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A STUDY OF FACTORS THAT INFLUENCE INTENTION TO USE TELEMEDICINE APPLICATIONS IN THE ERA OF POST COVID-19 PANDEMIC IN INDONESIA

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Abstract :
This study was conducted to get some insights into what factors influence individual behavior to use telemedicine applications post-COVID-19 pandemic in Indonesia. Some studies were done previously during the COsVID-19 pandemic era; however, as we moved to the new era post covid-19 pandemic, it would be interesting to find the answers. The research method was the quantitative approach. Survey to total 746 respondents spread throughout Indonesia were conducted, but 620 valid responses were collected to analyse user behavior towards the of telemedicine applications. Findings – The findings indicated that intention to use telemedicine application post COVID-19 pandemic in Indonesia was jointly predicted and explained 64.8% by performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation, price values, habit, perceived security and reliability. The result also revealed that three variables which are performance expectancy, habit, perceived security and reliability have strong positive correlations and significant influence on individual behavior towards the use of telemedicine. Respondents were collected randomly from some areas, meanwhile Indonesia is a large country, consists of more than 10,000 islands. The result may be applicable only in some places. Based on the findings, it is important for healthcare professionals or those who have interest in the telemedicine industry to carefully look at three key factors related to improve performance expectancy, build users habit, and ensuring security and reliability in order to drive individuals' behavior to use telemedicine application in Indonesia. This study is using modified UTAUT2 model to assess individual behavior towards use of telemedicine application post covid-19 pandemic in Indonesia.

Keyword : Telemedicine health applications, Indonesia telemedicine, UTAUT2, Post Covid-19 pandemic, performance expectancy, habit, perceived security and reliability.

INTRODUCTION

Healthcare providers as a business have been forced to quickly adapt to new care methods cause the Covid-19 pandemic. Telemedicine, serve to deliver medical treatments remotely, has been widely adopted as one such adaptation (Colbert et al., 2020). The usage of telemedicine or telehealth has reduced the risk of viral exposure; such crucial equipment in care services and maintaining the safety of sufferers and health service providers the Covid-19 outbreak (Monangesh et al., 2020), while still complying with the regulation of Lockdown and social restrictions.

The potential for telemedicine users in Indonesia is high, considering its population is more than 270 million people, 77,02% of them already connected to the internet (APJII, 2022). In order to implement telemedicine, the Minister of Health has issued circulars such as Menteri Kesehatan No. 20 Tahun 2020 regarding Telemedicine Provider Accreditation of Provider Facilities also Circular Letter Menkes No. 303 Tahun 2020 regarding Telemedicine Provider Accreditation of Provider Facilities with Indian Technology During COVID-19 Pandemic. This is when the Badan Penyelenggara Jaminan Sosial (BPJS) and the Minister of Health come into action. With the help of a platform named Indonesia Case Base Group, BPJS is testing out telemedicine financing for JKN participants' recommendations (INA-CBG). 2019 (Deloitte, 2019).

In Indonesia, the Pandemic era is marked by social restrictions regulation called PSBB (Large Scale Social Restriction) and PPKM (Implementation of Restriction on Social Activities) that follows. In the two years of the pandemic, telemedicine new user has grown 84,4% with rapid service use, averaging three times per month per user (Katadata, 2022). Despite World Health Organization (WHO) not yet stating the pandemic is over, the Indonesian government has decided to state the end of restriction on December 30th, 2022 (Setkab, 2020). This paper marks this date as the day Indonesia chose to leave the Covid-19 Pandemic era and enter the post-pandemic period.

