Original Article

# THE IMPACT OF FACILITIES AND SERVICE QUALITY ON PRIVATE HOSPITAL CLIENTS' SATISFACTION

**Iswati[1]\*, Siti Nur Qomariah[1], Khairul Azmi Abd Kadir[2]**
[1] Nursing Department, Adi Husada Health Science College, Indonesia
[2] UMMC, University of Malaya, Malaysia
*Corresponding Author, E-mail: iswati@adihusada.ac.id

## ABSTRACT

**Background.** Market rivalry is getting fiercer both at the domestic level and internationally. As a result, many private hospitals based on hospital business companies compete with one another to win over clients by establishing objectives like offering first-rate facilities and customer service.

**Research Purpose.** Determining the impact of facilities and service quality on private hospital clients' satisfaction was the aim of this study.

**Research Method.** This study uses quantitative statistics as its methodology, gathering data via documentation, questionnaire distribution, and observation. The Accidental Sampling approach was used by the author to sample the population. In this study, 80 respondents made up the sample. Data quality testing, multiple linear regression analysis, hypothesis testing, partial and simultaneous determination coefficient testing, and the classical assumption test are the methods of data analysis that are employed.

**Findings.** Customer satisfaction is significantly impacted by both service quality (p=0.000) and facility factor. Additionally, customer happiness is significantly impacted by both facility factors and service quality.

**Conclusion.** Client happiness is significantly impacted by service quality, facility concerns, and changeable facilities.

**Keywords:** Customer Satisfaction, Facility Factors, Private Hospitals, Service Quality.

## BACKGROUND

Both domestically and internationally, market competition is getting tougher. Therefore, many businesses compete with each other to win the hearts of customers in order to achieve goals, such as providing excellent facilities and customer service. The tighter competition that exists indicates that every company needs to strengthen its position by improving and developing new concepts in managing its business, so that the company can consistently develop and survive[1, 2]. In achieving customer loyalty, a service must also be considered in order to know the extent to which the service has succeeded in meeting the expectations, wants, and needs of the customer. This can be known from how customers use the products and services offered, indicating that the company has succeeded in achieving customer loyalty.

Currently, there are many companies that focus on the service sector, vehicle service is one of the growing service industries, which every year pops up vehicle service services so that this becomes a main factor of competition so and customers are interested in using these services. Current and future hospital services are business-like, a type of socio-economic health service effort, namely an effort which, although social in nature, attempts to obtain financial benefits through professional management while paying attention to economic principles [3].

This is considered important for a private hospital in maintaining a good image in the eyes of customers because considering that customers are assets; therefore, decreasing customer satisfaction is not a problem that can be left without action to immediately fix it. As a company engaged in vehicle repair services that interact directly with customers, customer satisfaction must be maintained properly for the sustainability of the company's business activities.

As for the problems regarding service facilities, namely the waiting room, which is less comfortable for customers, and the design and lighting that are not harmonious, besides that the cleanliness of the toilet is fairly poorly maintained, so that the state of such facilities can cause uncomfortable customers and decreased customer satisfaction. In addition, another problem related to service quality is the lack of supporting equipment in carrying out vehicle repair services, and the completeness of spare parts needed by customers that which has an impact on customers who have difficulty finding services to repair their vehicles. Both problems in these variables result in a decrease in customer satisfaction.

In order for a company to be a winner in the competition, it must improve not only the quality of its products but also the quality of its services. When the difference in product quality between similar companies is getting smaller, the quality of service provided by a hospital employee to its clients is the key to winning the competition. The success or failure of a company is determined by its ability to provide services that satisfy customers. Clients' satisfaction is important to win the competition. However, it is not impossible if the hospital fails to provide the finest care possible to its clients[4]. The aim of this study was to determine the impact of facilities and service quality on customer satisfaction.

**RESEARCH METHOD**

This type of research uses quantitative statistics, namely testing using data to prove the hypothesis. Quantitative methods are research based on the philosophy of positivism, which aims to study certain populations or samples, with random sampling and data collection using instruments, and statistical data analysis[5]. The population in this study was all customers of a private hospital in Surabaya City who came in December 2024. This research took place in December 2024. The authors sampled the population along with the Accidental Sampling technique and collected data using a questionnaire.

