

THE IMPACT OF CORE AND PERIPHERAL SERVICE QUALITY ON VALUE, SATISFACTION, AND LOYALTY AMONG PATIENTS: THE MODERATING ROLE OF SWITCHING COSTS AND E-HEALTH AT A GOVERNMENT HOSPITAL

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Abstract

This study analyses the impact of core and peripheral service quality on patient value, satisfaction and loyalty at Lamongan General Hospital by considering the moderating role of switching costs and e-health. Using a quantitative approach, this study analyzed data collected from 80 patients hospitalized at Lamongan General Hospital through a survey. Structural equation modelling (SEM) was used to test the hypothesis. Results show that the quality of core and peripheral services has not significantly impacted perceived value and patient satisfaction, which in turn increases patient loyalty. Furthermore, switching costs and e-health act as substantial moderators in this relationship, with their influence being more decisive in patients who perceive switching costs as high and who use e-health services. This study confirms the importance of hospitals improving the quality of core and peripheral services as a primary strategy for increasing patient value, satisfaction, and loyalty. Additionally, integrating e-health and switching cost management strategies effectively strengthens this relationship. These findings provide important insights for healthcare practitioners to develop more patient-focused strategies in the digital era.

Keywords: Core Service Quality, Peripheral Service Quality, Patient Satisfaction Patient Loyalty, Perceived Value, Switching Costs, E-Health, Health Services

INTRODUCTION

The development of information technology in the last decade has drastically changed many aspects of health services, including the implementation of e-health, which is critical in modernizing the service approach to patients. In the Lamongan District General Hospital context, the implementation of core service quality and peripheral service plays a vital role in increasing perceived value, patient satisfaction and patient loyalty. Factors such as switching costs and e-health adoption offer new opportunities and challenges in creating quality and satisfying health services.

The latest Service Quality theory by (Uzir et al. 2021) explains that service quality can be measured through five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. This research adapts this framework to explore how core service quality and peripheral service at the Lamongan District General Hospital influence perceived value and outcomes such as patient satisfaction and loyalty.

Furthermore, the Perceived Value theory (Choi et al. 2020) explains that the value perceived by consumers (in this context, patients) comes from their assessment of what they receive

(benefits) compared to what they provide (costs). This research investigates how perceived value in health services is influenced by the quality of core services and supporting services provided by the Lamongan District General Hospital.

Regarding patient satisfaction, customer satisfaction theory (Hur, Kim, and Park 2013) identifies that satisfaction results from comparing customer expectations and perceived performance. This research applies these principles to understand patient satisfaction with the health services they receive.

Regarding patient loyalty, customer loyalty theory (Kiran 2017) states that loyalty results from high customer satisfaction and unique attributes that make customers reluctant to switch to competitors. This research assesses how service quality and perceived value contribute to the formation of patient loyalty at the Lamongan District General Hospital.

This research recognizes the importance of switching costs ((Moenardy Khalid, Messkah Anthon, and Isliko Thomas 2021) as influencing a patient's decision to remain loyal or switch to another health service provider. In addition, this study also integrates e-health as a potential moderating factor in the relationship between service quality, perceived value, satisfaction and patient loyalty, considering its increasing role in the provision of health services.

The main objective of this research is to comprehensively analyze and understand the influence of core service quality and peripheral service on perceived value, patient satisfaction, and patient loyalty at the Lamongan Regency General Hospital by considering the role of switching costs and e-health as moderating variables. This research aims to fill existing research gaps by providing a deeper understanding of the dynamics between health service quality, patient-perceived value, satisfaction, and loyalty in a specific and current context. It also offers strategic recommendations for healthcare practitioners in improving the effectiveness of their services.

LITERATURE REVIEW

Service Quality in Healthcare Context (Core and Peripheral Service Quality)

Core Service Quality: Refers to the quality of healthcare services received by patients, including diagnosis, treatment, and interactions with medical staff (Um and Lau 2018). Researchers like (AlOmari 2021) have identified dimensions of service quality that are adaptable to healthcare contexts, emphasizing reliability, responsiveness, empathy, assurance, and tangibles as critical attributes. The relationship between the quality of core services and patient loyalty at Lamongan Regional Hospital is rooted in the understanding that the quality of essential health services directly influences patient loyalty. This relationship is based on the premise that high-quality core services, such as accurate diagnostics, effective treatment, and competent healthcare delivery, contribute significantly to patient satisfaction and foster loyalty. According to recent theoretical advances, as discussed by (Puri and Singh 2018) (update of the SERVQUAL model), service quality dimensions tangibility, reliability, responsiveness, assurance, and empathy are critical in shaping patient perceptions and assessments. Loyalty results.

