

DOI: 10.5281/zenodo.122.126104

SOCIAL MEDIA FOR HEALTHCARE COMMUNICATION AND PR PURPOSES AMONG THE MEDICAL PRACTITIONERS: THE MEDIATING ROLE OF ARTIFICIAL INTELLIGENCE

Faycal Farhi¹, Riadh Jeljeli², Samira Setoutah³, Khaled Zamoum⁴, Mohamed Mallek⁵,
Merhan Mohsen Mohammed⁶

¹Department of Communication, College of Arts, Humanities and Social Sciences, University of Al Dhaid,
Sharjah, ffarhi@uodh.ac.ae, <https://orcid.org/0000-0003-2738-6970>

²Associate Professor, College of Arts, Humanities and Social Sciences, University of kalba, Sharjah, UAE,
riadh.jeljeli@ukb.ac.ae

³Associate professor, College of Arts, Humanities and Social Sciences University of Al Dhaid, Sharjah, UAE,
ssetoutah@uodh.ac.ae

⁴Associate professor, College of Communication, University of Sharjah, Sharjah,UAE,
Kzamoum@sharjah.ac.ae

⁵University of khorfakkan, College of Arts, Humanities and Social Sciences, Sharjah, United Arab Emirates,
mohamed.mallek@ukf.ac.ae⁵,

⁶Assistant Professor Department of Communication and Multimedia, University College of Bahrain,
memohammed@ucb.edu.bh⁶

Received: 07/11/2025

Accepted: 22/11/2025

Corresponding Author: Faycal Farhi
(ffarhi@uodh.ac.ae)

ABSTRACT

Today, in creating and sustaining online communication between healthcare services and the public, factors like Public Relations (PR) play a significant role. Additionally, Artificial Intelligence in the healthcare Public Relations as an important method to ensure accessibility to healthcare facilities, particularly in the United Arab Emirates. Supported by the Media Richness Theory, this research also focuses on Online Healthcare Communication that is further accompanied by AI adoption in the healthcare PR. The researchers proposed a conceptual model and executed Structural Equation Modelling for data analysis. Data gathered from n= 244 PR practitioners in the Healthcare Sector indicated their greater reliance on social media to build trust and gather Feedback from potential patients. Artificial Intelligence is also found to mediate trust and feedback by facilitating online healthcare communication. Overall, healthcare P.R.P.R. greatly facilitates healthcare services through online platforms leading to improved healthcare services in the U.A.E. The researchers concluded that Social Media for healthcare Public Relations is widely preferred today. As better services themselves guarantee improved P.R.P.R., using online communication mediated by social media platforms further enhances their quality. Finally, study implications and recommendations for future research are discussed accordingly.

KEYWORDS: Artificial Intelligence; Healthcare; Public Relations; Social Media; Feedback.

1. INTRODUCTION

Social media usage for healthcare purposes is increasing and getting higher acceptance. People preferring social media for healthcare purposes involve public members, healthcare practitioners, patients, and healthcare organizations (Huo *et al.*, 2019). According to Salleh and Moghavvemi (2016), there are several uses of social media for Healthcare, depending mainly on the purposes and requirements of the users. These requirements especially involve facilitating communication between healthcare professionals and patients, providing answers to queries regarding healthcare concerns, collecting data about patients' opinions and experiences, promoting health awareness, supporting disease prevention initiatives, enabling teleconsultations, and reducing healthcare-related stigma, as well as online consultation. Additionally, social media enables real-time updates on health emergencies and facilitates preventive healthcare campaigns, which are crucial in regions with high patient volumes. Plunkett (2021) argues that, within a few years, these uses will advance and expand, providing even more opportunities to use social media for healthcare communication. According to Afful-Dadzie *et al.* (2021), social media offers several benefits for healthcare communication purposes, *i.e.*, more tailored information, increased interactions, widening access, and increased social support.

As both patients and healthcare practitioners widely use social media, the healthcare sector and organizations must keep their services updated. Besides, healthcare staff should stay in touch with the online platforms as Healthcare is more than merely doctor-patient interaction. Srimarut and Techasatian (2019) recommend that healthcare organizations use social media but for specific purposes and activities that may magnify the importance of social media for healthcare purposes. Regardless of the nature and size of the healthcare organizations, staying in touch with the patients and frequent communication about the Healthcare is the need of the day. As Huo *et al.* (2019) stated, the key message of ever-increasing healthcare communication is that social media, along with conventional methods, is an important pathway to facilitate communication between patients, healthcare organizations, practitioners, and other staff members. Besides, social media provides a cost-effective channel for health promotion, especially in developing countries where traditional campaigns may be resource-intensive. As the health issues are prevailing, instant access to health care information and facilities is significant in resolving these concerns in a better possible manner.

Similarly, to create and sustain online communication between healthcare services and the public, factors like Public Relations (P.R.P.R.) play a significant role. In this regard, Elrod and Fortenberry (2020) call the relevant phenomenon "healthcare P.R.P.R.," which plays a constructive role in educating, fostering community, spreading awareness, building trust, and providing solutions to the problems concerning Healthcare (Nwodoh *et al.*, 2019). Also, online healthcare P.R.P.R. is bridging the gap between healthcare services and the public (Saleh Alkhayyal Alteneiji, 2021). According to Salleh and Moghavvemi (2016), across the healthcare sector, P.R.P.R. practitioners have strong skills in promoting online healthcare services and products that are accompanied by increased accessibility, ensuring positive outcomes for the patients. Effective healthcare P.R.P.R. can also influence patient behaviour, such as adherence to vaccination schedules or preventive screenings, which ultimately improves population health.

However, today when Healthcare and P.R.P.R. are merged into a single concept, evolving technology is adding more to enhance the scope, providing more public-centric approaches. Here, (Manne & Kantheti, 2021) cited an example of Artificial Intelligence in the healthcare Public Relations as an important method to ensure accessibility to healthcare facilities. For example, in the United Arab Emirates, Artificial Intelligence (A.I.A.I.) is widely embraced by the petroleum and telecommunication sector. But in the healthcare sector, P.R.P.R. through Artificial Intelligence has a separate scope, especially regarding healthcare education and online consultation reservation. Also, recommending the most relevant medical practitioners, providing important details about them, and also suggesting the most relevant pharmacy services are also done by the AI-enabled healthcare P.R.P.R. system in the U.A.E. (Chen & Wang, 2021). As noted by Matheny *et al.* (2018), Artificial Intelligence in Healthcare P.R.P.R. simplifies the life of healthcare practitioners, patients, and hospital administrators that are conventionally done by the human force. However, A.I.A.I. facilitated these relevant operations through less fraction of cost and period. Furthermore, AI reduces human error in administrative tasks and can improve response times for patient queries, enhancing overall trust in healthcare services.

Thus, this research also assesses the aforementioned adoption of A.I.A.I. in Healthcare P.R.P.R. Specifically, it investigates how AI mediates trust, feedback, and the effectiveness of online

healthcare communication. The researchers narrowed down this research scope to the Emirati region due to limited resources and time. Notably, the researchers have divided this study to examine the said phenomenon both empirically and systematically. In this context, the first section contains a brief discussion about the topic and problem of the study. Accompanied by the supportive literature, the second section highlights the study hypotheses. The third section involves the theoretical framework providing support to the conceptual Model. The fourth section is based on discussing the methods applied in the current research. The fifth section contains data analysis and results. Finally, the sixth section discusses the results, conclusion, and study limitations.

1.1. Study Background

The integration of advanced technologies, particularly Artificial Intelligence (AI) and telemedicine, has significantly transformed healthcare delivery by improving patient-centered care, enhancing accessibility, and strengthening patient-provider relationships. The successful adoption and use of these technologies rely on a variety of contextual factors, especially in distinctive healthcare systems, such as that of the United Arab Emirates (UAE) (Alkaabi & ElSORI, 2025). Developing a world-class healthcare system is a strategic priority for the UAE and constitutes one of the six pillars of its national agenda, Vision 2021. The sector has expanded rapidly to meet the growing population's needs, address the high prevalence of chronic diseases, and support the country's ambition to become a regional hub for medical tourism. This growth has been accompanied by the development of specialized healthcare capabilities aimed at reducing the number of patients seeking complex and costly treatments abroad.

