International Journal of Applied Business & International Management (IJABIM)
Vol. 10 No. 3, pp.828-849, December, 2025
E-ISSN: 2621-2862 P-ISSN: 2614-7432
https://www.ejournal.aibpmjournals.com/index.php/IJABIM

The Effect of Outpatient Service Quality on Patient Satisfaction with Perceived Value as a Mediating Variable

Nurwestu Rusetiyanti[1*], Eric Harianto[2]
[1,2] Master of Management Program, Faculty of Management and Business, Ciputra University, Surabaya, Indonesia
*Corresponding Email: eric.harianto@ciputra.ac.id[2]

ARTICLE INFORMATION

Publication information

Research article

HOW TO CITE
Rusetiyanti, N., & Harianto, E. (2025). The effect of outpatient service quality on patient satisfaction with perceived value as a mediating variable. *International Journal of Applied Business & International Management (IJABIM)*, *10*(3), 828-849.

DOI:
https://doi.org/10.32535/ijabim.v10i3.4510

Received: 15 October 2025
Accepted: 30 November 2025
Published: 20 December 2025

ABSTRACT

Attention to the quality of healthcare services has increased significantly. Healthcare providers are competing to deliver higher-quality healthcare services. Management is required to focus not only on medical technicalities but also on creating perceived value that drives patient satisfaction. Acknowledged as a central metric of healthcare service excellence, patient satisfaction is analyzed in this inquiry alongside the impact of outpatient service quality and perceived value at Nima Medical Center Clinic. The investigation also explores the function of perceived value as an intervening factor in the association between outpatient service quality and patient satisfaction. A quantitative approach was adopted, employing a survey instrument with a 1–5 Likert scale on 96 purposively sampled patients from the Nima Medical Center Clinic in Yogyakarta. Data were initially tabulated in Excel and subsequently analyzed using SmartPLS 4.0, employing the Structural Equation Modeling–Partial Least Squares (SEM-PLS) technique. Notably, the influence of service excellence on satisfaction is significant when it is facilitated by perceived worth. Altogether, these outcomes underscore the vital role of perceived value as a mediating factor between service excellence and patient satisfaction.

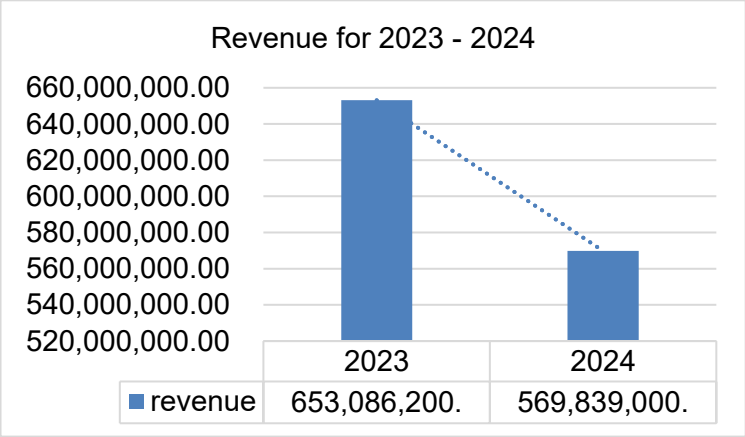
Keywords: Service Quality; Patient Satisfaction; Mediation; Perceived Value

INTRODUCTION

During the past thirty years, service quality has received increasing scholarly and practical attention. The rising expectations for improved healthcare standards have placed considerable pressure on healthcare providers to enhance the quality of services. Patients have evolved into critical consumers, seeking not only clinical cure, but also demanding a quality and valuable service experience (Wulandari et al., 2024). Clinics, as healthcare facilities, are at the forefront of this interaction (Ministry of Health of the Republic of Indonesia, 2018). With the increasing competition among healthcare providers, this requires management to not only focus on technical-medical aspects, but also on creating *perceived value*, which ultimately drives patient satisfaction (Sweeney & Soutar, 2001; Utami et al., 2024).

Nima Medical Center Clinic provides pediatric specialist services, dermatology and aesthetic venereology specialist services, as well as physiotherapy, speech therapy, and occupational therapy. Nima Medical Center Clinic is located in Kotagede, within the administrative area of South Yogyakarta City. It was originally a practice run by Dr. Sunartini, SpA(K), since 1980, which has since expanded and developed its services. Based on preliminary observations, patient satisfaction at Nima Medical Center is assessed through *Google reviews*, one of the methods used by the public to express satisfaction with service quality (Wijaya et al., 2023). Nima Medical Center received an overall rating of 4.1 out of 5. When calculated annually, the Google review rating was 4.8 in 2023 and 3.8 in 2024. This phenomenon indicates a problem, namely, patient dissatisfaction with healthcare services at Nima Medical Center. Extra corroborating information from Nima Medical Center's patient records indicates that the quantity of patient consultations dropped from 4,262 in 2023 to 3,335 in 2024, a reduction of 21.75%. Based on the financial report, there was a decrease from IDR 653,086,200.00 in 2023 to IDR 569,839,000.00 in 2024, representing a 12.75% decrease.

Figure 1. Nima Medical Center Clinic Revenue for 2023–2024



Healthcare service quality and patient satisfaction have been extensively explored in prior investigations, with numerous inquiries validating the presence of a straight linkage between service excellence and patient satisfaction (Afader et al., 2021; Erpurini & Saleh, 2021; Priyantini et al., 2023). However, this relationship often fails to explain the dynamics at play. Why would two patients who receive services of objectively the same quality have different levels of satisfaction? This is where *perceived value*, or the values expected by patients and their families, plays an important role (Lestari et al., 2024). Perceived *value* is defined as the overall evaluation by users (patients) of a service's utility, based on their observations of what is obtained and what is sacrificed. (Zeithaml,

1988). What patients receive is not only healing, but also confidence, comfort, and positive experiences. Meanwhile, what is given is not only financial costs, but also time, effort, and psychological stress when deciding to use health services.

In the context of healthcare services, the Expectancy-Confirmation Theory (ECT) (Oliver, 1980) can be enriched by incorporating *perceived value*. Good service quality will certainly meet patient expectations, but patients will further process this confirmation by considering, "Is this service valuable to me?" If the quality of service is perceived as highly valuable (for example, because it is affordable or time-efficient), then the resulting satisfaction will be greater and more sustainable. Thus, *perceived value* is thought to be the psychological mechanism that explains why and how service quality affects patient satisfaction.

Service quality, as conceptualized in the SERVQUAL model, represents the discrepancy between subjects' anticipations and their actual experience of the service. This evaluation is performed across five aspects: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). Another approach was introduced by (Cronin & Taylor, 1992) using the SERVPERF (*Service Performance*) model, which simplifies measurement by only measuring performance perceptions. This is often chosen for measurement in the health sector because quality assessment by patients is already an implicit comparison between expectations and performance, using the five dimensions found in SERVQUAL (Anastasya & Gurning, 2023).

Based on this framework, the main issue raised in this study is "Does service quality affect patient satisfaction at Nima Medical Center Clinic, and is this relationship significantly mediated by *perceived value*?" Without understanding this mediating role, efforts to improve patient satisfaction may focus solely on technical quality, failing to address the essence of value assessment from the patient's perspective. The urgency of raising this issue stems from preliminary observations of patient satisfaction *reviews* at the clinic, a decline in clinic visits and revenue, and the lack of research conducted to measure service quality and outpatient clinic patient satisfaction mediated by *perceived value*, especially in Yogyakarta. With 123 clinics in Yogyakarta City spread across 14 districts (Yogyakarta City Government, 2023). There is a need to determine whether perceived value significantly mediates the relationship between healthcare service quality and patient satisfaction, or whether it adds value to Nima Medical Center in providing patient services.

