Technological Effectiveness, Clinical Credibility, Data Sources, and WBMS Behavioural Intention

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Abstract – Patients' treatments are becoming more personalized as healthcare becomes more commodified. Meeting this need requires not just a large allocation of capital, but also a comprehensive application of information, resulting in efforts like electronic health record standards. The quantity of medical data accessible for analytics and data extraction will grow rapidly as these become more mainstream. This is accompanied by an increase in new methods for non-invasive assessment and collection of medically important data in different forms, such as signals and pictures. Despite problems with standardisation and availability, the enormous quantity of data that results is a significant tool for the machine learning industry. Biomedical Computational Intelligence (CI) technologies are already flourishing as a result of getting into this data stream. The legislative session "Computer science and information Intelligence in Biology and medicine" at European Symposium on Artificial Neural Networks (ESANN) addresses some of the field's most pressing issues. This paper introduces the theme session by highlighting a few of the submissions and pointing out possibilities and difficulties for CI in biomedicine.

Keywords – Web-Based Medical Services (WBMS), Computational Intelligence (CI), Perceived Ease of Use (PEOU), Perceived Utility (PU)

I. INTRODUCTION

Healthcare groups and management experts are arguing how individuals may utilize innovation and the Website to enhance medical services as the demographic ages and Healthcare expenses rise. Web-Based Medical Services (WBMS) incorporating telehealth, mHealth, eHeath seem to be viable alternatives. WBMS is regarded amongst the most creative medical technical support of the twenty-first century; nonetheless, marketing these programs remains a difficulty. Apparent effectiveness, behavioural change, and clinical legal limitations are the three hurdles. Users or prospective clients with chronic diseases such as hypertensive and diabetic are the focus of the majority of WBMS. Individuals who do not utilize WBMS have a hard time appreciating their worth. WBMS believes that "prevention is better than treatment." That implies WBMS will have to demonstrate its efficacy over a lengthy period of time before significant signs appear. Furthermore, most patients are used to receiving treatments in a clinic setting. Patients over the age of 65, particularly, do not purpose to contact medical provider over the web. Lastly, for health facilities and associated institutions, clinical advertising and doctor endorsements in public is forbidden, thus customer experience and unofficial recommendations by healthcare personnel play an essential part in WBMS.

The link between technological approval paradigm and behavioural intention in clinical disciplines has been studied extensively. Perceived Ease-of-Use (PEOU) and Perceived Utility (PU) have a significant influence on behavioural intentions, according to Puspitasari and Briliana in [1]. Other research has looked at these interactions from the perspective of doctors and nurses. Unlike other health services, WBMS combines medical personnel' and individuals' interactions into the Web-based computing platform that delivers medical services. Although the patient-based programs purposed to enhance the diagnostics of users who require long-term diagnosis or have restricted movement, examining from the perspective of the patient is still an overlooked topic.

Previous research has looked at the antecedent and moderating variables that influence technological appeal in respect of PU, PEOU, and performance expectancy. Authors [2] have shown that clinical credibility is significant in WBMS, but few studies have looked into the mediation implications of clinical confidence on this association. Furthermore, various kinds of health records may have distinct moderating impacts on technological appeal, medical legitimacy, and behavioural intention on WBMS due to clinical law limits. The goal of this research was to see whether there was a link between technological attraction, clinical credibility, source of data, and WBMS behavioural intention. The paper is purposed to (1) look at the technical appeal of WBMS and behavioral intention from the perspective of novice individuals, (2) look at the mediation impact of healthcare authenticity, and (3) look at a moderate-mediation effect of several clinical data sources.

Binh and Huy in [3] examined the status of hospitals in Vietnam, as well as the preservation, administration, and IT infrastructure accessible to patients. We discovered that the majority of hospitals relied on papers and film in booklets for

data preservation and administration. Personal PCs were also employed in certain hospitals to handle and print individual information in a basic and discrete manner. There are now solutions accessible to connect these pcs in order to store, preserve, and share information. Individuals' study findings are typically printed on paper or written out from findings received via medical gadgets. After that, they're physically attached to paper documents and given to the customers. In medical assessment books, doctors record diagnosis findings as well as therapy required for individual rehabilitation. Furthermore, many healthcare institutions that provide therapy to patients will provide them a distinct medical screening booklet.

