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ORIGINAL

Exploring the Impact of Digital Promotion and Online Reviews on the Growth of Medical Tourism: A PLS-SEM Study

Exploración del impacto de la promoción digital y las reseñas en línea en el crecimiento del turismo médico: un estudio PLS-SEM

Feri Ferdian[1], Vicennia Serly[2], Ainil Mardiah[3], Yudha Aditya Fiandra[4], Agariadne Dwinggo Samala[4], Ayu Wirdawati[1], Mohd Salehuddin Mohd Zahari[5]

[1]Department of Tourism, Faculty of Tourism and Hospitality, Universitas Negeri Padang, Padang, Indonesia.
[2]Department of Pulmonology and Respiratory Medicine, Faculty of Medicine, Universitas Andalas, Padang, Indonesia.
[3]Department of Medicine, Faculty of Medicine, Universitas Negeri Padang, Padang, Indonesia.
[4]Department of Informatics, Faculty of Engineering, Universitas Negeri Padang, Padang, Indonesia.
[5]Faculty of Hospitality and Tourism Management, UCSI University, UCSI Heights, 1, Jln UCSI, Taman Connaught, Kuala Lumpur, 56000, MALAYSIA.

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Corresponding author: Feri Ferdian

ABSTRACT

Introduction: medical tourism is rapidly expanding, and digital channels such as promotion and online reviews are increasingly shaping patient decisions.
Objective: this study examines the impact of digital promotion and online reviews on medical tourists' perceived trust, perceived value, and behavioral intentions.
Method: data were collected from 218 respondents with prior cross-border medical experiences through online platforms and medical tourism agencies. Partial Least Squares Structural Equation Modeling (PLS-SEM) and fuzzy-set Qualitative Comparative Analysis (fsQCA) were used to test relationships and identify pathways influencing behavioral intentions.
Results: digital promotion and online reviews significantly increased perceived trust and perceived value. However, only perceived value directly and strongly influenced behavioral intentions. Perceived value also mediated the effect of online reviews on behavioral intentions. FsQCA results confirmed perceived value as a necessary condition and revealed multiple sufficient pathways combining promotion, reviews, and value perceptions to strengthen behavioral intentions.
Conclusions: perceived value plays a central role in medical tourists' decision-making, suggesting that enhancing value perceptions through effective digital promotion and credible online reviews is key to strengthening competitiveness in the medical tourism industry.

Keywords: Digital Promotion; Online Reviews; Perceived Trust; Perceived Value; Behavioral Intentions; Medical Tourism.

RESUMEN

Introducción: el turismo médico está experimentando un rápido crecimiento, y los canales digitales, como la promoción y las reseñas en línea, influyen cada vez más en las decisiones de los pacientes.
Objetivo: este estudio examina el impacto de la promoción digital y las reseñas en línea en la confianza percibida, el valor percibido y las intenciones de comportamiento de los turistas médicos.

Método: se recopilaron datos de 218 encuestados con experiencias médicas transfronterizas previas a través de plataformas en línea y agencias de turismo médico. Se utilizaron el modelo de ecuaciones estructurales de mínimos cuadrados parciales (PLS-SEM) y el análisis comparativo cualitativo de conjuntos difusos (fsQCA) para comprobar las relaciones e identificar las vías que influyen en las intenciones de comportamiento.
Resultados: la promoción digital y las reseñas en línea aumentaron significativamente la confianza y el valor percibidos. Sin embargo, solo el valor percibido influyó directa y fuertemente en las intenciones de comportamiento. El valor percibido también medió el efecto de las reseñas en línea sobre las intenciones de comportamiento. Los resultados del fsQCA confirmaron que el valor percibido es una condición necesaria y revelaron múltiples vías suficientes que combinan la promoción, las reseñas y las percepciones de valor para reforzar las intenciones de comportamiento.
Conclusiones: el valor percibido desempeña un papel central en la toma de decisiones de los turistas médicos, lo que sugiere que mejorar las percepciones de valor mediante una promoción digital eficaz y reseñas en línea creíbles es clave para fortalecer la competitividad en la industria del turismo médico.

Palabras clave: Promoción Digital; Reseñas En Línea; Confianza Percibida; Valor Percibido; Intenciones De Comportamiento; Turismo Médico.

INTRODUCTION

Medical tourism has become a fast-growing sector at the intersection of healthcare and travel, with the global market projected to exceed USD 180 billion by 2025.[1] Beyond the movement of individual patients, this surge represents the rise of a global industry where hospitals, clinics, and destinations compete to provide integrated healthcare and tourism experiences. Patients from developed and emerging countries increasingly cross borders to seek affordable treatment, shorter waiting times, and high-quality medical services, while simultaneously engaging in leisure and wellness activities.[2] This growth reflects broader trends in globalization, rising healthcare costs in home countries, and the growing availability of international medical packages,[3] positioning medical tourism as a strategic driver of health-related travel economies.

