



STRENGTHENING BRAND IMAGE AND WORD OF MOUTH THROUGH SOCIAL MEDIA MARKETING: EVIDENCE FROM HEALTHCARE CLINICS

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ABSTRACT

Background: Increasing competition in Indonesia's healthcare sector encourages clinics to adopt effective digital marketing strategies. Social media marketing plays an important role in shaping patient perceptions and behavioral responses within the Stimulus–Organism–Response (S–O–R) framework.

Objectives: This study aims to analyze the influence of clinic social media marketing on brand image, brand trust, and satisfaction, as well as its impact on commitment and positive electronic word-of-mouth (e-WOM).

Methods: A sequential explanatory mixed-methods design was employed. The qualitative phase analyzed social media engagement data from Facebook, Instagram, and TikTok of Clinic during January–December 2024. The quantitative phase involved a survey of 401 respondents selected through purposive sampling. Data were analyzed using SEM-PLS with a focus on direct and indirect (mediation) effects.

Results: The findings show that satisfaction significantly influences brand image, brand trust, commitment, and positive e-WOM. Brand image and brand trust significantly affect commitment but do not directly influence positive e-WOM. Social media marketing does not have a direct significant effect on brand image and brand trust. Mediation analysis indicates that brand image and brand trust mediate the relationship between satisfaction and commitment.

Conclusion: The study confirms that patient satisfaction plays a central role in transforming social media engagement into positive behavioral outcomes. Clinics should prioritize service quality and experiential value to strengthen long-term patient relationships.

INTRODUCTION

Competition in Indonesia's healthcare service sector has become increasingly dynamic and competitive. The Business Competition Index (IPU) compiled by the Business Competition Supervisory Commission (KPPU) reflects annual national competition trends on a scale of 1–7. In 2024, Indonesia's IPU score reached approximately 4.95, increasing from the previous year and indicating that overall business competition was in the slightly high category. This trend continued in 2025, with the IPU score rising to

5.01, signaling an acceleration of competition among business actors across various economic sectors, including healthcare services and social activities. The healthcare service sector is among those with relatively high IPU scores, reflecting intense competition among healthcare providers, such as clinics and small hospitals (Timofeyev et al., 2024) (Business Competition Supervisory Commission [KPPU], 2024; KPPU, 2025; Antara News, 2024; Antara News, 2025).

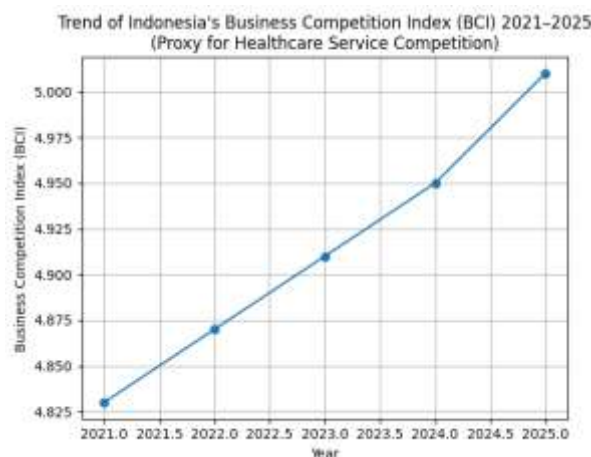


Figure 1. Business Competition Index (BCI)

In this context, health clinics or small hospitals have become one of the main points of competition due to the rapid growth of primary healthcare facilities across various regions. The high level of competition in the healthcare sector requires service providers to develop effective marketing strategies in order to win patient preferences. One increasingly dominant trend is the use of social media as a digital marketing tool capable of influencing patient choices. Patients no longer rely solely on recommendations from their social environment (word-of-mouth), but also consider interactions and information obtained through social media, including the number of followers, types of content, and the level of audience engagement when making decisions about healthcare services. Recent literature indicates that social media marketing in the healthcare services sector has become a major focus of academic research, demonstrating a significant influence on patient perceptions of brand equity and consumer behaviour (Hariri et al., 2025; Sutrisnawati et al., 2023). In

addition, competition in the healthcare services market has also been examined internationally due to its relationship with service quality. Several international studies have found that competition among hospitals can have varying effects on service quality; however, there is evidence suggesting that competition may improve both technical and non-technical aspects of medical service quality, particularly in primary healthcare facilities such as primary hospitals. This highlights the complexity of the impact of competition on service quality and patient choice (Lu et al., 2024; Peng et al., 2024).