As a result, the individual ends up having many medical assessment pamphlets from different medical care practitioners, which may be mystifying and make health information recovery difficult for physicians. Manual paper-based storage solutions, although simple and straightforward to use, are incapable of managing massive volumes of patient data. It's also ineffective for storing, searching, and sharing information. As a result, building EMR technologies for clinics and medical institutions in establishing nations like Vietnam is essential. A review of studies on WBMS [4], technological appeal, clinical validity, and clinical data sources is the first step in this research. This research articulates assumptions, details the techniques and sample, and delivers the findings depending on the academic analysis. Ultimately, the significance of theory, management consequences, and future study prospects are examined. To achieve the rationale of the paper, this research has been organized as follows: Section II focuses on an analysis of literature works and hypothesis. Section III identifies the research limitations. Section IV presents the methodology for the research. Section V focuses on the results. Section VI presents research discussion while Section VII concludes the paper and presents future research directions.

II. LITERATURE ANALYSIS AND HYPOTHESIS

Web-Based Medical Services (WBMS) Model

Web-Based Medical Services (WBMS) alludes to the employment of information systems to effectively deliver healthcare data and activities, such as cellphone assistance, health training, and rapid clinical consultation. The JMIR (Journal of Medical Internet Research) refers to it as eHealth and mHealth (mobile health), while other publications, e.g. New England Journal of Medicine (NEJM) refer to it as tele-health. It represents the patient-based, online to offline services, which provides users with rapid clinical assistance at their residence and it self-management therapeutic facility. This is a possible technique for boosting the cardiac illnesses findings by constantly observing individuals, allowing clinicians to act early if clinical worsening is evident.

The WBMS service method is as follows: a customer who signs up for the program is given a list of specially built devices, which includes a mini-computer or cell telephone as well as many gadgets to assess physical indications and is placed at his or her house. Individuals are asked to measure a variety of physical indications (such as hypertension, glucose levels, ECG, and SPO2), which are then instantly transferred to the hospital's databases over the Website. If any of the signals go beyond the permitted limits defined by doctors for each patient's physical state, nurses will review pertinent previous signals and give prompt clinical training and consultation. If the patient's health does not improve, a visit to the physician or liberation amenities might be required.

Technological Effectiveness and Behavioural Intentions

Technological attraction is described in this research as the extent to which people adopt new systems in terms of WBMS PU and PEOU. The extent to which an individual feels that utilizing a certain method would improve his or her work productivity is referenced to as PU, and the extent to which an individual perceives that adopting a specific technology would be independent of effort is referenced to as PEOU.

A lot of research has looked at the link between technological appeal and medical staff' behavior intentions. The doctor's purpose is the focus of one stream, while the nurse's goal is the center of the other. Omboni, Campolo, and Panzeri [5] discovered that when it comes to deciding whether to approve or decline a telehealth device, doctors tend to be pragmatic, focusing on its utility rather than its simplicity of use. In a pretest-posttest treatment program, researchers established computer-centered nursing reporting framework and critically evaluate pre-conditionals and consequences. The findings revealed that before the information systems implementation level, a nurse's self-confidence in using a pc is crucial, while after the installation phase, the fit among nursing processes and the program's capability is considerably more relevant. In conclusion, previous research suggests that raising medical employee' behavioural intentions via PU and PEOU of pc and Website accessibility at work. WBMS, on the other hand, is a three-sided cooperation approach that includes medical care personnel, patients, and technologies. In the early phases, patient approval will influence WBMS' effectiveness, although surveys from novice patients' perspectives are currently limited. For the reasons stated above, this research suggests the following assumption:

Hypothesis 1: There is a significant association between the appeal of electronics and the likelihood of patient behaviour.

