



THE EFFECT OF BRAND IMAGE AND SERVICE QUALITY ON OUTPATIENT LOYALTY MEDIATED BY PATIENT SATISFACTION

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ABSTRACT

Patient loyalty is a strategic indicator for hospitals, particularly in mental health services where continuity of care is essential. This study analyzed the effect of brand image and service quality on outpatient loyalty mediated by patient satisfaction at RSJD Atma Husada Mahakam, a type A psychiatric referral hospital in East Kalimantan, Indonesia. An explanatory quantitative survey with a cross-sectional design was conducted among 200 outpatients selected using purposive sampling. Data were collected using a structured Likert-scale questionnaire measuring brand image, service quality, patient satisfaction, and patient loyalty. Data were analyzed using descriptive statistics, Pearson correlation, and partial least squares structural equation modeling (PLS-SEM) with SmartPLS. The measurement model met validity and reliability criteria, with AVE values ranging from 0.546 to 0.649 and composite reliability values ranging from 0.902 to 0.924. The structural model showed that brand image positively affected patient satisfaction ($\beta = 0.318$; $t = 3.934$; $p < 0.001$) and loyalty ($\beta = 0.210$; $t = 2.920$; $p = 0.004$). Service quality positively affected satisfaction ($\beta = 0.515$; $t = 7.648$; $p < 0.001$) and loyalty ($\beta = 0.273$; $t = 4.042$; $p < 0.001$). Patient satisfaction also had a positive effect on loyalty ($\beta = 0.408$; $t = 4.794$; $p < 0.001$). Indirect effect testing confirmed that satisfaction significantly mediated the influence of brand image ($\beta = 0.130$; $t = 2.715$; $p = 0.003$) and service quality ($\beta = 0.210$; $t = 4.113$; $p < 0.001$) on loyalty. The findings indicate that strengthening service quality, maintaining a positive hospital image, and systematically managing patient satisfaction are central strategies for building outpatient loyalty in psychiatric hospital services.

Keywords: brand image; patient loyalty; patient satisfaction; psychiatric hospital; service quality

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INTRODUCTION

Hospitals are health service institutions that are expected to provide safe, accessible, high-quality, and patient-centered care. In an increasingly competitive health care environment, service performance alone is not sufficient to maintain patient trust. Hospitals also need to develop a positive institutional image and consistent service experiences that shape patient satisfaction and long-term loyalty. Brand image refers to a set of perceptions, associations, and beliefs attached to an organization in the minds of consumers (Kotler & Keller, 2016). In hospital services, brand image is shaped by the perceived reputation of the institution, accessibility, physical facilities, administrative processes, previous service experiences, and public recommendations. In the context of psychiatric hospitals, brand image is especially important because mental health services remain closely related to stigma, family decision-making, and the need for trust in continuity of care.

Service quality is another central determinant of satisfaction and loyalty. The SERVQUAL framework explains service quality through tangible evidence, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). These dimensions are highly relevant in outpatient mental health services because patients and families evaluate not only clinical

competence, but also administrative clarity, staff responsiveness, physical comfort, information adequacy, respectful communication, and perceived safety.

Patient satisfaction reflects the extent to which service experiences meet or exceed patient expectations. Satisfied patients are more likely to return, follow treatment plans, recommend services to others, and resist switching to alternative providers. Loyalty in health services is therefore not merely a marketing outcome; in psychiatric care, it may support continuity of treatment and reduce the risk of service discontinuation. Griffin (2005) conceptualized loyalty through repeated use, recommendations, cross-service utilization, and resistance to competitors.

Previous studies have reported that brand image and service quality are associated with satisfaction and loyalty in health service settings (Ni'am, 2021; Nurfitriani, 2023; Kurniawan et al., 2025). However, empirical evidence from psychiatric referral hospitals remains limited, particularly in East Kalimantan. RSJD Atma Husada Mahakam is a type A provincial psychiatric referral hospital in Samarinda and serves patients from various districts and cities. Understanding the relationship among brand image, service quality, satisfaction, and loyalty in this setting is important for developing evidence-based strategies for outpatient service improvement. This study aimed to analyze the direct effects of brand image and service quality on patient satisfaction and outpatient loyalty, as well as the mediating role of patient satisfaction in the relationship between brand image, service quality, and patient loyalty at RSJD Atma Husada Mahakam.

METHOD

This study used an explanatory quantitative approach with a cross-sectional survey design. The study was conducted for one month at the outpatient installation of RSJD Atma Husada Mahakam, located on Jalan Kakap No. 23, Samarinda, East Kalimantan, Indonesia. The target population consisted of all outpatients who received services at RSJD Atma Husada Mahakam. A purposive sampling technique was applied because the study required respondents with direct experience of outpatient services. The inclusion criteria were patients who had received outpatient services at least twice, were willing to participate, and were able to read, understand, and complete the questionnaire independently or with assistance. Hospital employees, inpatients, patients who did not meet the minimum service-use criteria, and individuals who were unwilling to participate were excluded. The final sample consisted of 200 respondents.