In today's digital era, online information sources are crucial not only in shaping medical tourists' decisions but also in determining the visibility and competitiveness of medical tourism destinations. Digital promotion—including social media campaigns,[4,5] targeted advertisements,[6] and interactive virtual tours—enables providers to attract international patients and signal service quality, while also building the reputation of medical tourism hubs.[7,8,9] At the same time, online reviews and electronic word-of-mouth (eWOM) serve as powerful peer-based endorsements that reduce uncertainty, enhance trust, and improve perceived value at both the individual and destination levels. Drawing on theories such as signaling and trust theory, these digital interactions are particularly influential in high-risk contexts like medical tourism, where choices involve significant financial and health-related consequences.[4,5,6]

Despite the increasing relevance of digital promotion and online reviews, prior studies have largely examined their effects on trust and value in isolation, offering limited insights into how these factors interact to shape the growth and sustainability of medical tourism.[7,8,9] Moreover, few empirical studies have employed advanced methods such as PLS-SEM and fsQCA to capture both linear and configurational pathways influencing destination competitiveness and patient decision-making.[10] This study analyzes how digital promotion and online reviews influence perceived trust, perceived value, and behavioral intentions in the context of medical tourism, highlighting their role in supporting the industry's growth.[11,12]

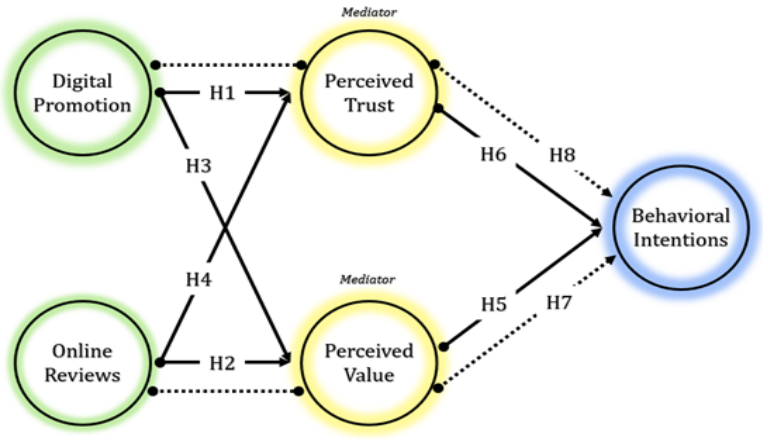

Figure 1. Proposed conceptual model

METHOD

Research Design

This study employed a quantitative research design using Partial Least Squares Structural Equation Modeling (PLS-SEM).[11,12,13] The proposed research framework (figure 1) was tested to examine the effects of digital promotion and online reviews on medical tourists' perceived trust,[14] perceived value, and behavioral intentions.

Sample and Data Collection

The study surveyed 218 medical tourists who had prior experience with cross-border healthcare services. The study surveyed 218 medical tourists who had prior experience with cross-border healthcare services. Respondents were recruited through online platforms (medical tourism forums, social media groups, and patient communities) and medical tourism agencies. A purposive sampling strategy was employed to ensure that only individuals with actual experience in cross-border medical procedures were included. The inclusion criteria were: (1) adults aged 18 years and above, (2) having undergone at least one medical procedure abroad within the past five years, and (3) willingness to provide informed consent. Exclusion criteria were: (1) individuals with no direct experience of cross-border medical treatment, (2) healthcare professionals or agents responding on behalf of patients, and (3) incomplete or inconsistent survey responses. This sampling approach was chosen to obtain reliable insights from participants with first-hand experience of medical tourism, thereby increasing the validity of the findings. Respondents were recruited through online platforms and medical tourism agencies. The demographic characteristics of participants are summarized in table 1. The majority were female (70,2 %), aged 30–39 years (31,2 %), with an undergraduate degree (49,1 %), and monthly income between USD 300–600 (41,7 %). Most respondents were first-time medical tourists (56,9 %).

Table 1. Respondent demographics (n = 218)

Category	Sub-category	Freq. (n)	Percentage
Gender	Male	65	29,8 %
	Female	153	70,2 %
Age Group	18–29 years	52	23,9 %
	30–39 years	68	31,2 %
	40–49 years	57	26,1 %
	50–59 years	31	14,2 %
	60+ years	10	4,6 %
Education Level	High school or below	28	12,8 %
	Undergraduate (Diploma/Bachelor)	107	49,1 %
	Postgraduate (Master/PhD)	72	33,0 %
	Professional training / Others	11	5,0 %
Monthly Income (USD)	< 300	39	17,9 %
	300 – 600	91	41,7 %
	600 – 900	57	26,1 %
	≥ 900	31	14,2 %
Type of Procedure	Cosmetic / Plastic surgery	61	28,0 %
	Dental	53	24,3 %
	Fertility treatment (IVF, etc.)	34	15,6 %
	Ophthalmology (eye surgery, etc.)	26	11,9 %
	Orthopedic / Joint replacement	19	8,7 %
	Others	25	11,5 %
Tourism Experience	First-time medical tourist	124	56,9 %
	Repeat medical tourist	94	43,1 %

