



RESEARCH ARTICLE

The Cause-and-Effect Model of Service Quality of Private Hospital on Brand Loyalty, Mediated by Customer Satisfaction

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ARTICLE INFO	ABSTRACT
Received: May 22, 2024	This study aims to (1) Examine the goodness of fit of a causal model representing brand loyalty among private hospital customers using empirical data. (2) Identify the direct and indirect effects, mediated by satisfaction, of service quality—reliability, responsiveness, assurance, empathy, and tangibility—influencing the brand loyalty among private hospital customers in Thailand
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Keywords	Multi-stage random sampling was utilized to select a sample of 400 customer's private hospitals in Thailand. Data was collected through a self-administered questionnaire and then analyzed with descriptive statistics and covariance-based structural equation modeling (CB-SEM).
Service quality	
Private hospitals	
Brand loyalty	
Customer satisfaction	
Causal model	The results first suggest that the causal model is empirically consistent based on the goodness of fit index (GFI) values of P-Value (0.000 N=400), P-Value (0.000, N = 400), /df = 2.731, CFI = 0.978, TLI = 0.967, RMSEA = 0.066, and SRMR = 0.027 Second, service quality of private hospitals have direct and indirect effects on the brand loyalty of private hospitals mediated by customer satisfaction with a statistical significance of 0.01. Finally, of direct effect predictors, service quality of private hospitals have a stronger positive influence on brand loyalty of private hospitals with a statistical significance of 0.01..
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INTRODUCTION

During the past decade, the worldwide private hospital market is projected to grow from USD 3,168.57 billion in 2023 to USD 3,667.59 billion in 2024, representing a compound annual of growth rate (CAGR) of 15.7%, exceeding the CAGR of overall service industry at 8.7%. (Research and Markets, 2024; the Business Research Company, 2024) The market is expected to reach USD 6,489.38 billion by 2028 at a CAGR of 15.3%. (Research and Markets, 2024). Though premium pricing charge, private hospitals gained increased popularity among wealthy patients owing to shorter waiting time, specialized treatment, superior service quality. The dramatic growth was due to an aging population trend with the increasing incidence of chronic diseases such as heart disease, stroke, cancer, diabetes, kidney disease, and respiratory diseases together with the growth of medical tourism (Fact & Factors, 2024; Research and Markets, 2024) COVID-19 was one of the key growth drivers for private hospital growth because public hospitals alone couldn't handle the severe pandemic situation with the dramatic increase on the number of COVID-19 patients and private hospitals was also one of the touchpoints to provide COVID-19 vaccination in many countries, supporting public hospitals in disseminating the vaccine to the critical mass of the population. (Kasikorn Research Centers, 2023)

The number of private hospitals worldwide has observed a dramatic increase with market segmentation by patient profiles, diseases, capacity and location, for example, children's hospitals, multispecialty hospitals, acute care hospitals, small to large hospitals, as well as rural and urban hospitals. (Fact & Factors, 2024; IBISWorld, 2024) This implies a strong growth of the private hospital sector to serve increasing demand for the consumer.

The strong growth of the private hospital sector was due to the following reasons. Firstly, the state-of-the-art quality care fueled by technological advancement in medical technology that utilizes AI to support the screening and diagnosis of disease and medicine prescription to increase customer care and satisfaction. (Research and Markets, 2024) Secondly, the increasing popularity of medical tourism that people choose to travel abroad to receive high-quality hospital care and specialized services in a comprehensive package including travel, accommodation, and health care services. (Fact & Factors, 2024) Thirdly, the emergence of digital health care services in the form of telemedicine and electronic health records that enhanced convenience for the customer without the need to visit the physical hospital if there is not an urgent need. (Research and Markets, 2024) Last but not least, private hospitals faced increased competition from both local and international players amidst the increasing and evolving demand of customers for personalized and convenient services so that private hospitals must continuously improve their service quality to increase customer satisfaction and loyalty. (BAIN & COMPANY, 2022)

