

The Influence of Management Capability, Staff Competence, and Waiting Time on Revisit Intention at Dental Clinic X with Patient Satisfaction as a Mediating Variable

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This study examines the effects of management capability, staff competence, and waiting time on patient revisit intention at Dental Clinic X, with patient satisfaction as a mediating variable. A quantitative explanatory design was applied using a structured questionnaire distributed to patients who had visited the clinic more than once. A total of 213 valid responses were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The results show that management capability and staff competence have positive and significant effects on patient satisfaction. Patient satisfaction also has a positive and significant effect on revisit intention. Management capability has a direct positive effect on revisit intention, while staff competence and waiting time do not have significant direct effects. The mediation test indicates that patient satisfaction mediates the effects of management capability and staff competence on revisit intention, but does not mediate the effect of waiting time. These findings highlight the importance of managerial quality and staff competence in strengthening patient satisfaction and encouraging revisit intention in dental health services.

Keywords: Revisit intention, Patient satisfaction, Management capability, Staff competence, Dental clinic.

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1. Introduction

Competition in the healthcare industry demands that service providers prioritize not only the accuracy of medical procedures but also a satisfying service experience. Patient satisfaction is a crucial indicator because it is linked to trust, adherence to medical recommendations, loyalty, and the patient's likelihood of returning to the same service (Fatima et al., 2018; Ferrand et al., 2016; Ramli, 2017). In the context of dental clinics, this issue is even more crucial because dental services often require ongoing engagement, such as consultations, post-procedure check-ups, and regular care.

Revisit intention reflects a patient's tendency to return to the same healthcare service when requiring treatment in the future. Previous studies have shown that patient satisfaction positively influences revisit intention in various healthcare contexts (Al-Harajin et al., 2019; Lee & Kim, 2017; Park et al., 2021). In dental clinics, the quality of interactions, doctor-patient communication, and patient confidence in the provider's competence can determine whether patients are willing to return.

Patient satisfaction is influenced by various determinants, including service quality, empathy, reliability, staff competence, waiting time, communication, and service availability (Akthar et al., 2023; Batbaatar et al., 2017; Darzi et al., 2023). Management capability is a crucial factor because clinical management plays a role in managing service flow, maintaining patient safety, following up on complaints, and ensuring consistent service standards are implemented. From a resource-based perspective, valuable internal

resources and capabilities can improve organizational performance and create a service experience that is difficult for competitors to imitate (D'Oria et al., 2021; Gerhart & Feng, 2021).

In addition to management capabilities, staff competence also determines patient experience. Patients expect medical and non-medical staff to be competent, communicative, caring, and able to understand their needs. Previous research has identified the competence, communication, and professional qualities of healthcare workers as factors influencing patient satisfaction (Lucadamo et al., 2021; Swain & Kar, 2018; Vogus & McClelland, 2016). Conversely, long wait times can cause discomfort and decrease patient satisfaction, although the impact may vary depending on the service context and patient expectations (Bahammam, 2023; Benevento et al., 2023; Xie & Or, 2017; Zhang et al., 2023).

Dental Clinic X has a relatively high and sustained visit volume. Internal data shows annual visits of 10,374 in 2022, 10,074 in 2023, 10,092 in 2024, and 10,534 in 2025. However, high visits require the ability to maintain patient satisfaction and willingness to revisit. The novelty of this research lies in the simultaneous examination of management capability, staff competence, and waiting time on revisit intention, with patient satisfaction acting as a mediator in the context of a dental clinic.

Based on this description, this study aims to analyze the influence of management capability, staff competence, and waiting time on patient satisfaction and revisit intention, as well as the mediating role of patient satisfaction in the relationship between these three service variables and patient revisit intention at Dental Clinic X.

2. Methods

This study employed a quantitative explanatory design with a survey approach. Primary data were obtained through a closed-ended questionnaire distributed to patients of Dental Clinic X. The study subjects were patients who had received dental health services at Dental Clinic X, while the unit of analysis was at the individual patient level.

The study population was Dental Clinic X patients. Respondent criteria were determined through two screening questions: patient status at Dental Clinic X and number of visits. Respondents who had only received a single examination were excluded from the analysis because the study focused on patient experiences, which already provided a basis for assessing revisit intentions. After data screening, 213 respondents were able to be processed.

The research instrument consisted of five constructs: management capability, staff competence, waiting time, patient satisfaction, and revisit intention. Management capability was measured using five indicators, staff competence with five indicators, waiting time with three indicators, patient satisfaction with four indicators, and revisit intention with three indicators. All items were measured using a 1-5 Likert scale, ranging from strongly disagree to strongly agree. The waiting time item was in the form of a negative statement, so interpretation of the results was based on the direction of the statement. Data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. Evaluation of the measurement model was carried out through outer loading, average variance extracted (AVE), Heterotrait-Monotrait Ratio (HTMT), and composite reliability. The criteria used were outer loading above 0.70, AVE above 0.50, HTMT below 1.00, and composite reliability above 0.70 (Sarstedt et al., 2021; Sholihin & Ratmono, 2021). Evaluation of the structural model was carried out through R-square, inner VIF, and bootstrapping hypothesis testing with a t-count limit of 1.645 and a p-value of 0.05.