Mediation Impact of Clinical Credibility

Past study has emphasized on the elements that influence intended behaviour (see researchers' journal article) as well as moderating impact on technological attraction and performance expectancy. According to the researchers, the attraction of systems, objective norms, and medical understanding may forecast the majority of the variation in individuals' adoption of

internet self-management innovation. Organization, technical, and human characteristics might regulate the association among technological appealing and behavioural intention, according to researchers. Nevertheless, few investigations have looked into the mediation impacts on this connection.

According to [6], a patient's desire to carry out an activity is influenced by objective norms and attitudes regarding the conduct. Perceptions, on the other hand, do not entirely moderate the link between technological appealing and behavioural intention in measures of PU and PEOU. More important criteria, like clinical reputation, might therefore mitigate this association. Nevertheless, this link has only been mentioned in a few research papers. Patients' readiness to be susceptible to the acts of healthcare service providers is described as their anticipation that the health personnel would conduct a specific and trustworthy medical attention that is vital to them. Unlike conventional health care, WBMS relies on the concurrent collaboration of medical personnel, individuals, and a web-based technological network to provide medical care. Older patients, on the other hand, are used to receiving treatments in a clinic setting and dislike communicating via the Computer. Individuals in the lower socioeconomic groups were the least likely to utilize a virtual healthcare treatment, according to [7]. As a result, gaining patients' confidence and enhancing WBMS' clinical validity in the services delivering system are critical.

WBMS' healthcare delivery procedure is divided into two segments. Patients initially meet innovation and assess its prospective utility, accessibility, and impartiality in the first phase. After the individuals have been using the system for some time, the medical personnel will present a monthly statement, which details every day's physical symptoms, clinical education, and nurse and physician recommendations. Clients will assess the authenticity of medical documents and the whole WBMS medical care delivery mechanism in the second phase. Individuals who have a favorable opinion of clinical confidence and trust this product are more likely to suggest it, according to a previous research. As a result, this research contends that a sustainable WBMS marketing strategy requires both individuals' faith in the web-based network infrastructure and their credibility in the clinical services they contact on a daily basis over the Web.

Assumption 2: Clinical credibility acts as a mediator among the appeal of innovation and the behavioural intentions of prospective patients.

Moderate Objective of Clinical Data Sources
The objective norm and mentality of an individual who participates in a certain conduct or creates a purpose have an impact on the behaviour. Subjective norm is described as the method in which people choose to act in a certain way when they are under social influence to adopt the view of others, such as family, friends, superiors, and coworkers. People's behavior, like evaluating a service or product, is influenced by the quantity of data available, according to researchers. Furthermore, the key character (or source of data) plays a significant part in a person's data judgment. Consumers' attitudes about and usage of medications, for example, may be influenced by how they pick and assess information on such drugs, according to research.

Authors [8] spoke with individuals who looked up drugs on the internet. Some of the respondents chose data from pharmaceutical corporations, while others liked data from authorities, groups, and health institutions, and yet others chose media advertising from other people who had used the medicine before. Researchers discovered that societies may have favorable treatment effects, especially when it comes to chronic disease care. According to certain studies, people trust doctors more than they trust internet health information, which they study before speaking with their doctors. As a result, this research suggests that various data resources have distinct impacts on the link between technological appeal, patient belief in clinical validity, and behavioural intention. This research looks upon whether sources of information such as word of mouth, clinical pharmacist suggestions, and marketing from a non-official healthcare firm have a moderated-mediation impact.

Assumption 3: Clinical sources of information play a moderated-mediation function among the appeal of technology and the behavioural intention of prospective clients.

III.   RESEARCH LIMITATIONS

The intents of novice patients are measured in this research using website summaries and trial designs. Nonetheless, pay concerns and various billing techniques are not taken into account, which might be among the causes for the service's difficulty in spreading. Even so, there will still be distinctions between purpose and practical use. Future studies should take this possible issue into account, according to this study. Furthermore, medical sources of data such as governmental advertising and community engagement activities were not taken into account. As a result, this study proposes that future research should take into account the impact of various sources.

