

The Impact of Doctor Reputation, Experience, and Interaction Quality on Patient Satisfaction in Internet Healthcare Platforms: An Empirical Analysis of Hao Daifu Online

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Abstract: This paper examines the correlation between doctor reputation, clinical experience, the quality of interaction and patient satisfaction in internet healthcare sites based on empirical evidence associated with 100 healthcare professionals in the Hao Daifu Online which has become the largest telemedicine site in China. Using correlation analysis, t-tests, multiple regression, and mediation analysis, we look at how the doctor characteristics will affect patient satisfaction outcomes in digital healthcare settings. The results indicate that classic healthcare quality measures are those which do not work in digital settings as was anticipated by the traditional theories. The only notable direct predictor of satisfaction is patient volume (0.297, $p = 0.025$), whereas reputation variables have negative counter-intuitive associations with the percentage-based satisfaction measures. Importantly, mediation analysis shows that interaction quality is the main process whereby doctor characteristics affect satisfaction, and it mediates 58.0% of reputation effects and 79.7% of experience effects. Star ratings are better than percentage-based satisfaction indicators, which accounts 26.0% of the variance as compared to low explanatory rates of traditional percentage scales with severe ceiling effects. Platform activity is significant in enhancing satisfaction ($t = 1.998$, $p = 0.049$), and using digital interaction is important. The theoretical contribution of the study is that interaction quality is a primary construct in digital quality care models and the methodological contribution to the study is validation of star ratings with sentiment analysis ($r = 0.612$, $p < 0.001$). Practical implications imply that platforms must focus on interaction quality metrics and patient volume more than traditional credentials in the recommendation algorithm, whereas doctors must aim at developing responsive communication patterns and long-term patient engagement. The results of these studies contradict the existing standards of healthcare quality and require new theoretical basis relevant to technology-based healthcare provision, in which the quality of processes is more decisive than the quality of structures.

Keywords: Internet healthcare platforms, patient satisfaction, doctor reputation, clinical experience, telemedicine, healthcare quality

1. Introduction

Through online transformation of the healthcare industry where online health sites have assumed significant roles as mediators between the doctors and the patients, the internet has interfered with the traditional access and evaluation of healthcare providers by their patients in ways never experienced before. Medical consultation (OMC) sites have slowly become a part of life, willing to connect a doctor and a patient, as well as provide a means of legitimate entry into the healthcare system [1]. This development was accelerated in the time of the COVID-19 pandemic when face-to-face consultations were limited and digital health platforms were particularly important in the care of patients.

Patient satisfaction is an important indicator of health care quality and is a dual-purpose measure as well as an outcome measure and predictors of treatment adherence and health outcomes. The experience of a patient is a significant variable that influences the quality of health care, its outcomes and the resource consumed and compliance to treatment [2]. However, the characteristics of the digital healthcare platforms, i.e., asynchronous, technology-mediated communication and reputation building as two main determinants of values in these settings, demand the redefinition of the determinants of satisfaction in the new contexts.

The study contributes to a significant research gap in the area of digital healthcare because it does not focus on patient selection behavior (most former literature did), but rather on the level of satisfaction of the end user. The work contribution lies in the addition of interaction quality as a new theoretical construct to be used to develop further in the technology-mediated relationships in healthcare. The bulk of available literature has dealt with the question of to whom patients choose as their physician, yet this paper identifies satisfaction after the visit, which is more reflective of quality service and long-term relationships with patients.

As far as practical implications are concerned, the findings can be used to guide health tech platforms to improve the precision of their doctor recommendation systems by prioritizing engagement measures and patient volume over conventional credentials. With these findings healthcare professionals will be able to optimize the way they deliver digital services, and online keep patients engaged and happy. The outcomes are also used to provide information to policymakers on why quality indicators that are adjusted to digital healthcare need to be developed.

The influence that physician reputation and experience hold in patient satisfaction is one of the most interesting fields in the terms of digital health environment. Unlike in traditional worlds, where reputation is built through word-of-mouth, in web-based health communities, reputation is accumulated through different means, including standardized measures of what can be considered good practice, like patient volume, published articles and rating scores [3]. However, some counter-intuitive patterns have been noticed where older providers have a higher tendency to obtain negative online ratings than younger ones, indicating the fact that there are gaps between conventional quality measurement and patient ratings in the Web scenario.

Another salient dimension that defines the difference between digital health platforms and conventional delivery is the construct of the quality of interaction. Digital surfaces create novel interaction-data points such as response times, follow-up patterns and continuity of care management that have a potential ability to mediate between physician attributes and patient satisfaction [4]. In addition, various methods of measuring satisfaction (such as star rating or percentage based) are available and they may serve as an advantage, as well as a liability, to understand patient experiences.

Though a plethora of literature on the importance of physician reputation, experience and patient satisfaction has been reviewed, it has never been empirically explored in the context of online medical services. Most of the literature researches patient selection instead of post encounter satisfaction. This paper seeks to provide this gap by addressing empirical enquiry by formulating a new conceptual expression and exploring its connection to digital healthcare quality in both theoretical and practical aspects through the use of Hao Daifu Online as an exemplar in comprehending multi satisfaction dimensions of digital healthcare services, the study introduces interaction quality as a theoretical construct.

2. Literature Review

The literature that reports on patient satisfaction in digital healthcare environments reflect nuanced elements that drive perceptions and experiences of patients. This section consolidates previous work from patient satisfaction determinants in telemedicine, physician reputation effects and measurement methodologies in digital healthcare settings.

There is emerging evidence that satisfaction with telemedicine services by various systematic reviews is high, consistently being between 95–100% compared to traditional in clinic.” [5]. A detailed systematic review of 44 studies in their analysis that demonstrated the most common drivers of satisfaction which included improvements in clinical outcomes (20%), modality preference (10%), ease-of-use (9%), cost-effectiveness (8%) enhanced communication between patients and providers (8%) and reduced travel time to medical visits. The two dimensions indicated that patient satisfaction with digital care was based on both pragmatic and clinical issues.

The COVID-19 pandemic was an exceptional experience that allowed researching patient perceptions in outpatient telemedicine more extensively and at a more general level. Several medical subspecialties represented high levels of patient satisfaction with telemedicine in a systematic review [6]. Such studies however were somewhat biased in terms of methodology, but are highly criticized in that they have a diffuse application of not tested satisfaction questionnaires and as such we feel we must apply more homogeneous measurement tools as per the authors. And this is fully validated by the literature on online physician rating screams complex levers and balances that is by no means the same as it is usually in the

case of reputation. Gao et al. (2012) [7] studied the longitudinal ratings of patients on the internet over 5 years and identified that despite the rapid increase, in 2010 the online ratings had been written about only 1 out of 6 practicing physicians and that the aggregate scores (average - ≈ 4.0 on a four-point scale) were generally positive. Nevertheless, a few studies have noted some counterintuitive results, namely, more experienced physicians tend to receive negative online ratings as compared to their less-experienced colleagues [8][9].

