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THE INFLUENCE OF TELEMEDICINE READINESS ON MEDICAL SERVICE QUALITY AND JOB SATISFACTION: A CROSS-SECTIONAL STUDY IN HOSPITALS IN JABODETABEK, INDONESIA

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Abstract
This study aims to analyze the effect of *Telemedicine Readiness* on *Perceived Usefulness*, *Medical Service Quality*, and *Job Satisfaction*, as well as to identify priority factors based on *Partial Least Squares-Structural Equation Modeling* (PLS-SEM) analysis. The research method used a quantitative approach with a *cross-sectional* survey design. The sample was determined using *purposive sampling* with 220 respondents who were health workers working in various health facilities. The data were analyzed using SmartPLS 4 software to test validity, reliability, inter-variable relationships, and mediation. IPMA analysis was conducted to identify priority improvements in indicators that had a significant impact on *job satisfaction*. The results showed that *Telemedicine Readiness* had a significant effect on *Perceived Usefulness* and *Medical Service Quality*, and indirectly increased *Job Satisfaction* through the mediation *of Perceived Usefulness*. IPMA analysis revealed that *Societal Readiness* and *Learning Readiness* were the most influential factors on *Job Satisfaction*, while *Core Readiness*, *Structural Readiness*, and *Technological Readiness* had a lower influence. The *Perceived Usefulness* and *Medical Service Quality* indicators are of high importance but their performance can still be improved, making them a priority for development.
Keywords: *Telemedicine Readiness*, *Perceived Usefulness*, *Medical service quality*, *Job satisfaction*, *Importance–Performance Map*

INTRODUCTION

The rapid advancement of digital technology in healthcare services has accelerated the transformation of medical services towards a *telemedicine* system that bridges the limitations of distance, time, and human resources. *Telemedicine* refers to the provision of healthcare services through information and communication technology, which enables consultation, diagnosis, and follow-up without the need for physical interaction between healthcare providers and patients. In Indonesia, particularly in the Greater Jakarta area, the adoption *of telemedicine* has grown significantly after the COVID-19 pandemic due to increased demand for efficiency, safety, and accessibility in medical services (El-Mazahy, Mekky, & Elshaer, 2023).

Despite its potential benefits, the implementation of *telemedicine* in hospitals in developing countries is still inconsistent and often faces substantial obstacles related to readiness, training, and infrastructure (Khoja *et al*., 2007). *Telemedicine Readiness* encompasses various dimensions such as *Technology Readiness*, *structural readiness*, staff *engagement*, and community support for the integration of digital health services (Kgasi & Kalema, 2014). Without adequate readiness, healthcare institutions may find it difficult to integrate *telemedicine* effectively, resulting in poor service quality, reduced user acceptance, and low satisfaction among medical personnel (Ibrahim *et al*., 2025).

Previous studies emphasize that readiness is not a single construct, but rather a multidimensional concept that includes *Core readiness*, *Engagement readiness*, *Structural readiness*, *Technology Readiness*, *Learning readiness*, and *Societal readiness* (Khoja *et al*., 2007). *Core readiness* reflects dissatisfaction with current clinical practices and awareness of the need for change. *Engagement readiness* measures staff willingness to adopt and participate in *Telemedicine* training. *Structural readiness* focuses on organizational systems and leadership support, while *Technology Readiness* relates to the availability and affordability of the necessary ICT infrastructure. *Learning readiness* highlights training opportunities and resource capacity, while *Societal readiness* involves the alignment of *Telemedicine* with cultural, social, and ethical factors (Wubante, Nigatu, & Jemere, 2022). Collectively, these factors determine whether hospitals can effectively provide *Telemedicine* services that improve patient outcomes and staff satisfaction.In line with the Technology Acceptance Model (TAM), *Perceived Usefulness* has been identified as an important mediating variable that shapes the relationship between readiness and actual use of *Telemedicine*. According to Davis (1989), *Perceived Usefulness* indicates the extent to which individuals believe that the use of certain technologies will improve their work performance. In the context *of Telemedicine*, when healthcare workers perceive *Telemedicine* as beneficial for clinical efficiency and patient safety, they are more likely to use and support it (Kissi *et al*., 2020). Thus, understanding the role of *Perceived Usefulness* can clarify how readiness impacts service quality improvement and *job satisfaction*. *Telemedicine Readiness* has also been linked to the quality of healthcare services, which includes clinical reliability, responsiveness, and patient-centeredness. Studies such as Bashir and Bastola (2018) and Alraimi and Shelke (2024) show that when *Telemedicine* systems are well prepared and supported, healthcare providers can deliver more accurate, timely, and efficient care. Additionally, *telemedicine* contributes to improving communication between healthcare professionals and patients, thereby increasing trust, safety, and satisfaction with medical services.From an organizational perspective, *job satisfaction* among healthcare professionals is another important outcome related to *telemedicine readiness*. El-Mazahy *et al*. (2023) found that doctors and nurses in Egypt experienced higher *job satisfaction* when *telemedicine* devices were well integrated into their daily routines, supported by adequate infrastructure and training. Similarly, Huynh *et al*. (2024) emphasized that *job satisfaction* does not only depend on workload or compensation, but also on working conditions, autonomy, and access to effective technology tools that simplify tasks and improve patient outcomes. Conversely, a lack of readiness, such as inadequate equipment or limited institutional support, can increase workload and stress, thereby reducing professional satisfaction (Hasebrook *et al*., 2023).

In Indonesia, the rapid digitization of healthcare systems provides an important context for studying these dynamics. Although large hospitals in Greater Jakarta are increasingly investing in *telemedicine* infrastructure, disparities in readiness, *perceived usefulness*, and staff satisfaction still exist across institutions. Examining the interaction between *telemedicine readiness*, *perceived usefulness*, service quality, and *job satisfaction* can provide empirical evidence to support sustainable digital transformation in healthcare provision in this region.

Several studies in Africa and Asia have underscored the importance of assessing readiness prior to large-scale implementation *of telemedicine*. For example, Mensah *et al*. (2023) found that readiness among healthcare professionals in Ghana significantly influenced their intention to use and maintain *telemedicine* systems. Similarly, Ibrahim *et al*. (2025) showed that hospitals with higher levels of *engagement* and *technology readiness* reported better service quality and stronger acceptance of *telemedicine*. However, few empirical studies have examined this relationship in the context of Indonesian healthcare, where institutional diversity and digital disparities remain critical challenges.

Given this gap, this study aims to analyze the effect of *Telemedicine Readiness* on *Medical service quality* and *Job satisfaction* of healthcare workers in hospitals in Greater Jakarta, Indonesia. Furthermore, this study explores the mediating role of *Perceived Usefulness* in the relationship between *Telemedicine Readiness* and service quality.

This study aims to answer the following research questions:

1. Does the level of *Telemedicine Readiness* affect *Perceived Usefulness?*
2. Does the level of *Telemedicine Readiness* affect *Medical service quality?*
3. Does *Perceived Usefulness* Influence *Medical Service Quality?*
4. Does *Medical Service Quality* affect *Job Satisfaction?*

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5. Does *Telemedicine Readiness* have a positive effect on *job satisfaction?*
6. Does *perceived usefulness* mediate the relationship between *telemedicine readiness* and *medical service quality?*
7. Does *Medical Service Quality* mediate the relationship between *Perceived Usefulness* and *Job Satisfaction?*
8. Do *perceived usefulness* and *medical service quality* mediate the relationship between *telemedicine readiness* and *job satisfaction?*

By adopting a quantitative *cross-sectional* data analysis approach using the *Partially-Least Square-Structural Equation Modeling (PLS-SEM)* method, this study seeks to provide evidence-based insights for healthcare administrators and policymakers to improve the implementation *of telemedicine* and professional satisfaction in the digital age.