In Thailand, the hospital market is forecasted to reach USD 10.59 billion in 2024 with average revenue per customer of USD 147.40, mainly driven by private hospitals with premium pricing and high-quality personalized services. (Statista, 2024) The private hospital has registered strong growth with an annual growth of 10-13% from 2019 to 2021 and is projected to reach approximately USD 5.0 billion. (Kasikorn Research Centers, 2023; Krunsri Research, 2020) The customers are more than 93% Thai while the rest are foreigners who are expatriates and medical tourists. There are 378 private hospitals in 2019 with most of the medium size (capacity of 31-200 beds) at 67.4%, followed by small size (1-30 beds) at 26.7% and the rest are large-sized hospitals (more than 200 beds). (Krunsri Research, 2020). In 2019, *worldsbesthospitals.net* announced one of Thailand's hospitals among the five best in the world for medical tourism, *CEOWORLD* ranked the quality of Thai healthcare as the sixth best medical care and services in the world and *Numbeo* placed Thailand the eighth in its world rankings for healthcare systems and services. (Krunsri Research, 2020) The rankings were mainly driven by the skill and competency of health care professionals, speed in disease diagnosis and medicine prescription, friendliness and courtesy of the staff, high satisfaction towards responsiveness and value-for-money cost of service as well as convenient location and facilities. (Krunsri Research, 2020) Thai Government is committed to promote healthcare industry by positioning Thailand as a global medical hub and wellness by 2026 with the focus on segments of cosmetic surgery, anti-aging treatments, surgery, dental care, and fertility treatments. This was reassured by the World Health Organization (WHO) mentioning for a long time that Thailand's health care has been one of the best models available in the world given the low per capita income of Thai population. (Balabanova, McKee, & Mills, 2011) The key success factors of private hospital success post COVID-19 are because of the following reasons. Firstly, Thai private hospitals invested in advanced medical technology and infrastructure such as telemedicine and teleconsulting, drive in service, 60-second service from consultation to prescription, as well as virtual hospital service. Secondly, the co-creation of medical tourism campaign with the government to promote high service quality yet affordable health care services for both local and international customers. Thirdly, private hospitals elevated the service to the level of highly personalized care with shorter waiting time to enhance customer satisfaction and loyalty. (Seven Peaks, 2023)

Owing to the positive growth trend of private hospitals, there are severe competitions among key players in the market such as Praram 9 Hospital, Bumrungrad International Hospital, Kasemrad, Bangkok Hospital, Samitivej Hospital, Ramkhamhaeng Hospital, and Phyathai hospital who are

committed to improve their service quality through technology enhancement and superior high touch services through customer relationship management, customized services, proactive communication, empathy and care demonstration to increase differentiation and retain their customer base. (Healthcare IT News, 2019) Previous research studies have revealed that private health care service providers were placing high emphasis on service quality to increase customer satisfaction because they found that service quality was positively related to satisfaction. (Fatima, Malik, & Shabbir, 2017; Sharka, Sedayo, Morad, & Abuljidayel, 2024; Al-Balas, Al-Maqableh, & Odeibat, 2024; Handoko, & Handayani, 2023; Kalaja, Kurti, Myshketa, 2023) In addition to that, service quality was found to have direct effect towards both satisfaction and loyalty and has indirect effect on brand loyalty through satisfaction, identifying that satisfaction is the essential mediator between service quality of hospitals and brand loyalty. (Fatima, Malik, & Shabbir, 2017; Lin, & Yin, 2022; Fatimah, Idrus, Mukhtar, Salam, & Ismawati, 2022; Permata, & Fachira, 2023) However, there are limited amounts of study for the influence of service quality on customer satisfaction and loyalty in Thailand given that Thailand has strong ambition to become the medical hub in the region and the world. Without knowing the influence of service quality on satisfaction and loyalty, it would be difficult to build the relevant strategy for both the short term and long term. Therefore, the current study contributes to new knowledge by reviewing the previous literature and research study to build a hypothesis structural equation modelling of the influence of the service quality of private hospitals on the brand loyalty, mediated by customer satisfaction. This is achieved by testing the goodness of fit of a cause-and-effect model of the service quality of private hospitals affecting the brand loyalty among the customers in Thailand.

