

**AN SEM-BASED ANALYSIS OF PURCHASING BEHAVIOUR AND BRAND
LOYALTY OF WOMEN CONSUMERS TOWARDS PERSONAL CARE PRODUCTS
IN CHENNAI CITY**

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Abstract

The rapid expansion of the personal care products market has intensified competition, making consumer satisfaction and brand loyalty critical for long-term success. This study examines the structural relationships between purchasing behaviour factors and brand loyalty among women consumers of personal care products in Chennai City, with consumer satisfaction acting as a mediating variable. A descriptive research design was employed, and primary data were collected from 150 women consumers using a structured questionnaire. Structural Equation Modelling (SEM) using AMOS was applied to test the proposed conceptual framework. The results indicate that purchasing behaviour factors—product quality, price, brand image, availability, and promotion—significantly influence consumer satisfaction, which in turn exerts a strong positive effect on brand loyalty. The findings confirm the mediating role of consumer satisfaction and highlight its importance in transforming favourable purchasing behaviour into sustained brand loyalty. The study offers both theoretical and managerial insights for personal care product marketers operating in competitive urban markets.

Keywords: Purchasing Behaviour, Brand Loyalty, Consumer Satisfaction, Women Consumers, Personal Care Products, Structural Equation Modelling, AMOS

Introduction

The personal care products industry has emerged as a dynamic segment of the consumer goods market, particularly among women consumers. Products related to skincare, haircare, cosmetics, and personal hygiene play an important role in shaping personal identity, confidence, and lifestyle. Factors such as urbanisation, increased disposable income, and exposure to mass and digital media have significantly altered women consumers' purchasing behaviour.

Purchasing behaviour refers to the process through which consumers recognise needs, evaluate alternatives, and make purchase decisions. Brand loyalty represents a consumer's consistent preference for a particular brand over time. In highly competitive markets, brand loyalty is essential for ensuring customer retention and long-term profitability. Chennai City, as a major metropolitan centre with diverse consumer segments, provides an appropriate context for examining purchasing behaviour and brand loyalty among women consumers of personal care products.

Review of Literature

Prior research suggests that purchasing behaviour in the personal care and cosmetics market is influenced by multiple factors, including product quality, brand image, price, availability, and promotional activities. Studies consistently report that women consumers are more quality-conscious and brand-oriented, particularly when purchasing products associated with personal appearance and health.

Brand loyalty has been widely linked to consumer satisfaction, trust, and perceived value. Recent studies employing Structural Equation Modelling have demonstrated that satisfaction frequently mediates the relationship between purchasing factors and loyalty outcomes. However, empirical studies integrating purchasing behaviour factors, consumer satisfaction, and brand loyalty within a single SEM framework—especially in the Indian metropolitan context remain limited. This study seeks to address this gap.

Objectives of the Study

1. To analyse the purchasing behaviour of women consumers towards personal care products.
2. To examine the influence of purchasing behaviour factors on consumer satisfaction.
3. To study the effect of consumer satisfaction on brand loyalty.
4. To test a structural equation model linking purchasing behaviour, consumer satisfaction, and brand loyalty.

Hypotheses of the Study

- **H₁:** Purchasing behaviour factors significantly influence consumer satisfaction towards personal care products.
- **H₂:** Consumer satisfaction has a significant positive effect on brand loyalty.
- **H₃:** Consumer satisfaction mediates the relationship between purchasing behaviour factors and brand loyalty.

Research Methodology

Research Design

The study adopted a descriptive research design.

Area of the Study

The study was conducted in Chennai City.

Sample Size and Sampling Technique

A sample of 150 women consumers was selected using convenience sampling.

Data Collection

Primary data were collected using a structured questionnaire. Secondary data were obtained from journals, books, and research reports.