Peripheral Service Quality: Concerns additional service aspects such as accessibility, availability of health information, and physical facilities. Studies by (Ampaw et al. 2020) underscore the importance of peripheral elements in enhancing patients' overall perception of service quality. This includes the ambience of the hospital, clarity and availability of information, and ease of navigating the healthcare system.

The Influence of Service Quality on Value, Satisfaction, and Loyalty

Literature suggests a positive relationship between service quality and the perceived value by patients (Aliman and Mohamad 2016), which in turn can enhance satisfaction (Chang, Chen, and Lan 2013) and patient loyalty (Kitapci, Akdogan, and Dortyol 2014). The conceptual model by (Mauri, Minazzi, and Muccio 2013) outlines how expectations and perceptions of service influence evaluations of value and satisfaction, leading to loyalty. High-quality service contributes to a patient's perception of value, which is a crucial mediator leading to satisfaction and subsequent loyalty.

Switching Costs and E-Health as Moderators

Switching Costs

Switching costs refer to the costs (financial, time, or psychological) that a patient incurs when deciding to switch to another healthcare provider. Research by (Mofokeng 2020) indicates that high switching costs can enhance loyalty as patients perceive it more challenging to switch providers, effectively locking them in due to the high perceived cost of change.

The Role of E-Health

E-health, referring to the use of information and communication technologies in healthcare, can impact patients' perceptions of service quality and loyalty. Studies by (Zhou et al. 2017) found that access to online health information can increase trust and satisfaction among patients and potentially lower the perception of switching costs by offering more options to patients. E-health solutions, such as patient portals, telemedicine, and online appointment systems, can significantly enhance both core and peripheral service quality by making healthcare more accessible and efficient.

METHOD

This research is explanatory research, which intends to explain the relationship between variables, namely the variables "Service Quality, E-Service Quality, Customer Satisfaction, switching costs and Patient Loyalty. The total population of patients in the General Hospital in Lamongan Regency cannot be known with certainty because patients can enter and leave at any time, so the population in this study is infinite. The sampling technique in this research used non-probability sampling with purposive sampling type.

The following sample criteria have been determined in this research:

- 1 Hospital patient Dr. Soegiri Lamongan and RSUD Muhammadiyah Lamongan.
- 2 The patient/family of the patient is hospitalized for at least three days. This criterion is used with the consideration that patients who have undergone treatment for at least three days have received and experienced the care and services provided by the hospital.
- 3 Patients who can communicate and do not include mental illness patients, pediatric patients and patients being treated in intensive care (ICU).
- 4 Patients who are said to be medically well or patients who are in the recovery period.

Determining the sample size in this research refers to the opinion of (Ghozali 2018) using a sample size 10 times larger than the number of variables so that 10 multiplied by seven variables equals 70 samples and to increase the accuracy of the research results, the researcher added 10 samples, so that we get The number of samples in this study was 80 inpatients.

RESULT

Table 1: Convergent Validity

<i>1st Order Constructs</i>	<i>2nd Order Constructs</i>	Indicators	<i>Outer Loadings</i>	T-Stat	P Values	Ket.
<i>Core Service Quality (X1)</i>	<i>Doctor Service Quality</i>	X1.1	0,815	19,633	0,000	Valid
		X1.2	0,808	13,450	0,000	Valid
		X1.3	0,777	15,435	0,000	Valid
		X1.4	0,725	10,312	0,000	Valid
	<i>Nurse Service Quality</i>	X1.5	0,794	18,228	0,000	Valid
		X1.6	0,836	23,750	0,000	Valid
		X1.7	0,760	12,490	0,000	Valid
		X1.8	0,754	14,327	0,000	Valid
	<i>Medical Devices</i>	X1.9	0,716	12,859	0,000	Valid
		X1.10	0,700	10,435	0,000	Valid
		X1.11	0,711	10,098	0,000	Valid
		X1.12	0,776	13,898	0,000	Valid
<i>Peripheral Service Quality (X2)</i>	<i>Patient Room</i>	X2.1	0,698	11,215	0,000	Valid
		X2.2	0,681	8,779	0,000	Valid
		X2.3	0,799	19,938	0,000	Valid
		X2.4	0,744	12,970	0,000	Valid
	<i>Eat Menu</i>	X2.5	0,715	8,310	0,000	Valid
		X2.6	0,663	8,344	0,000	Valid
		X2.7	0,709	10,371	0,000	Valid
		X2.8	0,750	12,559	0,000	Valid
<i>Perceived Value (Y1)</i>	<i>Emotional Value</i>	Y1.1	1,000	-	-	Valid
	<i>Price Value</i>	Y1.2	0,807	22,602	0,000	Valid
		Y1.3	0,769	14,468	0,000	Valid
		Y1.4	0,776	14,478	0,000	Valid
		Y1.5	0,678	10,112	0,000	Valid

