

Stimulus-Organism-Response (S-O-R) Theory Approach on Loyalty and Hospital Switching Model

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ABSTRACT

Objectives: This study aims to investigate how patient loyalty and hospital switching are impacted by service quality and hospital image via satisfaction.

Methodology: Purposive sampling is used in this approach, where the prerequisite is a patient who have undergone treatment at least 3 times in the last 3 months and have used other hospital care. Based on this technique, a sample of 100 patients. Data were analyzed using structural equation modeling using partial least square technique, via two distinct but sequentially related phases.

Finding: The findings demonstrate that satisfaction is positively and significantly impacted by hospital image and service quality. Only loyalty is impacted by the hospital's reputation; transferring hospitals is not directly impacted. However, hospital switching and loyalty are unaffected by service quality. Patient satisfaction can only mediate the relationship between the hospital image and hospital switching as well as patient loyalty, which does not apply to service quality. This study indicates that patient **stimulus** comes from external influences, where service quality and hospital image provide individual impacts (**Organism**) reflected in feelings of satisfaction or dissatisfaction. This then leads to a **response**, which is loyal patients. The satisfaction or dissatisfaction felt by patient as 'Organism' does not affect their decision to switch services to another hospital.

Conclusion: Patient loyalty and satisfaction are directly impacted by hospital image. Patient satisfaction is directly impacted by service quality, but loyalty is not much impacted. Only patient satisfaction can operate as a mediator in the interaction between loyalty and hospital image.

Keywords: Hospital Image; Service Quality; Patient Satisfaction; Hospital Switching; Patient Loyalty.

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INTRODUCTION

In the current era of intense competition within the healthcare sector, hospitals are required not only to provide excellent medical services but also to foster sustainable relationships with their patients (Adhikara et al., 2022). Public awareness regarding the vital role of healthcare services in enhancing life quality has made health a growing social priority (Marzban et al., 2022). In the highly competitive healthcare sector, hospitals must not only provide quality medical care but also build a good reputation in the eyes of patients. Excellent service quality and a positive image of the hospital are believed to enhance patient satisfaction, which in turn influences patient loyalty (N. X. Nguyen et al., 2021).

The level of patient satisfaction significantly shapes loyalty toward a hospital and simultaneously acts as a deterrent to switching behavior (T. L. H. Nguyen & Nagase, 2021), while also serving as a barrier to the tendency to move to other healthcare facilities. In this context, patient loyalty reflects emotional attachment and commitment to the hospital, while switching hospitals often indicates dissatisfaction or the availability of alternative services that are considered better (Dogra et al., 2023).

Service quality and hospital image function as external stimuli that shape patients' perceptions and behavioral responses toward a healthcare institution. Meanwhile, **Organism (O)** refers to the internal conditions of patient, such as satisfaction, emotions, and perceptions of the service. **Response (R)**: in the form of loyalty behavior or decision to switch to another hospital. According to this paradigm, loyalty and turnover are not directly impacted by service quality or hospital image since patient satisfaction serves as a mediator between stimulus and reaction. Numerous research attest to this model's applicability in the context of healthcare services. A study shows that the S-O-R is a dominant framework in assessing consumer behavior in the service sector, including healthcare (Sivasothy et al., 2024).

The quality of hospital service, including aspects such as reliability, empathy, assurance, responsiveness, and physical evidence, can directly shape patient loyalty (Shie et al., 2022). When patients feel well cared for, professional, and attentive, they frequently suggest the facility and come back for treatment (Abdel Fattah et al., 2021); (Astarini & Fachrodji, 2023). Low quality of service, such as in terms of medical results, staff interaction, administration, and physical environment, can trigger patient dissatisfaction. When expectations are not met, they tend to feel disappointed and start considering alternative health services (Ha et al., 2023).

Hospital perception can also be used to gauge loyalty. The general impression that patients have of the caliber and honesty of the care they get is more important to the hospital's image than its outward look or media notoriety. Higher patient satisfaction is correlated with a better hospital image (Marchama et al., 2024), and lead to loyalty (Kaban et al., 2022). Then the hospital reflects the reputation, trust, and professionalism of the institution. When hospital image is poor or does not meet expectations, patients tend to feel hesitant and uncomfortable. This reinforces the intention to switch, especially in other hospitals have more positive image. Switching behavior occurs when patients feel dissatisfied with the service received and have a negative perception of the hospital's image (Sukamuljo et al., 2021).

ABC Hospital is a Class D (basic health services) general hospital. Almost fifty years of operating in the maternity services has made the hospital, which changed its status to a general hospital, closely associated with the image of a maternity hospital. Some patients have expressed disappointment because ABC Hospital has become a general hospital, which requires pregnant women to encounter infectious patients. Although patient satisfaction surveys have

been conducted both by the hospital itself and by external parties, there has been a decrease in outpatient visits, despite the addition of specialist doctors.

