

Perceived Value and Trust as Drivers of Telemedicine Tourism Engagement: A Conceptual and Empirical Examination of Digital Healthcare Consumption

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Abstract

This study examines perceived value and trust as two main determinants of telemedicine tourism in the context of digital healthcare consumption. Digital transformation has brought many changes in healthcare delivery, and telemedicine tourism is one of the benefits, which enables patients to access healthcare providers across borders remotely. However, due to perceived value and trust concerns about digital platforms, user uptake is inconsistent. This study adopts a quantitative research methodology, by collecting information using structured questionnaire from 659 digital healthcare consumers of telemedicine services in the Mena Region. SPSS and AMOS were employed for the statistical analysis, such as reliability test, regression analyses and structural equation modeling to understand the direct and mediating correlations. The research findings indicate that perceived value has an important role in predicting trust and also engagement, whereas the direct effect of trust is strongest on engagement. In addition, trust acts as a partial mediating variable in the relationship between perceived value and engagement showing that it is an important determinant to translate perceptions into behavior. These findings suggest the adoption of telemedicine is motivated not only by functional online/digital healthcare services but also by psychological confidence in digital systems. This study brings together value and trust mechanisms in the context of a telemedicine tourism service while providing practical implications to advance user engagement in digital healthcare ecosystems.

Keywords

Customer engagement, digital healthcare, perceived value, sustainable healthcare, Telemedicine tourism, trust.

INTRODUCTION

Digital transformation has irrevocably shifted the delivery of healthcare services and given rise to new modalities, freed from reliance on physical travel. Of these transformations, telemedicine tourism represents a hybrid model of the confluence of digital healthcare technology and cross-border medical consumption, wherein patients gain online access to international healthcare providers. This paradigm is a fundamental transition away from medical tourism, which entails patients physically travelling to receive care – towards virtual health mobility defined by immediacy, accessibility and lower environmental and financial overhead.

Recent evidence shows that in tourism and mobility-related industries, telemedicine applications are able to shape how healthcare services are marketed, delivered and consumed [1]. Today, patients increasingly rely on mobile health platforms and digital interfaces that allow them to consult distant care providers for follow-ups allowing providers and destinations to overcome geographic barriers [2], [3].

But adoption has been uneven despite these benefits. Telemedicine tourism needs its users to trust invisible digital services; measure perceived risks and understand value without any interactions in person. Thus, psychological and

relational constructs—specifically perceived value and trust—are key drivers of engagement. Previous studies indicate that the adoption of telehealth services by users is strongly affected by perceived values like usefulness, cost-effectiveness and convenience [4], whilst trust dramatically influences uncertainty reduction or enhancement of digital healthcare technologies acceptance [5], [6].

Research on telemedicine has focused on clinical and technological aspects however, there is limited research regarding the marketing and behavioural drivers of telemedicine within a tourism context. In particular, little is known about how (value) perceptions lead to trust and the impact of trust on engagement behaviours such as usage intention, loyalty and recommendation. Filling this void is critical to creating sustainable transnational digital healthcare resources that can compete for the international user base.

Thus, this research investigates perceived value and trust as the key mediators that explain telemedicine tourism engagement.

Problem Statement

The development of digital healthcare technologies has progressed quickly, however the incorporation of telemedicine tourism into widespread practice varies by users

and market. Although telemedicine is advantageous and provides better access, lower cost, requires less traveling to have a medical appointment etc., many consumers remain reluctant to fully adopt such services. This reluctance is mainly due to the lack of physical contact without direct touch with patients in digital health, which increases uncertainty and risk [7], [5].

A central concern is that we know little about the behavioral mechanisms through which telemedicine tourism engages users. While the technological and clinical perspectives of telemedicine have been addressed previously, limited attention has been given to marketing and psychological perspectives by researchers regarding users' behavioral motivations within a specific tourism context [1]. In particular, the relationships among perceived value and trust are not sufficiently examined even though there is evidence to show both constructs are important in confirming how users interact with others on digital networks [4], [8].

In addition, empirically grounded models of the mechanism through which perceived value leads to trust and how this trust influences engagement behaviours (e.g., continued use, loyalty, recommendation) are also sparsely represented. Understanding this relationship enables telemedicine providers to be able to successfully develop strategies that attract users in a more demanding digital healthcare space.

Hence, the main research question tackled in this paper is that there is currently a lack of understanding to how perceived value and trust interplay in influencing telemedicine tourism. This gap needs to be addressed in order to construct sustainable digital healthcare ecosystems that will potentially inform user engagement and involvement over a longer time period.