Statistical Tools

- Descriptive statistics
- Confirmatory Factor Analysis (CFA)
- Structural Equation Modelling (SEM) using AMOS

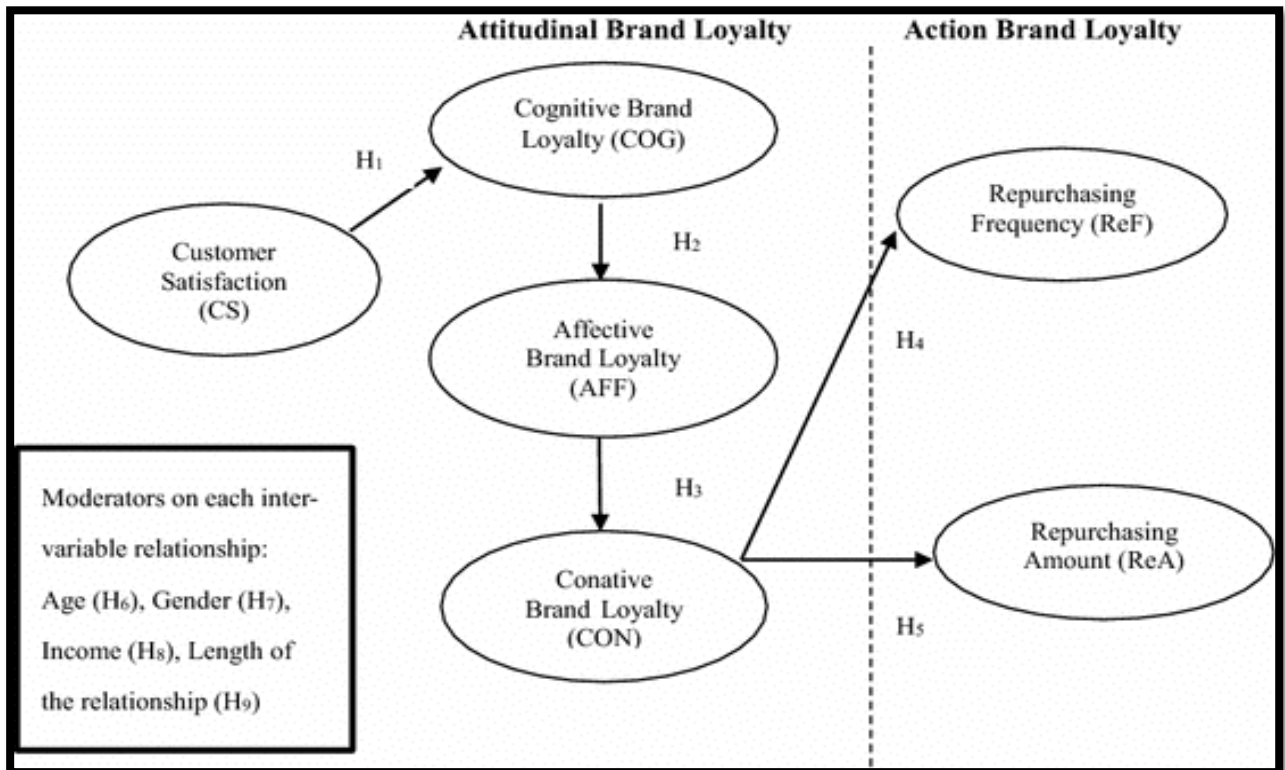
Conceptual Background

The conceptual framework of the present study is grounded in established theories of consumer behaviour, relationship marketing, and satisfaction–loyalty paradigms. In retailing and consumer services literature, purchasing behaviour is viewed as a multidimensional construct

shaped by both functional product attributes and perceptual brand-related factors. Brand loyalty, in turn, is regarded as a relational outcome that develops over time through repeated positive consumption experiences.

The framework proposes that **purchasing behaviour factors influence brand loyalty indirectly through consumer satisfaction**, positioning satisfaction as a key psychological mechanism that links transactional evaluations with long-term relational outcomes.

Figure 1. Structural Equation Model (SEM) of Purchasing Behaviour and Brand Loyalty



Purchasing Behaviour as a Higher-Order Construct

Purchasing behaviour in this study is conceptualised as a **higher-order latent construct** represented by five core dimensions:

- **Product Quality** – reflecting perceptions of effectiveness, safety, and reliability of personal care products.
- **Price** – representing consumers' evaluation of affordability, fairness, and value for money.
- **Brand Image** – capturing brand reputation, credibility, and trustworthiness in the minds of consumers.
- **Availability** – indicating ease of access across retail and digital channels.
- **Promotion** – encompassing advertising influence, social media presence, and sales incentives.