Although research on social media marketing and competition in the healthcare services sector has continued to increase especially following the digital transformation accelerated by the COVID-19 pandemic there remains a significant research gap in the academic literature. Numerous international studies have examined the influence of social media marketing on patient perceptions, service quality, and visit decisions in hospitals

and healthcare facilities, including its effects on brand awareness, online trust, and patient visit intention. For example, recent research shows that social media marketing has a significant impact on patients' visit intention through the mediation of brand awareness and online trust in the hospital context (Amanda & Achmadi, 2025). Furthermore, global bibliometric analyses indicate that research on social media in healthcare services peaked in 2024, focusing on themes such as engagement, brand equity, and overall consumer behavior (Badri, 2024). Nevertheless, studies that comprehensively integrate social media engagement variables such as the number of followers, content types, and audience interaction simultaneously within a single research model remain limited. Posted content and forms of digital interaction are important indicators of social media performance that not only affect brand visibility but also contribute to the formation of brand trust, brand image, patient satisfaction, the spread of positive electronic word-of-mouth (e-WOM), and patient commitment, all of which play a role in patients' decisions to choose a clinic within an increasingly competitive healthcare services environment (Yuliani et al., 2025). Although some literature has highlighted the relationship between social media marketing and variables such as brand trust or brand image, relatively few studies have examined how objective and measurable indicators of social media engagement contribute to these relationships within an integrated model (Faruk, 2026). Therefore, there is a clear need for in-depth research that integrates social media engagement indicators with patient behavior in the context of healthcare services, particularly clinics or small hospitals, in order to provide a holistic understanding of how social media strategies influence patient perceptions and decisions amid increasingly intense healthcare competition. This research is expected to enrich theoretical insights into digital healthcare marketing while also offering practical recommendations for clinic managers in designing more effective and market-responsive digital marketing strategies (Wati et al., 2025).

This study aims to analyze the social media engagement performance of healthcare clinics

by comparing the number of followers, interaction levels, and account activity, as well as identifying average engagement levels across different content types to determine the most effective content in attracting audience engagement. Furthermore, this study examines the influence of social media marketing on brand trust and brand image, investigates the role of patient satisfaction in shaping brand trust, brand image, positive electronic word-of-mouth (e-WOM), and patient commitment, and evaluates the mediating roles of brand image and brand trust in the relationships between social media marketing, patient satisfaction, positive e-WOM, and patient commitment. Overall, this study provides integrated empirical evidence regarding the relationships among social media engagement, digital marketing, and patient behavioral outcomes in healthcare clinics and small hospitals, offering practical implications for developing effective and competitive social media marketing strategies.

Based on the theoretical framework and prior empirical studies, the following hypotheses are proposed:

H1: Brand image positively influences patient commitment.

H2: Brand image positively influences positive electronic word-of-mouth (e-WOM).

H3: Brand trust positively influences patient commitment.

H4: Brand trust positively influences positive electronic word-of-mouth (e-WOM).

H5: Patient satisfaction positively influences brand image.

H6: Patient satisfaction positively influences brand trust.

H7: Patient satisfaction positively influences patient commitment.

H8: Patient satisfaction positively influences positive electronic word-of-mouth (e-WOM).

H9: Social media marketing of healthcare clinics positively influences brand image.

H10: Social media marketing of healthcare clinics positively influences brand trust.

Indirect (Mediating) Effects

H11: Brand image mediates the relationship between patient satisfaction and patient commitment.

H12: Brand image mediates the relationship between social media marketing of healthcare clinics and patient commitment.

H13: Brand trust mediates the relationship between patient satisfaction and patient commitment.

H14: Brand trust mediates the relationship between social media marketing of healthcare clinics and patient commitment.

H15: Brand image mediates the relationship between patient satisfaction and positive electronic word-of-mouth (e-WOM).

H16: Brand image mediates the relationship between social media marketing of healthcare clinics and positive electronic word-of-mouth (e-WOM).

H17: Brand trust mediates the relationship between patient satisfaction and positive electronic word-of-mouth (e-WOM).

H18: Brand trust mediates the relationship between social media marketing of healthcare clinics and positive electronic word-of-mouth (e-WOM).

METHODS

This study employed a sequential explanatory mixed methods design integrating qualitative social media analytics and

quantitative SEM-PLS analysis within the Stimulus–Organism–Response (S–O–R) framework (Creswell & Plano Clark, 2023).

Sequential Explanatory Mixed-Methods Research Design

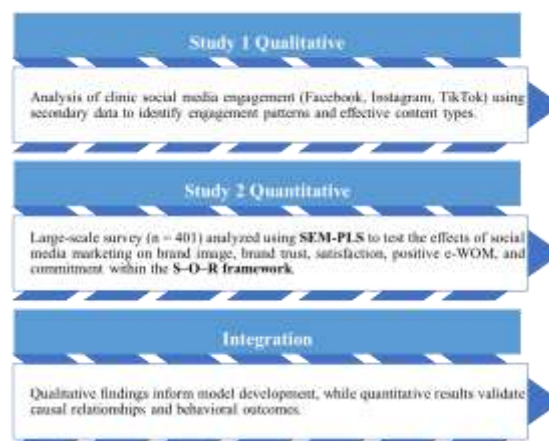


Figure 2. Overview of research design

This research applied a sequential explanatory mixed methods design, where qualitative findings were used to contextualize and support quantitative hypothesis testing. The study was grounded in the Stimulus–Organism–Response (S–O–R) framework (Islam et al., 2021), positioning Social Media Marketing Clinics as stimulus, Brand Image, Brand Trust, and Satisfaction as organism variables, and Commitment and Positive e-WOM as response variables.

a. Qualitative Phase

Design and Data Collection

The qualitative phase analyzed digital trace data from the official Facebook, Instagram, and TikTok accounts of Clinic during January–December 2024. The indicators included profile visits, content viewers, followers, likes, and comments. Posts were categorized into five content types: health

education, clinic promotion, patient testimonials, health tips, and service updates.

