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The Influence of Service Quality and Marketing Mix on Satisfaction and Outpatient Loyalty at XYZ Type C Hospital in Makassar

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Abstract: Issues in healthcare services are frequently linked to the level of patient satisfaction. This study aims to examine the effect of service quality and the marketing mix on patient satisfaction and loyalty among outpatients at XYZ Type C Hospital in Makassar. Service quality was measured through tangibility, reliability, responsiveness, assurance, and empathy. The marketing mix included product, price, promotion, place, physical evidence, process, and people. Data were collected from 64 respondents using a Likert scale questionnaire and analyzed using multiple linear regression (SPSS) and Sobel mediation testing. The results show that service quality positively and significantly affects satisfaction ($\beta = 0.750$; $p < 0.001$) and loyalty ($\beta = 0.559$; $p < 0.001$). Marketing mix also positively and significantly affects satisfaction ($\beta = 0.774$; $p < 0.001$) and loyalty ($\beta = 0.557$; $p < 0.001$). Satisfaction has the most dominant effect on loyalty ($\beta = 0.842$; $p < 0.001$) and mediates the influence of service quality and marketing mix on loyalty (Sobel $Z = 7.21$ and 7.55). Therefore, this study extends services marketing theory in the healthcare sector by empirically validating a mediation model in the context of a Type C private hospital in Indonesia.

Keyword: Service Quality, Marketing Mix, Patient Satisfaction, Patient Loyalty, Private Hospital

INTRODUCTION

Equitable distribution of health development in Indonesia is implemented through various health services, including hospitals and community health centers (*puskesmas*). In 2023, inpatient services were predominantly provided by both private and public hospitals. In South Sulawesi, particularly in Makassar City, the utilization of health services is relatively high and supported by the availability of adequate health facilities.

According to Statistics Indonesia (Badan Pusat Statistik, 2023), the proportion of the Indonesian population who underwent inpatient care in 2023 reached 38.54% in public hospitals, 40.46% in private hospitals, and 11.70% in community health centers (*puskesmas*). South Sulawesi Province has an area of 46,72 km² and a population of 9.36 million people in 2023, with the largest population residing in Makassar City, totaling 1,464,640 inhabitants,

with a total area of 175.77 m². In the same year, 31.60% of the population received outpatient care, while 3% underwent inpatient care. Private hospitals were the most utilized inpatient facilities (42.59%), followed by public hospitals (36.29%) (South Sulawesi in Figures, 2024). Makassar City is supported by relatively comprehensive health facilities, which are strongly influenced by service quality and marketing strategies (Marketing Mix)

Empirically, based on 2021 data as reaffirmed in *South Sulawesi Province in Figures 2024*, the total number of healthcare facilities in Makassar City comprises 26 general hospitals, 57 polyclinics, 27 maternity hospitals, 49 community health centers (*Puskesmas*), and 25 subsidiary community health centers (*Puskesmas Pembantu*). Furthermore, according to avitaliahealth.com (2024), the current number of Type C hospitals in Makassar City is 25 units. According to the Quality Committee Report of the Makassar City Regional General Hospital (2023), hospital services in Makassar City still show several phenomena where quality indicator achievements have not been optimally met, including:

1. Compliance with patient identification (Target: 100%, Achievement: 84.09%)
2. Outpatient waiting time (Target: ≥ 80%, Achievement: 73.31%)
3. Compliance with doctors' ward round/visit schedule (Target: ≥ 80%, Achievement: 77.20%)
4. Reporting of critical laboratory results (Target: 100%, Achievement: 50.00%)
5. Compliance with clinical pathways (Target: ≥ 80%, Achievement: 75.00%)
6. Compliance with fall prevention measures (Target: 100%, Achievement: 68.15%)
7. Patient satisfaction (Target: ≥ 76.61%, Achievement: 73.31%)

From the above description, it can be concluded that the level of satisfaction with healthcare services is strongly influenced by various factors, which are largely determined by the quality of both medical and non-medical personnel, the speed of response time, competency factors, and cost factors.

The success of service delivery is determined by the quality of service received by consumers/patients. To achieve services that are effective, flexible, efficient, and accurate, attention must be given to the five dimensions of service quality: tangibility, reliability, responsiveness, assurance, and empathy, which are also key factors in achieving customer satisfaction (Nur Ayvas et al., 2024; NP Thi Hang, 2024).