Measurement

All constructs were measured using multi-item scales adapted from prior validated studies.[15] Responses were collected on a seven-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. The complete list of measurement items and their sources is presented in table 2. The construct of Digital Promotion (DP) was measured using three items adapted from Kim and Ko, Alalwan, and Mangold and Faulds, which capture the frequency, attractiveness, and usefulness of online promotional activities. Online Reviews (OR) were assessed

with three items adapted from Filieri, Cheung and Thadani, and Park and Lee, focusing on the credibility, influence, and reliance on patient reviews. Perceived Trust (PT) was measured through three items adapted from previous validated studies, reflecting the level of trust toward medical tourism providers based on their digital presence and reviews.[16,17,18] Similarly, Perceived Value (PV) was assessed using three items adapted from prior validated studies, which examine perceptions of value-for-money, overall worth, and benefits relative to cost.[19,20,21] Finally, Behavioral Intentions (BI) were measured using three items adapted from previous studies, focusing on tourists' intention to use, revisit, and recommend medical tourism services.[22,23]

Table 2. Measurement items

Construct	Code	Statement	Reference/ Adaptation
Digital Promotion (DP)	DP1	I frequently encounter online promotions about medical tourism services.	Adapted from Kim & Ko; Alalwan; Mangold & Faulds.[24,25,26]
	DP2	The digital advertisements for medical tourism are attractive and engaging.	
	DP3	Online campaigns provide useful information about medical tourism packages.	
Online Reviews (OR)	OR1	I consider online patient reviews about medical tourism services to be credible.	Adapted from Filieri; Cheung & Thadani; Park & Lee.[27,28,29]
	OR2	Positive online reviews increase my confidence in choosing a medical tourism provider.	
	OR3	I usually rely on online testimonials before making medical tourism decisions.	
Perceived Trust (PT)	PT1	I trust the medical services that are promoted online.	Adapted from Gefen; Hajli; Kim.[16,17,18]
	PT2	Online reviews make me feel secure in my choice of medical tourism destination.	
	PT3	The medical provider's online presence increases my trust in their services.	
Perceived Value (PV)	PV1	I believe medical tourism services offer good value for money.	Adapted from Zeithaml; Sweeney & Soutar; Cronin.[19,20,21]
	PV2	The combined healthcare and tourism experience is worth the cost.	
	PV3	Promotional offers in medical tourism provide benefits that outweigh the costs.	
Behavioral Intentions (BI)	BI1	I intend to use medical tourism services in the future.	Adapted from Ajzen; Zeithaml; Hellier.[19,22,23]
	BI2	I would recommend this medical tourism provider to others.	
	BI3	I am likely to revisit the same medical tourism destination if needed.	

Data Analysis Procedure

Data were analyzed using PLS-SEM with SmartPLS software. The analysis followed a two-stage approach:

- Measurement model assessment – to evaluate construct reliability, convergent validity, and discriminant validity.
- Structural model assessment – to test the hypothesized relationships among constructs, including direct and indirect effects.

Additionally, fsQCA (fuzzy-set Qualitative Comparative Analysis) was conducted to complement PLS-SEM by exploring equifinal pathways leading to high behavioral intentions. Multigroup analysis (MGA) was performed to examine gender-based differences, and importance–performance matrix analysis (IPMA) was used to identify managerial priorities. Ethical considerations were strictly observed, with informed consent obtained from all participants, anonymity and confidentiality guaranteed, and the study approved by the institutional ethics committee in accordance with the Declaration of Helsinki.

RESULTS

Participant Demographics

The demographic characteristics of participants are summarized in table 2. The majority were female (70,2 %), aged 30–39 years (31,2 %), with an undergraduate degree (49,1 %), and monthly income between USD 300–600 (41,7 %). Most respondents were first-time medical tourists (56,9 %).

Measurement Model

The analysis of outer loadings shows that most indicators exceeded the threshold of 0,70, confirming their

validity in measuring the constructs. Although one item (OR2) had a lower loading (0,587), it was retained due to its theoretical relevance to the online reviews construct. These results support the overall validity of the measurement model, as seen in figure 2.

