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HOW NURSING CARE EXPERIENCE AND SATISFACTION SHAPE PATIENT LOYALTY: EVIDENCE OF PATIENT TRUST AS A MEDIATING MECHANISM

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ABSTRACT
This study aims to analyze the influence of Nursing Care Experience and Patient Satisfaction on Patient Loyalty, with Patient Trust as a mediating mechanism. The study was conducted at a type A general hospital as a referral hospital with comprehensive and specialized health services. This study used a cross-sectional design with a quantitative approach. Data collection was conducted through purposive sampling of 406 female patients who met the inclusion criteria, namely type A general hospital patients with a frequency of visits of more than three times. Data were analyzed using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) method. The results showed that Patient Experience with Nursing Care had a positive and significant effect on Patient Loyalty and Patient Satisfaction. Patient Satisfaction also had a positive effect on Patient Trust, but had a significant negative effect on Patient Loyalty (not supported). Patient Trust was proven to increase Patient Loyalty. In terms of mediation, Patient Satisfaction significantly mediated the relationship between Patient Experience and Patient Trust, but was ineffective on loyalty due to its negative direction. Meanwhile, mediation through Patient Trust was not significant. These findings confirm that patient experience and trust are more determinants of loyalty than satisfaction alone.

KEYWORDS: Nursing Care Experience; Patient Satisfaction; Patient Trust; Patient Loyalty; PLS-SEM

INTRODUCTION

Modern healthcare is no longer understood solely as a clinical process of healing illness, but rather as a holistic experience experienced by patients from the beginning to the end of their interaction with a healthcare facility. In the context of increasingly competitive healthcare services, hospitals and healthcare facilities are required to build long-term relationships with patients. One indicator of the success of these relationships is Patient Loyalty, which is reflected in patients' intentions to return to services, recommend services to others, and maintain ongoing relationships with healthcare providers. Therefore, understanding the factors that shape patient loyalty has become a strategic issue in healthcare management. (Liu et al., 2021)

Several studies have shown that patient experiences during healthcare services play a crucial role in shaping loyalty. Arslan et al. (2022) emphasized that patient experience can act as a mediating mechanism in explaining the formation of Patient Loyalty. In particular, patient experience with nursing care is crucial, given that nurses are the healthcare professionals who interact most directly with patients. Chen et al. (2022) demonstrated that Patient Experience with Nursing Care significantly influences Patient Satisfaction and Loyalty, particularly through a structural equation modeling approach. These findings reinforce the view that the quality of nursing interactions impacts not only immediate satisfaction but also long-term patient loyalty.

In addition to satisfaction, patient trust has emerged as a crucial construct in bridging the relationship between service experience and patient loyalty. Liu et al. (2021) and Durmuş and Akbolat (2020) revealed that patient trust plays a significant mediating role between patient satisfaction and loyalty. In the nursing context, Sedighi et al. (2025) specifically highlighted that nurses' caring behavior can increase patient loyalty through trust toward nurses. This suggests that trust is not only directed at institutions but also toward individual healthcare workers, particularly nurses as the frontline of care.

However, most previous research still positions patient experience, satisfaction, and trust separately or partially. Some studies emphasize satisfaction as the primary mediator (AlOmari & Hamid, 2022), while others focus more on trust as an intervening variable without explicitly integrating nursing experience as a primary construct. Sertan et al. (2023) and Hussain et al. (2025) also showed that the relationship between these variables is complex and contextual, depending on the characteristics of the healthcare system. Therefore, there remains a research gap regarding a comprehensive understanding of the mechanisms by which Nursing Care Experience and Patient Satisfaction simultaneously shape Patient Loyalty through the mediating role of Patient Trust.

The urgency of this research is increasing with the demand for improved quality of patient-centered nursing services. Patient loyalty not only impacts the sustainability of healthcare organizations but also contributes to cost efficiency, improved institutional image, and the quality of care outcomes. However, without a comprehensive understanding of psychological mechanisms such as patient trust, efforts to improve the quality of nursing services have the potential to be less effective.

Given these conditions, the novelty of this research lies in testing an integrative model linking Nursing Care Experience and Patient Satisfaction to Patient Loyalty, with Patient Trust as the primary mediating mechanism. This approach is expected to provide theoretical contributions to the development of patient loyalty literature and practical contributions to nursing management in designing strategies for improving the quality of sustainable care oriented toward patient trust.

This study focused on female general patients undergoing outpatient care at a type A state hospital. The selection of female patients was based on consumer behavior considerations regarding healthcare services, where women tend to be more sensitive to service quality, particularly aspects of communication, empathy, emotional attention, and the caring attitude of nurses. Women are also more reflective in evaluating service experiences and play a significant role as healthcare decision-makers within the family. Therefore, the loyalty of female patients has broader implications for the sustainability of healthcare organizations.

Furthermore, the focus on general patients was conducted to ensure the validity of the Patient Loyalty construct in the context of type A hospitals. Unlike BPJS patients who have limited choice of hospitals and doctors, general patients have the flexibility to choose the healthcare facility they use. Therefore, the intention to return for treatment and recommend the hospital truly reflects voluntary loyalty behavior, as emphasized in the patient loyalty literature (Nguyen et al., 2021; Hussain et al., 2025).

This study also established a minimum criterion of more than three (>3) clinic visits in the last three months. This criterion was based on the belief that loyalty cannot be formed from just one or two visits but requires repeated experiences that allow patients to comprehensively evaluate the quality of care (Gül et al., 2023). The limitation to the last three months aimed to minimize recall bias and ensure that the nursing care experience was still fresh in respondents' minds.

