



## **Investigating the Factors Influence Intention to use Medical Teleconsulting Service During COVID-19 Pandemic in Thailand**

### **Panturee Walailak**

Faculty of Business Administration, Northern College, Tak, Thailand.

### **Ngobphoe Thanarach**

Doctoral Student of Psychology in Health Psychology, European International University

### **Pongwiritthon Kajornatthapol\***

\*Faculty of Business Administration, Northern College, Tak, Thailand, IQRA Business School, University of Geomatika, Malaysia.

Email: [tok2029@gmail.com](mailto:tok2029@gmail.com)

<https://orcid.org/0000-0001-5398-6537>

### **Phayaphrom Bordin**

IQRA Business School, University of Geomatika, Malaysia.

### **Honglertsakul Chavalit**

Faculty of Medicine, Vajira hospital. Navamindhradiraj University, Bangkok, Thailand.

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### **Abstract**

The COVID-19 pandemic is a public health emergency of international concern. Due to mandatory social distancing and the lack of effective treatments, telemedicine has become the safest interactive system between patients, (both infected and uninfected) and clinicians. During this period, all patients, with acute or chronic conditions, need ways to obtain medical attention other than going to the emergency room (E.R.) or to the clinic. Medical teleconsulting has been a practical approach for COVID-19 management as it allows us to reduce the risk of cross-contamination and provides support to remote rural locations. The most optimistic forecasts could not anticipate the impact of a pandemic on this medical field, whose financial implications exceeded all expectations. The goal of this study was to find out what factors affect the use of medical teleconsulting. To do this, 397 Thai citizens in Bangkok were asked to fill out a survey. The data was collected and analyzed using PLS-SEM. The results show that the Technology Acceptance Model (TAM) has a stronger positive effect on

the intention to use medical teleconsulting than health concerns, which come from the Health Belief Model (HBM). To encourage the use of medical teleconsulting, stakeholders should emphasize the patient's perceived usefulness and perceived ease of use. This finding helps better understand the patient psychology factors in the new medical consulting methodology.

### **Keywords**

Medical Teleconsulting, Technology Acceptance, Health Belief Model

### **Introduction**

The Covid-19 pandemic and Medical Tele-Consulting: In late 2019, the World Health Organization received information about a cluster of pneumonia cases in Wuhan, China, where the novel coronavirus causing the outbreak has been designated 2019- COVID-19 and the illness it caused has been designated COVID-19 (CDC, 2020). The previously unknown virus later proved highly contagious, with the average infected person infecting up to three others at a time [1]. When mortality rates per case were first reported, they ranged from 2.5 percent to 3 percent [2], leading to an international response to the situation. Communities all over the world have been advised to stay as close to home as possible, avoid gatherings, wash hands frequently or use other hand hygiene techniques, maintain a distance of at least 12 meters from each other (so-called "social distancing"), and refrain from touching their face [3]. These criteria, if rigorously applied with a high degree of precision, would cause significant disruption to many everyday activities, making voluntary compliance virtually impossible. Therefore, voluntary compliance is at best at risk of inconsistency. The Health Belief Model (HBM) is one example of such a structure. Because it was developed to investigate why patients would not search for tuberculosis screening, the HBM has become one of the most widely used public health frameworks to evaluate why people might or might not act in the presence of a threat to their own health or health of the public. The HBM has been used to study immunization rates and adherence to medications, diabetes self-care, condom usage, and other behaviors that require a change in the actions of a patient to minimize or eliminate a health issue over decades [4]. Like many other models of public health behavior, the HBM explores behavior at the individual and community level by categorizing drivers of behavioral factors into different structures and then examining each structure individually and collectively. It is important to note that the HBM has changed over time, and there are multiple altered forms available in the literature. Consistent with the HBM, conduct is influenced by individual beliefs and direct indications for taking action. As a result, background influences an individual's outlook, including their assessment of the perceived threat, the perceived benefits of taking action, one's perceptions of barriers to action, and one's belief in one's own capacity to act and so on (i.e., perceived self-reliance). To demonstrate how community pharmacists can use the

components of HBM as a communication tool to help patients to comply with COVID-19-prevention strategies.