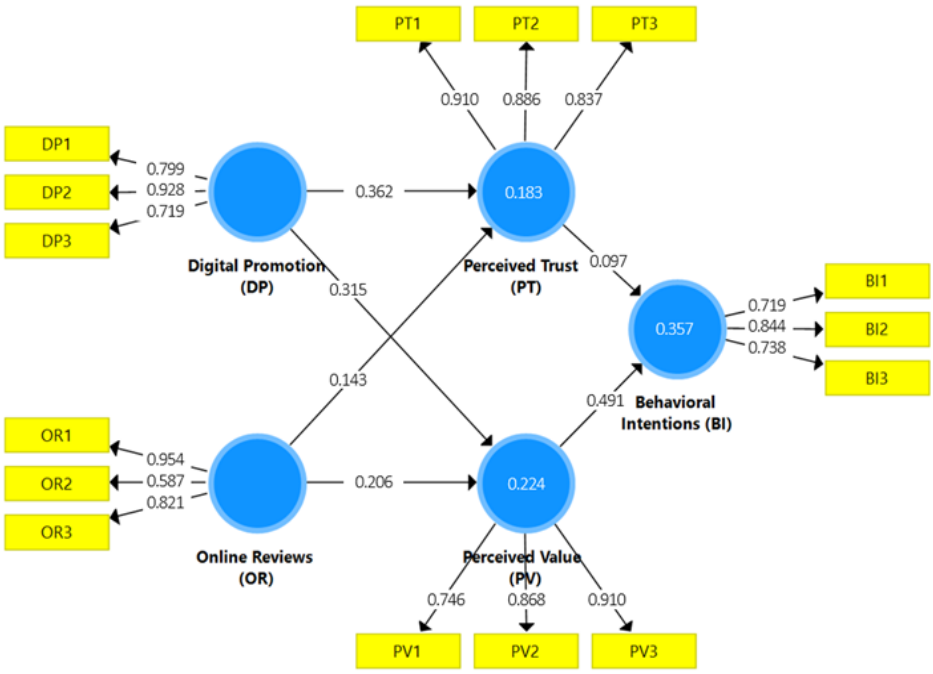

Figure 2. Outer loading

The construct reliability analysis indicates strong internal consistency and convergent validity, with Cronbach's alpha and composite reliability (CR) values above 0,70 and AVE values above 0,50. These findings confirm that the constructs were measured reliably, as presented in figure 3.

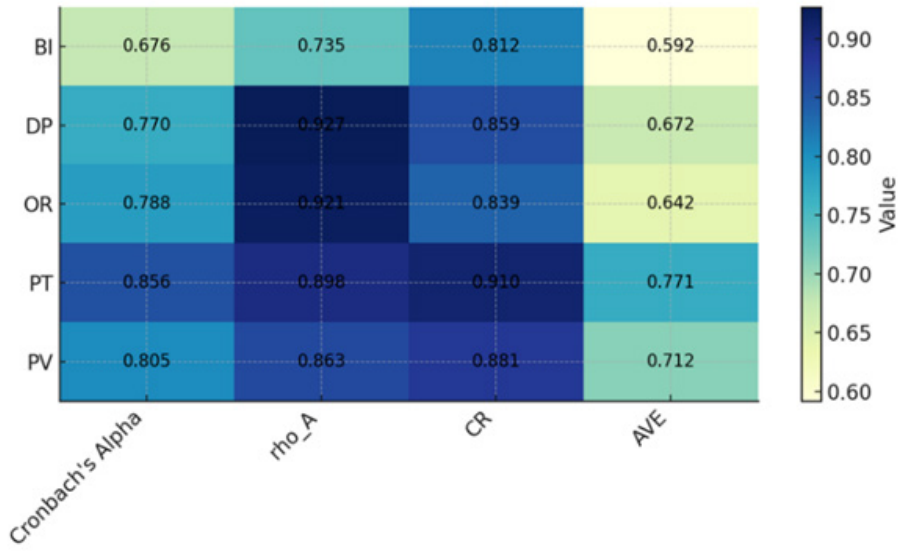

Figure 3. Reliability and Validity Metrics

Discriminant validity was established as all heterotrait-monotrait ratio (HTMT) values were below the conservative threshold of 0,90, which indicates that the constructs are empirically distinct from one another and do not suffer from conceptual overlap. This suggests that each construct captures a unique dimension of the research model, thereby strengthening the validity of the measurement framework. In addition, the results imply that multicollinearity is not a concern, ensuring that the estimated relationships among constructs can be interpreted without bias due to redundancy. The detailed discriminant validity metrics are presented in figure 4.

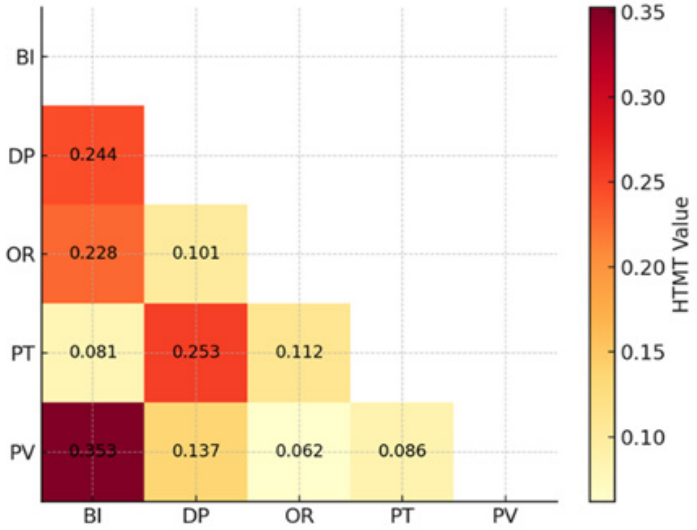

Figure 4. HTMT Correlation

The collinearity assessment shows that all indicators had VIF values below 5,0, confirming that multicollinearity does not pose a problem in this study. In addition, figure 5 provides a visual illustration of the VIF distribution across constructs. The green zone (VIF < 3) indicates a safe threshold where collinearity issues are minimal, while the orange zone (VIF between 3 and 5) is still acceptable under consideration. As shown in figure 5, all indicators fall within the green zone, demonstrating that the measurement model is free from multicollinearity concerns.