The types of clinics studied included non-chronic outpatient clinics such as general internal medicine, general surgery, obstetrics and gynecology, and dental clinics with single-visit procedures. This study explicitly excluded patients with chronic illnesses requiring routine monthly check-ups or ongoing care, as well as cases medically requiring multiple follow-up visits (e.g., multi-stage dental care). To ensure this, the research questionnaire included questions related to the type of illness and primary complaint at the time of treatment, allowing respondents with chronic conditions to be screened early. This approach ensured that repeat visits truly reflected patient loyalty, not simply medical obligations.

Finally, the use of a large sample size (>400 respondents) was deemed essential to ensure statistical power, particularly in testing the PLS-SEM-based structural model involving multiple relationship pathways and mediating mechanisms (Hair et al., 2021). By combining the characteristics of female respondents, general patients, a type A state hospital, and a non-chronic outpatient context, this study is expected to provide a comprehensive and contextualized picture of the mechanisms that shape Patient Loyalty through Nursing Care Experience, Patient Satisfaction, and Patient Trust.

Hypothesis Development

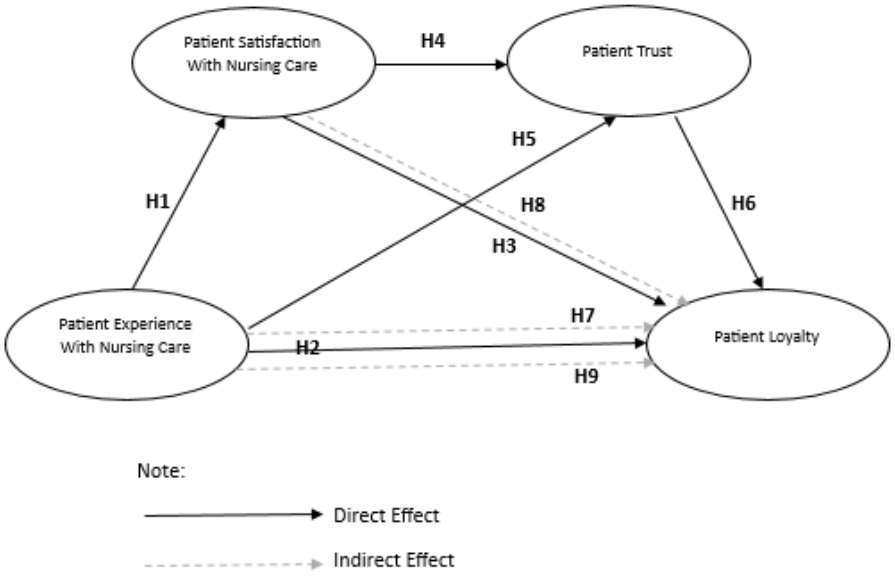

Figure 1. Conceptual model of hypotheses (H1–H9) linking patient experience, satisfaction, trust, and loyalty

Patient Experience with Nursing Care and Patient Satisfaction with Nursing Care

A patient's experience receiving nursing care reflects the quality of direct interactions between nurses and patients, encompassing empathy, communication, attention, and responsiveness to patient needs. This experience shapes patients' perceptions of the quality of nursing care, which ultimately determines their level of satisfaction. Chen et al. (2022) demonstrated that Patient Experience with Nursing Care significantly influences Patient Satisfaction, where a positive nursing experience enhances patients' evaluations of the care received. This finding is supported by Arslan et al. (2022), who asserted that patient experience is a key determinant of satisfaction in healthcare services. Furthermore, Nguyen et al. (2021) demonstrated that the quality of the patient's perceived service experience directly contributes to satisfaction, reflecting the patient's cognitive and affective evaluation of healthcare services.

H1: Patient Experience with Nursing Care has a positive effect on Patient Satisfaction with Nursing Care.

Patient Experience with Nursing Care and Patient Loyalty

A positive nursing experience not only impacts short-term patient evaluations but also shapes long-term behavioral intentions, such as a willingness to reuse the service and recommend it to others. Professional, empathetic, and patient-oriented interactions create lasting impressions that form the basis for loyalty. Chen et al. (2022) demonstrated that Patient Experience with Nursing Care has a direct influence on Patient Loyalty. Arslan et al. (2022) also emphasized that patient experience plays a central role in explaining the formation of loyalty in healthcare. Furthermore, Hussain et al. (2025) found that a positive service experience is one of the main antecedents of patient loyalty in public hospitals.

H2: Patient Experience with Nursing Care has a positive influence on Patient Loyalty.

Patient Satisfaction with Nursing Care and Patient Loyalty

Patient satisfaction with nursing care reflects the degree of congruence between patient expectations and perceived service performance. Satisfied patients tend to develop positive attitudes toward the service provider and demonstrate a commitment to maintaining a long-term relationship. Liu et al. (2021) found that patient satisfaction significantly influences patient loyalty, where high levels of satisfaction increase patients' intention to reuse services. This finding aligns with AlOmari and Hamid (2022), who asserted that satisfaction is a key predictor of patient loyalty in various healthcare contexts. Furthermore, Gül et al. (2023) also demonstrated that outpatient satisfaction directly contributes to loyalty in interaction-based healthcare services.

H3: Patient satisfaction with nursing care has a positive effect on patient loyalty.