LITERATURE REVIEW

Telemedicine Readiness

Telemedicine Readiness refers to the extent to which institutions and healthcare professionals are ready to adopt and implement *Telemedicine* services. This reflects not only the availability of technological infrastructure, but also institutional capacity, culture, and human resources to integrate digital health services into clinical practice (Khoja *et al*., 2007). According to Khoja *et al*. (2007) and Ibrahim *et al*. (2025), *Telemedicine Readiness* consists of six *Core* dimensions: *Core readiness*, *Engagement readiness*, *Structural readiness*, *Technology Readiness*, *Learning readiness*, and *Societal readiness*.

Core readiness describes an awareness of the need for change and dissatisfaction with existing healthcare practices, such as inefficient documentation and limited patient privacy (Ibrahim *et al*., 2025).

1. *Core readiness* refers to a person's basic readiness in the fundamental aspects needed to learn, work, or carry out activities effectively.
2. *Engagement readiness* assesses the willingness of healthcare workers to participate in *telemedicine* programs and their openness to new digital devices.
3. *Structural readiness* focuses on the organizational structure, leadership support, and workflow systems needed for digital health integration (Adem *et al*., 2023).
4. *Technology Readiness* refers to the availability, affordability, and accessibility of the necessary hardware, software, and network systems (Kgasi & Kalema, 2014).
5. *Learning readiness* encompasses the existence of training programs, educational resources, and staff capacity to learn and adapt to *Telemedicine* Technology (Khoja *et al*., 2007).
6. Finally, *Societal readiness* emphasizes the cultural, ethical, and social acceptance *of Telemedicine* in the broader community context (Wubante *et al*., 2022).

Studies in developing countries highlight that low levels of readiness, particularly in terms of technology and training, often hinder the sustainability of *telemedicine* programs (Mensah *et al*., 2023). Conversely, high readiness enables smoother implementation, leading to improved communication, workflow efficiency, and patient satisfaction (Ibrahim *et al*., 2025).

Perceived Usefulness

Perceived usefulness is defined as "the extent to which an individual believes that the use of a particular system will improve their job performance" (Davis, 1989). In the context *of telemedicine*, *perceived usefulness* reflects how healthcare professionals view *telemedicine* as a tool that improves clinical efficiency, decision-making, and patient outcomes (Kissi *et al*., 2020).

The Technology Acceptance Model (TAM) states that *perceived usefulness* greatly influences users' attitudes and behavioral intentions toward technology use. When healthcare workers believe that *telemedicine* is effective and saves time, they are more likely to adopt it. Kissi *et al*. (2020) found that doctors' satisfaction with *telemedicine* services was significantly predicted by *perceived usefulness*, which was mediated by ease of use and institutional support. Similarly, Hasebrook *et al*. (2023) reported that digital adoption in rural emergency services is closely related to staff perceptions of usefulness, communication efficiency, and reduced work stress. *Perceived usefulness* thus functions as a psychological bridge connecting institutional readiness with actual service outcomes, mediating the impact of technological and organizational preparedness on perceived service quality.

Medical service quality

Medical service quality refers to the extent to which healthcare services meet patient expectations and professional standards, which include clinical performance and patient experience (Cronin & Taylor, 1992). In the context *of telemedicine*, service quality integrates elements of reliability, responsiveness, safety, and communication between patients and service providers (Bashir & Bastola, 2018; Alraimi & Shelke, 2024).

Bashir and Bastola (2018) found that nurses' perceptions of telehealth quality are highly dependent on the functionality and ease of use of digital platforms. Similarly, Alraimi and Shelke (2024) validated the *SERVPERF* model as an effective instrument for assessing healthcare quality, emphasizing dimensions such as accuracy, empathy, and responsiveness in a digital context.

Research in various countries shows that increased readiness, particularly *Technology Readiness* and *Engagement*, contributes to better service delivery and patient satisfaction (Ibrahim *et al*., 2025; Mensah *et al*., 2023). This demonstrates how readiness factors translate into tangible improvements in clinical quality and workflow efficiency through the *Telemedicine* platform.

Job satisfaction

Job satisfaction is a multidimensional construct that reflects the level of satisfaction and *job satisfaction* of employees (Weiss *et al*., 1967). In healthcare services, *job satisfaction* is influenced by workload, autonomy, professional recognition, and work environment (Huynh *et al*., 2024).

Telemedicine introduces a new dimension to this concept, as digital transition can increase or decrease satisfaction, depending on the quality of its implementation. El-Mazahy *et al*. (2023) found that *Telemedicine Readiness* during the COVID-19 pandemic in Egypt significantly increased physician satisfaction through better workflow management and institutional support. Conversely, inadequate readiness, such as poor infrastructure or lack of training, often leads to frustration and increased workload (Hasebrook *et al*., 2023).

Huynh *et al*. (2024) further validate that satisfaction in healthcare institutions depends not only on financial compensation but also on working conditions and perceived support from the organization. In the context *of telemedicine*, these elements interact with *Technology Readiness* and *Perceived Usefulness* to shape overall satisfaction and retention among healthcare professionals.

Hypothesis Development

Telemedicine Readiness and *Perceived Usefulness*

When hospitals are technologically and *structurally* ready, healthcare staff consider *telemedicine* to be more useful and easier to use (Wubante *et al*., 2022; Kissi *et al*., 2020).

H1: The level *of telemedicine readiness* has a positive effect on *perceived usefulness*.

Telemedicine Readiness and *Medical Service Quality*

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Healthcare institutions with higher readiness, especially in terms of technology and *engagement*, tend to provide higher quality medical services due to smoother communication, accurate documentation, and better coordination (Khoja *et al*., 2007; Ibrahim *et al*., 2025).
H2: The level *of telemedicine readiness* has a positive effect on *medical service quality*.

Dimension-Specific Effects of Readiness

Each dimension of readiness contributes uniquely to the quality of health services:

1. H2a: *Core readiness* has a positive effect on *medical service quality*.
2. H2b: *Engagement readiness* has a positive effect on *medical service quality*.
3. H2c: *Structural readiness* has a positive effect on *medical service quality*.
4. H2d: *Technology readiness* has a positive effect on *medical service quality*.
5. H2e: *Learning readiness* has a positive effect on *medical service quality*.
6. H2f: *Societal readiness* has a positive effect on *medical service quality*.