Table 1. Variables and Measurement Indicators

Variable	Code	Items	Main Measurement Focus
Management capability	X1	5	Leadership, patient safety, data confidentiality, communication, complaint handling
Staff competence	X2	5	Interaction, medical knowledge, understanding patient needs, helpfulness, caring attitude
Waiting time	X3	3	Registration complexity, queue management, waiting duration
Patient satisfaction	M	4	Visit decision, treatment outcomes, physician explanation, availability of staff
Revisit intention	Y	3	Willingness to return and preference for Dental Clinic X

**)adapted from the thesis instrument and Islam et al. (2025).*

3. Results and Discussion

Respondent Profile and Descriptive Results

The 213 respondents analyzed had visited the site more than once. The majority of respondents (155 or 73%) had visited twice, while 58 or 27% had visited three or more times. Based on age, the largest number of respondents were in the 40-49 age group (94 or 44%), followed by the 30-39 age group (64 or 30%). The gender composition was relatively balanced, with 110 men (52%) and 103 women (48%).

Table 2. Respondent Characteristics

Characteristic	Category	n	%
Number of visits	2 visits; 3 visits or more	155; 58	73; 27
Age	<20; 20-29; 30-39; 40-49; 50-59; >=60 years	11; 35; 64; 94; 6; 3	5; 16; 30; 44; 3; 1
Gender	Male; female	110; 103	52; 48
Monthly dental budget	Rp300,000; Rp300,001-Rp500,000; Rp500,001-Rp1,000,000; Rp1,000,001-Rp2,000,000; >Rp2,000,001	11; 74; 75; 39; 14	5; 35; 35; 18; 7

**) survey results from 213 respondents (2026).*

Descriptively, respondents gave positive assessments of management capability, staff competence, patient satisfaction, and revisit intention. The average score for management capability was 4.27 and staff competence 4.29, placing both in the agree category. Patient satisfaction averaged 4.19 and revisit intention 4.09. Conversely, the average waiting time was 2.03. Because the waiting time indicator is in a negative statement, this value indicates that respondents tended not to perceive complicated registration, bad queues, or excessively long wait times.

Table 3. Summary of Descriptive Statistics and Measurement Model

Variable	Mean	AVE	Composite Reliability	Interpretation
Management capability	4.27	0.713	0.925	Valid and reliable
Staff competence	4.29	0.762	0.941	Valid and reliable
Waiting time	2.03	0.857	0.947	Valid and reliable
Patient satisfaction	4.19	0.790	0.938	Valid and reliable
Revisit intention	4.09	0.833	0.938	Valid and reliable

**)data processing results (2026); waiting time items were negatively worded.*

Measurement and Structural Model Evaluation

The measurement model evaluation results showed that all constructs met validity and reliability criteria. AVE values ranged between 0.713 and 0.857, indicating convergent validity. Composite reliability values ranged between 0.925 and 0.947, indicating good internal consistency. The outer loadings of all indicators were also above 0.70, while the HTMT values were below 1.00. Therefore, the indicators were deemed capable of explaining the constructs being measured and showed adequate differentiation between variables.

In the structural model, the R-square value for patient satisfaction was 0.275. This means that management capability, staff competence, and waiting time explained 27.5% of the variation in patient satisfaction. The R-square value for revisit intention was 0.362, indicating that management capability, staff competence, waiting time, and patient satisfaction explained 36.2% of the variation in revisit intention. All inner VIF values were below 5, indicating that the model did not exhibit multicollinearity issues.

Hypothesis Testing

Table 4. Path Coefficient Bootstrapping Results

Path	O	t-stat.	P-value	Decision	Meaning
Management capability -> Patient satisfaction	0.292	3.209	0.001	Supported	Positive significant
Staff competence -> Patient satisfaction	0.297	3.378	0.000	Supported	Positive significant
Waiting time -> Patient satisfaction	0.036	0.758	0.224	Not supported	Not significant
Patient satisfaction -> Revisit intention	0.411	5.400	0.000	Supported	Positive significant
Management capability -> Revisit intention	0.272	3.740	0.000	Supported	Positive significant
Staff competence -> Revisit intention	0.020	0.257	0.399	Not supported	Not significant
Waiting time -> Revisit intention	- 0.034	0.401	0.344	Not supported	Not significant
Management capability -> Patient satisfaction -> Revisit intention	0.120	2.355	0.009	Supported	Mediated
Staff competence -> Patient satisfaction -> Revisit intention	0.122	2.486	0.006	Supported	Mediated
Waiting time -> Patient satisfaction -> Revisit intention	0.015	0.717	0.237	Not supported	Not mediated

**)SmartPLS 4 data processing results (2026).*

a. Mnagement Capability, Patient Satisfaction, and Revisit Intention

Management capability has a positive and significant effect on patient satisfaction with a coefficient of 0.292, a t-test of 3.209, and a p-value of 0.001. These findings indicate that the clinic's ability to manage services, maintain patient safety, maintain medical data confidentiality, establish communication, and handle complaints contributes to increased patient satisfaction. These results align with the RBV view that internal organizational capabilities can create service value for customers (Aboramadan et al., 2021; D'Oria et al., 2021).