Patient satisfaction with nursing care and patient trust

Consistent patient satisfaction from nursing care experiences contributes to building confidence that nurses and the healthcare system are capable of providing reliable, safe, and patient-centered services. Repeated experiences of satisfaction strengthen patients' sense of security and trust in service providers. Durmuş and Akbolat (2020) demonstrated that patient satisfaction significantly influences patient trust, where satisfied patients tend to have higher levels of trust. This finding is supported by Liu et al. (2021), who identified satisfaction as a key antecedent in building patient trust. Furthermore, Sertan et al. (2023) also demonstrated that patient satisfaction plays a crucial role in increasing trust, which subsequently influences patient attitudes and loyalty.

H4: Patient satisfaction with nursing care has a positive effect on patient trust.

Patient Experience with Nursing Care and Patient Trust

Patients' direct experiences interacting with nurses are the primary foundation for building trust, especially when patients experience caring behavior, professional competence, and genuine concern from nurses. These positive experiences create the perception that nurses can be trusted to provide safe and quality care. Sedighi et al. (2025) confirmed that nurses' caring behavior significantly influences patient trust. Furthermore, Sertan et al. (2023) demonstrated that positive service experiences contribute to increased patient trust. This finding is also supported by Arslan et al. (2022), who emphasized that patient experience plays a crucial role in establishing trust as the foundation for long-term relationships between patients and healthcare providers.

H5: Patient Experience with Nursing Care has a positive effect on Patient Trust.

Patient Trust and Patient Loyalty

Patient trust in nurses and healthcare institutions is a key factor in building long-term loyalty. Patients with high levels of trust are more likely to demonstrate commitment to continuing to use services, reduce turnover intentions, and provide positive recommendations. Liu et al. (2021) found that patient trust has a direct and significant effect on patient loyalty. This finding is supported by Durmuş and Akbolat (2020) and Sedighi et al. (2025), who asserted that trust plays a crucial psychological role in strengthening patient loyalty in the context of nursing services.

H6: Patient Trust has a positive effect on Patient Loyalty.

Patient Satisfaction with Nursing Care mediates Patient Experience with Nursing Care on Patient Trust.

Patient experience with nursing care is a crucial factor in shaping patient satisfaction. Positive experiences, such as effective communication, nurse empathy, and responsiveness to patient needs, have been shown to significantly increase patient satisfaction. Furthermore, this satisfaction plays a role in building patient trust in healthcare professionals and healthcare institutions. Satisfied patients tend to perceive services as reliable, safe, and consistent, thus increasing their trust levels. Research by Chen et al. (2022) shows that patient experience significantly influences satisfaction, which in turn impacts subsequent behavioral variables. Furthermore, AlOmari and Hamid (2022) and Arslan et al. (2022) confirm that patient experience is a key determinant of satisfaction in the healthcare context. Furthermore, Durmuş and Akbolat (2020) and Liu et al. (2021) demonstrate that patient satisfaction has a positive influence on patient trust as a mediating mechanism. Thus, it can be assumed that patient satisfaction mediates the effect of patient experience on patient trust.

H7: Patient Satisfaction with Nursing Care mediates the positive effect of Patient Experience with Nursing Care on Patient Trust.

Patient Trust mediates Patient Experience with Nursing Care on Patient Loyalty.

Positive patient experiences during nursing care also directly contribute to the formation of patient trust. Humanistic interactions, attention to patient needs, and caring behavior from nurses can increase patient perceptions of the reliability and integrity of healthcare services. This trust, in turn, becomes a key factor in fostering patient loyalty, such as the desire to reuse the service and recommend it to others. Research by Sedighi et al. (2025) shows that trust in nurses mediates the relationship between nurses' caring behavior and patient loyalty. Furthermore, Sertan et al. (2023) and Nguyen et al. (2021) also found that service experience and quality influence loyalty by increasing patient trust. Hussain et al. (2025) emphasized that trust is an important mechanism in building long-term loyalty in the healthcare sector. Therefore, patient trust is suspected to mediate the effect of patient experience on patient loyalty.

H8: Patient Trust mediates the positive effect of Patient Experience with Nursing Care on Patient Loyalty.

Patient Satisfaction with Nursing Care mediates Patient Experience with Nursing Care on Patient Loyalty.

Besides trust, patient experience also influences loyalty through patient satisfaction as a mediating variable. A positive nursing care experience will increase patient satisfaction, which in turn encourages loyalty. Satisfied patients tend to have a higher commitment to reuse services and provide recommendations to others. Chen et al. (2022) empirically demonstrated that patient satisfaction mediates the relationship between patient experience and patient loyalty. This finding is supported by AlOmari and Hamid (2022) and Arslan et al. (2022), who stated that satisfaction is a key factor in bridging service experience with patient loyalty. Furthermore, Gül et al. (2023) and Hussain et al. (2025) also emphasized that satisfaction plays a crucial role in shaping long-term patient loyalty.

H9: Patient Satisfaction with Nursing Care mediates the positive effect of Patient Experience with Nursing Care on Patient Loyalty.

METHOD

This study employed a quantitative approach with a survey method, where data collection was conducted using a structured questionnaire. The survey method was chosen because it allowed researchers to systematically and efficiently obtain large amounts of patient perception data, particularly regarding nursing care experiences, satisfaction, trust, and loyalty. Questionnaires were distributed directly to respondents who met the research criteria in a type A state hospital.

The target population for this study was female general patients undergoing outpatient care at a type A state hospital. This population was chosen because female patients tend to be more reflective in evaluating their nursing care experiences, particularly regarding aspects of communication, empathy, and nurses' caring behavior. Furthermore, as general patients, respondents have the flexibility to choose their healthcare facility, so the loyalty behavior measured truly reflects patients' intentions and voluntary choices, rather than the limitations of the referral system.