Significance of the Study

The study reveals practical and theoretical contributions to digital healthcare, tourism and marketing.

Theoretically, this study adds on the literature by integrating perceived value and trust using a holistic model to explore telemedicine tourism. Although previous research has explored these constructs individually, this study contributes to our understanding by examining their joint and mediating effects empirically. This expands what is currently known about digital consumers behaviour and provides an indepth explanation of how telemedicine engagement forms [9], [10].

The study also advocates for sustainable healthcare projects by showing how telemedicine tourism can decrease physical travel and still achieve higher engagement levels. This is in accordance with international efforts to ensure environmentally friendly and resource-efficient healthcare system [3], [11], [2].

The study offers an overarching structure to call for academic inquiry and inform practice in the fast-evolving digital healthcare space.

Literature Review

Telemedicine tourism as the convergence of healthcare marketing, digital services and tourism systems Examining engagement with these services calls for insights from perceived value theory, trust theory and the research of digital consumer behaviour. In this regard, this section pulls together recent empirical and conceptual analyses to illustrate the mechanisms via which perceived value and trust are important determinants of adoption and continued engagement in telemedicine tourism ecosystems.

Perceived Value in Telemedicine Services

Perceived value is how consumers evaluate all the benefits they receive against the cost (knowledge, time, and more) incurred. In healthcare delivered digitally value is not just about clinical effectiveness, it also encompasses convenience, time-saving, cost and emotional reassurance.

[4] Perceived value is an important factor in telehealth adoption, patients assess services based on functional benefits (efficiency), economic benefits (cost savings/financial gain), and that consumers need psychological comfort. Their results confirm that higher the perceived value, the more there is an increase in behavioural intention to use telemedicine.

In the context of tourism and service, perceived value influences satisfaction and loyalty. Provide empirical evidence that perceived value directly increases customer satisfaction and indirectly reinforces trust in tourism services [9]. Similarly, [10] state that trust mechanisms enhance perceived value to reinforce brand loyalty and image. The findings of these studies indicate that value perceptions are a fundamental trigger for relational outcomes.

From the health marketing perspective, [12] and [13] demonstrate that service quality cues, physical evidence shape perceived service value in turn shaping loyalty and behavioural responses. When translating these insights to telemedicine tourism, digital service design, interface quality and responsiveness can enhance perceived value and promote engagement

Trust in Digital Healthcare Platforms

Trust is fundamental to risk and uncertainty environments. Because telemedicine tourism entails privacy-related issues due to remote interactions and perceived vulnerability, the establishment of trust is a prerequisite in addition to service delivery.

[5] show that trust greatly increases teleconsultation usage by shaping perceived safety, credibility and reliability. [6] do the same by showing how consumer trust strongly predicts adoption of e-healthcare applications through reduced perceived risk and improved perceived usefulness.

This relationship is amplified in digital marketing literature. According to [14], if digital practices are ethical, privacy protection procedures are implemented, and robust data management and stewardship is in place, consumers will trust online systems. Moreover, also recently [15] found that digital citizenship and corporate responsibility positively

impact trust in both digital marketing contexts. These results point to the necessity of more salient ethical and governance types of factors for such marketplaces processing sensitive health data in relation to the provision process of telemedicine tourism platforms.

The Relationship Between Perceived Value, Trust, and Engagement

Differing opinions could point to a sequential mechanism. Higher positive evaluations of telemedicine services under the perception of value foster trust, thereby driving behavioural engagement. This pathway is consistent with healthcare and tourism studies demonstrating that value leads to trust, while trust predicts loyalty and checking [9], [10].

Moreover, [16] mention that in addition to reliability perceptions induced with digital and health-related strategies would influence consumers responses under crisis situation thus augmenting the role trust can play as a mediator.

Thus, an engagement in telemedicine tourism can be considered as an outcome of cognitive appraisal (value) and relational trust (trust). High-value services are unlikely to succeed without trust — as yet-trusted platforms monetize perceptions of value into continuing usage and advocacy.

Research Hypotheses

The following hypotheses were developed:

H1: Perceived value has a positive and significant effect on trust in telemedicine platforms.

The rationale for this hypothesis is underlying the fact that users are more likely to build confidence and trust over telemedicine services when they see higher values like convenience, cost-effectiveness, service quality.

H2: Perceived value has a positive and significant effect on telemedicine tourism engagement.