These dimensions collectively shape women consumers' evaluation of personal care products during the purchase decision-making process. Rather than operating in isolation, these factors interact to form an overall purchasing experience that influences post-purchase evaluation.

Consumer Satisfaction as a Mediating Construct

Consumer satisfaction is conceptualised as an **affective and cognitive evaluation** resulting from the comparison between consumers' expectations and actual product performance. In line

with expectation–confirmation theory, satisfaction emerges when perceived performance meets or exceeds expectations.

Within the proposed framework, consumer satisfaction performs a **mediating role**, translating purchasing behaviour into brand loyalty. This implies that favourable purchasing behaviour factors do not directly guarantee loyalty unless they result in satisfaction. Satisfaction thus serves as the psychological bridge that converts transactional encounters into enduring brand relationships.

Brand Loyalty as a Relational Outcome

Brand loyalty is conceptualised as a **long-term behavioural and attitudinal commitment** towards a preferred brand. In the context of personal care products, brand loyalty is reflected through repeat purchase intention, resistance to brand switching, and positive word-of-mouth recommendations.

The framework assumes that loyalty is not merely driven by habitual buying or promotional exposure, but by sustained satisfaction derived from consistent product performance and brand value delivery.

Structural Relationships in the Conceptual Model

The conceptual framework specifies the following structural relationships:

1. **Purchasing behaviour → Consumer satisfaction**
Purchasing behaviour factors collectively influence consumer satisfaction by shaping consumers' perceptions of value, trust, and performance.
2. **Consumer satisfaction → Brand loyalty**
Higher levels of satisfaction lead to stronger brand loyalty through repeat purchasing and emotional attachment.
3. **Mediating role of consumer satisfaction**
Consumer satisfaction mediates the relationship between purchasing behaviour and brand loyalty, indicating an indirect effect of purchasing behaviour on loyalty.

Role of Demographic Variables

Demographic variables such as age, income, education, and occupation are treated as **contextual moderators** that may influence purchasing behaviour and loyalty patterns. While not explicitly modelled in the SEM diagram, these variables provide contextual depth and are statistically examined to understand variations across consumer segments.

Theoretical and Empirical Relevance

The proposed conceptual framework is:

- **Theory-driven**, drawing from consumer behaviour and relationship marketing literature
- **Empirically testable**, using CFA and SEM
- **Parsimonious and robust**, avoiding unnecessary complexity
- **Consistent with research objectives, hypotheses, questionnaire design, and analysis**

By integrating purchasing behaviour factors, consumer satisfaction, and brand loyalty into a single SEM framework, the study advances understanding of loyalty formation among women consumers in the personal care products market.

Measurement Model (Confirmatory Factor Analysis)

Confirmatory Factor Analysis was conducted to assess the reliability and validity of the measurement model.

Table 1. Reliability and Validity Measures

Construct	Cronbach's α	CR	AVE
Product Quality	0.84	0.86	0.67
Price	0.81	0.84	0.63
Brand Image	0.86	0.88	0.70
Availability	0.79	0.82	0.60
Promotion	0.80	0.83	0.61
Consumer Satisfaction	0.88	0.90	0.72
Brand Loyalty	0.89	0.91	0.74

Inference:

The results of the Confirmatory Factor Analysis indicate that the measurement model demonstrates **adequate reliability and convergent validity**. All constructs recorded Cronbach's alpha values exceeding the recommended threshold of 0.70, confirming strong internal consistency among the measurement items. In addition, the Composite Reliability (CR) values for all constructs were greater than 0.70, suggesting that the indicators reliably measure their respective latent variables.

The Average Variance Extracted (AVE) values for all constructs exceeded the minimum recommended level of 0.50, indicating that a substantial proportion of variance in the observed variables is explained by their corresponding latent constructs. This confirms that the constructs exhibit satisfactory convergent validity. Overall, the CFA results infer that the measurement instruments used in the study are reliable, valid, and appropriate for further structural analysis.

Structural Model (SEM using AMOS)

The SEM analysis demonstrated a good fit between the proposed model and the observed data.