This inquiry aims to evaluate the influence of the quality of ambulatory assistance on patient satisfaction, with perceived value as a mediating variable. Managerially, the research provides guidance for strategic investment decisions by highlighting the dimensions of service quality that most effectively drive perceived value. By emphasizing value creation over price competition, healthcare providers can strengthen patient loyalty, encourage positive word-of-mouth, and reduce expenses associated with attracting new patients. The practical implications of this research provide targeted guidance through protocols or behavioral training for frontline staff (doctors, nurses, therapists, pharmacists, administrative staff, and *customer service*), increasing awareness of patient sacrifices such as time, energy, emotions, and money, and as a tool for building long-term relationships with patients. In an academic context, this research is expected to develop and enrich existing theories such as SERVQUAL, SERVPERF, and ECT in the context of healthcare services in Indonesia, verifying the role of *perceived value* as a mediator as an important psychological mechanism that explains how the quality of healthcare services affects satisfaction, providing cultural contextualization by revealing the dimensions of quality and value that are most

appreciated by patients in Indonesia, as well as serving as a basis for further research and contributing to the global healthcare trend of *value-based healthcare*.

LITERATURE REVIEW

Expectancy Confirmation Theory (ECT)

The *Expectancy Confirmation Theory* (ECT) concept, first developed by (Oliver, 1980) in the context of marketing, explains the process of consumer satisfaction formation through four main stages, namely the formation of expectations regarding service performance before a person uses the service, the encounter and insight of execution shaped after an individual utilizes the assistance so that the insight of the real execution of an assistance may be identified, the procedure of verification or contradiction which is a contrast of real execution with primary anticipations in the shape of favorable verification, basic and adverse contradiction. The fourth stage is the formation of satisfaction, where the level of confirmation or disconfirmation directly affects satisfaction. Positive confirmation increases satisfaction, while negative disconfirmation decreases satisfaction. This theory places expectation confirmation as the main mediator between expectations and satisfaction. In its development, ECT has been adapted in service contexts, including health care, where actual performance is often reflected in perceptions of service quality.

While Expectation Confirmation Theory (ECT) originally centered on the confirmation of expectations, later studies suggest that the relationship between confirmation and satisfaction is often shaped by a more complex cognitive appraisal, particularly perceived value (Zeithaml, 1988). *Perceived value* in healthcare is defined as the patient's holistic evaluation of the benefits (utility, psychosocial, clinical) received relative to the sacrifices made, including monetary costs, time investment, effort, and emotional strain. Therefore, ECT serves as a solid theoretical foundation for analyzing how healthcare quality influences patient satisfaction. The inclusion of perceived value as a mediating variable strengthens the framework, providing a more complete and contextually relevant perspective. From this perspective, patient satisfaction emerges not only from the fulfillment of expectations, but rather a deeper assessment of whether the entire healthcare experience and outcomes are considered valuable.

SERVQUAL and SERPERF Service Quality Evaluation Models

Parasuraman's SERVQUAL structure (1988) provides a technique for appraising service excellence by contrasting clients' expectations with their perceptions of real service execution (Ghimire et al., 2022). The framework utilizes five aspects comprising tangibles, reliability, responsiveness, assurance, and empathy to grasp the agreement between anticipated and realized assistance (Jonkisz et al., 2021). Its strong validity and reliability have led to extensive use of the SERVQUAL scale in studies on healthcare service quality and other service sectors (AlOmari, 2021). In healthcare settings, the ability to efficiently detect and address errors in service delivery is important for ensuring high service quality. Service evaluation is commonly conducted through questionnaires or survey instruments specifically designed for this purpose, which function as practical tools for measuring service quality (Jonkisz et al., 2021).

In response to criticism of SERVQUAL, (Cronin & Taylor, 1992) proposed the SERVPERF (*Service Performance*) model. They argued that measuring service quality should focus only on actual performance perceptions, without including expectations. The SERVPERF approach is based on attitude theory (such as Fishbein's attitude theory). Performance perceptions are considered to reflect consumers' evaluations of services and are more direct and powerful predictors of outcomes such as satisfaction and behavioral intent. In healthcare research, this model is commonly utilized to measure

service quality because patients tend to evaluate services by implicitly comparing their expectations with the performance they experience, as represented through the five SERVQUAL dimensions (Anastasya & Gurning, 2023).

Service Quality

Service quality may be perceived as an entity's capability to meet client expectations through service generation, promotional operations, and the continuous maintenance of the service. Service quality, in theory, reflects the discrepancy between clients' expectations and the actual experience of the assistance they receive. Therefore, it is frequently evaluated by contrasting clients' realized assistance execution with their previous expectations. Assistance efficiency is often assessed by the degree of satisfaction reported by those receiving assistance. Satisfaction arises when the services received correspond to customers' expectations and address their needs (Rahman et al., 2023). High-quality service delivery in healthcare depends on adherence to professional and operational standards and the efficient, effective use of resources in hospitals and clinics. These services are provided safely, in accordance with applicable norms, ethics, laws, and socio-cultural norms (Wulandari et al., 2024).

Recently, service quality performance (SERVPERF) has become more popular than SERVQUAL for measuring patient satisfaction. In SERVPERF measurement, service quality is evaluated using simpler terminology, namely, measuring the dimension of perception, rather than measuring the dimension of user expectations (Anastasya & Gurning, 2023). Service quality represents a fundamental factor closely associated with customer satisfaction (Mabini Jr. et al., 2024). Service quality indicates how well customer expectations are met during service delivery. When these expectations are met or exceeded, customers tend to feel satisfied, which increases the likelihood that they will return to use the same service or purchase the product again.

In medical environments, the degree of service quality substantially adds to patient contentment, particularly within ambulatory assistance provided by infirmaries, public clinics, and dispensaries (Astuti, 2024; Mabini Jr. et al., 2024; Novitasari, 2022; Priyantini et al., 2023; Rahma et al., 2023; Waty et al., 2025). Healthcare service quality indirectly influences customer loyalty through patient satisfaction (Lienata & Berlianto, 2023; Wulandari et al., 2024). Grounded in this outlook, advancements in the quality of ambulatory medical assistance are likely to boost patient satisfaction. The assessment of healthcare service quality generally involves multiple determinants, including the five dimensions in SERVQUAL, as previously mentioned (Ghimire et al., 2022; Jonkisz et al., 2021). The performance of SERVQUAL is measured using SERVPERF, which measures the perspective of *end-users* or patients (Anastasya & Gurning, 2023).

The dimension of *tangibles*, or physical evidence, includes direct evidence such as the building's appearance and facilities, equipment, and the appearance of clinic employees. The appearance of the building, the completeness of the clinic facilities, and the infrastructure (Erpurini & Saleh, 2021; Waty et al., 2025), the appearance of the clinic staff (Mabini Jr. et al., 2024; Priyantini et al., 2023), and clinic facilities (Astuti, 2024) will further impact patient satisfaction.

The reliability dimension indicates the extent to which a company can provide the promised services accurately and appropriately. Reliability reflects the capability to consistently and accurately provide the services that were promised, including the competence of doctors and health workers in diagnosing and providing appropriate treatment to patients (Astuti, 2024; Dwijayanti et al., 2024; Ghimire et al., 2022; Mabini Jr. et al., 2024; Satyawati & Berlianto, 2022), the patient's condition improves after treatment (Mabini Jr. et al., 2024), and doctors practice on time according to the schedule

(Ghimire et al., 2022; Mabini Jr. et al., 2024). Quality in this dimension *of reliability* affects patient satisfaction.

Responsiveness indicates a company's willingness and commitment to providing timely services. In addition, *responsiveness* includes effective communication, provision of information and education by staff to patients, and the speed with which health care facility staff respond to complaints (Dwijayanti et al., 2024; Ghimire et al., 2022; Mabini Jr. et al., 2024; Satyawati & Berlianto, 2022; Waty et al., 2025). The alertness of personnel in medical centers plays a vital role in shaping client satisfaction.

The certainty aspect entails the institution's capacity to cultivate faith and trust among patrons through the proficiency, expertise, and politeness of its staff. *Assurance* in the health sector includes scheduled and properly conducted patient examinations by medical staff in accordance with procedures, comprehensive patient examinations, no discrimination against patients by employees in health services, and the provision of clear and accurate information (Dwijayanti et al., 2024; Ghimire et al., 2022; Mabini Jr. et al., 2024; Satyawati & Berlianto, 2022; Waty et al., 2025). The certainty of staff-provided assistance at medical centers plays a vital role in shaping patient satisfaction.