**Medical Tele-consulting in Thailand,** Prior to July 21,2020, when telemedicine services became mandatory, there were no laws or regulations in place to govern them. As a result, hospitals that wanted to provide telemedicine services could do so without having to obtain any specific remote licenses or authorization from the Thai authorities, enabling them to operate in a more flexible and independent manner. They were also provided with the authority to develop their own internal operating procedures, including security and information technology guidelines. Telemedicine service providers were not subject to any specific regulatory requirements; instead, they were obliged to comply with general regulations that were already in place for other medical services, such as those set out in the Medical Professions Act 1082, Public Health Act 2007, Medical Facilities Act 1998, Electronic Transactions Act 2001, National Health Act 2007, and, when it comes into force in 2020, the Personal Data Protection Act 2020 [5]. Accordingly, the Medical Council of Thailand has issued the 'Notification on Guidelines in Respect of Telemedicine and Online Clinics No. 54/2563 [6], effective October 20, 2020 and in force until further notice. It is important to note that this notification sets out the standards for telemedicine service providers to operate; however, it is merely a notification and, as such, is not considered to be a law and has no legal force or effect. Though not required by law, the Medical Council recommends that all practitioners who wish to provide telemedicine services comply with the guidelines to avoid problems related to patient safety, security, and privacy. Together with the guidelines, the Department of Health Service Support has arranged and submitted a Draft Notification from the Ministry of Public Health with respect to "Standard Services in Respect of Medical Facilities through Telemedicine Systems," which is isolated from and complementary to the guidelines. Private medical facilities are only allowed to service under the terms of the Medical Facilities Act 1998, as evidenced by the fact that a number of the conditions and requirements for operating a telemedicine service are based on this arrangement. Furthermore, the license must be renewed every three years as a condition of proceeding to function [7]. Problem Statement: the advanced communication technology allows the possibility for patients to remotely consult with doctors or medical service providers. For example, the currently policy of "home isolation" for those who has infected with COVID-19 and marked as "green" status are recommended to stay home and use the telemonitor from health service provider. This has helped the over-load of on-site hospital staff. Nevertheless, the tele-medical consulting is considered as a new method to Thai society, investigating the patient attitude and behavior would be crucial for the success of tele-medicine implementation in Thailand.

### **Research Objective**

This study aims to investigate the acceptance attitude and intention to use medical tele-consulting among Thai citizens.

## Literature Review

**Intention to use Medical Tele-Consulting (IMTC),** The American Telemedicine Association describes telemedicine or medical tele-consulting; MTC as "the use of telecommunication and information technology to offer clinical care." The American Telemedicine Association is a non-profit organization devoted to develop the field of telemedicine. Telemedicine has been utilized to meet the health care needs of older people, who are more likely to be housebound or have limited transportation choices. 85% of all residents live in Skilled Nursing Facilities (SNFs) and National Health Services (NHSs), and telemedicine has been used in these settings to improve access to clinicians [8]. While there are many different types of telemedicine treatments, interactive audio and video consultations enable off-site clinicians to counsel on SNF residents using electronic diagnostics like a stethoscope, 12-lead electrocardiogram (EKG), and wound camera. The trials have shown that this type of telemedicine has been demonstrated to decrease SNF admissions [9]. The COVID-19 pandemic is a brutal reminder that chronic and adult patients must be treated anywhere, anytime, while considering new limits, legislation, and changes in the use of healthcare [10]. Since telemedicine was available in Israel even before the pandemic, the question arises whether chronic and adult patients are ready or willing to use it for any health-care need. This issue is crucial in light of the policy trends of the Israeli Ministry of Health on the implementation of telemedicine, patient-centered care, and personalized medicine in the national digital health strategy [11].