This study uses the Classical Assumption Test, including the Multicollinearity Test, Normality Test, and the Heteroscedasticity Test. The normality test aims to determine whether a data distribution is normal or not. Basically, the normality test compares the data we have with data that has a normal distribution, with the same mean and standard deviation. The normality test has the following criteria: if the significance value> 0.05, then the value can be declared normal. If the significance value <0.05, then the value is not normally distributed.

The purpose of the multicollinearity test, according to Ghozali, is to determine whether the independent variable is also the dependent variable. If there is no association between independent variables, then the variables are said to be orthogonal. A variable can be deemed orthogonal if there is no association between the independent variables[6]. The multicollinearity test has the following criteria: if the VIF value is <10, it can be stated that the regression is free of multicollinearity. If the VIF value> 10, it can be stated that the regression is not free of multicollinearity.

# FINDINGS

Based on the validity test with R-table 0.254, all statement items used can be said to be valid, because R-count > R-table. The results of the reliability test above show that the coefficient value a (Alpha) through the variables shows results with various values, as well as the variable Cronbach's Alpha value> 0.60; thereforeThis study's measuring tool is regarded as reliable. The regression equation in this study has met the normality test. This shows that the residual distribution is normal. Therefore, the test results indicate that the residual data is normally distributed and the regression model can be used in this study.

Table 1. Validity, Reliability, and Normality Test

| Variable | Symbol | R-count | Result |
|---|---|---|---|
| Facility Factors (X1) | X1.1 | 0.498 | Valid |
| | X1.2 | 0.412 | Valid |
| | X1.3 | 0.465 | Valid |
| | X1.4 | 0.439 | Valid |
| | X1.5 | 0.523 | Valid |
| | X1.6 | 0.453 | Valid |
| | X1.7 | 0.461 | Valid |
| Service Quality (X2) | X2.1 | 0.400 | Valid |
| | X2.2 | 0.430 | Valid |
| | X2.3 | 0.511 | Valid |
| | X2.4 | 0.595 | Valid |
| | X2.5 | 0.403 | Valid |
| Customer Satisfaction (Y) | Y.1 | 0.416 | Valid |
| | Y.2 | 0.477 | Valid |
| | Y.3 | 0.481 | Valid |
| | Y.4 | 0.467 | Valid |
| | Y.5 | 0.520 | Valid |
| **Variable** | **Symbol** | **Cronbach's Alpha** | **Result** |
| Facility Factors | X1 | 0.844 | Reliable |
| Service Quality | X2 | 0.846 | Reliable |
| Customer Satisfaction | Y | 0.764 | Reliable |
| **Kolmogorov-Smirnov Sig (2-tailed)= 0.210** | | | **Normal distribution** |

Table 2. Regression Test

| Model | Unstandardized B | Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. | Colinearity Statistics Tolerance | VIF |
|---|---|---|---|---|---|---|---|
| (Constant) | 5.894 | 2.722 | | 2.185 | 0.033 | | |
| Facility Factors (X1) | 0.271 | 0.085 | 0.284 | 2.547 | 0.014 | 0.833 | 1.201 |
| Service Quality (X2) | 0.428 | 0.102 | 0.468 | 4.196 | 0.000 | 0.833 | 1.201 |

The test results on each variable in this model meet these assumptions. The Service Facility variable (X1) has a Tolerance value (0.883> 0.10) as well as VIF (1.201 < 10), so there is no multicollinearity. The Service Quality variable (X2) also shows a Tolerance value

(0.883> 0.10) and VIF (1.201 < 10), which means there is no multicollinearity. Overall, all independent variables in this model fulfill the assumption of the absence of multicollinearity according to the criteria. Therefore, this model can be applied for regression analysis without the risk of distortion due to the strong linear relationship between the Customer Satisfaction (Y) variables.

Multiple Linear Regression Analysis showed the regression equation based on unstandardized coefficients is:

$$Y = 5.894 + 0.271X1 + 0.428X2$$

Based on the regression equation above, it is interpreted as follows:

a. Constant (5.894): If the value of Service Facilities (X1) and Service Quality (X2) is equal to zero, then the predicted value for Customer Satisfaction (Y) is 5.894.

b. Service Facility (X1): The coefficient of 0.271 indicates that each one-unit increase in Service Facilities can increase satisfaction by 0.271. This variable shows a Sig value. 0.014, there is a significant influence on Customer Satisfaction.

c. Service Quality (X2): The coefficient of 0.428 shows that Customer satisfaction will rise with each unit improvement in service quality by 0.428. This variable shows a Sig value. 0.000 is smaller than 0.05, which means there is a significant influence on Customer Satisfaction.