Perceived usefulness* and *medical service quality

Perceived usefulness increases the likelihood of effective use of *telemedicine*, leading to better patient management and service quality (Davis, 1989; Kissi *et al*., 2020).
H3: *Perceived usefulness* has a positive effect on *medical service quality*.
Medical service quality and *job satisfaction.*

Good medical service quality not only affects patients but also has a positive impact on the job satisfaction of healthcare workers. Hospitals that are able to provide high-quality services tend to increase the motivation and job satisfaction of medical staff because they feel that their work is valuable and has a significant impact (El-Mazahy et al., 2023; Alraimi & Shelke, 2024; Huynh et al., 2024).
H4: *Medical service quality* has a positive effect on *job satisfaction.*
Telemedicine Readiness and *Job Satisfaction*

Telemedicine readiness, including technological readiness, human resources, and infrastructure, has been shown to increase job satisfaction among healthcare workers. Health workers who work in facilities with high telemedicine readiness find it easier and more efficient to carry out their duties, thereby increasing job satisfaction (Ibrahim et al., 2025; Wubante et al., 2022; Mensah et al., 2023).
H5: Telemedicine Readiness has a positive effect on *Job Satisfaction.*

Mediation Role of *Perceived Usefulness*

As proposed in TAM, *perceived usefulness* mediates the relationship between readiness and actual performance outcomes. Hospitals with higher readiness foster stronger beliefs in the benefits *of telemedicine*, which indirectly improves service quality (Hasebrook *et al*., 2023).
H6: *Perceived usefulness* mediates the relationship between *Telemedicine Readiness* and *Medical service quality*.

The role of *medical service quality* in the relationship between perceived usefulness and *job satisfaction*

Medical service quality acts as a mediator in the relationship between perceived usefulness of telemedicine and job satisfaction. High perceived usefulness encourages improvements in medical service quality, which in turn increases the job satisfaction of medical staff (El-Mazahy et al., 2023; Kissi et al., 2020).
H7: *Medical service quality* mediates the relationship between *perceived usefulness* and *job satisfaction.*

The mediating role of perceived usefulness and *medical service quality* in the relationship between telemedicine readiness and *job satisfaction*

In sequence, perceived usefulness and medical service quality mediate the effect of telemedicine readiness on job satisfaction. This means that telemedicine readiness increases perceived usefulness, which then improves medical service quality, thereby indirectly having a positive impact on the job satisfaction of healthcare workers (Davis, 1989; Adem et al., 2023; Hasebrook et al., 2023).
H8: *Perceived usefulness* and *medical service quality* mediate the relationship between *telemedicine readiness* and *job satisfaction*.

Conceptual Framework

The conceptual framework of this study (Figure 1) illustrates the hypothesized relationships between key variables. *Telemedicine Readiness* (independent variable) affects *Medical Service Quality* (dependent variable) both directly and indirectly through *Perceived Usefulness* (mediating variable). Furthermore, *Telemedicine Readiness* is measured through six dimensions: *Core*, *Engagement*, *Structural*, Technology, *Learning*, and *Societal readiness*.

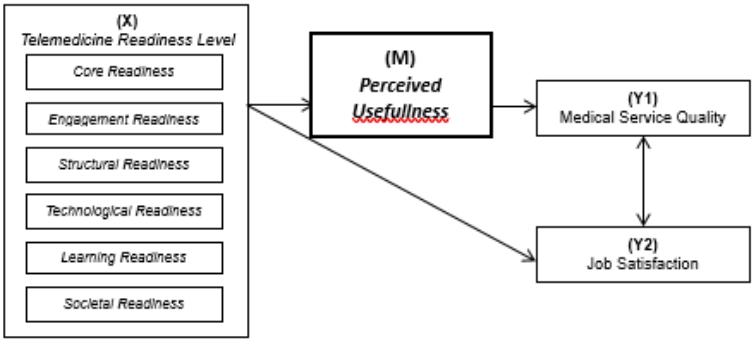

Figure 1. Conceptual Framework

This framework integrates the multidimensional readiness model (Khoja et al., 2007; Ibrahim et al., 2025) with the Technology Acceptance Model (Davis, 1989), which highlights the mediating role of *Perceived Usefulness* in explaining how institutional readiness improves service quality and professional satisfaction in the context *of telemedicine*.

RESEARCH METHOD

Research Design

This study uses a quantitative approach with a *cross-sectional* design that aims to analyze the effect of *Telemedicine Readiness* on *Medical Service Quality* and *Job Satisfaction* with *Perceived Usefulness* as a mediating variable. The *cross-sectional* approach was chosen because data collection was conducted during a specific period, namely October to November 2025, allowing researchers to assess the causal relationships between variables simultaneously (Hair et al., 2021).

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The online survey method was chosen to reach a wide range of participants in the Greater Jakarta area, mainly because most medical personnel have access to digital platforms and experience in using *telemedicine*. The use of this quantitative method allows for the analysis of relationships between latent variables through *Partial Least Squares Structural Equation Modeling* (PLS-SEM), which is considered appropriate for predictive and exploratory models with complex variables (Hair et al., 2021).

Research Location and Time

The study was conducted in the Greater Jakarta area (Jakarta, Bogor, Depok, Tangerang, Bekasi), Indonesia, which is the region with the highest penetration rate of *telemedicine* use in Indonesia. This region has a variety of public and private hospitals with diverse digital infrastructure, making it relevant for assessing the readiness and impact of *telemedicine* implementation. The study is scheduled to be conducted from October to November 2025.

Research Population and Sample

The population in this study is medical personnel in government and private hospitals in the Greater Jakarta area who have experience in using *telemedicine*. The sampling technique used is *purposive sampling*, with the following inclusion criteria:

1. Active medical personnel (doctors, nurses, or paramedics).
2. Have at least six months of experience using *telemedicine* in their practice.
3. Willing to voluntarily complete a questionnaire.

The sample size is set at 220 respondents. The sample size was determined based on the *PLS-SEM* guidelines, which recommend a minimum of ten times the number of arrows pointing to the most complex construct in the model (Hair et al., 2021). Considering that this research model has five main constructs and one mediating variable, a sample size of 220 respondents is considered adequate to meet the expected reliability and validity levels of the model.

Type and Source of Data

The data used in this study is primary data obtained directly from respondents through the distribution of online questionnaires using Google Forms. Secondary data is used as supporting data, in the form of previous research results, scientific journals, and academic reports related to the topics *of Telemedicine Readiness*, *service quality*, and *job satisfaction*.

Data Collection Techniques

The main instrument of this study was a structured questionnaire developed based on an adaptation of a previously validated instrument. The questionnaire used a 1–5 Likert scale (1 = strongly disagree to 5 = strongly agree) to measure respondents' perceptions of each statement. The questionnaire was distributed online to facilitate distribution and reach various hospitals in Greater Jakarta.

Operational Definitions of Variables

Table 1. Operational Definitions of Variables

Variable	Operational Definition	Instruments and Measurement Scales	References
Core readiness	Organizational awareness of the need for change and dissatisfaction with current work practices, such as inefficient documentation and patient data privacy issues.	Adaptation of the questionnaire from Ibrahim et al. (2025), Likert scale 1–5	Kiberu et al. (2019); Ibrahim et al. (2025)
Engagement readiness	Level of *engagement* and staff acceptance of *telemedicine* implementation, as well as willingness to participate in training.	Adapted from Ibrahim et al. (2025), Likert scale 1–5	Ibrahim et al. (2025)
Structural readiness	*Structural readiness* encompassing technical infrastructure and staff competencies.	Adapted from Ibrahim et al. (2025), Likert scale 1–5	Adem et al. (2023); Ibrahim et al. (2025)
Technological readiness	Availability and affordability of information technology, hardware, and software for the implementation of *telemedicine*.	Adapted from Khoja et al. (2007), Likert scale 1–5	Khoja et al. (2007)
Learning readiness	Institutional readiness to provide training and capacity building for medical personnel in the use of *telemedicine*.	Adapted from Khoja et al. (2007), Likert scale 1–5	Khoja et al. (2007)
Societal readiness	*Societal readiness* and culture that influence the acceptance *of telemedicine*, including equal access and social context.	Adapted from Khoja et al. (2007), Likert scale 1–5	Khoja et al. (2007)
Perceived Usefulness	Healthcare professionals' perceptions of the extent to which *telemedicine* is useful in improving work effectiveness and clinical outcomes.	Adapted from TAM (Davis, 1989), Likert scale 1–5	Davis (1989)
Medical service quality	Healthcare professionals' perceptions of clinical service quality and patient experience (reliability, safety, clinical accuracy, and patient satisfaction).	Adapted from SERVPERF, Likert scale 1–5	Cronin & Taylor (1992); Alraimi & Shelke (2024)
Job satisfaction	*Job satisfaction* of medical personnel with working conditions in general, especially in the context of *telemedicine* implementation.	Adaptation of MSQ, 1–5 Likert scale	Weiss et al. (1967); El-Mazahy et al. (2023)