<i>1st Order Constructs</i>	<i>2nd Order Constructs</i>	<i>Indicators</i>	<i>Outer Loadings</i>	<i>T-Stat</i>	<i>P Values</i>	<i>Ket.</i>
	<i>Social Value</i>	Y1.6	1,000	-	-	Valid
<i>Patient Satisfaction (Y2)</i>	<i>Experience</i>	Y2.1	1,000	-	-	Valid
	<i>Expectation</i>	Y2.2	0,778	18,629	0,000	Valid
		Y2.3	0,841	21,797	0,000	Valid
		Y2.4	0,722	10,935	0,000	Valid
		Y2.5	0,741	11,032	0,000	Valid
	<i>All Encounters Satisfaction</i>	Y2.6	0,821	19,404	0,000	Valid
		Y2.7	0,780	12,256	0,000	Valid
Y2.8		0,706	12,216	0,000	Valid	
<i>E-Health (Z1)</i>	<i>Reliability</i>	Z1.1	0,791	17,775	0,000	Valid
		Z1.2	0,770	13,704	0,000	Valid
		Z1.3	0,788	15,726	0,000	Valid
	<i>Privacy</i>	Z1.4	0,781	16,585	0,000	Valid
		Z1.5	0,760	12,038	0,000	Valid
		Z1.6	0,799	19,080	0,000	Valid
	<i>Trust</i>	Z1.7	0,753	11,254	0,000	Valid
		Z1.8	0,775	11,675	0,000	Valid
	<i>Easy of Use</i>	Z1.9	0,767	12,807	0,000	Valid
		Z1.10	0,745	12,674	0,000	Valid
		Z1.11	0,828	17,090	0,000	Valid
	<i>Responsiveness</i>	Z1.12	0,781	17,311	0,000	Valid
		Z1.13	0,842	27,211	0,000	Valid
		Z1.14	0,755	10,557	0,000	Valid
	<i>Contact</i>	Z1.15	0,820	25,164	0,000	Valid
		Z1.16	0,817	18,224	0,000	Valid
<i>Switching Cost (Z2)</i>	<i>Procedural Switching Cost</i>	Z2.1	0,738	9,923	0,000	Valid
		Z2.2	0,818	15,649	0,000	Valid
		Z2.3	0,650	6,810	0,000	Valid
	<i>Contractual Switching Cost</i>	Z2.4	1,000	-	-	Valid
	<i>Relational Switching Cost</i>	Z2.5	0,800	15,574	0,000	Valid
		Z2.6	0,855	29,898	0,000	Valid
		Z2.7	0,848	25,609	0,000	Valid
<i>Patient Loyalty (Y3)</i>	<i>Continued of use</i>	Y3.1	1,000	-	-	Valid
	<i>Recommendation to others</i>	Y3.2	0,857	21,357	0,000	Valid
		Y3.3	0,894	56,133	0,000	Valid
	<i>Resilience to not go to other products</i>	Y3.4	1,000	-	-	Valid

The results of convergent validity testing show that all indicators have produced an outer loading value greater than 0.50, so all indicators have met convergent validity and are declared valid in measuring the constructs of core service quality, peripheral service quality, perceived value, patient satisfaction, e-health, switching costs, and patient loyalty (Cevik 2019).

Table 2: Inner VIF Values

Independent Construct	VIF to Y1	VIF to Y2	VIF to Y3
<i>Core Service Quality (X1)</i>	1,089	1,089	1,361
<i>Peripheral Service Quality (X2)</i>	1,089	1,089	1,315
<i>Perceived Value (Y1)</i>	-	-	1,554
<i>Patient Satisfaction (Y2)</i>	-	-	1,674

The analysis of the level of collinearity in the influence path on Y1 and Y2 shows that the VIF value for the core service quality and peripheral service quality variables produces a value of less than 5, so it is declared free from collinearity.

Table 3: Coefficient Determinant

Construct Endogen	Adjusted R-Square	Category
<i>Perceived Value (Y1)</i>	0,261	Weak
<i>Patient Satisfaction (Y2)</i>	0,207	Weak
<i>Patient Loyalty (Y3)</i>	0,493	Moderate

Based on data processing with PLS-SEM, the resulting R2 value for the perceived value variable is 0.261, which means that the percentage of influence of core service quality and peripheral service quality on perceived value is 26.1% and is included in the weak category, as is the value R2 for the patient satisfaction variable is also included in the weak category with a value of 0.207. Furthermore, the resulting R2 value for the patient loyalty variable is 0.493, which means that the percentage of influence of core service quality, peripheral service quality, perceived value, and patient satisfaction on patient loyalty is 49.3% and is included in the moderate category.