Research Objectives

1. Examine the goodness of fit of a causal model representing brand loyalty among private hospital customers using empirical data.
2. Identify the direct and indirect effects, mediated by satisfaction, of service quality—reliability, responsiveness, assurance, empathy, and tangibility—influencing the brand loyalty among private hospital customers in Thailand

THEORETICAL FRAMEWORK

Service Quality

Service quality has been widely used for measuring service quality across different types of service businesses from financial services, airline, hotel, and hospitals. (Kerin, and Hartley, 2021) Service quality, can be called SERVQUAL model, was proposed by Parasuraman, Zeithaml, and Berry (1988), to measure the gaps between customer expectations and perceptions of service performance. The SERVQUAL model has been adapted for use in various settings, including hospitals, to measure service quality from the perspective of customers. (Manulik, Rosińczuk, Karniej, 2016; Mohammadi-Sardo, Salehi, 2018) The core idea of SERVQUAL is to measure the quality of service based on five key essential dimensions: tangibility, reliability, responsiveness, assurance, and empathy. (1) Tangibility refers to the physical evidence of the service, such as the appearance of physical facilities, equipment, service personnel, and other materials. For the context of hospital, tangibility refers to cleanliness of the facilities, state-of-the-art medical equipment, and appearance of service staff. In a hospital setting, the tangibles component is very important because it directly impacts the first impression of the customer of the facility. (2) Reliability measures the ability of service staff to perform the committed service efficiently and effectively to ensure the consistency and dependability of the service. Adherence to scheduled appointments, accuracy and consistency in service are included in this dimension. (3) Responsiveness assesses the willingness of service personnel to provide essential support to customers by providing prompt service in a timely manner. Speed and willingness of hospital staff, promptness in services, and timely responses to inquiries are key measurements. (4)

Assurance refers to the competency and courtesy of employees to deliver credibility and confidence of the service. The assurance aspect of hospital involves capability and manners of service personnel as well as their ability to communicate effectively to foster customers' confidence. (5) Empathy assesses the delivery of caring, personalized attention and dedication to customers through regular interaction with the customer. For hospital context, this dimension can be measured through personalized care, understanding of customers' needs, and provision of emotional support. Previous research studies revealed that service quality have direct influence towards brand loyalty and indirect influence through customer satisfaction on brand loyalty. (Fatima, Malik, & Shabbir, 2017; Lin, & Yin, 2022) Therefore, service quality is designed to be the independent variable for this study.

Customer Satisfaction of private hospitals

Customer satisfaction is one of the classic concepts in marketing theory and practice, demonstrating the degree to which a customer's expectations of a product or service are met or exceeded or underperformed. The concept is multidimensional because it includes various dimensions such as emotional response, fulfillment of needs, and overall contentment with the experience. Oliver (1980) mentioned that satisfaction is experienced when the perceived performance meets or exceeds the customer expectations, while dissatisfaction is felt when performance fails to live up to expectations. Adams (1965) stated that customers compare their inputs or investment such as time, money, and effort and outputs or benefits received with those of others and if they perceive a fair exchange when comparing with others, they are likely to be satisfied. Therefore, satisfaction is a result of the perceived value of the product or service, which is the difference between what the customer receives as benefits and what they give for exchange in terms of cost for acquisitions. Higher perceived value toward the product or service leads to higher customer satisfaction (Zeithaml, 1988). In the context of healthcare, customer satisfaction is a vital factor of the quality of care provided by hospitals. It embraces customers' experiences with care and treatment, interpersonal communication with service staff, the physical environment, and administrative processes. High levels of customers' satisfaction are correlated with better customer retention, and a positive reputation for the healthcare provider. In this research, customer satisfaction will be measured through 3 important aspects: the overall quality of care, communication and personal interaction with service providers, and the ease and efficiency of the administrative processes. (Oliver, 1980; Parasuraman, Zeithaml, & Berry, 1988; Grönroos, 1984) By focusing on these areas, private hospitals can gain valuable insights into their service quality and identify areas for improvement, ultimately enhancing patient satisfaction and brand loyalty. Customer satisfaction with private hospitals was affected by service quality. (Handoko, & Handayani, 2023; Kalaja, Kurti, Myshketa, 2023)