Many studies have been carried out to find reasons that influence the intention of using telemedicine applications during the Pandemic Era. A study in Pakistan applying the integration of the modified UTAUT2 Model also Delone and McLean Information Success Model has revealed ten factors altogether that determine a 77,9% variance in determining user actions toward telemedicine (Rahi, 2022). Those factors namely performance will, social impact, business will, supporting conditions, habits, hedonistic spirit, price value,

quality of information, and service quality. This studies also decided that there is a positive correlation between intention for use telemedicine health applications also usage behavior would be stronger when the perceived severity is more substantial. Another research in Brazil using the UTAUT model also confirmed there are two factors; perceptions of performance and safety and reliability are predictive of action intentions to use telemedicine (Rahi, 2022).

However, these studies have some limitations that must be acknowledged. These former studies and findings were conducted in the pandemic era when there were many restrictions and barriers to using the traditional way to get healthcare services (Rahi, 2022). Research is needed to investigate user intention toward telemedicine applications after the pandemic. Factors found in research during the pandemic need to be reinvestigated in the context after the pandemic and cross-country comparison so the Telemedicine healthcare service has enough knowledge to innovate their technology to adopt after the pandemic market.

This research is important because health required by service providers to develop their abilities to be efficient and grow opportunities in the future with technologies. their skills to be effective and develop opportunities in the future like Indonesia in order for entrepreneurship to serve society (Khan & Siddiqui, 2014).

Therefore, this research carries out experiments to obtain information regarding the causes influencing behavior toward adopting telemedicine applications in Indonesia post the Pandemic Covid 19. Using the UTAUT2 model, this research integrates some factors found as significant in the recent research to be tested in Indonesia. The following section will be discussed in detail with methods and causal mechanisms to construct the research.

1. Telemedicine in Indonesia

The delivery of medical care via the Internet while utilizing audio-visual technologies is known as telemedicine. (Grossman et al., 2020) Telemedicine can change the focus of care from the practice to the patient, cutting down on travel time or allowing patients to request a leave of absence from school or work. At the moment, there isn't a single definition of telemedicine, though. The terms "telemedicine," "telehealth," and "eHealth" often using interchangeably (Hilty et al., 2013) Telehealth is the collection and transmission of health information with medical devices, activity trackers, automatic reminders, glucose monitors, and others technologies, typically to control or monitor chronic conditions. Moreover, telemedicine technologies are included. Developing and enhancing education that is related to health, management and general health can all be facilitated through telehealth (Edirippulige & Armfield, 2017).

Quick developments at information technology spread to others industries at the beginning of the twenty-first century, including telemedicine in Indonesia's health care

system. Many telemedicine-related medical studies were conducted in 2004 despite a government decree banning the use (of tele-ECG) in 2011 (Menteri Kesehatan Republik Indonesia, 2020). The Community Health Centres (Puskesmas) created telemedicine via an internet connection, supporting, among other things, teleconsultation, telediagnosis, simple tele-coordinating, tele-education, and drug databases (Suksmono et al., 2004). The Padjajaran University Faculty of Health's Research Group created a tele-biomicroscopy that same year (Suksmono et al., 2004). This system transmitted a microscopic explanation of the condition of the eyes through a wireless communication channel. The findings concluded that a telemedicine system might be used to diagnose an eye disease remotely.

The Covid-19 pandemic was sparked a global catastrophe straining the healthcare sector in ways that have never been seen before. Telemedicine is advantageous in lowering hospital visits and emergency department arrivals (Eccleston et al., 2020). Telemedicine has effectively provided support for mental management of sufferers, beginning with the prescription of medications, lifestyle changes, also psychological management of sufferers, ultimately improving the quality of the patient.

Telemedicine faces many difficulties, including those relating individual resources, facilities, and manners guidelines, despite the fact that technology can enhance the calibre of medical activities throughout the outbreak (Tedeschi, 2021). Available facilities accommodate telemedicine program are needed to purchase telemedicine facilities. Nevertheless, there is no denying that the lack of basic infrastructure in underdeveloped nations, such as electricity, electrical devices, interactions tools, also software programs for enable telemedicine action, is a considerable obstacle (Combi et al., 2016).