Table 4: f² Effect Size

Construct	f ² effect size to Y1	f ² effect size to Y2	f ² effect size to Y3
<i>Core Service Quality (X1)</i>	0,152	0,149	0,008
<i>Peripheral Service Quality (X2)</i>	0,126	0,064	0,021
<i>Perceived Value (Y1)</i>	-	-	0,114
<i>Patient Satisfaction (Y2)</i>	-	-	0,117

In column f2 against Y1, the most significant value is in the core service quality construct (0.152); this shows that the construct that contributes the most to perceived value is core service quality, followed by supporting service quality (0.126). In columns f2 and Y2, it is also the same; the most significant value is in the core service quality construct (0.149); this shows that the construct that makes the most significant contribution to patient satisfaction is core service quality, followed by the quality of supporting services (0.064). Furthermore, in columns f2 to Y3, the most significant value is in the patient satisfaction construct (0.117); this shows that the construct that makes the most significant contribution to patient loyalty is satisfaction, followed by the perceived value (0.114), quality of supporting services (0.021), and quality core services (0.008).

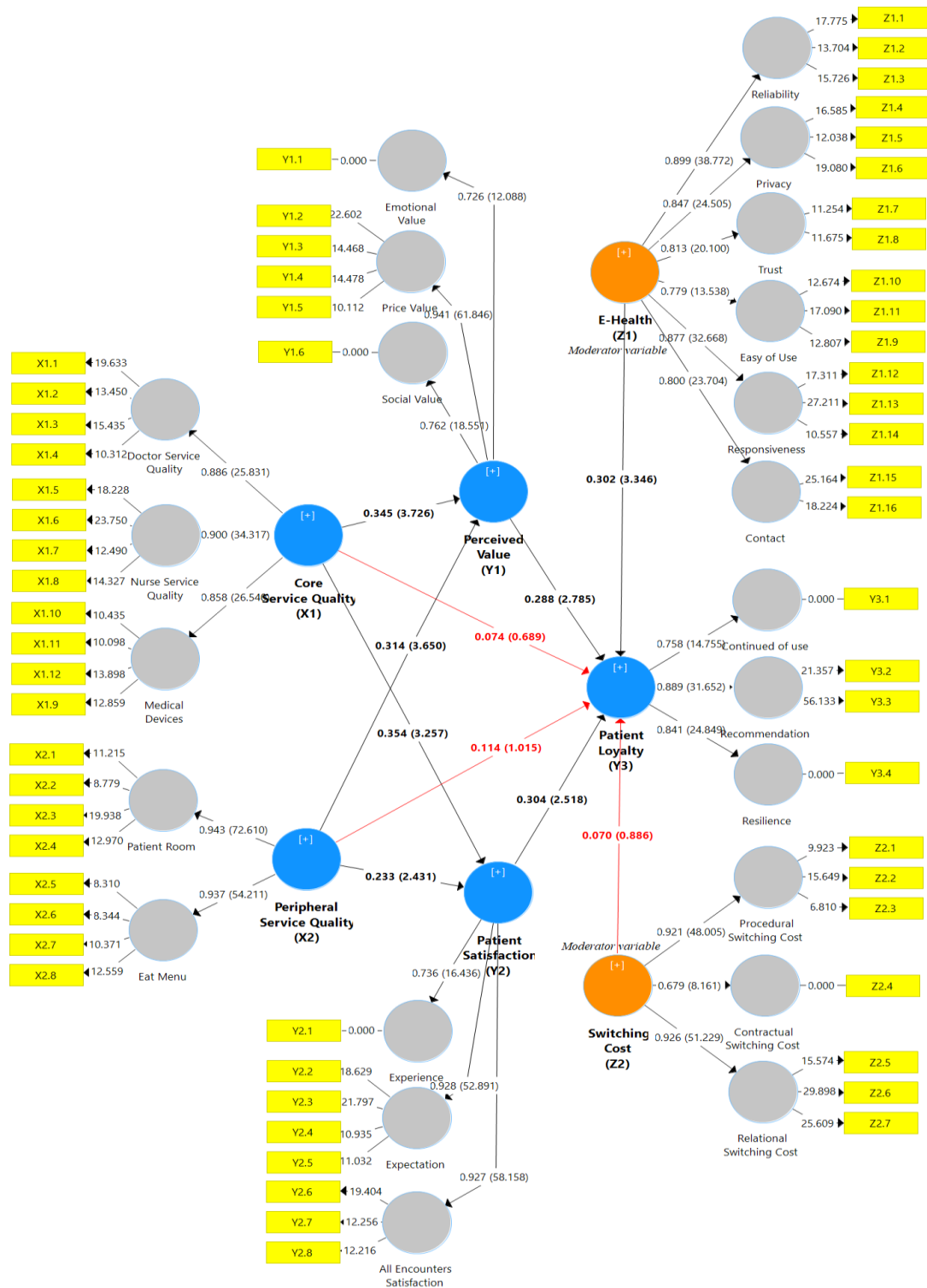


Figure 1: Estimate PLS-SEM Model

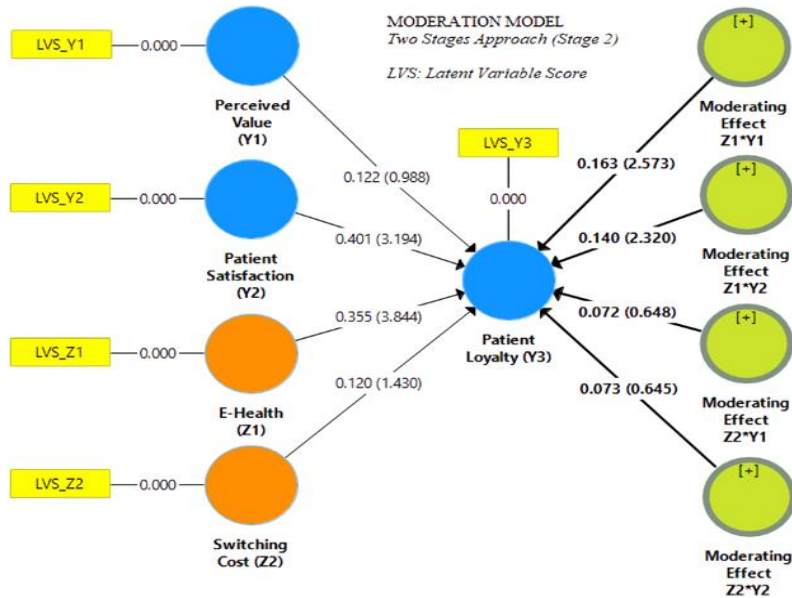


Figure 2: Estimate PLS-SEM Model Moderation (2-Stage Approach)

The results of hypothesis testing using PLS bootstrapping results according to Table 5.24 above can be explained as follows:

1. Core service quality has no significant effect on patient loyalty. The coefficient value of the influence of core service quality on patient loyalty is only 0.074 (close to zero) with T-statistics of 0.689 (<1.96) and p-value 0.491 ($>5\%$), so it is decided that core service quality has no significant effect on patient loyalty. , meaning that the better the quality of core services has not been able to impact increasing patient loyalty. Based on these results, the first hypothesis, which states that core service quality influences patient loyalty at Type B hospitals in Lamongan Regency, cannot be accepted (H1 is rejected).
2. Peripheral service quality also does not significantly affect patient loyalty. The coefficient value of the influence of peripheral service quality on patient loyalty is only 0.114 (close to zero) with T-statistics of 1.015 (<1.96) and a p-value of 0.311 ($>5\%$), so it is decided that peripheral service quality also has no significant effect on patients. Loyalty, meaning that the quality of supporting services is better, can also not have a tangible impact on increasing patient loyalty. Based on these results, the second hypothesis, which states that peripheral service quality influences patient loyalty at Type B hospitals in Lamongan Regency, is also unacceptable (H2 is rejected).
3. Core service quality positively and significantly affects perceived value. The coefficient value of the influence of core service quality on perceived value is 0.345 (positive) with T-statistics of 3.726 (≥ 1.96) and p-value 0.000 ($\leq 5\%$), so it is decided that core service quality has a positive and significant effect on perceived value, meaning that the better the quality of the core service, the higher the perceived value of the service. Based on these results,