The dimension *of empathy* is the ability of employees to communicate effectively in explaining services, including the attention and caring attitude of employees and doctors towards all patients, staff asking about and understanding patient complaints and needs, and staff being patient when dealing with complaints from patients and their families (Dwijayanti et al., 2024; Ghimire et al., 2022; Mabini Jr. et al., 2024; Satyawati & Berlianto, 2022; Waty et al., 2025). Patient satisfaction is affected by staff empathy in medical centers. Thus, the quality of healthcare services, which comprises 5 dimensions, influences patient satisfaction.

Patient Satisfaction

Customer satisfaction refers to the customer's evaluative response, conveyed via emotions of pleasure or displeasure that arise from contrasting the item or assistance obtained with their primary anticipations (Ge et al., 2021). Higher satisfaction is generally associated with superior product or service performance, whereas lower performance may lead to dissatisfaction. Furthermore, several factors influence customer satisfaction, including individual characteristics such as customer experience and the availability of information related to the product or service. Differences in product or service categories may also generate varying customer preferences and influence the determinants of satisfaction (Fatimah et al., 2022; Sinollah & Masruroh, 2019; Wulandari et al., 2024).

Customer satisfaction is very important for companies that are customer-focused and market-oriented (Ferreira et al., 2023). Research shows that companies that prioritize customer satisfaction will excel compared to those that do not. Hospitals and clinics are healthcare service providers that are based on trust, so their success is highly dependent on service quality, patient satisfaction, or loyalty (Utami et al., 2024). Patient contentment may be beneficial for gathering appraisals based on patients' ratings of the medical assistance they received. Gauging patient contentment can yield outcomes that mirror subject insights and act as a robust foundation for refining service quality. Patient satisfaction is positively associated with patient loyalty and has the potential to increase hospital revenue in the long run (Yusri et al., 2017) Based on these inquiries, it is apparent that service quality is a vital factor in patient satisfaction. In this investigation, improving service quality is a primary strategy to boost patient satisfaction at the Nima Medical Center Clinic. Therefore, the first hypothesis formulated in this research is:

H1: Outpatient service quality has a positive effect on patient satisfaction

Perceived Value

Perceived value is an assessment of a service or product that is considered to be in line with one's views or expectations. *Perceived value*, or the value felt by customers, is an overall assessment of the benefits of the service received by customers compared to the sacrifices made to obtain the expected service (Utami et al., 2024). In the healthcare sector, perceived value is commonly conceptualized through several dimensions, which generally include functional value, emotional value, and social value (Cengiz & Kirkbir, 2007; Liu et al., 2023). Studies performed by (Liu et al., 2023) expanded these categories into eight dimensions for assessing perceived value in outpatient healthcare services. The identified dimensions include image and accessibility, which represent social value; installation, efficiency, price, and service quality, which reflect functional value; as well as interactivity and control, which correspond to emotional. The value perceived by patients is the value they derive from the quality of the health services they receive.

The perception of value among patients is strongly influenced by the quality of healthcare services provided (Lestari et al., 2024). The discoveries of (Lestari et al., 2024) show that superior service quality favorably molds subjects' realized worth. Hence, it may be concluded that improvements in ambulatory service quality meaningfully influence how subjects appraise the value of the assistance they receive. Based on this logic, the investigation suggests the subsequent second hypothesis:

H2: The quality of outpatient services has a positive effect on *perceived value*

Perceived Value and Patient Satisfaction

Research conducted by (Ariany, 2021) showed that both service quality and realized worth have a favorable and meaningful impact on patient contentment. *The perceived value* of outpatient clinic patients in Chinese hospitals shows that *functional value* regarding efficiency is the main factor before coming to the clinic, while *emotional value* regarding control and *functional value* regarding service quality play a greater role during the patient's visit to the outpatient clinic (Liu et al., 2023). Research conducted at Medika BSD Hospital by (Utami et al., 2024) shows that perceived value significantly affects patient satisfaction, confirming its role in shaping patients' overall satisfaction. Therefore, the third hypothesis is:

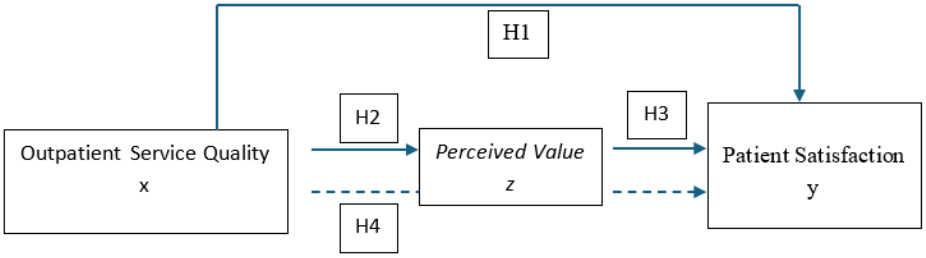
H3: Perceived value has a positive effect on patient satisfaction.

A meta-analysis conducted by (Cronin et al.,.2000) discovered that realized worth acts as a more potent forecaster of client contentment versus service quality alone. Consistent with this finding, (Kawisana & Ekawati, 2024) reported that perceived value significantly mediates the influence of service quality on customer satisfaction in the context of the Bedugul Recreation Center in Tabanan, Bali. Within the framework of medical assistance, an inquiry was carried out at ambulatory centers in Indonesian infirmaries by (Noviyani & Viwattanakulvanid, 2025) demonstrates that realized worth has a meaningful intervening impact on service quality and the willingness to revisit. Realized worth is also considered a catalyst for patient satisfaction. When subjects receive premium-quality assistance, their satisfaction increases. Moreover, realized worth is also recognized as an intermediary between service quality and client contentment. This reinforces the idea that realized worth may influence ambulatory service quality on patient satisfaction.

H4: *Perceived value* mediates the effect of outpatient service quality on patient satisfaction

Leveraging the prior theoretical synthesis and the formulation of propositions, the analytical framework for this research is illustrated as follows:

Figure 2. Conceptual framework model of the relationship between outpatient service quality variables and patient satisfaction mediated by perceived value



RESEARCH METHOD

Research Design

This research used a quantitative survey of patients at the Nima Medical Center Clinic to assess how outpatient service quality influences patient satisfaction, with realized worth as an intermediary variable. Data was gathered cross-sectionally at a single point in time. A numerical strategy was deemed suitable because the inquiry aimed to analyze the associations between factors in an impartial and quantifiable way using digital figures, which were then processed and examined using mathematical techniques (Sugiyono, 2025).

Population and Sample Size

The research universe comprised all clients attending the Nima Medical Center Clinic, with 3,355 visits in 2024, representing a 22% decrease from the previous year. Thus, the estimated number of patient visits in 2025 was 2,500 (a 25% decrease), or about 208 visits per month. Assuming 50% of total patient visits, the same patients undergo therapy 4 times/week, meaning the number of patients per month is 130.

The computation of the subject magnitude needed for this inquiry utilizes the Slovin equation (Hasibuan, 2020). Assuming the number of patients in 2025 will be 2,500, the Slovin formula for a limited population is n = N / (1 + N e^2), where n = sample size; N = population size; e = error rate. In the Slovin formula, there is a provision for them, as follows: α = 0.1 (10%) for large populations and α = 0.2 (20%) for small populations. The calculation yields $n = 2.500/ (1 + 2.500(0,1)^2) = 2.500 / 26 \approx 96,15$, rounded to 96 samples or subjects.

Purposive sampling was used to proportionally represent clinical activities, namely pediatric patients, dermatologists, and therapists. The inclusion criteria were 1) patients or parents of patients who came to the clinic for a check-up; 2) able to read; 3) able to communicate well; 4) aged 18–65 years. The omission standards were 1) patients in a serious condition; 2) unwilling to participate in the survey.

Variables and Measurements

In this research, patient satisfaction is treated as the dependent variable. The independent variable examined in this research is healthcare service quality, which is measured using the SERVPERF indicators consisting of five dimensions, namely *reliability, assurance, responsiveness, empathy,* and *tangibility* (Anastasya & Gurning, 2023; Baskoro et al., 2016; Ghimire et al., 2022). *Perceived value, as a mediating variable in this study, comprises three dimensions:* functional, emotional, and social.