One of the issues with telemedicine's promotion is accessibility of medical records throughout the doctor-suffer interactions (Orozco-Beltran et al., 2017); (Bendelin et al., 2020). Every doctor's office that uses telemedicine is concerned about the privacy of suffer data also medical records. Clinicians who use telemedicine mandatory abide by certain norms and legislation in order to assure patients the maintaining suffer data also information (Gibson et al., 2020).

2. The Unified Theory of Use and Acceptance of Technology 2 (UTAUT2)

One of the most popular Information System (IS) study is on how people adopt and use IT (Venkatesh et al., 2016). To achieve desired outcomes, as well as the growth of workers' creativity and performance companies, one must first use technology, according to research on the adoption of technology through groups also.

All reviewers have conceived and conducted trials of several competitive types and types according to the TPB in order to explain and estimate user and user acceptance of IT. Relate two decades ago, Venkatesh, Morris, Davis, also Davis (2003) combine these types into UTAUT.

In order to explain and predict customer adoption and IT usage, all reviewers have presented and tried several competing models, includes types according to TPB also the technology acceptance type (TAM). Venkatesh, Morris, Davis, and Davis (2003) merged these theories to develop UTAUT.

To think behavioral willingness to used technology as well technology use, particularly at organizational contexts, UTAUT has distilled the crucial elements and circumstances. UTAUT explained at least 70% of the types of action intentions to use technology and at least 50% of the use of technology in longitudinal field studies regarding the acceptance of technology by the workforce (Venkatesh, 2012). UTAUT2, an enhanced type of UTAUT, has publish in 2012 for clarify technological adoption from the consumer's perspective (Venkatesh et al., 2012). Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions are the four important factors that make-up UTAUT. UTAUT2 (Venkatesh et al., 2012) adds three frameworks to better adapt oneself to the rules of disobedience: habit, hedonistic motivation, and value.

In this study, Modified UTAUT2 was used to continue the investigation of user behavior intentions toward adopting telemedicine applications, which is also consistent with past e-health research by Samar Rahi (2021) and Anne Schmitz (2022).

The variables that make up the updated research's model and the relevant hypotheses will be presented at the section below.

3. Hypothesis Development

1) Performance Expectancy

Performance Expectancy (PRE) is defined as the extent to which an individual believes that the use of technology can help him achieve his work performance targets (Venkatesh et al., 2003). According to Venkatesh et al. (2016), performance expectancy has the main factor influencing a user's decision for adoption new technology. Regarding telemedicine, PE includes people's intents and views about how using telemedicine will benefit them (De Veer et al., 2015); De Veer et al., 2015).

Di Carlo & De Guzman (2015) got performance expectancy to be one of the very critical determinants of usage intention in the healthcare setting, while Rho et al (2015) found it to significance impact desire to use telemedicine services for diabetic treatment. Also, writers, including Jewel (2018), Kim et al. (2016), and Phichitchaisopa & Naenna (2013), indicate a favourable also significance association between PRE and intention to use new healthcare-related technology. In the context of the current article, *performance expectancy* considered becoming the benefits and practicality of agreeing to meet a digital doctor for the public daily lives. Thus, and in light of the preceding, the first hypothesis says that:

H1. Performance expectancy is positively related to the intention to use telemedicine applications.

2) Effort Expectancy

The term "effort expectancy" (EFE) refers for how simple it is to utilize new technology at first. New users may give up on technology if they discover that adopting new technology can use a lot of time work and time to learn (Venkatesh et al., 2003).

Effort expectancies is among the essential determinants of usage intention, according to Di no & De Guzman (2014). Studies suggest that effort anticipation is one of the most significant elements directly influencing usage intention in health care (Hoque & Sorwar, 2017; Jewer, 2018; Tavares & Oliveira, 2018). In the context of the current study, effort expectancy represents how simple or complex a person finds it to use a virtual medical appointment. It is correlated with the effort needed to conduct an online consultation, i.e., The effort required decreases as service use intention increases. Although medical video visits are a relatively new type of help, they are primarily conducted through a video conference, a technology that most people are already well-versed in. Hence, the second hypothesis states:

H2. Effort expectancy is positively related to the intention to use telemedicine applications.