The Main Research Question: How does the Stimulus–Organism–Response (S-O-R) framework explain the mechanism through which service quality and hospital image influence patient loyalty and hospital switching behavior through patient satisfaction at ABC Hospital? The purpose of this study is to examine how patient happiness and hospital image affect loyalty and service transfer. Another goal is to give hospitals strategic advice on how to raise service standards and cultivate a favorable reputation in order to keep patients and keep them loyal. The factors that were examined were the hospital's reputation and service quality, while other factors such as location, technology, and service culture were not discussed in depth even though they could have an influence.

The study subjects were limited to outpatients at one specific hospital, so the results may not be generalizable to all types of healthcare facilities. Another limitation is the questionnaire-based measurement of patient perceptions, which is susceptible to respondent biases such as social desirability bias (answering ideally) or recall bias (forgetting about service experiences).

LITERATURE REVIEW

Stimulus-Organism-Response (S-O-R) Theory in Healthcare Contexts

Mehrabian and Russell (1974) developed the Stimulus-Organism-Response (S-O-R) method (Hochreiter et al., 2022). A fundamental paradigm in psychology and behavioral science, the S-O-R model explains how internal processing from outside influences human behavior (Pandita et al., 2021). Previous research on the application of S-O-R theory has been more focused on business research. Meta-analysis and systematic reviews of the theory are uncommon, and the majority of research merely yields empirical data. In order to assess the impact and applicability of the model, the research paper will gather and examine studies that have used S-O-R theory in the healthcare industry during the previous five years (Sivasothy et al., 2024). Recent studies (e.g., (Pandita et al., 2021); (Hochreiter et al., 2022) suggest that in healthcare contexts, the "organism" component extends beyond affective states to include trust, perceived safety, and cognitive evaluation. Therefore, reducing the organism variable to satisfaction alone may oversimplify internal processing. This study therefore adopts a contextualized S-O-R interpretation, recognizing that in healthcare settings the organism reflects multidimensional internal processing integrating affective (emotional comfort), cognitive (performance evaluation), and relational (trust) mechanisms.

Patient Loyalty

"A deeply held commitment to re-buy or re-patronize a preferred product or service in the future, despite situational influences and marketing efforts having the potential to cause switching behavior," is the definition of loyalty. (Kotler & Keller, 2016). This concept highlights that loyalty is more than just making recurring purchases. It also represents a psychological bond and a reluctance to shift, especially in the face of compelling marketing or other options. Loyalty in this study is explained as patient loyalty. The patient loyalty indicators in this study are (1) Firmness, (2) Defense, (3) Repeat Purchase (Astuti & Nagase, 2016).

Hospital Switching

The definition of hospital switching is adopted from the definition of brand switching. Brand switching behavior is "the act of consumers changing their purchase habits from one brand to another due to internal preferences or external factors such as price, quality, or brand

image.”(Pratama & Haryanto, 2025). So, in this study, the definition of Hospital Switching is the action of patients changing their treatment habits from one hospital to another due to internal preferences or external factors. Healthcare loyalty is more complex because switching may occur even when satisfaction exists. Empirical studies in Scopus-indexed journals (e.g., (El Gareem et al., 2024) demonstrate that hospital image can moderate the satisfaction–loyalty relationship. This indicates that switching behavior is not merely the inverse of loyalty but may represent a separate behavioral outcome influenced by contextual variables. Hospital switching should not be treated simply as "negative loyalty." Instead, it may function as a parallel response variable within the S-O-R framework. This distinction strengthens the theoretical justification of modeling loyalty and switching simultaneously. The indicators used in Hospital Switching are (1) Dissatisfaction (2) Variation seeking behavior (3) Negative word of mouth (Astuti & Nagase, 2016).

Patient Satisfaction

"A person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) against his or her expectations" is the definition of customer satisfaction.”(Kotler & Keller, 2016). This definition highlights that satisfaction is a psychological evaluation, it depends on how well the actual experience matches what the customer expected. If performance exceeds expectations, satisfaction is high; if it falls short, disappointment occurs. Patient satisfaction, as described by the concept of consumer satisfaction, is the degree to which a patient is satisfied or dissatisfied with the performance (or results) of a hospital in relation to their expectations. The study's patient satisfaction metrics include (1) treatment experiences (2) Experiencing joy or disappointment (3) recommend to other (Astuti & Nagase, 2016).

Hospital Image

“The sum of people's experiences, perceptions, opinions, sentiments, and information about a corporation is its corporate image.”(Worcester, 2009). This definition emphasizes that image is shaped by both tangible and emotional interactions over time. Hospital image is defined as the sum of all experiences, perceptions, beliefs, sentiments, and information that patients or the general public have about a hospital, in accordance with the concept of corporate image. The hospital image indicators used in this study are (1) Corporate identity (2) Reputation (3) Recommended by other people (Ma et al., 2022).