To support this vision, the UAE has implemented a range of advanced medical technologies. These include telemedicine services, the digitization of health records, interconnected medical devices, and 3D printing solutions, often in partnership with leading global companies, particularly from the United States. The COVID-19 pandemic further accelerated the adoption of these technologies, creating opportunities for collaboration and highlighting the potential of telemedicine and remote patient monitoring. For instance, the use of smart wearable devices, such as wristbands, has allowed health authorities to monitor patients with mild symptoms at home, reducing the burden on hospitals while ensuring continuous care (Alzaabi & Hasan,

2022). The UAE has also prioritized the development of the Internet of Medical Things (IoMT), which connects medical devices and software applications to streamline healthcare services with minimal human intervention. This technology is efficient in managing chronic diseases, which are highly prevalent in the UAE, and in supporting remote patient monitoring. The pandemic has highlighted the utility of IoMT, reinforcing its importance in modern healthcare delivery and shaping the UAE's preparedness for future health crises (UAE Business Council Report, 2024).

From an economic perspective, the UAE's healthcare sector is poised for significant growth. Research predicts a compound annual growth rate of approximately 10% between 2019 and 2023, with healthcare spending expected to rise to 5.1% of GDP by 2029, up from 3.7% in 2019. This trend suggests a strong prospect for MedTech expansion, highlighting the country's focus on preventive healthcare, cost reduction, and the elimination of unnecessary medical procedures (El Khatib et al., 2022). The UAE's experience with managing COVID-19 is likely to have a lasting impact on the healthcare system, accelerating investments in telemedicine, electronic medical records, and other innovative medical technologies. To sustain the growth of the MedTech sector, continued attention to data privacy and regulatory frameworks is important, as these factors influence international investment and collaboration. Besides, healthcare and medical technology should remain a central focus in ongoing U.S.-UAE economic policy dialogues, facilitating partnerships that bring state-of-the-art medical solutions to the UAE. Therefore, these developments highlight the UAE as a strategic and forward-looking healthcare environment, providing a robust foundation for examining the role of AI and social media in healthcare communication, public relations, and patient-centered care (UAE Business Council Report, 2024).

1.2. Study Significance

This study is significant because it provides a more in-depth understanding of how social media and Artificial Intelligence (AI) can be used to improve healthcare communication and Public Relations practices. With the increasing use of digital platforms, healthcare organizations must find effective ways to engage with patients, provide timely information, and establish trust. This research highlights how technology can improve patient feedback collection, streamline communication, and increase the accessibility of healthcare services by

analyzing the mediating role of AI. The study also addresses a gap in existing literature by focusing on the healthcare sector in the United Arab Emirates, where the adoption of AI in Public Relations is still emerging. The findings can help healthcare organizations develop more effective online communication strategies, enhance patient satisfaction, and foster stronger relationships between healthcare providers and the public. Additionally, the research offers practical insights for policymakers, hospital administrators, and PR professionals on the benefits of integrating social media and AI for healthcare applications. Hence, this study contributes to improving healthcare quality, accessibility, and patient-centered services.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Trust And Feedback For The Healthcare Sector

Trust is a critical component of a successful healthcare facility. It is essential for healthcare practitioners, patients, and healthcare organizations. Without trust, medical practitioners and patients may be unable to communicate, share concerns, and provide better solutions to healthcare issues. Besides, trust is important for a relevant organization to offer its services at every doorstep (Sutherland et al., 2021). As noted Foundation (2021), without trust, even a minor prescribed treatment such as an antibiotic would be uncertain for a patient. Besides, from the therapeutic perspective, trust is of greater significance than it also increases the efficacy of the prescribed treatment. Al-Jabr et al. (2018) further argued that patients who trust their doctors are more likely to recover. Existing literature investigated the importance of trust according to patients' perspectives also indicates trust as an important factor motivating patients to depend on the relevant healthcare practitioners and organizations. A study by Wong et al. (2020) further validated the relationship between Healthcare and trust. The researchers used a literature review approach and found that trust in healthcare services is of greater significance across both public and private healthcare services. Further, factors like quality of services, practitioners' expertise, and healthcare cost also mediated the relationship between Healthcare and trust. Patients' Feedback provides an important opportunity to determine their requirements and their general opinion about the services from the healthcare providers. As noted by Plunkett (2021), examining the patient's Feedback is about which

services are going well and which need modifications. Thus, healthcare providers must communicate effectively with the patients and adapt their communication patterns to meet their demands. Especially today, when online communication in healthcare services is widely common, actively listening to the patients, determining their requirements, providing according to their needs, and attaining their opinion about the quality of services and overall satisfaction, is of greater importance (Gowda et al., 2020).

H1a: Healthcare sector has a significant impact on trust

H1b: Healthcare sector has a significant impact on Feedback

2.2. Healthcare Public Relations (P.R.P.R.)

Healthcare Public Relations or medical Public Relations are simply using communication for healthcare purposes. These communication purposes mainly involve press releases, traditional media platforms, and social media accounts to bridge the gap between healthcare providers and patients (Tomic et al., 2018). According to Nwodoh et al. (2019), healthcare Public Relations can also be considered a pathway to spread strategic messages between healthcare management and the general public. However, despite healthcare Public Relations being a subfield of public health and P.R.P.R., it also confronts some challenges and requires unique expertise. One of the prominent features of healthcare Public Relations is that it has a direct and prolonged effect on public behaviors. In other words, spreading awareness, suggesting effective healthcare solutions, and educating people about the importance of physical and psychological health are included in healthcare Public Relations (Nnabuko & Onyiaji, 2021). Here Alteneiji (2021) cited an example of healthcare Public Relations during the Covid-19 pandemic in the middle eastern region when healthcare service providers mainly resorted to online platforms to spread awareness about the pandemic and measures to halt the virus outbreak. As a result, people not only adopted these measures but also rushed to mass vaccination programs, leading to a prominent decrease in the infection outbreak.

H2: Healthcare sector has a significant impact on Public Relations

2.3. Trust And Feedback In Public Relations (P.R.P.R.):

According to Zeqiri (2021), trust is an important factor in Public Relations practices as there is no point

in conveying a message when the people do not trust the communicator. For this purpose, trust should be accelerated by merging credibility with reliability by the Public Relations practitioners. As noted by Gara and La Porte (2020), credibility and reliability are strongly associated with trust. These concepts further contain competence, empathy, and honesty, which are core components of successful Public Relations practices. For instance, trust is important to create and sustain good relationships between healthcare providers and patients. Notably, Public Relations in the healthcare sector widely acknowledge the importance of two-way benefits, but their approaches vary. However, these approaches are solely goal-oriented and support common health and wellbeing.

Similarly, Feedback on the metrics also helps determine the extent to which the public likes an organization and its services. Besides, it also helps to know the overall impact of the message and how people perceive it (Moreno et al., 2021). Feedback also enables assessing the opinion to improve the services. For example, during the Covid-19 outbreak, healthcare Public Relations campaigns were assigned tasks to convince the public of vaccination acceptance. These PR professionals are contacted through different online campaigns involving opinion leaders such as celebrities, athletes, politicians, and others from across the globe. As a result, a massive positive response was recorded, leading others to consider vaccination a safe passage to immunization (Mohamed & Devaraj, 2020). One of the prominent advantages of Feedback in Public Relations is that the observations can be made during a designated period. When PR professionals gather the needed data, they can assess it, generate results, and thus make relevant conclusions (Lee & Li, 2021).

