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CONNECTING THROUGH CREDIBILITY: HEALTH CARE WORKERS' TRUST TOWARDS HEALTH CARE APPS

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Abstract:
Mobile health (mHealth) applications are making a significant impact on the way health care is delivered, communicated and managed. The healthcare industry is becoming increasingly dependent on healthcare applications to support clinical decision making, patient monitoring, electronic documentation, telemedicine and professional communication. But there are some psychological and technological conditions that are important to the success of the implementation and continued use of healthcare applications. Within these factors, perceived trust, perceived attachment, and perceived credibility are important factors that affect the acceptance and continued use of healthcare applications by healthcare workers. This article investigates the correlation between perceived trust, perceived attachment and perceived credibility relationship between HWs and the healthcare applications. Drawing on the Technology Acceptance Model (TAM), trust theory, and attachment theory, the paper examines what healthcare professionals consider "reliable" and "secure" apps, as well as their perceptions of their usefulness and emotional attachment to the apps. The review underscores how important app credibility is in cultivating trust and attachment and its implications in usage intentions and organizational outcomes. The results indicate that transparency, security, ease of use, and evidence-based content are important key factors to build trust and credibility with healthcare organizations and app developers. Healthcare workers' acceptance of digital health technologies could be strengthened by these factors, which could lead to better healthcare delivery.

Keywords: Perceived trust, perceived attachment, perceived credibility, healthcare apps, healthcare workers, mHealth.

INTRODUCTION

Digital transformation has changed the healthcare landscape around the globe. Mobile health (mHealth) technologies have rapidly progressed and allowed healthcare professionals to collect clinical data, communicate with patients, manage medical records and assist in the decision-making process for healthcare, using mobile devices such as a smartphone. The convenience, accessibility, and efficiency of these applications make them indispensable in today's healthcare setting (Ventola, 2014).

Although technologies have advanced, successful implementation of healthcare applications relies not only on the technical functionality but also on users' psychological perceptions. A healthcare worker may be required to deal with confidential information and make crucial decisions regarding patients. Thus, the extent of their acceptance and ongoing use of healthcare applications is largely dependent on the trust in the technology, perceived credibility of the information they are provided, and emotional bonding that they are able to establish with the technology after repeated use.

Perceived trust is defined as the consumer's confidence in the reliability, security and effectiveness of a technology in accomplishing the desired tasks (McKnight et al., 2002). Perceived credibility is the users' judgment of the accuracy, reliability, and trustworthiness of information and services delivered via digital channels (Fogg et al., 2003). Perceived attachment is the emotional connection individuals form with technological systems as a result of their ongoing interaction and reliance on it (Thomson et al., 2005).

In healthcare environments, where the adoption of technology can have a significant impact on patient care, efficiency, and quality, understanding these relationships is especially significant. The aim of this article is to explore the interplay of perceived trust, perceived attachment, and perceived credibility relationships among healthcare workers in the use of healthcare applications and to discuss their implications in healthcare practice and policy.

LITERATURE REVIEW

Healthcare Applications in Modern Healthcare

Healthcare Applications in Modern Healthcare

The healthcare sector is broad and includes various digital tools that can be used in healthcare delivery. Such applications involve clinical decision support systems, Electronic Health Record applications, telemedicine apps, medication management systems, and health monitoring systems.

The COVID-19 pandemic has been the driving force behind the global adoption of the digital technologies of healthcare. Mobile apps were more and more essential for healthcare professionals to remotely conduct consultations, monitor patients, and share information. Research shows that healthcare applications can lead to better communication efficiency, less administrative work and increased patient engagement (Gagnon et al., 2016).
Yet, because of their attitudes about data privacy, reliability, ease of use, and information quality, technological adoption is still impacted by healthcare professionals. Worries about cybersecurity, misinformation and complexity of technology can lower acceptance and use rates.

Perceived Trust in Healthcare Applications
Trust is a key determinant of technology uptake and use. Healthcare is a vertical where trust is especially significant, as healthcare services often involve handling patient-specific information with confidentiality, and relying on technology for clinical decisions.
McKnight et al (2002) believe that trust is made up of three components: competence, integrity and benevolence. For applications in healthcare, competence is the accuracy of the application, integrity means that the application behaves in an ethical and professional manner, and benevolence has to do with the application working in the interests of the users.
Trust is a key factor consistently shown to have an impact on the acceptance of health care technology. If health care workers find an application to be reliable, secure, and professionally developed, they are more likely to use it and use it on a regular basis (Zhou, 2011). On the other hand, data leakage, system crashes and faulty information diminishes trust and leads to non-use.
The concept of trust is also related to two constructs in the Davis (1989) Technology Acceptance Model (TAM), namely perceived ease of use and perceived usefulness. Applications that run smoothly and can aid clinical activities well have increased trust values among healthcare workers.