This shows that those who find telemedicine services more beneficial are also more likely to continue using, recommend, and participate actively in these platforms.

H3: Trust has a positive and significant effect on telemedicine tourism engagement.

Under this hypothesis, trust diminishes uncertainty and risk perception—it leads to more participation in telemedicine.

H4: Trust mediates the relationship between perceived value and telemedicine tourism engagement.

The hypothesis asserts that perceived value affects engagement indirectly through trust; therefore, trust functions as a critical mechanism resulting from value perceptions leading to actual behavioral engagement.

METHODOLOGY

The present study employs a quantitative research design to investigate the association between perceived value, trust, and tourism engagement in the context of telemedicine usage. A structured questionnaire, using previously validated scales

was created to measure perceived value as independent variable, trust as the mediating variable and engagement as dependent variable. The study collected data through a survey method and they were analyzed with SPSS and AMOS software. The analysis of the data consisted of performing descriptive statistics, reliability test, regression analysis and structural equation modeling (SEM) to investigate direct and indirect effects moving through the different variables studied.

QUESTIONNAIRE AND MEASUREMENT

The questionnaire was designed to operationalise the three constructs in the conceptual model, namely perceived value, trust and telemedicine tourism engagement. The measures were derived from previously validated scales, providing content continuity with existing research. Respondents evaluated statements that delineated what they believed they obtained from telemedicine services, level of trust in the digital healthcare platforms/providers and their active engagement with telemedicine tourism service on a Likert scale.

POPULATION AND SAMPLE

The study's population includes digital healthcare consumers of telemedicine services in the Mena Region. Finally, 659 valid responses were acquired and analysed.

The results relating to the sample characteristics suggest that respondents are better represented with respect to a mature and well-informed sample. In terms of gender distribution, males (54.6%) and females (45.4%) are equitably represented with males constituting the slight majority of participants. Regarding age, the majority of respondents are 40–50 years (37.3%), followed by more than 50 years (35.2%) and finally, younger respondents in a much lower percentage; As for educational level, the highest proportion of respondents were educated to bachelor's degree (39.2%), followed by master's (28.1%) and doctoral education (24.3%) demonstrating a very high level of education in our sample. Together these traits indicate that the data are credible reflections of well-informed opinions, although a larger proportion of younger participants would be advantageous in future studies.

RESULTS

Mean (μ) and standard deviation (σ) were used in order to analyze questionnaire of study. Table1 below presented the data from the survey variables. The descriptive statistics indicate that perceived value recorded the highest mean score (3.715), followed by trust (3.347) and engagement (3.233), suggesting that respondents generally perceive telemedicine services positively, while trust and engagement remain at moderate levels. The relatively low standard deviations indicate consistency in responses.

Table 1: Variables Results

	N	Minimum	Maximum	Mean	Std. Deviation
Perceived Value	659	2.20	5.00	3.715	.634
Trust	659	2.00	5.00	3.347	.713
Engagement	659	1.60	5.00	3.233	.804

Reliability

Cronbach's Alpha was used to check how reliable the scale was. The values turned out to be good since they were higher than the accepted 70%value. [17]

You can see a summary of the results in the table below:

Table 2: Cronbach Alpha test

Variable	α
Perceived Value	0.857

Variable	α
Trust	0.847
Engagement	0.867

Hypotheses Testing:

H1: Perceived value has a positive and significant effect on trust in telemedicine platforms.

Table3: H1 testing

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.753 ^a	.567	.566	.46978

a. Predictors: (Constant), Perceived Value

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	189.829	1	189.829	860.165	.000 ^b
	Residual	144.992	657	.221		
	Total	334.821	658			

a. Dependent Variable: Trust

b. Predictors: (Constant), Perceived Value

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.201	.109		1.849	.065
	Perceived Value	.847	.029	.753	29.329	.000

a. Dependent Variable: Trust

Linear Regression was used to test the above hypothesis. It is found that t value = 29.329 is significant at 0.05 level, explaining 56.7% of its variance. That means Perceived value has a positive and significant effect on trust in telemedicine

platforms.

H2: Perceived value has a positive and significant effect on telemedicine tourism engagement.