Table 2 showed that the t-count of Facility factors (X1) is 2.547. Ho is rejected t-count exceeds t-table (2.547> 2.002), it can be concluded that this matter shows that the Facility factors (X1) partially has a significant effect on Customer Satisfaction (Y) because t.sig (0.014) is less than 0.05 ($\alpha$) so partially Facility factors (X1) has a positive influence on Customer Satisfaction (Y). Based on t-count of Service Quality (X2) is 4.196. Ho is rejected t-count exceeds t-table (4.196> 2.002) so it can be concluded that this matter shows that Service Quality (X2) partially has a significant effect on Clients' Satisfaction (Y) because t.sig (0.000) is less than 0.05 ($\alpha$) so partially Service Quality (X2) has a positive effect on Customer Satisfaction (Y).

Table 3. ANOVA Test

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 139.573 | 2 | 69.787 | 17.925 | 0.000 |
| Residual | 201.677 | 77 | 3.538 | | |
| Total | 341.250 | 79 | | | |

Based on the results of the regression test together (F test) in the table, the value of Fhitung = 17.925 and Significance = 0.000. Because Fcount>Ftabel (17.925> 3.20), the null hypothesis (Ho) is rejected. The significance value (0.000 < 0.05), which shows that the results are statistically significant. Therefore, all independent variables in the model, Facility factors (X1) as well as Service Quality (X2), simultaneously have a significant effect on Customer Satisfaction (Y). In other words, the three variables, Facility factors (X1) as well as Service Quality (X2), together make a meaningful contribution in explaining variations in Customer Satisfaction (Y).

**DISCUSSIONS**

Customer satisfaction is significantly impacted by both facility factors and service quality. This research result is in line with the previous research that service quality has a positive effect on customer satisfaction[7]. Customer satisfaction is a multifaceted construct influenced by a variety of factors, ranging from tangible product attributes to intangible service aspects[8]. It represents overall assessment of a product or service by a consumer, determined by the extent to which their needs and expectations have been met.[9]. This perception is inherently psychological and subjective, varying from person to person based on individual experiences, expectations, and prior knowledge[10]. Consequently, businesses must consider a wide range of factors when striving to improve customer satisfaction, as it is a crucial indicator of performance and a key driver of customer retention and loyalty[11].

Customer satisfaction can be understood as a personal assessment that is greatly affected and can be experienced in a variety of situations, connecting to both goods and services. It is an emotional or cognitive reaction to a particular experience that is closely tied to a person's expectations. Customer satisfaction results from comparing expectations with the perception of the service received, with companies often using questionnaires to measure it, including closed and open response options, or quality models[12]. Customer satisfaction measurement is complicated by the fact that individual attitudes on quality vary greatly; what one person considers outstanding quality, another may consider average[13].

In the realm of retail, the perceived quality of service plays a pivotal role in shaping customer satisfaction, with satisfied customers more likely to become repeat purchasers and brand advocates, contributing to an expanded customer base through positive word-of-mouth.[14, 15]. Conversely, dissatisfied customers can lead to a significant loss, potentially deterring numerous prospective clients, which underscores the critical need for businesses to prioritize and maintain high levels of customer satisfaction by addressing the gaps between expected and perceived service quality[16]. Delivering consistent service that aligns with customer expectations is essential for achieving service quality. Customer satisfaction is more than just a response to a product's or service's actual performance or quality. It is significantly influenced by expectations developed prior to consumption, which can be shaped by marketing communications, word-of-mouth referrals, and past experiences[17, 18]. These expectations act as a benchmark against which customers assess their real experiences, and any discrepancy can affect their level of satisfaction. In essence, a customer's decision to purchase services is frequently motivated by specific needs[15].

Service quality is not just about delivering a functional product, but also about creating an overall positive experience for the customer. This experience encompasses factors such as the attitude and behavior of service personnel, the actual setting in which the service is provided, as well as the efficacy and efficiency of the service procedure[19].

There is a lot of research on how facilities and service quality affect client happiness, particularly in the hospitality industry. Studies have shown that Customer satisfaction is significantly impacted by service quality[20]. Similarly, according to studies, the link between service quality and customer happiness, customer loyalty can be mediated[21].