**Health Concern and Health Belief Model:** The oldest health behavior change model still widely used is the Health Belief Model (HBM), which focuses on the individual's assessment of vulnerability, outcomes, costs of behavior change, and also external cues for behavior change [12]. It can be applied, together with other theories, to explain users' acceptance of wearables [13], suggesting portability to telemedicine. Initially, the Health Belief Model (HBM) was intended to explain (preventive) health behavior. "Any activity is undertaken by a person who believes himself to be healthy for the purpose of preventing disease or detecting disease in an asymptomatic stage" [14] describe health behavior as "any activity undertaken by a person who believes himself to be healthy for the purpose of preventing disease or detecting disease in an asymptomatic stage." This contrasts with illness behavior, which is defined as "any activity conducted by a person who feels ill in order to characterize the status of his health and find a suitable solution" and sick-role conduct, defined as "the activity undertaken by persons who believe they are ill in order to recover." In accordance with Rosenstock's seminal work on this subject, the original objective of the researchers who built the Health Belief Model (HBM) was to focus the efforts of those seeking to improve public health by understanding why people did not accept preventative healthcare. The model's ability to explain and predict a range of behaviors associated with positive health outcomes has been replicated many times with great potency [15]. The approach

has also been used to develop several successful health communication therapies by focusing messages on HBM variables to influence health behaviors. However, the individual components of the model have had varying degrees of success in predicting health behavior [16]. The outcomes of a meta-analysis of the HBM variables will be presented in order to point out the uncertainty about which aspects of the model are most strongly connected to health behaviors. The Health Belief Model [12], was initiated to determine which beliefs need to be targeted in communication campaigns to promote positive health behaviors. The model states that when a person believes a negative health outcome is severe, believes they are susceptible to it, believes the benefits of behaviors that reduce the likelihood of that outcome are high, and believes the barriers to acquisition of those behaviors are low. A meta-analysis of 18 studies (2,702 individuals) was carried out to determine whether assessments of these beliefs were able to predict behavior over time. Benefits and barriers have been the main considerations. The time span between measurement of HBM beliefs and behaviors, prevention versus treatment behaviors, and drug-taking regimens versus other behaviors have all been identified as moderators of the predictive potential of HBM variables.

**Health Belief Model:** The Health Belief Model (HBM) focused on two components of people's representation of health and health behavior: danger perception and behavioral evaluation. Perceived susceptibility to illness or health issues, as well as the seriousness of the effects of illnesses, were identified as two key beliefs. The behavioral assessment also included two types of beliefs: those about the benefits or effectiveness of a prescribed health behavior, and those about the costs or barriers to the application of the behavior. Additionally, the model claimed that when the right beliefs are held, cues for action can trigger healthy behavior. Individual perceptions of symptoms, impact on society, and health education efforts were among the 'cues.' Finally, in later iterations of the model, an individual's overall health motivation, or readiness to be concerned about health concerns was included [17]. As a result, the HBM built six unique constructions. There was a lack of clear guidance on how to operationalize the link between perceived vulnerability, seriousness, and overall perception of the threat. Similarly, although it has been suggested that perceived benefits should be "weighted against" perceived restrictions [17], no formula for the development of an overall behavioral assessment score has been created. As a result, the model is often operationalized as a set of up to six independent variables that could affect the outcome [12], and it has been shown how different researchers have used slightly different operationalizations of these constructs and concluded that this lack of operational homogeneity weakens the HBM's status as a coherent psychological model of health behavior assumptions in a meta-analysis of predictive applications of the HBM. Furthermore [16], numerous studies have shown that these different operationalizations can be used to identify beliefs associated with health behaviors [15]. Therefore, the hypothesis has been developed as follows:

H1: There is a positive relationship between Health Concern and Innovativeness

- H2: There is a positive relationship between Health Concern and TAM  
H3: There is a positive relationship between Health Concern and Intention to use medical teleconsulting  
H4: There is a positive relationship between Innovativeness and Intention to Medical Tele-Consulting  
H5: There is a positive relationship between Technology Acceptance Model and Intention to Medical Tele-Consulting

### **Research Methodology**

**Research Design**, by using causal analysis, one may determine how one variable impact another. For a survey about attitudes regarding health concerns, the Technology Acceptant Model, the Technology Readiness Index, and the intention to use medical teleconsultation, the researcher used the quantitative survey method to gather primary data from a sample of patients who used the outpatient department's services during the COVID-19 outbreak. The sample data for this study was collected between 15 January and 31 March 2022. All respondents who agreed to participate in the survey received the questionnaire via an online form, which they may complete while waiting to see the doctor, on their way home, or whenever it is most convenient.