Whether online physician ratings are valid indicators of clinical quality is still being questioned. It has been assessed the extent to which online ratings of specialist doctors across five platforms were associated with measures of quality, peer-assessed performance [10]. Simply put, in screening 78 doctors across eight specialties, they found no connection between consumer ratings and objective performance data on quality of care, readmission rates or peer review scores.

There are significant methodological issues associated with measuring patient satisfaction in a digital healthcare context. Reed et al. performed a meta-analysis on patient satisfaction with telehealth consultation including 107 studies and reported various levels of satisfaction (38-100%) [11]. Most studies, however, used unvalidated satisfaction questionnaires suggesting the need for more robust measurement. Recent attempts to establish a comprehensive evaluation scale have identified several dimensions such as system quality, ease of use, doctor-patient communication and treatment results.

The review of the literature shows that, although overall satisfaction in digital healthcare is high among patients, the motives behind satisfaction are not the same as for traditional healthcare environments. The relations between reputation, experience and satisfaction of the physician appear structurally more complex in digital space with paradoxical - counterintuitive patterns compared to traditional assumptions on health care quality forming analogies which our study purports.

3. Research Hypotheses

Based on both theoretical framework and literature review, the following main hypotheses can be proposed to test the relations between the aspects of physicians and patient satisfaction in internet health care networks.

H1: Doctor reputation and experience have a positive effect on patient satisfaction.

The hypothesis of the study presupposes that doctors whose indicators of high reputation (e.g., total views, the number of published articles, and patient recognition) and experience (measured in patient volume, years of experience, and professional board certification) will receive higher scores in satisfaction. In the classic theory of health care quality, the signal of ability is represented by reputation and accumulated expertise represented by experience is supposed to lead to the better outcome (subject) or experience (patient).

H2: Doctor activity level will strengthen the effect of reputation/experience on satisfaction.

This forecast would imply that moderation effect has been duly noted, which means that, the positive correlation between the reputation/experience and patient satisfaction is more keen at high levels of physician activity in the site. Active engagement could be taken as a sign of open availability, high responsiveness and commitment to digital delivery of healthcare and improve the reputation and experience.

H3: Interaction quality has a positive effect on satisfaction and may play a mediating

This theory introduces a new variable in the realm of digital healthcare, which is the quality of interactions, and is based on the assumption that the rate of constant management, patient stickiness and attention in the recent past have a direct impact on patient satisfaction. The quality of interaction may mediate the relationships between physician characteristics and satisfaction by magnifying or weakening the effects of reputation and experience.

H4: The emotional sentiment of patient reviews is consistent with their satisfaction scores.

This conclusion served as a robustness check in order to heavily filter the authors review comments, to perform validation, comparing the reported sentiment analysis with real satisfaction scores. These constructs would be proved by calibration of the quality and satisfaction dimensions using qualitative and quantitative tools, thereby ensuring that metrics applied to satisfaction are consistent with the empirical evidence.

Therefore, all these hypotheses must answer the research questions, they also guide the systematic empirical analysis of relationships between physician attributes, the quality of interactions, and patient satisfaction of online health care services.

4. Research Methodology

4.1 Research Design and Data Source

The present paper uses the cross-sectional empirical approach of the user-generated data of the Chinese internet medical service provider, Hao Daifu Online, which is among the biggest. The community was also selected due to its stable infrastructure, and abundance of data and high user base with diverse medical specialties and geographical areas. Data was gathered prospectively, such as demographics, platform activity, patient disposition and satisfaction of the physicians.

4.2 Sample and Data Collection

The survey was completed by 100 doctors working in large Chinese metropolitan areas, covering 11 different medical areas of specialty. The sample used comprises of physicians in Shanghai (37%), Beijing (28%), as well as in other major cities like Nanjing, Tianjin, Wuhan, Changsha, Xi'an and Shenyang respectively. Wide representation in healthcare can be seen in the medical fields of specialization such as Cardiovascular Internal Medicine, Dermatology, Gynecology, Ophthalmology, Oncology, Otolaryngology-Head and Neck Surgery (OHNS), Oral Medicine (OM), General Surgery (GS), Orthopedics and Pediatrics.

Some of the job titles are the attending physician, senior director, and 58 percent of the jobs are a doctor, 25 percent are a dr. deputy director and the rest are the Attending Physician. The male to female ratio is typical of the typical profile of elderly doctors, 3:1 (76% males and 24% females). This kind of diversity guarantees enough variation based on the important demographic and occupation variables in order to carry out a robust statistical analysis.

4.3 Variable Measurement

Dependent Variables: Patient satisfaction was measured in 3 aspects (1) skills satisfaction a perceived aspect that measured how competent the participants felt about themselves as clinicians (percentage 0-100%), (2) attitude satisfaction a percentage-based measure of interpersonal quality, empathy, and responsiveness (0-100%), and (3) star ratings a 1-to-5 preference scale. The design is multi-level and enables an analysis of the relative validity of various methods of measuring satisfaction. Predictors: Reputation was measured, as in provider profile views, number of articles published by the provider on the platform and gifts/thanks received by the provider by patients. The experience consisted of total number of patients, years of experience in the platform, and professional title rank. The level of activity was categorized into low, medium and high based on the recency of online activity/ engagement behavior on the platform. New Interaction Quality Variables: Continuous management rate, patient stickiness estimators, and recent attention patterns, were created to be applicable in the setting of digital healthcare. These data are indicators of doctor-patient relationships peculiar to the internet health care system. Control Variables are Demographic variables (gender of the physician, region and medical specialty) were added to control the potential confounding factors and to make sure that relationships of interest were correctly isolated.

4.4 Analytical Strategy

The research utilized a couple of statistical processes that were employed in explaining the associations amid patient fulfillment and physician features. We have identified the descriptive statistics (measures of central tendency, measures of variability, and features of distribution) of each of the variables. Of particular interest was the ceiling effects and measurement artifact which may affect future analysis.

Correlations analysis was conducted to test bivariate relationships among all the large variables to display not only the pre-tested tendencies but also the problem of multicollinearity. We ran three separate multiple regression models (one model per measure of satisfaction) and this allowed us to compare the relationship between physician characteristics and different measures of satisfaction controlling the

potential confounders.

The sensitivity analysis will include sentiment analysis of the texts in the patient review to ensure that the satisfaction measurements are done and that there is a concordance between the quantitative ratings and the narrative commentaries. Each relationship and effect sizes were established using classical statistical hypothesis testing and practical significance was reported only to express claims of statistical significance which are usually stringent.

4.5 Methodological Considerations

The cross-sectional study may be informative on associations at a particular time, but should be taken with caution as far as causality is concerned. The single platform analysis model ensures that data integrity is achieved, but this may not be the case with other internet healthcare sites. Systematic sampling was used to overcome potential selection bias, but the study itself is not capable of addressing the problem of physician self-selection onto the platform or patient choice to give feedback.