Service Quality

Every service interaction is a test of a company's service quality (Kotler & Keller, 2016). Because it directly affects public trust and is highly competitive among the various options for healthcare facilities, service quality is crucial for hospitals. This service-quality model is based on (Parasuraman et al., 1985), In decreasing order of significance, researchers found five factors that influence the quality of services: First, dependability; second, responsiveness; third, assurance; fourth, empathy; and fifth, tangibles.

HYPOTHESIS AND RESEARCH FRAMEWORK

The effect of Hospital Image on Patient Satisfaction

A hospital's image reflects patients' perceptions of its reputation, professionalism and the quality of services offered. When a hospital's image is perceived positively, patients tend to feel

more trusting, comfortable and satisfied with the services they receive. A good image forms high expectations of service. If the service matches or exceeds expectations, patient satisfaction increases. Hospitals with a professional and trusted image make patients feel emotionally and medically safe. In other words, the increasing image of the hospital causes patients to be satisfied (Kaban et al., 2022); (Sukawati, 2021); (Aziz et al., 2024).

H1: Patient satisfaction is positively impacted by hospital image

The effect of Service Quality on Patient Satisfaction

In addition to meeting patient expectations, high-quality service produces a satisfying experience that has a direct effect on patient satisfaction. Patients have certain expectations. Satisfaction rises when service meets or beyond expectations. The medical staff's kind disposition, open communication, and careful attention to detail provide emotional comfort that strengthens contentment. Fast, accurate, and error-free service enhances patient trust and satisfaction. In other words, the increasing service quality due to patients to be satisfied (N. X. Nguyen et al., 2021); (Kaban et al., 2022); (Aziz et al., 2024).

H2: Patient satisfaction is positively impacted by service quality

The effect of Hospital Image on Hospital Switching

Patients tend to trust hospitals with a good image and feel safe using their services. A positive hospital image reflects a good reputation. Conversely, a negative image can make patients hesitate and choose another, more trusted hospital. Patients may switch to a better care experience. In other words, the better the image of the hospital, the less likely it is that patients will move to another hospital (Chigwende, 2021).

H3: Hospital Image has negative effect on hospital switching

The effect of Service Quality on Hospital Switching

Patient views are greatly influenced by elements including certainty, responsiveness, empathy, and dependability. When patients feel disrespected or treated with empathy, they are more likely to switch to another hospital. A hospital's image is shaped by the quality of its services. A hospital with a poor reputation will lose patients, even if it offers comprehensive facilities. If another hospital offers faster, friendlier, and more convenient service, patients will consider switching. Negative experiences, such as long lines or poor communication, can prompt patients to switch providers. (Ha et al., 2023); (Fintan et al., 2024).

H4: Hospital switching is negatively impacted by service quality

The effect of Hospital Image on Patient Loyalty

Image isn't just about facilities, but also emotional experiences, such as friendly staff, caring doctors, and a comfortable environment. Positive experiences build emotional bonds that make patients reluctant to move elsewhere. Hospitals with a positive image are perceived as competent, safe, and professional. Patients are more likely to be loyal if they trust the hospital to provide excellent care and ensure their safety. Patients often choose a hospital based on recommendations from others, online reviews, or reputation in the community. Hospitals with a good image are more frequently recommended, strengthening the loyalty of existing patients and attracting new ones. Patients who feel proud and comfortable with their hospital are less likely to seek alternatives, even if there are closer or cheaper options (Trisno & Berlianto, 2023); (Akbolat et al., 2023); (Aladwan, Salleh, & ALhwadi, 2021).

H5: Patient loyalty is positively impacted by hospital appearance

The effect of Service Quality on Patient Loyalty

Service is a direct experience patients experience throughout the treatment process. Loyalty grows from satisfaction and a lack of complaints regarding the care provided. Friendly, prompt, and professional service makes patients feel valued and secure. Empathetic and caring service builds an emotional bond between patients and medical staff. This bond makes patients feel "close" and more comfortable continuing to use the hospital's services. Patients who have a pleasant experience, from registration to completion of care, are more likely to return to the same hospital when they need further healthcare services (N. X. Nguyen et al., 2021); (Arman et al., 2023); (Sundram et al., 2022).

H6: Service quality has positive effect on patient loyalty

The effect of Patient Satisfaction on Hospital Switching

There is a negative correlation between patient satisfaction and the desire to transfer hospitals, which means that the less satisfied a patient is, the more likely they are to do so. Dissatisfied patients will begin comparing their hospital with other facilities perceived as superior. Conversely, satisfied patients tend to have an emotional bond and trust in the hospital, making them reluctant to switch even when alternatives are available. In other words, more satisfied patients are, the more likely they are to continue receiving treatment at that hospital, while the more dissatisfied patients are, the more likely they are to move to another hospital (Teng et al., 2021); (Kaneko et al., 2022); (Astuti & Nagase, 2014).