H3a: Public Relations sector has a significant impact on trust

H3b: Public Relations sector has a significant impact on Feedback

2.4. Trust In Online Healthcare Communication:

Much literature has always focused on public trust in healthcare services. However, this trust-building and uncertainty reduction process have adopted new approaches. For instance, using online platforms for communication purposes is a general concept. On the other hand, online healthcare communication further provides insight regarding the importance of the online presence and usability of healthcare communication for both organizations and the general public (Hyland-Wood et al., 2021). Here, Chen et al. (2016) further argued that the

significance of trust could be determined by the fact that it is a default initiating point for the healthcare issues and a moral duty of the healthcare providers. According to Peng et al. (2020), a lack of communication between patients and healthcare providers create certain uncertainties among the public. However, the contemporary patterns of online communication not only alleviate these uncertainties but also ensure healthcare facilities are at their doorstep. Chua and Banerjee (2018) further suggested that developing a more reciprocal and balanced understanding between the healthcare providers and patients is important to enhance the healthcare services. Accompanied by the ease of use and increased accessibility, social media platforms provide direct access to healthcare services, enabling interaction between healthcare practitioners and patients.

Moreover, these online platforms also help spread awareness and education about the diseases, their symptoms, and possible treatments (Asan et al., 2021). To further validated this, Sousa-Duarte et al. (2020) cited an example of the role of social media during polio epidemics in Pakistan. As noted, both Public and Private healthcare organizations consider social media as an important career of information and communication and information between the healthcare services providers and the public. Online platforms inform people about the severity of the issue and spread awareness about the importance of vaccination programs to counteract the epidemic. Consequently, people changed their behaviors and adopted measures to counteract the relevant epidemic (Ganatra & Patel, 2018).

H4: Trust has a significant impact on online healthcare communication

2.5. Feedback In Online Healthcare Communication:

According to W and Sing (2018), patient experiences are an important determinant of healthcare quality. Existing literature on poor healthcare services indicates a decreased interest and, therefore, a reduced consideration by the public. As a result, healthcare organizations widely resort to fast and reliable resources to gather timely patient feedback through their social media platforms. As noted by (Jug et al., 2019), online Feedback tends to support patient-centered, actively responsive healthcare services that fulfill the patients' needs if used well. Once the healthcare sector recognizes the importance of Feedback, they carefully gather and interpret them to modify their services. As noted by Baines et al. (2018), one thing we have learned during

the current technological era is that adopting digitalization and collecting Feedback is the need of the hour. Also, the data collected from the patients can become handy and may help to provide insights to alter or maintain the services. Further, if we recognize the overall significance of collecting patient feedback data, it can also facilitate us in concluding. Gowda et al. (2020) further argued that Feedback through online healthcare communication also helps improve the overall reputation of the services. In this regard, getting online Feedback for healthcare purposes is different than ordinarily getting reviews. This Feedback, as mentioned earlier, helps in a multifaceted way, further ensuring equal healthcare services for all.

H5: Feedback has a significant impact on online healthcare communication

2.6. Artificial Intelligence In Online Healthcare Communication:

Using Artificial Intelligence in the healthcare sector has a prospective ability to serve healthcare practitioners and patients at many levels. For example, Artificial Intelligence can help practitioners suggest the most relevant treatment for the patients. Besides, it can also help in disease diagnosis on a fundamental level (Matheny et al., 2018). On the other hand, Artificial Intelligence also allows the patients to choose the most suitable and relevant healthcare practitioner, find the best matching pharmaceutical company, and select a good quality healthcare service provider (Secinaro et al., 2021). According to Chen and Decary (2020), mostly healthcare technologies and Artificial Intelligence have potential relevance to the healthcare field. Yet, their adopted tactics may vary based on their organizations and policies. Some studies also assert that Artificial Intelligence in Healthcare can perform better than humans, such as disease diagnosis, as many cases have witnessed its role in different cases and regions. Further, regarding the applicability and the role of Artificial Intelligence in Healthcare, (Puaschunder, 2020) argues that machine learning is one of the best approaches. It is one of the core techniques of Artificial Intelligence, having different versions for healthcare purposes.

Manne and Kantheti (2021) cited another example of deep learning in Healthcare. As noted, Artificial Intelligence in Healthcare uses Deep learning prefers using speech recognition as Natural Language Processing (N.L.P.). However, compared to machine learning, deep learning has complex meanings for human observers, indicating challenges regarding the interpretation of the results. (Isaacs, 2020a) in

their review study further highlighted the importance of Artificial Intelligence in Healthcare. As stated, Artificial Intelligence can diagnose a disease comparatively faster than humans. The AI-based approaches the healthcare sector is adopting further determine their relevance and suitability for the patients' health. Further validated by Manne and Kantheti (2021) as noted that using Artificial Intelligence as a tool for improved Healthcare provides an unprecedented opportunity to improve healthcare and patient experiences and reduce costs. Examples involve but are not limited to automation, providing the patients with suitable caregivers, healthcare practitioners' synthesis, recommendations, and information synthesis for the shared decision-making process.

H6a: Artificial Intelligence mediates the relationship between trust and online healthcare communication

H6b: Artificial Intelligence mediates the relationship between Feedback and online healthcare communication

2.7. Media Richness In The Age Of Social Media And Artificial Intelligence (AI)

The conceptual framework of the current research is grounded in Media Richness Theory (MRT), proposed by Daft and Lengel, which asserts that communication media vary in their ability to convey information effectively. The richness of a medium depends on its capacity to handle multiple information cues, provide timely feedback, and facilitate personal interaction, which becomes particularly critical during uncertain or high-stakes situations, such as healthcare crises (Bergin, 2016). Media Richness Theory has been widely applied to both traditional and emerging digital platforms, offering a lens through which to evaluate the suitability of communication channels for different purposes (Salleh & Moghavvemi, 2016). Healthcare communication is inherently complex and accompanied by uncertainties. Patients require accurate, accessible, and context-sensitive information from healthcare professionals to make informed decisions (Sousa-Duarte et al., 2020). Online healthcare platforms, particularly social media and AI-enabled systems, are increasingly seen as avenues to satisfy these needs. Such platforms, when designed with attention to ease of use and meaningful feedback mechanisms, can align with patients' informational and emotional requirements (Nwodoh et al., 2019). In this context, Trust and Feedback emerge as crucial components under Media Richness Theory, as they allow healthcare

organizations to reduce uncertainties and foster sustained online interactions (Srimarut & Techasatian, 2019).

Expanding MRT to the current research, the theoretical model emphasizes how health information and communication technologies (HICTs), including AI-enabled online platforms, can align the communication medium with the content to improve patient engagement. Traditional offline consultations are often limited in depth due to time constraints and high patient volume, which may reduce patient trust and lead to tension in physician-patient relationships (Wang et al., 2017; Wei et al., 2020). Online platforms provide opportunities to rebuild trust by enabling more flexible, timely, and continuous interaction. However, online communication introduces new challenges: reduced social presence, asynchronous interactions, and reliance on patient-reported symptoms, which may hinder trust development and affect the quality of the physician-patient relationship (Li et al., 2018; Zhang et al., 2019). Media Richness Theory critically addresses these challenges by suggesting that different communication formats, text, voice, or combined text and voice—offer varying degrees of richness and social presence. Richer media can provide more immediate feedback, nuanced cues, and a greater sense of presence, which in turn enhances communication efficiency and strengthens trust between patients and healthcare providers (Mandal & McQueen, 2013). The selection of an appropriate media channel, therefore, becomes a strategic decision in online healthcare PR, ensuring that messages are effectively delivered and patients feel adequately supported. In the context of Artificial Intelligence in healthcare Public Relations (A.I.A.I.), AI-enabled platforms can further optimize media richness by personalizing interactions, providing real-time responses, and analysing patient feedback to improve communication outcomes (Liu et al., 2022). This aligns with the theoretical model of the current research, which posits that the alignment between technology, message, and media richness

directly affects patient trust, feedback, and engagement in online healthcare communication. By incorporating MRT into the study, this research not only highlights the importance of selecting rich media for healthcare interactions but also emphasizes the role of AI in mediating these interactions to enhance trust, satisfaction, and effective health communication. Figure 1 illustrates the conceptual framework of current research study.