The use of secondary digital engagement data aligns with social media analytics approaches in marketing research (Kozinets, 2022; Humphreys et al., 2023).

Data Analysis

Data were analyzed descriptively and comparatively to examine engagement patterns across platforms and content types (Tafesse & Wien, 2023). Correlation analysis was also conducted to explore the relationship between content frequency and patient visit trends. The qualitative findings served as contextual support for the structural model tested in the quantitative phase.

b. Quantitative Phase

Design, Population, and Sample

The quantitative study used a cross-sectional survey design. The population consisted of social media users who had been

exposed to the clinic's social media content. Using purposive sampling, 401 valid respondents were selected based on prior exposure to the clinic's social media.

Instrument and Data Collection

Data were collected through an online questionnaire adapted from validated prior

studies. The instrument measured six constructs: Social Media Marketing Clinics, Brand Trust, Satisfaction, Brand Image, Positive e-WOM, and Commitment. All items were assessed using a 5-point Likert scale (Hair et al., 2022; Sarstedt et al., 2022).

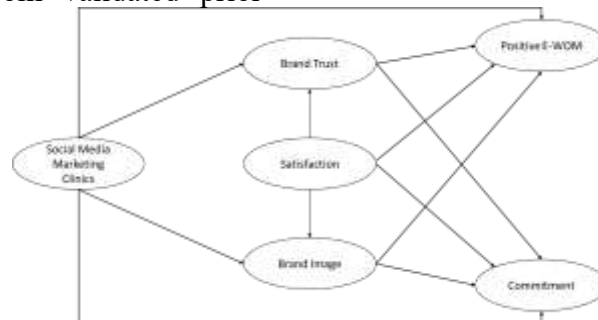


Figure 3. Conceptual model

Figure 3 illustrates the conceptual model of this study based on the Stimulus–Organism–Response (S–O–R) framework. Social Media Marketing Clinics is positioned as the stimulus variable that influences patients' psychological responses, namely Brand Trust, Satisfaction, and Brand Image, which function as organism variables. These psychological constructs subsequently affect behavioral responses, represented by Commitment and Positive electronic Word-of-Mouth (e-WOM). The model proposes both direct and indirect relationships among constructs. Social Media Marketing Clinics is hypothesized to influence Brand Trust and Brand Image directly. Satisfaction is expected to influence Brand Trust and Brand Image, as well as directly affect Commitment and Positive e-WOM. Furthermore, Brand Trust and Brand Image are proposed to influence Commitment and Positive e-WOM. The model also examines

the mediating roles of Brand Trust and Brand Image in strengthening the relationship between Satisfaction and behavioral outcomes, as well as between Social Media Marketing Clinics and behavioral outcomes. Overall, the conceptual model provides a structured framework to examine how social media marketing activities translate into patient behavioral responses through psychological mechanisms.

The following table presents the demographic characteristics of the respondents involved in the quantitative phase of this study. The information includes exposure to the clinic's social media content, gender, and age distribution. This profile provides an overview of the sample composition and supports the suitability of respondents within the Stimulus–Organism–Response (S–O–R) framework applied in this research.

Table 1. Demographic information of respondents

Characteristic	Category	Frequency (n)	Percentage (%)
Experience of Exposure to Clinic Social Media Content	Yes	401	100%
	No	-	-
Gender	Male	167	41,65%
	Female	234	58,35%
Age	< 20 years	20	4,99%
	20–25 years	140	34,91%
	26–30 years	120	29,93%
	31–35 years	60	14,96%
	36–40 years	40	9,98%
	>40 years	21	5,24%
Total		401	100%

Source: Primary Data 2024

The respondent characteristics table indicates that all respondents (401 individuals or 100%) had been exposed to the clinic's social media content, confirming the suitability of the sample for the Stimulus–Organism–Response (S–O–R) framework applied in this study. Exposure to the clinic's social media content represents the stimulus, which serves as the foundation for analyzing psychological and behavioral responses. In terms of gender, the respondents were predominantly female (234 respondents) compared to male (167 respondents), suggesting that the clinic's social media marketing activities may be more effective in reaching or engaging female audiences. Regarding age, most respondents were in the 20–25 years (140 respondents) and 26–30 years (120 respondents) age groups. These age groups are highly active on social media, making them relevant as the organism, as they actively process digital stimuli through perceptions, trust, and engagement.

RESULTS

Findings of Qualitative Study

Clinic Social Media Performance 2024

This section presents an evaluation of the clinic's social media performance throughout 2024 across three primary platforms: Facebook, Instagram, and TikTok. The analysis focuses on key engagement indicators

The dominance of respondents within productive and digitally savvy age groups strengthens the analysis of the response, reflected in their intention and actual decision to visit the clinic. Overall, the respondent profile presented in the table supports the appropriateness of the sample and reinforces the application of the S–O–R framework in examining the influence of social media marketing activities on patient visit behavior.

