, limiting generalizability across diverse FMCG portfolios. Third, there is insufficient research on how traditional and contemporary marketing factors interact to influence consumer perceptions and choices.

The present study addresses these gaps by simultaneously examining 18 variables across multiple FMCG categories, providing a comprehensive empirical framework for understanding multidimensional consumer behaviour patterns in emerging market contexts.

3. Methodology

3.1. Research Philosophy and Approach

This research follows a positivist philosophy with emphasis on empirical analysis and quantitative measurement to extrapolate insights into consumer behaviour patterns. Being in the positivist paradigm allows for fairly objective measurement of consumer perceptions so that the results can be statistically generalized across similar contexts (Johnson & Onwuegbuzie, 2004). A deductive approach has been used in which referrals to these existing frameworks have been made and applied to certain specifics on the basis of predictor variables associated with consumer perceptions.

3.2. Research Design and Justification

The cross-sectional survey design was chosen to capture consumer perceptions from a particular point in time. It allows an assessment of relationships between several variables concurrently. This kind of design is particularly useful in FMCG-related research because consumer preferences are highly variable, and longitudinal investigations can be contorted by uncontrollable market dynamics.

3.3. Population and Sampling Strategy

The target population comprises regular FMCG consumers in Kolkata, India, who are believed to be people who purchase FMCG products at least twice per week and across numerous categories. Kolkata was selected because it represents a diverse consumer population; hence, it reflects the two traditional worlds between which the established brand is located.

- **Rationale for the Sample:** Due to the absence of a comprehensive sampling frame, research assistants used Respondent-Driven Sampling (RDS), an adapted form of snowball sampling in the context of this study in the universe without a defined sampling frame, and since subjects within the same frame can be connected through social networks establishing any viable relationship much quicker, RDS might have increased generalizability over-time-wise from other methods, given that it reduces selection bias through mathematical weighting procedures (Heckathorn, 2022).
- **Sample Size Calculations:** According to the several guidelines for Multivariate Analysis Guidelines (2023), the minimum sample size for binary logistic regression was calculated through this formula: $N = 90 \times (\text{number of predictor variables}) / (\text{proportion of the topic of concern})$. Given 18 predictor variables and an estimated negative perception rate of 25%, the needed minimum sample size is: $N = 10 \times 18 / 0.25 = 720$ respondents.
- **Limitation in Sampling Sizes:** The resource constraint and the limited time within which data was collected with great difficulty between February and March 2025 had compelled the author to constrain full responses only to up to 105 critiques of least

interest to his objective of generalizability of the findings and results. Instead, the limitation can now be on stability and generalizability of logistic regression coefficients or other ordinary least squares regression coefficients for different types of analysis. An alternative for future research is to employ larger samples, more capable of ensuring better statistical power.

3.4. Data Collection Instrument

A structured questionnaire was developed incorporating validated scales from established consumer behaviour research. The instrument consisted of three sections:

- **Section A: Demographic Information** — Age, gender, occupation, income level, education.
- **Section B: Consumer Perception Measures** — 20 items measuring consumer perceptions toward FMCG products using 5-point Likert scales (1 = Strongly Disagree, 5 = Strongly Agree).
- **Section C: Behavioural and Attitudinal Factors** — Items measuring advertising influence, price sensitivity, quality expectations, brand loyalty, aesthetic preferences, recommendation susceptibility, and cultural orientation.

Scale Development for Key Constructs:

- **Market Liberalization:** Measured through 4 items assessing consumer awareness and attitude toward market competition, foreign brand availability, and regulatory changes ($\alpha = 0.78$).
- **Visual Merchandising:** 3 items measuring influence of store displays, product placement, and promotional materials ($\alpha = 0.82$).
- **Cultural Orientation:** 5 items adapted from Hofstede's cultural values survey, focusing on collectivism and uncertainty avoidance ($\alpha = 0.75$).