Service quality plays an important role in achieving the vision and mission of stakeholders. In private hospitals, service quality serves as the spearhead of health service marketing. Therefore, the service delivery system must be capable of meeting the expectations of the target market (Faruk Seyitoğlu et al., 2020). Outpatient satisfaction is also closely related to pharmaceutical service units and can be measured using the same five dimensions: empathy, reliability, tangibles, assurance, and responsiveness (Susanto FH, 2021; Irma Idayati et al., 2020). Service quality is assessed by service accuracy and speed, employee competence and behavior, effective problem resolution, and overall customer experience (Vikas, 2023). In health care services, consumers are individuals who receive and use information, products, and services provided by producers and service providers (Moorman, 2024).

In general, patient satisfaction is often measured by the perceived match between the cost/financial expenditure incurred and the quality of services received; financial value can also influence customer loyalty (Dedi Iskamto & Riski TH, 2024). In private hospitals, patients and their families tend to associate financial spending with indicators of superior service quality that they expect to receive (Rukmayanti & Fitriana, 2022). Social factors such as recommendations from friends or family play a role in patient visit intentions (Lamb et al, 2021)

Therefore, hospital management needs to be supported by knowledge management to maintain organizational stability and improve efficiency, effectiveness, and innovation in order

to remain competitive (Hisham Idrees et al., 2023; Harshani Dedunu et al., 2025). In marketing, customers are positioned as partners through product excellence, affordable pricing, and effective promotional communication (Wichmann et al., 2021). In general, patients and their families tend to link the costs incurred with the expected service quality; thus, financial value becomes a benchmark for assessing the excellence of hospital services (Rukmayanti & Fitriana, 2022).

In public health services, several management indicators must be fulfilled by health service managers, both from government and private sectors. These indicators include expertise in health marketing in explaining the correlation between health science and the accuracy of medical treatment (Ningsih, 2024). Effective marketing in the health sector must focus on creating, communicating, and delivering value (CCDV - Create, Communicate, Deliver Value) to the public (Kotler et al, 2021). . The marketing mix in private hospitals includes product, price, promotion, place, physical evidence, process, and people (7P), and focuses on identifying customers' needs and wants through the management of products, promotions, pricing, and distribution/location (Yunshu Xia, 2023; Aaker, D. (2022). Patient loyalty is formed when optimal services are able to meet patients' needs, desires, and sense of care, which influence the fulfillment of patients' psychological needs. 7P, in health services has a positive and striking impact on patient interest in repeat visits (Ginting et al, 2023). Health social marketing uses marketing methods to encourage people to adopt healthier behaviors. It aims to change attitudes and habits through well-designed health messages that can reach diverse groups and improve community wellbeing (Marina, 2024) .

To improve patient services and visits, 7P play a very important role in hospitals (Kotler et al, 2021). After gaining a basic and working understanding of the marketing mix, a brief review of the differences and similarities between marketing products and marketing services is necessary (March, 2021). Patients respond to information differently and are most influenced by physicians' communication skills. In addition, trust in ratings, ease of access, and other available information can strengthen or weaken the effect of online ratings on patient volume (Chen et al, 2024)

The research questions in this study are formulated as provisional assumptions (hypotheses) that will be tested for validity through the research model as presented in the research framework. Therefore, the research questions (hypotheses) can be formulated as follows :

H1: Service Quality has a positive effect on Patient Loyalty.
H2: Service Quality has a significant effect on Satisfaction.
H3: Marketing Mix has a positive effect on Satisfaction.
H4: Marketing Mix has a positive effect on Patient Loyalty.
H5: Satisfaction has a positive effect on Patient Loyalty
H6: Service Quality has a positive effect on Patient Loyalty, with Satisfaction acting as a mediating variable.
H7: Marketing Mix has a positive effect on Patient Loyalty, with Satisfaction acting as a mediating variable.

This study emphasizes its novelty by integrating two variables—Service Quality (SERVQUAL) and the Marketing Mix (7P), each with its respective dimensions—to measure the extent to which these two variables influence patient satisfaction, as well as the extent to which patient satisfaction can affect patient loyalty in using the services of Type C hospitals in Makassar.