Data were collected using a structured questionnaire with a five-point Likert scale ranging from strongly disagree to strongly agree. The validity and reliability of the questionnaire were tested prior to data collection. All items met the validity criteria, while reliability testing using Cronbach's alpha showed acceptable internal consistency ($\alpha \geq 0.70$). Brand image was measured through indicators such as strategic location, parking facilities, patient registration, reputation, psychiatric outpatient services, positive impression, and recommendation. Service quality was measured using the SERVQUAL dimensions of tangibles, reliability, responsiveness, assurance, and empathy. Patient satisfaction was measured through expectation conformity, perceived performance, and customer assessment. Patient loyalty was measured through repeated service use, recommendation to others, willingness to use other services at the same hospital, and resistance to alternative providers.

Data analysis was conducted in several stages. Descriptive statistics were used to summarize respondent characteristics and variable scores. Pearson correlation was used as an initial bivariate analysis. PLS-SEM was then applied using SmartPLS version 4 to evaluate the measurement and structural models. The measurement model was assessed using outer loading, average variance extracted (AVE), Cronbach's alpha, composite reliability, cross loading, and Fornell-Larcker criteria. The structural model was evaluated using R-square, effect size, model fit indicators, and bootstrapping for direct and indirect effect testing. Statistical significance was determined using t-statistics greater than 1.96 and p-values less than 0.05 (Hair et al., 2021). Participation was

voluntary and informed consent was obtained prior to questionnaire completion.

RESULT

A total of 200 outpatients participated in this study. Most respondents were female (62.0%), and the largest age groups were 21-30 years (34.0%) and 31-40 years (32.0%). Most respondents had completed senior high school or vocational school (66.0%).

Table 1.

Respondent characteristics (n = 200)

Characteristic	Category	f	%
Age	11-20 years	22	11.0
	21-30 years	68	34.0
	31-40 years	64	32.0
	41-50 years	23	11.5
	51-60 years	13	6.5
	61-70 years	10	5.0
Gender	Male	76	38.0
	Female	124	62.0
Education	Junior high school	7	3.0
	Senior high/vocational school	132	66.0
	Diploma	14	7.0
	Bachelor degree	45	23.0
	Master degree	2	1.0

Descriptive analysis indicated that all main variables had relatively high mean scores. Service quality had the highest absolute score because it contained more indicators, while brand image, patient satisfaction, and loyalty also showed favorable responses. The mean values were higher than the standard deviations, suggesting relatively homogeneous perceptions among respondents.

Table 2.

Descriptive statistics of research variables

Variable	Minimum	Maximum	Mean	Median	SD
Brand image	21	35	30.62	31.00	3.345
Service quality	46	65	57.48	57.50	4.749
Patient satisfaction	20	30	26.06	25.50	2.730
Patient loyalty	25	45	38.18	37.00	4.071

Pearson correlation analysis showed positive and significant relationships among all tested variables. Brand image was correlated with satisfaction ($r = 0.659$; $p = 0.001$) and loyalty ($r = 0.664$; $p = 0.001$). Service quality was correlated with satisfaction ($r = 0.751$; $p = 0.001$) and loyalty ($r = 0.728$; $p = 0.001$). Patient satisfaction was also strongly correlated with loyalty ($r = 0.744$; $p = 0.001$). These results provided preliminary support for the proposed structural model.

The first-stage convergent validity test showed that six indicators had outer loading values below 0.70 and were eliminated. After model refinement, all remaining indicators met the minimum outer loading criterion. The AVE values exceeded 0.50 and all reliability coefficients were above 0.70, indicating acceptable validity and internal consistency of the measurement model.

Table 3.

Validity and reliability of latent variables

Variable	AVE	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Decision
Brand image	0.636	0.904	0.908	0.924	Reliable
Patient satisfaction	0.649	0.865	0.868	0.902	Reliable
Service quality	0.546	0.908	0.910	0.923	Reliable
Patient loyalty	0.630	0.902	0.904	0.922	Reliable

The structural model explained 58.0% of the variance in patient satisfaction (R -square = 0.580; adjusted R -square = 0.575) and 63.4% of the variance in patient loyalty (R -square = 0.634; adjusted

R-square = 0.629). The predictive relevance values were strong for patient satisfaction (Q-square = 0.564) and patient loyalty (Q-square = 0.548). The strongest effect size was found for service quality on patient satisfaction (f-square = 0.364), followed by patient satisfaction on loyalty (f-square = 0.192).

Table 4.