Brand Loyalty of private hospitals

Brand loyalty is a pivotal concept in marketing and consumer behavior, reflecting the strength of a consumer's preference for a specific brand over time. This preference is often demonstrated through repeated purchases and a consistent choice of brand despite the availability of alternatives. (Kotler, Keller, & Chernev, 2022) Understanding brand loyalty is crucial for businesses aiming to maintain a competitive edge, as loyal customers are more likely to engage in positive word-of-mouth, are less sensitive to price changes, and contribute to stable revenue streams. (Kotler, & Armstrong, 2018) It encompasses both behavioral and attitudinal dimensions. Behavioral loyalty is evident in the consistent purchasing patterns of consumers, while attitudinal loyalty reflects a deeper emotional and psychological attachment to the brand. This duality highlights that true brand loyalty goes beyond mere repurchase behavior and includes a favorable attitude and commitment to the brand (Oliver, 1999). Behavioral loyalty is the observable aspect of brand loyalty. It is typically measured through metrics such as repeat purchase rates, purchase frequency, and share of category requirements, which indicates the proportion of purchases within a category that are devoted to a specific brand. Behavioral loyalty can be influenced by factors such as convenience, habit, and

contractual obligations. Attitudinal loyalty delves into the psychological and emotional facets of consumer loyalty. It reflects the consumer's favorable disposition towards a brand, characterized by positive beliefs, feelings, and intentions. Attitudinal loyalty often leads to behaviors such as recommending the brand to others, resisting competitive offers, and displaying a willingness to pay a premium price. Brand loyalty can be measured by three dimensions of brand loyalty: advocacy, future usage, and comparative satisfaction. (Oliver, 1980; Dick, & Basu, 1994; Reichheld, 2003) Latest research found that brand loyalty of private hospital business was influenced by service quality and customer satisfaction. (Fatimah, Idrus, Mukhtar, Salam, & Ismawati, 2022; Permata, & Fachira, 2023)

Based on these observations and studies related to influencing factors of the brand loyalty of private university, two research hypotheses have been formulated alongside a research framework:

1. The proposed causal model of the brand loyalty of private hospitals is consistent with empirical data.

2. Mediated by customer satisfaction, the service quality has both direct and indirect effects on the brand loyalty of private hospitals in Thailand.

Research Framework

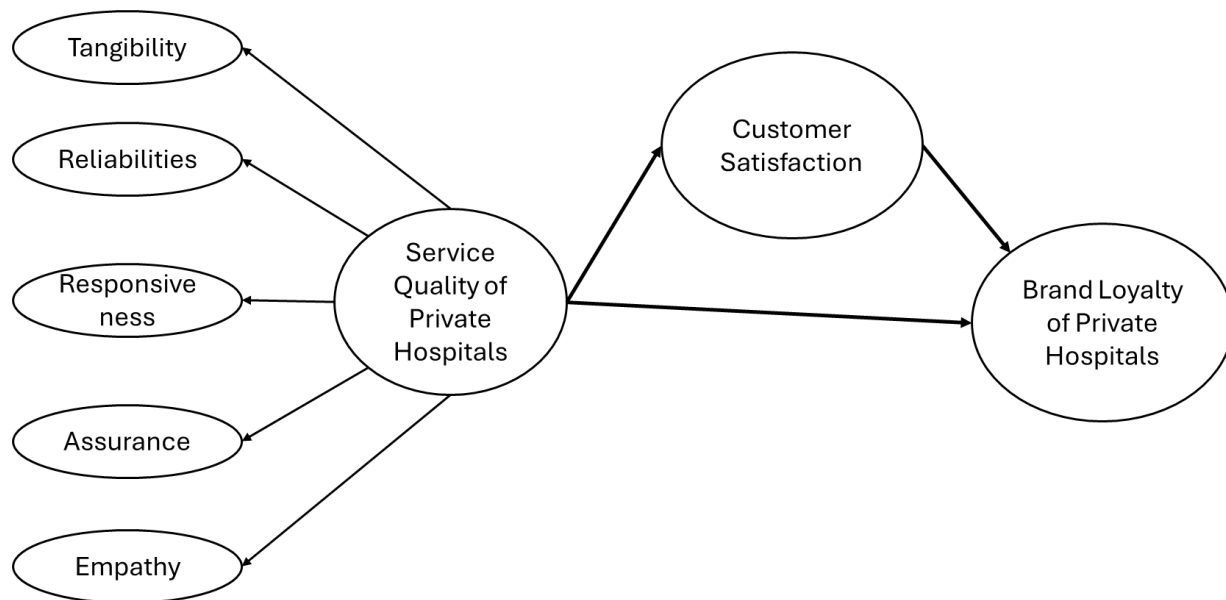


Figure 1: The Hypothesized Paths of the Proposed Structural Model

Source: Prepared by the Author

METHODOLOGY

Population

The population considered in this study comprises Thai people who are aged above 18 years old and have experienced the service of private hospital in the past 6 months. The exact amount of population is unknown since there's consolidated tracking of customers of private hospitals in Thailand.