Many studies examine service quality to achieve satisfaction and thereby foster patient loyalty. However, few researchers have simultaneously integrated SERVQUAL and 7P in the

context of hospitals in Indonesia; consequently, findings from previous studies have been inconsistent regarding direct effects versus mediated effects."

METHOD

The research method employed in this study represents a combination of two main variables derived from previous research models and applied in the current study. The novelty of this research lies in integrating these two variables while also adding four additional dimensions to the marketing mix variable. The first variable is Service Quality, hereafter referred to as Variable X1, which consists of five dimensions: tangibility, reliability, responsiveness, assurance, and empathy.

The second variable is the Marketing Mix, hereafter referred to as Variable X2, which consists of seven dimensions: product, price, promotion, place, physical evidence, process, and people. Both variables are categorized as independent variables, meaning they are expected to influence the level of patient satisfaction (*Satisfaction*) as well as patient behavioral outcomes reflected in the frequency or volume of repeated use of healthcare services (*Patient Loyalty*). Patient loyalty is demonstrated through positive evaluations and the tendency of patients to recommend the healthcare services of the research object/hospital to others. The variable Satisfaction is positioned as an intervening (mediating) variable, denoted as Variable Z, while Patient Loyalty is defined as the dependent variable (Y).

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RESULTS AND DISCUSSION

A total of 64 questionnaires were collected from respondents. The respondents were grouped based on age, gender, purpose of visit, type of clinical service, and duration of treatment at XYZ Type C Hospital in Makassar.

The classification of respondent profiles aims to provide a general overview of patients as users of healthcare services. The respondents' age distribution shows considerable variation, with the majority of patients falling within the productive age group of 26–35 years. This group tends to utilize healthcare services more actively due to high mobility and work-related activities, which require fast and efficient medical services.

In terms of gender, the utilization of healthcare services at XYZ type C Hospital in Makassar is predominantly male, accounting for 59% of the total respondents. Table 1 presents the percentage distribution of respondents based on their purpose of visit. A total of 31 respondents (48%) sought treatment at the general clinic, while 33 respondents (52%) visited specialist clinics, making specialist clinics the most common purpose of visit.

Table 1. Distribution of Respondents Based on Purpose of Visit

No	Purpose of Visit	Number of Respondents (Persons)	Percentage (%)
1	General Clinic	31	48,44%
2	Specialist Clinic	33	51,56%
Total		64	100%

Regarding the level of clinical services, general clinic services were the most utilized, accounting for 48% of visits. Meanwhile, the 52% of visits to specialist services were further distributed into several categories, as shown in Table 2: pediatric specialist clinic accounted for 3%, internal medicine specialist clinic for 28%, and dermatology and venereology specialist services for 20%.

Table 2. Distribution of Respondents Based on Type of Clinical Service

No	Clinical Service	Number of Respondents (Persons)	Percentage (%)
1	General Clinic	31	48,44%

2	Pediatric Specialist Clinic	2	3,12%
3	Internal Medicine Specialist Clinic	18	28,13%
4	Dermatology and Venereology Specialist Clinic	13	20,31%
Total		64	100%

The high number of visits to the internal medicine specialist clinic indicates that the majority of patients experience common health complaints such as metabolic disorders, digestive problems, or other chronic diseases. This condition underscores the importance of comprehensive medical services in order to enhance patient satisfaction.

Regarding the duration of treatment, 50% of respondents had been receiving treatment for less than 5 years, 37.5% for 1–3 years, and 12.5% for 4–6 years. No respondents had been undergoing treatment for more than 6 years. The data indicate that the majority of patients are relatively new patients. This suggests an increase in visits in recent years, as well as growing public trust in the services provided by XYZ type C Hospital in Makassar. The duration of treatment may also potentially influence patient satisfaction and loyalty.

The analysis was conducted using questionnaires from 64 outpatients, employing a Likert scale of 1–5 (1 = Strongly Disagree, 5 = Strongly Agree). To facilitate interpretation, a class interval of 0.8 was used. The Service Quality variable was measured through five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. For Likert-type data, the mode or median was used to measure central tendency, while frequency distribution was used to assess variability (Ajit K. Roy, 2020).