H7: Patient Satisfaction has negative effect on Hospital Switching

The effect of Patient Satisfaction on Patient Loyalty

Patients' level of satisfaction indicates how well their expectations for healthcare services are met or exceeded. Happy patients are less likely to transfer to another hospital, are more likely to stay there, and are more likely to recommend it to others. Patients who are happy feel appreciated and cared for. This creates an emotional bond that strengthens loyalty. Patients are more likely to return to a hospital when they are satisfied. To put it another way, patients become more devoted as their level of satisfaction rises (Kaban et al., 2022); (T. L. H. Nguyen & Nagase, 2021); (Rahman et al., 2021).

H8: Patient satisfaction has positive effect on patient loyalty

The effect of Hospital Image on Patient Loyalty Through Patient Satisfaction

A hospital's image shapes a patient's initial perception, which influences satisfaction. Patient satisfaction is a bridge to loyalty. Hospitals that can build a positive image and provide high-quality services are more likely to retain patients long-term. A positive image creates high expectations for service. When service meets or exceeds expectations, patients are satisfied. Patients who are happy with the service are more likely to use it again, refer others to the hospital, and show a sustained commitment (Deniz & Çimen, 2023); (Abbas et al., 2021); (Tahir et al., 2024).

H9: Hospital Image has effect on Patient Loyalty Through Patient Satisfaction

The effect of Service Quality on Patient Loyalty Through Patient Satisfaction

Reliability, empathy, responsiveness, assurance, and concrete proof of meeting or surpassing patient expectations are all components of high-quality services. When service meets expectations, patients feel emotionally and functionally satisfied. Satisfied patients are more likely to return to the service, recommend it to others, and are less likely to switch to another facility. Patient satisfaction acts as a mediator, strengthening the relationship between service and loyalty. Hospitals that consistently maintain service quality are more likely to retain patients long-term (Shie et al., 2022); (Aladwan, Salleh, Anuar, et al., 2021); (Singh et al., 2023).

H10: Service Quality has effect on Patient Loyalty Through Patient Satisfaction

The effect of Hospital Image on Hospital Switching Through Patient Satisfaction

When a hospital's image is perceived positively, patients tend to have high expectations and feel more confident in the services provided. If service meets or exceeds expectations, patient satisfaction increases. Patient dissatisfaction is a key driver for evaluating alternative healthcare services. Dissatisfied patients are more likely to switch to a hospital perceived as superior. A positive hospital image increases patient satisfaction, which reduces switching intentions. Conversely, a negative image and unsatisfactory service can drive patients to seek alternative hospitals (Chigwende, 2021).

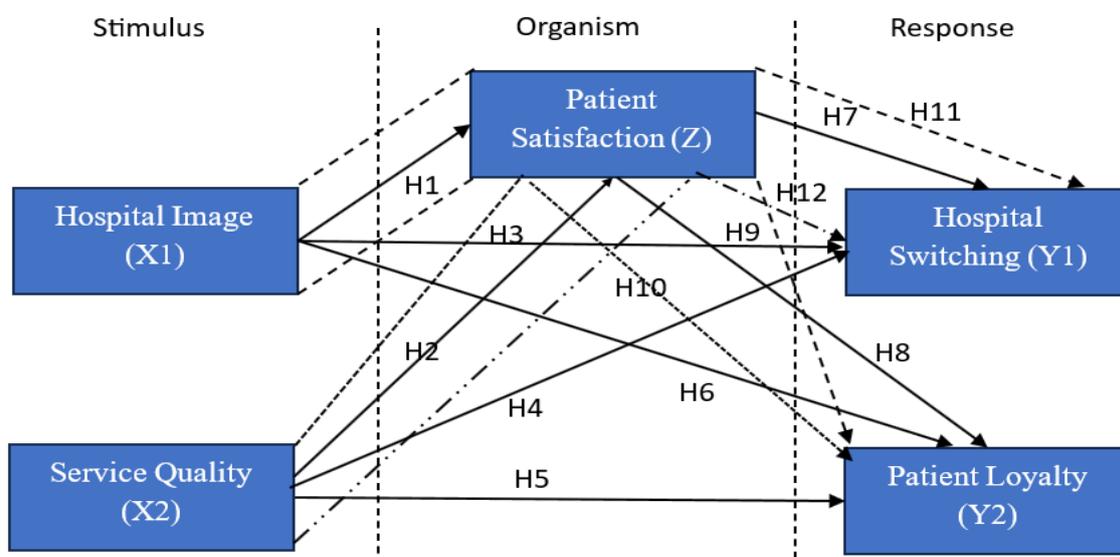
H11: Hospital image has effect on hospital switching through patient satisfaction

The effect of Service Quality on Hospital Switching Through Patient Satisfaction

Good service quality increases patient satisfaction, which reduces the intention to switch providers. Conversely, poor quality and unsatisfactory service can drive patients to seek alternative hospitals (Dogra et al., 2023); (Sukamuljo et al., 2021).