Sampled Data

Structural equation modeling (SEM) is an analysis method for testing a research hypothesis where a large sample size is required (Viratchai, 1999). Bentler and Chou (1987) suggest that a proper amount sample for estimating SEM parameters should not have less than 10 samples per one

observed variable, whereas Kline (2010) suggests a range of sample sizes from 10–20 units per observed variable or indicator. The structural equation model proposed in this study consists of 21 observed variables and 15 sample units per observed variable, with a minimum sample size of 315, which provides sufficiently robust data. This data has been extracted through multi-stage random sampling. First, Thailand was divided into 4 regions: North, South, Northeast, and Central according to National Statistical Office of Thailand. Then, one region was randomly selected with the result of central region. Then, a province was randomly selected, with the result of Nakhon Nayok province. A final systematic random sampling process was performed to collect a minimum of 315 samples, ensuring the sample data requirements have been achieved.

Research Instruments

A self-administered questionnaire was developed for this study containing four sections. The first ascertains the demographic profile of each respondent, including gender, age, occupation, education, and household income. Each question was formatted as a multiple-choice checklist. The second section concerns the service quality and includes 15 questions with three questions for each aspect of service quality. A five-point rating scale was used for all these questions. The third section covers customer satisfaction with private hospitals with three questions. These were measured using a five-point rating scale. Finally, the fourth section evaluates the brand loyalty of private hospitals with three questions measured using a five-point rating scale.

All questions were reviewed by three subject matter experts to ensure content validity, passing an index of Item Objective Congruence (IOC) threshold score higher than 0.5. All questions received a score of one. Next, the questionnaire was administered to 30 trial participants as a pilot study in order to test the reliability using the Cronbach's Alpha coefficient and the Pearson correction coefficient. The Cronbach's Alpha coefficient for all latent variables is higher than 0.80 (Carmines & Zeller, 1979), and the corrected-item total correlation is higher than 0.20. The full reliability test results are listed in Table 1.

Table 1: Questionnaire Reliability Test Results

Latent Variables	Number of Questions	Cronbach's Alpha Coefficient	Corrected-Item Total Correlation
1. Reliability	3	0.944	0.839–0.906
2. Responsiveness	3	0.950	0.889–0.906
3. Assurance	3	0.941	0.848–0.925
4. Empathy	3	0.965	0.913–0.941
5. Tangibility	3	0.951	0.883–0.913
6. Satisfaction	3	0.947	0.760–0.819
7. Brand Loyalty	3	0.901	0.866–0.906
Total	21	0.960	0.381-0.855

Source: Results of analysis by the author

Data Collection

The questionnaire was distributed and collected in June 2024. Two screening questions were used to qualify the intended respondents: (1) Are you 18 or older? And (2) Have you experienced private hospital service in the past 6 months? Total 400 samples were collected for this study.

Data Analysis

The data was analyzed using descriptive statistics to describe the socio-demographics of the samples with frequency and percentage. SEM was employed to test the hypotheses on the structural equation model goodness of fit and the direct and indirect effects of the service quality of private hospitals on the brand loyalty of private hospitals, mediated by customer satisfaction.

RESULTS & DISCUSSION

Results

From the calculated demographic information, the majority of participants in the sample are female (66.3%), aged between 26-33 years old (24.0%), and work as an employee (33.8%). The majority have bachelor's degree (40.5%) Approximately one third of the participants have an average monthly income of 50,001 to 100,000 baht (33.0%). Full demographic information is presented in Table 2.