International Journal of Applied Business & International Management (IJABIM)
Vol. 10 No. 3, pp.758-xx, December, 2025
E-ISSN: 2621-2862 P-ISSN: 2614-7432
https://www.ejournal.aibpmjournals.com/index.php/IJABIM

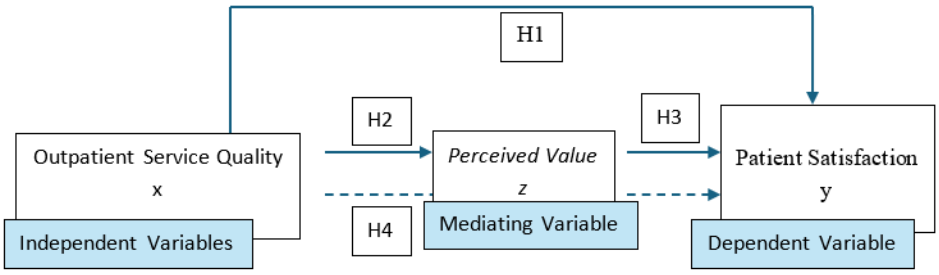


Figure 3. Model of the relationship between independent and dependent variables in the study

Data on the independent, dependent, and mediating variables were obtained via a questionnaire. Service excellence and perceived worth were measured via a five-point Likert instrument from 1 (entirely disagree) to 5 (entirely agree), whereas patient contentment employed a five-point metric from 1 (highly discontented) to 5 (highly contented) (Anastasya & Gurning, 2023; Liu et al., 2023), (Sinyiza et al., 2022).

Table 1. Table of operational definitions of the main variables in the study.

Construct	Definition	Indicators	Scale	Source
Service quality	An instrument used to assess the extent to which healthcare services meet patient needs and expectations through the delivery and maintenance of services provided by healthcare facilities. The aspects used to gauge service quality include reliability, assurance, responsiveness, empathy, and tangibles or physicals.	1) Clinic rooms are comfortable and clean 2) Medical equipment is fully available 3) Staff are clean and neatly dressed	Likert 1–5	Anastasya et al., 2023; Parasuraman et al, 1988
		1) Clinic services are provided according to schedule 2) Doctors provide accurate diagnoses and treatment		
		Clinic staff respond quickly to complaints and immediately provide solutions if there are problems with the service		
		1) Doctors/nurses/clinic therapists are competent in treating patients 2) Information provided by doctors/nurses/ therapists is clear and reliable		
		Clinic staff understand patient needs and serve with genuine care for patients		
Perceived value	Subjects' general appraisal of the advantages of the	1) Doctors, nurses, therapists understand patient needs, 2)	Likert scale 1–5	Cengiz et al., 2007;

	assistance they obtain versus the forfeits they incurred to acquire the anticipated. This includes social, functional, and emotional value.	Doctors, nurses, therapists are professional, 3) Doctors, nurses, therapists are polite and trustworthy		Liu et al., 2023
		1) Patients can understand the advice and education provided by doctors/nurses/therapists well 2) Doctors/nurses/ therapists at the Nima clinic provide sufficient time to communicate with patients		
		1) Patients are provided with information and informed consent for medical procedures effectively 2) Patient privacy during service at the clinic is well maintained		
		1) Patients receive the expected clinic services, 2) The clinic provides safe and reliable medical services		
		1) The clinic has a good reputation among the community, 2) Patients can easily obtain information about the clinic's services		
		The clinic environment is perceived as clean, comfortable, and quiet		
		1) Patients do not experience long waiting times when receiving services from doctors, nurses, or therapists. 2) Patients receive pharmacy services and medications without excessive waiting time.		

		1) The costs incurred are commensurate with the quality of services received, 2) Service fees are affordable		
Patient satisfaction	Customer's evaluative response, reflected in feelings of satisfaction or dissatisfaction, that arises from comparing the performance of the service received with the patient's expectations.	The services patients receive meet their expectations.	Likert Scale 1–5	Ge, et al., 2021
		Overall, the quality of service at the clinic is good		
		Patients are willing to use the clinic's services again in the future		
		Patients would recommend the clinic to friends or family		

Data Collection Technique
Data collection techniques used questionnaires in the form of *G-forms* distributed to prospective respondents who met the criteria via WhatsApp (WA) at the Nima Medical Center clinic. The completed questionnaires were then analyzed.

Data Analysis Technique
The research procedure began with the development of a questionnaire based on existing references and modified to align with the research objectives. Subsequently, the questionnaire was distributed online to respondents who met the specified criteria. After collecting the data, it was organized and processed using Excel and SmartPLS 4.0. Structural Equation Modeling–Partial Least Squares (SEM-PLS) was employed because it allows simultaneous testing of variable relationships, does not require data normality, and works well with relatively small samples (Sugiyono, 2025). The analysis included instrument validity and reliability testing, outer and inner model construction, and hypothesis evaluation. Validity ensures that indicators accurately reflect the intended constructs, and reliability assesses instrument consistency. These procedures help ensure that findings are both valid and reliable, supporting decision-making to enhance service quality at the Nima Medical Center Clinic.

Furthermore, the examination of the results offers insight into the associations between medical aid factors and general subject contentment, with perceived value acting as an intermediary.

RESULTS

The study was conducted from November to December 2025 using a questionnaire distributed to 251 respondents, with 107 respondents completing it and 96 selected for analysis.

Table 2. Subject Characteristics

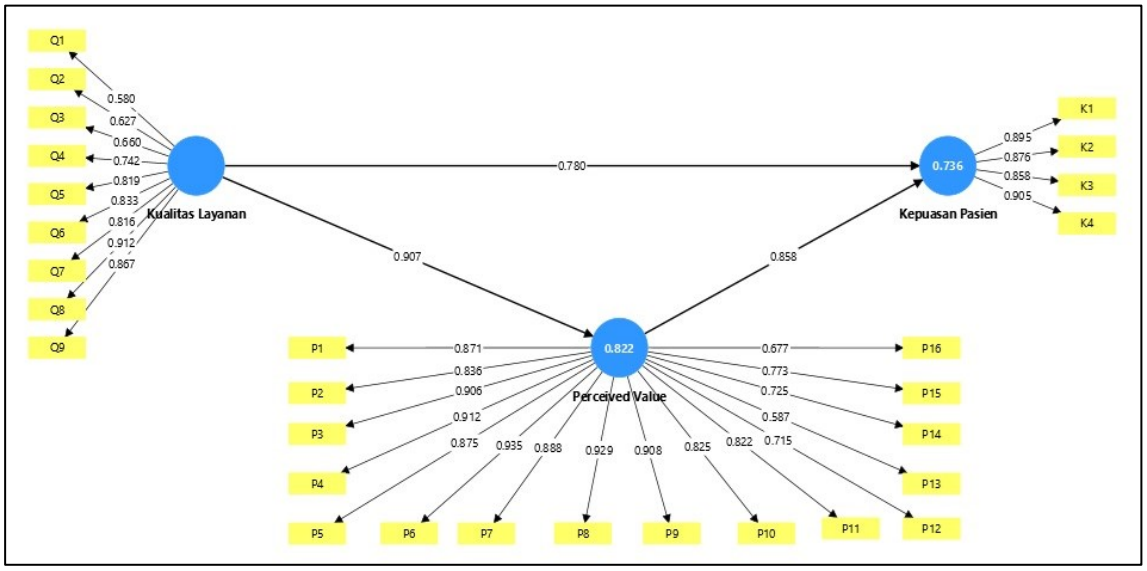
Variable	Classification	Results
Gender	Male	21 (22%)
	Female	75 (78%)
Age	Median	36

	Mean	36.7
Education	No schooling	0
	Elementary	2 (2%)
	Junior High School	0
	High School	13 (14%)
	Diploma / Bachelor's Degree	69 (72%)
	Master's / Doctorate	12 (12%)
Origin	Special Region of Yogyakarta (DIY)	78 (81%)
	Outside DIY	15 (16%)
	Outside Java	3 (3%)
Occupation	Student / College Student	4
	Civil Servant / State Civil Apparatus	25
	Private Sector Employees / State-Owned Enterprises	23
	Self-employed	10 (11%)
	Housewives	29 (30%)
	Other	5 (5%)
Type of service	Pediatrician	49 (51%)
	Dermatologist & Venereologist	27 (28%)
	Physical Therapy	6 (6%)
	Speech Therapy	4 (4%)
	Occupational Therapy	10 (10%)

Source: Processed Data, 2026

As shown in Table 1, most respondents were women, comprising 75 individuals (78%), with a mean age of 36.7 years. The most common level of education was Diploma/Bachelor's degree, totaling 69 (72%). The majority of respondents (81%) came from the Special Region of Yogyakarta. The most common occupations among respondents were housewives (30%), civil servants/state civil servants (26%), private-sector/state-owned enterprise employees (24%), entrepreneurs (11%), others (5%), and students (4%).