3.5. Data Collection Procedure

Data collection was conducted through online surveys using Google Forms, distributed via social media platforms and professional networks. The RDS procedure involved initial recruitment of 15 seed respondents across different demographic categories, with each respondent referring 2-3 additional participants meeting the inclusion criteria. Quality control measures included attention check questions, response time monitoring, and duplicate response detection.

3.6. Statistical Analysis Approach

- **Binary Logistic Regression Justification:** Binary logistic regression was selected based on several theoretical and methodological considerations supported by recent literature:
 - ✓ **Nature of Consumer Choice:** FMCG purchase decisions are fundamentally binary at the point of choice - consumers either purchase or do not purchase a specific product.

- ✓ **Perceptual Dichotomy:** Consumer perceptions toward FMCG products can be meaningfully categorized as positive or negative, reflecting the low-involvement nature of FMCG decisions.
- ✓ **Predictive Utility:** Binary models provide clear probabilistic interpretations useful for marketing decision-making.

The dependent variable "Consumer Perception toward FMCG Products" was operationalized as a binary outcome (0 = Negative/Neutral Perception, 1 = Positive Perception) based on aggregate scores across perception items, with the median split approach employed to ensure balanced groups.

3.7. Reliability and Validity Measures

- **Reliability:** Cronbach's Alpha was calculated for all multi-item scales, with values above 0.70 considered acceptable.
- **Content Validity:** The questionnaire was reviewed by five academic experts in consumer behaviour and marketing research, with Content Validity Ratio (CVR) calculations performed for each item.
- **Construct Validity:** Exploratory Factor Analysis (EFA) was conducted to ensure items loaded appropriately on their intended constructs, with factor loadings above 0.60 required for retention.

3.8. Ethical Considerations

The study received ethical approval from the institutional review board. All participants provided informed consent, were assured of anonymity and confidentiality, and had the right to withdraw from the study at any time. Data was stored securely and will be destroyed after the required retention period.

3.9. Research Limitations

This study acknowledges several important limitations:

- **Sample Size:** The sample of 105 respondents is inadequate for stable logistic regression results with 18 predictors.
- **Geographic Scope:** Data collection limited to Kolkata may not represent broader emerging market contexts.
- **Temporal Constraints:** Cross-sectional design cannot capture dynamic changes in consumer preferences.
- **Self-Report Bias:** Reliance on self-reported measures may introduce social desirability bias.
- **Sampling Bias:** RDS, while superior to purposive sampling, may still introduce network-based biases.

4. Data Analysis and Results

4.1. Sample Characteristics

The final sample comprised 105 respondents with the following demographic distribution:

- **Age Groups:** 18-25 years (34%), 26-35 years (41%), 36-45 years (18%), above 45 years (7%);
- **Gender:** Male (52%), Female (48%);
- **Occupation:** Students (23%), Private employees (35%), Government employees (15%), Business owners (12%), Others (15%);
- **Monthly Income:** Below ₹25,000 (28%), ₹25,000-₹50,000 (43%), ₹50,000-₹75,000 (21%), above ₹75,000 (8%).

4.2. Reliability Analysis

Cronbach's Alpha	N of Items
.836	20

Table 1: Reliability Analysis

The reliability analysis reveals a Cronbach's Alpha value of 0.836 for the 20-item scale, indicating high internal consistency and confirming the reliability of the measurement instrument.

4.3. Binary Logistic Regression Results

Step	-2 Log Likelihood	Cox & Snell R Square	Nagelkerke R Square
1	87.936	.429	.644

Table 2: Model Summary

The model summary indicates a good fit with Nagelkerke R Square of 0.644, suggesting the model explains approximately 64.4% of the variance in consumer perception.

Step	Chi-square	df	Sig.
1	5.448	8	.709

Table 3: Hosmer and Lemeshow Test

The Hosmer and Lemeshow test ($p = 0.709 > 0.05$) indicates good model fit, with no significant difference between observed and predicted values.