Perceived Credibility of Healthcare Applications
Perceived credibility is users' judgment of the trustworthiness and expertise of a technology platform. When it comes to healthcare, credibility is paramount as misinformation can have a detrimental impact on patient care and outcomes.
Fogg et al. (2003) identified several dimensions of credibility, including trustworthiness, expertise, transparency, and reliability. Healthcare workers often evaluate app credibility based on factors such as:
1.Evidence-based content.
2.Professional
endorsements. 3.Institutional
affiliations.
4.Developer reputation.
5.Information accuracy.
6.Security
certifications.
Research shows that healthcare professionals trust applications created or recommended by a trusted healthcare institution, government agencies, and professional organizations (Boudreaux et al., 2014). People trust the applications more when they cite scientific research and confirm with health-related laws.
The perceived credibility is a foundation for the development of trust. Applications which always deliver accurate and validated information are more likely to be trusted by healthcare workers. So, in the context of healthcare technology environments, credibility comes before trust.
A sense of attachment to health care applications
The attachment theory is a traditional theory of emotional bonds between people and important things or people. More recently, attachment theory has been expanded to consumer technology and to digital platforms (Thomson et al., 2005).
In healthcare, perceived attachment builds up with repeated interaction, familiarity and dependence. Healthcare workers can become emotionally involved with apps that support their clinical activities and enhance productivity.
Several factors contribute to attachment formation:
1. Frequent use.
2. Personalization features.
3. Positive user experiences.
4. Emotional satisfaction.
5. Professional dependence.

When healthcare workers perceive an application as indispensable to their daily activities, emotional attachment increases. This attachment often results in stronger commitment, continued use intentions, and resistance to switching to alternative systems.
Research in information systems suggests that attachment can influence technology loyalty beyond functional benefits. Users often continue using familiar systems because of emotional comfort and accumulated experience even when alternatives are available (Mugge et al., 2010).

THEORETICAL FRAMEWORK

Technology Acceptance Model (TAM)

Davis (1989) developed a technology acceptance model that continues to be one of the most influential models to understand how people accept technology. TAM suggests that attitudes towards technology and subsequent behavioral intentions are determined by perceived usefulness and ease of use.

In healthcare applications:
Perceived credibility increases the perceived usefulness.
Perceived trust facilitates positive attitudes towards
usage.
Perceived attachment positively influences intentions to continue using the system.
These relationships add to TAM by including psychological and relational factors that are pertinent to the implementation of healthcare technology.

Trust Theory

Trust theory focuses on the need for trust and risk minimization in technology engagements. Healthcare workers are at a high risk of using digital systems because of the risk of privacy breaches, inaccurate information, or system failures.
Trust helps to eliminate uncertainty and enhances the willingness to trust in healthcare applications. Perceived credibility is an important antecedent of trust, and trust in turn has an impact on behavioral intentions and usage behavior.

Attachment Theory

Importance of attachment theory to behavior and commitment. In health technology settings, successful interactions can foster a sense of emotional engagement and connection between users and technology.
This attachment strengthens loyalty, enhances user satisfaction, and promotes long-term engagement with healthcare technologies.

Perceived Credibility and Trust are connected

Credibility and trust in digital technologies have been linked in many ways in the literature. For users to trust an application, they first need to believe that it is credible and knowledgeable in the topic.
The credibility of applications is often evaluated by evidence-based information, institutional endorsement, and professional recommendations, all of which are often seen by healthcare workers. Applications with high credibility levels can lead to lower risk perception and higher confidence by the user.
Research has shown that perceptions of credibility are positively related to trust in health technologies. Applications that have been consistently providing accurate clinical information will engender more trust amongst the healthcare professionals which will in turn result in an increased uptake and ongoing use of the application.
There is a relationship between trust and attachment.There is a connection between trust and attachment.
Trust is a basis of emotional attachment. Users typically only start to get attached to a technology once they are confident in its reliability and performance.
The healthcare context makes trust a good motivator for re-use and reliance. After a certain period of time, there are emotional links established between healthcare workers and healthcare applications resulting from repeated positive experiences. These bonds are displayed through attachment, binding, and attachment to certain platforms.
A level of trust from the healthcare workers will lead to a higher number of the workers using the application in their daily routine. Ongoing dependence fosters attachment and sustained involvement.

Relationship Between Credibility and Attachment

Credibility is an indirect way to attachment as it helps to build trust. If applications are seen as credible, they will be more likely to be trusted by users, and this will make it easier to develop emotional attachment.
Furthermore, satisfaction is improved when users have confidence in the information and services that are provided, as credibility is increased. Positive experiences builds attachment and enhances loyalty towards Healthcare applications.
Healthcare professionals tend to get attached to applications that have the ability to give them accurate information consistently and help them to manage their workflow effectively, and be consistent with their professional standards.