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Management capability also directly influences revisit intention, with a coefficient of 0.272, a calculated t-value of 3.740, and a p-value of 0.000. This means that patients assess not only the treatment outcome but also the overall quality of the service system. Orderly and responsive management can create a perception of trustworthiness in the clinic, thus encouraging patients to return. Furthermore, patient satisfaction mediated the effect of management capability on revisit intention, with an indirect coefficient of 0.120 and a p-value of 0.009. These results indicate that clinic management quality is more effective in encouraging revisits when it first creates patient satisfaction.

b. Staff Competence, Patient Satisfaction, and Revisit Intention

Staff competence has a positive and significant effect on patient satisfaction, with a coefficient of 0.297, a calculated t-value of 3.378, and a p-value of 0.000. Descriptively, staff competence also achieved the highest average score compared to other variables, at 4.29. This indicates that staff's ability to interact, explain services, understand patient needs, and demonstrate compassion plays a crucial role in creating a satisfying service experience. These findings support studies emphasizing the role of professionalism, communication, and healthcare worker competence in shaping patient satisfaction (Lucadamo et al., 2021; Swain & Kar, 2018; Vogus & McClelland, 2016).

However, staff competence did not have a significant direct effect on revisit intention, with a coefficient of 0.020, a calculated t-value of 0.257, and a p-value of 0.399. This finding suggests that a positive assessment of staff competence is not sufficient to directly drive a decision to revisit. The effect of staff competence becomes significant through patient satisfaction, as indicated by a mediation coefficient of 0.122, a calculated t-value of 2.486, and a p-value of 0.006. Therefore, staff competence needs to be directed toward building a tangible sense of satisfaction for patients to impact revisit intention.

c. Waiting Time and Revisit Intention

Waiting time did not significantly influence patient satisfaction or revisit intention. The coefficient for patient satisfaction was 0.036 with a p-value of 0.224, while the coefficient for revisit intention was -0.034 with a p-value of 0.344. The indirect effect through patient satisfaction was also insignificant with a p-value of 0.237. These results differ from several studies that found that long waiting times can decrease patient satisfaction (Al-Harajin et al., 2019; Bahammam, 2023; Xie & Or, 2017; Zhang et al., 2023).

This insignificance can be explained by the context of Dental Clinic X. The average waiting time of 2.03 for negative statements indicates that respondents generally did not perceive complicated registration, bad queues, or excessively long wait times. In other words, waiting time may still be within patients' tolerance limits and therefore not a major factor in determining satisfaction or revisit decisions. Nevertheless, waiting time management remains important because service efficiency can strengthen the overall patient experience (Benevento et al., 2023).

d. Patient Satisfaction as a Key Mechanism

Patient satisfaction had a positive and significant effect on revisit intention, with a coefficient of 0.411, a t-count of 5.400, and a p-value of 0.000. These findings make patient satisfaction the strongest predictor in the model. Patients who are satisfied with their decision to visit, treatment outcomes, the clarity of the doctor's explanations, and the availability of medical personnel tend to have a higher intention to return to Dental Clinic X's services. These results are consistent with previous research showing that patient satisfaction is a crucial mechanism for building retention and repeat visits (Fu et al., 2022; Lee & Kim, 2017; Park et al., 2021).

From a managerial perspective, the study's findings confirm that Dental Clinic X needs to focus its patient loyalty strategy on satisfaction. Management capabilities and staff competency must translate into a safe, The Influence of Management Capability, Staff Competence, and Waiting Time on Revisit Intention at Dental Clinic X with Patient Satisfaction as a Mediating Variable. Lismawati et.al

comfortable, communicative, and responsive service experience. When these two internal factors successfully increase patient satisfaction, the likelihood of repeat visits increases.

4. Conclusion

This study concludes that management capability and staff competence have a positive and significant effect on patient satisfaction at Dental Clinic X. Patient satisfaction also has a positive and significant effect on revisit intention. Management capability was shown to have a direct effect on revisit intention, while staff competence and waiting time did not have a significant direct effect. Patient satisfaction mediated the effect of management capability and staff competence on revisit intention, but did not mediate the effect on waiting time.

These findings imply that increasing patient revisit intention cannot be achieved solely through isolated operational improvements but must be directed toward creating patient satisfaction. Dental Clinic X needs to strengthen management capabilities through consistent service management, medical data protection, complaint handling, and follow-up on patient suggestions. The clinic also needs to maintain and improve staff competence through technical training, communication, and patient-oriented service.

A limitation of this study is that it was conducted at only one clinic, thus limiting the generalizability of the results. Future research could expand the study to other dental clinics or healthcare facilities, employ a mixed methods approach, and re-examine the role of waiting time in different service contexts or with a larger number of respondents.

5. Acknowledgement

The author would like to thank Dental Clinic X, the research respondents, and the supervisors and examiners who provided guidance in the preparation of this research. This article is based on the Master's thesis in Hospital Administration from Pelita Harapan University.

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