- the third hypothesis, which states that core service quality influences perceived value at Type B hospitals in Lamongan Regency, can be accepted (H3 is received).
4. Peripheral service quality positively and significantly affects perceived value. The coefficient value of the influence of peripheral service quality on perceived value is 0.314 (positive) with T-statistics of 3.650 (≥ 1.96) and p-value 0.000 ($\leq 5\%$), so it is decided that peripheral service quality also has a positive and significant effect on perceived value. Value means that the better the quality of supporting services, the higher the perceived value. Based on these results, the fourth hypothesis, which states that peripheral service quality influences perceived value in Type B hospitals in Lamongan Regency, can also be accepted (H4 is received).
 5. The quality of core services also positively and significantly affects patient satisfaction. The coefficient value of the influence of core service quality on patient satisfaction is 0.354 (positive) with T-statistics of 3.257 (≥ 1.96) and p-value 0.001 ($\leq 5\%$), so the end of core service quality also has a positive and significant effect on patients. Satisfaction means that the better the quality of core services, the higher patient satisfaction will be. Based on these results, the fifth hypothesis, which states that the quality of core services influences patient satisfaction at Type B hospitals in Lamongan Regency, can be accepted (H5 is received).
 6. The quality of peripheral services positively and significantly affects patient satisfaction. The coefficient value of the influence of peripheral service quality on patient satisfaction is 0.233 (positive) with T-statistics of 2.431 (≥ 1.96) and p-value 0.015 ($\leq 5\%$), so stopping the quality of peripheral service also has a positive and significant effect on patients. Satisfaction means that the better the quality of maintenance services, the higher patient satisfaction will be. Based on these results, the sixth hypothesis, which states that the quality of peripheral services influences patient satisfaction at Type B hospitals in Lamongan Regency, can be accepted (H6 is received).
 7. Perceived value positively and significantly affects patient loyalty. The coefficient value of the influence of perceived value on patient loyalty is 0.288 (positive), with T-statistics of 2.785 (≥ 1.96). P-value 0.006 ($\leq 5\%$), so the cessation of perceived value positively and significantly affects patient loyalty. The higher the perceived value of the service, the higher patient loyalty will be. Based on these results, the seventh hypothesis, which states that perceived value influences patient loyalty at Type B hospitals in Lamongan Regency, can be accepted (H7 is received).
 8. Patient satisfaction also positively and significantly affects patient loyalty. The coefficient value of the influence of patient satisfaction on patient loyalty is 0.304 (positive) with T-statistics of 2.518 (≥ 1.96) and p-value 0.012 ($\leq 5\%$), so that ultimately, patient satisfaction also has a positive and significant effect on patient loyalty. This means that the higher patient satisfaction, the higher their loyalty will be. Based on these results, hypothesis eight states that patient satisfaction influences patient loyalty at Type B hospitals in Lamongan Regency, which can also be accepted (H8 is received).

Table 5: Indirect Effect

Indirect Effect	Coeff.	T-Stat	P-Values	
Core Service Quality (X1) → Perceived Value (Y1) → Patient Loyalty (Y3)	0,100	2,263	0,024	Fully mediation
Peripheral Service Quality (X2) → Perceived Value (Y1) → Patient Loyalty (Y3)	0,091	2,032	0,043	Fully mediation
Core Service Quality (X1) → Patient Satisfaction (Y2) → Patient Loyalty (Y3)	0,108	2,250	0,027	Fully mediation
Peripheral Service Quality (X2) → Patient Satisfaction (Y2) → Patient Loyalty (Y3)	0,071	1,972	0,049	Fully mediation

The results of testing these four mediation paths provide reinforcement that efforts to increase the loyalty of inpatients at Type B hospitals in Lamongan Regency through the quality of these services and the quality of supporting services, must focus on perceived value and patient satisfaction, this has been proven to encourage increased loyalty higher.

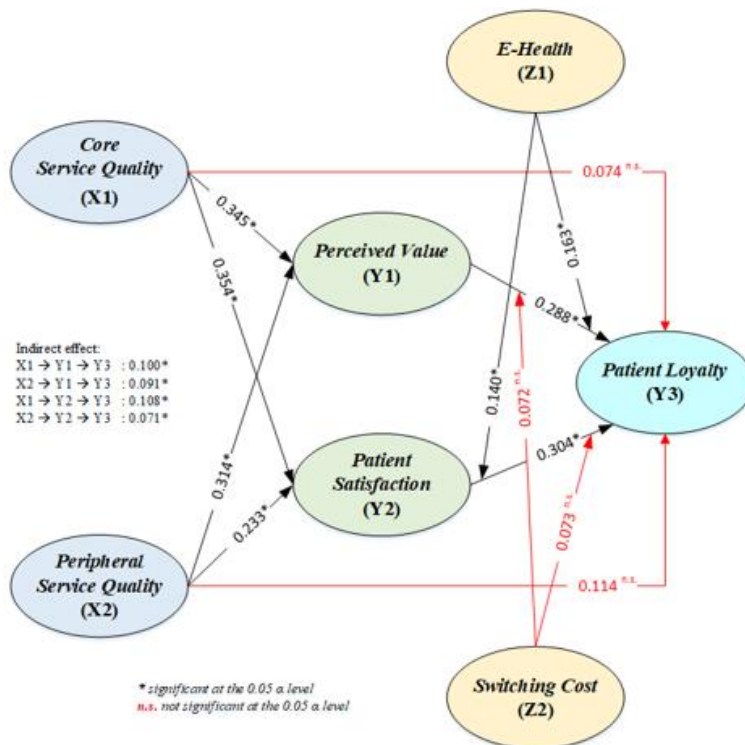


Figure 3. Model Parameter Significance Test Results

Figure 5 shows that there are 6 direct influence paths known to be positive and significant, and the remaining 2 direct paths are known to be insignificant. The four known mediations were all significant. While 2 of the 4 moderation paths are known to be significant, the remaining 2 paths are not significant. Thus, of the 16 hypotheses proposed in this research, 12 hypotheses were accepted, and the remaining 4 hypotheses were rejected.