H12: Service quality has effect on hospital switching through patient satisfaction

Figure 1. The Conceptual Framework



Based on figure 1, This research is based on the S-O-R approach as the main conceptual model. Below is the explanation of each component:

Component	Explanation
Stimulus (S)	External factors such as the service quality and the hospital image received by patients from the hospital
Organism (O)	Internal conditions of patients that include satisfaction, perceptions, and emotions regarding the services received
Response (R)	Patient behavior in the form of loyalty and decisions to switch to another hospital

METHOD

This kind of study is quantitative in nature. Examining a particular population or sample using data gathering methods, research tools, and quantitative/statistical data analysis is known as quantitative research, and its goal is to test a preconceived hypothesis. (Sugiyono, 2017)

Data Collection

Patients receiving outpatient care between February 15 and March 15, 2024, were given questionnaires, and the data gathered from these surveys was analyzed by the Obstetrics and Gynecology Outpatient Clinic. The technique of purposive sampling was employed to gather data, with the condition that a patient who has undergone treatment at least 3 times in the last 3 months and has used other hospital care. Researchers analyzed the data according to the main issues outlined at the beginning of the section. The response rate was 97% with the returned questionnaire 100 data set. There were 100 female respondents, because all patients undergo treatment for the obstetrics and gynecology polyclinic While the homogeneous sample limits statistical generalization, the study aims for theoretical and analytical generalization. The focused context strengthens internal validity and 100 exceeds recommended minimum thresholds for adequate statistical power (Cohen & Primer, 1992) (Sarstedt et al., 2020) and (Hair & Alamer, 2022). The largest age range is 21-30 years (77.5%), the most common patient occupation is housewife (68.4%), and the number of visits is more than 3 times (62.1%).

Analysis Techniques

Structural equation modeling (SEM) with partial least squares (PLS Smart 3.0) was used for the analysis. Two distinct phases of analysis were performed on the data (inner and outer model). Reliability, convergent validity, and discriminant validity are used to evaluate the outer model. If the study is still in the early stages of constructing measurement scales, outer model loadings of 0.5 or 0.6 could be appropriate.

According to Chin (2009), research methods are the plans, procedures, or methods used to gather information for analysis and to specify the instruments and supplies needed for the study. The structural model (inner model) is continued if the conditions are satisfied.

RESULTS AND DISCUSSION

Key Findings

The measurement model can proceed to the inner model stage if it meets valid and reliable criteria. The result of convergent validity shown in table 1.

Table 1. Variables, Indicators, Loading Factor Running, AVEs and Composite Reliability

Variables	Indicators	1Loading Factor ^a	2Loading Factor ^a	AVEs ^b	Composite Reliability ^c
Patient Loyalty	Firmness,	0.901	0.901	0.781	0.914
	Defense,	0.897	0.897		
	Repeat Purchase	0.852	0.842		
Hospital Switching	Dissatisfaction,	0.501	Rejected	0.810	0.803
		0.499	Rejected		
	Variation seeking behavior,	0.780	0.868		
Patient Satisfaction	Negative word of mouth	0.929	0.916	0.884	0.958
	Treatment experiences	0.945	0.945		
	Feeling happy or disappointed	0.949	0.949		
Hospital Image	Recommend to other	0.927	0.927	0.822	0.933
	Corporate identity	0.850	0.850		
	Reputation	0.928	0.928		
Service Quality	Recommended by other people	0.940	0.940	0.749	0.937
	Reliability,	0.860	0.860		
	Responsiveness,	0.869	0.869		
	Assurance,	0.851	0.851		
	Empathy,	0.899	0.899		
	Tangibles	0.847	0.847		

AVE: Average Variance Extract

^aAcceptable value of Loading Factor is greater than 0.5

^bAcceptable value of AVE is greater than 0.5

^cAcceptable value of Composite Reliability is greater than 0.6

Table 1 indicates that the convergent validity (loading factor and AVEs) satisfies the requirements. The results of discriminant validity in the Fornell and Larcker criteria are displayed in Table 2.

