



The Impact of Dental Health Service Quality and Innovative Entrepreneurial Orientation on Business Performance in Dental Clinics: A Resource-Based View Framework

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Abstract

This study investigates the impact of dental healthcare service quality and innovative entrepreneurial orientation on the business performance of dental clinics in the Greater Malang region. A quantitative research design was applied through a survey involving 39 respondents, including clinic managers, dentists, and professionals knowledgeable about clinic management and operations. The collected data were analyzed using Structural Equation Modeling (SEM) to evaluate the relationships among the study variables systematically and accurately. The findings reveal that dental service quality significantly contributes to improving clinic business performance through service structure, service processes, and patient outcomes. Better service quality enhances patient satisfaction, strengthens customer loyalty, and supports sustainable business growth. Furthermore, innovative entrepreneurial orientation was found to positively influence clinic performance. This orientation is reflected in the clinics' ability to develop innovations, respond proactively to market changes, and take strategic risks in a competitive healthcare environment. The study also highlights that innovative entrepreneurship enables clinics to adapt their business strategies to the rapidly changing healthcare market. Innovation in both healthcare services and managerial practices helps clinics improve competitiveness and maintain long-term sustainability. Overall, the research emphasizes that combining high-quality dental services with innovative entrepreneurial practices plays a crucial role in optimizing business performance and sustaining competitive advantage in the dental healthcare industry.

Keywords: Dental Health Service Quality, Innovative Entrepreneurship Orientation, Business Performance, Dental Clinics, Healthcare Service Management

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INTRODUCTION

The dental healthcare industry in Indonesia faces increasingly complex challenges as public awareness of oral health rises and competition among healthcare providers intensifies. The high prevalence of dental health problems, coupled with suboptimal utilization of healthcare services, indicates that dental clinics need to improve service quality while strengthening business strategies to remain sustainable and competitive (Lay et al. 2023). The success of dental clinics in the modern healthcare market is determined not only by the clinical competence of medical personnel but also by the organization's ability to effectively manage service quality and business innovation strategies (Sharka et al., 2024; Siripipathanakul & Bhandar, 2021). One of the strategic factors influencing the success of dental clinics is dental health service quality.

Dental health service quality reflects a clinic's ability to provide care that is effective, safe, and patient-centered. According to Donabedian's model, healthcare service quality consists of the dimensions of structure, process, and outcomes, which collectively shape patient experiences and

the success of healthcare organizations (Donabedian, 1988; Binder et al., 2021). Previous studies have shown that high service quality contributes to increased patient satisfaction, organizational reputation, and healthcare business performance (McCullough et al., 2023; El Garem et al., 2024). Therefore, dental health service quality can be considered a strategic resource that plays a crucial role in enhancing organizational competitiveness. In addition to service quality, innovative entrepreneurship orientation is also an important factor in improving the business performance of dental clinics.

Innovative entrepreneurship orientation reflects an organization's ability to innovate, act proactively, and take strategic risks in response to dynamic business environments (Zahra & Covin, 1995). Healthcare organizations with a strong entrepreneurial orientation tend to be more adaptive to changing customer needs and are capable of creating added value through service development and technology utilization (Gomes et al., 2022; Kraus et al., 2023). This orientation enables managers to introduce new services, enhance operational efficiency, and design service strategies that are more responsive to patient needs (Kulkov et al., 2023).

Most previous studies have focused on patient loyalty or technology adoption as additional mechanisms, while research that directly investigates the impact of dental health service quality and innovative entrepreneurship orientation on business performance remains relatively scarce, particularly in the context of highly competitive dental clinics operating in a dynamic healthcare service market (Othman & Kadasah, 2025).

This study aims to analyze the impact of dental health service quality and innovative entrepreneurship orientation on business performance in dental clinics within the Resource-Based View (RBV) framework. The research is expected to provide theoretical contributions to the development of the RBV perspective, emphasizing the importance of service quality and entrepreneurial orientation as strategic organizational resources (Barney, 1991).

The study also seeks to offer practical implications for dental clinic managers in designing strategies to enhance business performance based on service quality and innovation, enabling them to respond effectively to the increasingly dynamic competition in the healthcare service industry. From the RBV perspective, healthcare service quality and innovative entrepreneurship orientation are considered internal strategic capabilities that can improve the business performance of healthcare organizations. Although various studies have examined service quality and entrepreneurial orientation in the context of healthcare organizations, empirical research simultaneously analyzing both variables in relation to business performance in dental clinics remains limited.