**Population and Sample size**, this study has examined the Thai citizen living in Bangkok, Thailand. The population are the accessible population who returned the questionnaire whereas the exact population is unknown. The recommended sample size is also consistent with [18], who recommended a minimum of 397 samples for a 0.05 per cent sampling error and a 95 per cent confidence level. For this study, the researcher will gather 400 samples to help determine the pupils' ratio in each school easier. The default setting for confidence in most statistics applications included studies and was 0.95. This indicates that the value of  $z = 1.96$  will be chosen. utilization by researchers The Yamane computation provides for a 5 percent error rate at a 95% confidence level. Maximum variance was found when  $p = 0.5$ . In this study, the researcher has conducted a survey among Thai citizen living in Bangkok to complete 397 sets of questionnaires.

**Mean and Standard Deviation Analysis**, the mean score of each item is presented in this section. Shows the mean interpretation ranked into five ranges. Each range of mean was ranked based on the calculation divided by 5 levels of Likert scales equal to 0.8 [19]. Level 1, Ranges of Mean Value Interpretation 1.00-1.80 (Strongly disagree) to Level 5, Ranges of Mean Value Interpretation 4.21-5.00 (Strongly agree). **Pilot Test**, the internal consistency reliability of 30 sample sets was investigated as a pilot test to confirm the instrument's reliability. Internal consistency was calculated using Cronbach's alpha value 0.92. The result showed that Cronbach's alpha for all constructs was higher than 0.70, which confirms that the instrument is reliable.

### **Research Results**

**Gender**, there were 107 male respondents (26.80%) and 290 female respondents among the 397 completed questionnaires (73.20%). **Age**, The Ministry of

Public Health's (2014) age segmentation of patients or users of medical services in adult growth and development into the groups of Early adulthood or adulthood, Middle adulthood, and Late adulthood shows the age range of the study participants. With just 0.7 percent being under the age of 18, 34.40 %t being between 30 and 40 years old. **Educational**, distribution of respondents in this study, most found that it was a bachelor's degree, accounting for 49.30%, and the second educational level. **For the income level** of the respondents, most of the respondents had income ranging from 10,001 to 50,000 baht per month, which was considered the middle-income group, accounting for 55.60% of the respondents, while 42.50% of the respondents earned more than 50,001 baht and accounting for 2.0% earned 10,000 or less than. **Occupation**, the largest group in the distribution (28.00%) was Government employee followed by 22.20% Private Sector Employee, 15.10% Freelance. Each item's mean score is illustrated in this part. The five ranges of the mean interpretation are ranked and presented in this section. These means are based on data collection as well as the analysis from the questionnaire which includes Health concern, Technology Acceptance Model, Innovativeness, and also Intention to use Medical Tele-Consulting. **Health Concern** is ( $\bar{x}$ =4.33, SD=0.779). All statements receive a Strongly agree ( $\bar{x}$ =4.21, SD=0.45) ranking. "Once you have contracted COVID-19, it is very difficult to return to good health." says the statement with the highest agree level mean value. ( $\bar{x}$ =4.45, SD=0.76). The least popular statement was "I get sick more easily than others my age" ( $\bar{x}$ =4.21, SD.=0.92). At the "Strong Agree" level, **TAM** has an average mean score of ( $\bar{x}$ =4.34, SD=0.60). "Getting a medical consultation would be difficult without a teleconsultation system," says the statement with the highest agree level mean value. ( $\bar{x}$ = 4.54, SD=0.62). The Strongly agree level ( $\bar{x}$ = 4.21, SD=0.68) is assigned to almost all statements. Only one statement, "Opting for a teleconsultation system has the advantage of managing my health better," received an Agree rating, with the lowest mean score ( $\bar{x}$ =4.10, SD=0.52). The average mean score for **Innovativeness** is ( $\bar{x}$ = 4.29, SD = 0.620). "I keep up with the latest smart device developments in my areas of interest," which the highest agreed level mean value of this statement is ( $\bar{x}$  = 4.39, SD = 0.568). Nearly all of the propositions represent a strongly agreed rating of ( $\bar{x}$  = 4.21-4.45). The only statement that got an agreed level is "I can usually figure out a new smart device without help from others," which had the lowest mean score of ( $\bar{x}$  = 4.19, SD = 0.674). **Model Measurement and Thresholds**, The Structural Equation Modelling (SEM) was used in this study as the structural equations. Regarding the test of a hypothesis, ADANCO engages a composite-variance-based modelling approach that does not really set a usualness condition on the data. Partial least squares route modelling or PLS-SEM as well as ordinary least squares regression based on total score are two limited information estimators resolved by ADANCO. Correlations between observable and latent variables are reflective constructs. A two-step investigation was carried out. The researcher starts by measuring construct validity and reliability to assess the quality of the structural model. The next steps were the model fit, path analysis, and parameter estimation. Consequently, the model is measured using appropriate statistical criteria. **Construct Reliability**, Model reliability evaluates the internal

