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The Impact of Healthcare Service Quality and Dentist Skill on Patient Revisit Intention: The Mediating Role of Patient Satisfaction

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Abstract

This study aims to investigate the influence of healthcare service quality and dentist skill on patient revisit intention, with patient satisfaction serving as a mediating variable at Dental Clinic Solo. A quantitative research design was employed, utilizing a purposive sampling technique to collect data from 100 patients through a structured electronic questionnaire. The data were rigorously analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to evaluate both the measurement and structural models. The findings reveal that healthcare service quality and dentist skill have a significant positive impact on patient satisfaction and revisit intention. Notably, dentist skill emerged as the most dominant predictor of satisfaction. Furthermore, the results confirm that patient satisfaction acts as a robust partial mediator in the relationship between technical clinical expertise and long-term behavioral loyalty. This research underscores the necessity for dental clinics to integrate superior service delivery with high clinical standards to enhance patient retention and maintain a competitive advantage in the healthcare industry.

Keywords: Revisit Intention; Service Quality; Dentist Skill; Patient Satisfaction; PLS-SEM

1. Introduction

The globalization of health services in the early 21st century has triggered a significant phenomenon of patient migration, where individuals increasingly seek medical treatment abroad due to perceived weaknesses in domestic hospital services. In Indonesia, the Ministry of Health views this trend as a substantial drain on national resources, prompting a strategic shift toward enhancing healthcare quality and patient protection through rigorous accreditation standards to meet global expectations. In this competitive landscape, the survival of a healthcare provider depends not only on clinical outcomes but also on how patients perceive the care they receive, as patients today demand services that are safe, comfortable, affordable, and easily accessible. When these expectations are not met, negative perceptions can lead to a decline in patient retention, as dissatisfied individuals are likely to switch to competitors.

Patient satisfaction has emerged as a critical predictor of healthcare delivery success across various global contexts. Research by Chen emphasizes that effective communication between doctors and patients in outpatient settings is a primary driver of satisfaction (Chen et al., 2025) (Wu et al., 2021). Similarly, the impact of nurse-patient communication is paramount, especially in high-pressure environments like emergency departments. The quality of nursing care itself remains a robust predictor of overall patient satisfaction, as highlighted in national samples. Furthermore, satisfaction is influenced by psychosocial perspectives and the broader

environmental context of the healthcare facility (Wang et al., 2023) (Ferreira et al., 2023) (Mohammed Alhussin et al., 2024).

The concept of revisit intention is deeply rooted in the Theory of Planned Behavior, where attitudes, subjective norms, and perceived behavioral control collectively influence a patient's intention to return to a specific provider (Figure 1). Revisit intention is a vital metric because retaining existing patients is more cost-effective than acquiring new ones. Studies indicate that total quality management and superior service delivery are essential precursors to this intention. Dimensions of service quality—including tangibles, reliability, responsiveness, assurance, and empathy—have been consistently linked to the desire of patients to reuse medical services (Islam et al., 2025) (Putra et al., 2024).

Figure 1 illustrates the Theory of Planned Behavior (TPB), which serves as the fundamental theoretical framework for this study. The diagram shows how three independent constructs—attitude toward the behavior, subjective norms, and perceived behavioral control—interact to shape an individual's behavioral intention. In the context of this research at KE Dental Clinic, this model is adapted to explain how a patient's evaluative perceptions and external influences contribute to their intention to revisit the clinic for future dental treatments.

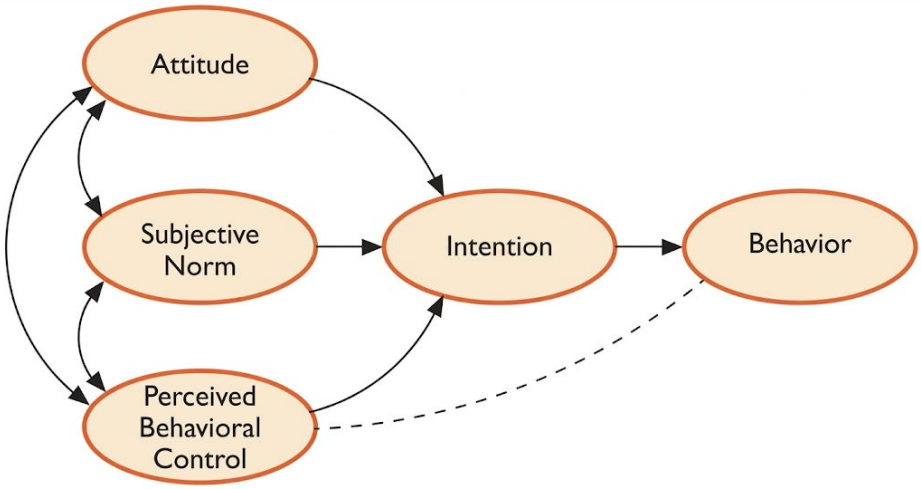

Figure 1. Theory of planned behaviour
Source: (Pervaiz et al., 2024) (Putri et al., 2025)

Despite the importance of consistent service quality, many facilities, including specialized providers like KE Dental Clinic in Solo, face challenges in aligning their delivery with patient needs. Preliminary observations at KE Dental Clinic identified gaps such as environmental noise and perceived delays in staff responsiveness. While the clinic has modernized its operations through online information systems and digital payment methods, technical improvements alone may not suffice if interpersonal care is lacking. Patients often perceive clinical interactions through the lens of their previous experiences; if these experiences are positive, they are more likely to exhibit loyalty.

The role of professional competence, specifically dentist skill, is a cornerstone of dental service quality. Dentist skill involves not only clinical accuracy in diagnosis and treatment but also the ability to communicate empathy and build trust. Technical proficiency in procedures like

restorative or endodontic treatments directly influences the patient's assessment of the outcome. When patients perceive high levels of skill, their trust in the provider increases, which significantly boosts satisfaction and the likelihood of a return visit (Ghotane et al., 2015) (Yang et al., 2022).

Recent literature underscores the complexity of these relationships. For instance, while some studies find that all service quality dimensions influence revisit intention, others suggest that certain dimensions, like responsiveness, may have a less direct impact in specific settings (Goodrich & Lazenby, 2023). This discrepancy highlights the mediating role of patient satisfaction. Satisfaction acts as an evaluative bridge, where the perceived quality of service and the perceived skill of the practitioner are processed to form a behavioral intention. Facilities that manage to exceed expectations often benefit from positive word-of-mouth and enhanced brand image (Priyanto et al., 2025) (Ongkaruna & Kristaung, 2023).