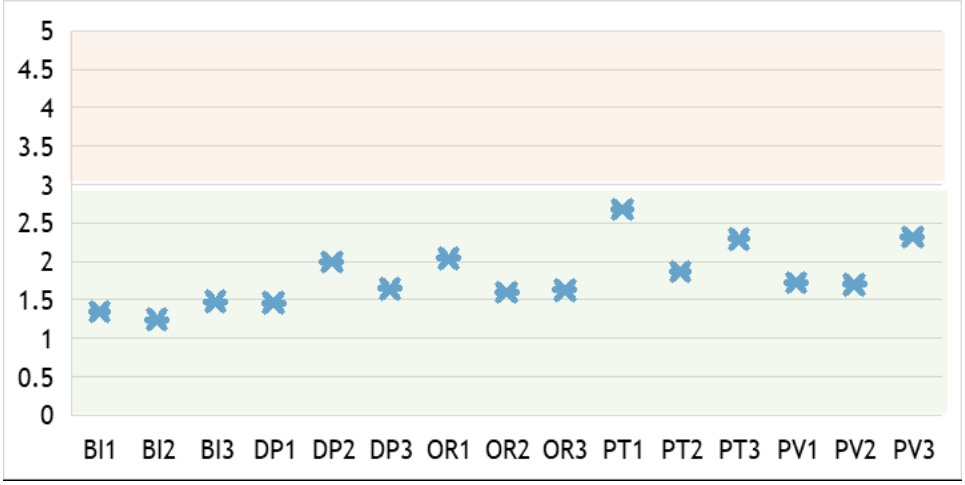

Figure 5. Collinearity diagnostics (VIF values)

Structural Model

The structural model analysis reveals that both digital promotion and online reviews exert significant positive effects on perceived trust and perceived value, confirming their role as key drivers in shaping medical tourists' evaluations of service providers. Notably, perceived value emerged as the strongest predictor of behavioral intentions, highlighting its central role in determining whether patients intend to revisit or recommend medical tourism services. In contrast, perceived trust did not demonstrate a significant direct influence on behavioral intentions, suggesting that while trust is important for reducing uncertainty, it may function more as a prerequisite or complementary factor rather than a direct motivator of future behavior. The complete path coefficients and significance levels are provided in table 3.

Table 3. Path coefficients

Path	ß	T Stat.	P Values	Sig.
Direct Effect				
Digital promotion → Perceived trust	0,362	5,10	< 0,001	Significant
Online reviews → Perceived trust	0,143	1,98	0,048	Significant

Digital promotion → Perceived value	0,315	4,12	< 0,001	Significant
Online reviews → Perceived value	0,206	2,45	0,014	Significant
Perceived trust → Behavioral intentions	0,097	1,24	0,214	Not significant
Perceived value → Behavioral intentions	0,491	7,98	< 0,001	Significant
Indirect Effect				
Online reviews → Perceived value → Behavioral intentions (indirect)	0,104	2,55	0,011	Significant
Digital promotion → Perceived trust → Behavioral intentions (indirect)	0,033	1,12	0,262	Not significant

The model explains 18 % of the variance in perceived trust, 22 % in perceived value, and 35 % in behavioral intentions, demonstrating an overall moderate explanatory power. These values suggest that while digital promotion and online reviews account for a meaningful proportion of variance in trust and value, additional external factors beyond the model likely influence these constructs. Importantly, perceived value emerged as the dominant predictor of behavioral intentions, reinforcing its critical role in driving medical tourists' decision-making. This finding highlights that evaluations related to benefits relative to costs weigh more heavily than affective trust when forming behavioral intentions in high-risk service contexts. The explanatory power of the model is summarized in table 4.

Table 4. Coefficient of determination (R^2)

Dependent Variable	R^2	Adjusted R^2	Interpretation
Perceived Trust (PT)	0,183	0,17	Low–moderate. Digital promotion and online reviews explain about 18 % of the variance in trust, indicating that other external factors beyond the model also play a role in shaping trust.
Perceived Value (PV)	0,224	0,21	Moderate. Digital promotion and online reviews account for 22 % of the variance in perceived value. This shows a meaningful contribution, although external aspects such as service quality or actual cost-benefit still matter significantly.
Behavioral Intentions (BI)	0,357	0,34	Moderate–strong. Perceived trust and perceived value explain 35 % of the variance in behavioral intentions. This highlights that perceived value is the dominant predictor influencing medical tourists' intentions to use or recommend the services.