The sample size for this study was set at 406 respondents. This number was deemed adequate to ensure statistical power, particularly in testing the structural model involving several latent constructs and relationship paths. This sample size was also in line with the recommendations of Hair et al. (2021) emphasized the importance of a large sample size in Partial Least Squares Structural Equation Modeling (PLS-SEM)-based analysis to obtain stable and reliable parameter estimates.

The sampling technique used was non-probability sampling with a purposive sampling approach. This technique was chosen because not all members of the population had characteristics that matched the research objectives. Respondents were purposively selected based on certain criteria: general female patients, having had more than three outpatient visits in the past three months, not suffering from chronic diseases requiring regular check-ups, and seeking treatment for episodic complaints. The use of purposive sampling was deemed appropriate because it allowed researchers to obtain respondents with relevant experience to accurately evaluate the research variables.

The data analysis approach in this study used Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS-SEM was chosen because it can simultaneously test causal relationships between latent constructs, including testing direct and indirect effects (mediation). Furthermore, this approach is suitable for predictive and complex research models and does not require strict data distribution assumptions (Hair et al., 2021).

The research instrument, a questionnaire, was developed through an adaptation process from instruments that have been used and validated in previous studies. The measurement items for Patient Experience With Nursing Care were adapted from Chen et al. (2022), while the Patient Satisfaction, Patient Trust, and Patient Loyalty items were developed based on Liu et al. (2021), AlOmari and Hamid (2022), and Arslan et al. (2022), with adjustments to the context of nursing services in public hospitals. The adaptation process was carried out to ensure cultural and contextual suitability for the Indonesian healthcare system.

All items in the questionnaire were measured using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. This scale was used to more sensitively capture respondents' level of agreement with each statement and facilitate quantitative analysis in the PLS-SEM model.

RESULT

Outer Model

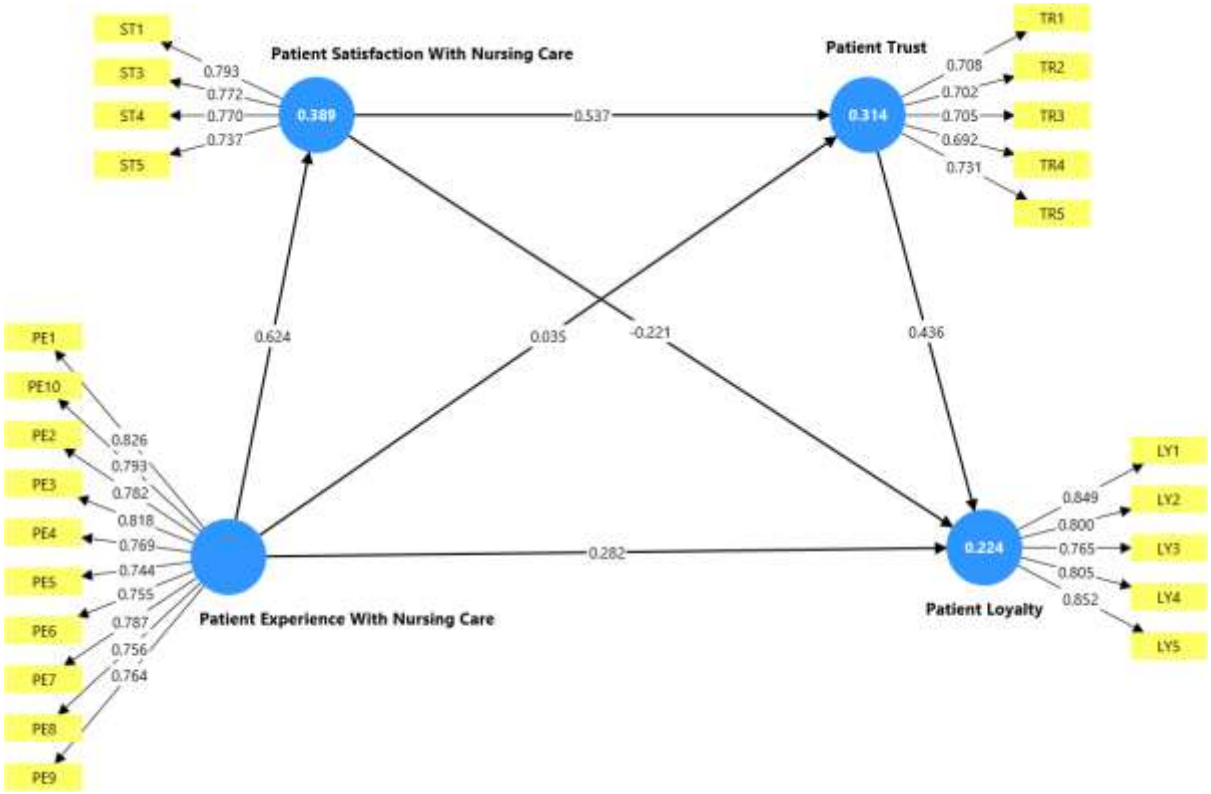

Figure 2. Outer Model

Table 1. Outer Loadings

	Outer loadings
LY1 <- Patient Loyalty	0.849
LY2 <- Patient Loyalty	0.800
LY3 <- Patient Loyalty	0.765
LY4 <- Patient Loyalty	0.805
LY5 <- Patient Loyalty	0.852
PE1 <- Patient Experience With Nursing Care	0.826
PE10 <- Patient Experience With Nursing Care	0.793
PE2 <- Patient Experience With Nursing Care	0.782
PE3 <- Patient Experience With Nursing Care	0.818
PE4 <- Patient Experience With Nursing Care	0.769
PE5 <- Patient Experience With Nursing Care	0.744
PE6 <- Patient Experience With Nursing Care	0.755
PE7 <- Patient Experience With Nursing Care	0.787
PE8 <- Patient Experience With Nursing Care	0.756
PE9 <- Patient Experience With Nursing Care	0.764
ST1 <- Patient Satisfaction With Nursing Care	0.793
ST3 <- Patient Satisfaction With Nursing Care	0.772
ST4 <- Patient Satisfaction With Nursing Care	0.770
ST5 <- Patient Satisfaction With Nursing Care	0.737
TR1 <- Patient Trust	0.708
TR2 <- Patient Trust	0.702
TR3 <- Patient Trust	0.705
TR4 <- Patient Trust	0.692
TR5 <- Patient Trust	0.731