Table 4: H2 testing

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726a	.527	.526	.55343

a. Predictors: (Constant), Perceived Value

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	223.901	1	223.901	731.016	.000b
	Residual	201.231	657	.306		
	Total	425.132	658			

a. Dependent Variable: Engagement

b. Predictors: (Constant), Perceived Value

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	-.184	.128			-1.432	.153
	Perceived Value	.920	.034	.726		27.037	.000

a. Dependent Variable: Engagement

Linear Regression was used to test the above hypothesis. It is found that t value = 27.037 is significant at 0.05 level, explaining 52.7% of its variance. That means Perceived value has a positive and significant effect on telemedicine tourism

engagement.

H3: Trust has a positive and significant effect on telemedicine tourism engagement.

Table5: H3 testing

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.828a	.686	.686	.45057

a. Predictors: (Constant), Trust

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	291.755	1	291.755	1437.152	.000b
	Residual	133.377	657	.203		
	Total	425.132	658			

a. Dependent Variable: Engagement

b. Predictors: (Constant), Trust

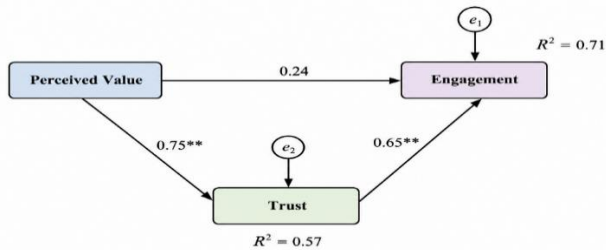
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	.109	.084			1.288	.198
	Trust	.933	.025	.828		37.910	.000

a. Dependent Variable: Engagement

Linear Regression was used to test the above hypothesis. It is found that t value = 37.91 is significant at 0.05 level, explaining 68.6% of its variance. That means Trust has a positive and significant effect on telemedicine tourism engagement.

H4: Trust mediates the relationship between perceived value and telemedicine tourism engagement.



Notes: Standardized path coefficients are shown.
** $p < .001$.

Test for the mediation hypothesis (H4) were conducted in AMOS by estimating the direct path from perceived value to engagement as well as the indirect path through trust. As shown in the structural model, perceived value strongly predicts trust (standardised path coefficient approximately $\beta = 0.75$) and trust in turn has a large positive effect on engagement (approximately $\beta = 0.65$). When trust was added to the model, the direct effect of perceived value on engagement was still positive, but considerably smaller ($\beta = 0.235$). The estimated indirect effect through trust was $\beta = 0.490$, which was larger than the remaining direct effect. As the direct path remained while a substantial portion of the remaining effect was operating through trust, the pattern is consistent with partial rather than full mediation. In substantive terms, perceived value encourages engagement both directly, as well as, and more importantly, by strengthening consumers' trust in telemedicine platforms.

CONCLUSION

Perceived value is an important antecedent to telemedicine tourism engagement — in both a direct and an indirect manner through trust — as shown by this study. The results emphasize that although perceived value determines user engagement, the effect of it on user engagement is strongly mediated by trust. This means that trust becomes an important connector between your perceptions of value and actual engagement behaviors.

The results further show that telemedicine adoption is not simply influenced by functional benefits, but also by psychological assurance and confidence in digital health platforms. This also highlights the need to take into consideration both the cognitive and relational aspects of behaviour with regard to digital health.

RECOMMENDATIONS

Organizations that deliver telemedicine services must communicate the value of their offerings through higher quality, access, and cost-effectiveness according to this study. Enhancing perceived value indirectly strengthens trust, it will indirectly build that trust and delivering a concrete list of benefits will be the easiest measurable way to drive engagement.

At the same time, building trust is considered a strategic priority. It is achieved by ensuring that data privacy, transparency, ethics, and reliable services are maintained.

This immediate impact of trust on user engagement therefore warrants organizations making additional investments in mechanisms which will amplify the ambassadorship of users as this creates a virtuous cycle for persistent, ongoing relationships.

In addition, value creating and trust building strategies should be adopted concurrently within digital healthcare as both constructs mutually reinforce each other in disease engagement initiation. More mediators should be examined and the model should be tested with various cultural and technological products and conditions to allow comparison, as future research.