Data Analysis Techniques

Data analysis was performed using the *Partial Least Squares Structural Equation Modeling* (PLS-SEM) approach with SmartPLS 4 software. This method was chosen because it has the ability to analyze models with many latent constructs and indicators, and is suitable for exploratory research with a medium sample size (Hair et al., 2021).

The analysis process was carried out in two main stages:

1. **Measurement Model (*Outer Model*)**

This stage aims to evaluate the validity and reliability of the constructs. The tests include:

a. *Convergent validity* with a *loading factor* value ≥ 0.70 and *Average Variance Extracted (AVE)* ≥ 0.50.
b. *Discriminant validity* using *the Fornell-Larcker criterion* and *cross-loading*.
c. Construct reliability using *Composite Reliability (CR)* ≥ 0.70 and *Cronbach's Alpha* ≥ 0.70 (Hair et al., 2021).

2. ***Structural* Model (*Inner Model*)**

The *structural* model was evaluated to assess the relationship between latent variables through *path coefficient* testing and R^2 values. The significance of the influence was tested with *bootstrapping* using 5000 resampling, with a *p-value* criterion of < 0.05. In addition, the following tests were conducted:

a. *Predictive relevance (Q^2)* using the *blindfolding* procedure to ensure the predictive ability of the model.
b. *Effect size (f^2)* to assess the relative contribution of each construct.
c. *PLS-Predict* to test predictive validity for dependent variables.

Research Ethics

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This study upholds the principles of research ethics by maintaining the confidentiality of participants' identities and ensuring that participation is voluntary. Before completing the questionnaire, each respondent will be given an *informed consent* form. The data collected will only be used for academic purposes without revealing the identities of individuals or institutions.

RESULTS AND DISCUSSION

Outer Model

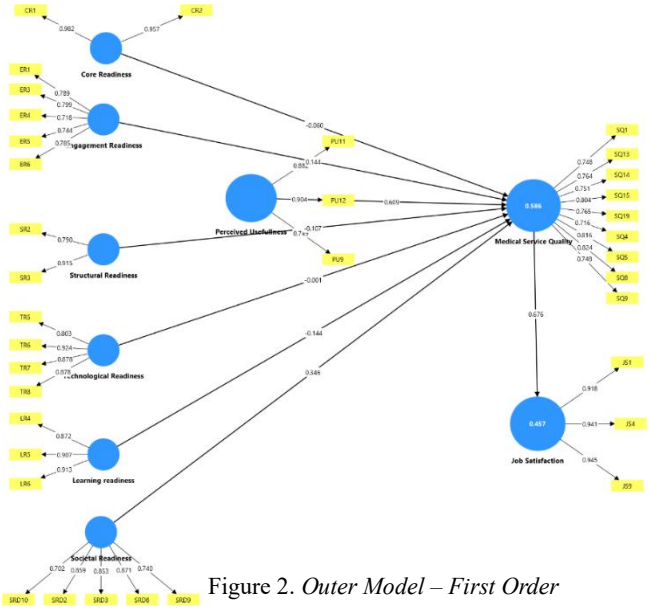

Figure 2. *Outer Model – First Order*

This study uses *first* and *second order*. The first test conducted is a validity and reliability test through an outer model test, namely convergent validity, discriminant validity, and reliability.

Table 2. *Convergent* validity-Outer *loadings*

Items	*Outer loadings*
CR1 <- *Core readiness*	0.982
CR2 <- *Core readiness*	0.957
ER1 <- *Engagement readiness*	0.789
ER3 <- *Engagement readiness*	0.799
ER4 <- *Engagement readiness*	0.718
ER5 <- *Engagement readiness*	0.744
ER6 <- *Engagement readiness*	0.785
JS1 <- *Job satisfaction*	0.918
JS4 <- *Job satisfaction*	0.941
JS9 <- *Job satisfaction*	0.945
LR4 <- *Learning readiness*	0.872
LR5 <- *Learning readiness*	0.907
LR6 <- *Learning readiness*	0.913
PU11 <- *Perceived usefulness*	0.882
PU12 <- *Perceived usefulness*	0.904
PU9 <- *Perceived usefulness*	0.749
SQ1 <- *Medical service quality*	0.748
SQ13 <- *Medical service quality*	0.764
SQ14 <- *Medical service quality*	0.751
SQ15 <- *Medical service quality*	0.804
SQ19 <- *Medical service quality*	0.765
SQ4 <- *Medical service quality*	0.716
SQ5 <- *Medical service quality*	0.816
SQ8 <- *Medical service quality*	0.824
SQ9 <- *Medical service quality*	0.748
SR2 <- *Structural readiness*	0.790
SR3 <- *Structural readiness*	0.915
SRD10 <- *Societal readiness*	0.702
SRD2 <- *Societal readiness*	0.859
SRD3 <- *Societal readiness*	0.853
SRD8 <- *Societal readiness*	0.871
SRD9 <- *Societal readiness*	0.740
TR5 <- *Technological readiness*	0.803
TR6 <- *Technological readiness*	0.924
TR7 <- *Technological readiness*	0.878
TR8 <- *Technological readiness*	0.878

Convergent validity was assessed through *outer loadings*, where indicators were considered valid if they had a value ≥ 0.70. Based on Table 2, all indicators in the variables *of Core readiness*, *Engagement readiness*, *Job satisfaction*, *Learning readiness*, *Perceived Usefulness*, *Medical service quality*, *Societal readiness*, *Structural readiness*, and *Technological readiness* showed *outer* loadings above the minimum

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threshold. This indicates that each indicator is able to adequately represent its construct. Some indicators, such as those in *Core readiness* and *Technological readiness*, even have very high values (above 0.90), thus showing a very strong contribution to their constructs.

Table 3. Discriminant Validity – HTMT

	Core readiness	Engagement readiness	Job satisfaction	Learning readiness	Quality of medical services	Perceived usefulness	Societal readiness	Structural readiness	Technological readiness
Core readiness									
Engagement readiness	0.371								
Job satisfaction	0.061	0.103							
Learning readiness	0.044	0.082	0.528						
Medical service quality	0.106	0.103	0.727	0.450					
Perceived usefulness	0.089	0.060	0.608	0.561	0.836				
Societal readiness	0.062	0.113	0.559	0.912	0.610	0.621			
Structural readiness	0.217	0.844	0.024	0.088	0.064	0.107	0.121		
Technological readiness	0.305	0.680	0.181	0.092	0.095	0.074	0.137	0.664	

Discriminant validity testing using *HTMT* values aims to ensure that each construct in the model is truly distinct from one another. In general, HTMT values should be below 0.85 (strict) or below 0.90 (more lenient). Based on Table 3, most of the relationships between variables, such as between *Core readiness*, *Job satisfaction*, *Learning readiness*, *Medical service quality*, and *Perceived Usefulness*, show low HTMT values, thus meeting the criteria for discriminant validity. However, there are some relatively high values, for example between *Structural readiness* and *Engagement readiness* (0.844), and *Societal readiness* and *Learning readiness* (0.912). These values are close to or slightly exceed the threshold, which may indicate conceptual proximity, but are still acceptable in the context of a *second-order* model.