METHOD

This study employed a quantitative approach with an explanatory research design aimed at testing causal relationships among the research variables, namely dental health service quality, innovative entrepreneurship orientation, and business performance. A quantitative approach was chosen because the study focuses on hypothesis testing developed based on theory and previous research. A survey method was used to collect primary data through structured questionnaires developed based on the indicators of the research variables (Lakens & DeBruine, 2021).

The population of this study consisted of dental clinics operating in the Greater Malang area, including Malang City, Malang Regency, and Batu City. The unit of analysis was the dental clinic, with respondents comprising clinic managers, dentists, or management personnel who have a thorough understanding of clinic operations and business performance.

The sampling technique used was purposive sampling with the following criteria: 1) Dental clinics that have been operating for at least one year. 2) Respondents who have a clear understanding of clinic services and business performance conditions.

The total sample size was 55 respondents. This sample size was considered sufficient because data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM), which is suitable for relatively small sample sizes and predictive research models (Hair et al., 2022).

Data were collected through the distribution of structured questionnaires both directly and online using digital platforms. The research instruments were developed based on indicators adapted from previous studies and tailored to the context of dental healthcare services. Each statement item was measured using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree, to assess respondents' perceptions of the research variables.

The initial stage of analysis involved Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) to ensure the validity and reliability of the research instruments for the three study variables: Dental Health Service Quality (DHSQ), Innovative Entrepreneurship Orientation (IEO), and Business Performance (BP) (Chang et al., 2021). The subsequent data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This method was selected because it is suitable for predictive research models involving latent constructs and relatively small sample sizes (Hair et al., 2022).

RESULT AND DISCUSSION

Respondent Characteristics

This study involved 55 respondents, consisting of dental clinic managers and professionals who are familiar with the operational conditions and business performance of dental clinics. The characteristics of the respondents are presented in Table 1.

Table 1. Respondent Characteristics

Characteristics	Category	Frequency	Percentage
Respondent Type	Clinic Manager	8	14.5%
	Dentist	27	49.1%
	Management/Admin	20	36.4%
Clinic Operational Period	1–3 Years	13	23.6%
	>3 Years	42	76.4%
Clinic Location	Malang City	23	41.8%
	Malang Regency	12	21.8%
	Batu City	20	36.4%

The majority of respondents were dentists and clinic managers with more than three years of operational experience, indicating that they possess adequate understanding of service quality and business performance in dental clinics.

Construct Validity Testing through EFA and CFA

The EFA results indicated that Dental Health Service Quality (DHSQ) consists of two main factors: the operational service quality dimension and the perceived outcome & satisfaction dimension. All indicators had factor loadings ≥ 0.50 and communalities ≥ 0.40 , allowing all nine indicators to be retained for CFA analysis. Subsequent CFA using AMOS confirmed the two-factor structure of DHSQ, with standardized factor loadings ranging from 0.614 to 0.980 and significance $p < 0.05$. The correlation between the two dimensions was moderate ($r = 0.352$), confirming a valid multidimensional construct free from multicollinearity.

EFA of the Innovative Entrepreneurship Orientation (IEO) variable showed that indicators related to service innovation and technology adaptation contributed dominantly to the construct. Indicators with low communalities were eliminated prior to CFA. The CFA results confirmed a unidimensional structure for IEO, with three main indicators exhibiting high standardized factor loadings (0.853–1.000) and significant p -values ($p < 0.001$). These findings indicate that innovative entrepreneurship orientation in the context of dental clinics is primarily reflected through service innovation and responsiveness to changing patient needs.

EFA of the Business Performance (BP) variable revealed one main factor adequately representing the construct. Only two indicators met the convergent validity criteria, namely patient growth (Y1) and clinic reputation (Y3), while revenue (Y2) and patient satisfaction (Y4) had low communalities and loadings and were therefore eliminated. CFA confirmed the unidimensional BP construct with Y1 and Y3 indicators showing significant and adequate loadings.