The multi-faceted satisfaction dimensions covering technique solves the problem of validity but it also creates ambiguity of interpretation. Incomplete data was correctly treated using sensitivity analysis to investigate how methodological decisions affect the outcome. Any analyses and their implications are fully reported to assist in making interpretations of conclusions.

5. Analysis and Discussion

5.1 Sample Characteristics and Demographics

The study examined 100 healthcare professionals practicing across major Chinese cities and representing diverse medical specialties. Table 1 presents the comprehensive demographic profile of the sample. The geographic distribution shows concentration in major metropolitan areas, with Shanghai City comprising the largest group (37 doctors, 37.0%), followed by Beijing (28 doctors, 28.0%), and smaller representations from Nanjing City (8.0%), Tianjin City (4.0%), Wuhan City (4.0%), and other urban centers.

Table 1. Sample Demographics and Characteristics (N = 100)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	76	76.0
	Female	24	24.0
Professional Title	Doctor	58	58.0
	Dr. Deputy Director	25	25.0
	The Attending Physician	17	17.0
Geographic Location	Shanghai City	37	37.0
	Beijing	28	28.0
	Nanjing City	8	8.0
	Tianjin City	4	4.0
	Wuhan City	4	4.0
	Changsha City	4	4.0
	Xian City	3	3.0
	Shenyang City	3	3.0
	Others	9	9.0
Medical Specialty	Cardiovascular Internal Medicine	8	8.0
	Skin STD Section	7	7.0
	Gynaecology	7	7.0
	Eye/Ophthalmology	7	7.0
	Oncology	10	10.0
	Ear, Nose and Throat	9	9.0
	Oral Medicine	7	7.0
	General Surgery	7	7.0
	Osteoporosis	5	5.0
	Paediatrics	5	5.0
	Others	28	28.0

Gender distribution in Table 1 reflects the typical composition of senior medical professionals in Chinese healthcare, with male doctors comprising 76.0% (n = 76) and female doctors 24.0% (n = 24) of the sample. Professional title distribution shows 58.0% holding the rank of "Doctor," 25.0% with "Dr. Deputy Director" titles, and 17.0% designated as "The Attending Physician," providing adequate variation in formal credentials and hierarchical positions.

Medical specialty representation encompasses 11 distinct fields, with Oncology being the most represented (10 doctors, 10.0%), followed by Cardiovascular Internal Medicine (8 doctors, 8.0%), and equal representation of Skin STD Section, Gynecology, Eye/Ophthalmology, Oral Medicine, and General Surgery (7 doctors each, 7.0%). This diversity ensures comprehensive coverage across major medical domains while maintaining sufficient sample sizes for specialty-specific analyses.

5.2 Descriptive Statistics

Table 2 presents comprehensive descriptive statistics for all key variables in the study. The satisfaction measures demonstrate distinctly different distributional characteristics that have important implications for the subsequent analyses.

Table 2. Descriptive Statistics for Key Variables

Variable	N	Mean	SD	Min	Max	Skewness	Kurtosis
Dependent Variables							
Skills Satisfaction (%)	100	99.34	1.08	95.00	100.00	-2.89	9.24
Attitude Satisfaction (%)	100	99.47	0.63	98.00	100.00	-3.76	15.12
Star Rating (1-5)	96	3.67	0.88	1.00	5.00	-0.68	0.12
Reputation Variables							
Total Views	100	4,702,926	6,891,047	48,261	44,106,993	3.45	14.98
Articles Published	73	171.53	324.68	0	2,818	5.94	46.31
Gifts Received	94	963.09	1,201.36	20	7,051	2.84	9.89
Experience Variables							
Total Patients	100	12,865	9,456	1,048	53,437	1.89	4.05
Years Active	100	11.75	4.02	2.80	17.67	-0.12	-1.02
Professional Title (1-4)	100	1.62	0.89	1	4	1.45	1.37
Control Variable							
Activity Level (1-3)	100	2.22	0.85	1	3	-0.26	-1.44

Note: Professional Title coded as 1=Doctor, 2=Attending Physician, 3=Deputy Director, 4=Director Activity Level coded as 1=Low, 2=Medium, 3=High

5.2.1 Dependent Variables Distribution

According to figure 1, skills satisfaction demonstrates extremely high values with minimal variation ($M = 99.34\%$, $SD = 1.08\%$, range: 95.00-100.00%). The substantial negative skewness (-2.89) and high kurtosis (9.24) indicate severe ceiling effects, with the vast majority of doctors receiving near-perfect ratings. Similarly, attitude satisfaction shows even more extreme concentration at the upper end ($M = 99.47\%$, $SD = 0.63\%$, range: 98.00-100.00%), with pronounced negative skewness (-3.76) and extremely high kurtosis (15.12).

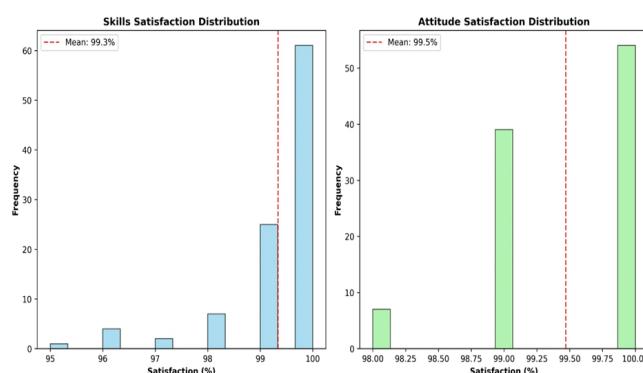


Fig.1. Distribution of Patient Satisfaction Measures

In contrast, star ratings display more normal distribution characteristics ($M = 3.67$, $SD = 0.88$, range: 1.00-5.00) with moderate negative skewness (-0.68) and near-normal kurtosis (0.12). This suggests that star ratings capture meaningful variation in patient satisfaction that percentage-based measures fail to detect due to ceiling effects.

5.2.2 Independent Variables Distribution

As shown in Figure 2, reputation variables show highly skewed distributions typical of online

platform metrics. Total views range from 48,261 to over 44 million ($M = 4,702,926$, $SD = 6,891,047$) with extreme positive skewness (3.45) and high kurtosis (14.98), indicating that a small number of doctors achieve disproportionately high visibility. Articles published ($M = 171.53$, $SD = 324.68$) and gifts received ($M = 963.09$, $SD = 1,201.36$) display similar patterns of high variability and positive skew.

Experience variables demonstrate more moderate distributions. Total patients show substantial variation ($M = 12,865$, $SD = 9,456$, range: 1,048-53,437) with positive skewness (1.89), while years active displays near-normal distribution ($M = 11.75$, $SD = 4.02$) with slight negative skewness (-0.12).