Table 2. Discriminant Validity in the Fornell and Larcker Criterion

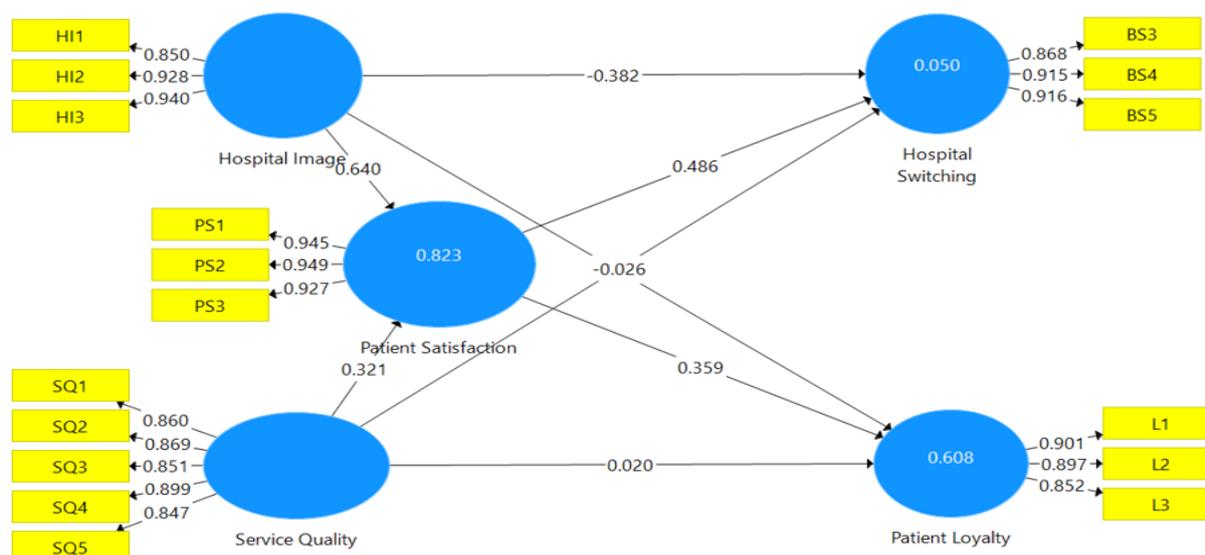
	Hospital Image	Hospital Switching	Patient Loyalty	Patient Satisfaction	Service Quality
Hospital Image	0.907				
Hospital Switching	0.048	0.733			
Patient Loyalty	0.758	0.134	0.884		
Patient Satisfaction	0.883	0.148	0.752	0.940	
Service Quality	0.758	0.106	0.632	0.805	0.856

The findings of the Fornell and Larcker criteria are shown in table 2. This criteria essentially says that each construct's square root of the Average Variance Extracted (AVE) must be higher than the correlation between that construct and the other constructs in the model. Based on table 2, all AVE roots meet the discriminant validity criteria. From the two tables it can be concluded that all statement items are **valid both convergently and discriminant**.

Table 1 also shows the results of the internal consistency of the indicators that make up a latent variable in research is measured by composite reliability. The values of composite reliability were >0.6 , so, we can conclude that all variables were **reliable**.

New structural models were tested following observations at the outer models. The structural equation modeling using PLS is displayed in Figure 2

Figure 2. Model of patient loyalty and hospital switching



According to Figure 2, the modified R-square value is 0.823, which indicates that 82.3% of patient satisfaction can be explained by hospital image and service quality. Additionally, patient happiness, service quality, and hospital image account for 60.8% of patient loyalty. However, patient happiness, service quality, and hospital image only account for 5% of hospital switching. Imbalance does not indicate model misspecification. Variation in R² values reflects differences in theoretical determinism rather than model imbalance (Henseler et al., 2016). Hospital switching differs conceptually from satisfaction and loyalty.

A good model fit indicates that the proposed research model is capable of explaining the patterns of relationships between variables in the empirical data. This indicates that the model significantly fits the available data in addition to being statistically significant. Based on the calculations, the SRMR (Standardized Root Mean Square Residual) results were 0.076 (saturated model) and 0.079 (estimated model). Based on the calculations, the SRMR (Standardized Root Mean Square Residual) results were 0.076 (saturated model) and 0.079 (estimated model). The requirement is that an SRMR value below 0.08 indicates a fit model. Therefore, the research model is a fit model.

Table 3 explains the relationship's outcomes, the P value, and the path coefficient. Based on the table, it was found that there were 10 accepted hypotheses and 2 rejected hypotheses.

Table 3. Path coefficients, P values, relationships, and outcomes

Relationships	Path Coefficients	P Values	Results
Hospital Image → Patient Satisfaction	0.639	0.000	H1 accepted
Service Quality → Patient Satisfaction	0.321	0.000	H2 accepted
Hospital Image → hospital switching	-0.381	0.083	H3 accepted *
Service quality → hospital switching	-0.026	0.877	H4 rejected
Hospital image → Patient Loyalty	0.428	0.007	H5 accepted
Service quality → patient loyalty	0.020	0.842	H6 accepted
Patient Satisfaction → Hospital Switching	0.486	0.026	H7 rejected
Patient satisfaction → patient loyalty	0.358	0.029	H8 accepted
Hospital Image → Patient Satisfaction → Patient Loyalty	0.229	0.026	H9 accepted
Service Quality → Patient Satisfaction → Patient Loyalty	0.115	0.097	H10 accepted*
Hospital image → patient satisfaction → hospital switching	0.310	0.029	H11 accepted
Service quality → patient satisfaction → hospital switching	0.156	0.063	H12 accepted*

*accepted α : 0.10

This structure remains conceptually coherent and theoretically nested within the S-O-R paradigm. Behavioral models often require multiple structural paths to adequately represent psychological processes. Thus, the number of hypotheses reflects theoretical completeness rather than arbitrary complexity (Jacoby, 2002).