Figure 4. Results of the SEM-PLS structural model of the effects of service quality and perceived value on patient satisfaction



Source: Processed Data, 2026

Figure 4 presents the loading factor results for each variable and demonstrates the relationships among service quality, perceived value, and patient satisfaction. The loading factor values of all indicators are above 0.5, confirming that the measurement indicators are valid.

Table 3. Validity and Reliability Test Results

Variable	*Cronbach's alpha*	*Composite reliability (rho_a)*	*Composite reliability (rho_c)*	*Average Variance Extracted (AVE)*
Service quality	0.912	0.932	0.928	0.592
Perceived Value	0.969	0.973	0.972	0.689
Patient Satisfaction	0.906	0.910	0.934	0.781

Source: Processed data, 2026.

Table 2 demonstrates that the patient satisfaction, perceived value, and service quality constructs exhibit Cronbach's alpha exceeding 0.6, CR exceeding 0.7, and AVE exceeding 0.5. These AVE scores meet the convergent validity requirements, while the alpha and CR metrics confirm robust reliability. Consequently, the outer model evaluation validates the consistency and accuracy of all research variables.

Table 4. R Square Analysis Results

Variable	*R-square*	*Adjusted R-square*
Patient Satisfaction	0.736	0.730
Perceived Value	0.822	0.820

Source: Processed data, 2026.

R-square analysis was employed to assess how well exogenous variables account for variance in endogenous variables. Table 3 demonstrates an R-square of 0.736 for patient satisfaction, indicating that service quality explains 73.6% of its variability, with 16.4% explained by other factors. For perceived value, an R-square of 0.822 suggests a strong relationship, with service quality accounting for 82.2% of its variation. Bootstrapping of the SEM-PLS model was then conducted to test the hypotheses and determine the significance on perceived value as a mediating variable.

Table 5. Total Effect Analysis Results

Hypothesis	*Path Coefficient*	*SD*	*T statistic*	*P value*	*Description*
Service quality → patient satisfaction	0.780	0.045	17.441	0.000	Accepted
Service quality → *perceived value*	0.907	0.018	49.425	0.000	Accepted
Perceived value → patient satisfaction	0.847	0.150	5.629	0.000	Accepted

Source: Processed data, 2026.

Table 4 reveals a total effect coefficient of 0.780 with a P-value of 0.000, confirming that the quality of outpatient services has a significant positive effect on patient satisfaction.

Table 6. Path Coefficient Analysis Results (Direct Effect)

Variable	*Path Coefficient*	*P Values*	Description
Service Quality -> Patient Satisfaction	0.012	0.940	Not accepted
Service Quality -> *Perceived Value*	0.907	0.000	Accepted

Perceived Value -> Patient Satisfaction	0.847	0	Accepted

Source: Processed data, 2026.

Table 7. Results of Indirect Effect Analysis

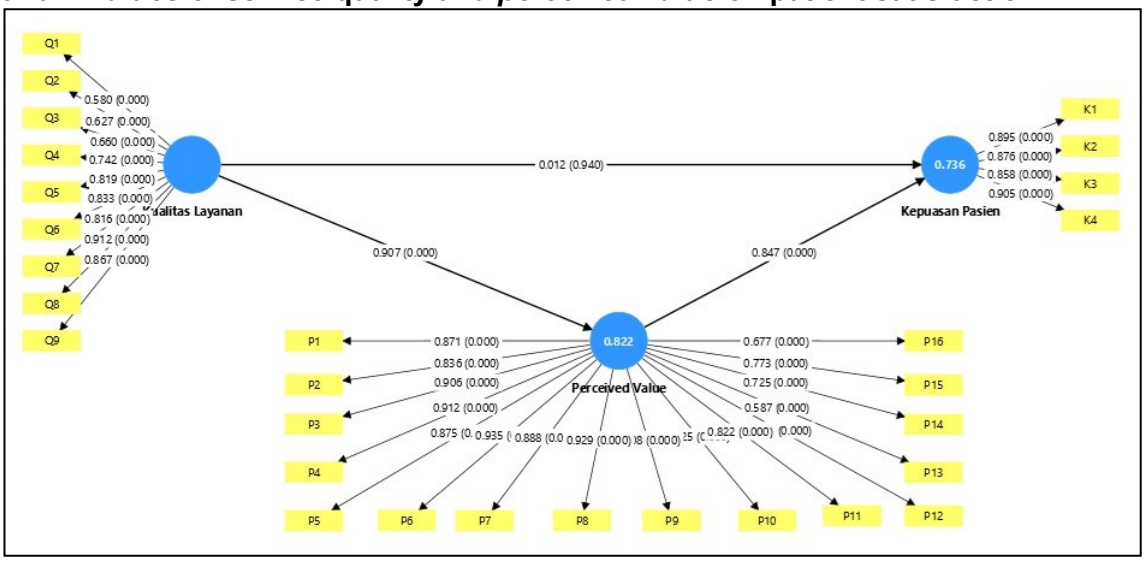
Variable	*Coefficient*	*SD*	*T statistic*	*P value*	Description
Service Quality -> *Perceived Value* -> Patient Satisfaction	0.768	0.134	5.730	0.000	Accepted

Source: Processed data, 2026.

Table 4 illustrates the total effect analysis, demonstrating that service quality exerts a significant overall influence on patient satisfaction. Nevertheless, as detailed in Tables 5 and 6, the decomposition of these relationships reveals that the direct path between service quality and satisfaction is not statistically significant. Conversely, the indirect influence channeled through a mediating variable remains highly significant, confirming a full mediation effect.

The connection between service quality and perceived value is meaningful in both cumulative and straight impact assessments, with a figure of 0.907 (P = 0.000), showing a robust immediate effect of service quality on perceived value. Similarly, perceived value shows a highly significant association with patient contentment, with a coefficient of 0.847 (P = 0.000), indicating that perceived value strongly influences patient satisfaction.

Figure 5. Bootstrapping results of the *SEM-PLS path coefficient* structural model and *P values* of service quality and *perceived value* on patient satisfaction



Source: Processed data, 2026.

The examination outcomes suggest that perceived value fully mediates the relationship between service quality and patient satisfaction. Although service excellence exerts a universal influence on contentment (cumulative effect = 0.780), this influence operates circuitously through perceived value rather than directly. Grounded in these discoveries, it may be inferred that:

H1: Outpatient service quality does not have a direct positive effect on patient satisfaction
H2: Outpatient service quality has a significant positive effect on *perceived value*
H3: *Perceived value* has a significant positive effect on patient satisfaction

H4: *Perceived value* fully mediates the effect of outpatient service quality on patient satisfaction

DISCUSSION

Among the indicators measuring outpatient service quality, the highest score is observed in the assurance dimension, particularly in the clarity and reliability of medical information provided by doctors, nurses, or therapists. For the perceived value variable, the highest score, specifically within the emotional value dimension, pertains to the appropriate delivery of information and patient consent for medical procedures.

The Effect of Outpatient Service Quality on Patient Satisfaction

This research demonstrates that outpatient service quality lacks a significant direct positive influence on contentment. While quality influences satisfaction within the aggregate model, this relationship does not manifest directly. Such findings suggest that the connection is entirely indirect, highlighting the presence of critical intervening variables that fully mediate. These findings differ from previous studies by (Astuti, 2024; Mabini Jr. et al., 2024; Novitasari, 2022; Priyantini et al., 2023; Rahma et al., 2023; Waty et al., 2025) which states that good service quality will directly increase patient satisfaction. Same with this inquiry (Utari et al., 2025) demonstrate that service quality fails to meaningfully impact patient contentment. Quality certainty is not directly linked to nursing learner satisfaction. Realized worth served as an intermediary between the certainty of quality and satisfaction.