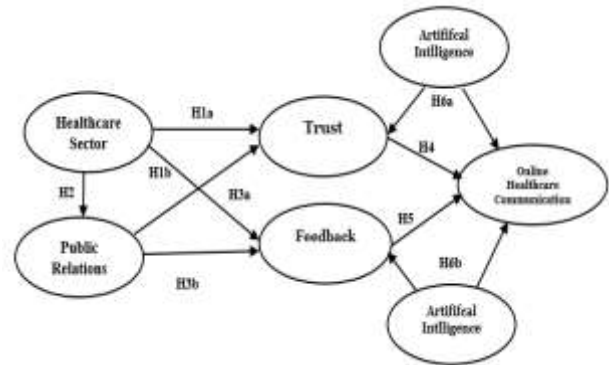


Figure 1: Conceptual Model.

3. METHODOLOGY

3.1. Study Design

The current research is based on a cross-sectional nature. According to (Macnamara, 2016), cross-sectional are important as they enable data collection from several participants at a single point in time. Further, the researchers adopted a survey approach designed on a five-point Likert scale. According to Ahmad et al. (2019) survey method is mainly preferred as it enables data gathering directly from the respondents having first-hand experience of a relevant phenomenon. Table 1 summarizes the sources, and items of data gathering tool. After data gathering, the researchers coded and manipulated the data for statistical analysis. Here, both Statistical Package for Social Sciences and I.B.M. Amos were used according to the nature and design of the study (Krosnick, 1999).

Table 1: Sources Of Research Survey Items.

S/R	Variables	Source	Items
1.	Social Media Healthcare	(Afful-Dadzie et al., 2021; Huo et al., 2019a)	The hospital/healthcare organization ensures high-quality patient services.
			The healthcare sector provides easy access to medical care for patients.
			Healthcare services in my organization are responsive to patients' needs.
2.	Healthcare and PR	(Elrod & Fortenberry, 2020; Nwodoh et al., 2019b; Tomic et al., 2011)	The healthcare organization effectively uses social media for public communication.

			Public Relations campaigns improve patient awareness about healthcare services.
			PR activities in the healthcare sector help in building community trust.
3.	Artificial Intelligence in Healthcare Sector	(Isaacs, 2020b; Manne & Kantheti, 2021; Matheny et al., 2018)	I trust the healthcare organization to provide accurate information online.
			I believe healthcare professionals provide reliable guidance and recommendations.
			I feel confident in sharing my personal health information with the healthcare organization.
4.	Trust and Equivocality	(Bergin, 2016; Salleh & Moghavvemi, 2016a)	The healthcare organization actively seeks patient feedback online.
			Feedback from patients is considered for improving healthcare services.
			I feel my opinions about healthcare services are valued.

3.2. Sampling Approach

The population of the current investigation involves Public Relations practitioners from public sector hospitals currently working in the United Arab Emirates. However, the researchers randomly selected a sample of $n=250$ PR practitioners. Notably, selecting the relevant sample size was suitable, as according to Ahmed (2009), studies based on structural equation modeling should contain a minimum sample size of $n=200$ participants to ensure their generalizability. Moreover, as the researchers used self-administered questionnaires, they applied a convenience sampling technique for the participants' selection purposes, as suggested by Apuke (2017). For this reason, the researchers first approached the relevant hospitals and acquired permission from their administrators as an important consideration. Notably, the selected sample size of 250 ensures sufficient statistical power for structural equation modeling and provides a practical yet representative overview of PR practitioners across public hospitals in the UAE, even without knowing the exact total population size. Thus, after the data gathering, the researchers carefully checked and finalized $n=244$ questionnaires as $n=6$ were incompletely filled or missing, suggesting the response rate of 97.6%.

3.3. Research Ethics

According to Brown (2016), informed consent is one of the most preferred research ethics. It involves providing the participants with primary information about the research process. Thus, the researchers also provided the participants with informed consent,

mainly involving information about the research problem, its purposes, and the potential generalizability of results. Participants were also ensured that their data would be kept safe and not used for commercial purposes. Finally, the researchers also informed the participants that they could quit responding whenever they wanted without further questions or obligations.

4. DATA ANALYSIS

4.1. Convergent Validity Analysis

In the first step of data analysis, the researchers examined the convergent validity of the measurement model. As noted by Samuels (2016), convergent validity help to ensure the internal consistency of the research items facilitating the further pathway to the structural model analysis. Thus, for the convergent validity, the researchers examined Factor Loadings, Average Variance Extracted, Cronbach Alpha, and Composite Reliability. First, the Factor Loadings values analysis revealed that most of the relevant values surpass the threshold value of 0.5. Besides, all the Average Variance Extracted Values (AVE) also range from .860 to .954, which are also greater than the designated threshold value of 0.5.

Similarly, calculating the Cronbach Alpha values revealed that they range from .754 to .811, and the Composite Reliability value ranges from .717 to .905. Both Cronbach Alpha and Composite Reliability values surpass the threshold value of 0.7. Thus, it is found that the convergent validity of the measurement is successfully established. Table 2 summarizes the findings of convergent validity analysis:

Table 1: Convergent Validity of Measurement Model.

Variables	Items	FL	AVE	CA	CR
-----------	-------	----	-----	----	----

Healthcare Sector	HCS1	0.810	0.860	.754	.781
	HCS2	0.764			
	HCS3	0.910			
Public Relations	PR1	0.915	0.954	.773	.905
	PR2	0.994			
	PR3	0.781			
Trust	TST1	0.878	0.878	.811	.722
	TST2	0.879			
	TST3	0.098			
Feedback	FBK1	0.996	0.906	.794	.802
	FBK2	0.817			
	FBK3	0.718			
Artificial Intelligence	AI1	0.918	0.875	.803	.717
	AI2	-0.061			
	AI3	0.833			
Online Healthcare Communication	OHC1	-0.060	0.863	.762	.813
	OHC2	0.911			
	OCH3	0.810			

4.2. Goodness of Fit

According to Gu et al. (2019), Goodness of Fit, also known as Model Fit, is a critical measure to determine how well the observed data aligns with the hypothesized model. In the current study, the measurement model demonstrated an excellent fit across multiple indices. The chi-square value ($X^2 = 0.440$) is well below the recommended threshold of 3.0, indicating a strong alignment between the model and observed data. The probability value ($p = 0.000$) further confirms the statistical significance of the model fit. Also, the Fit Index ($FI = 2.56$) exceeds the minimum recommended value of 1.0, suggesting that the model provides a good representation of the observed relationships (Hooper et al., 2008). The Standardized Root Mean Square Residual ($SRMR = 0.651$) is also below the threshold of 0.85, demonstrating a very low residual error and excellent fit (Hooper et al., 2008). Considering these indices, the Comparative Fit Index ($CFI = 0.92$) and Tucker-Lewis Index ($TLI = 0.91$) both exceed the commonly accepted benchmark of 0.90, indicating a good fit (Hu & Bentler, 1999). Finally, the Root Mean Square Error of Approximation ($RMSEA = 0.068$) remains below the 0.08 threshold, suggesting acceptable approximation error. Taken together, all indices confirm that the measurement model shows an excellent overall fit, supporting the reliability and validity of the proposed conceptual framework.. Table 2 summarizes the results of goodness of fit.

Table 2: Goodness Of Fit Indexes.

Fit Index	Value	Threshold	Interpretation
Chi-Square (X^2)	0.440	< 3.0	Excellent fit; well below threshold
Probability Value (p)	0.000	$p < 0.05$	Statistically significant;

			confirms model fit
Fit Index (FI)	2.56	> 1.0	Good fit; exceeds minimum requirement
Standardized Root Mean Square Residual (SRMR)	0.651	< 0.85	Excellent fit; value is below threshold
Comparative Fit Index (CFI)	0.92	> 0.90	Very good fit; meets recommended criteria
Tucker-Lewis Index (TLI)	0.91	> 0.90	Very good fit; meets recommended criteria
Root Mean Square Error of Approximation (RMSEA)	0.068	< 0.08	Good fit; below threshold indicating acceptable error

4.3. Discriminant Validity

In the second step of examining the internal consistency of the measurement model, the researchers examined the discriminant validity. According to Zumbo (2005), criteria are important to test the discriminant validity of the measurement model, including the Heterotrait-Monotrait Ratio and the Fornell-Larcker criterion. First, regarding the Fornel-Larcker criterion, the square of all the Average Vraince Extracted values is greater than the correlation values (See Table 3). Besides, the calculation of the Heterotrait-Monotrait Ratio revealed the H.T.M.T. value of -1.39 (See Table 4) that is smaller than the threshold value of 0.9, as suggested by Weston and Gore (2006). Thus, the discriminant validity of the measurement model is also affirmed.