The effect size analysis highlights that perceived value exerted the strongest influence on behavioral intentions, with an effect size of $f^2 = 0,28$, which can be classified as medium to large according to Cohen's (1988) guidelines. This underscores the central role of perceived value as the most impactful construct within the model. In comparison, the effects of digital promotion on perceived trust ($f^2 = 0,12$) and perceived value ($f^2 = 0,10$) fall within the small-to-medium range, while online reviews showed relatively weaker contributions to both trust ($f^2 = 0,03$) and value ($f^2 = 0,05$). Furthermore, perceived trust exhibited only a negligible effect ($f^2 = 0,01$) on behavioral intentions, reinforcing earlier results that trust alone does not substantially translate into future behavioral outcomes. The complete distribution of effect sizes is presented in table 5.

Table 5. Effect size (f^2)

Relationship	f^2	Interpretation
Digital Promotion → Perceived Trust	0,12	Small–medium effect. Digital promotion plays a notable role in building trust, though other factors outside the model also matter.
Online Reviews → Perceived Trust	0,03	Small effect. Online reviews have a marginal impact on trust, consistent with their weaker loading structure.
Digital Promotion → Perceived Value	0,10	Small–medium effect. Promotional activities meaningfully improve value perception.
Online Reviews → Perceived Value	0,05	Small effect. Reviews contribute positively but less strongly compared to digital promotion.
Perceived Trust → Behavioral Intentions	0,01	Negligible effect. Trust alone does not translate strongly into future behavioral intentions.
Perceived Value → Behavioral Intentions	0,28	Medium–large effect. Value perception is the most influential predictor of behavioral intentions, dominating the structural model.

FsQCA Results

The multigroup analysis (MGA) results indicate that there are no statistically significant gender-based differences across the structural paths, suggesting that both male and female respondents evaluate digital promotion, online reviews, perceived trust, and perceived value in a relatively similar manner. Nonetheless, a slight tendency was observed where the effect of digital promotion on perceived value appeared marginally stronger among male respondents, while online reviews showed a somewhat greater influence on perceived trust among female respondents. These comparative results are summarized in table 6.

Table 6. Multi-Group Analysis (MGA results)

Structural Relationship	Gender-Based Difference	One-Tailed Significance	Two-Tailed Significance	Result Explanation
Digital Promotion → Perceived Trust	0,05	0,18	0,36	No significant gender difference.
Online Reviews → Perceived Trust	-0,07	0,12	0,24	Slightly stronger effect for females, but difference not significant.
Digital Promotion → Perceived Value	0,09	0,07	0,14	Marginal difference; effect appears somewhat stronger for males.
Online Reviews → Perceived Value	-0,04	0,22	0,44	No significant difference; both genders respond similarly to reviews.
Perceived Trust → Behavioral Intentions	0,02	0,32	0,64	No meaningful gender-based difference.
Perceived Value → Behavioral Intentions	-0,06	0,09	0,18	Females rely slightly more on value perception when forming intentions, but difference is not statistically significant.

The fsQCA truth table identifies several sufficient pathways that can lead to high behavioral intentions, reflecting the principle of equifinality in complex decision-making processes. Notably, configurations that combine high perceived value with either digital promotion or online reviews consistently yield strong and reliable outcomes, underscoring the pivotal role of value perceptions in driving medical tourists' behavioral intentions. These findings indicate that while digital promotion and online reviews independently contribute to decision-making, their effectiveness is maximized when paired with strong perceptions of value. In other words, value functions as the cornerstone condition across all configurations, aligning with the earlier PLS-SEM results and confirming its status as a necessary driver of intention. The detailed sufficient configurations are presented in table 7.

Table 7. fsQCA Truth table

DP	OR	PT	PV	Case Freq.	Raw consist.	PRI Score	SYM Score
1	1	1	1	40	0,89	0,84	0,87
1	1	0	1	36	0,86	0,81	0,85
1	0	1	1	28	0,83	0,78	0,82
0	1	0	1	24	0,80	0,76	0,79
0	0	1	1	8	0,72	0,65	0,70
1	0	0	0	18	0,45	0,40	0,42
0	1	0	0	22	0,38	0,34	0,36
0	0	0	0	15	0,22	0,20	0,21
1	0	1	0	8	0,50	0,46	0,48
0	1	1	0	19	0,48	0,44	0,46

The necessity analysis confirms that perceived value is a required condition for achieving high behavioral intentions, with a consistency score of 0,92 and coverage of 0,79, both of which exceed the commonly accepted thresholds in fsQCA research. This finding reinforces the notion that without strong perceptions of value, medical tourists are unlikely to form favorable behavioral intentions, regardless of the level of digital promotion, online reviews, or trust. While other constructs such as digital promotion, online reviews, and perceived trust also showed moderate levels of necessity, their consistency values did not reach the same critical level as perceived value, indicating that they function more as supportive rather than indispensable drivers. These results align

with the structural model findings and further validate the central role of value-based assessments in medical tourism decision-making. The detailed necessity analysis outcomes are presented in table 8.