The Effect of Outpatient Service Quality on *Perceived Value*

The findings of this study indicate that service quality influences patients' perceived value. This suggests that improvements in the quality of the provisions supplied to Nima Clinic lead to a higher level of perceived value among patients. Previous research by (Lestari et al., 2024) also supports this relationship, showing that when patients receive higher-quality service, they tend to evaluate the service's value more positively. Consequently, the study concludes that service quality positively contributes to patients' perception of overall value.

The Effect of *Perceived Value* on Patient Satisfaction

The analysis further demonstrates that perceived value has a notable impact on patient satisfaction. These findings suggest that when patients perceive greater value in the services provided by Nima Clinic, their satisfaction increases. These findings align with (Utami et al., 2024) who observed that perceived value significantly impacts patient satisfaction. Likewise, (Ariany, 2021) demonstrated that both service quality and perceived value exert positive or significant influences on satisfaction levels, reinforcing the importance of these constructs. Similarly, evidence from China suggests that the perceived value experienced by patients at outpatient clinics plays a crucial role in determining their satisfaction during clinic visits (Liu et al., 2023). Overall, these findings suggest that more positive patient experiences with healthcare services contribute to higher satisfaction.

Perceived Value Mediates the Relationship between Outpatient Service Quality

Bootstrapping evaluation via SEM-PLS demonstrated that perceived worth meaningfully mediates the association between service excellence and patient satisfaction. The path analysis indicates that the direct effect of service quality on patient satisfaction is not statistically significant. Nonetheless, the impact of service quality on perceived value is vital, and perceived value, in turn, powerfully influences patient satisfaction. Collectively, these links create a mediation model where perceived value acts as a complete intermediary (Hair et al., 2021). This indicates that within the outpatient service context examined in this study, service quality does not directly determine patient satisfaction

when perceived value is included in the model. Instead, the influence of service quality on satisfaction occurs entirely through patients' evaluations of the value they receive.

Implications of the research results

The theoretical contribution of this research lies in positioning perceived value as a total mediator, extending classical models of service quality and satisfaction in healthcare. Specifically, it advances *Expectancy-Confirmation Theory (ECT)* by presenting perceived value as the critical psychological conduit. This insight explains the mechanism by which service quality assessments ultimately determine patients' satisfaction. Service quality must be perceived as valuable by patients before it can impact satisfaction. This indicates that expectation confirmation may not be sufficient to generate satisfaction in the context of healthcare services. Confirmation is only the first stage in a more complex evaluation process. Thus, this research provides an empirical basis for the next generation of ECT theory as *an* important *refinement*, where the theory acknowledges that in many modern consumption contexts, we are not satisfied simply because we get what we expect, but because we feel that what we get is worth more than what we sacrifice to get it. This is an important and necessary elaboration of Oliver's classic theory, which remains relevant but needs refinement for more complex contexts. Second, while classical frameworks such as SERVQUAL or SERVPERF assume a direct link between service quality and satisfaction, this research demonstrates that the relationship operates through a profound psychological mechanism: *perceived value*. These findings do not invalidate established theories but rather illuminate the *black box* between quality and satisfaction, clarifying the underlying cognitive processes involved. (Cronin et al., 2000) state that models that integrate *perceived value* as a mediator between service quality and *behavioral intentions* have greater explanatory power than direct models. The study confirms this in the context of healthcare. By refining both the ECT and SERVQUAL/SERPERF classical theories, this study also corrects the assumption that service quality automatically leads to satisfaction or that satisfaction is only a function of expectation confirmation, indicating that the initial model was too simplistic and needed revision.

The functional consequences grounded in the discoveries of this inquiry are to offer a tangible tactical roadmap for Nima Clinic's leadership. There is a tactical framework transition from a quality-centered method to a value-centered method. From providing high-quality health services to providing the best value for patients through optimal health services. Management redesigned value-based service processes by conducting a value-based mapping of each point in the patient journey that affects perceived value and by analyzing service activities that increase patient benefits. The new system was designed to maximize the principle of perceived value, with the first principle being value-based design, whereby each point of contact in the patient journey must be evaluated in terms of what the patient sacrifices in time, effort in obtaining services, stress factors, and cost clarity. The second is value-based clinical pathways, which are based not only on medical effectiveness but also on patient burden, such as the frequency of visits, ease of access to medication, and educational support to reduce patient anxiety. The third is digital value creation, such as strengthening telemedicine services and providing a patient portal for access to schedules and evaluation of examination results.

With the redesign of value-based patient services, the architecture of the patient experience has shifted from a functional to a holistic, value-based one. Several things that can be done are, first, redesigning the patient journey through pre-visit value creation, such as pre-visit education about what to expect from the service, automatic reminders, and information on preparing for the procedure; enhancing value during the visit (during-visit value enhancement) by identifying critical moments where value can be increased; and then post-visit value reinforcement, such as follow-up calls to check on

patients, especially those who have undergone certain procedures, and surveys to directly measure perceived value. Second, by developing value-based service recovery, which means that when a problem occurs, a recovery protocol is created that focuses on restoring the lost value rather than just apologizing. Third, developing co-creation platforms, which involve patients in service design, for example, using feedback loops to continuously adjust services to what patients consider valuable.

The implications of this research have led to changes in organizational investment logic, whereby asset-based investments focused on physical assets, such as building renovations, the addition of sophisticated equipment, and human resources, have become patient value-based investments. These value-based investments use *value metrics* as the basis for evaluation, whereby every investment proposal must demonstrate how it will increase *perceived value* for patients. With this matrix, it is hoped that investments will strike a balance between improving technical quality and enhancing the value of experience. Furthermore, budget reallocation is based on value drivers that reflect their contribution to *perceived value*, rather than simply following healthcare industry trends. For example, allocate more to process efficiency than to adding physical facilities if waiting time is the greatest sacrifice patients feel. The *shared value investment* model can be used where it benefits the clinic while increasing patient value, for example, a comprehensive child growth and development education program where patients gain value, such as knowledge and better control of growth and development, while the clinic gains value (more compliant patients, faster achievement of better growth and development, and lower long-term costs). The results of this study also enable *value-based pricing*, in which service prices are linked to outcomes and perceived value rather than simply to the volume of procedures.

Within the framework of service landscapes and value co-production, the interplay among service excellence, perceived worth, and patient satisfaction appears multifaceted, offering a more comprehensive perspective on the inextricable links among these constructs (Vargo & Lusch, 2024). The results of this study have led to an ontological shift from transactional to relational, in which value initially created by service providers is now co-created through interactions among various actors within complex healthcare networks. In this case, it is observable that the assistance framework, which *a service ecosystem,* incorporates subjects, relatives, medical vendors, insurers, authorities, innovation, and the socio-cultural background, proceeding in a cyclic and fluid way. This ecosystem generates value from interactions, not from linear inputs. Patients are key actors in value creation, which is formed during the interaction process. Service providers are facilitators who provide resources that enable patients to create value for themselves. Meanwhile, patients' families, communication, technology, regulators, and insurance (financing) also influence the value that may be created during the interaction process. From a service ecosystem perspective, patients are important evaluators, but not the only ones, as value is evaluated individually, relationally, institutionally, and through network interactions within the digital ecosystem. Thus, *perceived* value from this perspective is not a purely individual attribute but rather a social construct that emerges from shared practices within the service ecosystem.

The extent to which perceived value serves as a mediating variable may vary across service sectors. In higher education, this concept is particularly relevant because the sector shares several service-based characteristics with healthcare. Evidence from a study by (Ledden et al., 2024) suggests that perceived value fully mediates the association between service quality and learner contentment in British tertiary education institutions. (Kim & Lee, 2025) confirmed similar findings for student health services. This indicates transferability between contexts.

Applications in the field of digital platforms, such as e-commerce and marketplaces, may partially mediate perceived value rather than fully mediate it, because users can be immediately satisfied by technical quality. The distinguishing factors in the health sector are the network effect, whereby the platform's value can increase with the number of users due to the creation of a social dimension, and the data-driven personalization effect, whereby value is created by the platform's ability to understand individual preferences. This is reinforced by research by (Zeithaml et al., 2020), which states that perceived value in a digital context has additional dimensions such as convenience value and social value. Similarly, research by (Hsu & Lin, 2023) noted that perceived worth intercedes the connection between portal excellence and e-commerce contentment, while maintaining a significant direct impact on quality. Their findings indicate that perceived value serves as a partial mediator, where both direct and indirect paths contribute to the outcome.