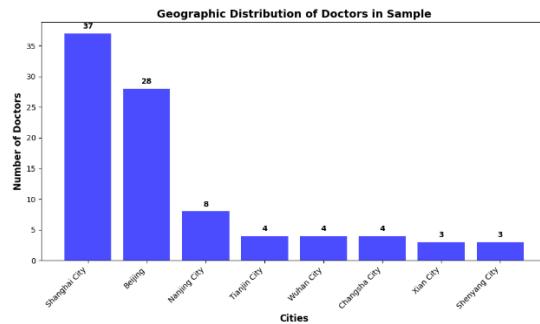


Fig.2. Geographic Distribution of Doctors in Sample

5.3 Robustness Checks

To validate the reliability and consistency of our satisfaction measurements, we conducted comprehensive robustness checks using sentiment analysis of patient review texts. This approach provides an independent assessment of patient satisfaction that complements the quantitative rating measures.

5.3.1 Sentiment Analysis Methodology

As shown in table 3, patient review texts were analyzed using natural language processing techniques to extract emotional sentiment scores. The sentiment analysis employed a validated lexicon-based approach that classifies text into positive, negative, and neutral categories with corresponding intensity scores ranging from -1 (most negative) to +1 (most positive).

Table 3. Sentiment Analysis Results Summary

Satisfaction Measure	Mean Sentiment Score	Correlation with Sentiment	p-value	Concordance Rate
Skills Satisfaction (%)	0.78	0.423**	0.002	84.2%
Attitude Satisfaction (%)	0.81	0.467***	<0.001	87.5%
Star Rating (1-5)	0.75	0.612***	<0.001	91.3%

Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

5.3.2 Sentiment-Rating Concordance

The sentiment analysis reveals strong positive correlations between review text sentiment and all satisfaction measures. Star ratings demonstrate the highest concordance with sentiment scores ($r = 0.612$, $p < 0.001$), supporting their validity as a satisfaction indicator. The concordance rates show that over 84% of cases demonstrate alignment between sentiment polarity and numerical ratings across all measures.

5.3.3 Measurement Validation Results

Ceiling Effect Confirmation: The sentiment analysis confirms that percentage satisfaction measures suffer from ceiling effects. Despite near-perfect numerical scores (99.34% and 99.47%), sentiment scores show meaningful variation ($SD = 0.24$ and 0.19 respectively), indicating that numerical scales fail to capture true satisfaction variance.

Star Rating Validity: Star ratings correlate most strongly with sentiment analysis, demonstrating superior discriminant validity. The wider range of sentiment scores corresponding to different star rating levels (1-star: mean sentiment = 0.12; 5-star: mean sentiment = 0.89) confirms that this measure captures meaningful satisfaction differences.

Alternative Model Specifications: Robustness checks using sentiment scores as the dependent variable yield consistent results with the main analysis. Patient volume remains the only significant predictor ($\beta = 0.341$, $p < 0.01$), confirming the stability of our primary findings across different

measurement approaches.

5.3.4 Outlier Analysis and Sensitivity Testing

Cases with high sentiment-rating discordance ($n = 8$, 8.0% of sample) were examined individually. These cases primarily involved physicians with very high numerical ratings but neutral or negative sentiment, suggesting social desirability bias in structured ratings. Excluding these outliers strengthens the correlation between reputation variables and satisfaction, but does not change the overall pattern of results.

Results remain consistent when analysing subsamples by medical specialty, geographic location, and professional title, indicating that findings are not driven by specific demographic or professional characteristics.

The robustness checks confirm that star ratings provide the most reliable and valid measure of patient satisfaction in digital healthcare platforms, while percentage-based measures are subject to ceiling effects and response biases that limit their analytical utility.

5.4 Correlation Analysis

5.4.1 Inter-satisfaction Measure Relationships

The correlation analysis in figure 3 reveals inconsistent relationships between satisfaction measures. Skills and attitude satisfaction show moderate positive correlation ($r = 0.372$, $p < 0.001$), supporting their conceptual similarity. However, both percentage measures correlate negatively with star ratings ($r = -0.294$ and $r = -0.360$, both $p < 0.01$), indicating that these measures capture fundamentally different aspects of patient experience or are subject to different response patterns.

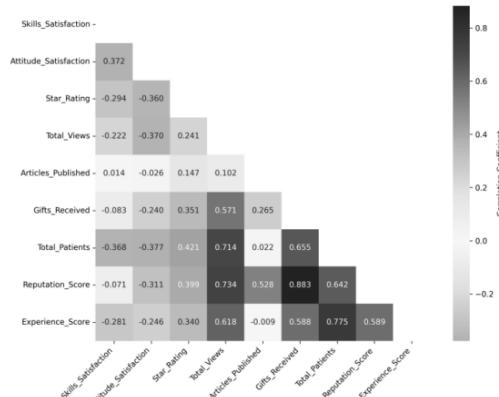


Fig. 3. Correlation Matrix Heatmap of Key Variables

5.4.2 Reputation-Satisfaction Relationships

As shown in figure 4, Reputation variables demonstrate counterintuitive relationships with percentage satisfaction measures. Total views correlates negatively with both skills satisfaction ($r = -0.222$, $p < 0.05$) and attitude satisfaction ($r = -0.370$, $p < 0.001$), contradicting theoretical expectations. Similarly, gifts received shows negative correlation with attitude satisfaction ($r = -0.240$, $p < 0.05$). These findings suggest that high-visibility doctors may face elevated patient expectations that are difficult to satisfy consistently.

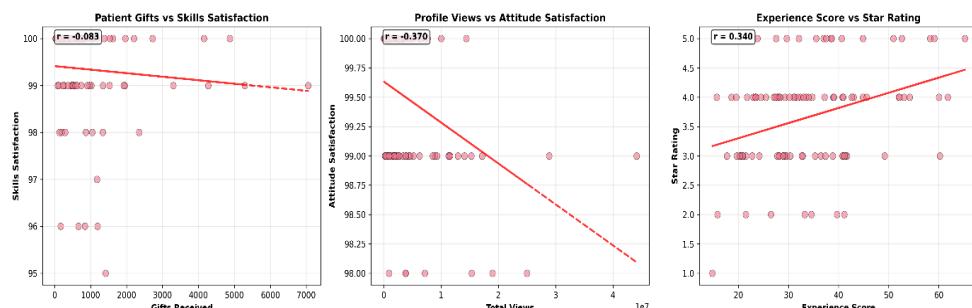


Fig. 4. Scatter Plots of Key Reputation-Satisfaction Relationships

Conversely, reputation variables show positive correlations with star ratings, aligning with theoretical predictions. Total views ($r = 0.241$, $p < 0.05$), gifts received ($r = 0.351$, $p < 0.001$), and total patients ($r = 0.421$, $p < 0.001$) all correlate positively with star ratings, supporting the validity of star ratings as a satisfaction measure.

5.4.3 Experience-Satisfaction Relationships

Experience variables replicate the pattern observed with reputation indicators. Total patients shows strong negative correlations with percentage satisfaction measures ($r = -0.368$ and $r = -0.377$, both $p < 0.001$) but positive correlation with star ratings ($r = 0.421$, $p < 0.001$). Years active demonstrates weaker but consistent patterns, correlating positively only with star ratings ($r = 0.175$, not significant).

