




The Influence of service quality on behavioral intentions mediated by patient trust and satisfaction

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ARTICLE INFO	ABSTRACT
<p><i>Article history:</i> Received Mar 16, 2024 Revised Mar 19, 2024 Accepted May 30, 2024</p> <p><i>Keywords:</i> Behavioral Intensions; Satisfaction; Service Quality; Trust.</p>	<p>This study aims to determine the effect of service quality on trust, consumer satisfaction and behavioral intentions in the patient population of PKU Muhammadiyah Gombong Hospital. The population is patients at the PKU Muhammadiyah Gombong Hospital with a sample of 100 inpatients. Questionnaires are distributed by distributing questionnaires directly to patients. SmartPLS software version 3 was used to model the relationships between the variables studied. The research results confirm the existence of a relationship between trust and behavioral intentions, consumer satisfaction and behavioral intentions, service quality and trust, service quality and consumer satisfaction. The research results show that there is a significant mediating effect of consumer trust and satisfaction on the relationship between service quality and behavioral intentions. Based on the model presented in this research, we can conclude that service quality has a major impact on trust, patient satisfaction and behavioral intentions.</p> <p><i>This is an open access article under the CC BY-NC license.</i></p> 

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1. INTRODUCTION

The healthcare industry in Indonesia is experiencing significant changes and challenges due to increasing competition among healthcare providers. Differences in the provision of health services create uniqueness in competitive conditions (Murhadi, WR; Karsana, 2021; Suhail & Srinivasulu, 2021). Indonesia is entering an epidemiological transition from infectious diseases to non-communicable degenerative diseases, and mental illnesses are exacerbating the burden on the curative system for high- and middle-income economies (Siswati et al., 2022).

The 2021 National Sports Development Index (SDI) report by the Ministry of Youth and Sports classifies the fitness level of Indonesian people as still very low (Alfarizi & Zalika, 2023). The World Health Organization (WHO) states that 71% of deaths in Indonesia are caused by diseases suffered by people, such as heart disease, stroke, diabetes, and kidney disease, which require long-term medical and social care, and elderly patients usually suffer from various morbidities (Alfarizi & Zalika, 2023).

Healthcare competition has taken various forms, and players, such as hospitals, insurers, and doctors, need help to achieve niche market positions (Madanaguli et al.,

2022). Every year, the number of hospitals in Indonesia increases, which explains why market-oriented health sector reforms continue to dominate the health policy agenda (Alfarizi & Zalika, 2023). One of the hospitals participating in the business competition is the PKU Muhammadiyah Gombong Hospital, a private hospital in Kebumen City that provides health services. Healthcare providers include various institutions and organizations that provide healthcare services to patients, such as private and government hospitals. Understanding patient behavior is critical to tailoring healthcare services and building solid relationships. Behavioral *intention* is a particular possibility of engaging in a behavior that includes the intention to use, namely the extent to which consumers desire to carry out a specific behavior (Albayrak et al., 2016). Patient behavioral intentions include the willingness to revisit the hospital for further treatment and recommend the hospital to others (Rahman et al., 2018).

According to data, the number of patients at PKU Muhammadiyah Gombong Hospital continued to increase in 2018 until 2023, especially in the year when the pandemic experienced an increase from previous years. Based on this, it is necessary to investigate perceived trust customers and quality of patient service at PKU Muhammadiyah Gombong Hospital, its role in customer satisfaction, as well how customers will behave in the future.

Previous research explains that behavioral intention is essential to service companies' success, such as health services (Suhail & Srinivasulu, 2021; Rahman et al., 2018). More previous research should focus on patients' behavioral intentions towards government and private hospitals. The Quality and value of health services are essential concepts for patient attraction and behavior (Canaway et al., 2017; Dobbs and Warriner, 2018). Several previous studies explain that values influence behavioral intentions (Medhekar et al., 2020; Milan et al., 2015; Zainuddin et al., 2011), beliefs (Kim et al., 2019; Zheng et al., 2017; Zhou, 2020) satisfaction (Suhail & Srinivasulu, 2021; Kim et al., 2019), and service quality (Suhail & Srinivasulu, 2021; Ulucayli et al., 2023). Research focuses on patient behavioral intentions, trust, consumer satisfaction, and service quality (Suhail & Srinivasulu, 2021).

Previous research explains that trust can influence a person's behavioral intentions by providing better quality patient services and building patient trust in an organization (Sulphay and Jasimm, 2020). Trust is an essential factor for the success of long-term relationships between service providers and consumers (Parasuraman et al., 1985). Trust is a primordial attribute (with commitment and shared values) that prevents opportunism in relationships and supports loyalty (Morgan and Hunt, 1994).