Data Analysis

Quantitative data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 3 (Hair et al., 2022; Hair et al., 2024). The analysis focused specifically on direct effects (path coefficients, t-statistics, and p-values) and indirect effects (mediation analysis) to examine the mediating roles of Brand Image and Brand Trust. Hypotheses were evaluated at a 5% significance level ($p < 0.05$).

to assess platform effectiveness in building visibility, audience growth, and interaction intensity. By comparing performance metrics across platforms, this section aims to identify which social media channel contributes most significantly to digital engagement and potential patient outreach.

Table 2. Social Media Performance Summary – Clinic (2024)

Metric	Facebook	Instagram	TikTok
Profile Visits (Total)	18,650	21,100	32,600
Content Viewers (Total)	266,000	430,000	532,000
Followers (Dec)	2,300	3,900	5,100
Content Likes (Total)	31,800	46,900	78,100
Content Comments (Total)	3,050	6,970	12,630

Source: Primary Data 2024

The results indicate significant differences in social media performance among the three platforms in 2024. TikTok demonstrates the strongest overall performance across engagement metrics. It generated the highest total content viewers (532,000), content likes (78,100), and content comments (12,630). In addition, TikTok recorded the highest number of followers by

the end of the year (5,100). Instagram ranked second in overall performance, with 430,000 total content viewers and 46,900 total likes. It also achieved steady follower growth, reaching 3,900 followers in December. Meanwhile, Facebook showed the lowest engagement levels compared to the other platforms, although it maintained stable performance throughout the year with 266,000 total viewers

and 31,800 total likes. Overall, TikTok proved to be the most effective platform for increasing visibility and audience engagement for the clinic in 2024. These findings suggest that

short-video content strategies may be more effective in attracting and engaging audiences compared to traditional social media formats.

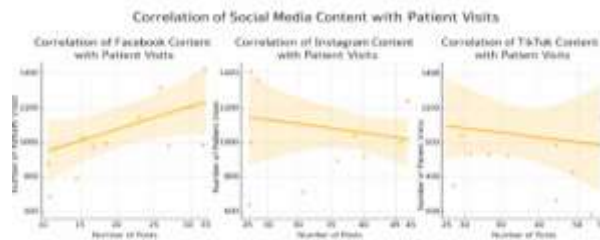


Figure 4. The Influence of Content on Patient Visits to Clinics

Based on the correlation diagrams, Facebook shows a moderate positive relationship ($r = 0.46$) between the number of posted contents and patient visits, indicating that increased content activity may potentially encourage more clinic visits. Instagram exhibits a weak negative correlation ($r = -0.18$), suggesting that the volume of content does not have a significant effect on patient visits. Meanwhile, TikTok shows almost no relationship ($r = -0.04$), indicating that despite high engagement levels, TikTok content does not directly convert audiences into clinic visits.

Average Social Media Engagement by Content Type at Clinic (2024)

This section presents an analysis of the clinic's social media engagement based on the types of content published throughout 2024. The evaluation aims to identify audience response patterns across various content categories organized within a weekly content calendar. By comparing the average interaction metrics such as likes, comments, shares, and viewers across Facebook, Instagram, and TikTok, this analysis seeks to determine which types of content are most effective in fostering interaction, building trust, and stimulating patient visit intentions

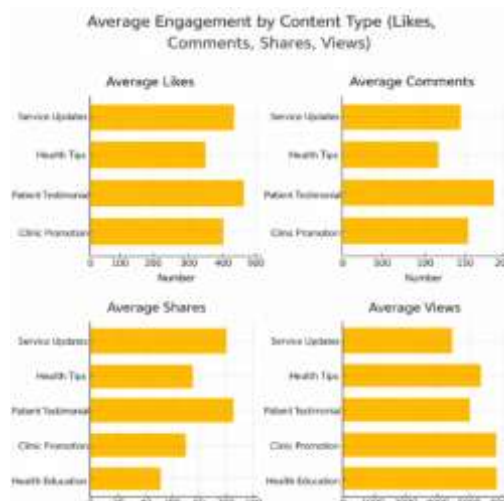


Figure 5. Average Social Media Engagement by Content Type at Clinic (2024)

The qualitative study provides an in-depth exploration of the clinic's social media engagement patterns throughout 2024 by systematically examining a weekly content calendar structured around five primary content categories: health education, clinic promotion, patient testimonials, health tips,

and service updates. Rather than merely reporting interaction metrics, this analysis seeks to interpret how different types of digital content function as stimuli that trigger varying audience responses. Engagement performance was evaluated using average interaction indicators likes, comments, shares, and

viewers across Facebook, Instagram, and TikTok, allowing for a comparative and cross-platform understanding of audience behavior.

a. Overall Engagement Patterns

The qualitative findings reveal substantial variation in audience engagement across content categories, indicating that not all forms of content generate equal psychological and behavioral responses. Among the five categories, patient testimonial content consistently demonstrated the strongest engagement performance. This was particularly evident in higher averages of likes, comments, and shares across platforms. The dominance of testimonial-based content suggests that experiential narratives and authentic patient stories resonate strongly with digital audiences. In healthcare contexts, where perceived risk and uncertainty are often high, testimonials function as a form of social proof that reduces doubt and enhances perceived credibility. The strong engagement with testimonial content reflects audiences' preference for relatable and emotionally grounded information. When patients share their real experiences, audiences may perceive the clinic as more transparent, trustworthy, and human-centered. This engagement pattern indicates that testimonial content not only attracts attention but also fosters interaction, dialogue, and trust-building. The narrative nature of testimonials encourages audiences to respond, ask questions, or share the content with others, thereby amplifying its reach organically.