The results of the outer loadings test indicate that almost all indicators in each construct have values above 0.70. However, there is one indicator below 0.70, namely TR4. This value indicates that almost all indicators strongly represent the latent construct, except for TR4. However, an understanding is still made so that convergent validity at the indicator level has been met and no indicators need to be eliminated.

Table 2. HTMT

	Patient Experience with Nursing Care	*Patient Loyalty*	*Patient Satisfaction with Nursing Care*	*Patient Trust*
Patient Experience with Nursing Care				
Patient Loyalty	0.339			
Patient Satisfaction with Nursing Care	0.735	0.244		
Patient Trust	0.442	0.516	0.726	

The HTMT value indicates that all relationships are below the conservative threshold of 0.90. This indicates no conceptual closeness between constructs, so overall, there is no indication of conceptual overlap across constructs, thus the model structure is acceptable.

Table 3. Validity and Reliability

	Cronbach's alpha	*Composite reliability (rho_a)*	*Composite reliability (rho_c)*	*Average variance extracted (AVE)*
Patient Experience with Nursing Care	0.928	0.929	0.939	0.608
Patient Loyalty	0.873	0.875	0.908	0.664
Patient Satisfaction with Nursing Care	0.768	0.769	0.852	0.590
Patient Trust	0.751	0.753	0.834	0.501

The Cronbach's alpha and composite reliability (rho_a and rho_c) values for all constructs were above 0.70, indicating excellent internal consistency. Furthermore, the AVE values for all constructs were above 0.50. Thus, reliability and convergent validity at the construct level were strongly met.

Table 4. VIF

	VIF
Patient Experience with Nursing Care -> Patient Loyalty	1.639
Patient Experience with Nursing Care -> Patient Satisfaction with Nursing Care	1.000
Patient Experience with Nursing Care -> Patient Trust	1.637
Patient Satisfaction with Nursing Care -> Patient Loyalty	2.058
Patient Satisfaction with Nursing Care -> Patient Trust	1.637
Patient Trust -> Patient Loyalty	1.457

The VIF values for all indicators were below the threshold of 5, with a range of 1.000–2.058. These results indicate that there is no multicollinearity problem among indicators in the measurement model. Thus, each indicator contributes unique information to the latent construct being measured, and the model can be estimated stably.

Inner Model

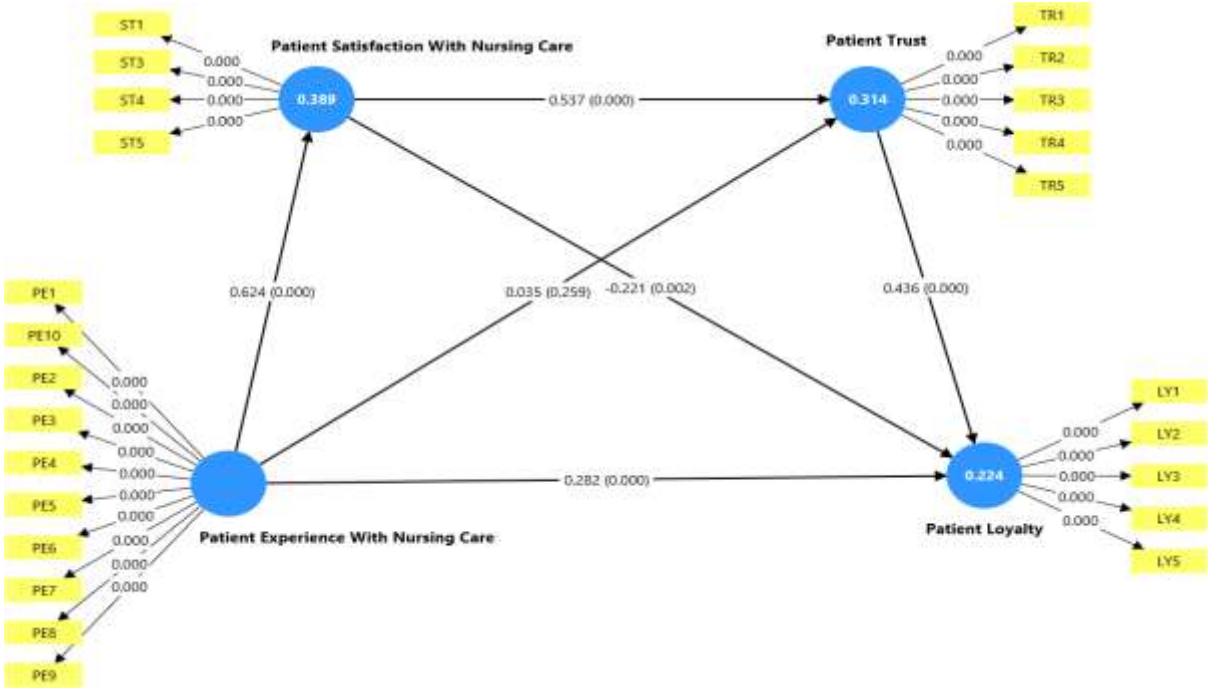

Figure 3. Inner Model

Table 5. R-Square

	R-square	R-square adjusted
Patient Loyalty	0.224	0.218
Patient Satisfaction with Nursing Care	0.389	0.388
Patient Trust	0.314	0.310

The R-square value shows that the model is able to explain Patient Loyalty by 22.4%, while the explanatory ability is greater in the Patient Satisfaction with Nursing Care variable by 38.9%, and Patient Trust is weak at only 31.4%.