Table 2 Structural Equation Model of Purchasing Behaviour and Brand Loyalty of Women Consumers towards Personal Care Products

Model Fit Indices

Fit Index	Value	Recommended
χ^2/df	2.41	< 3.0
GFI	0.92	≥ 0.90
AGFI	0.90	≥ 0.90
CFI	0.95	≥ 0.90

TLI	0.94	≥ 0.90
RMSEA	0.062	≤ 0.08

Inference:

The structural model estimated using AMOS demonstrates a good overall fit with the observed data. The goodness-of-fit indices fall within the acceptable limits ($\chi^2/df = 2.41$, GFI = 0.92, AGFI = 0.90, CFI = 0.95, TLI = 0.94, RMSEA = 0.062), indicating that the proposed model adequately represents the underlying relationships among the constructs. This confirms the robustness and empirical soundness of the conceptual framework.

The path coefficient from purchasing behaviour to consumer satisfaction is positive and statistically significant ($\beta = 0.68$, CR = 7.92, $p < 0.001$). This result infers that purchasing behaviour factors—represented by product quality, price, brand image, availability, and promotion—play a critical role in shaping consumer satisfaction among women consumers. It suggests that favourable evaluations of these purchasing factors lead to higher levels of satisfaction with personal care products.

Further, the path coefficient from consumer satisfaction to brand loyalty is also positive and statistically significant ($\beta = 0.74$, CR = 8.36, $p < 0.001$). This finding infers that consumer satisfaction strongly influences brand loyalty, indicating that satisfied women consumers are more likely to engage in repeat purchase behaviour, recommend the brand to others, and resist switching to alternative brands.

9. Structural Path Results**Table 3. Standardised Path Coefficients**

Path	β	CR	p-value
Purchasing Behaviour → Consumer Satisfaction	0.68	7.92	< 0.001
Consumer Satisfaction → Brand Loyalty	0.74	8.36	< 0.001

Inference: An important inference drawn from the structural model is the **mediating role of consumer satisfaction** in the relationship between purchasing behaviour and brand loyalty. The significant paths from purchasing behaviour to satisfaction and from satisfaction to brand loyalty confirm that purchasing behaviour influences brand loyalty indirectly through consumer satisfaction. This implies that purchasing behaviour factors do not directly result in brand loyalty unless they generate positive satisfaction outcomes.

Consumer satisfaction thus acts as a key psychological mechanism that converts transactional evaluations of personal care products into long-term relational outcomes. This mediation effect reinforces theoretical propositions from consumer behaviour and relationship marketing literature, which posit satisfaction as a central determinant of loyalty formation.

All hypothesised relationships are statistically significant, supporting H₁, H₂, and H₃.

Findings and Discussion**Findings of the Study**

1. The Confirmatory Factor Analysis confirms that all measurement constructs exhibit adequate reliability and convergent validity, indicating that the questionnaire items appropriately capture purchasing behaviour, consumer satisfaction, and brand loyalty.
2. Purchasing behaviour factors—product quality, price, brand image, availability, and promotion—collectively exert a significant positive influence on consumer satisfaction among women consumers of personal care products.
3. Among the purchasing behaviour dimensions, product quality and brand image emerge as dominant contributors, highlighting the importance of functional performance and brand credibility in shaping consumer evaluations.
4. Consumer satisfaction has a strong and statistically significant positive effect on brand loyalty, indicating that satisfied women consumers are more likely to engage in repeat purchases, recommend preferred brands, and resist brand switching.
5. Consumer satisfaction is found to mediate the relationship between purchasing behaviour and brand loyalty, suggesting that favourable purchasing behaviour translates into loyalty primarily through positive satisfaction outcomes.
6. The overall structural model demonstrates a good fit with the observed data, confirming the theoretical soundness and empirical robustness of the proposed SEM framework.

Discussion of the Study

The present study advances understanding of purchasing behaviour and brand loyalty in the personal care products market by empirically validating a satisfaction-mediated structural model among women consumers in a metropolitan context. The findings provide important theoretical and practical insights into how purchasing behaviour factors influence brand loyalty through consumer satisfaction.

The results indicate that purchasing behaviour factors—product quality, price, brand image, availability, and promotion—significantly influence consumer satisfaction. This supports the view that women consumers evaluate personal care products through a multidimensional lens that combines functional performance with perceptual and brand-related attributes. The prominence of product quality and brand image suggests that women consumers place greater emphasis on effectiveness, safety, and brand credibility than on transactional considerations alone. This finding aligns with contemporary consumer behaviour literature, which emphasises quality assurance and brand trust as critical drivers of satisfaction in personal care and cosmetic product categories.