Direct and indirect effects in the structural model

Path	Beta	STDEV	t-statistic	p-value	Decision
Brand image -> Patient satisfaction	0.318	0.081	3.934	<0.001	Accepted
Brand image -> Patient loyalty	0.210	0.072	2.920	0.004	Accepted
Patient satisfaction -> Patient loyalty	0.408	0.085	4.794	<0.001	Accepted
Service quality -> Patient satisfaction	0.515	0.067	7.648	<0.001	Accepted
Service quality -> Patient loyalty	0.273	0.068	4.042	<0.001	Accepted
Brand image -> Satisfaction -> Loyalty	0.130	0.048	2.715	0.003	Accepted
Service quality -> Satisfaction -> Loyalty	0.210	0.051	4.113	<0.001	Accepted

All direct hypotheses were supported. Brand image and service quality had positive and significant effects on patient satisfaction and loyalty. Patient satisfaction also had a positive and significant effect on loyalty. The indirect effects were significant, confirming that patient satisfaction mediated the relationship between brand image and loyalty, as well as between service quality and loyalty. The indirect effect of service quality through satisfaction was larger than that of brand image, suggesting that patient satisfaction is a particularly important mechanism through which service quality strengthens loyalty.

DISCUSSION

This study demonstrated that brand image and service quality are important determinants of outpatient satisfaction and loyalty at RSJD Atma Husada Mahakam. The model explained a substantial proportion of loyalty variance, indicating that the proposed framework is empirically relevant for psychiatric outpatient services. Brand image had a significant positive effect on patient satisfaction. This finding suggests that patients who perceive the hospital as accessible, reputable, organized, and capable of providing satisfactory psychiatric services are more likely to report positive service evaluations. The role of brand image is consistent with marketing theory, which explains that institutional associations shape expectations before service encounters and influence the interpretation of service experiences (Kotler & Keller, 2016). In psychiatric hospitals, a positive brand image may also reduce uncertainty and strengthen trust among patients and families.

Service quality showed the strongest direct effect on patient satisfaction. This indicates that satisfaction is primarily driven by patients' direct experiences with service delivery. The SERVQUAL dimensions of responsiveness, assurance, and empathy are especially important in mental health services, where patients and families may be vulnerable and require clear information, respectful communication, professional competence, and a sense of safety. These findings support the SERVQUAL assumption that perceived service quality is a major predictor of satisfaction in service organizations (Parasuraman et al., 1988; Zeithaml et al., 2020).

Patient satisfaction had a significant effect on loyalty. In practical terms, satisfied outpatients are more likely to continue using the hospital, recommend the hospital to others, and remain loyal despite alternative providers. In psychiatric care, this finding has clinical relevance because repeated use of services may be linked to treatment continuity, medication adherence, and long-term follow-up. Therefore, loyalty should not be interpreted only as a marketing outcome, but also as a mechanism that may support continuity of mental health care.

Brand image and service quality also directly influenced loyalty. This implies that loyalty can be shaped through both cognitive trust in the institution and affective satisfaction derived from service experiences. However, the significant indirect effects show that patient satisfaction is a key mediating mechanism. The mediation pattern indicates partial mediation: brand image and service

quality contribute directly to loyalty while also increasing loyalty through satisfaction. This supports the theoretical view that satisfaction is a central pathway between perceived service performance and long-term consumer commitment (Baron & Kenny, 1986; Griffin, 2005).

The larger indirect effect of service quality compared with brand image suggests that improving day-to-day outpatient service processes is likely to yield stronger gains in loyalty. Priority improvement areas include maintaining responsive service, strengthening information delivery by nurses, ensuring the availability of drugs and medical equipment, improving complaint-handling mechanisms, and sustaining therapeutic communication. At the strategic level, RSJD Atma Husada Mahakam should ensure that public communication and brand promises remain aligned with actual service quality to avoid a gap between external image and patient experience.

This study has several limitations. First, the cross-sectional design limits causal interpretation. Second, the study used self-reported questionnaire data, which may be influenced by response bias. Third, the instrument was adapted from general service quality and loyalty frameworks and may not fully capture the unique characteristics of psychiatric outpatient services. Future studies should include longitudinal designs, compare psychiatric hospitals with general hospital psychiatric clinics, and develop instruments that are more specific to mental health service contexts.

CONCLUSION

Brand image and service quality had positive and significant effects on outpatient satisfaction and loyalty at RSJD Atma Husada Mahakam. Patient satisfaction also had a significant positive effect on loyalty and mediated the influence of both brand image and service quality on loyalty. Service quality was the strongest determinant of satisfaction, while satisfaction was the key pathway for building sustained loyalty. These findings indicate that RSJD Atma Husada Mahakam should prioritize systematic patient satisfaction management, continuous improvement of SERVQUAL-based service quality, therapeutic communication, reliable information delivery, responsive complaint handling, and evidence-based brand image strengthening.

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