Table 6. F-Square

	f-square
Patient Experience with Nursing Care -> Patient Loyalty	0.063
Patient Experience with Nursing Care -> Patient Satisfaction With Nursing Care	0.637
Patient Experience with Nursing Care -> Patient Trust	0.001
Patient Satisfaction with Nursing Care -> Patient Loyalty	0.031
Patient Satisfaction with Nursing Care -> Patient Trust	0.257
Patient Trust -> Patient Loyalty	0.168

Based on the results of the f-square (f^2) test, it can be seen that the strength of the influence between variables in the model varies from very weak to large. Patient Experience With Nursing Care has a large influence on Patient Satisfaction With Nursing Care (0.637), indicating that patient experience is a major factor in shaping satisfaction. However, its influence on Patient Loyalty (0.063) is relatively small and on Patient Trust (0.001) is very weak. Furthermore, Patient Satisfaction With Nursing Care has a small influence on Patient Loyalty (0.031) but has a moderate influence on Patient Trust (0.257), indicating that satisfaction plays a greater role in building trust than loyalty directly. Meanwhile, Patient Trust has a moderate influence on Patient Loyalty (0.168), so it can be concluded that patient loyalty is more influenced by trust as a mediating variable than the direct influence of patient experience or satisfaction.

Table 7. PLS Predict LV Summary

	Q^2predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE	IA_RMSE	IA_MAE
ST1	0.195	0.841	0.642	0.847	0.647	0.937	0.665
ST3	0.212	0.976	0.769	0.984	0.773	1.099	0.818
ST4	0.248	0.897	0.724	0.897	0.723	1.034	0.760
ST5	0.216	0.949	0.749	0.961	0.767	1.072	0.782
TR1	0.088	0.833	0.657	0.851	0.676	0.872	0.666
TR2	0.030	1.005	0.789	1.012	0.791	1.020	0.749
TR3	0.063	0.994	0.768	0.998	0.775	1.027	0.748
TR4	0.058	0.910	0.714	0.922	0.723	0.937	0.712
TR5	0.066	0.890	0.652	0.908	0.662	0.921	0.613
LY1	0.067	1.127	0.832	1.136	0.846	1.167	0.835
LY2	0.037	1.249	0.983	1.270	1.006	1.273	1.026
LY3	0.050	1.159	0.891	1.181	0.916	1.189	0.944
LY4	0.051	1.150	0.851	1.172	0.879	1.181	0.883
LY5	0.081	1.175	0.865	1.192	0.895	1.226	0.931

Table 7 (PLS Predict LV Summary) shows that all indicators have Q^2predict values > 0, so the model has predictive relevance. Indicators in the Patient Satisfaction With Nursing Care construct (ST1–ST5) have relatively higher Q^2predict values (0.195–0.248) compared to other indicators, indicating good to moderate predictive ability. Meanwhile, indicators in Patient Trust (TR1–TR5) and Patient Loyalty (LY1–LY5) have lower Q^2predict values (around 0.030–0.088), so their predictive ability is considered weak. In terms of error, the RMSE and MAE values in PLS-SEM are generally smaller or equal to those of the LM model, and better than those of IA, indicating that the PLS-SEM model has better predictive ability than the comparison models.

Table 8. PLS Predict MV Summary

	Q^2predict	RMSE	MAE
Patient Satisfaction with Nursing Care	0.376	0.800	0.538
Patient Trust	0.124	0.953	0.601
Patient Loyalty	0.086	0.962	0.701

Table 8 (PLS Predict MV Summary) shows that at the construct level, Patient Satisfaction With Nursing Care has a Q^2predict value of 0.376, indicating strong predictive ability, while Patient Trust (0.124) and Patient Loyalty (0.086) have weak to moderate predictive ability. The relatively smaller RMSE and MAE values for Patient Satisfaction also confirm that this construct is the most accurately predicted in the model. Overall, these results

indicate that the model has good predictive relevance, but the most dominant predictive power is found in the patient satisfaction variable compared to trust and loyalty.

Table 9. Hypothesis Testing

Code	Path	Coef (O)	T-Statistics	P-Value	Result
H1	*Patient Experience With Nursing Care → Patient Satisfaction With Nursing Care*	0.624	11.288	0.000	Supported
H2	*Patient Experience With Nursing Care → Patient Loyalty*	0.282	3.593	0.000	Supported
H3	*Patient Satisfaction With Nursing Care → Patient Loyalty*	-0.221	-2.949	0.002	Not supported (Significant in the opposite direction)
H4	*Patient Satisfaction With Nursing Care → Patient Trust*	0.537	8.040	0.000	Supported
H5	*Patient Experience With Nursing Care → Patient Trust*	0.035	0.645	0.259	Not Supported
H6	*Patient Trust → Patient Loyalty*	0.436	6.538	0.000	Supported
H7	*Patient Experience → Patient Satisfaction → Patient Trust (Mediation)*	0.335	7.381	0.000	Supported
H8	*Patient Experience → Patient Trust → Patient Loyalty (Mediation)*	0.015	0.646	0.259	Not Supported
H9	*Patient Experience → Patient Satisfaction → Patient Loyalty (Mediation)*	-0.138	-2.757	0.003	Not supported (Significant in the opposite direction)