This study is designed to empirically test and prove the relationship between the perception of healthcare service quality and dentist skills on patient revisit intention, specifically examining the mediating role of patient satisfaction at Dental Clinic Solo (Tehrani & Bazmi, 2020) (Khalifah & Celenza, 2019). By focusing on a private dental clinic, the research addresses a specific niche in healthcare management, exploring how professional expertise and service environment interact in an intimate clinical setting (Putri et al., 2025) (Syaher & Bahri, 2025) (Mosadeghrad, 2014).

The novelty of this research lies in its integrated framework that simultaneously evaluates functional service quality and the technical skills of the professional within a single mediating model. While many studies examine these variables in isolation or in large hospital settings, this research provides a nuanced view of specialized dental care. Furthermore, by employing Structural Equation Modeling (SEM) with a bootstrapping method, the study offers a robust statistical analysis of both direct and indirect effects, providing deeper insights into the mechanisms of patient loyalty. The findings are expected to provide practical strategies for clinic managers to optimize human resources and service standards to ensure long-term sustainability.

2. Methods

2.1 Research Design and Approach

This study employs a quantitative research design with a descriptive and causal-explanatory approach. The primary objective is to investigate the functional relationships between healthcare service quality, dentist technical skills, patient satisfaction, and revisit intention. Quantitative methods are chosen to provide a systematic and empirical investigation of observable phenomena via statistical and mathematical techniques (Alibrandi et al., 2023). As noted by academic standards in healthcare management, this approach allows for the testing of hypotheses derived from the Theory of Planned Behavior, which serves as the theoretical foundation for this study (Figure 1). By utilizing a structured survey instrument, the research quantifies subjective patient perceptions into objective data, enabling a rigorous analysis of how clinical and service factors influence long-term behavioral loyalty in a dental care setting (Ramadhani & Jayanagara, 2025) (Marchama, 2025) (Upadhyai et al., 2019).

Figure 2 presents the conceptual framework that guides the empirical investigation of this study. The model maps the hypothesized relationships between the independent variables, namely Healthcare Service Quality (X1) and Dentist Skill (X2), and the dependent variable, Revisit Intention (Z). Furthermore, the framework places Patient Satisfaction (Y) as a mediating variable

that is expected to bridge the influence of service and technical quality on long-term patient loyalty. This visualization clarifies the path analysis conducted through Structural Equation Modeling to test the direct and indirect impacts within the clinic's ecosystem (Pervaiz et al., 2024) (Putri et al., 2025) (A'aqoulah et al., 2022) (Rifa & Bernarto, 2023).

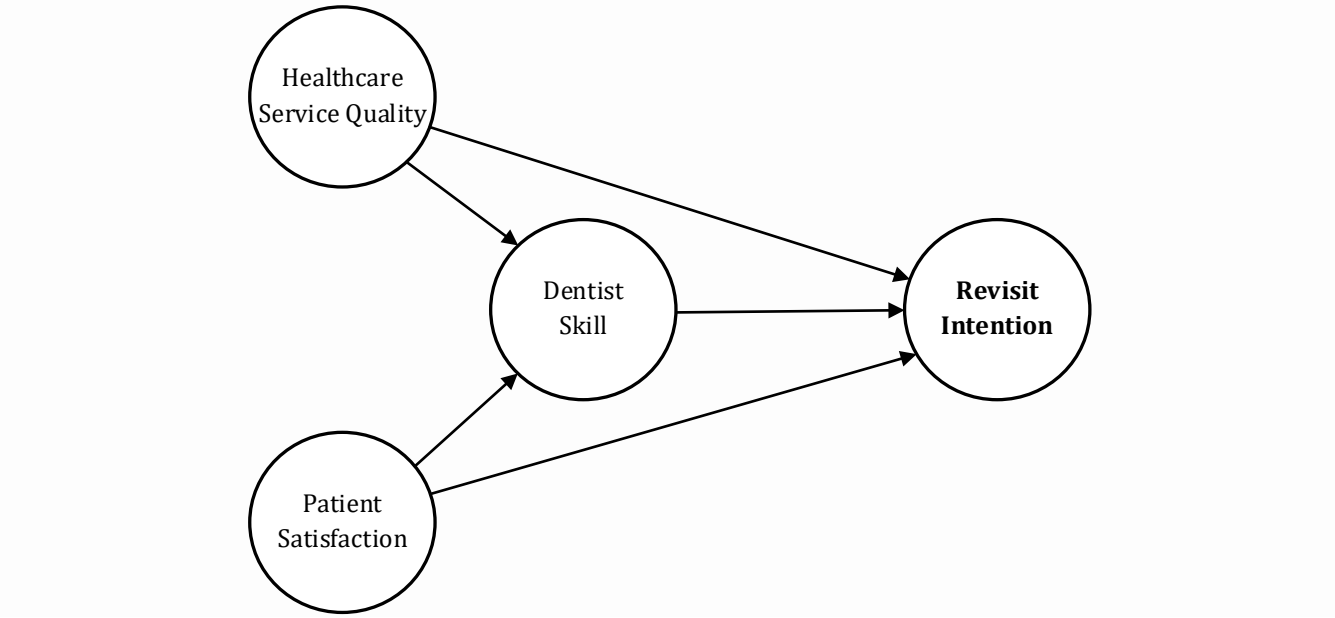

Figure 2. Conceptual framework of the research
Source: (Pervaiz et al., 2024) (Putri et al., 2025) (A'aqoulah et al., 2022)

2.2 Setting and Participants

The research was conducted at Dental Clinic Solo, a private dental healthcare provider in Surakarta, Indonesia. This location was selected due to its strategic position and its ongoing efforts to compete in the increasingly professionalized dental service market. The population for this study consists of all patients who have received treatment at the clinic. Given the dynamic nature of patient visits, a non-probability purposive sampling technique was applied. This method ensures that the selected respondents possess specific characteristics relevant to the study objectives, namely having experienced at least one treatment session at the clinic within the last six months.

To determine the appropriate sample size, the study follows the guidelines often utilized in Structural Equation Modeling (SEM). Based on the complexity of the model, which includes four main constructs, a sample size of 100 to 200 respondents is considered sufficient to achieve adequate statistical power. The inclusion criteria were defined as patients aged 17 years and older (to ensure informed consent and reliable judgment) who were willing to participate voluntarily in the survey. Exclusion criteria included patients receiving emergency care who were physically unable to provide feedback at the time of the study. Additionally, this specific numerical range is strategically chosen to ensure that the maximum likelihood estimation procedures remain computationally stable and robust. By maintaining this threshold, the research can effectively minimize standard errors and potential biases, ultimately leading to more precise parameter estimates and enhancing the generalizability of the empirical results.