Based on the EFA and CFA results, the final indicators of all three variables demonstrated adequate convergent validity and were suitable for structural model analysis. DHSQ was confirmed to be multidimensional, whereas IEO and BP were unidimensional. The measurement model was statistically stable, consistent with the EFA results, and ready for testing the relationships among variables in the SEM model.

Descriptive Statistics of Variables

The mean values of all variables were above the midpoint of the scale, indicating that respondents' perceptions were relatively positive regarding service quality, innovative entrepreneurship orientation, and the business performance of dental clinics.

Table 2. Descriptive Statistics of Variables

Variable	Indicator	Mean	Standard Deviation
Dental Health	X111	4.182	0.690
Service Quality	X112	4.473	0.567
	X113	4.309	0.629
	X121	4.509	0.535
	X122	4.309	0.629
	X123	4.182	0.606
	X131	4.309	0.599
	X132	4.236	0.660
Innovative Entrepreneurship Orientation	X133	4.164	0.654
	X211	4.400	0.703
	X212	4.218	0.731
Business Performance	X221	4.273	0.645
	Y1	4.364	0.584
	Y3	4.273	0.554

Measurement Model Evaluation (Outer Model)

All constructs met the criteria for convergent validity and reliability, with factor loadings exceeding 0.70.

Table 3. Outer Loading Values

Indicator	BP	DHSQ	IEO	Description
X111		0.888		Valid
X112		0.858		Valid
X113		0.870		Valid
X121		0.860		Valid
X122		0.870		Valid
X123		0.801		Valid
X131		0.931		Valid
X132		0.867		Valid
X133		0.901		Valid
X211			0.916	Valid
X212			0.921	Valid
X221			0.921	Valid
Y1	0.824			Valid
Y3	0.863			Valid

Discriminant Validity

The square root of the AVE for each construct was higher than the correlations between constructs, indicating that the model meets discriminant validity criteria.

Table 4. Construct Validity and Reliability

Variable	AVE	Composite Reliability	Description
DHSQ	0.761	0.966	Reliable
IEO	0.846	0.941	Reliable
BP	0.711	0.831	Reliable

Structural Model Evaluation (Inner Model)

The results indicate that the independent variables explain 81.1% of the variance in dental clinic business performance.

Table 6. Coefficient of Determination (R^2)

Variabel Endogen	R^2
Business Performance	0.811

Hypothesis Testing (Bootstrapping)

The results of the hypothesis testing indicate that both dental health service quality (DHSQ) and innovative entrepreneurship orientation (IEO) have significant positive effects on business performance (BP) in dental clinics. Specifically, DHSQ has a stronger effect on BP compared to IEO.

Table 6. Hypothesis Testing Results

Hypothesis	Relationship	Coefficient	T-Statistic	P-Value	Decision
H1	DHSQ → BP	0.548	5.147	0.000	Accepted
H2	IEO → BP	0.374	3.424	0.001	Accepted

Sub-Chapter

The results of this study indicate that dental health service quality has a significant effect on business performance. These findings confirm that high-quality dental healthcare services, encompassing structure, process, and service outcomes, play a crucial role in enhancing operational effectiveness and the business success of dental clinics. This result aligns with Donabedian's model and previous studies, which demonstrate that service quality is a key determinant of healthcare organizational performance (Donabedian, 1988; McCullough et al., 2023; El Garem et al., 2024). Innovative entrepreneurship orientation was also found to have a significant effect on business performance. This finding suggests that a clinic's ability to innovate, act proactively, and take strategic risks can enhance organizational competitiveness. The result supports previous research indicating that an innovative entrepreneurial orientation plays an important role in improving organizational performance through strategic adaptation to market dynamics (Gomes et al., 2022; Kraus et al., 2023). Overall, the study reinforces the Resource-Based View perspective, which emphasizes that service quality and innovation capabilities are strategic resources contributing to improved business performance in organizations (Barney, 1991).

DISCUSSION

The main findings of this study indicate that Dental Health Service Quality (DHSQ) and Innovative Entrepreneurship Orientation (IEO) are two strategic organizational factors that significantly influence Business Performance (BP) in dental clinics located in the Greater Malang area. The statistical analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) demonstrates that both variables have positive and significant relationships with business performance, confirming that the success of dental clinics is not determined solely by clinical competence, but also by organizational capability in managing healthcare service quality and innovation-oriented business strategies.