IV.   METHODOLOGY

Conceptual Model
The structure of this research was established as indicated in Fig. 1 in an attempt to investigate (1) the technological attraction of WBMS from the perspective of prospective patients, (2) the mediating impacts of clinical validity, and (3) the moderating effect impact of clinical data sources.
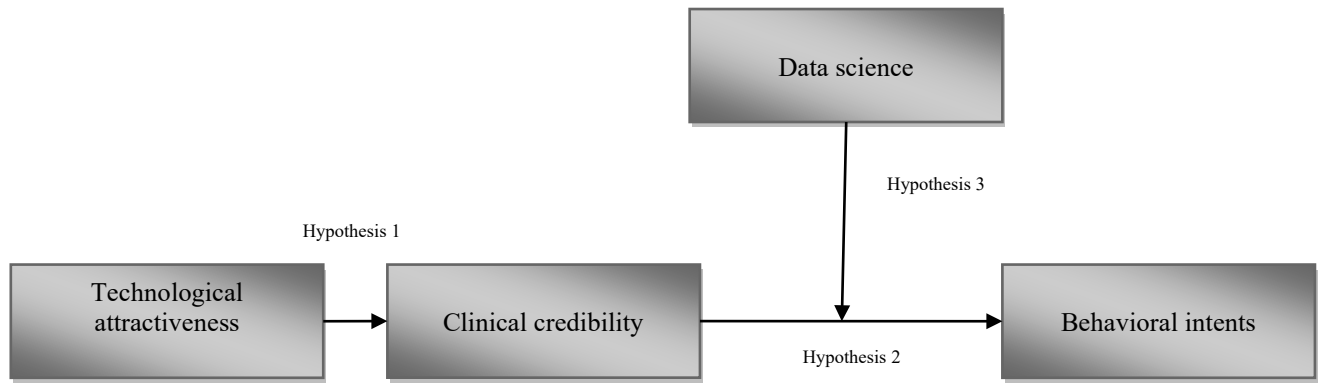
Fig 1. The Conceptual Model for the Research

Sampling and Designing

WBMS has widely been employed in Taiwan for some decades, but service producers were curious as to why the majority of the populace is still acquainted with it and rejects it. This research gathered 213 tests from a variety of Taipei classes; nevertheless, unlike other investigations, the goal of this one was to see whether prospective patients would utilize or promote WBMS to other possible individuals. As a result, the sample group had to accomplish certain requirements: (a) respondents had not utilized or comprehended WBMS before the analysis; (b) the users and their relatives were at a higher risk for increased cardiovascular problems, blood strain, and resistance of insulin; and (c) they had sophisticated internet and computer technology.

Individuals who did not fit the three criteria were also eliminated, as were questionnaires with incomplete data. This research employed just 150 surveys, with females filling out 98 (65.3%) and men filling out 52 (34.7%). Individuals were between the ages of 26 and 50. (mean 35). The average number of times each individual utilized the Internet each week was 3 to 4. Respondents were randomized into three subgroups at random to investigate the impact of various data sources. The n = 50 "group 1" transformed the data from relatives and friends, n = 50 "group 2" affected the state of data from non-official pharmaceutical entities and n = 50 "group 3) transformed the datasets from an actual medical source, including a specialist. A random variable was used to create the randomness. Furthermore, all respondents were required to access the eHealth webpage, which detailed how to use the WBMS instruments as well as the advantages of WBMS (see Fig. 2).