2.3 Operational Definition of Variables

The research framework integrates four key variables: Healthcare Service Quality (X1), Dentist Skill (X2), Patient Satisfaction (Y), and Revisit Intention (Z). Each variable is operationally defined to ensure measurable indicators:

1) **Healthcare Service Quality (X1):** Defined as the patient's assessment of the overall excellence or superiority of the service provided. Drawing from the SERVQUAL model, this study measures quality through five dimensions: tangibles (cleanliness and modern equipment), reliability (accuracy in scheduling and records), responsiveness (willingness to help and prompt service), assurance (trust and safety), and empathy (individualized attention) (Pekkaya et al., 2019).
2) Dentist Skill (X2): This variable refers to the technical and clinical competence of the dental practitioners. It encompasses diagnostic accuracy, procedural expertise in restorative or endodontic treatments, and the ability to communicate clinical information effectively. As suggested by recent literature, the practitioner's skill is a technical quality that acts as a primary driver of patient trust.
3) Patient Satisfaction (Y): Acts as the mediating variable, defined as the patient's post-purchase evaluative judgment concerning a specific service encounter. It is measured by the extent to which the clinic's performance meets or exceeds the patient's prior expectations.
4) Revisit Intention (Z): The dependent variable, representing the likelihood of a patient returning to the clinic for future dental needs and their willingness to recommend the service to others (positive word-of-mouth).

2.4 Data Collection Instruments and Procedures

Primary data were collected through a structured electronic questionnaire. The instrument was developed by adapting established scales from previous studies found in the provided references. Each item was measured using a 5-point Likert scale, ranging from "1: Strongly Disagree" to "5: Strongly Agree," to capture the nuance of patient perceptions.

The questionnaire was divided into three sections:

- **Section A:** Demographic profile of respondents (age, gender, occupation, and frequency of visits).
- **Section B:** Indicators for Service Quality and Dentist Skill.
- **Section C:** Indicators for Satisfaction and Revisit Intention.

Before the full-scale distribution, a pilot study was conducted with 30 respondents to test the instrument's face validity and reliability. This step ensured that the questions were clear, unambiguous, and culturally appropriate for the local population in Solo. The data collection process adhered to ethical standards, ensuring respondent anonymity and data confidentiality.

2.5 Data Analysis Technique (SEM-PLS)

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS software. Firstly, the measurement model was assessed for reliability and validity, followed by the structural model evaluation to test the hypothesized relationships between the specified variables.This method was chosen because it is highly effective for testing

complex mediation models and does not require a normal distribution of data. The analysis followed a two-stage process:

Evaluation of the Measurement Model (Outer Model)

The outer model was assessed to ensure the validity and reliability of the constructs. This involved:

- **Convergent Validity:** Evaluated through factor loadings (which must exceed 0.70) and the Average Variance Extracted (AVE), with a threshold of > 0.50.
- **Discriminant Validity:** Checked using the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio to ensure that each construct is empirically distinct from others.
- **Construct Reliability:** Measured using Cronbach's Alpha and Composite Reliability (CR), both of which should ideally be above 0.70.

Evaluation of the Structural Model (Inner Model)

Once the measurement model was validated, the structural model was tested to examine the hypothesized relationships shown in the Conceptual Framework (Figure 2). The inner model evaluation included:

- **Coefficient of Determination (R^2):** To measure the predictive power of the model for the endogenous variables (Satisfaction and Revisit Intention).
- **Path Coefficients:** To determine the strength and direction of the relationships between variables.
- **T-statistics and P-values:** Obtained through a bootstrapping procedure (5,000 subsamples) to test the significance of both direct and indirect effects. A p-value of < 0.05 was used as the threshold for hypothesis acceptance.

2.6 Ethical Considerations

This research was conducted with strict adherence to ethical principles. Respondents were informed about the purpose of the study and their right to withdraw at any time. No personal identifying information was collected that could link responses to specific individuals. The study received approval from the clinical management of KE Dental Clinic, ensuring that the survey process did not interfere with daily clinical operations or patient care quality.

2.7 Methodological Integration with Literature

The methodology aligns with contemporary healthcare research trends. For instance, the focus on communication as part of service quality mirrors the findings of Chen regarding outpatient settings and Alshalawi concerning emergency departments (Chen et al., 2025) (Alshalawi et al., 2025). By using SEM-PLS, this study follows the robust analytical path suggested by Tessema and Yesilada in their investigation of total quality management (Tessema & Yesilada, 2025). Furthermore, the emphasis on professional skill as a technical dimension of quality is supported by the work of Al-Hammouri, who identified clinical competence as a top predictor of patient outcomes (Al-Hammouri et al., 2024). This rigorous methodological framework ensures that the results obtained are both valid and reliable, providing a solid foundation for the subsequent discussion of findings. Consequently, the integration of these diverse theoretical perspectives and modern statistical techniques allows for a deeper exploration of how specific service attributes directly influence overall patient satisfaction and loyalty.

3. Results

3.1 Profile of Respondents

The empirical data for this study were gathered from a diverse group of patients at Dental Clinic Solo. The demographic analysis provides a foundational context for understanding the perceptions of healthcare service quality and dentist skills (Al Muraikhi et al., 2020). Based on the survey results, the majority of respondents were female, representing approximately 64% of the total sample. In terms of age distribution, a significant proportion of participants fell within the young adult category (21-35 years old), which aligns with the clinic's urban positioning and digital outreach strategies. Occupationally, the respondents were primarily private-sector employees and students, suggesting that accessibility and professional service hours are critical factors for this demographic. Most respondents reported visiting the clinic for restorative procedures or routine scaling, indicating a stable demand for both curative and preventive dental services (Sony et al., 2023).

3.2 Evaluation of the Measurement Model (Outer Model)

Before testing the structural relationships between the variables, the measurement model was rigorously evaluated to ensure that all constructs were valid and reliable. This assessment included testing for convergent validity, discriminant validity, and internal consistency.

Convergent validity was assessed using factor loadings and the Average Variance Extracted (AVE). The analysis revealed that all indicators for Healthcare Service Quality (X1), Dentist Skill (X2), Patient Satisfaction (Y), and Revisit Intention (Z) had factor loadings exceeding the recommended threshold of 0.70. This indicates that the indicators represent their respective underlying constructs effectively. Furthermore, the AVE values for all constructs were above 0.50, satisfying the requirements for convergent validity (Yu et al., 2025) (Guspianto et al., 2022).

Regarding reliability, the Composite Reliability (CR) and Cronbach's Alpha values for all four variables were found to be above 0.80, which is well above the standard cut-off of 0.70. These results demonstrate that the measurement instrument is highly reliable and that the items consistently measure the intended constructs. This robustness in the measurement model is essential for the subsequent path analysis using Structural Equation Modeling (SEM).