This research is in line with previous research that customer satisfaction and dependability have a substantial link[22]. Customer happiness and responsiveness have a substantial link. Customer satisfaction and assured certainty are significantly correlated. Customer satisfaction and empathy have a substantial link. Customer satisfaction and service quality dimensions have a strong positive link, according to the correlation research that if service quality improves, customer satisfaction should also rise.

Several characteristics of high-quality services, including dependability, promptness, assurance, and compassion, have a significant positive correlation with customer satisfaction. This suggests that improvements in service quality can lead to increased customer satisfaction. The physical environment and facilities play a crucial role in service quality[23]. Tangible aspects of service quality are important indicators for users. Both service and management quality have a positive effect on customer satisfaction. In the context of hotels, factors like employee behavior, room facilities, and food quality can influence customer satisfaction[24]. The factors that drive customer satisfaction can vary between institutions and subject areas.

There are several suggestions in this study for private hospitals in order to increase customer satisfaction. In Facility factors, the indicator "equipment is quite complete" gets the smallest percentage of 4.30%. For future suggestions, private hospitals can pay more attention to adequate equipment in order to achieve customer satisfaction. In Service Quality, the indicator "Company employees have a guarantee to complete the service according to the promised standard" gets the smallest percentage of 4.05%. For future suggestions, to increase patient satisfaction, private hospitals should focus more on staff service quality.

## CONCLUSION

The facility variable partially has a significant effect on customer satisfaction. The service quality variable partially has a significant effect on customer satisfaction. Facilities and service quality simultaneously have an influence on customer satisfaction.

### Acknowledgement

The authors acknowledge all directors and nursing staff of private hospitals in Surabaya City for the research permit and data support. Also, thanks to all participants in this research.

### Conflict of Interest

The authors declare no conflict of interest during research and publication of the article.

## REFERENCES

[1]   Novera NA. STUDY ON THE EFFECT OF BRAND EQUITY ON IPHONE PRODUCT CUSTOMERS IN SEMARANG CITY. *Int J Econ Bus Account Res*; 5. Epub ahead of print 2022. DOI: 10.29040/ijebar.v5i4.3932.

[2]   Skorin-Kapov J, Skorin-Kapov D. Business Competition and Innovation: Business and Ethical Issues in Engineering Discussed Via Narrative Films. *Int J Bus Manag Stud*; 04. Epub ahead of print 2023. DOI: 10.56734/ijbms.v4n8a2.

[3]   Hariyanto K, Hindratmo A. Identifikasi Sistem Kerja Dalam Mengurangi Muskuloskeletal Dan Resiko Cedera Pada Proses Manufaktur (Studi Kasus Pelatihan Mesin Bubut Mahasiswa Teknik Universitas Wijaya Putra Surabaya). *J SENOPATI Sustain Ergon Optim Appl Ind Eng*; 2. Epub ahead of print 2020. DOI: 10.31284/j.senopati.2020.v2i1.1162.

[4]   Noordin KA. The Edge SME Forum 2017: The rise of the chatbots | The Edge Markets. *El borde Malasia*.

[5]   Abad-Segura E, Daniela GZM, Eloy LM. Analysis of research on decision making-based on quantitative methods. *Rev Metod Cuantitativos para la Econ y la Empres*; 34. Epub ahead of print 2022. DOI: 10.46661/revmetodoscuanteconempresa.5135.

[6]     Gómez RS, Martínez ER. Métodos cuantitativos para un modelo de regresión lineal con multicolinealidad. Aplicación a rendimientos de letras del tesoro. *Rev Metod Cuantitativos para la Econ y la Empres*; 24. Epub ahead of print 2017. DOI: 10.46661/revmetodoscuanteconempresa.2886.

[7]     Tuncer I, Unusan C, Cobanoglu C. Service Quality, Perceived Value and Customer Satisfaction on Behavioral Intention in Restaurants: An Integrated Structural Model. *J Qual Assur Hosp Tour*; 22. Epub ahead of print 2021. DOI: 10.1080/1528008X.2020.1802390.