Clinic promotional content ranked second in overall engagement performance, particularly in viewer counts and content shares. Posts featuring discounts, bundled health packages, vaccination programs, or limited-time offers attracted substantial attention and were frequently redistributed by users. This suggests that promotional content serves as a strong behavioral stimulus, triggering immediate interest and potentially influencing visit intention. Unlike testimonial content, which primarily builds relational and emotional connections, promotional posts appear to activate more goal-oriented responses. They provide tangible value propositions that audiences can directly evaluate and act upon. The high share rate

indicates that users perceive such content as useful and relevant to their networks, thereby contributing to extended digital reach. Health education content also achieved relatively high engagement levels, especially in terms of viewers. This pattern implies that audiences actively seek informative and credible health-related knowledge from clinic social media accounts. Educational posts fulfill an informational function, positioning the clinic as a reliable source of expertise. However, engagement indicators such as comments and shares were comparatively moderate. This suggests that while educational content is widely consumed, it does not always stimulate interactive participation unless delivered in engaging formats such as short videos, infographics, interactive quizzes, or live discussions. In other words, educational content primarily satisfies cognitive needs, whereas testimonial and promotional content more strongly activate emotional and behavioral responses.

b. Lower-Performing Content

In contrast to the previously discussed categories, service update content demonstrated the lowest engagement levels across all measured indicators. Posts containing operational information—such as doctor schedules, holiday announcements, or facility updates—received limited likes, comments, and shares. This pattern indicates that purely functional information tends to attract attention only from audiences with immediate service needs. For broader audiences, such content lacks emotional appeal and interactive stimulus. The relatively low performance of service updates highlights an important strategic consideration: information alone is insufficient to generate meaningful engagement in digital environments saturated with diverse content. Functional announcements may be necessary for transparency and service clarity, but they require complementary persuasive or creative elements to increase audience involvement. For example, combining service updates with patient stories, visual storytelling, or interactive prompts could potentially enhance their impact.

c. Strategic Implications from Qualitative Findings

The qualitative findings provide several strategic insights for healthcare social media management. First, patient testimonial content should be prioritized within the content calendar due to its consistently high engagement performance and its ability to build trust through social proof mechanisms. Testimonial-based storytelling strengthens relational bonds and encourages participatory interaction, which are critical in healthcare communication. Second, promotional content should be strategically designed to maintain audience interest while avoiding excessive commercial emphasis. When presented in a value-driven manner—such as emphasizing health benefits rather than solely price incentives—promotional posts can effectively stimulate visit intentions without compromising professional credibility. Third, health education content remains essential for maintaining brand authority and reinforcing the clinic’s expertise. However, to maximize engagement, educational materials should be

delivered in interactive and visually appealing formats. This may include short-form videos, animated explanations, carousel posts, or question-and-answer sessions that invite audience participation. Finally, service update content should not be eliminated but rather integrated with more engaging formats. Embedding operational information within storytelling elements or pairing updates with testimonials or educational insights can increase relevance and interaction levels.

Overall, the qualitative study demonstrates that different content types generate distinct engagement responses, reflecting variations in emotional resonance, informational value, and behavioral stimulation. These findings underscore the importance of content differentiation strategies in healthcare social media marketing. More importantly, the qualitative insights provide a conceptual foundation for the subsequent quantitative analysis, where engagement quality and satisfaction are examined as mediating mechanisms influencing patient perceptions and behavioral outcomes.

Findings of Quantitative Study

The following table presents the results of hypothesis testing using the Structural Equation Modeling Partial Least Squares (SEM-PLS) approach. This analysis aims to examine the relationships among variables in the research model, including Brand Image, Brand Trust, Satisfaction, Commitment, Positive electronic Word of Mouth (e-WOM), and Social Media Marketing Clinics.

The measurement model was first evaluated by examining the outer loading values of each indicator. Indicators with outer loading values greater than 0.60 were considered valid and retained for further analysis, while indicators with lower values were excluded from the final measurement model.

Table 3. Outer Loadings

Construct	Valid Indicator(s)	Notes
Brand Image	BI1 (0.923)	BI2–BI4 not valid
Brand Trust	BT1 (0.903)	BT2–BT6 not valid
Commitment	C1 (0.955)	C2–C5 not valid
Positive E-WOM	PW1 (0.833)	PW2–PW5 not valid
Satisfaction	S1 (0.946)	S2–S5 not valid
Social Media Marketing Clinics	SMM1 (0.692)	SMM2–SMM8 not valid

Source: Primary Data 2024

As presented in Table 3, only one indicator for each construct met the required outer loading criterion (> 0.60). The remaining indicators did not satisfy the validity threshold and were therefore excluded from the subsequent analysis. The retained indicators were used for evaluating the structural model. The reliability and convergent validity of the measurement model were evaluated using Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). The results are presented in Table 4.