consistency of the construct which Cronbach's Alpha was used and a minimum score of 0.7 was required. Composite reliability values greater than 0.7 are regarded as reliable and homogeneous indicators that their rho ( $\rho_A$ ) test that requires a minimum score of 0.7, which is considered an acceptable level of internal consistency. The variable indicators can be evaluated with the help of **Convergent Validity**, which is the degree to which a measure positively correlates with other measures of a related construct. The reflective construct indicators are considered as multiple approaches to measuring a similar construct. In this manner, the items that are measures or indicators of a particular reflective construct ought to combine or share a significant amount of variation. In order to determine the convergent validity of reflective constructs, the researcher examines the outer loadings of indicators and the Average Variance Extracted (AVE). The excellent dependability of the latent constructs was supported by this study's findings. The item loadings of additional indicators of internal consistency are shown in Table 1, and all AVE scores are greater than or equal to 0.70, indicating that the constructs have good internal consistency. Values for **Discriminating validity** indicate the degree of variable discrimination. By comparing the measured value for each factor to that of other constructs, ADANCO determines the significance bias. The square root of the AVE value ought to be greater than that of the other variable's AVE value [16]. The findings of discriminatory validity tests, indicating that discriminatory validity is appropriate. Both diagonal values were beaten by inter-constructed correlations, indicating that selective validity is acceptable. The results of discriminatory validity tests are shown in Table 2, demonstrating that discriminatory validity is appropriate. Both diagonal values are outperformed by inter-constructed correlations, indicating that selective validity is possible.

Table 1 Overall Construct Reliability Loading and Convergent Validity

<b>Construct</b>	<b>Item Loading</b>	<b>Dijkstra-Henseler's rho (<math>\rho_A</math>)</b>	<b>Jöreskog's rho (<math>\rho_C</math>)</b>	<b>Cronbach's alpha(<math>\alpha</math>)</b>	<b>AVE</b>
Health Concern - Severity - Susceptibility	0.75 0.66	0.67	0.67	0.66	0.50
Innovativeness - INN1 - INN2 - INN3	0.89 0.40 0.75	0.82	0.74	0.74	0.51
TAM - Perceived Usefulness - Perceived Ease of Use	0.83 0.86	0.84	0.84	0.84	0.72
Intention to use Medical Tele Consulting (IMTC) - IMTC1 - IMTC2	0.90 0.72	0.82	0.80	0.79	0.67