Table 2: Sample Characteristics of the Survey Respondents

Variable	Categories	Respondents (n = 400)	Percentage
Gender	Male	135	33.6
	Female	263	66.3
Age	18-25	68	17.0
	26-33	96	24.0
	34-41	88	22.0
	42-49	93	23.3
	Above 50	55	13.8
Occupation	Government Officer	51	12.8
	Employee	135	33.8
	Business Owner	116	29.0
	Freelancer	81	20.3
	Retired	17	4.3
Education	Below bachelor's degree	83	20.8
	Bachelor's Degree	162	40.5
	Above bachelor's degree	155	38.8
Average Monthly Income	Below 15,000 Baht	41	10.3
	15,001-30,000 Baht	75	18.8
	30,001-50,000 Baht	82	20.5
	50,001-100,000 Baht	132	33.0
	Above 100,000 Baht	70	17.5

Source: Results of analysis by the author

A structural equation model on the decision to enroll in an open university incorporating the service marketing mix and brand image has been developed based on the literature review discussed in the research framework. The criterion used to measure the goodness of fit between the hypothesized model and the empirical data follows the approach established by Hair, Black, Babin, Anderson, and Tatham (2006), as detailed in Table 3.

Table 3: The Proposed Model Goodness of Fit Index (GFI) for More Than 250 Samples on the 30 Observed Variables and Questions

Statistics	Criteria
χ^2 P-Value	Significant P-value expected
CFI or TLI	Above 0.90
SRMR	0.80 or less (with a CFI above 0.92)
RMSEA	Below 0.70 (with a CFI of 0.90 or higher)

Source: Results of analysis by the author

Basic assumptions regarding the multicollinearity incidence must be tested before proceeding to the structural equation analysis. The Pearson correlation coefficient considers the correlation among the 21 observed variables, 15 of which are independent variables, 3 are mediated variables, and 3 are dependent variables.

All independent variables have a positive correlation with the other dependent variables and the brand loyalty of private hospitals with a significance level of 0.01, ranging from 0.38–0.71. The Pearson correlation coefficients of the 6 dependent variables are between 0.35–0.75; these figures are lower than the target criteria of 0.8, suggesting that the causal variables do not demonstrate a problem with multicollinearity.

The goodness of fit results of the proposed causal model with the collected empirical data have been analyzed with the Mplus program using the maximum likelihood method. The causal model was initially determined not to be consistent with the empirical data, so a modification allowed some observed variables to correlate. As a result, the final proposed causal model is consistent with the empirical data with GFI values of χ^2 P-Value (0.000, N=400), χ^2 /df = 2.731, CFI = 0.978, TLI = 0.967, RMSEA = 0.066, and SRMR = 0.027, as presented in Table 4.

Consistent with empirical data, the proposed causal model suggests that the service quality and customer satisfaction have both direct and indirect effects on the brand loyalty of private hospitals. For direct effects, this causal model features four paths. Path 1 is SAT → LYT, implying that customer satisfaction has a positive direct effect on the brand loyalty with a 0.01 significance level and a standardized effect size (β of 0.25 ($t = 2.85$)). Path 2 follows SEQ → LYT, meaning that service quality of private hospitals positively influences the brand loyalty with a 0.01 significance level and a standardized effect size (β of 0.38 ($t = 4.58$)). Path 3 is SEQ → SAT, showing that service quality of private hospitals has a positive effect on the brand loyalty at a 0.01 significance level and a standardized effect size (β of 0.81 ($t = 39.84$)). These results are presented in Table 4 and Figure 2.

For the indirect effects, the proposed causal model confirms one path, which is SEQ → SAT → LYT, demonstrating that service quality of private hospitals indirectly influences the brand loyalty, mediated by customer satisfaction with a standardized effect size (β (equal to β SEQ → SAT × β SAT → LYT = 0.81 × 0.38 = 0.31, resulting in the total effect of 0.69. This indirect effect result is also presented in Table 4 and Figure 2.