Table 4. Discriminant Validity – Fornell Locker

	Core readiness	Engagement readiness	Job satisfaction	Learning readiness	Medical service quality	Perceived usefulness	Societal readiness	Structural readiness	Technological readiness
Core readiness	0.969								
Engagement readiness	0.310	0.768							
Job satisfaction	-0.020	0.101	0.935						
Learning readiness	0.031	0.013	0.485	0.898					
Medical service quality	-0.100	0.109	0.676	0.417	0.771				
Perceived usefulness	-0.087	0.021	0.523	0.469	0.720	0.848			
Societal readiness	-0.021	0.107	0.513	0.816	0.548	0.514	0.808		
Structural readiness	0.187	0.595	0.013	0.067	0.033	0.070	0.097	0.855	
Technological readiness	0.248	0.629	0.179	0.108	0.104	0.077	0.148	0.497	0.872

The *Fornell-Larcker* method assesses discriminant validity by comparing the AVE root (diagonal value) with the correlation between variables (*non-diagonal* value). Table 4 shows that each variable has a higher diagonal value than its correlation with other variables. For example, the AVE root value for *Job satisfaction* (0.935) is much greater than its correlation with other variables such as *Medical service quality* (0.676) or *Perceived Usefulness* (0.523). This shows that each construct has good discriminant ability and is able to distinguish itself from other constructs, so that discriminant validity is fulfilled through this criterion.

Table 5. Validity and Reliability

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Core readiness	0.939	0.969	0.940
Engagement readiness	0.843	0.877	0.589
Job satisfaction	0.928	0.954	0.874
Learning readiness	0.882	0.926	0.806
Medical service quality	0.915	0.930	0.595
Perceived usefulness	0.802	0.884	0.719
Societal readiness	0.866	0.903	0.653
Structural readiness	0.645	0.844	0.731
Technological readiness	0.904	0.927	0.760

Table 5 presents the results of *reliability* and *convergent validity* evaluations through *Cronbach's Alpha*, *Composite Reliability*, and *Average Variance Extracted (AVE)* values. In general, *Cronbach's Alpha* and *Composite Reliability* values above 0.70 indicate that the construct has good internal reliability. Almost all variables, such as *Core readiness*, *Job satisfaction*, *Learning readiness*, *Medical service quality*, *Perceived Usefulness*, *Societal readiness*, and *Technological readiness* meet this criterion. The AVE values for most constructs are also above 0.50, indicating that more than 50% of the indicator variance is explained by the construct. Thus, both reliability and convergent validity have been fulfilled overall.

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Inner Model

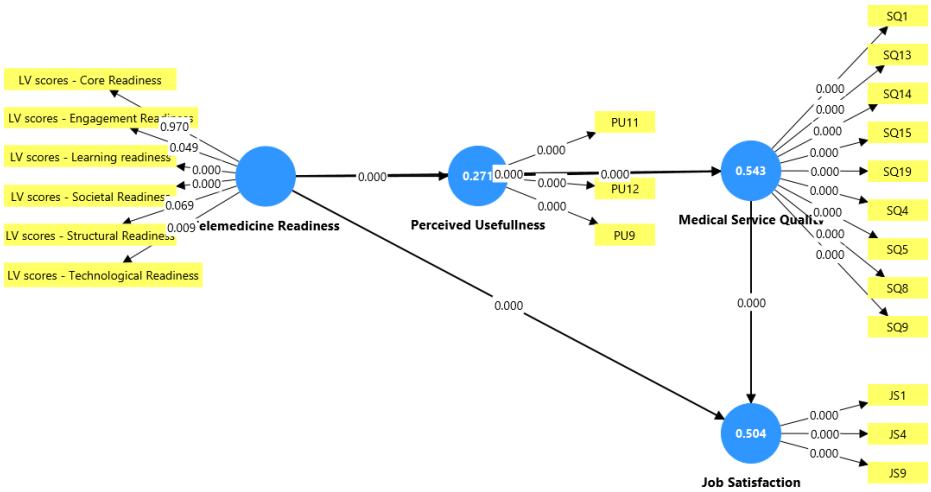

Figure 3. Inner Model – *Second order*

After being declared valid and reliable, the research continued to the inner model stage or the relationship between variables as described above (*second order*).

Table 6. *R-square*

	R-square	Adjusted *R-square*
Job satisfaction	0.504	0.499
Medical service quality	0.543	0.539
Perceived usefulness	0.271	0.267

Table 6 shows the model's ability to explain the variation in endogenous constructs through *R-square* values. The *Job satisfaction* variable has an *R-square* value of 0.504, which means that 50.4% of its variation can be explained by the constructs that influence it, particularly *Medical service quality* and *Telemedicine Readiness*. This value falls into the moderate category. Furthermore, *Medical service quality* has an *R-square* value of 0.543, meaning that 54.3% of its variance can be explained by constructs in the model such as *Core readiness*, *Engagement readiness*, *Learning readiness*, *Societal readiness*, *Structural readiness*, *Technological readiness*, *Perceived Usefulness*, and *Telemedicine Readiness*. This also indicates moderate explanatory power. Meanwhile, *Perceived Usefulness* has an *R-square* value of 0.271, which means that only 27.1% of the variance of this construct is explained by *Telemedicine Readiness* and other variables in the model, placing it in the low category. Overall, the model has varying predictive capabilities, with some strong relationships and others weak.

Table 7. F-square

	f-square
Core readiness -> Medical service quality	0.008
Engagement readiness -> Medical service quality	0.023
Learning readiness -> Medical service quality	0.016
Societal readiness -> Medical service quality	0.086
Structural readiness -> Medical service quality	0.017
Technological readiness -> Medical service quality	0.000
Medical service quality -> Job satisfaction	0.441
Perceived usefulness -> Medical service quality	0.604
Telemedicine Readiness -> *Job satisfaction*	0.093
Telemedicine Readiness -> *Medical service quality*	0.062
Telemedicine Readiness -> *Perceived usefulness*	0.371
Engagement readiness -> Medical service quality	0.023

The *f-square* value is used to see the contribution of each construct to the endogenous construct. Based on Table 7, the contribution of the variables *Core readiness*, *Engagement readiness*, *Learning readiness*, *Structural readiness*, and *Technological readiness* to *Medical service quality* is in the very small category (0.00–0.02), so the effect can be considered weak. *Societal readiness* has a small but more prominent effect (0.086). *Perceived Usefulness* shows a large contribution to *Medical service quality* (0.604), indicating a strong influence. Meanwhile, *Medical service quality* shows a large influence on *Job satisfaction* (0.441), making medical service quality a dominant factor in increasing job satisfaction.In the *second order*, *Telemedicine Readiness* has a moderate effect on *Job satisfaction* (0.093), a small effect on *Medical service quality* (0.062), and a large effect on *Perceived Usefulness* (0.371). This indicates that overall telemedicine readiness (which is influenced by core readiness, engagement, learning, community, structure, and technology) contributes substantially to *perceived usefulness*, but its contribution to service quality and job satisfaction is more limited.