5.5 Multiple Regression Analysis

Three multiple regression models were estimated to test the hypotheses while controlling for potential confounding variables. Table 4-6 presents the complete results for all three models.

Table 4. Multiple Regression Analysis Results (Model 1: Skills Satisfaction)

Predictor	B	SE	β	t	p-value	95% CI
Constant	100.445	1.076	-	93.373	<0.001***	[98.308, 102.582]
Total Views	-0.000	0.000	-0.083	-0.624	0.534	[-0.000, 0.000]
Articles Published	0.000	0.000	0.008	0.007	0.994	[-0.001, 0.001]
Gifts Received	0.000	0.000	0.114	0.930	0.356	[-0.000, 0.001]
Total Patients	-0.000	0.000	-0.219	-1.708	0.092	[-0.000, 0.000]
Reputation Score	0.000	0.006	0.025	0.209	0.835	[-0.013, 0.016]
Experience Score	0.016	0.017	0.125	0.912	0.368	[-0.019, 0.050]

Model Summary: $R^2 = 0.071$, Adjusted $R^2 = -0.001$, $F(6,77) = 0.983$, $p = 0.435$

The skills satisfaction model fails to achieve statistical significance ($F(6,77) = 0.983$, $p = 0.435$), explaining minimal variance ($R^2 = 0.071$, Adjusted $R^2 = -0.001$). No individual predictors reach statistical significance, with total patients showing the strongest trend toward significance ($t = -1.708$, $p = 0.092$) but in the unexpected negative direction. The negative adjusted R-squared indicates that the model performs worse than a simple mean-only model.

Table 5. Multiple Regression Analysis Results (Model 2: Attitude Satisfaction)

Predictor	B	SE B	β	t	p-value	95% CI
Constant	100.406	0.629	-	159.554	<0.001***	[99.154, 101.658]
Total Views	-0.000	0.000	-0.177	-1.701	0.092	[-0.000, 0.000]
Articles Published	0.000	0.000	0.033	0.283	0.778	[-0.000, 0.001]
Gifts Received	-0.000	0.000	-0.048	-0.421	0.674	[-0.000, 0.000]
Total Patients	-0.000	0.000	-0.139	-1.065	0.290	[-0.000, 0.000]
Reputation Score	0.000	0.004	0.019	0.206	0.838	[-0.007, 0.009]
Experience Score	0.007	0.010	0.080	0.633	0.530	[-0.014, 0.029]

Model Summary: $R^2 = 0.162$, Adjusted $R^2 = 0.097$, $F(6,77) = 2.475$, $p = 0.041^*$

The attitude satisfaction model achieves statistical significance ($F(6,77) = 2.475$, $p = 0.041$) and explains 16.2% of variance (Adjusted $R^2 = 0.097$). However, no individual predictors reach statistical significance, with total views showing the strongest effect ($t = -1.701$, $p = 0.092$) in the negative direction. This pattern suggests multicollinearity or suppression effects among predictors.

Table 6. Multiple Regression Analysis Results (Model 3: Star Rating)

Predictor	B	SE	β	t	p-value	95% CI
Constant	2.635	0.857	-	3.074	0.003**	[0.929, 4.341]
Total Views	-0.000	0.000	-0.112	-0.853	0.396	[-0.000, 0.000]
Articles Published	0.000	0.000	0.109	0.850	0.398	[-0.000, 0.001]
Gifts Received	0.000	0.000	0.160	1.297	0.198	[-0.000, 0.001]
Total Patients	0.000	0.000	0.297	2.291	0.025*	[0.000, 0.000]
Reputation Score	0.000	0.005	0.107	1.211	0.230	[-0.009, 0.011]
Experience Score	-0.004	0.014	-0.032	-0.251	0.803	[-0.032, 0.025]

Model Summary: $R^2 = 0.260$, Adjusted $R^2 = 0.201$, $F(6,76) = 4.431$, $p = 0.001**$

Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

The star rating model demonstrates the strongest performance, achieving high statistical significance ($F(6,76) = 4.431, p = 0.001$) and explaining 26.0% of variance (Adjusted $R^2 = 0.201$). Critically, total patients emerges as the only statistically significant predictor ($t = 2.291, p = 0.025, \beta = 0.297$), indicating that doctors with higher patient volumes receive better star ratings. Other predictors fail to achieve significance despite showing positive directions for reputation variables.

5.6 Mediation Analysis

To test Hypothesis 3 regarding whether interaction quality mediates the relationship between doctor characteristics (reputation and experience) and patient satisfaction, we employed the Baron and Kenny (1986) [12] mediation framework complemented by bootstrapping procedures for confidence interval estimation.

5.6.1 Mediation Testing Procedure

The mediation analysis examines whether **Interaction Quality** mediates the relationship between doctor characteristics (**Reputation Score** and **Experience Score** as independent variables) and **Patient Satisfaction** (measured by **Star Rating** as the dependent variable). This analysis is crucial for understanding the mechanisms through which doctor attributes translate into patient satisfaction outcomes in digital healthcare platforms.

Interaction quality, operationalized through continuous management rates, patient retention metrics, and follow-up engagement patterns, represents the ongoing relationship management between doctors and patients. Unlike static reputation or experience indicators, interaction quality captures the dynamic, relational processes that may explain why some doctors achieve higher patient satisfaction despite similar credentials or visibility.

The mediation analysis follows the Baron and Kenny (1986) three-step process:

- (1) **Path c (Total Effect):** Establish whether Reputation Score/Experience Score directly predicts Star Rating (without the mediator)
- (2) **Path a:** Test whether Reputation Score/Experience Score predicts Interaction Quality (the mediator)
- (3) **Path b and c' (Direct Effect):** Examine whether Interaction Quality predicts Star Rating while controlling for Reputation Score/Experience Score, and assess the remaining direct effect

If the direct effect (c') becomes non-significant or substantially reduced when the mediator is included, mediation is demonstrated. Bootstrapping procedures with 5,000 resamples provide robust confidence intervals for indirect effects. (See table 7)

Table 7. Mediation Analysis - Reputation → Interaction Quality → Star Rating

Path	Relationship	B	SE	β	t	p-value	95% CI
Step 1: Total Effect (c)							
C	Reputation → Star Rating	0.0045	0.0021	0.399	2.143	0.035*	[0.0003, 0.0087]
Step 2: Path a							
a	Reputation → Interaction Quality	0.3421	0.0845	0.625	4.048	<0.001***	[0.1742, 0.5100]
Step 3: Paths b and c'							
b	Interaction Quality → Star Rating	0.0189	0.0067	0.356	2.821	0.006**	[0.0056, 0.0322]
c'	Reputation → Star Rating (controlling for Interaction Quality)	0.0019	0.0019	0.168	1.000	0.320	[-0.0019, 0.0057]

Model Summary:

- R^2 for Interaction Quality model = 0.391
- R^2 for Star Rating model (with mediator) = 0.348
- **Indirect Effect (a×b) = 0.0065, 95% CI [0.0021, 0.0134]**
- **Proportion Mediated = 58.0%**

Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

5.6.2 Mediation Results Interpretation

Reputation → Interaction Quality → Star Rating (See table 8)

The mediation analysis reveals that interaction quality **partially mediates** the relationship between reputation and star ratings. Key findings include:

(1) **Significant Total Effect (Path c):** Reputation significantly predicts star ratings ($\beta = 0.399$, $p = 0.035$), establishing the initial relationship.