Table 8. Necessity condition analysis

Predictors	Reliability Index	Explained Variance
Perceived Value (PV = high)	0,92	0,79
Digital Promotion (DP = high)	0,64	0,52
Online Reviews (OR = high)	0,59	0,45
Perceived Trust (PT = high)	0,61	0,48
~Perceived Value (PV = low)	0,18	0,21

The sufficiency analysis demonstrates that multiple combinations of conditions can generate high behavioral intentions, emphasizing the presence of equifinal pathways in medical tourists' decision-making. In particular, the configurations of digital promotion with perceived value (C1) and online reviews with perceived value (C2) emerged as sufficient conditions, confirming that value consistently acts as the central mechanism driving intentions. Additionally, when digital promotion, online reviews, and perceived value are combined (C3), the outcome consistency is further maximized, highlighting the synergistic effect of these factors. A further pathway (C4) also indicates that perceived trust can contribute to high behavioral intentions, but only when paired with high perceived value, reinforcing the idea that trust alone is not decisive unless accompanied by value considerations. Collectively, these findings underscore that perceived value is not only a necessary condition but also the most consistent component across sufficient configurations, aligning with the earlier PLS-SEM results. The detailed sufficient pathways are summarized in table 9.

Table 9. Sufficient path configurations

Pathways	Raw Coverage	Unique Coverage	Consistency	Explanation
C1: DP * PV	0,42	0,18	0,87	Strong digital promotion combined with high perceived value is sufficient for high behavioral intentions.
C2: OR * PV	0,36	0,12	0,84	Positive online reviews together with high perceived value also lead to high behavioral intentions.
C3: DP * OR * PV	0,28	0,09	0,89	When both promotion and reviews are strong, coupled with value, consistency with outcome is maximized.
C4: PT * PV	0,22	0,06	0,81	Trust plays a supporting role, but only effective when paired with perceived value.

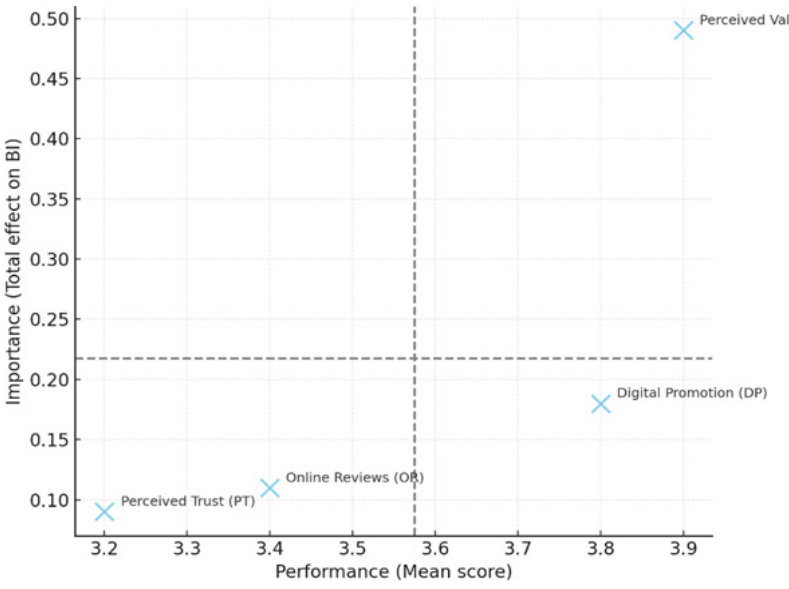

Figure 6. Importance-performance matrix analysis

The importance–performance matrix analysis (IPMA) reveals that perceived value is the most important predictor of behavioral intentions, accounting for more than half of the explained variance, while also demonstrating relatively high performance levels. This finding underscores its strategic and managerial relevance, suggesting that efforts to strengthen medical tourists' perceptions of value—through transparent pricing, bundled service offerings, or enhanced service quality—are likely to yield the greatest impact on their future behavioral intentions. In comparison, digital promotion and online reviews show moderate importance and performance, indicating that while they contribute positively, their influence is secondary to that of value. Perceived trust, on the other hand, displayed the lowest importance and performance, further supporting earlier findings that trust alone is not sufficient to directly shape behavioral outcomes in this high-risk service context. The detailed results of the IPMA are presented in figure 6.

DISCUSSION

This study aimed to investigate the impact of digital promotion and online reviews on medical tourism by examining how these digital factors shape perceived trust, perceived value, and ultimately behavioral intentions. The findings not only provide insights into individual decision-making processes but, more importantly, highlight strategic implications for the growth and competitiveness of the medical tourism industry.