Fig 2. WBMS (Web-Based Medical Service)

Applications	Objective	Service
Contact a physician	Provide clinical consultations on demand	Email
Therapeutic chat	Provide clinical consultations on demand, the group therapeutic service	Chats
Therapeutic forum	Provide clinical consultation on demand, retaining archives	Forums
Ask the physician websites	Archive clinical consultations	Dynamic websites
Patients support website and mail lists for notifications	Provide data content, supporting and preventive protocols	Emails, static websites
Digital assessments	Detect potential additions, preventing maladies	Active websites
Tele-health, homecare, medicine etc.	Remotely render medical care, medical training and diagnosis	Tele-conferences, video and voice-over IPs

Measures

This research employed an experimental method and surveys to gather information in three distinct settings to investigate the intentions of prospective clients when they accessed various data sources. Because a fully fitted survey to assess our assumptions could not be found, relevant changes depending on previous researchers' surveys were produced. Moreover, since the modified measures were initially written in English, back translation methods were undertaken to guarantee that the converted Chinese questionnaires had the same interpretations. Only two bilingual English Chinese persons were employed, one to translate the English survey into Chinese and cross-translate questions in English. Even before study was deployed, the researchers and bilingual people worked out any conceptual problems and made minor wording changes. For the questions of clinical validity, this research used Davis's [9] survey for measuring technological appeal and behavioural intention, as well as researchers' surveys. All items were assessed on a 5-point Likert scale, with 1 being "absolutely disapprove" and 5 being "agree completely."

Data Analysis

To analyze the elements, this study used confirmatory factor analysis (CFA) and linear regression model, and to test the convergent and discriminatory accuracy of the elements, it utilized LISREL 8.5. In this research, chi-square tests, RMSEA (Root Mean Squared Error of Approximation), and the forecast value, IFT (Incremental Fit Index), Goodness-of-Fit (GOF), Comparative Fit Index were utilized in assessing modeling fit. Experts also pointed out that an RMSEA larger than 1.0 suggested low internal consistency, 0.05 to 0.1 suggested an adequate level, as well as less than 0.1, showed good convergent validity. GFI, CFI and IFI all had a range of 0 to 1, with CFI, GFI, and IFI having a minimum of 1.0. Using SPSS version 10 analysis processes, the hypotheses were also checked. To evaluate hypotheses 1 and 2, this research used potential mediating test methodologies developed by researchers. When the method regarded digital desirability, three circumstances were used: (1) a considerable impact of digital desirability on patients' behavioural intentions, (2) a main impact of innovation desirability on clinical validity, and (3) a major impact of clinical validity on prospective patients' motives. This research used three circumstance stages suggested by researchers to evaluate the moderated-mediation impacts in the framework (Theory 3), including (1) a meaningful impact of digital desirability on patients' behavioural intentions, (2) a main impact of innovation desirability on clinical validity and a positive relation among digital desirability and clinical source of information, and (3) a strong association among innovation desirability and clinical data mechanism.

V. RESULTS

All of the measures' averages, significant variances, and relationships are shown in **Table 1.** Because the connections between the four categories are so important, this research employed the VIF (Variance Inflation Factor) to assess the issue. No VIFs were more than 0.5 showing that there was no collinearity in this investigation.

Table 1. Average, Standard Deviation and Inter-Correlation of Dimensions (correlations values are significant)

Variable	1st	2nd	3rd	4th	5th	Mean	Standard deviations
Apparent applicability	1					3.9	0.8
Apparent ease-of-use	46	1				3.8	0.7
Clinical credibility	47	30	1			3.9	0.6
Will-of-use	33	30	36	1		3.8	0.9
Recommedations	35	36	36	55	1	3.9	0.7

Reliability and Validity

To ensure that the survey questions accurately represent the real interpretation of components, a set of validity and reliability checks were done. This research employed CFA to look at construct validity, and two items were removed. The chi-square test was substantial (251 = 89.6, P.001), the RMSEA was 07, the GFI was 91, the CFI was 93, the modified goodness-of-fit (AGFI) was 857, and all signals indicated strong regression model in the assessment. Moreover, the latent variable retrieved from each concept was greater than 0.5, suggesting that the reliability test had strong predictive relevance. Furthermore, [9] asserted that when the AVE (Average Variance Extracted) was more than the sum of squares of the conceptual correlations, excellent discriminating validity was obvious. All of the associations were substantial, as shown in **Table 2** (P.001). The suggested model's reliability and validity were both shown by these findings. Furthermore, the range of convergent validity was 0.8, showing that the survey questions were internally reliable.