Table 3: Fornel-Larcker Criterion.

	H.C.S.	PR	TEST	FBK	AI	OHC
HCS	.739					
P.R.P.R.	-.875	.910				
TEST	.054	-.021	.770			
FBK	-.750	.678	.228	.820		
AI	-.422	.354	-.393	-.260	.765	
O.H.C.	.281	-.238	-.538	-.269	-.043	.739

Table 4: Hetesssrotrait-Monotrait Ratio.

	H.C.S.	PR	TEST	FBK	AI	OHC
HCS						
PR	.186					
TEST	-.065	-.063				
F.B.K.	.934	-.124	-.036			
AI	.911	-.117	.097	.954		
O.H.C.	-.062	-.055	.596	.005	.064	

4.4. Coefficients Of Determination R2

After affirming the internal consistency of the measurement model, the researchers examined the structural Model. For this purpose, first, they conducted the Coefficients of Determination R2 to assess the predictive power of latent variables (Dufour, 2011). In this regard, the R2 values range from .455 to .762, indicating a fundamental/ strong predictive power of the latent variables. Table 5 summarizes the results of Coefficients of Determination R2:

Table 5: Coefficients of Determination R2.

S/R	Variables	R ²
1.	Healthcare Sector	.762
2.	Public Relations	.455
3.	Trust	.667
4.	Feedback	.601
5.	Artificial Intelligence	.583

4.5. Hypotheses Testing

The second step of structural model analysis involves path analysis, including regression weights. As noted by Suhr (2016), although path analysis contains regression weights (t and significance values), it provides potential insights regarding the strength of structural relationships proposed in the conceptual model. Thus, in this research, the researchers also conducted a path analysis to examine the relationships between latent variables. First, H1a and H1b proposed a significant impact of the Healthcare Sector on Trust and Feedback. The proposed relationships were in line with the current healthcare strategies, as witnessed by Chen and

Wang (2021). The proposed relationships remained significant with the path values at -.674 and .988 (respectively), with significance values $p > 0.000$ and $p > 0.000$. Further, H2 of the study proposed a significant impact of the Healthcare Sector on Public Relations, assuming P.R.P.R. as an important component of healthcare organizations today Alteneiji (2021). The relevant hypotheses also indicated validation with the path value at .117 and significance value at $p > 0.001$. The next two hypotheses (H3a and H3b) proposed the significant impact of Public Relations with Trust and Feedback, as also scrutinized by (Kaya & Mantar, 2021a; Wong et al., 2020). The relevant hypotheses also got validated as the path values remained at .282 and -.485 ($p > 0.000$ and $p > 0.000$).

Similarly, in the next hypothesis, the researchers proposed a significant impact of Trust (H4) and Feedback (H5) on Online Healthcare Communication, as also investigated by Kaya and Mantar (2021) and Srimarut and Techasatian (2019). First, the impact of Trust on Online Healthcare Communication remained significant, with the path value at .638 and the p-value at $p > 0.000$. Besides, the effect of Feedback on Online Healthcare Communication also remained significant, with the path value at .133 and p-value at $p > 0.003$. Finally, the researchers proposed mediating/ indirect effect of Artificial Intelligence (A.I.A.I.) on the Trust (H6a) and Feedback (H6b), leading to Online Healthcare Communication. The researchers used path analysis and Sobel Test to examine the proposed mediation, as suggested by Wood et al. (2008). In this regard, it is found that Artificial Intelligence is significantly mediating the Trust (H6a) and Feedback (H6b), leading to Online Healthcare Communication with the path values at -.108, -.106 (respectively), and p-values at $p > 0.006$ and $p > 0.000$. Besides, the indirect effect's values are also found as H1a: .390 and H6b: .262 (respectively). Table 5 summarizes the results of hypotheses testing, i.e., path analysis and regression weights.

Table 6: Hypotheses Testing (Path Analysis And Regression Weights).

Hypotheses	Path	t-value	P
Trust<--- Healthcare Sector	-.674	-32.275	.000
Feedback<--- Healthcare Sector	.988	86.693	.000
Public Relations<--- Healthcare Sector	.117	3.240	.001

Trust<---Public Relations	.282	8.556	.000
Feedback<---PublicRelations	-.485	-26.905	.000
Online Healthcare Communication<---Trust	.638	12.588	.000
Online Healthcare Communication<---Feedback	.113	2.965	.003
Hypotheses	Path	Indirect Effects	P
Trust<---Artificial Intelligence <---Online Healthcare Communication	-.106	.390	.006
Feedback<---Artificial Intelligence <---Online Healthcare Communication	-.106	.262	.000

Sectors remained the least influenced variables (M: 3.77 and M: 3.73, respectively).

5. DISCUSSION ON RESULTS

Trust and Feedback are two crucial factors that strengthen the company-client relationships. This trust can be built through constant communication, providing a pathway to access the public, offering them services, gathering their opinion, and improving services accordingly. Media Richness Theory, in terms of Trust and Feedback, provides a strong baseline regarding how mass media platforms, including social media, help people interact, stay connected, and gain insights about the services they want (Gołuchowski et al., 2017). Further consistent with the propositions of media richness theory, respondents also agreed that “the hospital/healthcare organization ensures high-quality patient services,” “the healthcare sector provides easy access to medical care for patients,” and “healthcare services in their organization are responsive to patients’ needs,” reflecting the positive perception of the Healthcare Sector.

Especially talking about healthcare Public Relations, the increased use of online healthcare communication also requires the practitioners and the relevant organizations to imply the responsibility of foresight and precision. As a result, healthcare Public Relations campaigns and messages access the right people, convey the favorable message, and attain the required outcomes through online platforms. However, it is also notable that the healthcare P.R.P.R. professional does not need to be complicated. Instead, adopting general approaches aimed at simplified information through simplified means is the need of the day (Borchert & Heisel, 2022). Participants also indicated that their organization effectively utilizes social media for public communication, and PR campaigns enhance patient awareness of healthcare services. They further revealed that PR activities in the healthcare sector help in building community trust,” presenting the significance of Healthcare and PR in strengthening public communication.

Peng et al. (2020) also witnessed that technology, such as Artificial Intelligence, is another progress in healthcare Public Relations that further enhances public trust and confidence in healthcare services in general. In line with Peng et al.'s (2020) propositions, respondents in the current study, largely agreed that they trust the healthcare organization to provide accurate information online, as healthcare professionals provide reliable guidance and recommendations. According to the respondents,

4.6. Importance Of Performance Map Analysis:

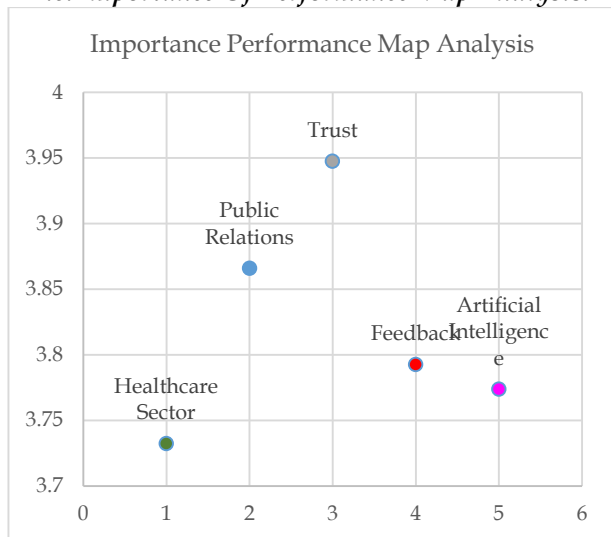


Figure 3: Importance of Performance Map Analysis

According to Aprilia et al. (2022), Importance Performance Map Analysis is an important part of Structural Equation Modelling (S.E.M.), showing the influence of exogenous variables on the endogenous variable(s). IPMA represents the performance of exogenous construct in a two-dimensional map. Thus, in this research, the researchers conducted Importance Performance Map Analysis. As shown in the See Figure 3, trust remained the highest endogenous variable influenced by the exogenous variable with the Mean value at M: 3.94. Besides, followed by Public Relations (M: 3.86), Feedback remained the third most influenced variable (M: 3.79). Finally, Artificial Intelligence and Healthcare

they feel confident in sharing personal health information with the healthcare organization, indicating the positive perception of Artificial Intelligence in Healthcare.