Table 4: Effects of the service quality and customer satisfaction on brand loyalty of private hospitals

Dependent Variables	Customer Satisfaction (SAT) R ² = 0.66				Brand Loyalty of Private Hospitals (LYT) R ² = 0.36			
	DE	t-stat	IE	TE	DE	t-stat	IE	TE
Customer Satisfaction (SAT)	-	-	-	-	0.25**	2.85	-	0.24
Service Quality (SEQ)	0.81**	39.84	-	0.81	0.38**	4.58	0.31	0.69
Goodness of fit index (GFI)	χ^2 P-Value (0.000, N = 400), χ^2 /df = 2.731, CFI = 0.978, TLI = 0.967, RMSEA = 0.066, and SRMR = 0.027							

** = 0.01 significance level, DE = direct effect, IE = indirect effect, TE = total effect

Source: Results of analysis by the author

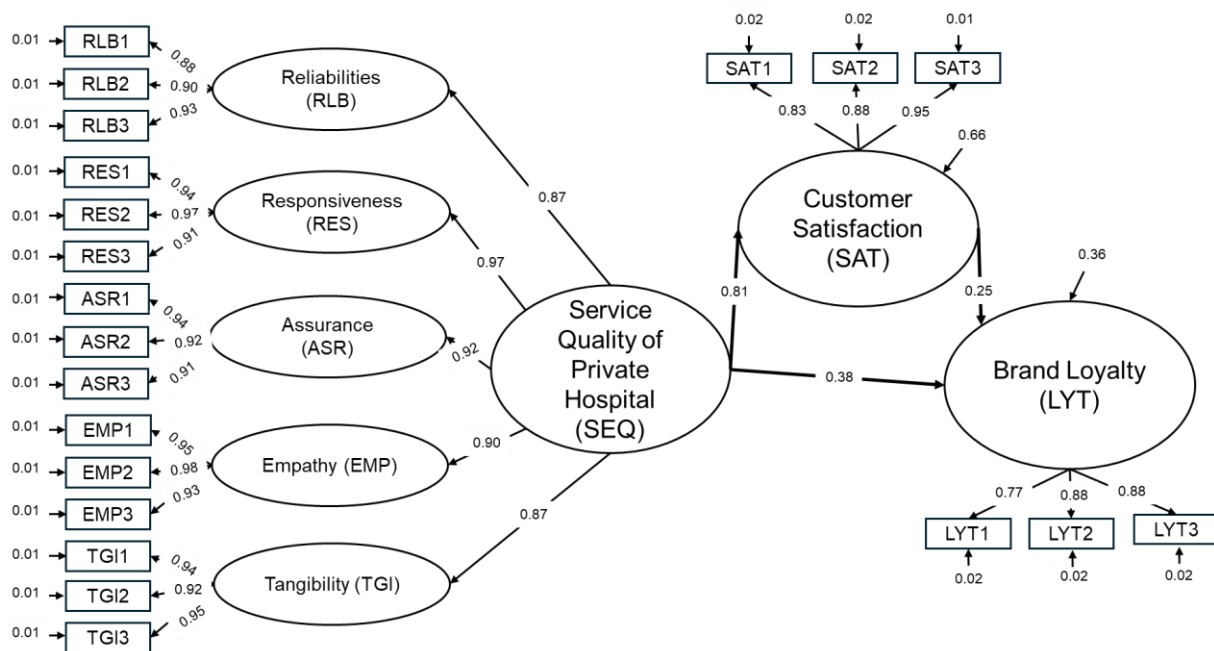


Figure 2: The Proposed Structural Model for the Impact of the service quality on the brand loyalty of private hospitals

Source: Results of analysis by the author

Discussion

This study provides perspective on the influence of service quality of private hospitals and customer satisfaction on the brand loyalty of private hospitals in Thailand. The findings suggest that (1) the proposed structural equation model of the service quality of private hospitals and customer satisfaction influencing the brand loyalty of private hospitals is consistent with empirical data, and (2) the service quality of private hospitals have both direct and indirect influences on the brand loyalty of private hospital mediated by customer satisfaction, with a significance level of 0.01. These results are consistent with Fatima, Malik, & Shabbir (2018) and Lin, & Yin, (2022) who found that the better service quality of private healthcare organizations leads to better satisfaction and loyalty among customers and service quality have a positive effect on the loyalty through the satisfaction of

the customers. In addition, Sharka, Sedayo, Morad, & Abuljadayel (2024) revealed that the service quality led to revisit intention of the customer in the healthcare business. This implies that if the private hospitals or healthcare business owners would like to enhance their customers' loyalty, they will have to focus on the service quality as the main strategic focus to directly and indirectly influence brand loyalty.