Table 2. CFA Standard Load

Variable	Standard load	Extracted mean variances	Reliability
Apparent applicability		5	79
PU-1	50		
PU-2	47		
PU-3	46		
PU-4	70		
Apparent ease-of-use		5	79
PEOU-1	64		
PEOU-2	68		
PEOU-3	93		
PEOU-4	80		
Clinical credibility		5	79
PMP-1	73		
PMP-2	62		
PMP-3	61		
PMP-4	75		

Hypotheses Tests

As shown in Model 1 of **Tables 3 and 4**, the novelty of technologies was significantly and positively associated to the performance expectancy of prospective patients. Hypothesis 1 was validated since PU and PEOU were fundamentally linked to the desire to use P = 002, SE = 0.11, beta = 36, P = 04, SE = 0.1, beta = 29 and recommend to others (P = 002, SE = 0.12, beta = 39); (P = 001, SE = 0.09, beta = 32). Secondly, PEOU, PU and Model 2 were indicated to be linked to medical trustworthiness (P = 001, SE = 0.1, beta = 30, P = 001, SE = 0.1, beta = 38). In Models 3, the factor of clinical creditworthiness was substantial after taking into account the attraction of technology, medical credence, and prospective patients' intentions. In addition, the PEOU and PU in Model 3 were much lower than in Model 1. Hypothesis 2 was validated because medical credibility had a partly mediation influence on technological appeal and prospective patients' revisit intention.

The mediating impact was also investigated using the Sobel test. Because of the effects of a moderating effect [10], the Sobel analysis presumed that the correlations between the research variables had an indirect influence. The influence of the independent factors is decreased in a linear regression with the intermediary, but the impact of the intermediary is still technically meaningful. Medical believability was shown to be a mediator in the association between technological acceptability and desire to utilize (P = 06, SE = 0.04, Z = 1.9, P = 03, SE = 0.02, Z = 2.3), and readiness and recommend (P = 04, SE = 0.03, Z = 2.1, P = 05, SE = 0.1, Z = 1.96). As a result of the Sobel test, Hypothesis 2 was confirmed. Finally, the researchers looked at whether there was a regulated mediating impact between medical data sources. The Hypotheses 1 and 2 were the same throughout the previous research; this one only included condition   Hypothesis 3 was not substantiated since there was no interaction effect among medical legitimacy and clinical data sources on desire to adopt (beta = 01, P = 39, SE = 0.12) and readiness to propose to others (SE = 01, beta = 00, P = 39). As a result, when clinical authenticity was present, clinical data outlets did not play a regulated mediating role on the attraction of technologies and prospective patients' behavioural intention.

Table 3. Hierarchical linear regression findings for tests focusing on utilizing the mediating effect (The table corresponds to the forecast variable and unstandardized projections of fixed impacts (two-tailed)

Variable	Will-of-use beta "Model 1" SE	Clinical credibility "Model 2" SE	Will-of-use beta "Model 3" SE
Constants	0.3 (0.5)	1.2 (0.3)	87 (0.6)
Independent variables			
Apparent applicability	29 (0.1)	38 (0.1)	16 (0.1)
Apparent ease-of-use	36 (0.1)	30 (0.1)	27 (0.1)
Clinical credibility			50 (0.2)
Data sources x clinical credibility			1 (0.1)
r$_2$	15	38	18

Table 4. Hierarchical linear relapse findings for test recommended to others (arbitrating impacts). The entries correspond to the forecast variable and are unstandardized projection of fixed impacts (two-tailed)

Variable	Recommendations beta "Model 1" SE	Clinical credibility "Model 2" SE	Recommendations "Model 3" SE
Constants	99 (0.4)	1.2 (0.3)	64 (0.5)
Independent variables			
Apparent applicability	39 (0.1)	38 (0.1)	28 (0.1)
Apparent ease-of-use	32 (0.1)	30 (0.1)	23 (0.1)
Clinical credibility			39 (0.1)
Data sources x clinical credibility			00 (0.1)
r$_2$	24	38	28

VI.   DISCUSSION

Basic Results

The main purpose of this analysis is to assess if the attraction of innovation, the credibility of medical data, and the variety of clinical data sources may all influence behavior intention. According to the findings, technological desirability must be highly favorable in order to increase behavioural intentions. Furthermore, clinical validity is a moderator, but it does not change much across various manipulating information outlets.