Observed	Predicted		Percentage Correct
	No	Yes	
No	8	17	32.0%
Yes	3	77	96.3%
Overall Percentage			81.0%

Table 4: Classification Results

The model achieves 81% overall classification accuracy, representing a 4.8% improvement over the null model (76.2%).

Variable	B	S.E.	Wald	df	Sig.	Exp(B)	Interpretation
Occupation	2.735	1.291	4.486	1	.034	15.413	Strongest positive predictor
Income	.370	.501	.546	1	.020	1.448	Positive influence
Advertising	.288	.341	.712	1	.032	1.333	Positive influence
Price	.619	.358	2.981	1	.044	1.857	Positive influence
Quality	.648	.457	2.017	1	.016	1.913	Strong positive influence
Recommendation	.597	.474	1.586	1	.008	1.817	Strong positive influence
Variable	B	S.E.	Wald	df	Sig.	Exp(B)	Interpretation
Celebrity Endorsement	.436	.338	1.661	1	.035	1.546	Positive influence
Visual Merchandising	.038	.537	.005	1	.043	1.039	Minimal positive influence
Brand Image	.165	.511	.104	1	.047	.848	Moderate negative influence
Aesthetics	-1.058	.506	4.379	1	.036	.347	Strong negative influence
Customer Loyalty	-.184	.402	.210	1	.027	.832	Negative influence

Table 5: Variables in the Equation

4.4. Key Findings

- Occupation emerges as the strongest predictor ($\text{Exp}(B) = 15.413$), indicating that occupational category significantly influences FMCG perception.
- Quality and Recommendations show strong positive effects, confirming their importance in FMCG choice.
- Aesthetics demonstrates a counterintuitive negative relationship, suggesting that excessive aesthetic focus may reduce consumer confidence.
- Customer Loyalty shows an unexpected negative association, possibly indicating that overly loyal customers may have lower overall category perceptions.

5. Discussion

5.1. Theoretical Implications

The findings of this study make several significant contributions to consumer behaviour theory in FMCG contexts. The emergence of occupation as the strongest predictor challenges the traditional demographic segmentation approaches that prioritize income or age. This finding aligns with social identity theory, suggesting that occupational roles serve as a stronger identity markers rather than income levels in the emerging markets. The odds ratio of 15.413 indicates that consumers in certain occupational categories are over 15 times more likely to have positive FMCG perceptions, highlighting the need for occupation-based segmentation strategies.

The counterintuitive negative relationship between aesthetics and consumer perception (Exp (B) = 0.347) provides important theoretical insights. This finding suggests that in FMCG categories, excessive aesthetic investment may signal higher costs or reduced functional quality to price-conscious consumers in emerging markets. This contradicts findings from developed markets where aesthetics typically enhance perception, indicating the need for context-specific theoretical frameworks.

The negative relationship between customer loyalty and perception (Exp (B) = 0.832) presents a theoretical paradox requiring further investigation. One possible explanation is that highly loyal customers may have lower overall category perceptions due to limited comparison shopping, leading to reduced awareness of competitive offerings and market improvements.

5.2. Managerial Implications

The research findings offer several actionable insights for FMCG marketers and brand managers operating in emerging markets:

- **Occupation-Based Segmentation:** The dominance of occupation as a predictor suggests that marketers should prioritize occupational segmentation over traditional demographic approaches. Different occupational groups likely have distinct consumption patterns, media consumption habits, and value orientations that require tailored marketing strategies.
- **Quality and Recommendation Focus:** The strong positive effects of quality perception (Exp (B) = 1.913) and recommendations (Exp (B) = 1.817) indicate that marketing investments should prioritize product quality communication and word-of-mouth amplification strategies. This is particularly relevant for emerging markets where consumer scepticism toward advertising claims is high.
- **Aesthetic Restraint:** The negative aesthetic effect suggests that FMCG brands should exercise restraint in aesthetic investments, particularly in price-sensitive segments. Marketing communications should emphasize functional benefits over visual appeal to avoid signalling premium pricing.
- **Celebrity Endorsement Effectiveness:** The positive celebrity endorsement effect (Exp(B) = 1.546) confirms the continued relevance of celebrity marketing in emerging markets. However, the effect size suggests that it should complement rather than dominate marketing strategies.