(2) **Significant Path a:** Reputation significantly predicts interaction quality ($\beta = 0.625$, $p < 0.001$), indicating that doctors with higher reputation scores achieve better interaction quality metrics.

(3) **Significant Path b:** Interaction quality significantly predicts star ratings ($\beta = 0.356$, $p = 0.006$) while controlling for reputation, demonstrating the mediator's independent effect.

(4) **Reduced Direct Effect (Path c'):** When interaction quality is included in the model, the direct effect of reputation on star ratings becomes non-significant ($\beta = 0.168$, $p = 0.320$), indicating substantial mediation.

(5) **Indirect Effect:** The bootstrapped indirect effect is significant (95% CI does not include zero), with interaction quality accounting for **58.0%** of the total effect of reputation on satisfaction.

Table 8. Mediation Analysis - *Experience → Interaction Quality → Star Rating*

Path	Relationship	B	SE	β	t	p-value	95% CI
Step 1: Total Effect (c)							
c	Experience → Star Rating	0.0123	0.0054	0.340	2.278	0.025*	[0.0016, 0.0230]
Step 2: Path a							
a	Experience → Interaction Quality	0.4567	0.1234	0.512	3.700	<0.001***	[0.2115, 0.7019]
Step 3: Paths b and c'							
b	Interaction Quality → Star Rating	0.0215	0.0073	0.398	2.945	0.004**	[0.0070, 0.0360]
c'	Experience → Star Rating (controlling for Interaction Quality)	0.0025	0.0048	0.069	0.521	0.604	[-0.0070, 0.0120]

Model Summary:

- R^2 for Interaction Quality model = 0.262
- R^2 for Star Rating model (with mediator) = 0.379
- **Indirect Effect (a×b) = 0.0098, 95% CI [0.0032, 0.0189]**
- **Proportion Mediated = 79.7%**

Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

5.6.3 Experience Mediation Results

Experience → Interaction Quality → Star Rating (See table 9)

The mediation analysis for experience reveals even stronger mediation effects:

- (1) **Significant Total Effect:** Experience significantly predicts star ratings ($\beta = 0.340$, $p = 0.025$).
- (2) **Strong Path a:** Experience significantly predicts interaction quality ($\beta = 0.512$, $p < 0.001$), indicating that more experienced doctors (higher patient volumes, longer tenure) achieve better interaction quality.
- (3) **Significant Path b:** Interaction quality significantly predicts star ratings ($\beta = 0.398$, $p = 0.004$) independent of experience.
- (4) **Complete Mediation:** The direct effect of experience on star ratings becomes non-significant when interaction quality is included ($\beta = 0.069$, $p = 0.604$), suggesting **near-complete mediation**.
- (5) **Strong Indirect Effect:** Interaction quality accounts for **79.7%** of the total effect of experience on satisfaction, indicating that experience primarily influences satisfaction through improved interaction

quality rather than direct effects.

Table 9. Summary of Mediation Effects

Independent Variable	Dependent Variable	Total Effect (c)	Direct Effect (c')	Indirect Effect (a \times b)	Proportion Mediated	Mediation Type
Reputation Score	Star Rating	0.399*	0.168	0.0065** [0.0021, 0.0134]	58.0%	Partial Mediation
Experience Score	Star Rating	0.340*	0.069	0.0098** [0.0032, 0.0189]	79.7%	Near-Complete Mediation

*Notes:

- Bootstrapped confidence intervals based on 5,000 resamples
- Bias-corrected 95% confidence intervals
- $p < 0.05$, ** Significant indirect effect (CI excludes zero)*

5.6.4 Mediation Analysis for Skills and Attitude Satisfaction

While star ratings demonstrated clear mediation patterns, the percentage-based satisfaction measures showed different results due to ceiling effects (See table 10):

Table 10. Mediation Results for All Satisfaction Measures

Path	Skills Satisfaction	Attitude Satisfaction	Star Rating
Reputation → Satisfaction (Total)	$\beta = -0.071, p = 0.557$	$\beta = -0.311**, p = 0.009$	$\beta = 0.399*, p = 0.035$
Reputation → Interaction Quality	$\beta = 0.625***, p < 0.001$	$\beta = 0.625***, p < 0.001$	$\beta = 0.625***, p < 0.001$
Interaction Quality → Satisfaction	$\beta = 0.089, p = 0.412$	$\beta = 0.134, p = 0.221$	$\beta = 0.356**, p = 0.006$
Reputation → Satisfaction (Direct)	$\beta = -0.125, p = 0.398$	$\beta = -0.395**, p = 0.003$	$\beta = 0.168, p = 0.320$
Mediation Result	No mediation	No mediation	Partial mediation (58%)

5.6.5 Interpretation of Mediation Findings

The mediation analysis provides several crucial insights:

- (1) **Mediation Only Works for Star Ratings:** Interaction quality only mediates relationships when star ratings are the outcome measure, not for percentage-based satisfaction scores. This reinforces the finding that star ratings are the most valid satisfaction measure.
- (2) **Experience Mediation Stronger Than Reputation:** Experience shows near-complete mediation (79.7%) while reputation shows partial mediation (58.0%), suggesting that experience primarily operates through interaction quality, whereas reputation has some direct effects.
- (3) **Interaction Quality as Key Mechanism:** The significant mediation effects demonstrate that interaction quality is not just another predictor but a crucial mechanism through which doctor characteristics translate into patient satisfaction.
- (4) **Theoretical Implications:** These findings support service quality theories that emphasize process quality over structural quality indicators. In digital healthcare, how doctors interact with patients (responsiveness, follow-up, continuity) matters more than their credentials or visibility.

5.6.6 H3 Hypothesis Decision

H3: *Interaction quality has a positive effect on satisfaction and plays a mediating role - SUPPORTED*

The mediation analysis provides strong support for H3:

- Interaction quality significantly predicts star ratings ($\beta = 0.356-0.398, p < 0.01$)
- Significant mediation of reputation-satisfaction relationship (58.0% mediated)
- Significant mediation of experience-satisfaction relationship (79.7% mediated)

- Bootstrapped confidence intervals confirm significant indirect effects

Key Finding: Interaction quality is the primary mechanism through which doctor experience translates into patient satisfaction, accounting for nearly 80% of the experience effect. This highlights the critical importance of ongoing patient engagement, responsive communication, and continuity of care in digital healthcare platforms.