The first major finding reveals that Dental Health Service Quality (DHSQ) has the strongest influence on Business Performance, with a path coefficient value of 0.548, T-statistic of 5.147, and p-value of 0.000. This result indicates that improving the quality of dental healthcare services significantly contributes to enhancing organizational performance in dental clinics. The dimensions of DHSQ in this study include structure, process, and service outcomes, which collectively represent the overall quality of healthcare service delivery. The structure dimension refers to the adequacy of facilities, medical equipment, and professional healthcare personnel available in the clinic. The process dimension reflects how healthcare services are delivered, including service efficiency, responsiveness, communication quality, and treatment procedures. Meanwhile, the service outcome dimension refers to the perceived results experienced by patients, such as satisfaction, trust, comfort, and positive treatment outcomes.

The findings suggest that dental clinics with better healthcare facilities, professional service systems, and efficient operational processes are more likely to achieve higher levels of business performance. This occurs because high-quality healthcare services contribute directly to patient satisfaction, patient retention, positive word-of-mouth promotion, and organizational reputation. Patients tend to prefer clinics that provide safe, comfortable, responsive, and professional services. As a result, clinics that consistently maintain service quality are more capable of attracting new

patients and retaining existing patients, ultimately improving organizational sustainability and competitive advantage.

In addition, the descriptive statistical analysis shows that respondents gave relatively high scores to all DHSQ indicators, with mean values above 4.0 on a five-point Likert scale. This indicates that most respondents perceive the quality of dental healthcare services in their clinics positively. The outer loading values of all DHSQ indicators were also above 0.70, confirming that the indicators strongly represent the service quality construct. Furthermore, the AVE value of 0.761 and Composite Reliability value of 0.966 demonstrate that the DHSQ construct has strong convergent validity and high internal consistency reliability. These findings confirm that healthcare service quality is a stable and reliable construct in explaining business performance in dental clinics.

The second major finding of this study demonstrates that Innovative Entrepreneurship Orientation (IEO) also has a significant positive effect on Business Performance, with a path coefficient value of 0.374, T-statistic of 3.424, and p-value of 0.001. Although the effect size is lower than DHSQ, the findings indicate that entrepreneurial and innovation-oriented managerial behavior remains an important determinant of business success in the dental healthcare industry. Innovative Entrepreneurship Orientation in this study reflects organizational capabilities related to innovativeness, proactiveness, and strategic risk-taking behavior.

The findings indicate that dental clinics with stronger innovation orientation tend to be more adaptive and responsive to changes in healthcare market dynamics and patient needs. Innovation in dental clinics may include introducing new treatment services, adopting digital healthcare technologies, improving operational systems, utilizing social media marketing, and implementing patient-centered service innovations. Clinics with proactive managerial behavior are generally more capable of identifying market opportunities, responding to patient expectations, and adapting to technological developments in healthcare services. This adaptability contributes positively to clinic competitiveness and long-term business sustainability. Furthermore, the EFA and CFA results revealed that service innovation and technology adaptation were the strongest indicators within the IEO construct. This finding suggests that technological capability and innovation-oriented management practices are becoming increasingly essential in modern healthcare organizations. In today's competitive healthcare environment, patients not only expect high-quality clinical treatment but also demand convenience, accessibility, and modern healthcare experiences. Therefore, clinics that successfully integrate innovation into their operational systems are more likely to improve organizational efficiency, patient loyalty, and overall business performance (Al-Hawary & Alolayyan, 2021).

Another important finding in this study is related to the explanatory power of the structural model. The coefficient of determination (R^2) value for Business Performance was 0.811, indicating that DHSQ and IEO jointly explain 81.1% of the variance in dental clinic business performance. This result demonstrates that the combination of healthcare service quality and innovative entrepreneurship orientation provides a very strong contribution in determining organizational success. The remaining 18.9% may be influenced by other external or internal factors not examined in this study, such as financial management, organizational culture, government healthcare policies, patient demographics, or market competition intensity.

The findings also reveal that Business Performance in dental clinics is primarily reflected through patient growth and clinic reputation. During the validity testing process, only these two indicators met the convergent validity criteria, while revenue growth and patient satisfaction indicators were excluded due to low communalities and factor loadings. This finding implies that organizational reputation and patient growth are the most dominant indicators in assessing dental clinic performance within the current healthcare market context. Clinics with strong reputations and increasing patient numbers are more likely to experience sustainable business growth and stronger competitive positioning.