Methodology

The researcher has collected data from 516 health care workers who work in private hospitals during the period 2025-2026. The researcher used convenience sampling to collect the responses.All the reliability values are above 0.85; hence, the questionnaire is reliable.

Data Analysis

The collected data was analysed using structural equation modelling using AMOS 26 and SPSS

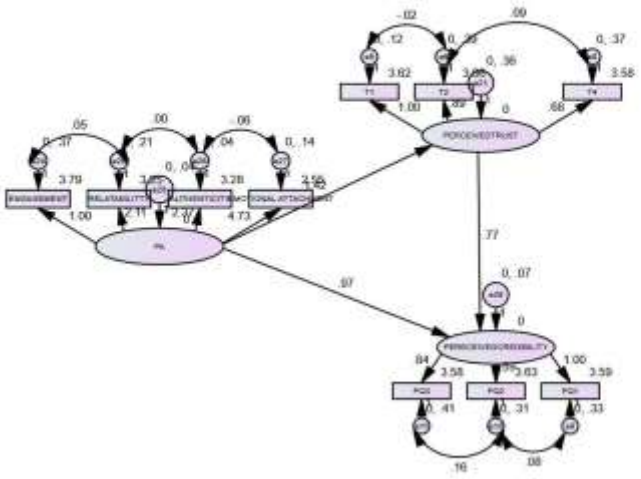
Demographic Profile

Age		
	Frequency	**Percent**
18-24	453	87.8
25-35	42	8.1
36-45	15	2.9
55&Above	6	1.2
Total	516	100.0

Gender		
	Frequency	Percent
MALE	153	29.7
FEMALE	363	70.3
Marital Status		
	Frequency	Percent
MARRIED	145	28.1
UNMARRIED	371	71.9
Total	516	100.0

Of the 516 respondents, the majority were aged 18–24 years (n = 453, 87.8%), followed by 25–35 years (n = 42, 8.1%), 36–45 years (n = 15, 2.9%), and 55 years and above (n = 6, 1.2%). Most respondents were female (n = 363, 70.3%), while males accounted for 29.7% (n = 153). Regarding marital status, 71.9% (n = 371) were unmarried and 28.1% (n = 145) were married. These findings indicate that the sample was predominantly composed of young, female, and unmarried individuals

Structural Equation Modelling



H_{01}: Perceived Attachment (PA) has no significant effect on Perceived Trust among healthcare workers.
H_{02}: Perceived Attachment (PA) has no significant effect on Perceived Credibility among healthcare workers.
H_{03}: Perceived Trust has no significant effect on Perceived Credibility among healthcare workers.

			Estimate	**S.E.**	**C.R.**	**P**	**Label**

PERCEIVEDTRUST	<--	PA	1.418	.246	5.763	***	
PERCEIVEDCREDIBILITY	<--	PA	.972	.215	4.530	***	
PERCEIVEDCREDIBILITY	<--	PERCEIVEDTRUST	.769	.079	9.788	***	
T1	<--	PERCEIVEDTRUST	1.000				
T2	<--	PERCEIVEDTRUST	.892	.067	13.394	***	
T4	<--	PERCEIVEDTRUST	.677	.060	11.273	***	
PQ1	<--	PERCEIVEDCREDIBILITY	1.000				
PQ2	<--	PERCEIVEDCREDIBILITY	.587	.044	13.306	***	
PQ3	<--	PERCEIVEDCREDIBILITY	.838	.061	13.721	***	
ENGAGEMENT	<--	PA	1.000				
RELATABILITY	<--	PA	2.105	.295	7.125	***	
AUTHENTICITY	<--	PA	2.374	.397	5.974	***	
EMOTIONALATTACHMENT	<--	PA	4.733	.761	6.220	***	

There were two structural models examined: the effect of Perceived Attachment (PA) on Perceived Trust and Perceived Credibility and the effect of Perceived Trust on Perceived Credibility.

The results show that Perceived Attachment had a significant positive effect on Perceived Trust ($\beta = 1.418$, SE = 0.246, CR = 5.763, $p < .001$). The result indicates that those who feel attached to, relate with, be authentic to and feel engaged with healthcare applications, have more trust in them, which in turn, is shown as a stronger level of emotional attachment, relatability, authenticity and engagement, in that order.

Perceived Attachment also had a significant positive impact on Perceived Credibility ($\beta = 0.972$, SE = 0.215, CR = 4.530, $p < .001$). This finding shows that more powerful attachment to the healthcare applications increases healthcare workers' perceptions of the credibility and reliability of the information and services delivered through the app.