REFERENCE

- [1] Carrera, A., & Recuero-Virto, N. (2026). Telemedicine apps and their influence on the tourism industry. A qualitative study. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.6300960>
- [2] Ocak, A. (2025). Click for care, care for planet: Sustainable marketing drivers of telemedicine adoption. *Telemedicine Reports*, 6(1). <https://doi.org/10.1177/26924366251394120>.
- [3] Lu, W., Wei, D., Li, C., Gao, P., Ma, R., Zhai, Y., & Wang, C. (2024). How to promote telemedicine patient adoption behavior for Greener Healthcare? *Journal of Cleaner Production*, 434, 139884. <https://doi.org/10.1016/j.jclepro.2023.139884>.
- [4] Yuen, K. F., Chua, J. Y., Li, X., & Wang, X. (2023). The determinants of users' intention to adopt telehealth: Health belief, perceived value and self-determination perspectives. *Journal of Retailing and Consumer Services*, 73, 103346. <https://doi.org/10.1016/j.jretconser.2023.103346>.
- [5] Bahari, G., Mutambik, I., Almuqrin, A., & Alharbi, Z. H. (2024). Trust: How It Affects the Use of Telemedicine in Improving Access to Assistive Technology to Enhance Healthcare Services. *Risk Management and Healthcare Policy*, 17, 1859–1873. <https://doi.org/10.2147/RMHP.S469324>.
- [6] Gupta, O. J., Srivastava, M. K., Darda, P., Yadav, S., & Mishra, V. (2024). How Consumer Trust affects the adoption of e-healthcare products on mobile apps: An analysis of perceived usefulness, time, and price. *International Journal of Pharmaceutical and Healthcare Marketing*, 19(3), 351–376. <https://doi.org/10.1108/ijphm-03-2023-0027>.
- [7] Haleem, A., Javaid, M., Singh, R. P., & Suman, R. (2021). Telemedicine for Healthcare: Capabilities, features, barriers, and Applications. *Sensors International*, 2, 100117. <https://doi.org/10.1016/j.sintl.2021.100117>.
- [8] Hashem, T. N. (2023). Social media strategies: Building brand awareness through digital platforms in health care sector. *European Economic Letters (EEL)*, 13(4), 352–364. Retrieved from <https://www.eelet.org.uk/index.php/journal/article/view/594>.
- [9] Elshaer, I. A., Azazz, A. M., Fayyad, S., Aljoghaiman, A., Fathy, E. A., & Fouad, A. M. (2025). From asymmetry to satisfaction: The dynamic role of perceived value and trust to boost customer satisfaction in the tourism industry. *Tourism and Hospitality*, 6(2), 68. <https://doi.org/10.3390/tourhosp6020068>.
- [10] Fatawu, A., Manda, V. K., Tarnanidis, T., & Sousa, B. (2025). The impact of CSR dimensions on customer loyalty, Brand Image, and satisfaction in the hospitality and tourism sector:

- The role of customer trust and perceived value. *Journal of Global Marketing*, 1–25. <https://doi.org/10.1080/08911762.2025.2557214>.
- [11] Gu, D., Humbatova, G., Xie, Y., Yang, X., Zolotarev, O., & Zhang, G. (2021). Different roles of telehealth and telemedicine on medical tourism: An Empirical Study from Azerbaijan. *Healthcare*, 9(8), 1073. <https://doi.org/10.3390/healthcare9081073>.
- [12] Hashem, T. N., Issa, M. S., Iapadre, G., & Hamdan, F. I. (2018). Does the Physical Evidence in Emergency Department Affect the Loyalty of the Beneficiaries in Jordanian Healthcare Organizations? *International Journal of Medical Research & Health Sciences*, 7(7), 151-161, Available online at www.ijmrhs.com
- [13] Hashem, T. N. (2018). The flower of service concept and its influence on the customer satisfaction: case study of Jordanian private hospitals sector. *International Journal of Business and Management*, 13(2), 122, <https://doi.org/10.5539/ijbm.v13n2p122>
- [14] Hashem, T. (2024). Digital Marketing and the Ethical Code for Behavioral Tracking: Issues of Privacy and Consumer Trust. *Journal of Electrical Systems*, 20(10), 2842-2854. <https://journal.esrgroups.org/jes/article/view/5604>
- [15] Hashem, T. N., & Al Qudah, M. A. (2025a). Role of digital citizenship in Consumer Trust through the moderating role of Corporate Social Responsibility in digital marketing. *Advances in Science, Technology & Innovation*, 73–81. https://doi.org/10.1007/978-3-031-90558-2_10.
- [16] Hashem, T. (2021). Smart Business as an Approach for De-marketing During COVID 19 Pandemic: Insights from Health Sector. *Turkish Online Journal of Qualitative Inquiry*, 12(8), 4058-4071, <https://www.tojqj.net/index.php/journal/article/view/5081>
- [17] Sekaran, & Bougie. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.