

The Effect of Service Quality and Brand Image on Customer Loyalty with Customer Satisfaction as a Mediating Variable: A Study on Modern Retail Consumers in the City of Bandung

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ABSTRACT: This study examines the effect of service quality and brand image on customer loyalty, with customer satisfaction as a mediating variable, in the context of modern retail in the city of Bandung. Intensifying competition in modern retail calls for a deeper understanding of the mechanisms underlying customer loyalty, particularly the role of customer satisfaction as a bridge between perceptions of service quality, brand image, and long-term loyal behavior. Data were collected through a survey of 210 modern retail consumers using purposive sampling and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4.0. Results indicate that service quality ($\beta = 0.34$, $p < 0.001$) and brand image ($\beta = 0.29$, $p < 0.001$) have significant positive effects on customer satisfaction, and customer satisfaction has a significant positive effect on customer loyalty ($\beta = 0.46$, $p < 0.001$). Customer satisfaction partially mediates the relationship between service quality and customer loyalty, but fully mediates the relationship between brand image and customer loyalty. This study reinforces expectancy-disconfirmation theory and offers practical implications for retail managers to prioritize frontline service quality and ensure a consistent shopping experience in order to strengthen customer loyalty.

Keywords: Brand image, Service quality, Customer satisfaction, Customer loyalty, Modern retail

INTRODUCTION

Competition within Indonesia's modern retail industry has intensified alongside the rapid growth of minimarket and supermarket outlets operating in urban areas. Under such conditions, a retailer's ability to retain existing customers becomes far more critical than merely attracting new ones, given that the cost of retaining existing customers is generally much lower than the cost of acquiring new ones (Kotler & Keller, 2016). Customer loyalty, as a key indicator of retail business sustainability, is influenced by various factors, including service quality and brand image as perceived by consumers.

Service quality refers to consumers' overall assessment of the superiority or excellence of a service (Parasuraman et al., 1988). In the modern retail context, service quality is reflected in transaction

speed, staff friendliness, shopping convenience, and product availability. In addition to service quality, brand image also plays an important role in shaping consumer perceptions. A positive brand image can create cognitive and emotional associations that strengthen consumer preference for a given retailer over its competitors (Aaker, 1991).

Although the direct effects of service quality and brand image on customer loyalty have been widely studied, the mechanism explaining how these effects occur still warrants further investigation. Customer satisfaction is believed to serve as a mediating variable that bridges consumers' perceptions of service quality and brand image with long-term loyal behavior (Oliver, 1999). Consumers who feel satisfied with their shopping experience tend to develop emotional commitment, which ultimately drives repeat purchase behavior and recommendations to others.

Prior studies on the relationships among service quality, brand image, customer satisfaction, and customer loyalty have largely been conducted in the banking or professional services context (Zeithaml et al., 2006; Tjiptono, 2014), while research on the modern retail sector in developing cities such as Bandung remains relatively limited. This study therefore aims to examine the effect of service quality and brand image on customer loyalty, with customer satisfaction as a mediating variable, in the context of modern retail customers in the city of Bandung.

This study contributes to the marketing literature in three ways: (1) it simultaneously tests the mediating role of customer satisfaction in the relationship between service quality, brand image, and customer loyalty in the modern retail context; (2) it provides recent empirical evidence from a developing-city context in Indonesia; and (3) it offers practical implications for retail marketing managers in designing strategies to enhance customer loyalty.

METHOD

Research Design

This study employs a quantitative approach using a cross-sectional survey design. A positivist approach was adopted because this study aims to test hypotheses derived from marketing theory regarding the causal relationships among variables (Sugiyono, 2019). Primary data were collected through a structured questionnaire distributed to modern retail consumers in the city of Bandung.

Population and Sample

The population of this study consists of consumers who had shopped at modern retail outlets (minimarkets and supermarkets) in the city of Bandung within the past three months. The sampling technique used was purposive sampling with the following criteria: (1) at least 17 years of age; (2) had shopped at the same modern retail outlet at least three times within the past three months; and (3) willing to complete the questionnaire in full. The sample size was determined using the guideline of 10 times the largest number of indicators for a single construct (Hair et al., 2019), with the largest number of indicators being 6 items, resulting in a minimum sample of 60 respondents. To improve representativeness and account for incomplete questionnaires, questionnaires were distributed to 230 respondents, and after the data-screening process, 210 questionnaires were deemed valid for analysis (response rate: 91.3%).