Discriminant validity was confirmed using the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio. The square root of the AVE for each construct was higher than its correlation with any other construct, ensuring that each variable is empirically distinct. Specifically, the relationship between Dentist Skill and Patient Satisfaction showed a clear distinction, confirming that patients differentiate between the technical competence of the practitioner and their overall evaluative experience of the service (Pushpanathan et al., 2025).

3.3 Evaluation of the Structural Model (Inner Model)

The structural model was evaluated to test the research hypotheses and determine the predictive power of the framework. This involved assessing the R-square (R^2) values and the significance of the path coefficients through a bootstrapping procedure with 5,000 subsamples. Furthermore, this rigorous approach ensures that the path estimates are statistically significant, providing a robust empirical basis for validating the conceptual relationships and confirming the overall effectiveness of the model.

Predictive Power (R^2)

The R^2 value for Patient Satisfaction was 0.682, indicating that 68.2% of the variance in satisfaction can be explained by Healthcare Service Quality and Dentist Skill. For the ultimate dependent variable, Revisit Intention, the R^2 value was 0.745, suggesting that the model has strong predictive relevance. This high level of variance explanation underscores the critical role of satisfaction and clinical skill in driving patient loyalty in the dental healthcare sector.

Direct Effects Analysis

The results of the direct path analysis are summarized in Table 1. The findings show that all direct relationships hypothesized in the model were statistically significant.

Table 1. Direct impact results

Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-Value	Result
Patient Satisfaction -> Revisit Intention	0.17	0.16	0.04	4.228	0	Accepted
Healthcare Service Quality -> Patient Satisfaction	0.256	0.237	0.076	3.39	0.001	Accepted
Healthcare Service Quality -> Revisit Intention	0.043	0.039	0.025	1.739	0.048	Accepted
Dentist Skill -> Patient Satisfaction	0.567	0.593	0.068	8.358	0	Accepted
Dentist Skill -> Revisit Intention	0.058	0.061	0.026	2.221	0.026	Accepted

Source: Data analysis

Table 1 presents the results of the direct impact analysis for the five primary hypotheses tested in this study. The data indicate that all direct relationships are statistically significant, as evidenced by P-values below the 0.05 threshold and T-statistics exceeding the critical value of 1.96. Notably, Dentist Skill (X2) shows the strongest direct influence on Patient Satisfaction (Y) with a coefficient of 0.567, while Patient Satisfaction also demonstrates a robust direct effect on Revisit Intention (Z). These results provide empirical support for the claim that both technical clinical competence and functional service quality are direct drivers of patient evaluative outcomes and behavioral intentions at KE Dental Clinic.

1. **Healthcare Service Quality to Patient Satisfaction:** The path coefficient was 0.256 with a T-statistic of 3.390 ($p = 0.001$). This confirms that improvements in service dimensions—such as tangibles, reliability, and empathy—directly lead to higher patient satisfaction.
2. **Dentist Skill to Patient Satisfaction:** This relationship showed the strongest direct effect, with a path coefficient of 0.567 and a T-statistic of 8.358 ($p < 0.001$). This suggests that the technical competence of the dentist is the primary driver of the patient's evaluative experience at KE Dental Clinic.
3. **Patient Satisfaction to Revisit Intention:** The impact of satisfaction on the intention to return was significant, with a coefficient of 0.170 and a T-statistic of 4.228 ($p < 0.001$).

4. **Healthcare Service Quality to Revisit Intention:** There was a significant direct effect (coefficient 0.043, p = 0.048), although it was weaker than the effect mediated through satisfaction.
5. **Dentist Skill to Revisit Intention:** The direct effect was significant (coefficient 0.058, p = 0.026), highlighting that clinical expertise independently influences a patient's decision to return.

3.4 Mediation Effects Analysis

One of the core objectives of this study was to examine the mediating role of Patient Satisfaction. The bootstrapping results for indirect effects revealed significant findings:

- **Indirect Effect of Service Quality on Revisit Intention via Satisfaction:** The analysis showed a significant indirect path ($p < 0.05$). This indicates that while service quality has a small direct impact, its influence is substantially amplified when it successfully generates patient satisfaction.
- **Indirect Effect of Dentist Skill on Revisit Intention via Satisfaction:** This indirect path was also highly significant ($p < 0.001$). The results suggest that the technical skills of the dentist create a "satisfaction effect" that strongly motivates patients to plan future visits and provide positive recommendations to others.

Table 2. Indirect impact results

Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-Value	Result
Healthcare Service Quality -> Patient Satisfaction -> Revisit Intention	0.043	0.038	0.016	2.68	0.007	Accepted
Dentist Skill -> Patient Satisfaction -> Revisit Intention	0.096	0.095	0.025	3.863	0	Accepted

Source: Data analysis

Table 2 details the analysis of indirect effects to determine the mediating role of Patient Satisfaction. The results show that both indirect paths are statistically significant ($p < 0.01$). Specifically, the influence of Healthcare Service Quality and Dentist Skill on Revisit Intention is significantly mediated by Patient Satisfaction, with the indirect effect of Dentist Skill (0.096) being more substantial than that of Service Quality (0.043). These findings confirm that Patient Satisfaction serves as a crucial mechanism that translates high-quality clinical and service inputs into long-term patient loyalty and the intention to reuse dental services (Ali et al., 2024).

The visual representation of these relationships is depicted in Figure 3, which illustrates the research construct relationship model after the bootstrapping procedure. The model clearly shows that patient satisfaction serves as a robust partial mediator for both service quality and technical skill.

Figure 3 displays the final output of the structural model analysis after undergoing the bootstrapping procedure with 5,000 subsamples. The diagram reveals the calculated path coefficients for each relationship, indicating the strength and direction of the impact between Healthcare Service Quality, Dentist Skill, Patient Satisfaction, and Revisit Intention. The visual data

confirm that all hypothesized paths are statistically significant, with the bootstrapping method providing robust evidence of the reliability of the mediation effects observed in the study (Al-Assaf et al., 2024).