Table 4. Construct Reliability and Validity

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Brand Image	-1.214	0.168	0.294
Brand Trust	-0.724	0.253	0.190
Commitment	-1.125	0.210	0.250
Positive E-WOM	-0.795	0.265	0.241
Satisfaction	-0.856	0.238	0.250
Social Media Marketing Clinics	-0.730	0.262	0.141

Source: Primary Data 2024

Table 4 shows that the values of Cronbach's Alpha, Composite Reliability, and AVE for all constructs are below the recommended thresholds, indicating that the measurement model has not yet achieved satisfactory reliability and convergent validity. The acceptance or rejection of hypotheses is determined based on the path coefficient (β), t-statistic, and p-value, with a significance level of 5%.

Table 5. Direct Effects

	Hypothesized Relationship	Path Coefficient (β)	t-Statistic	p-Value	Decision
H1	Brand Image $\rightarrow$ Commitment	0.190	2.888	0.004	Accepted
H2	Brand Image $\rightarrow$ Positive e-WOM	0.067	0.509	0.611	Rejected
H3	Brand Trust $\rightarrow$ Commitment	0.226	3.326	0.001	Accepted
H4	Brand Trust $\rightarrow$ Positive e-WOM	0.137	1.020	0.308	Rejected
H5	Satisfaction $\rightarrow$ Brand Image	0.298	3.860	0.000	Accepted
H6	Satisfaction $\rightarrow$ Brand Trust	0.227	2.813	0.005	Accepted
H7	Satisfaction $\rightarrow$ Commitment	0.233	3.843	0.000	Accepted
H8	Satisfaction $\rightarrow$ Positive e-WOM	0.307	3.498	0.001	Accepted
H9	Social Media Marketing Clinics $\rightarrow$ Brand Image	0.161	1.485	0.138	Rejected
H10	Social Media Marketing Clinics $\rightarrow$ Brand Trust	0.128	0.943	0.346	Rejected

Source: Primary Data 2024

Table 6. Indirect Effects

	Mediation Path	Indirect Effect Coefficient (β)	t-Statistic	p-Value	Decision
H11	Satisfaction $\rightarrow$ Brand Image $\rightarrow$ Commitment	0.057	2.363	0.018	Accepted
H12	Social Media Marketing Clinics $\rightarrow$ Brand Image $\rightarrow$ Commitment	0.031	1.291	0.197	Rejected
H13	Satisfaction $\rightarrow$ Brand Trust $\rightarrow$ Commitment	0.051	2.472	0.014	Accepted
H14	Social Media Marketing Clinics $\rightarrow$ Brand Trust $\rightarrow$ Commitment	0.029	0.856	0.392	Rejected
H15	Satisfaction $\rightarrow$ Brand Image $\rightarrow$ Positive e-WOM	0.020	0.603	0.547	Rejected
H16	Social Media Marketing Clinics $\rightarrow$ Brand Image $\rightarrow$ Positive e-WOM	0.011	0.317	0.751	Rejected
H17	Satisfaction $\rightarrow$ Brand Trust $\rightarrow$ Positive e-WOM	0.031	0.955	0.340	Rejected
H18	Social Media Marketing Clinics $\rightarrow$ Brand Trust $\rightarrow$ Positive e-WOM	0.017	0.514	0.607	Rejected

Source: Primary Data 2024

Based on the analysis, several hypothesized relationships between the variables were tested. Brand Image has a positive and significant effect on Commitment (H1: $\beta = 0.190$, $t = 2.888$, $p = 0.004$, Accepted), but it does not significantly affect Positive e-WOM (H2: $\beta = 0.067$, $t = 0.509$, $p = 0.611$, Rejected). Similarly, Brand Trust significantly influences Commitment (H3: $\beta = 0.226$, $t = 3.326$, $p = 0.001$, Accepted), but has no direct effect on Positive e-WOM (H4: $\beta = 0.137$, $t = 1.020$, $p = 0.308$, Rejected). Satisfaction shows a dominant role in the research model. Satisfaction has a positive and significant effect on Brand Image (H5: $\beta = 0.298$, $t = 3.860$, $p = 0.000$, Accepted), Brand Trust (H6: $\beta = 0.227$, $t = 2.813$, $p = 0.005$, Accepted), Commitment (H7: $\beta = 0.233$, $t = 3.843$, $p = 0.000$, Accepted), and Positive e-WOM (H8: $\beta = 0.307$, $t = 3.498$, $p = 0.001$, Accepted). This confirms that patient satisfaction is a key factor in shaping perceptions, trust, and positive behavioral responses. In contrast, Social Media Marketing Clinics does not have a significant direct effect on Brand Image (H9: $\beta = 0.161$, $t = 1.485$, $p = 0.138$, Rejected) or Brand Trust (H10: $\beta = 0.128$, $t = 0.943$, $p = 0.346$, Rejected). This indicates that social media marketing activities alone may not be sufficient to directly influence brand image and trust, and their effect might operate through mediating variables such as satisfaction or patient experience. The results of the indirect effect (mediation) test show that Brand Image and Brand Trust significantly mediate the effect of Satisfaction on Commitment (H11: $\beta = 0.057$, $t = 2.363$, $p = 0.018$, Accepted; H13: $\beta = 0.051$, $t = 2.472$, $p = 0.014$, Accepted). However, the mediation of these variables on Positive e-WOM is not significant (H15: $\beta = 0.020$, $t = 0.603$, $p = 0.547$, Rejected; H16: $\beta = 0.011$, $t = 0.317$, $p = 0.751$, Rejected; H17: $\beta = 0.031$, $t = 0.955$, $p = 0.340$, Rejected; H18: $\beta = 0.017$, $t = 0.514$, $p = 0.607$, Rejected). These findings suggest that satisfaction enhances Commitment through brand perception and trust, while its effect on Positive e-WOM remains limited.