Characteristic	Distribution
Gender: Female	58.6% (n = 123)
Gender: Male	41.4% (n = 87)
Age 17–25 years	34.3% (n = 72)
Age 26–35 years	38.1% (n = 80)
Age 36–45 years	18.1% (n = 38)
Age > 45 years	9.5% (n = 20)
Shopping frequency 3–5 times/month	61.0% (n = 128)
Shopping frequency > 5 times/month	39.0% (n = 82)
Education: Senior High School	31.0% (n = 65)
Education: Diploma/Bachelor/Master	69.0% (n = 145)

Table 1. Respondent Profile (n = 210)

Variable Measurement

Service Quality (SQ)

Service quality was measured using 6 indicators adapted from the SERVQUAL dimensions (Parasuraman et al., 1988), covering tangibles, reliability, responsiveness, assurance, and empathy, adapted to the modern retail context. Each item was measured using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Cronbach's alpha in this study: $\alpha = 0.89$.

Brand Image (BI)

Brand image was measured using 5 indicators adapted from Aaker (1991) and Keller (1993), covering the uniqueness of brand associations, the strength of brand associations, and the favorability of brand associations relative to competitors. $\alpha = 0.86$.

Customer Satisfaction (CS)

Customer satisfaction was measured using 5 indicators adapted from Oliver (1999), covering expectation confirmation, intention to revisit, and willingness to recommend. $\alpha = 0.88$.

Customer Loyalty (CL)

Customer loyalty was measured using 5 indicators adapted from Zeithaml et al. (1996), covering repurchase intention, resistance to competitor offers, and willingness to recommend to others. $\alpha = 0.90$.

Data Analysis Strategy

Data were analyzed using Partial Least Squares Structural Equation Modeling (SEM-PLS) with the aid of SmartPLS 4.0 software. SEM-PLS was selected because this study is predictive-exploratory in nature and involves a mediating construct that requires bootstrapping-based testing (Hair et al., 2019).

The analysis was conducted in two stages: (1) measurement model (outer model) evaluation, comprising convergent validity testing via outer loadings and Average Variance Extracted (AVE), and reliability testing via Cronbach's alpha and Composite Reliability (CR); and (2) structural model

(inner model) evaluation, comprising path coefficients, t-statistics, R^2 , and mediation testing using the bootstrapping method with 5,000 subsamples at the 5% significance level.

RESULT AND DISCUSSION

Measurement Model Assessment

The measurement model was assessed prior to testing the structural model, in accordance with established SEM-PLS guidelines (Hair et al., 2019). Table 2 presents the outer loadings, Cronbach's alpha, Composite Reliability, and AVE for each construct.

Construct / Indicator	Loading	α	CR	AVE
Service Quality (SQ)				
SQ1 – Tangibles	0.81			
SQ2 – Reliability	0.85			
SQ3 – Responsiveness	0.83			
SQ4 – Assurance	0.79			
SQ5 – Empathy	0.80			
Composite Reliability (SQ)		0.89	0.92	0.66
Brand Image (BI)				
BI1 – Uniqueness of Association	0.82			
BI2 – Strength of Association	0.84			
BI3 – Favorability of Association	0.78			
Composite Reliability (BI)		0.86	0.91	0.64
Customer Satisfaction (CS)		0.88	0.92	0.70
Customer Loyalty (CL)		0.90	0.93	0.72

Table 2. Measurement Model Results

All indicator outer loadings exceeded the recommended threshold of 0.70. Composite Reliability (CR) ranged from 0.90 to 0.93, surpassing the 0.80 threshold. Average Variance Extracted (AVE) values ranged from 0.64 to 0.72, all above the 0.50 criterion (Fornell & Larcker, 1981), indicating that convergent validity and construct reliability were satisfied. Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio, with all construct pairs below 0.85 (Henseler et al., 2015).

Structural Model Assessment and Hypothesis Testing

Table 3 presents the path coefficients, t-statistics, and hypothesis test results from the PLS structural model. The model explains 51.4% of the variance in Customer Satisfaction ($R^2 = 0.514$) and 58.7% of the variance in Customer Loyalty ($R^2 = 0.587$), both of which are substantial in the context of consumer behavior research (Cohen, 1988).

Hypothesis / Path	β	t-statistic	p-value	Decision
H1: SQ $\rightarrow$ Customer Satisfaction	0.34	5.21	<0.001	Supported

Hypothesis / Path	β	t-statistic	p-value	Decision
H2: BI $\rightarrow$ Customer Satisfaction	0.29	4.38	<0.001	Supported
H3: Customer Satisfaction $\rightarrow$ Loyalty	0.46	6.72	<0.001	Supported
H4: SQ $\rightarrow$ Loyalty (direct)	0.18	2.14	<0.05	Significant
H4: SQ $\rightarrow$ CS $\rightarrow$ Loyalty (indirect)	0.16	3.02	<0.01	Partial mediation
H5: BI $\rightarrow$ Loyalty (direct)	0.09	1.45	0.146	Not significant
H5: BI $\rightarrow$ CS $\rightarrow$ Loyalty (indirect)	0.13	2.87	<0.01	Full mediation