Quality is one of the determining factors for consumer satisfaction; this explains that higher service quality will increase consumer satisfaction (Uzir et al., 2021). (Ali et al., 2017) found that there is a strong relationship between service quality and consumer satisfaction in the field of marketing. (Suhail & Srinivasulu, 2021; Zainuddin et al., 2011) Also, service quality influences consumer trust and satisfaction in the banking sector. Previous research results show that service quality significantly affects consumer satisfaction (Nguyen et al., 2018; Uzir et al., 2021). Service quality influences consumer satisfaction, where trust is a mediator between the two (Uzir et al., 2021).

2. RESEARCH METHOD

This research uses a quantitative design by applying survey research methods. The population was patients at the PKU Muhammadiyah Gombong Hospital, and 100 research samples were taken using *simple random sampling techniques*. This research instrument was adapted from previous research (Table 1) with Likert scale items of one to five where a value of one represents the statement 'Strongly Disagree,' while a value of five represents the statement 'Strongly Agree.' Instruments in questionnaires were distributed through direct patient visits at the PKU Muhammadiyah Gombong Hospital.

Of the total distribution of 120 questionnaires, 100 patients returned completed questionnaires.

Table 1 . Source and Number of Items in the Instrument

Variable	Amount Statement	Source
Quality Service	6	(Choi et al., 2004)
Trust	4	(Zheng et al., 2017)
Satisfaction	4	(Parasuraman et al. , 1985)
Behavioral Intention	3	(Choi et al., 2004)

Statistical data analysis and PLS path modeling were carried out using SmartPLS 3.2.9 software. Two steps are performed sequentially. First, the measurement model is evaluated, and then the structural model is assessed. All statistical analyses carried out are considered significant if *the p-value* ≤ 0.05 .

3. RESULTS AND DISCUSSIONS

Figure one shows the findings of the PLS analysis, showing the path coefficient (b), the statistical significance of the path (*p-value*), and the variance explained by the structural model (R^2).

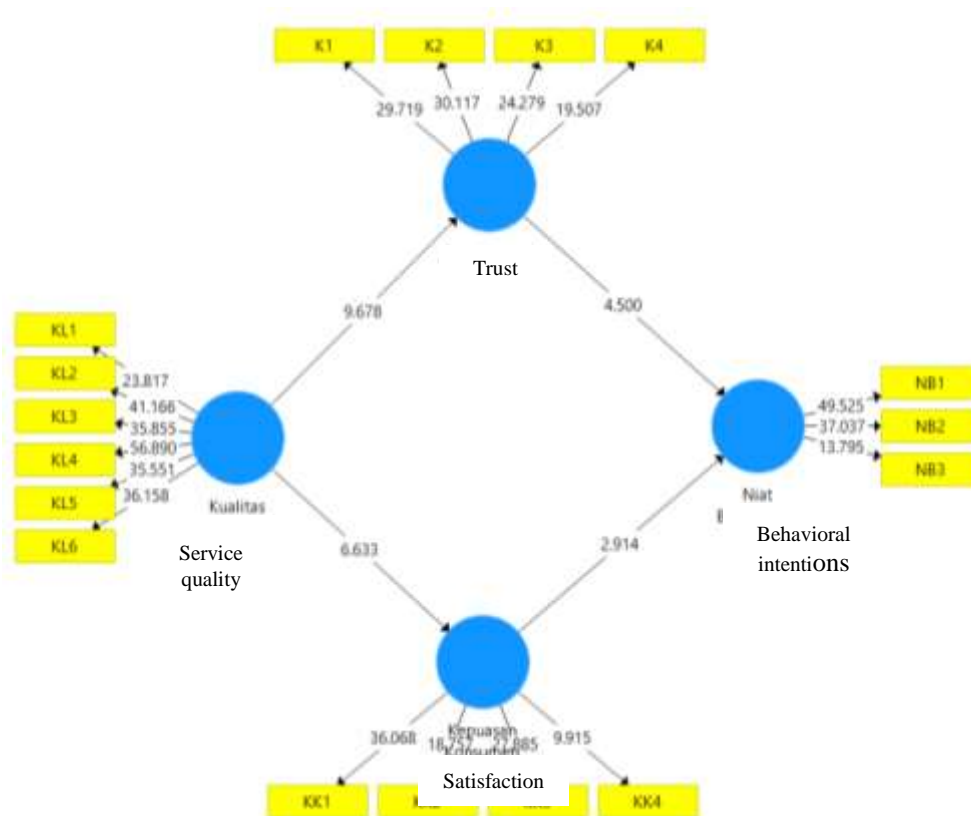


Figure 1. Structural Model

3.1 Assessment of the Measurement Model

Assessment of the measurement model is a fundamental step, providing valuable details regarding the reliability and validity of the scales used to assess latent constructs and observed indicators (Loehlin, 1998). Different criteria can be used to assess the reliability or internal consistency of an instrument: *Cronbach's alpha*, which is based on

the intercorrelation of observed indicators (if greater than 0.70, the reliability is acceptable; if greater than 0.80, then the reliability is acceptable; considered very good), composite reliability (Hair et al., 2016), and reliability coefficient rho (rA) (Dijkstra and Henseler, 2015). The final index has a recommended cutoff value of 0.70 (Hair et al., 2016).