The strong and positive relationship between consumer satisfaction and brand loyalty highlights satisfaction as a central determinant of repeat purchase behaviour and long-term brand commitment. Satisfied women consumers are more likely to develop emotional attachment to brands, recommend them to others, and resist switching to competing alternatives. This reinforces relationship marketing theory, which posits that satisfaction is a prerequisite for the development of enduring customer–brand relationships, particularly in markets characterised by high product involvement.

A key contribution of the study lies in confirming the mediating role of consumer satisfaction in the purchasing behaviour–brand loyalty relationship. The results demonstrate that purchasing behaviour factors do not directly translate into brand loyalty unless they generate positive satisfaction outcomes. This mediation effect underscores the importance of post-purchase evaluation in shaping loyalty formation. From a theoretical perspective, this finding

supports expectation–confirmation and satisfaction–loyalty frameworks by illustrating how transactional evaluations evolve into relational outcomes.

The good fit of the structural equation model further validates the conceptual framework and confirms the robustness of the proposed relationships. The empirical support for the model suggests that satisfaction-based loyalty frameworks are particularly relevant in urban retail markets such as Chennai City, where consumers are exposed to a wide range of competing brands and alternatives.

Overall, the discussion highlights that sustainable brand loyalty in the personal care products market is driven not merely by promotional intensity or price competitiveness, but by consistent value delivery and positive consumption experiences that enhance consumer satisfaction. By focusing on satisfaction-oriented strategies, firms can effectively transform favourable purchasing behaviour into long-term brand loyalty among women consumers.

Suggestions of the Study

1. ***Emphasise consistent product quality:***
Manufacturers should ensure reliable product performance, safety, and quality consistency, as product quality significantly influences consumer satisfaction.
2. ***Strengthen brand image and credibility:***
Firms should invest in trust-building and brand-building initiatives to reinforce positive brand perceptions among women consumers.
3. ***Adopt value-oriented pricing strategies:***
Pricing decisions should reflect perceived value rather than excessive discounting, as price influences satisfaction when aligned with quality and brand reputation.
4. ***Enhance satisfaction-driven marketing strategies:***
Companies should actively monitor consumer satisfaction through feedback systems, post-purchase support, and service improvements to strengthen brand loyalty.
5. ***Focus on long-term promotional engagement:***
Promotional activities should prioritise meaningful engagement through digital platforms, social media, and experiential marketing rather than short-term sales incentives.
6. ***Develop loyalty-focused relationship programmes:***
Retailers may introduce loyalty programmes, personalised offers, and relationship marketing strategies to convert satisfied consumers into loyal brand advocates.
7. ***Ensure seamless product availability:***
Although availability plays a secondary role, consistent presence across physical and online retail channels can support satisfaction and reinforce purchasing continuity.

Conclusion

This study examined the structural relationships between purchasing behaviour and brand loyalty among women consumers of personal care products in Chennai City, with consumer satisfaction serving as a mediating variable. Using Structural Equation Modelling (SEM), the study provides empirical evidence that purchasing behaviour factors—namely product quality, price, brand image, availability, and promotion—significantly influence consumer satisfaction, which in turn has a strong positive effect on brand loyalty.

The findings confirm that consumer satisfaction plays a pivotal mediating role in transforming favourable purchasing behaviour into sustained brand loyalty. Women consumers are more

likely to remain loyal to personal care product brands when their expectations regarding product performance, value, and brand credibility are consistently met. The results further highlight that while promotional efforts and pricing strategies may influence purchase decisions, long-term brand loyalty is primarily driven by satisfaction derived from positive consumption experiences.

From a theoretical perspective, the study contributes to retailing and consumer behaviour literature by validating a satisfaction-mediated loyalty framework within the personal care products context. From a managerial standpoint, the findings emphasise the need for marketers to prioritise quality consistency, brand trust, and customer satisfaction as central components of their competitive strategies.

Overall, the study concludes that satisfaction-oriented, customer-centric approaches are essential for building and sustaining brand loyalty among women consumers in highly competitive urban retail markets.

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