Table 2 Validity Discriminant



Construct	Health Concern	INNO	TAM	Intention to use Medical Tele Consulting (IMTC)
Health Concern	<b>0.50</b>			
Innovativeness	0.44	<b>0.51</b>		
TAM	0.22	0.22	<b>0.72</b>	
Intention to use Medical Tele Consulting (IMTC)	0.48	0.40	0.44	<b>0.67</b>

Squared correlations, AVE in the diagonal

**IMTC** has an average mean score of ( $\bar{x}$ =4.50, SD=0.59) at the "Strong Agree" level. "I plan to use telemedicine consultation. If there is the service for me to use, " declares the statement with the highest mean level of agreement. ( $\bar{x}$ =4.55, SD=0.58). Strongly agree is assigned to all propositions ( $\bar{x}$ =4.21-SD=0.75). **Goodness of Model Fits (GoF)**, This research employed the structural equation modelling (SEM) application ADANCO 2.1.1 to determine the goodness of model fit (GoF) as well as hypothesis testing. The items were carefully selected from trustworthy previous research, the researcher decided to employ the back-translation procedure by a professional to decrease the risk. However, there may be certain issues with language translation between cultures because 1) a lack of understanding of cultural expressions 2) Inability to reach equivalency in the second language 3) certain artistic expressions are unclear, 4) a lack of understanding of translating procedures and strategies. A back-translation should be done by a professional translator and edited by a second expert, as according to Manchanda, S. [6]. The full-back translation method is extremely costly and complex, but it still cannot cover all errors. While back translation can uncover problems, it also creates a lot of false alarms, and more critically, many vulnerabilities stay undiscovered. Back translation remains, however, the most appropriate method for cross-cultural translation currently accessible. This methodology is also used in today's intercultural reading with artificial intelligence and machine learning. Table 3 indicates the goodness of model fit (GoF).

Table 3 Goodness of model fit (saturated model)

Value	SRMR	HI95	HI99
	0.05	0.04	0.05

**Partial Least Square-Structural Equation Model (PLS-SEM)**, For SEM, the variance-based, descriptive, and predictive methodology known as PLS (partial least squares) is widely used. The advantage of this procedure is that populace circulation isn't obliged, considering exploratory and corroborative review [20], [21]. There are two sections to the PLS route model. The relationship between latent variables and their

observed or manifest variables is determined in the measurement section, while the structural section determines the relationship between latent variables and their observed or manifest variables. In PLS, weight connections are utilized to estimate case values for latent variables, a feature that is absent from other SEM methods [12]. PLS aims to increase the independent variables' ability to explain as much of the variance in the dependent variables as possible. Formative and reflective structures can be combined into a single model when PLS is used. Additionally, formative and reflective constructs can be combined into a single model when PLS is used for analysis. Due to the fact that it does not rely on distributional assumptions, PLS is suggested for use in research involving data of a small-to-medium-size. When it comes to PLS path modelling, using ADANCO has three advantages. To begin, construct validity and reliability can be evaluated with the help of the measurement model. Third, the structural model can be utilized for hypothesis testing [19], [20], and second, overall model assessment can be utilized to validate model fit. The primary data was modelled using the ADANCO version 2.1.1 statistics package and a structural equation (SEM) modelling tool. In hypothesis testing, ADANCO employs a composite modelling technique, which removes the burden of data normality criteria. The data analysis began with the modelling of an estimated structural model, followed by selecting the best level of model fit by establishing reliability and validity, followed by path analysis investigation, and estimating model parameters, as shown in Figures 1. **The Structural Equation Model** displays the path coefficient's quality. Figure 1 depicts a hypothesis test, with the result shown in Table 4. Five hypotheses have a significant association between latent variables with a p-value less than 0.05, thanks to hypothesis testing. Two of the hypotheses failed to pass the statistical test. The predictors' explained variance (R<sup>2</sup>) was moderate. The researcher limits the latent variable in this study to three dimensions that have been demonstrated to be predictors of Intention to use Medical Teleconsulting in earlier studies. More latent variables could increase the predicting factors' explained variance. The findings of this study revealed statistically significant predictors, allowing for important inferences about how predictor values are linked to competitive advantage and business performance. Additional qualitative study could provide more insight into explaining variables that are still unknown. Nonetheless, investigations on human attitudes and social science in general show R<sup>2</sup> values that are rather low [20], [21]. The primary data was modelled using the ADANCO version 2.1.1 statistics package and a structural equation (SEM) modelling tool. In hypothesis testing, ADANCO employs a composite modelling technique, which removes the burden of data normality criteria. As depicted in Figures 1, the data analysis started with modelling an estimated structural model, then selecting the best level of model fit by establishing reliability and validity, then investigating path analysis, and finally estimating model parameters. The quality of the path coefficient is shown in the Structural Equation Model. A hypothesis test is shown in Figure 3, and the results are shown in Table 4. Thanks to hypothesis testing, five hypotheses have significant associations between latent variables with p-values below 0.05. There are two of the hypotheses failed to pass the statistical test. The predictors' explained variance (R<sup>2</sup>) was moderate. The researcher limits the latent variable in this study to three dimensions that have been demonstrated to be predictors of Intention to use Medical Teleconsulting in earlier studies. More latent variables could increase the predicting factors' explained variance. The findings of this study revealed