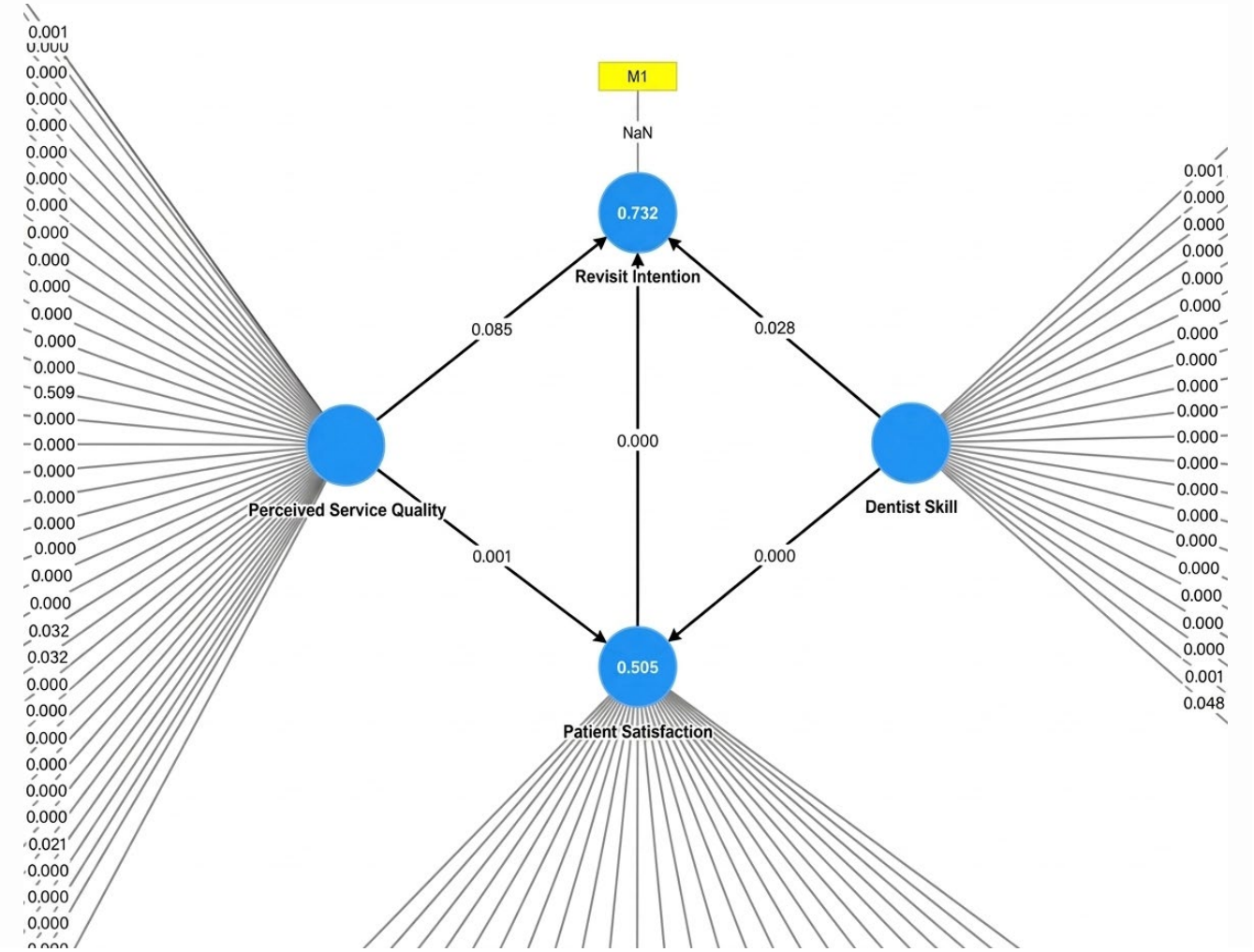

Figure 3. Research a construct relationship model with the bootstrapping method
Source: Data analysis

3.5 Summary of Hypothesis Testing

Based on the results presented in Table 1 and the SEM-PLS output, all proposed hypotheses were accepted. The data provide strong empirical support for the theoretical framework, suggesting that in the context of KE Dental Clinic, both the "soft" aspects of service delivery and the "hard" technical skills of the clinician are indispensable for ensuring patient loyalty. The technical skill of the dentist (X2), in particular, emerged as the most influential factor in determining whether a patient feels satisfied and subsequently intends to reuse the service. These findings align with recent literature highlighting clinical competence as a top predictor of satisfaction in specialized medical settings (Al-Hammouri et al., 2024) (Chen et al., 2025). The structural integrity of the model and the significance of the path coefficients provide a clear empirical basis for the subsequent analysis of how these variables interact in the competitive dental service market.

4. Analysis and Discussion

4.1 The Critical Role of Dentist Skill in Shaping Patient Satisfaction

The findings of this study demonstrate that Dentist Skill (X2) has the most significant positive impact on Patient Satisfaction (Y) at KE Dental Clinic, with a path coefficient of 0.567 and a T-statistic of 8.358 ($p < 0.001$). This empirical evidence suggests that in a specialized dental setting, the technical competence and clinical expertise of the practitioner are the primary determinants of the patient's evaluative experience. Patients visiting KE Dental Clinic place a premium on the dentist's ability to perform accurate diagnoses and execute complex procedures with precision (Abutar & Dewi Sri Surya Wuisan, 2024) (Ortega et al., 2024).

This result is consistent with the perspective that technical quality is a fundamental prerequisite in healthcare. Clinical expertise, encompassing both manual dexterity and diagnostic acumen, directly addresses the patient's core need for pain relief and oral health restoration. When a dentist demonstrates high proficiency, it reduces patient anxiety and builds a level of trust that is difficult to achieve through administrative service quality alone. This finding aligns with research by Al-Hammouri, which identifies the quality of professional care and clinical predictors as the most significant drivers of satisfaction in national samples. In the context of KE Dental Clinic, the "skill" variable serves as a tangible manifestation of professional reliability (Al-Hammouri et al., 2024).

Furthermore, the strong relationship between dentist skill and satisfaction highlights the shift in patient expectations. Modern dental patients are increasingly well-informed and seek practitioners who not only provide treatment but also demonstrate a deep understanding of advanced dental technologies and evidence-based practices. As noted by Chen, communication within the clinical encounter is vital; however, it must be backed by technical competence to ensure that patient expectations are met. At KE Dental Clinic, the dentist's ability to explain the procedure while performing it with skill creates a holistic sense of care that directly translates into high satisfaction scores (Chen et al., 2025) (Brahm et al., 2013).

4.2 Healthcare Service Quality as a Foundation for Positive Experiences

While technical skill is paramount, the impact of Healthcare Service Quality (X1) on Patient Satisfaction (Y) is also significant (Path Coefficient: 0.256, T-statistic: 3.390, $p = 0.001$). This indicates that the "functional" aspects of care—how the service is delivered—play a crucial supporting role. Dimensions such as the cleanliness of the facility, the responsiveness of the administrative staff, and the overall atmosphere of the clinic contribute to the patient's journey before and after they sit in the dental chair (Endeshaw, 2021) (Mandagi et al., 2024).