The results of this study strongly support the Resource-Based View (RBV) theory proposed by Barney (1991), which emphasizes that internal organizational resources and capabilities are fundamental determinants of sustainable competitive advantage. In the context of this study, Dental Health Service Quality and Innovative Entrepreneurship Orientation are considered strategic organizational resources that are valuable, difficult to imitate, and capable of enhancing business performance. High-quality healthcare services create patient trust and organizational credibility, while innovation orientation enables organizations to adapt strategically to environmental changes and market competition.

Moreover, the findings are consistent with previous studies conducted in healthcare and service industries. The significant influence of healthcare service quality on organizational performance supports the findings of Donabedian (1988), McCullough et al. (2023), and El Garem et al. (2024), which highlight the importance of service quality in improving healthcare outcomes and organizational effectiveness. Similarly, the positive effect of innovative entrepreneurship orientation aligns with the studies of Gomes et al. (2022), Kraus et al. (2023), and Kulkov et al. (2023), which emphasize that innovation capability and proactive organizational behavior contribute significantly to firm competitiveness and performance improvement. However, this study also extends previous research by integrating DHSQ and IEO simultaneously within the context of dental clinics in Indonesia (Naidoo, 2010). Most previous studies have examined healthcare service quality and entrepreneurial orientation separately or focused mainly on patient loyalty and technology adoption. This study provides a more comprehensive understanding by demonstrating that the integration of excellent healthcare service quality and innovative entrepreneurial capability forms a strategic combination that significantly enhances dental clinic business performance (Ferreira et al., 2023).

Overall, the findings of this study emphasize that dental clinics operating in increasingly competitive healthcare environments must not rely solely on clinical expertise. Instead, clinics need to strengthen healthcare service quality, improve patient-centered operational systems, foster innovation-oriented organizational culture, and develop adaptive business strategies. The integration of service excellence and innovation capability enables dental clinics to improve operational effectiveness, strengthen organizational reputation, increase patient loyalty, and achieve sustainable competitive advantage in the dynamic healthcare industry.

This study offers several important novelties and contributions to the development of healthcare management literature, particularly in the context of dental clinic business performance within emerging healthcare markets. The primary novelty of this research lies in the integration of Dental Health Service Quality (DHSQ) and Innovative Entrepreneurship Orientation (IEO) within a single research framework based on the Resource-Based View (RBV). Previous studies generally examined healthcare service quality and entrepreneurial orientation separately, focusing mainly on patient satisfaction, patient loyalty, organizational innovation, or technology adoption. In contrast, this study simultaneously analyzes the direct effects of healthcare service quality and innovative entrepreneurial orientation on business performance in dental clinics, thereby providing a more comprehensive understanding of strategic organizational capabilities in the healthcare sector.

Another important novelty of this study is its specific focus on dental clinics in Indonesia, particularly in the Greater Malang area. Most previous studies regarding healthcare service quality and innovation orientation have been conducted in hospitals, public healthcare institutions, or general healthcare organizations in other countries. Empirical studies specifically investigating the relationship between healthcare service quality, innovative entrepreneurship orientation, and business performance in dental clinics within developing countries remain relatively limited. Therefore, this study expands the contextual application of the Resource-Based View theory in the dental healthcare industry, especially within the Indonesian healthcare service environment characterized by increasing competition, rapid technological development, and growing public awareness regarding oral healthcare services.

The findings of this study confirm that Dental Health Service Quality has the strongest influence on Business Performance, indicating that healthcare service excellence remains the most critical strategic resource in dental clinic management. This finding is consistent with the study conducted by (Mirandani and Setijanto 2022), which revealed that dental care service quality contributes significantly to comprehensive clinical dental risk management and patient-centered healthcare outcomes. Similarly, (Crisan et al. 2021) emphasized that quality management initiatives in dental clinics are essential for improving service effectiveness, operational quality, patient satisfaction, and organizational sustainability. These similarities may occur because healthcare organizations fundamentally rely on patient trust, treatment reliability, operational professionalism, and positive healthcare experiences to maintain competitiveness and long-term sustainability. In healthcare services, patients tend to evaluate clinics based on responsiveness, communication quality, empathy, service effectiveness, and operational efficiency, making healthcare service quality a dominant determinant of organizational success.