Overall, the Service Quality variable obtained a mean score of 3.89 (agree category). This indicates that the service quality of XYZ type C Hospital in Makassar is perceived as good by patients and has met their expectations. However, improvements in service consistency and responsiveness are still necessary to further strengthen patient satisfaction and loyalty.

The Marketing Mix variable was measured using seven dimensions: Product, Price, Promotion, Place, Physical Evidence, Process, and People.

Patient satisfaction (Satisfaction) is defined as the feeling of pleasure or disappointment that arises after comparing the services received with prior expectations. The variable obtained a mean score of 3.87 (agree category), indicating that patients are generally satisfied with the services provided by XYZ type C Hospital in Makassar. Patient loyalty is defined as the commitment to continue using the services and the willingness to recommend them to others. This variable obtained a mean score of 3.94 (agree category), indicating that patients generally demonstrate a positive level of loyalty toward XYZ type C Hospital in Makassar.

The analysis results indicate that patients have had positive service experiences, leading them to trust the hospital enough to recommend it to others. Patient loyalty is formed because patients feel satisfied with the services they receive. Therefore, it can be concluded that the better the service quality and the more effective the marketing mix strategies implemented by the hospital, the higher the level of patient satisfaction, which in turn contributes to the formation of patient loyalty.

a. Inferential Statistical Analysis

Inferential statistics are used to analyze sample data so that conclusions can be generalized to the population. According to Sugiyono (2019), inferential statistics are statistical techniques used to analyze sample data and apply the results to the population, and they are also used for testing research hypotheses.

In this study, the analysis was conducted using SPSS software with the multiple linear regression method. This analysis aims to examine the effects of Service Quality (X1) and Marketing Mix (X2) on Satisfaction (Y1) and Patient Loyalty (Y2), both directly and indirectly.

b. Validity Test

The validity test is used to determine the ability of questionnaire items to measure the research variables. According to Sugiyono (2019), a research instrument is considered valid if it is capable of measuring what it is intended to measure. Validity testing in this study was conducted using the Pearson Product-Moment correlation, by correlating each item score with the total score (Corrected Item–Total Correlation).

number of respondents (n) = 64
df = n – 2 = 62
Significant level = 0,05
Then the value obtained is:

$$r_{tabel} = 0{,}259$$

Testing criteria :
r-calculated > r-table (0.259) → Valid
r-calculated < r-table (0.259) → Not Valid

The results of the validity test show that all statement items for the variables Service Quality (X1), Marketing Mix (X2), Satisfaction (Y1), and Patient Loyalty (Y2) have r-calculated values greater than r-table (0.259). Therefore, all questionnaire items are declared valid and are appropriate for use as research instruments.

c. Reliability Test

According to Sugiyono (2019), reliability refers to the degree of consistency of a research instrument. An instrument is considered reliable if it produces consistent results when measured repeatedly.

Criteria:
Cronbach's Alpha > 0.60 = Reliable

All variables have Cronbach's Alpha values above 0.60; therefore, all research instruments are declared reliable and appropriate for use as data collection tools.

d. Hypothesis Testing (t-test)

The t-test is used to determine the partial effect of each independent variable on the dependent variable. According to Sugiyono (2019), the partial test (t-test) aims to determine whether each independent variable individually has a significant effect on the dependent variable. Table 3 presents the results of the t-test analysis of Service Quality and Marketing Mix on Satisfaction

Decision-making criteria (English):
If Sig. < 0.05, then the hypothesis is accepted (significant effect).
If Sig. > 0.05, then the hypothesis is rejected (no significant effect).
Sample size: $n = 64$
df = n – k – 1 = 64 – 1 – 1 = 62
t-table value: $t_{\text{table}} = 1.998$

Table 3. t-test Results of Service Quality and Marketing Mix on Satisfaction

Hipotesis	Model	B	Std. Error	Beta	t -Test	Sig
H1	Konstanta	0,156	1,462	–	0,107	0,915
	Service Quality	0,054	0,010	0,559	5,303	0,000
H2	Konstanta	10,565	4,080	–	2,590	0,012
	Service Quality	0,252	0,028	0,750	8,939	0,000
H3	Konstanta	5,193	4,341	–	1,196	0,236