DISCUSSION

The findings of this study reveal important insights into how social media engagement and satisfaction influence patient perceptions and behaviors in the healthcare context. From the qualitative analysis, distinct engagement patterns were observed across social platforms, with TikTok demonstrating the highest levels of interaction (profile visits, content views, followers, likes, and comments), followed by Instagram and Facebook. This is consistent with recent literature suggesting that visual and interactive content fosters stronger audience engagement, especially among digitally native users (e.g., social media marketing research shows engagement as a key trend in healthcare promotion and brand equity studies) (Badri, 2024; Kim & Lee, 2024; Zhang et al., 2023).

These qualitative insights underscore the importance of content interactivity and audience participation as elements of the Stimulus–Organism–Response (S–O–R) framework. High engagement observed on visually rich platforms like TikTok reflects users' positive psychological responses to digital stimuli (e.g., novelty, entertainment), which sets the foundation for deeper perceptual and behavioral outcomes (Harrigan et al., 2024; Cheung et al., 2024). In the quantitative findings, satisfaction consistently emerged as a strong predictor for multiple outcome variables. Satisfaction significantly influenced Brand Image, Brand Trust, Commitment, and Positive Electronic Word-of-Mouth (e-WOM), confirming the central role of satisfaction in digital healthcare marketing (e.g., satisfaction as a mediator in online interaction models) (Wati dkk., 2025; Alalwan et al., 2023; Rahman & Hossain, 2024). These results indicate that patients who feel satisfied with the content they consume are more likely to form positive perceptions and trust toward the clinic, as well as express positive e-WOM and commitment to the clinic. This aligns with research emphasizing the mediating role of perceptual responses in translating online engagement into behavioral intentions within healthcare settings. Interestingly, the direct effects of Social Media Marketing Clinics on Brand Image and Brand

Trust were not significant in the structural model. An unexpected finding of this study is that social media marketing did not have a significant direct effect on either brand image (H9) or brand trust (H10). This result differs from many previous studies that reported a positive relationship between social media marketing and consumer brand perceptions. A possible explanation is that the effectiveness of social media marketing in healthcare services depends not merely on the existence or frequency of social media activities but on the quality of interactions and patients' experiences with the healthcare provider.

Healthcare services are characterized as high-credence services, in which patients often evaluate providers based on actual service experiences rather than promotional messages alone. Consequently, social media content may increase awareness but is insufficient to directly strengthen brand image or establish brand trust unless patients perceive the information as credible, useful, and consistent with the quality of care they receive. In this context, patient satisfaction appears to play a more central role in shaping favorable brand perceptions than promotional activities on social media.

Another possible explanation relates to the nature of healthcare decision-making. Unlike consumer products, patients generally seek reliable medical information, professional competence, service quality, and recommendations from previous patients before developing trust toward a clinic or small hospital. Therefore, social media marketing functions primarily as an informational and communication channel rather than as a direct determinant of brand trust and brand image. The significant effects of patient satisfaction on both brand image and brand trust found in this study support this argument, indicating that positive service experiences remain the primary driver of favorable brand evaluations.

These findings also suggest that social media marketing alone may not be sufficient to influence patients' perceptions. Instead, healthcare organizations should focus on creating meaningful engagement through educational content, interactive communication, responsive customer service, authentic patient testimonials, and consistent

delivery of high-quality healthcare services. Such strategies are more likely to transform social media exposure into stronger brand image and brand trust, ultimately encouraging positive electronic word-of-mouth and long-term patient commitment.

Overall, this finding contributes to the social media marketing literature by suggesting that social media presence alone does not automatically create favorable brand perceptions in healthcare settings. Instead, its effectiveness depends on meaningful patient engagement and the delivery of satisfactory healthcare experiences. Similar patterns are reported in recent studies where social media marketing impacts visit intention indirectly through mediators such as brand awareness, trust, or perceived value in healthcare contexts (Amanda & Achmadi, 2025). Moreover, while Brand Trust and Brand Image did not show direct significant effects on positive e-WOM in this study, the literature indicates that e-WOM is often mediated by affective and cognitive responses, such as satisfaction and perceived value, which were significant predictors in our model (Luthfi et al., 2025). Research exploring the nexus between social media marketing and e-WOM also highlights how interactivity and trendiness dimensions of social media activities enhance e-WOM formation and patient participation in value co-creation (e.g., participation in online health communities).