DISCUSSION

The results of hypothesis testing using PLS-SEM show that the coefficient of influence of core service quality on patient loyalty is small and not significant, so the research hypothesis, which states that core service quality has a substantial effect on the loyalty of inpatients at Type B General Hospital in Lamongan Regency, cannot be accepted. The results of this test show that although the quality of core services is good, other factors, such as perceived value or patient satisfaction, play an essential role in forming loyalty. Patients will consider various aspects in determining their level of loyalty, not just based on core service loyalty.

Several logistical reasons can explain why the quality of core services does not affect patient loyalty at the Type B General Hospital in Lamongan Regency. The first reason is that the choice of health facilities is increasing, and patients have more options in terms of health facilities in Lamongan, so their choice can be influenced not only by the facilities but also by the location and access to the hospital. Muhammadiyah General Hospital and Dr Soegiri, which are very close (± 1 km), give consumers a choice, thereby reducing loyalty; in contrast, if these two hospitals are located far apart, they will have loyalty more closely related to the people in their respective locations.

Several logical reasons can explain why peripheral service quality does not affect patient loyalty at the Type B General Hospital in Lamongan Regency. The first reason is that the level of competition between health facilities is starting to increase; the large number of health facilities in the form of hospitals, health centres and clinics means that patients have many choices to get services that suit their preferences. Dissatisfaction with certain aspects of supporting services, such as the variety of food menus or room comfort, is insufficient to significantly reduce the level of loyalty; patients focus more on other aspects considered more important.

Logical reasons can also be related to the characteristics of the respondent. Generation X and the beginning of Generation Y are starting to get used to digital experiences and technology. If a hospital provides adequate technological solutions, patients will prefer more accessible access to health information than peripheral services that do not directly impact hospital selection. Patients from this generation also have more flexibility when choosing health facilities. They will switch to another hospital if other options can provide more satisfactory services. The condition of the inpatient room (an aspect of peripheral service quality) can directly impact the patient's perception of the value of the services provided. Clean, comfortable, and well-maintained rooms can increase the value perceived by patients. Likewise, variations in the food menu can also improve patients' value towards inpatient services; patients who receive adequate food variations think that they get good value from the service. Furthermore, middle-class economic patients are more likely to assess the value of every aspect of the service they receive. Good facilities and a varied food menu can be considered a significant plus. Patients with middle economic status do not have too high expectations in terms of service, so they focus more on overall comfort. Good peripheral service quality can increase overall comfort, which influences the value the patient perceives. Core service quality includes aspects of medical and nursing services. If patients feel that the

medical and nursing services provided are very satisfactory, this can increase patient satisfaction with their care. The core service quality aspect also includes the relationship between patients, doctors, and nurses, which can significantly impact patient satisfaction. Patients who feel heard, involved, and receive good attention from medical personnel tend to be more satisfied. Another logical explanation is that good quality core services will create a positive patient experience, leading to higher satisfaction levels. The patient's financial capabilities can also influence treatment choices. Middle-class economic patients pay more attention to the value of the services they receive. Patients will feel more satisfied if core service quality provides good value within a limited budget.

The influence of peripheral service quality on satisfaction shows the importance of the patient's psychological aspects. Factors such as the cleanliness and tidiness of inpatient rooms can have a positive psychological influence on patients. Good peripheral service quality can create an environment that supports the patient's psychological aspects and increases satisfaction. The characteristics of primary generations X and Y patients pay more attention to the comfort and facilities of the inpatient room. Good peripheral service quality, especially in clean and comfortable rooms, can fulfil their preferences for good facilities, encouraging satisfaction. Peripheral aspects of service quality can also have a strong influence on patient psychology; good room conditions and satisfying food can create a positive experience, which will encourage patient satisfaction from a psychological perspective.

Increasing the perceived value and patient satisfaction of inpatients can be done by improving the quality of core and supporting services, focusing on indicators of the quality of core services and certain supporting services. These results provide practical findings that the inpatient services of Type B General Hospital in Lamongan Regency improve the quality of core services in terms of deep attention from doctors to the needs and desires of patients as well as friendliness and deep attention from nurses to the needs and desires of patients being the primary concern, the hospital can implement strategies to improve the quality of core services. Another finding is that the neatness of inpatient rooms is the focus of attention on the quality of supporting services, which can be the basis for increasing patient comfort and perceived value. Implement a routine maintenance and upkeep program for inpatient rooms to ensure cleanliness, tidiness and availability of adequate facilities. Furthermore, food menu innovation is also considered, with the finding that menu variations, menu taste, and meal portions are concerned with the quality of supporting services. Hospitals can consider innovation in food provision to increase the perception of value and patient satisfaction by collaborating with nutritionists to design food menus. Which not only meets the patient's nutritional needs but is varied and delicious.