Discussion

Stay or Switch by S-O-R Theory

Stay or Switch, hospital patient behavior in choosing to stay or move to another health facility. In an era of increasingly competitive healthcare, understanding patient behavior is crucial. The "stay or switch" phenomenon reflects a patient's decision to continue using a hospital or switch to another facility. The S-O-R theory can be used to analyze the psychological and environmental factors that influence this decision. Stimulus is an external stimulus from the marketing environment that influences the consumer decision-making process (Kotler & Keller, 2016). External factors (stimuli) that influence patients, such as quality of service, hospital reputation, facilities, interaction with medical staff, and costs. The patient's internal reaction (referred to as the organism's) to a stimulus, including perception, emotion, satisfaction, belief, and emotional attachment. Patient actions (responses) based on internal responses by choosing to continue using the hospital or moving to another hospital.

Hospital Image and Service Quality on Patient Satisfaction

The findings of the study demonstrate that patient satisfaction is significantly influenced by hospital image and service quality (N. X. Nguyen et al., 2021); (Kaban et al., 2022); (Sukawati, 2021); (Aziz et al., 2024). These results are consistent with other research that highlights how crucial patient perceptions are in influencing how they behave toward healthcare facilities. Hospital image is the collective perception of patients regarding the institution's reputation, professionalism of medical staff, physical facilities, and values. A positive image can instill a sense of security and trust in the hospital. When patients have a positive image of a hospital, they tend to be more trusting and feel proud to receive care there, this increases

emotional attachment. Service quality encompasses punctuality, staff friendliness, easy access to information, and comfort during the care process. Good quality not only meets patient expectations but also creates moments of truth that reinforce their positive perceptions.

Hospital image and service quality on hospital switching

Hospital image has negative effect on hospital switching (Chigwende, 2021); (Anwar et al., 2022) and (Cholil, 2021), however, service quality no effect on hospital switching even though negative direction. A hospital's image reflects public perception of its reputation, quality, and reliability of services. When a hospital's image is perceived negatively, it can directly impact patients' decisions to seek alternative healthcare services. For example, due to issues of poor service, inadequate facilities, or malpractice cases can undermine patient trust in the hospital. When trust is lost, patients tend to seek out other hospitals perceived as safer and more professional. Negative images often spread through dissatisfied patient experiences. Bad reviews or negative stories from loved ones can reinforce negative perceptions and encourage other patients to avoid that hospital. In an era of competitive healthcare, hospitals with a poor image will lose out. Patients have many options, and they tend to choose hospitals with a better image, even if the quality of service may be similar.

Indeed, within the S-O-R framework and relationship marketing theory, service quality is conceptualized as a stimulus that enhances positive internal evaluations such as satisfaction and trust, thereby reducing switching behavior rather than increasing it. Empirically, our findings show a negative and statistically insignificant path coefficient, leading to rejection of H4. This result aligns with prior studies in high-impact journals such as previous study on the *Journal of Service Research* (Keaveney, 1995) that poor service quality is a primary driver of switching behavior in service industries, implying that better service quality reduces switching and the *Journal of Business Research* (Choi et al., 2005), which demonstrate that higher service quality decreases switching behavior. Accordingly, we have revised the theoretical justification and clarified that service quality influences switching primarily through mediating mechanisms such as satisfaction

When it comes to patient transfers, service quality is not necessarily a deciding factor. Despite the fact that service quality is frequently seen as a critical component of patient happiness, several studies have demonstrated that its impact on patients' decisions to transfer hospitals is not always substantial. Many patients decide to switch services not solely based on service quality, but also on other factors such as treatment cost, hospital location, availability of facilities, or recommendations from family and friends. Patients' decisions to switch services are often influenced by personal perceptions and previous experiences, rather than solely by objective standards of service quality. For example, patients may feel more comfortable at a particular hospital due to the atmosphere or the relationship with the medical staff, even if the overall quality of service is similar.

Hospital Image and Service Quality on Patient Loyalty

Hospital image (Trisno & Berlianto, 2023); (Akbolat et al., 2023); (Aladwan, Salleh, Anuar, et al., 2021) and service quality (N. X. Nguyen et al., 2021); (Arman et al., 2023); (Sundram et al., 2022) have positive effect on patient loyalty. The public's opinion of a hospital's reputation, level of service, professionalism of its medical personnel, and the comfort of its facilities make up its image. Patient loyalty, or the propensity for patients to keep utilizing the hospital's services and refer others to it, is greatly influenced by this image. Patients feel more secure and trusted when they are in a hospital that has a good reputation. Patients are

more inclined to return for more care when they have faith in the hospital's skill and moral character. Patients are more likely to tell others about their great experiences when they project a favorable image. This word-of-mouth recommendation strengthens loyalty and attracts new patients. An image built on consistent and professional service strengthens the patient's emotional connection with the hospital, making patients feel valued and cared for. A hospital's image is not just about branding; it also reflects the quality of the relationship between the institution and its patients. Maintaining a positive image increases patient loyalty, fostering a mutually beneficial and sustainable relationship.