How does it apply to the hospitality industry, such as hotels, restaurants, and tourism? In general, it is still relevant to apply, but it needs to be adjusted to the sector's characteristics. The hospitality sector is defined by enjoyment and pleasure as primary value components, with social value often disseminated via digital platforms. Within these moments of truth, every interaction can determine value creation or destruction (Gallarza et al., 2023) confirmed that perceived worth intercedes the connection between service excellence and loyalty, identifying emotional dimensions as the most influential factors for driving long-term engagement within the global tourism industry. The PERVAL scale proposed by (Sweeney & Soutar, 2001) covers emotional or social values that are highly relevant to hospitality. This suggests that the mechanism by which service quality affects customer satisfaction through perceived value may be a universal pattern applicable across service sectors. However, several factors influence this, such as variations in the strength of mediation (full or partial), differences in relevant value dimensions across sectors, and the measurement of perceived value, which must be contextualized by service characteristics.

CONCLUSION

The outcomes of this inquiry indicate that outpatient service excellence does not have a direct, meaningful, positive influence on client satisfaction. Nonetheless, it has a statistically significant positive impact on perceived worth. Moreover, perceived worth exhibits a strong positive direct association with patient satisfaction. Within this structure, perceived worth functions as a mediator between outpatient service excellence and satisfaction levels. While service quality exerts an overall influence, its direct impact is not statistically significant, indicating that the relationship is essentially fully mediated. This shows that service quality does not necessarily make patients satisfied. Service quality must first create a high perceived value in patients' minds. When patients perceive that the services they receive are of high value (functionally, emotionally, and socially), they will experience high satisfaction. In other words*, perceived value* is a psychological mechanism that is absolutely necessary to translate objective service quality into subjective patient satisfaction. This shows the importance of the value perceived by patients and their families in increasing customer satisfaction. In addition to quality improvements, healthcare providers must prioritize strategies that elevate perceived value for patients and their families to bolster satisfaction. Notable limitations include the small respondent pool and the specific quantitative design, which limit the confirmation of variables. Accordingly, future investigations should employ larger samples and mixed-method approaches, incorporating qualitative data to provide a more nuanced and in-depth exploration of the findings established in this research.

LIMITATION

This research has several limitations that warrant consideration in future research. First, this research was conducted in a non-BPJS specialist clinic in Yogyakarta City; if it is to be applied to a different setting, adjustments must be made to the characteristics of the health service setting. The data used were cross-sectional, so they could not describe changes in patients' perceptions of the value of clinic service quality or patient satisfaction over time. (Zeithaml et al., 2020) argued that perceived value changes with the accumulation of experience. In the context of healthcare, Johnson et al. (2018) showed that satisfaction measurements vary greatly over time. A longitudinal design is needed to track these temporal dynamics. Third, the variables used in this research were limited to service quality, *perceived value*, and patient satisfaction, while other factors, such as trust, loyalty, or patient experience using the service, were not included in the analysis. Fourth, data collection was conducted using an online questionnaire distributed via WhatsApp, which may have introduced respondent perception bias or subjectivity. In the future, it is recommended that research be conducted across various healthcare settings, including private practices, general clinics, specialist clinics, and hospitals. In addition, other relevant variables could be added, and a longitudinal approach could be used to provide more comprehensive and in-depth results regarding the quality of health services on patient satisfaction mediated by *perceived value*.

ACKNOWLEDGMENT

The authors wish to express their sincere gratitude to the institutions and researchers whose studies were included in this review. We also thank colleagues and reviewers for their valuable feedback during the preparation of this manuscript, which contributed to the clarity and rigor of the analysis.

DECLARATION OF CONFLICTING INTERESTS

The authors declare that no potential conflicts of interest exist concerning the execution of this research, its authorship, or the final publication of this manuscript.

REFERENCES

Afader, M., Rahman, P. H., & Sunjaya, D. K. (2021). Patients' Satisfaction in Public and Private Primary Health Care: A Study in Karawang Regency, West Java, Indonesia. *Althea Medical Journal*, *8*(4). https://doi.org/10.15850/amj.v8n4.2340

AlOmari, F. (2021). Measuring Gaps in Healthcare Quality Using the SERVQUAL Model: Challenges and Opportunities in Developing Countries. *Measuring Business Excellence*, *25*(4), 407–420. https://doi.org/10.1108/MBE-11-2019-0104

Anastasya, R., & Gurning, F. P. (2023). Analysis of Health Service Quality Using the SERVPERF and IPA Methods in Outpatients at Malahayati Islamic Hospital Medan. *TROPHICO: Tropical Public Health Journal*, *3*(2), 105–111. https://doi.org/10.32734/trophico.v3i2.13234

Ariany, I. V. (2021). The Effect of Service Quality and Perceived Value on Patient Loyalty: Patient Satisfaction as a Mediating Variable. *Journal of Business Management and Entrepreneurship*, *5*(4), 402–407.

Astuti, E. R. (2024). Factors that Influence the Satisfaction of Health Service Recipients in Hospitals: Systematic Literature Review. *Care: Journal of Health Sciences*, *12*(2), 353–362. https://doi.org/10.33366/jc.v12i2.5947

Baskoro, R. R., Arvianto, A., & Rinawati, D. I. (2016). Assessment of Patient Satisfaction Using the SERVQUAL Method. *Industrial Engineering Online Journal*, *5*(4).

Cengiz, E., & Kirkbir, F. (2007). Customer Perceived Value: The Development of a Multiple Item Scale in Hospitals. *Problems and Perspectives in Management*, *5*, 252–268.

Cronin, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the Effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments. *Journal of Retailing*, *76*(2), 193–218.

Cronin, J. J., & Taylor, S. A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, *56*(3), 55–68.

Dwijayanti, K. A., Wirajaya, I. W. A., Sukadana, K., & Kusuma, N. Y. (2024). Service Quality Factors that Influence Patient Satisfaction at Buleleng Regional Hospital. *Jurnal Ilmiah Manajemen Kesatuan*, *12*(4), 1179–1190. https://doi.org/10.37641/jimkes.v12i4.2722

Erpurini, W., & Saleh, F. D. (2021). Analysis of Patient Service Quality at Kasih Bunda Yanti Rajamandala Primary Clinic. *Journal of Management Science*.

Fatimah, S., Idrus, M., Mukhtar, A., Salam, K. N., & Ismawati. (2022). Study on Service Quality on Customer Satisfaction and Loyalty. *Jurnal Manajemen*, *26*(3), 512–532. https://doi.org/10.24912/jm.v26i3.938

Ferreira, D. C., Vieira, I., Pedro, M. I., Caldas, P., & Varela, M. (2023). Patient Satisfaction with Healthcare Services and the Techniques Used for its Assessment: A Systematic Literature Review and a Bibliometric Analysis. *Healthcare*, *11*(5). https://doi.org/10.3390/healthcare11050639

Gallarza, M. G., Saura, I. G., & Arteaga, F. (2023). The Quality-Value-Satisfaction-Loyalty Chain in Tourism: A Meta-analysis. *Tourism Management*, *94*.

Ge, Y., Yuan, Q., Wang, Y., & Park, K. (2021). The Structural Relationship among Perceived Service Quality, Perceived Value, and Customer Satisfaction. *Sustainability*, *13*(15). https://doi.org/10.3390/su13158633

Ghimire, P., Bista, N., & Collao, M. R. (2022). Evaluation of Patients' Satisfaction Using the SERVQUAL Questionnaire Model. *Journal of Chitwan Medical College*, *12*(4), 68–72. https://doi.org/10.54530/jcmc.650

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Mediation Analysis. In *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R*. Springer. https://doi.org/10.1007/978-3-030-80519-7_7

Hasibuan, C. F. (2020). *The Measurement of Customer Satisfaction towards the Service Quality at XYZ Wholesale by Using the Fuzzy Service Quality Method*. *909*(1). https://doi.org/10.1088/1757-899X/909/1/012053

Hsu, C. L., & Lin, J. C. (2023). Understanding the Role of Perceived Value in E-commerce Platform Loyalty. *Electronic Commerce Research and Applications*, *58*.