Increasing the loyalty of inpatients can be done by increasing perceived value and satisfaction, focusing on specific indicators of perceived value and satisfaction. The practical findings are that service speed indicates perceived value, the primary concern. Therefore, hospitals need to pay attention to and improve the efficiency of service processes, from registration and examination to patient treatment. Implementing technology, such as integrated health information systems and online registration, can also help increase the speed of service. Apart

from that, hospitals can also focus on hospital social values by building good relationships between hospitals and patients. Increasing social interaction and community involvement can create a positive image that provides added value for patients. Expectations of nurse services are also an indicator of satisfaction that needs special attention, improving nurses' skills in providing responsive services that align with patient expectations. Satisfaction with inpatient room facilities needs to continue to be evaluated, and improvements to inpatient room facilities must be made based on patient feedback.

CONCLUSION

1. The quality of core services does not significantly affect the loyalty of inpatients at Type B General Hospital in Lamongan Regency; the better quality of core services cannot have a tangible impact on increasing patient loyalty.
2. The quality of peripheral services also does not significantly affect the loyalty of inpatients at Type B General Hospital in Lamongan Regency; the better quality of examination services can also not have a tangible impact on increasing patient loyalty.
3. The quality of core services positively and significantly affects the perceived value of inpatient care at Type B General Hospital in Lamongan Regency. The better the quality of core services, the higher the perceived value of the service.
4. The quality of peripheral services positively and significantly affects the perceived value of inpatient care at the Type B General Hospital in Lamongan Regency. The better the quality of the supervision service, the higher the perceived value of the service.
5. The quality of core services also positively and significantly affects the satisfaction of inpatients at Type B General Hospital in Lamongan Regency. The better the quality of core services, the higher patient satisfaction will be.
6. The quality of peripheral services positively and significantly affects the satisfaction of inpatients at Type B General Hospital in Lamongan Regency. The better the quality of supporting services, the higher patient satisfaction will be.
7. Perceived value positively and significantly affects the loyalty of inpatients at the Type B General Hospital in Lamongan Regency. The higher the perceived value of the service, the higher the patient loyalty will be.
8. Patient satisfaction also positively and significantly affects the loyalty of inpatients at the Type B General Hospital in Lamongan Regency. The higher the patient satisfaction, the higher the loyalty.
9. The influence of core service quality on the loyalty of inpatients at the Type B General Hospital in Lamongan Regency through perceived value is positive and significant with complete mediation properties, meaning that the quality of core services can only influence patient loyalty indirectly through the value felt.

10. The influence of device service quality on the loyalty of inpatients at Type B General Hospital in Lamongan Regency through perceived value is also positive and significant with complete mediation properties, meaning that device service quality can only influence patient loyalty indirectly through the value felt.
11. The influence of core service quality on the loyalty of inpatients at the Type B General Hospital in Lamongan Regency through patient satisfaction is positive and significant with complete mediation, meaning that the quality of core services can only influence patient loyalty indirectly through patient satisfaction.
12. The influence of peripheral service quality on inpatient loyalty at Type B General Hospital in Lamongan Regency through patient satisfaction is also positive and significant with complete mediation, meaning that peripheral service quality can only influence patient loyalty indirectly through patient satisfaction.
13. E-Health strengthens the influence of perceived value on the loyalty of inpatients at the Type B General Hospital in Lamongan Regency; patients who feel they get additional benefits from using health technology also tend to have a higher perceived value, which can strengthen the relationship between perceived value and loyalty.
14. E-Health also strengthens the influence of patient satisfaction on the loyalty of inpatients at Type B General Hospital in Lamongan Regency; patients who feel satisfied with using health technology can positively contribute to patient satisfaction. Furthermore, satisfied patients tend to be more loyal. Thus, using E-Health can strengthen the relationship between patient satisfaction and loyalty.
15. Switching costs do not moderate the influence of perceived value on the loyalty of inpatients at the Type B General Hospital in Lamongan Regency; high perceived value will still substantially impact patient loyalty over the switching cost factor. If patients feel the high value provided (perceived value), they will remain loyal despite enormous switching costs.
16. Switching costs also do not moderate the influence of patient satisfaction on the loyalty of inpatients at the Type B General Hospital in Lamongan Regency; if the patient is delighted with the services provided, switching costs are not the main factor influencing the decision to remain loyal or move to another hospital. Satisfied patients are more likely to remain faithful regardless of switching costs.

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