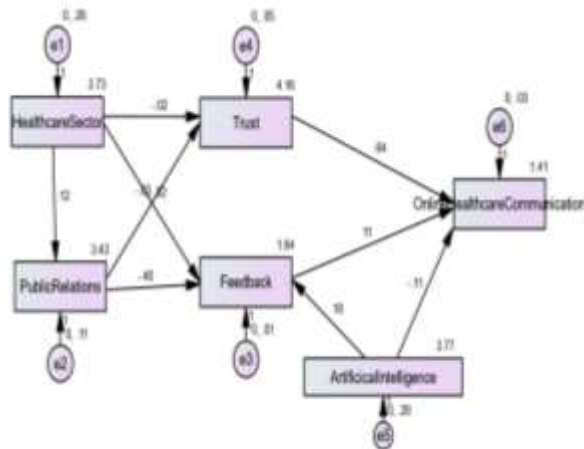


Figure 5: Path Model in Current Study.

Similarly, this research also examined why healthcare Public Relations adopt and implement an ever-improved online technology. Factors like Trust and Feedback provided a pathway to design and examine the potentially significant structural relationship. Accompanied by Artificial Intelligence, the researchers further proposed improved services for the public members in the United Arab Emirates (See Ptah Model labeled as Figure 5). However, proposing a conceptual model was one thing, assessing it with suitable statistical approaches such as Structural Equation Modelling (S.E.M.). Thus, applying the relevant statistical technique revealed that all the hypotheses remained significant as proposed. First, in the H1a and H1b of the study, the researchers proposed significant impacts of the Healthcare Sector on Trust and Feedback. Results revealed a potentially significant impact of the Healthcare Sector on Trust and Feedback with the path values at -0.674 and $.988$ (respectively) and significance values at $p > 0.000$ and $p > 0.000$. Accordingly, respondents agreed that their organization actively seeks patient feedback online as it is considered important for improving healthcare services. Besides, patients' opinions about healthcare services are valued, supporting the role of Trust and Equivocality in enhancing patient engagement.

As Sousa-Duarte et al. (2020) noted, community trust in healthcare services is important for optimal health. Trust, in this context, greatly impacts the decision to attain critical medical care, mental health care, and preventive screenings. Trust between the healthcare providers and patients is also associated

with patients' confidence to share their Feedback regarding services leading to improved experiences, positive healthcare results, and patients' perceptions about the healthcare system. Besides, H2 of the study proposed a significant impact of the Healthcare Sector on Public Relations, assuming that the healthcare sector in the U.A.E. today pays special consideration to adopt Public Relations practices. Findings validated the proposed impact as significant with the path value at $.117$ and significance value at $p > 0.000$. These results align with the arguments proposed by Chen et al. (2016), who consider healthcare P.R.P.R. as the need of the day. Also supported by Shahzad et al. (2021) as they consider Public Relations an important source to spread healthcare awareness and education, especially after the rise of the Covid-19 pandemic.

Further in the H3a and H3b of the study, the researchers assumed a significant impact of Public Relations practices on Trust and Feedback. As Zeqiri (2021) argued, Public Relations practitioners believe in the power of trust-building with their clients. This trust not only facilitates the pathway to increased interaction opportunities but also increases access to their Feedback. Both these factors help understand the clients' requirements and further improve the required goals of the Public Relations activities. Thus, results in the current research revealed a significant impact of Public Relations practices on Trust and Feedback. According to the Healthcare P.R.P.R. respondents, trust is one of the most important considerations in our everyday practices. Through trust-building, we tend to interact and gain insights into the customers' experiences of the healthcare services. Consequently, it further aids us in improving the service quality and also sustaining relationships with them.

Similarly, the H4 of this research proposed a significant impact of Trust on Online Healthcare communication. According to Huo et al. (2019), the patients need to be listened to and provided with potential solutions to their problems. Besides, building their trust in online interaction with healthcare services is another brighter aspect of technology-enhanced healthcare services. Hence, results in current research also validated H4 with the path value at $.638$ ($p > 0.000$), showing the consistency of results with the arguments given by Huo and their colleagues. Additionally, findings also approved the H5 of the current study asserting a significant impact on Feedback on the Online Healthcare Communication with the path value at $.113$ ($p > 0.003$). As noted by Nwodoh et al. (2019), social media platforms give direct access to know what the

patients think of services, also leading to trust-building.

However, the healthcare sector should start professional courses and Training programs for the workers to magnify the importance and possibility of obtaining Feedback from the patients.

Finally, the researchers examined the proposed mediation of Artificial Intelligence in H6a and H6a of the study. First, the researcher proposed a significant mediating impact of Artificial Intelligence on Trust, leading to an increased Online Healthcare Communication.

Results indicated significant mediation of the Artificial Intelligence with the path value at $-.106$ ($p > 0.006$). Second, the mediating impact of Artificial Intelligence on the Feedback leading to an increased Online Healthcare Communication also remained significant, with the path value at $-.106$ ($p > 0.000$). As Matheny et al. (2018) stated, Artificial Intelligence in Healthcare provides several advantages over the conventional methods of clinical examination, drug prescription, and consultation services. AI-based learning algorithms are becoming more accurate and precise, especially when gathering patient data, providing more insights into the most suitable diagnostics, treatment variability, care processes, and patient outcomes.

6. STUDY CONCLUSION

The current study indicated that Social Media for healthcare Public Relations is widely preferred today.

As better services themselves guarantee improved P.R.P.R., using online communication, further mediated by social media platforms, further enhances their quality.

Besides the study, respondents indicated another major use of Artificial Intelligence in Healthcare P.R.P.R. is the use of N.L.P. systems that help classify the clinical documentation. Study participants revealed that N.L.P. provides vital insights regarding quality and approaches to improve the medical practices, h to prepare unstructured notes for the patients, and ensure better patient results.

It is also notable that providing insights regarding the factors that lead to social media adoption for healthcare P.R.P.R. provides only one side of the reasons behind technology acceptance and implementation.

Examining technology usage strategies concerning adoption factors, especially from the patient's perspective, can further highlight more dimensions and opportunities to ensure healthcare services for everyone in a better possible manner.

6.1. Implications

This research provides significant theoretical implications for the study of healthcare communication, public relations, and technology adoption. First, it expands the application of Media Richness Theory by showing its relevance in online healthcare environments, particularly in shaping trust and feedback mechanisms between healthcare organizations and the public. By highlighting how different media formats and communication strategies affect the quality of interaction, the study supports the notion that the choice of communication medium influences both relational and informational outcomes in healthcare contexts. Second, the integration of Artificial Intelligence (AI) into healthcare Public Relations contributes to theoretical discussions on technology-mediated trust and service delivery. This research emphasizes that AI is not merely a tool for automation, but rather functions as an active mediator that improves the effectiveness of communication and public engagement. It enhances the understanding of how technology can facilitate alignment between organizational messages and patient expectations, providing insights into the mechanisms by which AI influences patient perceptions and behavioral responses.