statistically significant predictors, allowing for important inferences about how predictor values are linked to competitive advantage and business performance. Additional qualitative study could provide more insight into explaining variables that are still unknown. Nonetheless, investigations on human attitudes and social science in general show R2 values that are rather low [19], [15]. Table 4 Path Coefficient and Hypothesis Testing Results are being shown.

Table 4 Path Coefficient and Hypothesis Testing Results

Effect/Hypothesis	Original Coefficient	Mean value	Standard error	t-value	p-value (2-sided)	Interpretation
Health Concern -> INN	0.66	0.66	0.06	10.18	0.0001	Accept
Health Concern -> TAM	0.47	0.47	0.08	6.17	0.0001	Accept
Health Concern -> IMTC	0.38	0.39	0.11	3.43	0.0001	Accept
INN -> IMTC	0.19	0.20	0.09	2.02	0.0430	Accept
TAM -> IMTC	0.40	0.38	0.09	4.52	0.0001	Accept

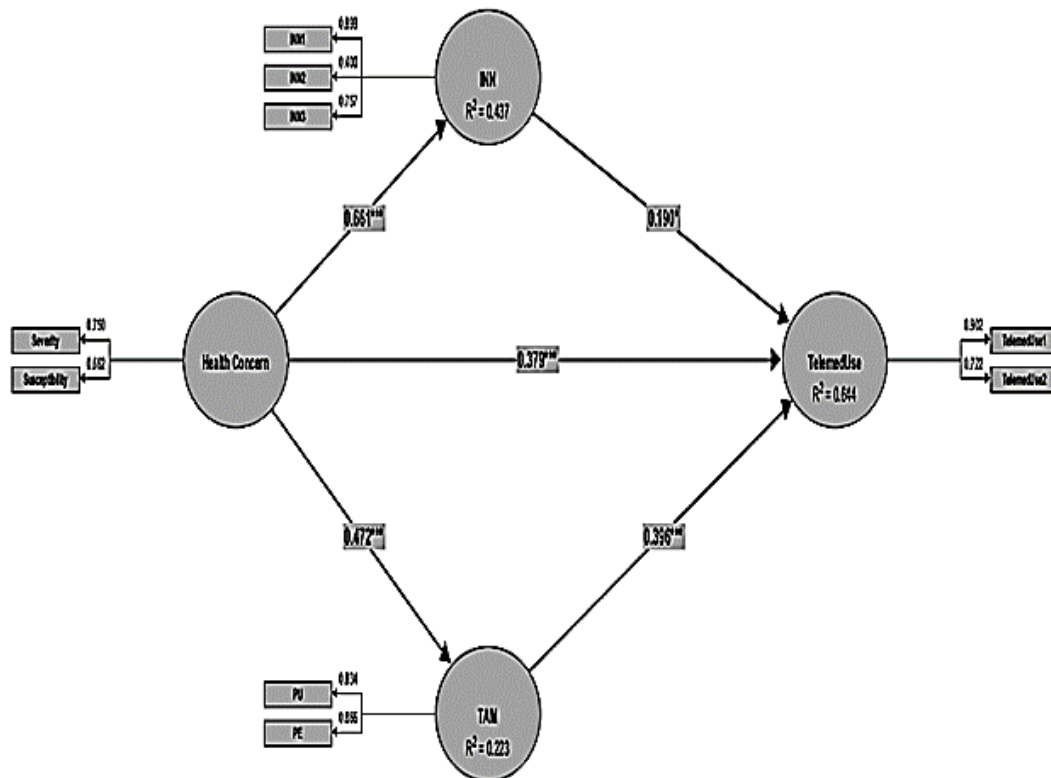


Figure 1 Partial Least Square-Structural Equation Model (PLS-SEM)

**Discussion**

**Covid-19**, a driver of increased Medical Teleconsulting, there are a number of COVID-19 cases all across the world, a driver of increased medical teleconsulting. This dilemma has contributed to the widespread adoption of telemedicine in several countries. The market value for telemedicine is predicted to increase from 41.63 billion USD in 2019 to 396.76 billion USD in 2026, a CAGR of 25.7 % (2020-2027) (1) Virtual health users increased by 19,000 percent in the United States, from roughly 96,000 users in 2019 to 18 million in 2020. Governments and private hospitals have both created remote medical service systems [20], [21]. **Factors influencing the intention to use Medical Teleconsulting in Thailand.** A quantitative survey research approach is utilized in this study. The health belief model (HBM), the technology acceptance model (TAM), and the innovativeness of individuals toward the intention to use medical teleconsulting were all used to ask the 410 samples of Bangkok-residing Thai citizens about their perceptions of health issues. TAM (Perceived usefulness and Perceived Ease of Use) was found to be the best predictor of intention to use medical teleconsulting out of all the factors examined (t-value=4.52, sig = 0.001), followed by health concern (t-value=3.43, sig = 0.001) and innovativeness (t-value=2.02, sig = 0.043). The relationship between health concern and the intention to use medical teleconsulting is moderated by innovativeness and technology