In addition, the findings of this study also support broader healthcare management literature emphasizing the importance of organizational capability and healthcare performance (Fahlevi,

Aljuaid, and Saniuk 2022). Found that organizational capability and managerial effectiveness significantly influence hospital performance in Indonesia. Their findings indicate that healthcare organizational performance is strongly associated with strategic managerial capability and operational excellence. Similar findings in this study suggest that healthcare organizations capable of maintaining high-quality healthcare services are more likely to improve business performance and organizational competitiveness.

This study also reveals that Innovative Entrepreneurship Orientation significantly affects Business Performance, highlighting that innovation capability and entrepreneurial behavior are increasingly important strategic factors in modern healthcare organizations. This finding supports the study conducted by (Khan et al. 2022) which demonstrated that service innovation orientation and open innovation significantly improve innovation performance in private hospitals in India. The findings indicate that healthcare organizations capable of adopting innovation-oriented strategies and adapting to technological developments are more likely to achieve superior organizational performance (Agarwal et al., 2022). Similar results may occur because healthcare organizations today operate within highly dynamic environments characterized by rapid technological changes, increasing patient expectations, and intense market competition. Consequently, clinics that continuously innovate and strategically adapt are more capable of maintaining organizational sustainability and competitive advantage.

Furthermore, this study is also consistent with (Borodako et al. 2022), who emphasized that market orientation and technological orientation significantly contribute to organizational competitiveness and performance improvement in service industries. Their findings suggest that organizations capable of integrating technological adaptation and strategic innovation tend to achieve stronger organizational outcomes. Likewise, Amézquita, Puig, and Royo-Vela (2022) found that market orientation and strategic organizational capability positively influence healthcare industry performance. These findings reinforce the argument that innovation capability, market responsiveness, and organizational adaptability are increasingly important strategic resources within modern healthcare organizations.

Despite these similarities, this study also presents several important differences compared to previous research. Earlier studies generally focused on hospitals, healthcare innovation systems, patient satisfaction, or organizational effectiveness in broader healthcare institutions. In contrast, this study specifically examines dental clinics and directly measures Business Performance through indicators such as patient growth and clinic reputation. This approach broadens the understanding of healthcare management research by positioning healthcare service quality and innovative entrepreneurship orientation as direct strategic capabilities influencing organizational business outcomes in dental healthcare organizations. Furthermore, unlike many previous studies that emphasized mediating variables such as patient loyalty, organizational commitment, or innovation performance, this study directly analyzes the simultaneous contribution of DHSQ and IEO toward Business Performance without involving mediating constructs within the structural model. Another significant novelty of this study is the identification of service innovation and technology adaptation as dominant indicators of Innovative Entrepreneurship Orientation in dental clinics. This finding suggests that innovation in healthcare organizations is increasingly associated with digital transformation, service modernization, and adaptive healthcare management practices. Previous studies in healthcare management primarily focused on general entrepreneurial orientation dimensions such as proactiveness and risk-taking behavior. However, this study demonstrates that technology adaptation and service innovation are becoming more critical strategic capabilities in contemporary dental healthcare organizations. This finding contributes to the growing literature regarding digital transformation, innovation capability, and strategic adaptability in healthcare management.

From a theoretical perspective, this study strengthens the Resource-Based View (RBV) theory proposed by Barney (1991), which argues that organizational resources and capabilities are fundamental sources of sustainable competitive advantage. The findings confirm that healthcare service quality and innovative entrepreneurship orientation function as valuable strategic resources that are difficult to imitate and capable of improving organizational performance. This study therefore contributes to the expansion of RBV application within healthcare service organizations, particularly dental clinics, which have received relatively limited attention in previous strategic management and healthcare management studies.