Third, this study extends the conceptualization of trust and feedback as diligent constructs in the healthcare sector. The results suggest that these constructs are critical in mediating the relationship between healthcare strategies, technological interventions, and communication outcomes. The research also emphasizes the role of public relations as a theoretical lens for understanding organizational legitimacy, message framing, and reputation management in healthcare. Altogether, this study contributes to the theoretical body of knowledge by integrating communication theories, technology adoption models, and healthcare public relations frameworks, providing an in-depth understanding of how trust, feedback, and AI jointly shape effective healthcare communication.

6.2. Research Limitations

This study also contains three primary limitations. First, this study employs a single-method, quantitative approach, which limits its scope. Future studies can integrate more methodologies, such as mixed-methods, to further delimit this scope. The second limit involves the geographical generalizability of results. Future researchers can replicate this study and conduct similar projects in different regions to gain a deeper, region-specific understanding. Finally, the third limitation involves

the convenience sample approach. Although the relevant sampling approach is widely applied, it has received much criticism due to researchers' own bias.

Future studies can employ alternative approaches, such as random sampling, to mitigate this limitation.

Acknowledgments: The authors would like to express their sincere gratitude to all those who contributed to the completion of this research. Special thanks are extended to the reviewers and editors for their valuable comments and constructive feedback, which helped improve the quality of this work.

REFERENCES

- Afful-Dadzie, E., Afful-Dadzie, A., & Egala, S. B. (2021). Social media in health communication: A literature review of information quality. *Health Information Management Journal*, April. <https://doi.org/10.1177/1833358321992683>
- Ahmad, S. Z., Abu Bakar, A. R., & Ahmad, N. (2019). Social media adoption and its impact on firm performance: The case of the UAE. *International Journal of Entrepreneurial Behaviour and Research*, 25(1), 84–111. <https://doi.org/10.1108/IJEBr-08-2017-0299>
- Ahmed, S. (2009). *Methods in Sample Surveys Simple Random Sampling Systematic Sampling Lecture 2 Saifuddin Ahmed*, MBBS, PhD School of Hygiene and Public Health. Public Health.
- Al-Jabr, H., Twigg, M. J., Scott, S., & Desborough, J. A. (2018). Patient feedback questionnaires to enhance consultation skills of healthcare professionals: A systematic review. In *Patient Education and Counseling* (Vol. 101, Issue 9). Elsevier Ireland Ltd. <https://doi.org/10.1016/j.pec.2018.03.016>
- Alkaabi, A., & Elson, D. (2025). Navigating digital frontiers in UAE healthcare: A qualitative exploration of healthcare professionals' and patients' experiences with AI and telemedicine. *PLOS Digital Health*, 4(4), e0000586. <https://doi.org/10.1371/journal.pdig.0000586>
- Alzaabi, H. O. E. A., & Hasan, H. (2022). Influence of Innovative Digital Technology on Healthcare Service Performance. *International Journal of Sustainable Construction Engineering and Technology*, 13(2), 168–182.
- Aprilia, C., Yusra, Y., & Ismail, I. R. (2022). Measuring Tsunami Museum Visitor Satisfaction: An Importance Performance Map Analysis. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2021.2020398>
- Apuke, O. D. (2017). Quantitative Research Methods: A Synopsis Approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(11), 40–47. <https://doi.org/10.12816/0040336>
- Asan, O., Yu, Z., & Crotty, B. H. (2021). How clinician-patient communication affects trust in health information sources: Temporal trends from a national cross-sectional survey. *PLoS ONE*, 16(2 February), 1–15. <https://doi.org/10.1371/journal.pone.0247583>
- Baines, R., Regan De Bere, S., Stevens, S., Read, J., Marshall, M., Lalani, M., Bryce, M., & Archer, J. (2018). The impact of patient feedback on the medical performance of qualified doctors: A systematic review. *BMC Medical Education*, 18(1), 1–12. <https://doi.org/10.1186/s12909-018-1277-0>
- Bergin, R. (2016). *Media Richness Theory*.
- Borchert, A., & Heisel, M. (2022). The Role of Trustworthiness Facets for Developing Social Media Applications: A Structured Literature Review. *Information (Switzerland)*, 13(1). <https://doi.org/10.3390/info13010034>
- Brown, A. (2016). An Exploratory Study Investigating the Impact of a University Module That Aims to Challenge Students' Perspectives on Ageing and Older Adults. *Practitioner Research in Higher Education*, 10(2), 25–39.
- Chen, J., & Wang, Y. (2021). Social media use for health purposes: Systematic review. *Journal of Medical Internet Research*, 23(5), 1–16. <https://doi.org/10.2196/17917>
- Chen, M., & Decary, M. (2020). Artificial intelligence in healthcare: An essential guide for health leaders. *Healthcare Management Forum*, 33(1), 10–18. <https://doi.org/10.1177/0840470419873123>
- Chen, X., Hay, J. L., Waters, E. A., & Kiviniemi, M. T. (2016). Health Literacy and Use and Trust in Health Information. *Physiology & Behavior*, 176(3), 139–148. <https://doi.org/10.1080/10810730.2018.1511658>
- Chua, A. Y. K., & Banerjee, S. (2018). Intentions to trust and share online health rumors: An experiment with medical professionals. *Computers in Human Behavior*, 87, 1–9. <https://doi.org/10.1016/j.chb.2018.05.021>
- Dufour, J.-M. (2011). Coefficients of determination *. March 1983.

- El Khatib, M., Hamidi, S., Al Ameer, I., Al Zaabi, H., & Al Marqab, R. (2022). Digital Disruption and Big Data in Healthcare – Opportunities and Challenges. *ClinicoEconomics and Outcomes Research*, 14, 563–574. <https://doi.org/10.2147/CEOR.S369553>
- Elrod, J. K., & Fortenberry, J. L. (2020). Public relations in health and medicine: Using publicity and other unpaid promotional methods to engage audiences. *BMC Health Services Research*, 20(Suppl 1), 1–7. <https://doi.org/10.1186/s12913-020-05602-x>
- Foundation, A. (2021). *Surveys of Trust in the U. S. Health Care System T. NORC at the University of Chicago*, 7.
- Ganatra, N., & Patel, A. (2018). A Comprehensive Study of Deep Learning Architectures, Applications and Tools. *International Journal of Computer Sciences and Engineering*, 6(12), 701–705. <https://doi.org/10.26438/ijcse/v6i12.701705>
- Gara, G. L., & La Porte, J. M. (2020). Processes of building trust in organizations: Internal communication, management, and recruiting. *Church, Communication and Culture*, 5(3), 298–319. <https://doi.org/10.1080/23753234.2020.1824581>
- Gołuchowski, J., Filipczyk, B., & Paliszkiwicz, J. (2017). Social media and trust. In *Intuition, Trust, and Analytics (Issue March)*. <https://doi.org/10.1201/9781315195551>
- Gowda, N. R., Wankar, A., Arya, S. K., Vikas, H., Narayanan, N. K., & Linto, C. P. (2020). Feedback System in Healthcare: The Why, What and How. *International Journal of Marketing Studies*, 12(1), 52. <https://doi.org/10.5539/ijms.v12n1p52>
- Gu, D., Guo, J., Liang, C., Lu, W., Zhao, S., Liu, B., & Long, T. (2019). Social media-based health management systems and sustained health engagement: TPB perspective. *International Journal of Environmental Research and Public Health*, 16(9), 1–15. <https://doi.org/10.3390/ijerph16091495>
- Hooper, D., Coughlan, J., Mullen, M. R., Mullen, J., Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit Structural equation modelling: Guidelines for determining model fit. *Dublin Institute of Technology ARROW @ DIT*, 6(1), 53–60.
- Huo, J., Desai, R., Hong, Y. R., Turner, K., Mainous, A. G., & Bian, J. (2019). Use of Social Media in Health Communication: Findings From the Health Information National Trends Survey 2013, 2014, and 2017. *Cancer Control*, 26(1), 1–10. <https://doi.org/10.1177/1073274819841442>
- Hyland-Wood, B., Gardner, J., Leask, J., & Ecker, U. K. H. (2021). Toward effective government communication strategies in the era of COVID-19. *Humanities and Social Sciences Communications*, 8(1), 1–11. <https://doi.org/10.1057/s41599-020-00701-w>
- IJug, R., Jiang, X. S., & Bean, S. M. (2019). Giving and receiving effective feedback a review article and how-to guide. *Archives of Pathology and Laboratory Medicine*, 143(2), 244–250. <https://doi.org/10.5858/arpa.2018-0058-RA>
- Isaacs, D. (2020). Artificial intelligence in health care. *Journal of Paediatrics and Child Health*, 56(10), 1493–1495. <https://doi.org/10.1111/jpc.14828>
- Kaya, A., & Mantar, O. B. (2021). Social Media and Health Communication. 33–53. <https://doi.org/10.4018/978-1-7998-6825-5.ch003>
- Krosnick, J. A. (1999). Survey research. *Annual Review of Psychology*, 50, 537–567. <https://doi.org/10.1146/annurev.psych.50.1.537>
- Lee, Y., & Li, J. Y. Q. (2021). The role of communication transparency and organizational trust in publics' perceptions, attitudes and social distancing behaviour: A case study of the COVID-19 outbreak. *Journal of Contingencies and Crisis Management*, 29(4), 368–384. <https://doi.org/10.1111/1468-5973.12354>
- Liu, X., Wang, X., Li, J., & Chen, M. (2022). The Effect of Media Richness on the Stability of Physician-Patient Relationships on E-Consultation Platforms. *Journal of Global Information Management (JGIM)*, 30(1), 1–26. <https://doi.org/10.4018/JGIM.315301>
- Macnamara, J. (2016). Organizational listening: Addressing a major gap in public relations theory and practice. *Journal of Public Relations Research*, 28(3–4), 146–169. <https://doi.org/10.1080/1062726X.2016.1228064>
- Mandal, D., & McQueen, R. J. (2013). Extending media richness theory to explain social media adoption by microbusinesses. *Te Kura Kete Aronui*, 5, 1–28.
- Manne, R., & Kantheti, S. C. (2021). Application of Artificial Intelligence in Healthcare: Chances and Challenges. *Current Journal of Applied Science and Technology*, 40(6), 78–89. <https://doi.org/10.9734/cjast/2021/v40i631320>