The analysis results indicate that:

1. H1. The test results indicate that Patient Experience with Nursing Care has a positive and significant effect on Patient Satisfaction with Nursing Care ($\beta = 0.624$; $p < 0.05$). This indicates that the better the patient's experience receiving nursing care, the higher the patient's perceived level of satisfaction.
2. H2. The hypothesis test shows that Patient Experience with Nursing Care has a positive and significant effect on Patient Loyalty ($\beta = 0.282$; $p < 0.05$). This finding indicates that patient experience can directly increase patient loyalty to the services provided.
3. H3. Patient Satisfaction with Nursing Care has a significant effect on Patient Loyalty, but in a negative direction ($\beta = -0.221$; $p < 0.05$). Thus, the hypothesis is not supported because the relationship is in the opposite direction to the expected direction (not supported).
4. H4. The test results indicate that Patient Satisfaction with Nursing Care has a positive and significant effect on Patient Trust ($\beta = 0.537$; $p < 0.05$). This means that the higher the patient satisfaction, the greater the patient's trust in nursing services.
5. H5. The analysis results indicate that Patient Experience with Nursing Care has no significant effect on Patient Trust ($\beta = 0.035$; $p > 0.05$). This indicates that patient experience is not yet strong enough to directly shape patient trust.
6. H6. The test shows that Patient Trust has a positive and significant effect on Patient Loyalty ($\beta = 0.436$; $p < 0.05$). This confirms that patient trust is an important factor in increasing patient loyalty.
7. H7. The results of the mediation test indicate that Patient Experience has a positive and significant effect on Patient Trust through Patient Satisfaction ($\beta = 0.335$; $p < 0.05$). Thus, patient satisfaction is proven to mediate the relationship between experience and trust.
8. H8. The test results indicate that Patient Experience does not have a significant effect on Patient Loyalty through Patient Trust ($\beta = 0.015$; $p > 0.05$). This indicates that trust is unable to mediate the relationship between patient experience and loyalty.
9. H9. The results of the mediation test indicate that Patient Experience has a significant effect on Patient Loyalty through Patient Satisfaction, but in a negative direction ($\beta = -0.138$; $p < 0.05$). Therefore, the hypothesis is not supported because the relationship is in the opposite direction to what was expected.

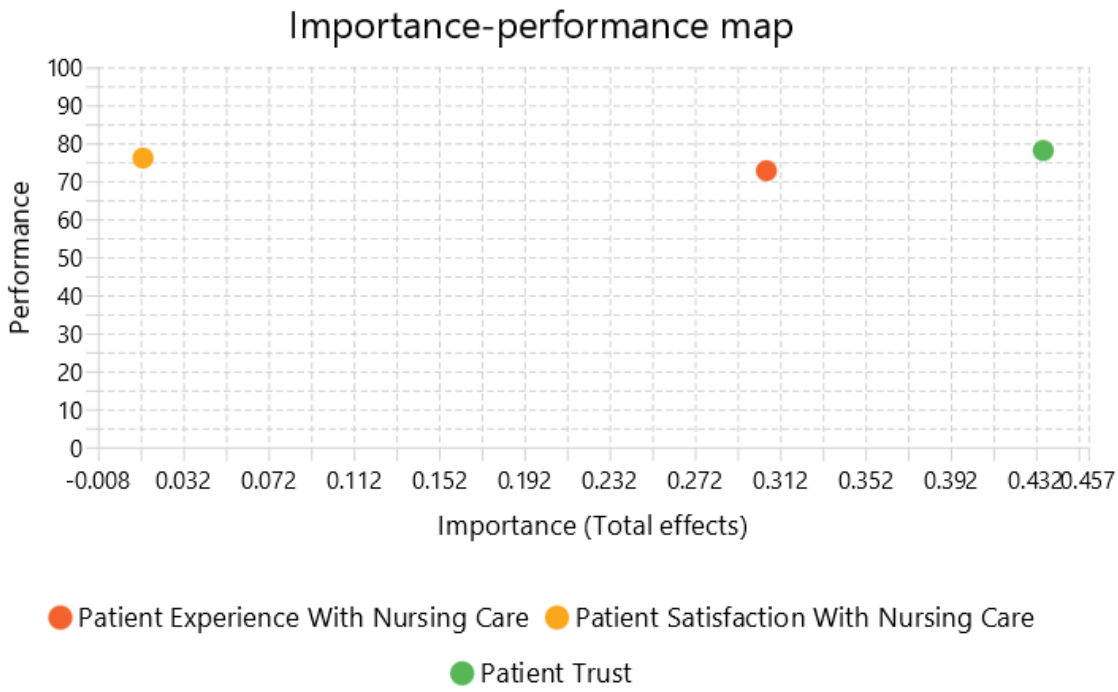

Figure 4. IPMA Konstruk

The results of the Importance-Performance Map Analysis (IPMA) show that the most important variable in increasing Patient Loyalty is Patient Trust (0.436), followed by Patient Experience with Nursing Care (0.306), while Patient Satisfaction with Nursing Care has a very small influence (0.014). In terms of performance, Patient Trust also has the highest value (78.095), followed by Patient Satisfaction (76.104) and Patient Experience (72.794). These findings indicate that although trust already has high performance and is a major factor, improving patient experience still needs to be prioritized because it has a large influence but its performance is relatively lower in driving patient loyalty.