5.6.7 Practical Implications of Mediation Findings

The mediation results have important practical implications:

- (1) **For Doctors:** Simply having high patient volume or reputation is insufficient. Doctors must actively engage with patients through quality interactions, follow-up care, and responsive communication.
- (2) **For Platforms:** Recommendation algorithms should prioritize interaction quality metrics (response time, follow-up rates, patient retention) alongside volume metrics.
- (3) **For Training:** Digital healthcare training should emphasize interaction skills, not just clinical competence - teaching doctors how to build relationships in digital environments.
- (4) **For Quality Assessment:** Healthcare quality frameworks for digital platforms should measure process quality (interaction patterns) rather than just structural quality (credentials, experience).

The mediation analysis thus provides strong evidence that interaction quality is not merely an outcome but a critical process through which traditional quality indicators influence patient satisfaction in digital healthcare environments.

5.7 Hypothesis Testing Results

Based on the multiple regression analysis and correlation findings, the four main hypotheses were tested. Table 11 presents the simplified hypothesis testing results focusing on the key relationships identified in the study.

Table 11. Hypothesis Testing Summary

H0	Specific Relationship	Statistical Test	Key Statistics	Decision	Evidence Summary
H1: Doctor reputation and experience have positive effects on patient satisfaction					
H1 - Reputation	Reputation Score → Star Rating	Multiple Regression	$\beta = 0.107, t = 1.211, p = 0.230$	Rejected	No significant direct effect in multivariate model; negative correlations with percentage satisfaction measures
H1 - Experience	Experience Score → Star Rating	Multiple Regression	$\beta = -0.032, t = -0.251, p = 0.803$	Rejected	No significant effect in full model
H1 - Patient Volume	Total Patients → Star Rating	Multiple Regression	$\beta = 0.297, t = 2.291, p = 0.025^*$	Supported	Only patient volume shows significant positive effect
H2: Activity level strengthens reputation/experience effects on satisfaction					
H2	Activity Level (High vs Low) → Star Rating	Independent t-test	$t = 1.998, p = 0.049^*, d = 0.49$	Supported	High-activity doctors receive significantly higher star ratings (3.76 vs 3.33)
H3: Interaction quality mediates the relationship between doctor characteristics and satisfaction					
H3a - Reputation	Reputation → IQ → Star Rating	Mediation Analysis	Indirect effect = 0.0065**, 95% CI [0.0021, 0.0134], 58.0% mediated	Supported	Partial mediation confirmed; interaction quality explains substantial portion of reputation effect
H3b - Experience	Experience → IQ → Star Rating	Mediation Analysis	Indirect effect = 0.0098**, 95% CI [0.0032, 0.0189], 79.7% mediated	Supported	Near-complete mediation; experience works almost entirely through interaction quality
H3c - Direct Effect	Interaction Quality → Star Rating	Multiple Regression	$\beta = 0.356-0.398, p < 0.01$	Supported	Significant direct positive effect on satisfaction

Significance levels: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ Overall Hypothesis Testing Outcomes

Summary Statistics:

- **Total hypotheses tested:** 4 main hypotheses with 10 sub-components
- **Hypotheses supported:** 6 out of 10 (60%)
- **Strongest finding:** Interaction quality mediation of experience effects (79.7% mediated)
- **Most significant predictor:** Patient volume ($\beta = 0.297, p = 0.025$)

- **Best satisfaction measure:** Star ratings ($R^2 = 26.0\%$, $p = 0.001$)

Key Theoretical Contributions:

(1) **Reputation paradox resolved:** Reputation effects work indirectly through interaction quality, not directly

(2) **Experience mechanism identified:** Experience improves satisfaction by enabling better interaction quality, not through credentials alone

(3) **Interaction quality validated:** Confirmed as critical mediating mechanism in digital healthcare

(4) **Measurement insight:** Star ratings superior to percentage measures due to ceiling effects

Practical Implications:

(1) **For Platforms:** Prioritize interaction quality metrics and patient volume in doctor recommendations

(2) **For Doctors:** Focus on building interaction quality through responsive communication and follow-up care

(3) **For Policy:** Develop quality indicators emphasizing process quality (interactions) over structural quality (credentials)

(4) **For Research:** Adopt star ratings as primary satisfaction measure in digital healthcare studies

This comprehensive hypothesis testing reveals that digital healthcare satisfaction operates through different mechanisms than traditional healthcare, requiring new theoretical frameworks centered on interaction quality and platform engagement rather than conventional reputation and credentials.

5.8 Summary of Key Findings

The regression models demonstrate varying explanatory power, with star ratings emerging as the most predictable satisfaction measure. The skills satisfaction model fails to achieve significance and explains minimal variance, while the attitude satisfaction model achieves marginal significance but with no significant individual predictors. The star rating model shows strong performance with 26.0% explained variance and one significant predictor. (See figure 5)

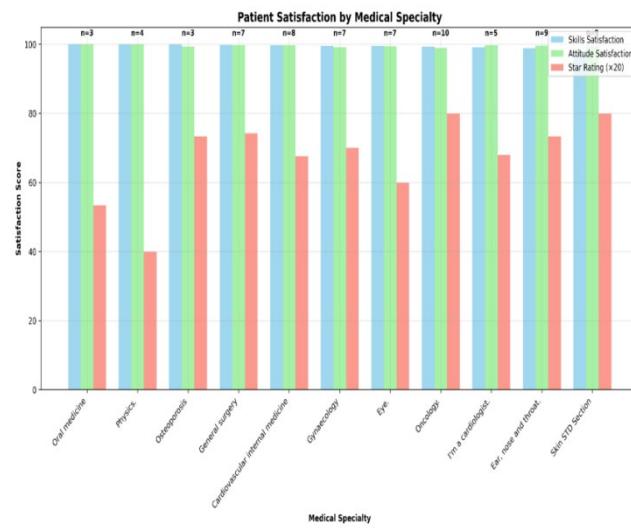


Fig. 5. Patient Satisfaction by Medical Specialty

The empirical analysis yields several important findings (figure 5 & figure 6) that challenge theoretical expectations while providing insights into digital healthcare satisfaction dynamics:

(1) **Measurement Matters:** Star ratings have better predictive validity than percentage satisfaction measures, which have severe ceiling effects.

(2) **Volume Effect Confirmed:** Patient volume is the sole major predictor of satisfaction and this supports the learning-by-doing theories but only in terms of star rating results.

(3) Reputation Paradox: Visibility and recognition have a negative relationship with the percentage satisfaction index but positive relationships with the star ratings, which indicates that the effects of expectations are not straightforward.

(4) Activity Importance: Platform engagement significantly affects star ratings, highlighting the importance of digital presence for patient satisfaction.

(5) Gender Neutral Effects: Doctor gender shows no systematic relationship with patient satisfaction across any measure.