- Matheny, M., Israni, S. T., & Ahmed, M. (2018). Artificial Intelligence in Health Care. National Academy of Medicine, 1-269.
- Mohamed, S. A., & Devaraj, K. (2020). Transparency of good feedback and suggestion from stakeholders for improvement on management, managers and employees. *Elementary Education Online*, 19(3), 1993-2000. <https://doi.org/10.17051/ilkonline.2020.03.735353>
- Moreno, Á., Tench, R., & Verhoeven, P. (2021). Trust in public relations in the age of mistrusted media: A European perspective. *Publications*, 9(1), 1-20. <https://doi.org/10.3390/publications9010007>
- Nnabuko, J. O., & Onyiaji, J. (2021). Application of Public Relations in Enhancing Healthcare Delivery to Women of Reproductive Age in South-East Nigeria. 2, 9-15.
- Nwodoh, C. O., Okoronkwo, I. L., Nwaneri, A. C., & ... (2019). Effective Public Relations in Health Practice: An Unexplored Tool for the Growth of Nigeria'S Health Sector and Its *Journal of Nursing and ...*, June.
- Peng, Y., Yin, P., Deng, Z., & Wang, R. (2020). Patient-physician interaction and trust in online health community: The role of perceived usefulness of health information and services. *International Journal of Environmental Research and Public Health*, 17(1). <https://doi.org/10.3390/ijerph17010139>
- Plunkett, A. (2021). Embracing excellence in healthcare: The role of positive feedback. *Archives of Disease in Childhood - Education & Practice Edition*, edpract-2020-320882. <https://doi.org/10.1136/archdischild-2020-320882>
- Puaschunder, J. M. (2020). The Potential for Artificial Intelligence in Healthcare. *SSRN Electronic Journal*, 6(2), 94-98. <https://doi.org/10.2139/ssrn.3525037>
- Saleh Alkhayyal Alteneiji, E. (2021). Public Relations in health institutions. *المجلة العربية لبحوث الاعلام والاتصال*, 2021(32), 32-48. <https://doi.org/10.21608/jkom.2021.170787>
- Salleh, N. A. M., & Moghavvemi, S. (2016). Media Richness Theory for Social Media Research: Opportunities and Challenges. *researchgateInternational Journal of Advances in Engineering & Technology*, 1(January 2014), 122-149.
- Samuels, P. (2016). Advice on Exploratory Factor Analysis. Centre for Academic Success, Birmingham City University, June, 2.
- Secinaro, S., Calandra, D., Secinaro, A., Muthurangu, V., & Biancone, P. (2021). The role of artificial intelligence in healthcare: A structured literature review. *BMC Medical Informatics and Decision Making*, 21(1), 1-23. <https://doi.org/10.1186/s12911-021-01488-9>
- Shahzad, A., Hassan, R., Aremu, A. Y., Hussain, A., & Lodhi, R. N. (2021). Effects of COVID-19 in E-learning on higher education institution students: The group comparison between male and female. *Quality and Quantity*, 55(3), 805-826. <https://doi.org/10.1007/s11135-020-01028-z>
- Sousa-Duarte, F., Brown, P., & Mendes, A. M. (2020). Healthcare professionals' trust in patients: A review of the empirical and theoretical literatures. *Sociology Compass*, 14(10), 1-15. <https://doi.org/10.1111/soc4.12828>
- Srimarut, T., & Techasatian, K. (2019). Use of social media in health care by patients and health care professionals: Motives & barriers in thailand. *Utopia y Praxis Latinoamericana*, 24(Extra6), 215-223.
- Suhr, D. (2016). The Basics of Structural Equation Modeling. 11-. <https://doi.org/10.1007/s007840050036>
- Sutherland, B. L., Pecanac, K., LaBorde, T. M., Bartels, C. M., & Brennan, M. B. (2021). Good working relationships: How healthcare system proximity influences trust between healthcare workers. *Journal of Interprofessional Care*, 00(00), 1-9. <https://doi.org/10.1080/13561820.2021.1920897>
- Tomic, Z., Lasic, D., & Tomic, T. (2011). Public relations in health care. *Materia Socio Medica*, 22(1), 25-27.
- Tomic, Z., Lasic, D., & Tomic, T. (2018). Public relations in health care. *Materia Socio Medica*, 22(1), 25-27.
- UAE Business Council Report. (2024). TECHNOLOGY SERIES U.A.E. MedTech Sector. U.S.-U.A.E. Business Council. <https://usuaebusiness.org/wp-content/uploads/2020/09/Technology-Series-MedTech-Report-2020.pdf>
- W.Y., J., & SingK, K. (2018). Communication Skills in Patient-Doctor Interactions: Learning from Patient Complaints. *Health Professions Education*.
- Weston, R., & Gore, P. A. (2006). A Brief Guide to Structural Equation Modeling. *The Counseling Psychologist*, 34(5), 719-751. <https://doi.org/10.1177/0011000006286345>
- Wong, E., Wong, E., Mavondo, F., & Fisher, J. (2020). Patient feedback to improve quality of patient-centred care in public hospitals: A systematic review of the evidence. *BMC Health Services Research*, 20(1), 1-17. <https://doi.org/10.1186/s12913-020-05383-3>

- Wood, R. E., Goodman, J. S., Beckmann, N., & Cook, A. (2008). Mediation testing in management research: A review and proposals. *Organizational Research Methods*, 11(2), 270–295. <https://doi.org/10.1177/1094428106297811>
- Zeqiri, M. (2021). Access and its contribution to achieving trust and satisfaction in inter-ethnic relationships. *Corporate Communications*, 26(1), 205–220. <https://doi.org/10.1108/CCIJ-01-2020-0013>
- Zumbo, B. D. (2005). Structural Equation Modeling and Test Validation. *Encyclopedia of Statistics in Behavioral Science*, 4, 1951–1958. <https://doi.org/10.1002/9781118445112.stat06521>