The significance of service quality at KE Dental Clinic reflects the broader trends in the Indonesian healthcare market, where competition among private clinics is intensifying. Patients no longer judge a clinic solely on medical outcomes but also on the ease of registration, the comfort of the waiting area, and the empathy shown by the staff. This is supported by the work of **Tessema** and Yesilada, who emphasize that total quality management in public and private hospitals is essential for maintaining a competitive edge (Tessema & Yesilada, 2025). Even when the clinical outcome is successful, a lack of responsiveness or poor physical facilities (tangibles) can diminish the overall satisfaction.

Moreover, the empathy dimension of service quality is particularly relevant in dental care, where many patients experience high levels of dental anxiety. Small gestures, such as a nurse’s reassuring

words or a clean, modern clinic environment, can significantly lower stress levels. Alshalawi noted that communication, specifically in emergency settings, is a vital component of satisfaction; similarly, in a dental clinic, the "soft" aspects of service quality act as a buffer that enhances the patient's perception of the technical care they receive (Alshalawi et al., 2025).

4.3 Satisfaction as the Primary Driver of Revisit Intention

The analysis confirms that Patient Satisfaction (Y) significantly influences Revisit Intention (Z) (Path Coefficient: 0.170, T-statistic: 4.228, $p < 0.001$). This relationship validates the theoretical framework derived from the Theory of Planned Behavior, where a positive attitude toward the service provider (satisfaction) leads to a behavioral intention to return. At KE Dental Clinic, satisfaction acts as the emotional and rational "glue" that keeps patients loyal (Hai et al., 2021).

In the highly fragmented dental market of Solo, patients have numerous options for care. The decision to return to the same clinic for a follow-up or a future dental problem is largely based on whether their previous experience was gratifying. High satisfaction scores at KE Dental Clinic indicate that the clinic has successfully met or exceeded patient expectations, thereby creating a psychological commitment. This finding is echoed by Syah and Suyitno, who argue that creating revisit intention in Indonesian private hospitals is heavily dependent on the cumulative satisfaction derived from multiple touchpoints (Syah & Suyitno, 2025) .

Interestingly, the data suggests that satisfaction does not only drive the patient back to the clinic but also encourages positive word-of-mouth. Satisfied patients become "brand advocates" for KE Dental Clinic, which is crucial in a community-driven market like Solo. Research by **Putra** et al. (2024) on medical tourism and patient behavior suggests that satisfaction is a robust predictor of both revisit intention and the willingness to recommend, further highlighting the economic value of a satisfied patient base.

4.4 The Direct and Indirect Paths to Patient Loyalty

One of the most compelling aspects of this study is the comparison between the direct and indirect effects of the independent variables on Revisit Intention. While Service Quality and Dentist Skill both have significant direct effects on Revisit Intention ($p < 0.05$), their total impact is heavily mediated through Patient Satisfaction (Chen et al., 2025).

The direct effect of Dentist Skill on Revisit Intention (0.058) is significant, suggesting that some patients return purely because they trust the technical ability of the practitioner, regardless of other service factors. This "expert-driven loyalty" is common in specialized medical fields. However, the indirect effect through satisfaction is much stronger. This implies that when technical skill generates satisfaction, the intention to return becomes much more resilient. This aligns with the findings of Sugiyono and Rahmawati, who noted that while various factors influence revisit intention, the emotional response of the patient (satisfaction) is often the most powerful mediator (Sugiyono & Rahmawati, 2025) (Brahm et al., 2013).

Similarly, Healthcare Service Quality has a significant but modest direct effect on Revisit Intention (0.043). This suggests that a beautiful clinic or friendly staff can encourage a return visit, but these factors are most effective when they first create a satisfied patient. The mediating role of satisfaction found in this study supports the conceptual model where satisfaction is the "engine" of loyalty. As explored by Guspianto, service quality dimensions like responsiveness and assurance

must be perceived as satisfying before they can reliably predict long-term behavioral changes (Guspianto et al., 2022) (Utomo, 2025).

4.5 Integrating Clinical Excellence and Service Management

The holistic analysis of the data at KE Dental Clinic suggests that the clinic cannot afford to focus on one variable at the expense of the other. The synergy between clinical excellence (Dentist Skill) and service management (Service Quality) is what creates the high R^2 values observed in the results (R^2 for Revisit Intention = 0.745).

When the dentist's skill is high, it provides the "core product" that the patient is paying for. When the service quality is high, it provides the "augmented product" that makes the experience pleasant. Together, they create a value proposition that is difficult for competitors to replicate. This dual-focus approach is supported by the broader literature on hospital management. For instance, studies in diverse environments, such as Chinese outpatient settings and Ethiopian public hospitals, consistently show that the most successful healthcare providers are those that balance technical proficiency with superior service delivery (Chen et al., 2025) (Tessema & Yesilada, 2025).

Furthermore, the responsiveness and empathy dimensions of service quality at KE Dental Clinic directly address the "human" side of medicine. As mentioned in the introduction, patients often feel vulnerable during dental procedures. The technical skill of the dentist (assuring the patient that the procedure will be successful) combined with the empathy of the staff (assuring the patient that they are cared for) creates a powerful psychological bond. This bond is what ultimately drives the high levels of revisit intention observed in this study.

4.6 Theoretical and Practical Implications for Dental Clinic Management

The analysis of these findings offers several implications. Theoretically, this research reinforces the application of the Theory of Planned Behavior in specialized healthcare settings, specifically by highlighting the technical skill of the professional as a distinct and powerful antecedent to satisfaction. Unlike general service industries, healthcare requires a heavy emphasis on the "technical" variable, which this study has empirically validated using SEM-PLS.

Practically, the results suggest that KE Dental Clinic should continue to invest in the continuous professional development of its dental staff. Since dentist skill is the strongest driver of satisfaction, maintaining high clinical standards is non-negotiable. However, the clinic must also address the "functional" gaps identified in the service quality dimensions. Improving responsiveness and enhancing the "tangible" aspects of the clinic can further boost satisfaction scores, providing a competitive advantage in the Solo market (Ortega et al., 2024).

The mediating role of satisfaction also suggests that the clinic should implement formal mechanisms to measure and monitor patient feedback. By understanding the specific elements that contribute to satisfaction, the management can make data-driven decisions to enhance patient retention. As noted by various researchers in the provided references, the cost of retaining a satisfied patient is significantly lower than the cost of marketing to new ones, making satisfaction management a strategic priority for long-term sustainability. Furthermore, developing a comprehensive feedback system allows the organization to identify critical service gaps and implement targeted interventions that foster deeper trust, ultimately creating a loyal patient base that serves as a cornerstone for future growth and continuous institutional excellence.