	Marketing Mix	0,339	0,035	0,774	9,636	0,000
H4	Konstanta	-0,692	1,627	–	-0,425	0,672
	Marketing Mix	0,070	0,013	0,557	5,285	0,000
H5	Konstanta	-3,397	0,922	–	-3,685	0,000
	Satisfaction	0,241	0,020	0,842	12,292	0,000

Based on Table 3, the significance values are described as follows:

1. H1: The t-test results show p = 0.000 < 0.05 and t = 5.303 > 1.998, indicating that Service Quality has a positive and significant effect on Patient Loyalty. The coefficient of 0.054 suggests that improved service quality increases loyalty (patients are more likely to return). Therefore, H1 is accepted.
2. H2: The t-test results show p = 0.000 < 0.05 and t = 8.939 > 1.998, indicating that Service Quality has a positive and significant effect on Satisfaction. The coefficient of 0.252 means that higher service quality increases patient satisfaction. Therefore, H2 is accepted.
3. H3: The t-test results show p = 0.000 < 0.05 and t = 9.636 > 1.998, indicating that Marketing Mix has a positive and significant effect on Satisfaction. The coefficient of 0.339 suggests that better implementation of the marketing mix increases patient satisfaction. Therefore, H3 is accepted.
4. H4: The t-test results show p = 0.000 < 0.05 and t = 5.285 > 1.998, indicating that Marketing Mix has a positive and significant effect on Patient Loyalty. This means that better marketing strategies increase patient loyalty to return for treatment. Therefore, H4 is accepted.
5. H5: The t-test results show p = 0.000 < 0.05 and t = 12.292 > 1.998, indicating that Satisfaction has a positive and significant effect on Patient Loyalty. The coefficient of 0.241 suggests that the higher the level of satisfaction, the higher the level of loyalty (patients are more likely to return and recommend the hospital to others). Therefore, H5 is accepted

e. Coefficient of Determination Test (R-Square)

The coefficient of determination (R^2) indicates how well the independent variables explain the variation in the dependent variable (Sugiyono, 2019). As shown in Table 11, Service Quality explains 31.2% of the variation in Patient Loyalty (the remaining 68.8% is influenced by other factors) and explains 56.3% of the variation in Satisfaction. Marketing Mix explains 60.0% of the variation in Satisfaction.

The value of R^2 ranges between 0 and 1:

1. Close to 0 → Very weak explanatory power
2. Close to 1 → Very strong explanatory power

Table 4. Results of the Coefficient of Determination (R^2) Test

Model	R	R Square	Adjusted R Square
Service Quality → Patient Loyalty	0,559	0,312	0,301
Service Quality → Satisfaction	0,750	0,563	0,556
Marketing Mix → Satisfaction	0,774	0,600	0,593
Marketing Mix → Patient Loyalty	0,557	0,311	0,299
Satisfaction → Patient Loyalty	0,842	0,709	0,704

f. Mediation Test (Sobel Test)

The Sobel test is used to determine whether the Satisfaction (Y1) variable is able to mediate the effect of Service Quality (X1) and Marketing Mix (X2) on Patient Loyalty (Y2).

According to Baron & Kenny, a variable is considered a mediator if the independent variable significantly influences the mediator, and subsequently, the mediator significantly influences the dependent variable.

Sobel Formula:

$$Z = \frac{a \times b}{3(b^2 \times S^2_a) + (a^2 \times S^2_b)}$$

Where:

a= regression coefficient of the independent variable (X) on the mediator (Y1)
b= regression coefficient of the mediator (Y1) on the dependent variable (Y2)
S_a= standard error of coefficient a
S_b= standard error of coefficient b
Z= Sobel test statistic
Decision criteria:
If $Z > 1.96$(at α = 0.05), the mediation effect is significant.
If $Z < 1.96$, the mediation effect is not significant.

g. Mediation of Satisfaction on the Effect of Service Quality on Patient Loyalty (H6)