Table 8. Q2

	Q^2predict
Job satisfaction	0.260
Medical service quality	0.243
Perceived usefulness	0.241

The Q^2 *predict* value is used to assess whether the model has good predictive capabilities. A Q^2 value above 0 indicates that the model has *predictive relevance*. Based on the results, *job satisfaction* obtained a Q^2 value of 0.260 and *medical service quality* obtained a value of 0.243. Both of these values are in the moderate category, indicating that the structural model is able to predict both variables with a fairly good level of predictive relevance. Thus, the model not only has an adequate structural relationship, but can also predict actual data behavior moderately.

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Table 8. Hypothesis Testing

	Hypothesis	Original Sample (O)	T-Statistics	P-Values	Description
H1	*Telemedicine Readiness → Perceived Usefulness*	0.520	6.644	0.000	**Accepted**
H2	*Telemedicine Readiness → Medical service quality*	0.197	3.543	0.000	**Accepted**
H2a	*Core readiness → Medical service quality*	-0.060	1.144	0.253	**Rejected**
H2b	*Engagement readiness → Medical service quality*	0.144	1.682	0.093	**Rejected**
H2c	*Structural readiness → Medical service quality*	-0.107	1.548	0.122	**Rejected**
H2d	*Technological readiness → Medical service quality*	-0.001	0.016	0.987	**Rejected**
H2e	*Learning readiness → Medical service quality*	-0.144	1.514	0.130	**Rejected**
H2f	*Societal readiness → Medical service quality*	0.346	3.418	0.001	**Accepted**
H3	*Perceived Usefulness → Medical service quality*	0.615	10.693	0.000	**Accepted**
H4	*Medical service quality → Job satisfaction*	0.547	10.531	0.000	**Accepted**
H5	*Telemedicine Readiness → Job satisfaction*	0.251	4.566	0	**Accepted**
H6	*Telemedicine Readiness → Perceived Usefulness → Medical service quality* (Mediation)	0.320	5.602	0.000	**Accepted**
H7	*Perceived Usefulness → Medical service quality → Job satisfaction* (Mediation)	0.336	7.639	0.000	**Accepted**
H8	*Telemedicine Readiness → Perceived Usefulness → Medical service quality → Job satisfaction* (Mediation)	0.175	4.888	0.000	**Accepted**

Based on the results of the hypothesis test, it was found that:

H1. *Telemedicine Readiness → Perceived Usefulness:* The analysis results show that *Telemedicine Readiness* has a positive and significant effect on *Perceived Usefulness* with a p-value of 0.000. This confirms that when an organization has good telemedicine readiness, both medical personnel and patients will increasingly feel the benefits and usefulness of telemedicine technology. A high level of readiness makes the system easier to use, more stable, and more tailored to needs, thereby enhancing the perception that telemedicine is indeed beneficial.

H2. *Telemedicine Readiness → Medical service quality:* The test results show that *Telemedicine Readiness* has a significant effect on *Medical service quality* with a p-value of 0.000. This finding indicates that the higher the level of telemedicine readiness in an organization, which includes core, structural, community, technological, learning, and engagement readiness, the better the quality of medical services produced. In other words, comprehensive readiness in the implementation of telemedicine can drive improvements in service quality, both in terms of efficiency, convenience, and speed of health services provided.

H2a. *Core readiness → Medical service quality:* The analysis results show that *Core readiness* does not have a significant effect on *Medical service quality* with a p-value of 0.253. This means that basic readiness factors such as the organization's needs, motivation, and desire to use telemedicine are not yet strong enough to improve the quality of medical services. This indicates that core readiness factors alone are not sufficient to drive changes in service quality without the support of other more technical and structural readiness components.

H2b. *Engagement readiness → Medical service quality:* This hypothesis was not proven significant because it had a p-value of 0.093. This means that *engagement readiness*, which is related to user involvement and support for telemedicine, does not have a significant direct impact on *medical service quality*. Although there is a positive correlation, the level of involvement is not strong enough to directly improve service quality without adequate technological readiness, systems, or organizational context.

H2c. *Structural readiness → Medical service quality:* The test results show that *structural readiness* has no significant effect with a p-value of 0.122. This finding indicates that the existence of policies, organizational structures, and administrative support alone is not sufficient to improve the quality of medical services. Structural readiness may be important, but its effects are not immediately apparent in service quality without the support of other more operational factors such as technology and perceived usefulness.

H2d. *Technological readiness → Medical service quality:* This hypothesis is not supported because the p-value is very high, namely 0.987. Thus, *technological readiness* does not have a significant effect on *medical service quality*. This shows that the availability of technology alone does not automatically improve the quality of medical services if it is not used optimally, or if users do not have a high perception of the usefulness of the technology.

H2e. *Learning readiness → Medical service quality:* The test results show that *learning readiness* does not have a significant effect on *medical service quality* with a p-value of 0.130. This means that readiness to learn telemedicine, including the ability and willingness of users to adapt, has not been able to directly improve service quality. This may be because new learning factors have an impact when the service is already in intensive use, rather than at the initial readiness stage.

H2f. *Societal readiness → Medical service quality:* The analysis results show that *societal readiness* has a significant effect on *medical service quality* with a p-value of 0.001. This finding indicates that community support, social norms, and environmental acceptance of telemedicine can encourage improvements in medical service quality. When the community supports and accepts the use of telemedicine, services become more effective, are well received, and are able to reach more users, thereby improving overall service quality.

H3. *Perceived Usefulness → Medical service quality:* Hypothesis testing shows that *Perceived Usefulness* has a significant and strong effect on *Medical service quality* with a p-value of 0.000. This finding indicates that the higher the users' perception of the usefulness of telemedicine, the better the quality of medical services produced. This perception of usefulness has an impact on ease of use, efficiency of service processes, and improved effectiveness of medical communication, which is directly reflected in service quality.

H4. *Medical service quality* has a positive effect on *job satisfaction.*

The results of the analysis show that *medical service quality* has a positive and significant effect on *job satisfaction*, with a coefficient value of 0.547, a t-value of 10.531, and a p-value of 0.000. This indicates that the higher the quality of medical services provided, the higher the level of employee job satisfaction. This finding supports the hypothesis , that good service not only has an impact on patients but also has positive implications for the job satisfaction of healthcare workers.

H5. Telemedicine Readiness* has a positive effect on *Job satisfaction

The analysis also shows that telemedicine readiness has a positive and significant effect on job satisfaction with a coefficient value of 0.251, t-value of 4.566, and p-value of 0.000. This means that adequate telemedicine facilities and systems can increase employee job satisfaction. This readiness encompasses technological aspects, human resources, and operational procedures that support telemedicine services.

***H6. Telemedicine Readiness → Perceived Usefulness → Medical service quality* (Mediation)**

The mediation test results show that *Perceived Usefulness* significantly mediates the effect of *Telemedicine Readiness* on *Medical service quality*, with a p-value of 0.000. This means that telemedicine readiness not only improves service quality directly, but also increases perceived usefulness, which in turn drives service quality improvement. Thus, the benefits of telemedicine are perceived as an important bridge that strengthens the relationship between readiness levels and medical service quality.