3) Social Influence

Social influence (SOI) is defined as the degree to which citizens consider others' recommendations and use of telemedicine applications (Khan & Siddiqui, 2014).

Nonetheless, given the highly intimate and personal character of health care, it has been hypothesized that other people's opinions will only have a minimal (Chang et al., 2007) or no influence at all on people's conduct (Chang et al., 2007). Although social factors are cited as a significant component in recent studies predicting patient behavior in the adoption of health ICT, peer and professional opinions can in fact, have a significant impact on people's behavior (Ashida, Wilkinson & Koehly, 2012; Cimperman et al., 2016; Jang et al., 2016). Information system literature makes a note of the significance of social influence (Venkatesh et al., 2012; Cho, 2016; Venkatesh et al., 2003). As a result, the following is presented as the third hypothesis as follows:

H3. Social influence is positively related to the intention to use telemedicine application.

4) Facilitating Condition

Venkatesh et al. (2003) defined facilitating conditions (FCN) as the extent to which a person thinks a technological infrastructure is available to assist them while using new technology. Facilitating conditions were proposed as an antecedent of actual user behavior in the initial version of UTAUT. This indicates that the likelihood of employing a new technology increases with stronger perceptions about the availability of resources,

knowledge, and support. In other words, they enable circumstances to lessen perceived obstacles to technology adoption regarding aid and support (Blok et al., 2020). In UTAUT2, it is hypothesized that the likelihood that a person will accept new technology is directly related to the facilitating conditions. (Venkatesh et al., 2013; Macedo, 2017).

Some researchers have emphasized the significance of social impact and conducive conditions in the literature on e-health, including Kaium et al. (2020), Zhou and Li (2014), Cho (2016), Nysveen and Pedersen, and Cho (2016).

While virtual doctor consultations are a relatively new method of getting medical help, it was decided to include facilitating conditions in the current study because the potential need for support during the procedure can be considerable, especially at the beginning. Given this, it is critical to examine whether people see technology as a barrier in and of itself, which impedes adoption. As a result, the fourth hypothesis reads as follows:

H4. Facilitating condition is positively related to the intention to use telemedicine application.

5) Hedonic Motivation

Hedonic motivation (HDM) described as a feeling of joy, pleasure and is a significant determinant of consumer acceptance of technology and is found to be a crucial antecedent of intention to act. (Venkatesh et al., 2012; Alalwan et al., 2017; Chopdar et al., 2018). It is explained that the greater the feeling of hedonism, the greater the desire to use technology, goods also service (Chopdar et al., 2018).

Hedonic motivation leads to a level of joy also enjoyment that users of telemedicine applications will experience (Baudier et al., 2020; Tavares & Oliveira, 2018). At this study, it's critical for note characteristics of digital meeting agreements. Before the outbreak, these meeting agreements were generally used for routine situations and health services providers could not meet in person, focusing on convenience (no travel, no waiting in line, no need to take time off from work, etc.).

According to Baudier, Kondrateva, and Ammi (2020), as the usage of digital health service was increased during outbreak, virtual appointments may cause some excitement, interest, or delight due to such use creative virutal health care. While seeking medical advice is never enjoyable, having the option to do it online from a home or office setting may motivate and boost the desire to use it. Particularly in the healthcare context, there needs to be more data at Correlation between hedonistic enthusiasm and intention to use, and more study are necessary for confirm this correlation. (Macedo, 2017). In order to prevent the lack of empirical evidence, it was decided to add a hedonic motivational framework to our research, especially in the era of post covid-19 pandemic. Hence, the fifth hypothesis is proposed as follows:

H5. Hedonic motivation is positively related to user behavior towards the use of telemedicine applications.