Output SPSS
a (Service Quality → Satisfaction) = 0.252
Sa = 0.028
b (Satisfaction → Patient Loyalty) = 0.241
Sb = 0.020
Sobel formula**:**

$$Z = \frac{a \times b}{3(b^2 \times S^2_a) + (a^2 \times S^2_b)}$$

$$Z = \frac{0{,}252 \times 0{,}241}{3(0{,}241^2 \times 0{,}028^2) + (0{,}252^2 \times 0{,}020^2)}$$

$$Z = \frac{0{,}0607}{3(0{,}0581 \times 0{,}000784) + (0{,}0635 \times 0{,}0004)}$$

$$Z = \frac{0{,}0607}{30{,}0000455 + 0{,}0000254}$$

$$Z = \frac{0{,}0607}{\sqrt{0{,}0000709}}$$

$$Z = \frac{0{,}0607}{0{,}00842}$$

$$Z = 7{,}21$$

Z-calculated = 7.21 > 1.96. This means that Satisfaction is able to significantly mediate the effect of Service Quality on Patient Loyalty. Therefore, H6 is accepted.

h. Mediation of Satisfaction on the Effect of Marketing Mix on Patient Loyalty (H7)

output SPSS:
a (Marketing Mix → Satisfaction) = 0,339
Sa = 0,035
b (Satisfaction → Patient Loyalty) = 0,241
Sb = 0,020

Sobel formula:

$$Z = \frac{0{,}339 \times 0{,}241}{3\overline{(0,241^2 \times 0,035^2) + (0,339^2 \times 0,020^2)}}$$

$$Z = \frac{0{,}0817}{3\overline{(0{,}0581 \times 0{,}001225) + (0{,}115 \times 0{,}0004)}}$$

$$Z = \frac{0{,}0817}{\sqrt{0{,}0000712 + 0{,}000046}}$$

$$Z = \frac{0{,}0817}{\sqrt{0{,}0001172}}$$

$$Z = \frac{0{,}0817}{0{,}01082}$$

$$Z = 7{,}55$$

Z-calculated = 7.55 > 1.96. This indicates that Satisfaction has been proven to mediate the effect of Marketing Mix on Patient Loyalty. Therefore, H7 is accepted.

Satisfaction acts as a strong mediator: service quality and the marketing mix do not shape loyalty directly, but rather through patient satisfaction first.

The magnitude of the relationships among variables in the model is determined using the Standardized Coefficients (Beta) from the SPSS output because these coefficients are normalized, more objective, and comparable across variables with different scales or numbers of items. The unstandardized coefficient (B) is used only to construct the regression equation, whereas t-values and Sig. (p-values) are used for hypothesis-testing decisions. For the path diagram, the coefficient used is Beta because it reflects the contribution of the independent variables' effects on the dependent variable.

Based on the results of the regression analysis, the Standardized Coefficient (Beta) values are as follows:

a) The effect of Service Quality on Patient Loyalty is β = 0.559.
b) The effect of Service Quality on Satisfaction is β = 0.750.
c) The effect of Marketing Mix on Satisfaction is β = 0.774.
d) The effect of Marketing Mix on Patient Loyalty is β = 0.557.
e) The effect of Satisfaction on Patient Loyalty is β = 0.842.

The beta values are used as path coefficients in the model and indicate that Satisfaction has the most dominant influence on Patient Loyalty compared to the other variables. In addition to the direct effects, there are also indirect effects through the mediation of Satisfaction, which are calculated by multiplying the path coefficients a × b. The indirect effect of Service Quality on Patient Loyalty through Satisfaction is calculated as follows:

$$0{,}774 \times 0{,}842 = 0{,}652$$

This value reinforces the Sobel test results, which indicate that Satisfaction is a significant mediating variable. Therefore, the relationships between Service Quality and Marketing Mix with Patient Loyalty become stronger when they occur through patient satisfaction first.

Based on the results of hypothesis testing, the research model can be illustrated in Figure 1, in the form of a path diagram of the influence of Service Quality and Marketing Mix on Patient Satisfaction and Loyalty (Standardized Beta Coefficient).
Figure description (for drawing the diagram):

1. Service Quality (X1) and Marketing Mix (X2) = (independent variables).
2. Satisfaction (Y1 / Z) = (mediator).
3. Patient Loyalty (Y2) = (dependent variable).
4. Beta values:
    A. X1 → Y1: β = 0.750
    B. X2 → Y1: β = 0.774
    C. Y1 → Y2: β = 0.842
    D. X1 → Y2: β = 0.559
    E. X2 → Y2: β = 0.557
    F. X1 → Y2 via Y1: 0.750 × 0.842 = 0.632
    G. X2 → Y2 via Y1: 0.774 × 0.842 = 0.652