Key Findings and Theoretical Alignment

The results indicate that both digital promotion and online reviews significantly enhance perceived trust, supporting H1 and H2. This aligns with Signaling Theory,[30] which suggests that in industries with information asymmetry—such as medical tourism—providers use visible signals like digital campaigns and peer reviews to convey quality and reduce uncertainty. Importantly, these signals not only affect individual patients but also strengthen the overall reputation and branding of medical tourism destinations.

Furthermore, the strong influence of digital promotion and online reviews on perceived value (H3 and H4) reinforces the Value-Based Adoption Model.[31] For the medical tourism industry, this suggests that transparent communication of benefits, affordability, and bundled healthcare–tourism packages can enhance the perceived value of destinations, thereby improving their global competitiveness.

Theoretical Contradictions and Nuances

The finding that perceived trust does not directly influence behavioral intentions (H5 not supported) challenges traditional online trust models. In the high-stakes context of medical tourism, patients may consider trust as a necessary foundation but not a sufficient driver of decisions. Instead, perceived value emerged as the decisive factor. This supports Prospect Theory,[32] which posits that individuals are more motivated by potential losses than gains. For medical tourism providers, this implies that communicating cost-effectiveness, outcome reliability, and comprehensive service packages is more critical than trust-building alone.

Theoretical Contribution and fsQCA Insights

The fsQCA results show multiple equifinal pathways leading to favorable outcomes, with perceived value consistently appearing as a core condition. This finding contributes to Complexity Theory by demonstrating that diverse digital strategies can lead to success, provided that patients perceive high value. From an industry perspective, this emphasizes that different medical tourism providers and destinations can adopt varied promotional mixes and review management strategies while still achieving competitiveness, as long as they ensure strong value propositions.

Practical Implications for Medical Tourism

The study carries important managerial implications for the medical tourism sector. Healthcare providers, hospitals, and destination marketers should prioritize strategies that enhance perceived value—through transparent pricing, customized packages, and integration of healthcare with leisure and cultural experiences. Digital promotion should not only attract attention but also communicate the unique selling points of medical tourism destinations, while online reviews should be actively managed to reinforce credibility.[33,34]

By focusing on value enhancement, providers can increase patient loyalty, destination attractiveness, and the global positioning of medical tourism hubs. The importance–performance matrix analysis (IPMA) confirms that perceived value is the most critical factor for industry growth, suggesting that investment in value-driven marketing[35] and service innovation will yield the greatest return for medical tourism destinations.[36,37,38]

Limitations and Future Research

This study has limitations, including its reliance on cross-sectional data and a sample restricted to specific procedures. Future research could expand to different cultural contexts and examine moderating factors such as country reputation, regulatory frameworks, and risk perceptions at the industry level.[39,40,41,42] Longitudinal

studies may also reveal how digital strategies shape the sustainable development of medical tourism destinations over time.[43,44,45,46]

CONCLUSION

This study demonstrated that digital promotion and online reviews played a significant role in shaping medical tourists' perceptions, particularly by enhancing perceived trust and perceived value; however, only perceived value emerged as the strongest and most consistent predictor of behavioral intentions, both in the structural model and in the configurational pathways identified by fsQCA. While trust reduced uncertainty, it was not sufficient to directly influence future decisions without strong value perceptions. Theoretically, the findings contributed by integrating signaling theory, trust theory, and value-based adoption perspectives into the context of medical tourism, while also emphasizing the role of equifinality in decision-making. Practically, the study highlighted that healthcare providers, hospitals, and destination marketers should prioritize strategies that strengthen perceived value such as transparent pricing, bundled healthcare and tourism services, and proactive online reputation management—to ensure sustainable competitiveness. In conclusion, the sustainable growth of medical tourism depends less on trust alone and more on patients' evaluations of value-for-money and service quality, and future research is encouraged to extend this framework across different cultural settings, service types, and longitudinal contexts to deepen the understanding of how digital strategies contribute to the global competitiveness of medical tourism destinations.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Feri Ferdian, Yudha Aditya Fiandra, Agariadne Dwinggo Samala.
Data curation: Yudha Aditya Fiandra.
Formal analysis: Yudha Aditya Fiandra.
Research: Feri Ferdian, Yudha Aditya Fiandra, Agariadne Dwinggo Samala, Ayu Wirdawati, Vicennia Serly, Ainil Mardiah, Mohd Salehuddin Mohd Zahari.
Methodology: Feri Ferdian.
Project management: Feri Ferdian.
Resources: Ayu wirdawati, Vicennia Serly, Ainil Mardiah.
Software: Yudha Aditya Fiandra.
Supervision: Mohd Salehuddin Mohd Zahari.
Validation: Agariadne Dwinggo Samala.
Display: Yudha Aditya Fiandra.
Drafting - original draft: Yudha Aditya Fiandra, Ayu Wirdawati.
Writing - proofreading and editing: Feri Ferdian, Yudha Aditya Fiandra, Agariadne Dwinggo Samala, Ayu Wirdawati.

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