Of all five key elements, they are all important indicators of service quality of private hospitals with the ranking from most important aspect as follows: responsiveness, assurance, empathy, reliability, and tangibility. This was found to be different from other studies on service quality of private healthcare in other countries such as Khoso, Akhtar, Narejo, Mallah, Vighio, & Sanjrani (2022) and Sritharan, V. (2014) found out the tangibility and reliability are among topmost important aspects of service quality. For the case of private hospitals in Thailand, tangibility and reliability are equally ranked with lowest indicator score because key private hospital players have established acceptable standard on tangibility through modern physical evidence of buildings and devices as well as reliability driven by consistency of services. This is evident that many private hospitals have local and internally accredited with JCI (Joint Commission International), GHA (Global Healthcare Accreditation), and HA (Hospital Accreditation). The most important aspect of service quality among private hospitals in Thailand is responsiveness, possibly since Thai consumer's places high importance on the willingness and speed of service. (Dheva-Aksorn, & Hongsrnagon, 2017)

For the direct effect of the brand loyalty of private hospitals, service quality of private hospitals is assessed to have the strongest positive influence, followed by the direct effect of customer satisfaction. These results are not consistent with Kristinawati, Gunardi, & Fushen. (2023) and Fatima, Malik, & Shabbir (2018) who found out that customer satisfaction has stronger influence than service quality towards brand loyalty of hospitals. This is so because good service quality helps increase retention rates and becomes the key competitive advantage of the service business. (Reichheld & Sasser, 1990; Parasuraman, Zeithaml, & Berry, 1985) As a result, private hospitals should carefully design and manage the service quality to meet or exceed customer expectations to increase brand loyalty. The brand loyalty aspect involves repeat purchase of service, brand advocacy as well as comparative satisfaction over other competitors. Customer satisfaction has a direct positive influence on brand loyalty because satisfied customers are not likely to turn to other competitors' brands since there are both functional and emotional uncertainties of brand switching. (Thomson, MacInnis, & Park, 2005) Furthermore, customers are more likely to recommend the brand to their friends and family through word-of-mouth communication. (Reichheld, 2003) With the strong impact of social media, customers tend to share their experiences whether satisfied or unsatisfied through various platforms and this tend to affect the perception of online audiences towards the service of private hospitals.

The findings of the current study largely contribute to the design and management of the service quality and its application to the private hospital context by considering customer satisfaction as an important mediator between the service quality and the brand loyalty of private hospitals. This study highlights the differentiated influence among 5 components of service quality for private hospitals specifically. Therefore, the research results here is beneficial for service marketing academic and management of private hospitals to design and optimize a service quality capability to create a better customer satisfaction and hence escalating brand loyalty among private hospital customers.

RECOMMENDATIONS

The management or marketers of private hospitals should build a service quality strategy by consistently measuring both customer satisfaction and brand loyalty to ensure that the business delivers superior service quality versus customer expectations as well as competitors' performance. This can be done through systematic customer satisfaction survey post receiving services in the form of online or offline as well as quarterly brand loyalty tracking study. These inputs are crucial for

redesigning the upgraded service quality to meet the evolving needs of the customer in the very competitive private healthcare landscape.

FUTURE RESEARCH

The future research can be conducted to measure the specific brand of private hospitals to assess the proposed model with empirical data and the qualitative understanding is recommended to inquire on issues in each element of the service quality since each private hospital brand may have unique product and brand positioning governing the service quality design.

CONCLUSION

The results presented by this study suggest direct and indirect influences of the service quality on the brand loyalty of private hospitals based on empirical data collected through a survey of the target population. These supported causal relationships are outlined in Table 5.

Table 5: Hypotheses Test Results

Research hypotheses	Result
1. The proposed causal model of the factors influencing the brand loyalty of private hospitals is consistent with empirical data.	Supported
2. The identified factors have direct and indirect effects on the brand loyalty of private hospitals.	Supported
2.1 Direct effects	
2.1.1 Service quality has a positive direct effect on the brand loyalty of private hospitals.	Supported
2.1.2 Customer satisfaction has a positive direct effect on the brand loyalty of private hospitals.	Supported
2.2 Indirect effects	
The service quality of private hospitals indirectly influences the brand loyalty of private hospitals, mediated by customer satisfaction.	Supported

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