One important element influencing a patient's experience receiving medical care is service quality. When service meets or exceeds patient expectations, it fosters strong loyalty to a hospital. Friendly, prompt, accurate, and empathetic service makes patients feel valued and cared for. This satisfaction forms the foundation for long-term loyalty. Consistent and professional service creates a sense of security and trust in the hospital. Patients who trust the hospital are more likely to return and recommend the hospital to others. Hospitals with high service quality tend to have better patient retention rates. Patients feel less compelled to seek alternatives because they are already satisfied with the service. Satisfied patients share their positive experiences, strengthening the hospital's image and attracting new patients through personal recommendations. Service quality extends beyond medical techniques to encompass communication, comfort, and empathy. When all these elements are met, patient loyalty grows naturally and sustainably.

Patient Satisfaction on Hospital Switching and Patient Loyalty

Hospital switching is impacted by patient satisfaction, but in a good way. It can be describe that when patient has satisfactory, patient has desire to move to other hospital (Zam et al., 2025), however, on loyalty has effect (Kaban et al., 2022); (T. L. H. Nguyen & Nagase, 2021) and (Rahman et al., 2021). Satisfaction is an important factor, but it doesn't always guarantee treatment. The decision to change hospitals can be influenced by various external and internal factors that are more complex than simply the service experience. Patients may be satisfied with previous services, but their medical needs change. For example, they may require more advanced facilities, specific specialist doctors, or services not available at their previous hospital. Patients may move to a hospital that is closer to home, more accessible, or has shorter wait times, even if they were satisfied with their previous hospital. Satisfied patients may have increasing expectations. They may seek out hospitals that offer a more premium experience, more advanced technology, or a better reputation. Recommendations from family, friends, or social media can influence a patient's decision to try another hospital, even if they have no complaints about the previous service.

This result research acknowledges that a positive direct effect from patient satisfaction to hospital switching contradicts the widely accepted theoretical logic whereby greater satisfaction enhances retention and reduces switching intentions, as supported by conventional service marketing and healthcare behavior models (satisfied patients are less likely to terminate or change providers). Empirically, studies such as previous study (Henry et al., 2024) demonstrate that patient satisfaction decreases the likelihood of switching (not increases).

On the other hand, loyalty may result from patient pleasure. Patient satisfaction is the result of a positive experience during healthcare services, encompassing aspects of medical care, communication, facility comfort, and empathy from healthcare professionals. Patients are more likely to be loyal to the hospital when they are satisfied. Patients who are happy with the hospital are more inclined to use it again and refer others to it. Satisfied patients not only return

for treatment but also become "ambassadors" for the hospital, sharing their positive experiences with family and friends, strengthening its image and public trust. Hospitals that are able to maintain and improve patient satisfaction will reap the benefits of sustainable and mutually beneficial relationships.

Patient Satisfaction as a mediator

In order to bridge the gap between the impact of hospital image and service quality on loyalty and turnover behavior, patient happiness is an essential mediating element. Hospitals that build a positive image and provide high-quality services will increase satisfaction, ultimately strengthen loyalty and reduce the risk of patient turnover. Following treatment, the link between image, service, and patient behavior is mediated by patient satisfaction. In the context of healthcare, patient satisfaction is not only the end result of hospital service and image but also functions as a bridge (mediator) linking these factors with patient behavior, such as loyalty or the tendency to switch services. Research at Kardinah Hospital in Tegal shows that hospital image has a positive influence on patient satisfaction, and this satisfaction then positively influences patient loyalty. This means that a positive image will increase satisfaction, which in turn strengthens loyalty. High service quality also increases patient satisfaction (Fitriana & Wijono, 2023). However, in some studies, satisfaction does not always significantly mediate the relationship between service quality and loyalty, depending on the context and patient expectations. Low satisfaction can encourage patients to switch to another hospital. Conversely, high satisfaction can reduce patient intention to switch, thus acting as a barrier to switching behavior.

CONCLUSION

This study investigates how patient satisfaction influences patient loyalty and switching behavior by acting as a mediator between hospital image and service quality. The results show that patient loyalty and happiness will result from a positive hospital image and high-quality services. However, moving to a different hospital can also result from a positive hospital image or from a patient's contentment with medical services. This can happen because, even when the overall quality of care is comparable, patients may feel more at ease at a certain hospital because of the environment or their interactions with the medical personnel.

These results suggest that hospitals should improve their reputation by providing consistent, satisfaction-focused care if patient happiness mediates the link between image and loyalty. Hospitals must define how these variables influence each other and what this means for decision-making. Management needs to regularly evaluate patient perceptions of the hospital's image and integrate this into service training, such as empathy-based staff training and communication, as well as hospital image campaigns through social media and patient testimonials.

These findings strengthen the theory that satisfaction plays a mediating role in healthcare consumer behavior models. However, this needs to be expanded to include patient trust, emotional values, or digital experiences (e.g., use of hospital apps). More complex mediation and moderation models should also be developed, such as those involving age, education, or service type as moderators. Further research could also be conducted across different types of hospitals (private, public, and educational) and geographic regions to determine whether similar findings apply more generally.

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