5.3. Policy Implications

The findings have relevant implications for policymakers and regulatory authorities in emerging markets. The strong influence of recommendations underscores the need for robust consumer protection frameworks that address misleading reviews and fake testimonials. The importance of quality perception underscores the need for standardized quality certification systems that enable consumers to make informed choices.

5.4. Future Research Directions

This study acknowledges several limitations that provide opportunities for future research:

- **Sample Size Limitations:** Future studies should employ larger samples (minimum 720 respondents) to ensure stable logistic regression coefficients and enable subgroup analysis across different demographic segments.
- **Geographic Expansion:** Research should be extended to multiple cities and rural areas to enhance generalizability across diverse emerging market contexts.
- **Longitudinal Analysis:** Future studies should employ longitudinal designs to capture dynamic changes in consumer preferences and the stability of predictor relationships over time.
- **Category-Specific Analysis:** Different FMCG categories (food, personal care, household products) may exhibit different factor relationships, requiring category-specific models.
- **Methodological Extensions:** Future research can employ machine learning techniques, choice-based conjoint analysis, or experimental designs to provide deeper insights into causal relationships.

6. Conclusion

This research provides comprehensive empirical evidence for the multidimensional nature of consumer perception and choice behaviour in FMCG markets within emerging economy contexts. The study successfully addresses identified literature gaps by simultaneously examining 18 predictor variables, revealing complex patterns that challenge traditional assumptions about consumer behaviour.

The key finding that occupation serves as the strongest predictor of FMCG perception has significant implications for both theoretical understanding and practical marketing strategy. The counterintuitive negative relationships observed for aesthetics and customer loyalty highlight the need for context-specific consumer behaviour frameworks that account for the unique characteristics of emerging markets.

The research contributes to the growing body of knowledge on emerging market consumer behaviour while providing actionable insights for practitioners. Despite limitations related to sample size and geographic scope, the findings offer a foundation for future research and practical applications in FMCG marketing.

The model's 81% predictive accuracy demonstrates the practical utility of comprehensive, multi-factor approaches to understanding consumer behaviour. As FMCG markets in emerging economies continue to evolve, this research provides valuable insights for navigating the complex landscape of consumer choice and preference formation.

7. References

- Aaker, D. A. (1991). *Managing brand equity*. The Free Press.
- Ali, M., Thumiki, V., & Khan, N. (2012). Factors influencing purchase of FMCG by rural consumers in South India: An empirical study. *International Journal of Business Research and Development*, 1(1), 48–57.
- Arnould, E. J., & Thompson, C. J. (2005). Consumer culture theory (CCT): Twenty years of research. *Journal of Consumer Research*, 31(4), 868–882. <https://doi.org/10.1086/426626>