Jonkisz, A., Karniej, P., & Krasowska, D. (2021). SERVQUAL Method as an Old New Tool for Improving the Quality of Medical Services: A Literature Review. *International Journal of Environmental Research and Public Health*, *18*(20). https://doi.org/10.3390/ijerph182010758

Kawisana, M. G., & Ekawati, N. W. (2024). The Role of Perceived Value in Mediating the Influence of Service Quality on Customer Satisfaction. *Jurnal Impresi Indonesia*, *3*(1), 48–58. https://doi.org/10.58344/jii.v3i1.4602

Kim, Y. T., & Lee, C. W. (2025). The effect of health service quality on health service value and satisfaction. *Productivity Research*, *39*(7), 77–107.

Ledden, L., Kalafatis, S. P., & Samouel, P. (2024). The mediating role of perceived value in higher education service quality and student satisfaction. *Studies in Higher Education*, *49*(3), 412–432.

Lestari, R. B., Widagdo, H., & Meirisa, F. (2024). The Role of Perceived Value in Mediating the Effect of Service Quality on Customer Satisfaction. *Forum Bisnis Dan Kewirausahaan*, *13*(2), 484–492.

Lienata, A., & Berlianto, M. P. (2023). The Effect of Service Quality and Clinic Image on Satisfaction to Mediate Revisit Intention and Loyalty in the Beauty Clinic Industry. *Daengku: Journal of Humanities and Social Sciences Innovation*, *3*(4), 551–563. https://doi.org/10.35877/454RI.daengku1735

Liu, S., Hu, Y., Lu, C., Li, D., & Zhang, Z. (2023). Identifying Patient Perceived Values During Outpatient Encounters: An Empirical Study from Chinese Public Hospitals. *BMC Health Services Research*, *23*, 852. https://doi.org/10.1186/s12913-023-09817-6

Mabini Jr., S. P., Narsico, L. O., & Narsico, P. G. (2024). Service Quality, Patient Satisfaction, and Improvement Indicators. *International Journal of Multidisciplinary: Applied Business and Education Research*, *5*(4), 1331–1345. https://doi.org/10.11594/ijmaber.05.04.18

Ministry of Health of the Republic of Indonesia. (2018). *Minister of Health Regulation No. 26 of 2018 on Integrated Electronic Business Licensing Services in the Health Sector*. https://farmalkes.kemkes.go.id/unduh/permenkes-26-2018/

Novitasari, D. (2022). Hospital Quality Service and Patient Satisfaction: The Role of Service Excellence and Service Quality. *Journal of Information Systems and Management*, *1*(1).

Noviyani, A., & Viwattanakulvanid, P. (2025). Service Quality as a Driver of Perceived Value, Satisfaction, and Revisit Intention in Indonesia. *Scientific Reports*, *15*. https://doi.org/10.1038/s41598-025-29414-3

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, *17*(4), 460–469. https://doi.org/10.1177/002224378001700405

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, *64*(1), 12–40.

Priyantini, D., Marini, G., Ulfa, A., & Uliyah, M. (2023). Excellent Service and Patient Satisfaction in Health Clinic Services. *Fundamental and Management Nursing Journal*, *6*(1), 18–24. https://doi.org/10.20473/fmnj.v6i1.45670

Rahma, A. Z., Yanuar, T., & Syah, R. (2023). The Relationship Between Service Quality, Patient Satisfaction, Behavioral Intentions, and Prices in Outpatient Healthcare in the Hospital Industry. *Jurnal Ekonomi*, *12*(2).

Rahman, F., Islam, Md. A., & Hadiuzzaman, Md. (2023). Paratransit Service Quality Modeling Reflecting Users' Perception: A Case Study in Dhaka, Bangladesh. *IATSS Research*, *47*(3), 335–348. https://doi.org/10.1016/j.iatssr.2023.07.001

Satyawati, & Berlianto, M. P. (2022). Service Quality, Patient Satisfaction, and Its Impact on Patient Loyalty at X Hospital. *The Enrichment: Journal of Management*, *12*(4), 2572–2581.

Sinollah & Masruroh. (2019). *Measurement of Service Quality (Parasuraman SERVQUAL) in Building Customer Satisfaction to Create Customer Loyalty*. https://doi.org/10.36636/dialektika.v4i1.285

Sinyiza, F. W., Kaseka, P. U., Chisale, M. R. O., Chimbatata, C. S., Mbakaya, B. C., Kamudumuli, P. S., Wu, T. S. J., & Kayira, A. B. (2022). Patient Satisfaction with Health Care at a Tertiary Hospital in Northern Malawi: Results from a Triangulated Cross-Sectional Study. *BMC Health Services Research*, *22*(1). https://doi.org/10.1186/s12913-022-08087-y

Sugiyono. (2025). *Statistics for Research*. Alfabeta.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer Perceived Value: The Development of a Multiple Item Scale. *Journal of Retailing*, *77*(2), 203–220.

Utami, I. H., Syah, T. Y. R., & Rokiah. (2024). The Effect of Service Quality and Customer Perceived Value: The Intention to Do a Medical Check-Up with Patient Satisfaction as a Mediating Variable at Medika BSD Hospital. *Devotion: Journal of Research and Community Service*, *5*(9), 1137–1147.

Utari, I., Kosasih, & Asnar, E. (2025). Analysis of Service Quality on Patient Satisfaction and Its Implications for Inpatient Patient Loyalty. *Jurnal Ners*, *9*, 6887–6896. https://doi.org/10.31004/jn.v9i4.50384

Vargo, S. L., & Lusch, R. F. (2024). Service-Dominant Logic 5.0: Advancing the Study of Value Co-Creation and Institutions. *Journal of Service Research*, *27*(1), 5–23.

Waty, D. S., Saputri, M. E., & Helen, M. (2025). The Relationship Between Service Quality and Patient Satisfaction in the Primary Clinic of the Directorate General of Regional Development, Ministry of Home Affairs. *Journal of Nursing Culture and Technology*, *2*(1).

Wijaya, T. W., Wiramijaya, F., & Christin, Y. (2023). Descriptive Analysis of Google Reviews to Measure Participant Satisfaction at Branch Offices within Regional Deputy Area XII. *Jurnal Jaminan Kesehatan Nasional*, *3*(2), 11–22. https://doi.org/10.53756/jjkn.v3i2.171

Wulandari, R., Doddy, I. P., & Indaryani, L. (2024). Measuring the Impact of Healthcare Service Quality of Hospitals on Customer Satisfaction. *Corporate and Business Strategy Review*, *5*(1), 336–345. https://doi.org/10.22495/cbsrv5i1siart8

Yogyakarta City Government. (2023). *Number of Health Facilities by Subdistrict in Yogyakarta City in 2023*. https://dataset.jogjakota.go.id/dataset/kyda2023-23/resource/feefaa53-a403-40e1-b1e8-d2a25b9b2fb5

Yusri, C. R., Hidayat, M., & Djuhaeni, H. (2017). Role of Satisfaction with Health Care Services in Increasing Patient Loyalty: An Ambulatory Setting. *Althea Medical Journal*, *4*(3), 329–334.

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, *52*(3), 2–22.

Zeithaml, V. A., Verleye, K., Hatak, I., Koller, M., & Zauner, A. (2020). Three Decades of Customer Value Research: Paradigmatic Roots and Future Research Avenues. *Journal of Service Research*, *23*(4), 409–432.

ABOUT THE AUTHOR(S)

1st Author
Nurwestu Rusetiyanti is a postgraduate student at Ciputra University, Surabaya, Indonesia. Her academic interests include healthcare management, hospital performance, and health policy. Email: nrusetiyanti@magister.ciputra.ac.id. ORCHID ID: https://orcid.org/0009-0008-1950-7764

2nd Author
Eric Harianto is a lecturer at Ciputra University, Surabaya, Indonesia. His research focuses on management studies, organizational governance, and healthcare systems. Email: eric.harianto@ciputra.ac.id. Orchid ID: https://orcid.org/0000-0003-1844-1368