H7. *Perceived usefulness* mediates the relationship between *Telemedicine Readiness* and *Medical service quality*.

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The results of the analysis show that telemedicine readiness has a positive and significant effect on *medical service quality* through perceived usefulness as a mediating variable, with a coefficient value of 0.320, t-value of 5.602, and p-value of 0.000. This indicates that a high level of telemedicine readiness increases employees' perceptions of the usefulness of telemedicine systems or services, which in turn leads to an improvement in medical service quality. In other words, perceived usefulness acts as an important mechanism that bridges the relationship between telemedicine readiness and medical service quality, thereby maximizing the positive impact of technology on service performance.

H8. *Perceived usefulness* and *medical service quality* mediate the relationship between *telemedicine readiness* and *job satisfaction*.

Multiple mediation analysis shows that the effect of telemedicine readiness on job satisfaction is mediated sequentially through perceived usefulness and medical service quality with a coefficient of 0.175, t-value of 4.888, and p-value of 0.000. This means that telemedicine readiness increases the perceived usefulness of the system, which then improves medical service quality, and ultimately has a positive impact on job satisfaction. These findings emphasize the importance of technological readiness and perceived usefulness as factors that play a role in improving the job satisfaction of healthcare workers.

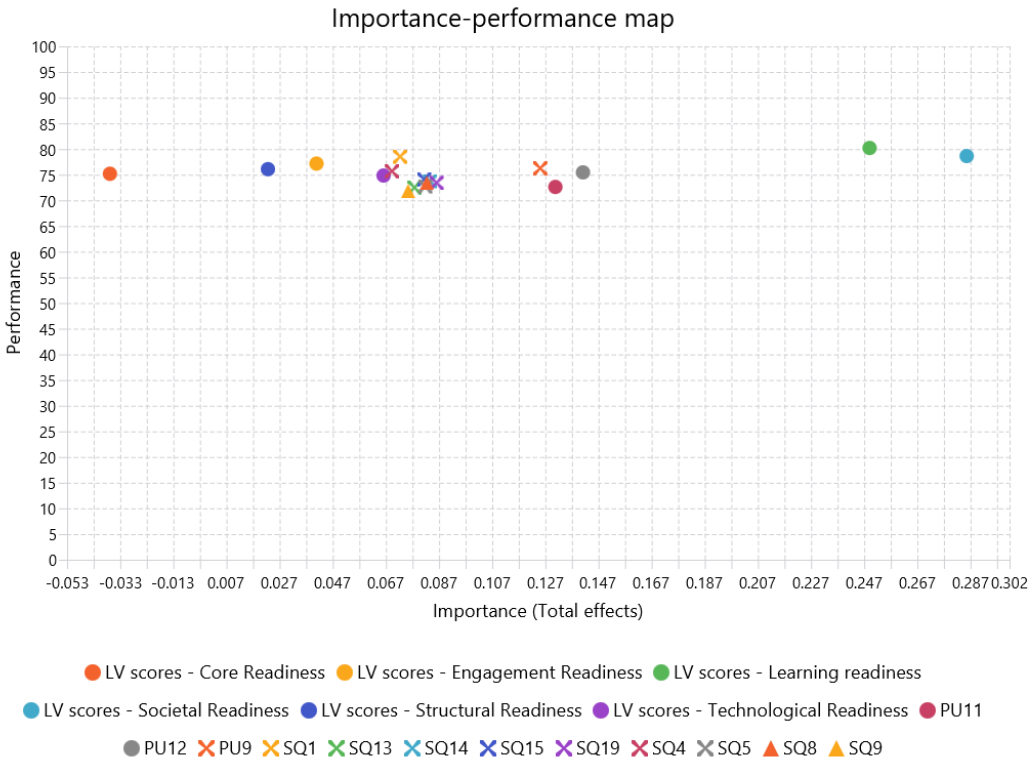

Figure 4. IPMA Map

The results of the IPMA analysis show that several constructs and indicators have different levels of *importance* (total effects) and *performance* on *job satisfaction*. Among the latent variables, *Societal readiness* has the highest influence on *Job satisfaction* (0.285) with a performance of 78.634. This shows that public acceptance and support for telemedicine are very important factors in increasing job satisfaction, and its relatively high performance indicates that this aspect is working relatively well. Furthermore, *Learning readiness* also shows a significant influence (0.249) with a performance of 80.207, indicating that users' readiness to learn and adopt the telemedicine system is a highly influential area and has excellent performance. Meanwhile, *Technological readiness* and *Engagement readiness* have a lower influence (0.066 and 0.041), although their performance is quite good, so neither is a top priority for improvement.

At the indicator level, several indicators of the *Perceived Usefulness* variable, such as *PU12*, *PU11*, and *PU9,* have a fairly high influence on *job satisfaction* (0.141, 0.131, and 0.125), even though their performance is in the middle range (72–76). This indicates that increasing the perceived usefulness of telemedicine can have a positive impact on job satisfaction and still has room for improvement. Furthermore, indicators of *Medical Service Quality* such as *SQ19*, *SQ14*, *SQ15*, and *SQ5* show moderate importance values (0.081–0.086) but relatively low performance (72–75), making the area of medical service quality an important focus for improvement in order to increase job satisfaction. Conversely, *Core readiness* has a very low influence (-0.037) and is therefore not a priority for improvement in the context of increasing *job satisfaction*. Overall, the IPMA results show that the main priority for improvement lies in increasing *Perceived Usefulness* and several *Medical service quality* indicators, while *Learning readiness* and *Societal readiness* remain highly influential factors with already good performance.The results of this study indicate that *Telemedicine Readiness* has a significant effect on *Perceived Usefulness* and *Medical Service Quality*, and indirectly affects *Job Satisfaction* through the mediation *of Perceived Usefulness*. These findings are in line with Davis' (1989) *Technology Acceptance Model* (TAM) theory, which emphasizes that *perceived* usefulness is a major factor in technology acceptance. In the context of telemedicine, the higher the readiness of organizations and health workers to use technology, the higher the perceived benefits, thereby positively impacting the quality of medical services and the job satisfaction of health workers. Research by El-Mazahy et al. (2023) also confirms that telemedicine readiness contributes to increased job satisfaction among medical personnel during the COVID-19 pandemic, particularly through experiences of use that facilitate their work. This is reinforced by a study by Kissi et al. (2020), which found that the perceived usefulness of telemedicine directly influences doctors' satisfaction with and acceptance of digital services.

In addition, *first-order* factors such as *Societal readiness* and *Learning readiness* show a significant influence on *Job satisfaction* in the IPMA analysis. These results indicate that community support and the ability of health workers to learn and adopt telemedicine are key priorities in improving job satisfaction. These findings are in line with the studies by Ibrahim et al. (2025) and Mensah et al. (2023), which show that societal readiness and the skills of healthcare professionals play an important role in the successful implementation of telemedicine. On the other hand, factors such as *Core readiness*, *Structural readiness*, and *Technological readiness* have a lower influence, although their performance is quite good, indicating that these aspects are already adequate but are not a top priority for further improvement, as also found by Kgasi & Kalema (2014) and Khoja et al. (2007) in the context of e-health readiness in developing countries.