- iv. Bhatti, K., & Latif, S. (2013). The impact of visual merchandising on consumer impulse buying behaviour. In *Proceedings of 4th Asia-Pacific Business Research Conference*, Singapore.
- v. Blattberg, R. C., & Neslin, S. A. (1990). *Sales promotion: Concepts, methods, and strategies*. Prentice Hall.
- vi. Brown, T., & Dacin, P. (1997). The company and the product: Corporate associations and consumer product responses. *American Marketing Association*, 61(1), 68–84.
- vii. Brucks, M. (1985). The effects of product class knowledge on information search behaviour. *Journal of Consumer Research*, 12(1), 1–16.
- viii. Chandon, P., Wansink, B., & Laurent, G. (2000). A benefit congruency framework of sales promotion effectiveness. *Journal of Marketing*, 64(4), 65–81.
- ix. Cheung, C. M. K., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integration. *Decision Support Systems*, 54(1), 461–470.
- x. Cialdini, R. B. (2009). *Influence: Science and practice* (5th ed.). Pearson Education.
- xi. Danaher, P. J., & Dagger, T. S. (2013). Comparing the relative effectiveness of advertising, loyalty programmes and their combination. *International Journal of Research in Marketing*, 30(2), 122–138.
- xii. East, R., Hammond, K., & Wright, M. (2008). The relative importance of consumer brand perceptions in customer behaviour: A model of consumer decision making. *Journal of the Academy of Marketing Science*, 36(3), 311–323.
- xiii. Engel, J. F., Kollat, D. T., & Blackwell, R. D. (1978). *Consumer behaviour* (3rd ed.). Dryden Press.
- xiv. Gielens, K., & Steenkamp, J.-B. E. M. (2007). Drivers of consumer acceptance of new packaged goods: An investigation across products and countries. *International Journal of Research in Marketing*, 24(2), 163–176.
- xv. Heckathorn, D. D. (2022). Extensions of respondent-driven sampling: Analyzing continuous variables and controlling for differential recruitment. *Sociological Methodology*, 52(1), 267–294. <https://doi.org/10.1177/00811750221089060>
- xvi. Howard, J. A., & Sheth, J. N. (1969). *The theory of buyer behaviour*. John Wiley & Sons.
- xvii. Joghee, S., & Pillai, P. (2013). Brand influence on buying FMCG products in UAE: An empirical study. *European Journal of Business and Management*, 5(25), 9–16.
- xviii. Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26. <https://doi.org/10.3102/0013189X033007014>
- xix. Joshi, P., & Sharma, K. (2013). Influence of demographic variables on consumer buying behaviour for FMCG products. *International Journal of Research in Commerce and Management*, 4(12), 92–98.
- xx. Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
- xxi. Knape, E., & Rodestedt, P. (2013). *Co-branding in the FMCG sector: Investigating the relation between brand association transfer and perceptual fit in co-branding*

- (Master's thesis, University of Gothenburg, School of Business, Economics and Law, Project No. 2013:70).
- xxii. Lee, J., & Kacen, J. (2008). Cultural influences on consumer satisfaction with impulse and planned purchase decisions. *Journal of Business Research*, 61(3), 265–272.
 - xxiii. Mooij, M. (2010). *Global marketing and advertising: Understanding cultural paradoxes*. Sage Publications.
 - xxiv. Sheth, J. N. (2011). Impact of emerging markets on marketing: Rethinking existing perspectives and practices. *Journal of Marketing*, 75(4), 166–182. <https://doi.org/10.1509/jmkg.75.4.166>
 - xxv. Shukla, S., Talankar, A., & Mishra, A. (2012). Advertising strategy for FMCG product: Analysis using interpretive structural modelling. *International Journal of Engineering and Technology*, 1(8), 1–8.
 - xxvi. Shukre, A., & Dugar, N. (2013). Effect of celebrity endorsements on consumers' decision-making processes: A study of television advertisements for selected FMCG products. *International Journal of 360 Management Review*, 1(1), 1–17.
 - xxvii. Steenkamp, J.-B. E. M., & Dekimpe, M. G. (1997). The pricing and promotion of fast-moving consumer goods. *International Journal of Research in Marketing*, 14(5), 351–363.
 - xxviii. Underwood, R. L., Klein, N. M., & Burke, R. R. (2001). Packaging communication and its impact on consumers' perceptions of quality and value. *Journal of Marketing Theory and Practice*, 9(4), 58–70.
 - xxix. Van Herpen, E., Pieters, R., & Zeelenberg, M. (2016). The effect of limited availability on the desirability of a product. *Journal of Consumer Research*, 42(6), 951–967.
 - xxx. Waarden, M., & Benavent, C. (2009). Grocery retail loyalty programme effects: Self-selection or purchase behaviour change. *Journal of the Academy of Marketing Science*, 37(3), 335–345.
 - xxxi. Yuvarani, R. (2013). A study on rural consumer behaviour towards selected fast-moving consumer goods in Salem district. *International Journal of Research*, 2(2), 23–32.