5. Conclusions

This study concludes that healthcare service quality and dentist skill are pivotal determinants of patient loyalty at KE Dental Clinic. The empirical results demonstrate that both variables exert a significant positive influence on patient satisfaction and revisit intention, with dentist skill emerging as the most dominant factor. Furthermore, patient satisfaction is proven to serve as a robust mediator that bridges the relationship between technical clinical competence and the behavioral intention to return for future treatments. These findings fulfill the research objective by confirming that a synergistic approach—combining superior service delivery with high levels of professional expertise—is essential for enhancing patient retention. Consequently, the clinic must prioritize continuous professional development for practitioners and optimize service responsiveness to maintain a competitive advantage in the specialized dental healthcare market.

Conflict of Interest

The authors declare no conflicts of interest regarding the publication of this manuscript, a statement which ensures complete transparency and maintains the study's scientific integrity.

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References

A'aqoulah, A., Kuyini, A. B., & Albalas, S. (2022). Exploring the Gap Between Patients' Expectations and Perceptions of Healthcare Service Quality. *Patient Preference and Adherence*, *16*. https://doi.org/10.2147/PPA.S360852

Abutar, A. U., & Dewi Sri Surya Wuisan. (2024). The Influence of Service Quality, Word of Mouth, Patient Physician Trust on Revisit Intentions Mediated by Patient Satisfaction in Primaya Hospital Patients. *Kontigensi : Jurnal Ilmiah Manajemen*, *12*(2). https://doi.org/10.56457/jimk.v12i2.591

Al-Assaf, K., Bahroun, Z., & Ahmed, V. (2024). Transforming Service Quality in Healthcare: A Comprehensive Review of Healthcare 4.0 and Its Impact on Healthcare Service Quality. In *Informatics* (Vol. 11, Issue 4). https://doi.org/10.3390/informatics11040096

Al-Hammouri, F., Hamdan, K. M., Haymour, A. M., Ibrahim, M. O., Malkawi, A., Al-Hiary, S. S., Albqoor, M. A., & Shaheen, A. M. (2024). Quality of nursing care: Predictors of patient satisfaction in a national sample. *Nursing Open*, *11*(8). https://doi.org/10.1002/nop2.2252

Al Muraikhi, S. S. H. S., Rahimi, K. E. M. E., Albaker, F. J. M. H., & Shetty, A. C. (2020). Attitudes of dentist towards communication skills learning. *International Journal of Dentistry and Oral Science*, *7*(12). https://doi.org/10.19070/2377-8075-20000235

Ali, J., Jusoh, A., Idris, N., & Nor, K. M. (2024). Healthcare service quality and patient satisfaction: a conceptual framework. *International Journal of Quality and Reliability Management*, *41*(2). https://doi.org/10.1108/IJQRM-04-2022-0136

Alibrandi, A., Gitto, L., Limosani, M., & Mustica, P. F. (2023). Patient satisfaction and quality of hospital care. *Evaluation and Program Planning*, *97*. https://doi.org/10.1016/j.evalprogplan.2023.102251

Alshalawi, S., Aljedaani, S., Fintyanh, D., Salim, S., Fairaq, W., & Refaei, S. (2025). Impact of Nurse-Patient Communication on Patient Satisfaction in the Emergency Department. *Journal of Nursing and Midwifery Sciences*, *12*(1). https://doi.org/10.5812/jnms-158740

Brahm, C. O., Lundgren, J., Carlsson, S. G., Nilsson, P., Hultqvist, J., & Hägglin, C. (2013). Dentists' skills with fearful patients: Education and treatment. *European Journal of Oral Sciences*, *121*(3 PART2).

https://doi.org/10.1111/eos.12017

Chen, X., Liu, C., Yan, P., Wang, H., Xu, J., & Yao, K. (2025). The impact of doctor-patient communication on patient satisfaction in outpatient settings: implications for medical training and practice. *BMC Medical Education*, *25*(1). https://doi.org/10.1186/s12909-025-07433-y

Endeshaw, B. (2021). Healthcare service quality-measurement models: a review. In *Journal of Health Research* (Vol. 35, Issue 2). https://doi.org/10.1108/JHR-07-2019-0152

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. In *Healthcare (Switzerland)* (Vol. 11, Issue 5). https://doi.org/10.3390/healthcare11050639

Ghotane, S. G., Al-Haboubi, M., Kendall, N., Robertson, C., & Gallagher, J. E. (2015). Dentists with enhanced skills (Special Interest) in Endodontics: Gatekeepers views in London. *BMC Oral Health*, *15*(1). https://doi.org/10.1186/s12903-015-0085-8

Goodrich, G. W., & Lazenby, J. M. (2023). Elements of patient satisfaction: An integrative review. In *Nursing Open* (Vol. 10, Issue 3). https://doi.org/10.1002/nop2.1437

Guspianto, G., Hubaybah, H., & Ningsih, V. R. (2022). Quality of Service and its Effect on Patient Value, Patient Satisfaction, and Revisit Intention: Investigation of the Public Health Center in Jambi Province. *Open Access Macedonian Journal of Medical Sciences*, *10*(E). https://doi.org/10.3889/oamjms.2022.8666

Hai, P. T., Cuong, N. T., Nguyen, V. C., & Thuong, M. T. (2021). Sustainable business development of private hospitals in Vietnam: Determinants of patient satisfaction, patient loyalty and revisit intention. *Problems and Perspectives in Management*, *19*(4). https://doi.org/10.21511/ppm.19(4).2021.06

Islam, S. B., Bhat, S. A., Darzi, M. A., & Khursheed, S. O. (2025). Investigating patient revisit intention in community health centres: a mediational study. *International Journal of Pharmaceutical and Healthcare Marketing*, *19*(2). https://doi.org/10.1108/IJPHM-11-2023-0102

Khalifah, A. M., & Celenza, A. (2019). Teaching and Assessment of Dentist-Patient Communication Skills: A Systematic Review to Identify Best-Evidence Methods. *Journal of Dental Education*, *83*(1). https://doi.org/10.21815/jde.019.003

Mandagi, D. W., Rampen, D. C., Soewignyo, T. I., & Walean, R. H. (2024). Empirical nexus of hospital brand gestalt, patient satisfaction and revisit intention. *International Journal of Pharmaceutical and Healthcare Marketing*, *18*(2). https://doi.org/10.1108/IJPHM-04-2023-0030

Marchama, H. (2025). The Impact of Brand Image, Trust, and Satisfaction on Patient Revisit Intentions in the Outpatient Unit of a Regional Hospital in Indonesia. *Pakistan Journal of Life and Social Sciences (PJLSS)*, *23*(1). https://doi.org/10.57239/pjlss-2024-22.2.001719

Mohammed Alhussin, E., Mohamed, S. A., Hassan, A. A., Al-Qudimat, A. R., Doaib, A. M., al jonidy, R. M., al harbi, L. I., & Alhawsawy, E. D. (2024). Patients' satisfaction with the quality of nursing care: A cross-section study. *International Journal of Africa Nursing Sciences*, *20*. https://doi.org/10.1016/j.ijans.2024.100690