3.2 Convergent Validity

Table 2 shows values for measurement scales greater than 0.7, thus providing adequate reliability.

Table 2 *Composite Reliability*

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Trust	0.939	0.940	0.956	0.844
Consumer Satisfaction	0.888	0.898	0.923	0.750
Service Quality	0.948	0.958	0.958	0.792
Behavioral Intention	0.854	0.894	0.911	0.775

This research indicates that AVE has an acceptable value, namely > 0.7 for trust, consumer satisfaction, service quality, and behavioral intentions.

3.3 Discriminant Validity

Two criteria were used to assess discriminant validity: Fornell-Larcker Criterion (Ornell and Larcker, 1981) and Heterotrait-Monotrait (HTMT) (Dijkstra and Henseler, 2015). The Fornell-Larcker criterion specifies that the square root of the AVE of each construct must be greater than the highest correlation of that construct with other constructs in the model. At the same time, the HTMT is an estimate of the factor correlations (Table 3).

Table 3 *Fornell-Larcker*

Constructs	Trust	Consumer Satisfaction	Service Quality	Behavioral Intention
Trust	0.919			
Consumer Satisfaction	0.801	0.866		
Service Quality	0.698	0.626	0.890	
Behavioral Intention	0.850	0.811	0.715	0.880

3.4 Reliability Indicators

Assessing the reliability of an indicator requires looking at the outer *loading* for the indicator construct, which shows how much variance is explained by the observed variables in relation to the latent construct (Hair et al., 2016). Table 4 reports the external loadings of all construct indicators, which are greater than the minimum acceptable value (0.7).

Table 4 *Outer Loading*

Constructs	Indicator	Loading Factor
Service Quality	KL1	0.855
	KL2	0.888
	KL3	0.865
	KL4	0.934
	KL5	0.904
	KL6	0.892
Trust	K1	0.936
	K2	0.924
	K3	0.909
	K4	0.905
Consumer Satisfaction	KK1	0.914
	KK2	0.851
	KK3	0.888

	KK4	0.807
	NB1	0.930
Behavioral Intention	NB2	0.924
	NB3	0.777

3.5 Assessment of the Structural Model

Structural models can be used to assess the impact of linear regression of endogenous constructs on each other by determining the pattern of relationships among various constructs (Hair et al., 2016; Loehlin, 1998)

3.6 Coefficient of Determination

Based on previous research, the coefficient of determination (or R² value) indicates the variation in the dependent variable that can be explained by one or more predictors, ranging between 0 and 1. It indicates the predictive accuracy of the structural model. The cutoff values of 0.19, 0.33, and 0.67 indicate weak, moderate, and vigorous coefficients of determination, respectively (Chin, 1998).

Table 5 R²

Construct	R Square
Trust	0.487
Consumer Satisfaction	0.392
Behavioral Intention	0.770

Table 5 shows that trust is influenced by service quality by 48.7% of the population. Consumer satisfaction is influenced by service quality by 39.2% of the population. Behavioral intentions are influenced by service quality by 77.7% of the population.

3.7 Effect Testing

The direct and indirect relationship hypothesis is validated using *bootstrapping* to test statistical significance and coefficients (Davison and Hinkley, 1997). Tables 6 and 7 show significant direct and indirect effects in the path model and show the means, standard deviations, and p values.

Table 6 Direct Effect

Constructs	Sample	Standard	T Statistics (P Values
	Mean (M)	Deviation (STDEV)	O/STDEV)	
Quality of Service -> Trust	0.689	0.072	9,678	0,000
Service Quality -> Consumer Satisfaction	0.616	0.094	6,633	0,000
Trust-> Behavioral Intention	0.572	0.125	4,500	0,000
Consumer Satisfaction -> Behavioral Intention	0.347	0.124	2,914	0.004

The table 6 shows a significant direct influence of service quality on trust with p value 0.00 and t statistic 9,678 (H1 is accepted). This shows that the better the quality of service provided by RSU PKU Muhammadiyah Gombong, the patient's trust will increase. The quality of service a health service provides is assessed based on its results and benefits, and patients require high-quality, safe, comfortable, and patient-centered services (Norman et al., 2018). Achieving high value should be the primary role of all healthcare providers. Previous research explains that Quality is a predictor of trust and is the primary determinant of trust (Ghali, 2021).