In addition, Perceived Trust was also determined to have a significant positive effect on Perceived Credibility ($\beta = 0.769$, SE = 0.079, CR = 9.788, $p < .001$). The high critical ratio and significant p value suggest that one's trust is a significant predictor of perceptions of credibility. If healthcare workers are more inclined to trust the information and functionalities of healthcare apps, they will be more likely to perceive them as credible and dependable.

In general, the structures model all hypothesized relationships, suggesting that both structural relationships Perceived Attachment to the Perceived Trust and Perceived Attachment to the Perceived Credibility are direct and positive, and Perceived Trust further supports Perceived Credibility.

The results revealed that Perceived Attachment is multidimensional among healthcare workers with Emotional Attachment being the more significant dimension to the overall attitude of the workers towards healthcare applications.

The test of the three null hypotheses was carried out using Structural Equation Modeling. The results showed that there was a significant positive effect of Perceived Attachment on Perceived Trust ($\beta = 1.418$, CR = 5.763, $p < .001$) supporting the rejection of H_{01}. The results also indicate that Perceived Attachment had a significant influence on Perceived Credibility ($\beta = 0.972$, CR = 4.530, $p < .001$), thus failing to accept H_{02}. In addition, the results showed that Perceived Trust had a significant positive impact on Perceived Credibility ($\beta = 0.769$, CR = 9.788, $p < .001$), thus disproving H_{03}. Hence all three null hypotheses were rejected, meaning there were significant positive relationships between Perceived Attachment, Perceived Trust and Perceived Credibility of healthcare applications among the healthcare workers.

Table showing the Model test results

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.905	.829	.915	.845	.914

The goodness-of-fit indices indicated that the proposed structural model provided an acceptable fit to the data.

Specifically, the model achieved a Normed Fit Index (NFI) of .905, Relative Fit Index (RFI) of .829, Incremental Fit Index (IFI) of .915, Tucker-Lewis Index (TLI) of .845, and Comparative Fit Index (CFI) of .914. The NFI, IFI, and CFI values exceeded the recommended threshold of .90, demonstrating good model fit. Although the RFI and TLI values were below .90, they exceeded the acceptable level of .80, indicating an overall acceptable fit of the model. Therefore, the hypothesized model examining the relationships among Perceived Attachment, Perceived Trust, and Perceived Credibility among healthcare workers was considered adequately supported by the data.

Implications for Healthcare Organizations
Healthcare organizations seeking to promote healthcare app adoption should focus on enhancing credibility, trust, and attachment among healthcare workers.

KEY STRATEGIES INCLUDE:

Ensuring Data

Security
Organizations should implement robust cybersecurity measures and communicate security practices clearly to users. Strong security protections increase trust and reduce concerns regarding patient confidentiality.

Providing Evidence-Based Content
Applications should incorporate scientifically validated information supported by clinical guidelines and research evidence. Evidence-based content strengthens credibility and trust.

Enhancing User Experience
User-friendly interfaces improve ease of use and encourage positive interactions. Positive experiences contribute to trust formation and attachment development.

Supporting Personalization
Personalized features increase relevance and emotional engagement. Customizable dashboards, notifications, and workflow tools strengthen user attachment.

Building Institutional Reputation
Healthcare organizations should collaborate with reputable healthcare institutions, professional associations, and regulatory bodies to enhance application credibility.

Future Research Directions
Future research should explore the relationships among perceived trust, perceived credibility, and perceived attachment using empirical data from diverse healthcare settings. Longitudinal studies could provide insights into how these perceptions evolve over time.
Researchers should also investigate:

- Differences across healthcare professions.
- Cultural influences on trust formation.
- Effects of artificial intelligence integration.
- Impact of cybersecurity incidents on trust and attachment.
- Relationships between attachment and technology resistance.

Understanding these factors can contribute to the development of more effective healthcare technologies and implementation strategies.

CONCLUSION
Healthcare applications have become indispensable tools in modern healthcare systems. Their successful adoption among healthcare workers depends largely on perceptions of trust, credibility, and attachment. Perceived credibility serves as a foundation for trust development by assuring users of information accuracy and system reliability. Trust, in turn, encourages continued interaction and reliance on healthcare applications. Through repeated positive experiences, healthcare workers develop emotional attachment, strengthening long-term engagement and loyalty.
Healthcare organizations and developers must prioritize transparency, security, usability, and evidence-based content to foster credibility and trust. By addressing these psychological factors, healthcare institutions can improve healthcare workers' acceptance of digital technologies and enhance the quality and efficiency of healthcare delivery.

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