DISCUSSION

The results of the study indicate that Patient Experience with Nursing Care has a direct and significant effect on Patient Loyalty, making patient experience a crucial factor in shaping loyalty. This finding aligns with Chen X. et al. (2022) and Arslan T. et al. (2022), who stated that patient experience can directly and indirectly increase loyalty. Furthermore, Patient Experience was also shown to have a significant effect on Patient Satisfaction, but not on Patient Trust, indicating that patient experience does not necessarily build trust.

Furthermore, Patient Satisfaction with Nursing Care was shown to have a positive and significant effect on Patient Trust, aligning with Durmuş A. & Akbolat M. (2020) and Liu S. et al. (2021), who asserted that satisfaction is an important antecedent of trust. However, the results of this study found that Patient Satisfaction had a significant negative effect on Patient Loyalty, thus not supporting the hypothesis. These findings indicate that satisfaction is situational and does not necessarily lead to long-term loyalty, as suggested by AlOmari F. & Hamid A. B. (2022) and Gül İ. et al. (2023). Although Patient Satisfaction with Nursing Care was found to significantly influence Patient Loyalty, the relationship occurred in a negative direction, indicating that satisfaction alone does not necessarily translate into long-term loyalty when other relational variables such as trust are considered simultaneously. One possible explanation is that satisfaction tends to reflect short-term evaluative judgments regarding a specific service encounter, whereas loyalty represents a deeper behavioral commitment involving repeated visits and active recommendations. In the context of a type A referral hospital, patients may feel satisfied with the quality of treatment received during a visit, yet still choose other healthcare providers in the future due to factors such as proximity, waiting time, convenience, physician preference, or lower costs. In addition, when Patient Trust is included in the model, the positive relational component of satisfaction may be absorbed by trust, causing satisfaction to display a negative residual effect. This finding suggests that healthcare organizations should not rely solely on satisfaction scores as indicators of future loyalty, but should prioritize strategies that transform satisfaction into sustained trust and relational attachment.

On the other hand, Patient Trust was shown to have a positive and significant effect on Patient Loyalty, thus becoming a key determinant in shaping patient loyalty. This aligns with Sedighi S. et al. (2025), who emphasized that nurses' caring behavior increases trust, which ultimately impacts loyalty. However, the mediation pathway from Patient Experience → Patient Trust → Patient Loyalty was insignificant, indicating that trust does not act as a direct mediator in this relationship.

Conversely, Patient Satisfaction mediation was found to be significant in the Patient Experience → Patient Trust relationship, but the mediation pathway from Patient Satisfaction → Patient Loyalty showed a negative direction (inconsistent mediation). These findings demonstrate the complexity of the relationship between variables, as explained by Hussain A. et al. (2025), who stated that patient loyalty is influenced by mediation mechanisms that are not always linear. Furthermore, the serial mediation pathway was not the primary focus of the hypothesis, but it does offer important implications for future research.

The IPMA results reinforce this finding, with Patient Trust having the highest level of importance in shaping Patient Loyalty, followed by Patient Experience, while Patient Satisfaction had a very low influence. This is consistent with Sertan A. et al. (2023), who emphasized that loyalty improvement strategies are more effective if they focus on trust and patient experience. However, Patient Experience performance remains lower than trust, making it a top priority for improvement.

Conceptually, this study supports Hair J. F. et al.'s (2021) view that constructs with high levels of importance should be the focus of managerial strategies. Therefore, increasing patient loyalty in the context of nursing care needs to be directed at strengthening the patient experience through quality interactions, empathetic communication, and consistent caring practices to build long-term trust.

CONCLUSION

The conclusion of this study indicates that Patient Experience with Nursing Care plays a significant role in shaping Patient Loyalty, both directly and through specific mechanisms, and is a key factor alongside Patient Trust. Furthermore, Patient Trust is a key determinant that significantly increases patient loyalty. Meanwhile, Patient Satisfaction with Nursing Care plays a complex role. Although it has a positive effect on Patient Trust, it also has a negative effect on Patient Loyalty, making it ineffective as a mediator in shaping loyalty. The IPMA results reinforce these findings by showing that Patient Trust has the highest level of importance and performance, followed by Patient Experience, while Patient Satisfaction has a relatively low contribution to loyalty.

However, this study has several limitations. First, the use of a cross-sectional survey design limits its ability to capture the dynamics of changes in patient experience, satisfaction, and trust over time. Second, this study focuses only on patient perspectives on nursing care, thus failing to consider other factors such as nurse characteristics, organizational systems, or hospital policies. Third, the measurement of Patient Satisfaction with Nursing Care is still general and therefore does not fully reflect the deeper emotional and relational dimensions. The managerial implications of this study emphasize that increasing patient loyalty requires more than just focusing on satisfaction; it also requires prioritizing patient experience and building trust. This can be achieved through improving the quality of nurse interactions, empathetic communication, and consistent implementation of caring practices. Thus, a positive patient experience will strengthen trust and ultimately drive sustained patient loyalty. Theoretically, this study confirms that patient loyalty is more influenced by experience and trust than by satisfaction alone.

For future research, a longitudinal design is recommended to more comprehensively capture the process of patient loyalty formation. Furthermore, the research model can be expanded by adding other variables such as perceived value, the quality of the patient-nurse relationship, and organizational factors. A mixed-methods approach is also recommended to delve deeper into patients' subjective experiences to yield a more comprehensive and applicable understanding.

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