The result show that service quality has a positive effect on on consumer satisfaction, with p value 0,00 and t stasticic 6,663 (H2 accepted). This shows that the better the quality of service provided by RSU PKU Muhammadiyah Gombong, the patient satisfaction will increase. Consumer satisfaction refers to positive experiences based on consumer perceptions of service providers (Marinkovic and Kalinic, 2017). The level of

product and service quality provided to consumers results from comparing consumer perceptions regarding perceived and expected services related to technical quality, functional quality, and image. (Kim et al., 2019) . Previous research shows that service quality influences consumer satisfaction (Uzir et al., 2021).

The result shows trust has a positive effect on behavioral intentions with p value 0,00 and t statistic 4,50 (H3 accepted). This shows that the better the patient's trust, the greater their behavioral intention will be. The result shows that patient satisfaction has a positive effect on behavioral intentions with p value 0,00 and t statistic 2,914 (H4 accepted). The more patients trust their doctors, the more they follow the doctor's recommendations and treatment suggestions (Zheng et al., 2017).

Table 7 Indirect Effects

Constructs	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (T / STDEV)	P Values
Service Quality -> Trust -> Behavioral Intentions	0.395	0.098	4,009	0,000
Service Quality -> Consumer Satisfaction -> Behavioral Intentions	0.214	0.085	2,678	0.008

From table 7, this research also shows the mediating effect of trust mediating the relationship between service quality and behavioral intention with t statistic 4,009 and p value 0,00 (H5 is accepted). Satisfaction comes from consumer perception, an essential criterion for assessing the Quality of service delivery. Satisfaction is often highlighted as a critical factor in consumers' behavioral intentions and sporting events (Li et al., 2020). Previous research explains that satisfaction influences consumer behavioral intentions (Sousa et al., 2023) When healthcare providers fail to understand patients' expectations and meet their needs in terms of reliability, integrity, and Quality of service, the intention to continue the relationship with them becomes risky (Rahman et al., 2018; Zheng et al., 2017). Therefore, the greater a patient's trust in a healthcare provider, the greater their intention to maintain a relationship with that healthcare provider. And satisfaction also mediates the relationship between service quality and behavioral intentions, with t statistic 2,678 and p value 0,00 (H6 accepted). Previous researchers showed a positive relationship between service quality, patient satisfaction, and behavioral intentions in different health service contexts (Suhail & Srinivasulu, 2021). Therefore, providing services with maximum care facilities and patient satisfaction can retain health service consumers from hospitals through profitable behavioral intentions.

4 CONCLUSION

This research aims to develop and assess a model that examines service quality in terms of trust, consumer satisfaction, and behavioral intentions. The results of this research indicate a relationship between service quality and trust. Overall service quality results from an evaluation comparing a person's expectations and the benefits they experience.

The research results also show a relationship between service quality and consumer satisfaction. Service quality is an essential factor in consumer-focused companies. It shows that service quality is the main factor in the service context, where it will be easier for consumers to obtain various information and needs that the company can later provide. This explanation shows that service quality influences consumer satisfaction.

The research results found a relationship between trust and behavioral intentions. Trust is what underlies the relationship between doctors and patients. Trust in doctors is the basis for maintaining relationships with health services. Rapid changes in the health care system make trust in doctors a determinant of maintaining relationships with them.

The research results show a relationship between consumer satisfaction and behavioral intentions. Satisfaction is often described as a summary of cognitive and affective reactions regarding services provided and is a concept that has attracted much attention.

The research results also show that trust mediates the relationship between service quality and behavioral intentions. Patient trust in healthcare providers is described as an acceptance of vulnerability in circumstances where the patient (trustor) believes that the healthcare organization or another person (doctor from the organization) will look out for their interests (Cherif et al., 2021; Rahman et al., 2018).

The test results show a mediating effect of consumer satisfaction on the relationship between service quality and behavioral intentions. Behavioral intentions determine loyalty to healthcare services for revisits, recommendations, and positive word-of-mouth communication about service providers. This research relates a performance-based service quality model to behavioral intentions with the mediating effect of patient satisfaction in health services.

This research is a cross section study so it has limitations in drawing conclusions which may be different if carried out at various research loci and only on inpatients. The practical implication of this research is that hospital management must continue to strive to improve the quality of service so that it can be complete and trust can be created. In this way, customer satisfaction can continue to be maintained and if they need health services they will return to PKU Muhammadiyah Gombong Hospital

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