[8]     Khan N, Patras W, Saeed A. IMPACT OF SERVICE QUALITY, CUSTOMER ENGAGEMENT & CUSTOMER SATISFACTION ON CUSTOMER LOYALTY WITH THE MODERATING ROLE OF RELIGIOSITY. *J Soc Res Dev*; 4. Epub ahead of print 2023. DOI: 10.53664/jsrd/04-01-2023-08-100-107.

[9]     Githiri MN. Does Customers' Expectation on Star Rating Always Predict Satisfaction? A Study Done in Kenyan Restaurants. *Int J Humanit Soc Stud*; 7. Epub ahead of print 2019. DOI: 10.24940/theijhss/2019/v7/i10/hs1910-016.

[10]    Wang Y, Mo DY, Ma HL. Perception of time in the online product customization process. *Ind Manag Data Syst*; 123. Epub ahead of print 2023. DOI: 10.1108/IMDS-03-2022-0159.

[11]    Almohaimmeed B. Pillars of customer retention: An empirical study on the influence of customer satisfaction, customer loyalty, customer profitability on customer retention. *Serbian J Manag*; 14. Epub ahead of print 2019. DOI: 10.5937/sjm14-15517.

[12]    Baquero A. Is Customer Satisfaction Achieved Only with Good Hotel Facilities? A Moderated Mediation Model. *Adm Sci*; 13. Epub ahead of print 2023. DOI: 10.3390/admsci13040108.

[13]    Milner R, Furnham A. Measuring Customer Feedback, Response and Satisfaction. *Psychology*; 08. Epub ahead of print 2017. DOI: 10.4236/psych.2017.83021.

[14]    Chhabra N. Measurement of Consumer's Perception of Service Quality in Organized Retail Using Servqual Instrument. *Manag Dyn*; 13. Epub ahead of print 2022. DOI: 10.57198/2583-4932.1119.

[15]    Farida N, Sofi M, S S. The Analysis of Word of Mouth (WOM) AND Brand Image on Purchasing Decisions. *Divers Log J Multidiscip* 2023; 1: 1–7.

[16]    Ferreira A, Silva GM, Dias ÁL. Determinants of continuance intention to use mobile self-scanning applications in retail. *Int J Qual Reliab Manag*; 40. Epub ahead of print 2023. DOI: 10.1108/IJQRM-02-2021-0032.

[17]    Baleviciene D. INTEGRATED MARKETING COMMUNICATIONS. In: *Art Marketing*. 2020. Epub ahead of print 2020. DOI: 10.69645/mbrp3953.

[18]    Andeka ZNP, Indrawan B. The Role of E-Commerce in the Success of Small and Medium Enterprises. *J Bus Behav Entrep*; 5. Epub ahead of print 2022. DOI: 10.21009/jobbe.005.2.03.

[19]    Kumolu-Johnson B. Improving Service Quality in the Fast-Food Service Industry. *J Serv Sci Manag*; 17. Epub ahead of print 2024. DOI: 10.4236/jssm.2024.171002.

[20]    Ma'ruf MH, Zailani A. EFFECT OF SERVICE QUALITY AND SERVICESCAPE ON HOTEL CUSTOMER SATISFACTION IN SOLO. *Int J Econ Bus Account*

*Res*; 6. Epub ahead of print 2022. DOI: 10.29040/ijebar.v6i1.4679.

[21] Nadhifa S, Sunaryo, Surachman. The effect of brand experience and service quality on customer loyalty mediated by customer satisfaction. *Int J Res Bus Soc Sci (2147-4478)*; 12. Epub ahead of print 2023. DOI: 10.20525/ijrbs.v12i7.2871.

[22] Kumar V, Kumari A, Garza-Reyes JA, et al. Dependability a key element for achieving competitive advantage: A study of information service firms. In: *IFIP Advances in Information and Communication Technology*. 2013. Epub ahead of print 2013. DOI: 10.1007/978-3-642-41266-0_59.

[23] Yap JBH, Hew QLT, Skitmore M. Student Learning Experiences in Higher Education: Investigating a Quantity Surveying Programme in Malaysia. *Constr Econ Build*; 22. Epub ahead of print 2022. DOI: 10.5130/AJCEB.v22i1.7835.

[24] Hussein AMA, Mohammad AM, Alheet A, et al. Relationships between human resource management practices, employee satisfaction, service quality, and employee service behavior in the hotel industry. *Probl Perspect Manag*; 21. Epub ahead of print 2023. DOI: 10.21511/ppm.21(1).2023.21.