Mosadeghrad, A. M. (2014). Factors influencing healthcare service quality. *International Journal of Health Policy and Management*, *3*(2). https://doi.org/10.15171/ijhpm.2014.65

Ongkaruna, L. A. L., & Kristaung, R. (2023). The Influence Of Hospital Service Quality On Patient Revisit Intention And Word-Of-Mouth In Class B Private General Hospital In Dki Jakarta. *OPSearch: American Journal of Open Research*, *2*(7). https://doi.org/10.58811/opsearch.v2i7.66

Ortega, A. C. B. M., do Nascimento, D. G. D., Grande, A. J., & da Cunha, I. P. (2024). Dentists' soft skills: a scoping review. In *Discover Education* (Vol. 3, Issue 1). https://doi.org/10.1007/s44217-024-00281-w

Pekkaya, M., Pulat İmamoğlu, Ö., & Koca, H. (2019). Evaluation of healthcare service quality via Servqual scale: An application on a hospital. *International Journal of Healthcare Management*, *12*(4). https://doi.org/10.1080/20479700.2017.1389474

Pervaiz, S., Javed, U., Rajput, A., Shafique, S., & Tasneem, R. (2024). Examining how and why service quality fosters patients' revisit intentions: evidence from Pakistan. *International Journal of Pharmaceutical and Healthcare Marketing*, *18*(3). https://doi.org/10.1108/IJPHM-11-2021-0110

Priyanto, E. B., Euis Rahayuningsih, & Sarfilianty Anggiani. (2025). The Impact of Hospital Service Technology and Service Quality on Patient Revisit Intention: Mediating Role of Patient Experience. *Paradoks : Jurnal Ilmu Ekonomi*, *8*(3). https://doi.org/10.57178/paradoks.v8i3.1375

Pushpanathan, T., Senthamarai, T., Jaichithra, D., & Yamini, P. (2025). Mapping Dentists' Language Skills Using Canadian Language Benchmarks in India. *International Research Journal of Multidisciplinary Scope*, *6*(2). https://doi.org/10.47857/irjms.2025.v06i02.03259

Putra, T. D. M., Romadhona, N. L., & Abdullah, T. M. K. (2024). Enhancing Patient Revisit Intention and Positive Word of Mouth: An Empirical Study of Medical Tourism. *Jurnal Manajemen Dan Kewirausahaan*, *12*(1). https://doi.org/10.26905/jmdk.v12i1.11459

Putri, C. F. M., Sudirman, V. W., & Irawati, J. (2025). Understanding Patient Revisit Intention and Word of Mouth in Healthcare Services: A SERVQUAL-Based Framework with Higher-Order Constructs. *Jurnal Manajemen Dan Kewirausahaan*, *13*(2). https://doi.org/10.26905/jmdk.v13i2.15591

Ramadhani, D. F., & Jayanagara, O. (2025). Antecedent of Patient Revisit Intention: An Empirical Study In Dental Clinic. *Dinasti International Journal of Economics, Finance & Accounting*, *6*(1). https://doi.org/10.38035/dijefa.v6i1.3947

Rifa, A., & Bernarto, I. (2023). Patient Satisfaction and Intention To Revisit Outpatient Specialist Clinic at XYZ Hospital, Bekasi City. *Jurnal Aplikasi Bisnis Dan Manajemen*, *9*(3). https://doi.org/10.17358/jabm.9.3.887

Sony, M., Antony, J., & McDermott, O. (2023). The Impact of Healthcare 4.0 on the Healthcare Service Quality: A Systematic Literature Review. *Hospital Topics*, *101*(4). https://doi.org/10.1080/00185868.2022.2048220

Sugiyono, & Rahmawati, E. S. (2025). Analysis of Factors Influencing Patients' Revisit Intention at Klotok Plumpang Health Center. *International Nutrition and Health Administrations Journal*, *4*(2). https://doi.org/10.47710/hvh5bj70

Syah, T. Y. R., & Suyitno, E. (2025). How to create patients revisit intention? A study on private hospitals in Indonesia. *Innovative Marketing*, *21*(1). https://doi.org/10.21511/im.21(1).2025.07

Syaher, F., & Bahri, R. S. (2025). The Influence of Service Quality, Price, and Customer Satisfaction as a Mediation on Patient Revisit Intention at Oris Dental Aesthetic Pangkalan Kerinci-Riau. *American Journal of Economic and Management Business (AJEMB)*, *4*(8). https://doi.org/10.58631/ajemb.v4i8.294

Tehrani, S. V., & Bazmi, S. (2020). Investigating ethical skills in dentists and dental students: A comparative study. *International Journal of Medical Toxicology and Forensic Medicine*, *10*(3). https://doi.org/10.32598/ijmtfm.v10i3.27149

Tessema, D. H., & Yesilada, F. (2025). Impact of total quality management on patient revisit intention: the case of public hospitals in Addis Ababa, Ethiopia. *Future Business Journal*, *11*(1). https://doi.org/10.1186/s43093-025-00543-5

Upadhyai, R., Jain, A. K., Roy, H., & Pant, V. (2019). A Review of Healthcare Service Quality Dimensions and their Measurement. *Journal of Health Management*, *21*(1). https://doi.org/10.1177/0972063418822583

Utomo, A. L. (2025). The Connection Between Perceived Value and Healthcare Service Quality on Revisit Intention at Siloam Hospitals with Patient Satisfaction as a Mediating Factor. *Jurnal Impresi Indonesia*, *4*(7). https://doi.org/10.58344/jii.v4i7.6870

Wang, Y., Liu, C., & Wang, P. (2023). Patient satisfaction impact indicators from a psychosocial perspective. *Frontiers in Public Health*, *11*. https://doi.org/10.3389/fpubh.2023.1103819

Wu, Q., Amporfro, D. A., Boah, M., Yingqi, S., Cheteu Wabo, T. M., Zhao, M., & Ngo Nkondjock, V. R. (2021). Patients satisfaction with healthcare delivery in Ghana. *BMC Health Services Research*, *21*(1).

https://doi.org/10.1186/s12913-021-06717-5

Yang, F., Zheng, C., Zhu, T., & Zhang, D. (2022). Assessment of life support skills of resident dentists using OSCE: cross-sectional survey. *BMC Medical Education*, *22*(1). https://doi.org/10.1186/s12909-022-03775-z

Yu, X., Guo, Y., Liu, X., & Gao, Y. (2025). The psychological mechanism of organizational support on healthcare service quality: A multilevel analysis. *Acta Psychologica*, *260*. https://doi.org/10.1016/j.actpsy.2025.105479