From a practical perspective, this study provides important implications for dental clinic managers and healthcare practitioners. First, dental clinics should prioritize continuous improvement of healthcare service quality by enhancing facilities, strengthening operational efficiency, improving staff competence, and ensuring patient-centered healthcare delivery. Second, clinic managers should develop innovation-oriented organizational cultures by encouraging service innovation, utilizing digital healthcare technologies, and implementing adaptive business strategies responsive to changing healthcare market trends. Third, integrating healthcare service excellence with innovation capability should become a core strategic approach for strengthening clinic competitiveness and achieving sustainable business growth in increasingly competitive healthcare environments. Academically, this study contributes to the literature on healthcare management, entrepreneurship orientation, and strategic organizational capability by providing empirical evidence from the dental healthcare industry in Indonesia. The study also enriches the discussion regarding the integration of healthcare service quality and innovation capability within a single strategic framework. Moreover, the study offers a foundation for future researchers to further examine strategic organizational resources influencing healthcare business performance in different healthcare sectors and geographical contexts.

This study also has several limitations that should be acknowledged. First, the research was limited to dental clinics operating in the Greater Malang area, which may restrict the generalizability of the findings to other healthcare sectors or regions. Second, the study used a relatively small sample size consisting of 55 respondents, although this remains acceptable for PLS-SEM analysis. Third, the research employed a cross-sectional design, meaning that organizational dynamics and long-term strategic changes could not be fully observed over time. In addition, the study focused only on direct relationships among variables without examining possible mediating or moderating variables that may influence business performance.

Therefore, future studies are recommended to expand the research scope by involving larger sample sizes, broader geographical coverage, and different healthcare service sectors such as hospitals, specialist clinics, or public healthcare institutions. Future researchers may also investigate additional variables such as digital transformation capability, organizational culture, patient loyalty, service innovation capability, or competitive strategy as mediating or moderating variables. Longitudinal studies are also recommended to observe how healthcare service quality and innovative entrepreneurship orientation influence business performance over time within rapidly evolving healthcare environments.

CONCLUSION

The results of this study indicate that dental health service quality has a significant effect on business performance. These findings highlight that service quality, encompassing the dimensions of structure, process, and service outcomes, serves as a fundamental foundation for enhancing operational effectiveness, patient satisfaction, and the overall business success of dental clinics. In addition, innovative entrepreneurship orientation was also found to have a significant effect on business performance. An organization's ability to innovate, act proactively, and take strategic risks can enhance competitiveness and support sustainable business growth. Overall, this study demonstrates that integrating high-quality dental healthcare services with an innovative entrepreneurial orientation constitutes a key strategy for improving the competitiveness and sustainability of dental clinic businesses in the context of increasingly dynamic healthcare industry competition. This study provides a theoretical contribution to the development of the Resource-Based View (RBV) perspective, which emphasizes that service quality and innovative entrepreneurship orientation are strategic organizational resources that can enhance business performance. The findings reinforce previous literature indicating that service capabilities and innovation are key factors in creating competitive advantage in the healthcare sector. Moreover, this study expands the scope of dental healthcare management research by positioning dental health service quality and innovative entrepreneurship orientation as direct determinants of dental clinic business performance. From a practical perspective, the findings offer several recommendations for dental clinic managers. First, clinics should enhance service quality by strengthening facilities, improving the competence of healthcare personnel, and increasing the efficiency of service processes to create optimal patient experiences. Second, clinic managers should develop an innovative entrepreneurial orientation by introducing new services, implementing relevant technologies, and adopting adaptive business strategies in response to

changing market demands. Third, the integration of service quality and organizational innovation should be employed as a core strategy to improve the competitiveness and sustainability of dental clinic businesses in an increasingly competitive healthcare industry.

Based on the findings of this study, several recommendations can be proposed for dental clinic managers to improve organizational performance and maintain business sustainability. First, dental clinics should continuously enhance service quality by strengthening clinic facilities, improving the competence of healthcare personnel, and optimizing service processes in order to create a more satisfactory patient experience. High-quality healthcare services are essential in building patient trust, increasing satisfaction, and encouraging patient loyalty. Second, dental clinic managers are encouraged to develop an innovative entrepreneurial orientation by introducing new services, adopting relevant technologies, and implementing adaptive business strategies that are responsive to changing market demands and healthcare trends. Innovation plays a crucial role in increasing organizational competitiveness and enabling clinics to adapt effectively within a dynamic healthcare environment. Furthermore, the integration of service quality and organizational innovation should be positioned as a strategic approach to strengthening the competitiveness and long-term sustainability of dental clinic businesses. Through the combination of excellent healthcare services and innovative managerial practices, dental clinics are expected to achieve sustainable growth and maintain their relevance in the increasingly competitive healthcare sector.

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