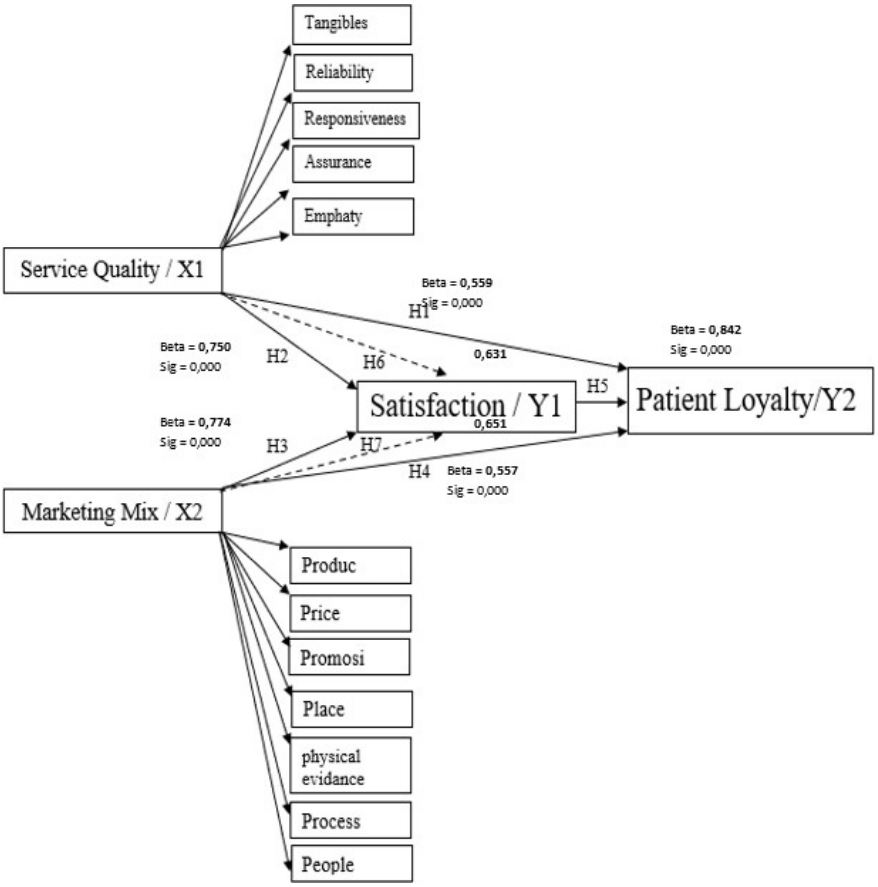


Figure 1. The Research Path Model (Standardized Coefficients/Beta)

CONCLUSION

Based on the research results as described in the Results and Discussion section, it can be concluded that:

1. Service quality has a positive and significant effect on patient loyalty.
2. Service quality has a positive and significant effect on patient satisfaction.
3. The marketing mix (7P) has a positive and significant effect on patient satisfaction.
4. The marketing mix (7P) has a positive and significant effect on patient loyalty.
5. Patient satisfaction has a positive and significant effect on patient loyalty.
6. Patient satisfaction mediates the effect of service quality on patient loyalty.
7. Patient satisfaction mediates the effect of the marketing mix (7P) on patient loyalty.

The limitations of this study are as follows:

a) The study was conducted in only one Type C hospital with a relatively small sample size; therefore, the findings cannot yet be broadly generalized.
b) The data were collected using questionnaires, which may introduce respondents' perception bias.
c) The research variables were limited; other factors such as trust, hospital image, and patient experience were not examined.
d) Supporting literature remains limited, especially recent international references.
e) The study used a cross-sectional design; thus, it does not capture changes in patient loyalty over the long term.

Overall, the findings show that patient satisfaction is a key factor in forming loyalty and serves as a mediator in the relationship between Service Quality, Marketing Mix, and Patient Loyalty. This emphasizes that patient loyalty in hospitals is determined not only by service quality and marketing strategies, but most importantly by the service's ability to create patient satisfaction. To support the development of future research, the researchers expect further studies to be conducted using a larger sample size

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