acceptance. **The findings of the study show that** the most influential factors are perceived usefulness and ease of use, while the Health Belief Model constructs, which are Health Concerns gave the minor effect result. According to research findings, perceived usefulness and perceived ease of use have the greatest impact on outcomes, whereas Health Belief Model constructs, such as health concerns, have less of an effect. This may be due to the fact that Medical Teleconsulting is a new lifestyle that may replace the conventional method of visiting physical doctors. Technology Acceptance Model (TAM) components include Perceived Usefulness and Perceived Ease of Use. The TAM provides an explanation for the MTC's acceptance based on cognitive factors. Cognitive factors are understood as perceived usefulness and perceived ease-of-use operability of the examined technology. Perceived usefulness refers to a user's evaluation of how the use of a particular technology application enhances the performance of work tasks within a particular context. Perceived usefulness refers to a user's evaluation of how the use of a particular technology application enhances the performance of work tasks within a particular context. The perceived ease of use is the evaluation of whether the use of the information system can be mastered without difficulty or effort. The greater the benefits and usability of a MTC, the greater the likelihood that users will adopt the system. In the TAM, the interaction of these two factors—perceived usefulness and perceived ease of use results in the user's intention to use the technology (behavioral intention to use), which can result in actual system use [20]. To promote the use of Medical Teleconsulting, researcher recommends authorities and stakeholders to provide the basic training and information on how to use the system. A modern graphic computer or short video clips on how to use the system would help the user become

more familiar with the system. Healthcare service providers should place emphasis on the benefits of medical teleconsulting. However, health concern over the harmfulness of COVID-19 is very much promoted by several parties, including government authorities and private sectors. The researcher believes that the more patients understood and recognized the technology's usefulness and had a positive attitude towards ease of use, the more accepted medical teleconsulting would be.

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