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The indicators of *Perceived Usefulness* and *Medical Service Quality* have moderate to high importance in IPMA, but their performance can still be improved, making this area a target for improvement to increase *job satisfaction*. This is consistent with the findings of Hasebrook et al. (2023), who stated that the perceived usefulness of technology and the quality of digital services affect job satisfaction and technology acceptance in medical environments. Furthermore, research by Huynh et al. (2024) emphasizes the importance of healthcare worker job satisfaction as a key indicator of healthcare service effectiveness, which is influenced by service quality and the ease of use of digital systems.

Overall, the findings of this study confirm that to improve *job satisfaction* in the context of telemedicine, the main priorities are to strengthen *societal readiness* and *learning readiness*, while also improving *perceived usefulness* and *medical service quality*. These results are in line with the study by Wubante et al. (2022), which shows that the readiness of health workers and the perception of the benefits of technology are key to the successful implementation of telemedicine in private hospitals in Ethiopia. Thus, health organizations must focus on strategies to improve the skills of medical personnel, socialize the use of technology, and improve service quality so that telemedicine can be optimally accepted and increase the job satisfaction of health professionals.

CONCLUSION

Based on the results of the study, *Telemedicine Readiness*, which consists of *Core readiness*, *Engagement readiness*, *Learning readiness*, *Societal readiness*, *Structural readiness*, and *Technological readiness*, has been proven to have a significant effect on *Perceived Usefulness* and *Medical service quality*, as well as indirectly increasing *Job satisfaction* through the mediation of *Perceived Usefulness*. These findings confirm that the readiness of organizations and health workers to adopt telemedicine is an important factor in improving service quality and job satisfaction. The IPMA analysis shows that *Societal readiness* and *Learning readiness* are the most influential factors on *Job satisfaction*, so community support and the learning ability of healthcare workers are the top priorities that need to be strengthened in the implementation of telemedicine. Meanwhile, *Core readiness*, *Structural readiness*, and *Technological readiness* have a lower influence, indicating that these aspects are already functioning quite well and are not the top priorities for improvement. Additionally, the indicators of *Perceived Usefulness* and *Medical service quality* in the " " have a high level of importance, but their performance can still be improved, requiring special attention to strengthen the perception of telemedicine's usefulness and the quality of medical services. Overall, this study confirms that the success of telemedicine depends not only on the availability of technology, but also on organizational readiness, community support, the learning ability of health workers, and positive perceptions of usefulness, all of which together can improve the quality of medical services and the job satisfaction of health professionals.

Although this study provides a comprehensive understanding of the influence of *Telemedicine Readiness* on *Perceived Usefulness*, *Medical service quality*, and *Job satisfaction*, there are several limitations that need to be considered. First, this study uses a cross-sectional design, so it cannot explain the causal relationship in depth between the variables studied. Second, the data was collected from a number of specific health facilities, so the results may not fully represent the conditions of health workers in other regions or in countries with different health systems. In addition, although *Telemedicine Readiness* was measured as a *second-order* construct covering several dimensions, other contextual aspects such as government policy support, internet infrastructure, or organizational cultural factors were not explicitly taken into account in the model.Given these limitations, future research should use longitudinal or experimental designs to test the causal effect of *Telemedicine Readiness* on *Perceived Usefulness*, *Medical Service Quality*, and *Job Satisfaction*. Future studies could also expand the sample to include various types of healthcare facilities, including private hospitals and remote areas, to make the results more generalizable. In addition, researchers can include additional relevant variables, such as management support, regulatory readiness, or organizational cultural factors, to gain a deeper understanding of the factors that influence the successful implementation of telemedicine. Qualitative or mixed-method approaches can also be used to explore the experiences and perceptions of health workers regarding telemedicine, thereby providing more holistic and practical insights for the development of digital health care systems.

REFERENCES

Adem, J. B., Zeleke, T., Walle, A. D., Atinafu, W. T., Tilahun, K. N., Melaku, M. S., & Kebede, S. D. (2023). Awareness and readiness of mental healthcare providers to implement telemental health services and associated factors at public referral hospitals in Addis Ababa City, Ethiopia. *BMJ open*, *13*(7), e069671.

Alraimi, A. A., & Shelke, A. (2024). Strengthening Health Systems in Conflict: Evidence-Based Policies for Quality Care in Yemen. *Journal of Cardiovascular and Cardiology*, *2*(1), 1-4.

Davis, F. D. (1989). *Perceived Usefulness*, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.

El-Mazahy, H., Mekky, J., & Elshaer, N. (2023). Medical professionals' *Job satisfaction* and *Telemedicine Readiness* during the COVID-19 pandemic: solutions to improve medical practice in Egypt. *Journal of the Egyptian Public Health Association*, *98*(1), 5.

El-Mazahy, H., Mekky, J., & Elshaer, N. (2023). Medical professionals' *job satisfaction* and telemedicine readiness during the COVID-19 pandemic: solutions to improve medical practice in Egypt. *Journal of the Egyptian Public Health Association*, *98*(1), 5.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage Publications.

Hasebrook, J. P., Michalak, L., Kohnen, D., Metelmann, B., Metelmann, C., Brinkrolf, P., ... & Hahnenkamp, K. (2023). Digital transition in rural emergency medicine: Impact of *job- -satisfaction*, and workload on communication and technology acceptance. *Plos one*, *18*(1), e0280956.

Huynh, C. M., Nguyen, C. H., Le, K. N. D., Tran, P. T. N., & Nguyen, P. M. (2024, February). *Job satisfaction* within the grassroots healthcare system in Vietnam's key industrial region—Binh Duong Province: validating the Vietnamese version of the Minnesota satisfaction questionnaire scale. In *Healthcare* (Vol. 12, No. 4, p. 432). MDPI.

Ibrahim, Y., Sako, S., Ayele, A., & Glagn, M. (2025). Readiness of Health Professionals for *Telemedicine* Implementation: Multi-centered Cross-Sectional Study In Public Hospitals, South Ethiopia. *Frontiers in Digital Health*, *7*, 1554199.

Kgasi, M., & Kalema, B. (2014). Assessment E-health readiness for rural South African areas. *J. Ind. Intell. Inf*, *2*(2).

Khoja, S., Scott, R. E., Casebeer, A. L., Mohsin, M., Ishaq, A. F. M., & Gilani, S. (2007). e-Health readiness assessment tools for healthcare institutions in developing countries. *Telemedicine and e-Health*, *13*(4), 425-432.

Kiberu, V. M., Scott, R. E., & Mars, M. (2019). Assessing core, e-learning, clinical and technology readiness to integrate telemedicine at public health facilities in Uganda: a health facility–based survey. *BMC health services research*, *19*(1), 266.

Kissi, J., Dai, B., Dogbe, C. S., Banahene, J., & Ernest, O. (2020). Predictive factors of physicians' satisfaction with *telemedicine* services acceptance. *Health informatics journal*, *26*(3), 1866-1880.

Mensah, N. K., Adzakpah, G., Kissi, J., Boadu, R. O., Lasim, O. U., Oyenike, M. K., ... & Sukums, F. (2023). Health professional's readiness and factors associated with *telemedicine* implementation and use in selected health facilities in Ghana. *Heliyon*, *9*(3).

Wubante, S. M., Nigatu, A. M., & Jemere, A. T. (2022). Health professionals' readiness and its associated factors to implement *Telemedicine* system at private hospitals in Amhara region, Ethiopia 2021. *PloS one*, *17*(9), e0275133.