Table 3. Structural Model Results and Hypothesis Testing

Discussion

Service Quality and Customer Satisfaction (H1 — Supported)

Service quality has a significant positive effect on customer satisfaction ($\beta = 0.34$, $p < 0.001$). This finding is consistent with Parasuraman et al. (1988) and Zeithaml et al. (2006), who assert that consumers' perceptions of retail staff reliability, responsiveness, and empathy directly shape post-transaction satisfaction evaluations. In the modern retail context, checkout transaction speed and staff responsiveness in assisting customers are the satisfaction determinants most strongly felt by consumers.

Brand Image and Customer Satisfaction (H2 — Supported)

Brand image has a significant positive effect on customer satisfaction ($\beta = 0.29$, $p < 0.001$). This result is consistent with Aaker's (1991) concept of brand association: consumers who hold positive perceptions of a retailer's reputation and consistency tend to evaluate their shopping experience more positively, even on objective aspects such as pricing or product availability.

Customer Satisfaction and Customer Loyalty (H3 — Supported)

Customer satisfaction has a significant positive effect on customer loyalty ($\beta = 0.46$, $p < 0.001$), making it the strongest predictor in this structural model. This finding confirms expectancy-disconfirmation theory (Oliver, 1999), which posits that satisfaction formed through consistent evaluation of the shopping experience drives emotional commitment and repeat purchase behavior.

Service Quality and Customer Loyalty (H4 — Partial Mediation)

The direct effect of service quality on customer loyalty remained significant even after customer satisfaction was included as a mediator (direct $\beta = 0.18$, $p < 0.05$; indirect β through customer satisfaction = 0.16, $p < 0.01$), indicating partial mediation. This suggests that service quality shapes loyalty not only through satisfaction but also through a direct pathway, possibly through trust perceptions formed by consistent service delivery over time.

Brand Image and Customer Loyalty (H5 — Full Mediation)

In contrast to service quality, the direct effect of brand image on customer loyalty was not significant (direct $\beta = 0.09$, $p = 0.146$), while the indirect effect through customer satisfaction was

significant (indirect $\beta = 0.13$, $p < 0.01$), indicating full mediation. This finding suggests that a positive brand image does not automatically translate into loyalty unless it is first converted into a satisfying shopping experience.

Theoretical and Practical Implications

This study offers the following contributions and implications:

- Theoretical contribution: This study reinforces expectancy-disconfirmation theory by showing that customer satisfaction mediates differently partially for service quality and fully for brand image thereby clarifying the distinct mechanisms through which each antecedent shapes loyalty.
- Methodological contribution: The use of SEM-PLS with bootstrapping-based mediation testing provides stronger evidence of the pathways of influence compared with the conventional regression approaches commonly used in prior retail studies.
- Managerial implication: Retail managers are advised to prioritize improving frontline service quality (transaction speed, staff friendliness) as a dual lever that influences loyalty both directly and through satisfaction, while investment in brand image needs to be matched with a consistently satisfying shopping experience for it to meaningfully impact loyalty.

CONCLUSION

This study examined the effect of service quality and brand image on customer loyalty, with customer satisfaction as a mediating variable, among 210 modern retail consumers in the city of Bandung. All five proposed hypotheses were supported by the data.

The main conclusions of this study are as follows. First, both service quality and brand image have significant positive effects on customer satisfaction. Second, customer satisfaction has a significant positive effect on customer loyalty and is the strongest predictor in the model. Third, customer satisfaction partially mediates the relationship between service quality and customer loyalty, but fully mediates the relationship between brand image and customer loyalty. This difference in mediation patterns indicates that service quality has a direct pathway of influence on loyalty, whereas brand image requires customer satisfaction as a bridge in order to shape loyalty.

Limitations and Future Research

This study has several limitations. First, the cross-sectional design does not allow for strong causal inference; future studies are encouraged to employ a longitudinal design to capture the dynamics of loyalty over time. Second, the sample is limited to modern retail consumers in the city of Bandung, so generalization to other cities or other retail formats (department stores, e-commerce) should be made with caution. Third, this study did not control for price and promotion variables, which may also influence customer loyalty.

Future research is encouraged to: (1) incorporate moderating variables such as consumer involvement or shopping frequency; (2) compare mediation patterns across offline and online (omnichannel) retail formats; (3) employ a longitudinal design to test the stability of loyalty over

time; and (4) expand the study population to other cities in Indonesia to improve the generalizability of the findings.

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