Comparisons to Recent Works

Previous research looked at the appeal of electronics and the desire to use it from the perspectives of doctors and nurses. This research discovered a link between the appeal of technology and prospective patients' behavioural intentions. Davis

TAM models are totally compatible with the outcome. This research suggests that, despite having never used WBMS previously, prospective customers are prepared to distribute data about this healthcare treatment with their family members and friends because of WBMS' technological appeal.

Clinical validity is also shown to play a part in moderating the relationship among technological attractions and individuals' behavioural intentions in this research. This study supports [11]' findings that consumers accept the clinical validity of face-to-face clinical facilities, which are more than the face-to-machine facility, recommending that the rationality of the experiments assumes an essential part in the WBMS service delivery system.

In addition, emotions do not entirely moderate the association between technological appeal and behavioural intention, according to this research. This research adds to the growing body of evidence that physician confidence is a key factor. Ultimately, alternative sources of medical knowledge do not substantially influence the association, according to this research. This conclusion contradicts earlier research that has focused on the influence of various sources of information on behavioural intentions. The Hudak, Pinheiro, and Yanamadala 's [12] response variable, readiness to use and readiness to suggest, might be one of the explanations. People with chronic health diseases such as cardiac attack, hypertensive, and mellitus are the target population of WBMS. Untrained individuals, as per social media concept, may not require this treatment, but their own friends and relatives may. Because sharing this data is not expensive, the WBMS data augmentation may be less significant for unskilled patients once they have received the data.

VII. CONCLUSION AND FUTURE RESEARCH

This research adds to the body of knowledge in a number of ways. The technology acceptance model (TAM) has been utilized in a number of research to analyze customers' intents following adoption of technology, with an emphasis on doctors' and practitioners' intents, but less works has focussed on the aspect of acceptability of the Web-Based Medical Services (WBMS) by the novice individuals. Furthermore, the majority of TAM research looks on antecedent causes. This study covers a research gap in the area of TAM's mediation impact. The findings reveal that in WBMS, physician credibility is an essential mediator. Lastly, this is one of the few studies that look into whether variations in medical data sources have a moderated-mediation effect on WBMS. This research also includes some recommendations for telecommunication operators and institutions interested in promoting WBMS. Patients are used to receiving services in person and dislike communicating through the Internet, particularly if they are old. As a result of this research, telehealth providers should stress not just the technical appeal of WBMS, but also its medical legitimacy when promoting the program to patients. Because WBMS includes offline and online solutions, placing significant attention on technological implication of WBMS within focus on the contributions to the scientific development and clinical assistance may not be appealing to the general public.

According to the findings, telehealth services and institutions should focus on the accessibility of technologies (online) and clinical validity (offline) while also educating clients on why avoidance is preferable to therapy and why prompt therapeutic intervention is critical. Furthermore, most non-official medical businesses believe they are failing since they do not have a physician's endorsement. The medical data source is not a major determinant in affecting the behavioural intentions of novice patients, according to this research. Instead of splurging on healthcare ads and doctor endorsements fees, this research advises that telemedicine companies should reconsider their marketing approach. Finally, people with chronic conditions make up the majority of the target populations. Unpracticed individuals, as per social network concept, may not require these services, but their relatives and friends may. The importance of social networks, predominantly the assistance of novice individuals and the public, should not be underestimated by telehealth providers. Even so, there will still be distinctions between purpose and actual use. Future studies should take this possible issue into account, according to this research. Furthermore, medical sources of data such as governmental advertising and public outreach activities were not taken into account. As a result, this study proposes that future research should take into account the impact of various sources.

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