Overall, the integration of qualitative engagement patterns and quantitative hypothesis testing confirms that engagement quality and patient satisfaction are critical mediators linking social media marketing efforts to positive patient outcomes. High engagement alone is not sufficient; it is the quality of interaction and resulting satisfaction that translate online activity into stronger brand trust, image, commitment, and positive word-of-mouth, supporting the applicability of the S-O-R framework in healthcare social media marketing research.

CONCLUSION

This study examines the influence of social media marketing activities on patients' visit intentions and behaviors within the healthcare context of Clinic by integrating quantitative and qualitative approaches.

Grounded in the Stimulus–Organism–Response (S–O–R) framework, the findings demonstrate that psychological responses—particularly satisfaction, brand image, and brand trust play a pivotal role in shaping patient commitment and positive electronic word-of-mouth (e-WOM). The quantitative results reveal that satisfaction exerts a strong and consistent influence on brand image, brand trust, commitment, and positive e-WOM, highlighting its central mediating role in the patient decision-making process. Brand image and brand trust significantly affect commitment, but their direct influence on positive e-WOM is not supported. Moreover, social media marketing activities do not directly strengthen brand image or brand trust, indicating that content exposure alone is insufficient to shape patients’ perceptions without meaningful experiential value. These findings are reinforced by qualitative insights, which suggest that patients place greater importance on service quality, credibility, and personal experience than on promotional intensity. Social media content primarily functions as an informational trigger, while actual trust and loyalty are formed through satisfactory healthcare experiences. Overall, this study confirms that effective digital marketing in healthcare must go beyond visibility and engagement metrics, emphasizing experiential satisfaction as the key driver of sustainable patient relationships.

Implications

Theoretical Implications

This study contributes to the literature on digital marketing and healthcare services by empirically validating the S–O–R framework in the context of clinic-based social media marketing. The results extend existing research by demonstrating that satisfaction acts as a dominant organism variable that mediates the relationship between marketing stimuli and behavioral outcomes. Additionally, the non-significant direct effects of social media marketing on brand image and brand trust challenge assumptions in prior studies that digital presence alone can directly enhance brand-related perceptions, particularly in high-involvement and high-risk services such as healthcare.

Managerial Implications

For healthcare practitioners and clinic managers, the findings emphasize the need to align social media strategies with service quality and patient experience. Rather than focusing solely on content frequency, clinics should prioritize informative, credible, and educational content that reinforces patients’ real experiences. Testimonials, transparent information, and service-related storytelling can strengthen satisfaction-driven trust and commitment. Furthermore, social media should be positioned as a supporting communication channel that complements offline service delivery, rather than as a standalone branding tool.

Practical Implications

Practically, clinics are encouraged to integrate digital marketing efforts with continuous service improvement initiatives. Monitoring patient satisfaction, responding to feedback, and ensuring consistency between online messages and offline services are essential to fostering long-term patient loyalty and encouraging positive e-WOM. By focusing on experience-driven content and patient-centered communication, healthcare providers can enhance the effectiveness of social media marketing in influencing patient visitation behavior.

c. Limitations

Despite its contributions, this study has several limitations that should be acknowledged. First, the research focuses on a single primary healthcare clinic, which may limit the generalizability of the findings to other healthcare settings such as hospitals, specialty clinics, or healthcare providers in different regions. Patient behavior and responses to social media marketing may vary depending on institutional scale, service complexity, and demographic characteristics. Second, the quantitative data were collected using a cross-sectional design, which restricts the ability to capture changes in patient perceptions and behaviors over time. Social media engagement and patient visit behavior are dynamic processes that may evolve as digital strategies, algorithms, and patient expectations change. Third, this study relies on self-reported data, which may be subject to response bias, recall bias, or social desirability

effects. Although procedural steps were taken to ensure data quality, respondents' perceptions may not fully reflect their actual behavior. Additionally, the qualitative findings were derived from secondary data and descriptive analysis, which limits deeper exploration of patients' underlying motivations and emotions. Finally, the measurement of social media marketing activities focused on general exposure and perceived intensity, without differentiating between specific content types (e.g., educational, promotional, testimonial) or platform-specific features, which may influence patient responses differently.

SUGGESTION

Future studies are encouraged to extend this research in several ways. First, comparative studies across multiple clinics or healthcare institutions are recommended to enhance external validity and provide broader insights into digital marketing effectiveness in healthcare services. Second, longitudinal research designs could be employed to examine how patient perceptions, satisfaction, and behavioral intentions evolve over time, particularly in response to sustained social media strategies or service improvements. Third, future research may incorporate objective behavioral data, such as actual visit records or digital analytics, to complement self-reported measures and reduce potential bias. Integrating experimental or quasi-experimental approaches may also help establish stronger causal inferences. Fourth, qualitative research using in-depth interviews or focus group discussions could be conducted to explore patients' cognitive and emotional processes in greater detail, particularly regarding trust formation and decision-making in healthcare contexts. Lastly, future studies should consider platform-specific and content-based analyses by distinguishing between different types of social media content and engagement mechanisms. Examining moderating variables such as perceived risk, health involvement, or digital literacy may further enrich understanding of how social media marketing influences patient behavior within the Stimulus–Organism–Response (S–O–R) framework.

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