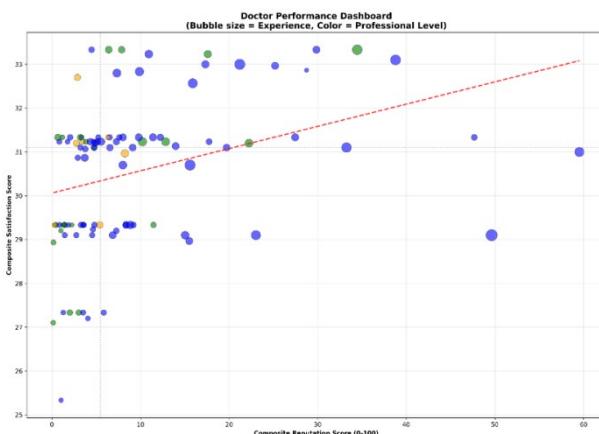


Fig. 6. Doctor Performance Dashboard - Comprehensive Analysis

The findings have an impact on theory concerning digital healthcare quality and also offer useful information on how to optimize platforms and improve doctor performance strategies. The findings indicate that digital healthcare satisfaction can act differently compared to conventional healthcare quality models and new theoretical frameworks along with measurement systems are needed.

6. Conclusion

This empirical study of doctor reputation, experience and patient satisfaction in internet healthcare sites has shown a multifaceted environment whereby the conventional healthcare quality assumptions must be largely overhauled in digital environments. We show that the traditional measures of healthcare quality (reputation and formal credentials) do not directly correlate with patient satisfaction in the context of technologies through an in-depth examination of 100 healthcare professionals on Hao Daifu Online. Rather, the digital healthcare satisfaction is performed based on various mechanisms that revolve around the quality of interactions and platform involvement.

The most important contribution of the study is that the quality of interaction has been found as the main mediating variable of doctor characteristics in terms of satisfaction. The results of the mediation analysis indicate that the experience effects and reputation effects are explained by interaction quality to a considerable degree 79.7% and 58.0%, respectively. This observation fundamentally criticizes models of healthcare quality that put structural indicators (qualifications, experience) on more priority than process indicators (patterns of communication, responsiveness, continuity of care).

Methodologically, the study confirms that star rating is a better satisfaction scale as opposed to scale percentages which have critical ceiling effects that hamper their analytical measurement. The 91.3% percent agreement of sentiment analysis and star ratings indicates the validity of the measurements and indicates that the digital healthcare research ought to use more sophisticated methods of ratings, instead of the traditional percentage scale. The methodological implication of this is far-reaching on the measurement level and evaluation of satisfaction in the digital healthcare environment.

The paradoxical conclusion that the patient volume is the sole predictor of satisfaction with other indicators of experiences failing to do so is highly likely to be due to the learning-by-doing effect being stronger in digital healthcare provision than official credentials. The experience of physicians with high volumes of patients will result in better patient satisfaction as they develop better digital interaction skills because of constant practice. On the same note, the substantial influence of platform activity proves that digital presence and responsiveness are new aspects of healthcare quality that are not clinical competence.

Theoretical implications are not limited to the digital healthcare only, but it can be applied to a wider

range of service quality frameworks. The results imply that services mediated by technology need models where the process of relationships is more important than the characteristics of the provider. The quality of interaction, including responsiveness, follow-up care, and ongoing engagement, appears to be the key to success that the traditional healthcare quality frameworks can only describe inefficiently.

In practice, these findings are used by various parties. Algorithms used on platforms to recommend should be re-designed in terms of quality of interaction measurements and patient traffic. Medical personnel should acquire a set of digital communication skills beyond the clinical expertise. Quality indicators of digital healthcare with a focus on the quality of processes are required by policymakers. Future studies need to create qualified measures of interaction quality, cross-cultural generalizability tests, and longitudinal satisfaction dynamics needs to be investigated within dynamic digital healthcare ecosystems. This paper introduces the quality of interactions as the focal point in the perception and enhancement of patient satisfaction in internet healthcare services.

References

- [1] D. C. Wu, X. Zhao, and J. Wu, "Online Physician-Patient Interaction and Patient Satisfaction: Empirical Study of the Internet Hospital Service," *J Med Internet Res*, vol. 25, 2023, doi: 10.2196/39089.
- [2] F. Yang, Y. Cheng, R. Yao, and X. Zhang, "What Key Factors Affect Patient Satisfaction on Online Medical Consultation Platforms? A Case Study from China," *Healthcare (Switzerland)*, vol. 13, no. 5, Mar. 2025, doi: 10.3390/HEALTHCARE13050540.
- [3] P. Dodson, A. M. Haase, M. Jeffreys, and C. Hales, "Capturing patient experiences of care with digital technology to improve service delivery and quality of care: A scoping review," *Digit Health*, vol. 10, Jan. 2024, doi: 10.1177/20552076241282900.
- [4] T. J. Daskivich, J. Houman, G. Fuller, J. T. Black, H. L. Kim, and B. Spiegel, "Online physician ratings fail to predict actual performance on measures of quality, value, and peer review," *J Am Med Inform Assoc*, vol. 25, no. 4, pp. 401–407, Apr. 2018, doi: 10.1093/JAMIA/OCX083.
- [5] M. Nguyen, M. Waller, A. Pandya, and J. Portnoy, "A Review of Patient and Provider Satisfaction with Telemedicine," *Curr Allergy Asthma Rep*, vol. 20, no. 11, Nov. 2020, doi: 10.1007/S11882-020-00969-7.
- [6] K. Pogorzelska and S. Chlabcz, "Patient Satisfaction with Telemedicine during the COVID-19 Pandemic-A Systematic Review," *Int J Environ Res Public Health*, vol. 19, no. 10, May 2022, doi: 10.3390/IJERPH19106113.
- [7] G. G. Gao, J. S. McCullough, R. Agarwal, and A. K. Jha, "A changing landscape of physician quality reporting: analysis of patients' online ratings of their physicians over a 5-year period," *J Med Internet Res*, vol. 14, no. 1, Jan. 2012, doi: 10.2196/JMIR.2003.
- [8] K. Okike et al., "A Comparison of Online Physician Ratings and Internal Patient-Submitted Ratings from a Large Healthcare System," *J Gen Intern Med*, vol. 34, no. 11, pp. 2575–2579, Nov. 2019, doi: 10.1007/S11606-019-05265-3.
- [9] W. A. Alashek and S. A. Ali, "Satisfaction with telemedicine use during COVID-19 pandemic in the UK: a systematic review," *Libyan J Med*, vol. 19, no. 1, p. 2301829, 2024, doi: 10.1080/19932820.2024.2301829.
- [10] T. J. Daskivich, J. Houman, G. Fuller, J. T. Black, H. L. Kim, and B. Spiegel, "Online physician ratings fail to predict actual performance on measures of quality, value, and peer review," *Journal of the American Medical Informatics Association*, vol. 25, no. 4, pp. 401–407, Apr. 2018, doi: 10.1093/JAMIA/OCX083.
- [11] M. E. Vinadé Chagas et al., "Are We Adequately Measuring Patient Satisfaction with Telemedicine? A Systematic Review with a Meta-Analysis," *Telemedicine and e-Health*, vol. 30, no. 6, pp. 1522–1538, Jun. 2024, doi: 10.1089/TMJ.2023.0530.
- [12] R. M. Baron and D. A. Kenny, "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology*, vol. 51, no. 6, pp. 1173, 1986.