6) Price Value

To learn more about user intention to adopt technology, the price value (PRV) is analysed. PRV is determined by how much the advantages outweigh the cost of money (Venkatesh et al., 2012). However, the author at this research argues that employing telemedicine software will help residents more when compared to the financial cost. According to the literature, price and value considerably impact whether e-health services are adopted. (Gao et al.,2015; Baudier et al.,2020). Thus, the following sixth hypothesis are drop forth:

H6. Price value is positively related to the intention to adopt telemedicine applications.

7) Habit

Habit, the first construct included in UTAUT2, is described to what extent the individual typically carries out a behavior automatically (Venkatesh et al.,2012; Baudier et al.,2020). Those who regularly use the internet for digital banking, shopping, playing games, and not using paper transactions has more opportunities for employ telemedicine or health applications today than ever. So, the following is our seventh hypothesis:

H7. Habit is positively related to the intention to use telemedicine applications.

8) Perceived security and reliability

To what extent can telemedicine provide satisfaction a person's needs for security and dependability is known as perceived security and reliability (PSR) (Baudier et al., 2020; Cimperman et al., 2016; Saigi-Rubio et al., 2016). People are more likely to worry about the safety and dependability of healths care (Otokiti, 2019; Saigi-Rubio et al., 2016). Reliability refers to patients' faith at telemedicine technology, health care providers, also care quality, whereas security refers to free from interference related to telemedicine used (Saigi-Rubio et al.,2016). So, the eighth of our eight hypotheses are:

H8. Perceived security and reliability positively relate to the intention to use telemedicine applications.

METHODOLOGY

Instrument Development

To analyze people's intentions in using telemedicine applications post-COVID-19 in Indonesia, here researchers use the quantitative modified UTAUT2 (Unified Theory on Acceptance and Use of Technology) method. This type cannot be traced to estimates of technology user acceptance measures (Venkatesh et al., 2012, 2016; Samar & Mazuri, 2019; Ma et al., 2019). The modified UTAUT2 The underlying causes include perceived

performance, effort, social impact, supporting conditions, price value, hedonistic spirit, also habits.

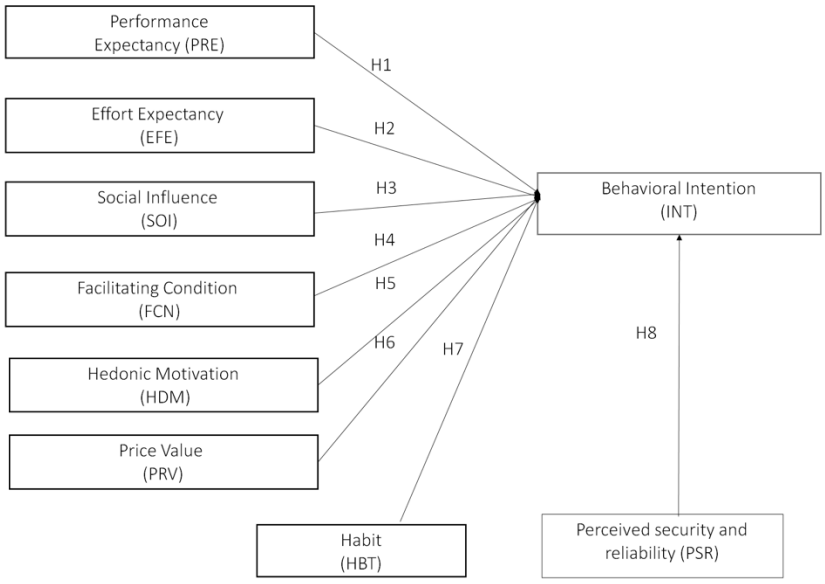

Figure 1. Research Model

The questionnaires that were given included eight constructs or independents variable, also one dependents variable was adopted from the previous studies. The independents variable are perceived performance, effort, social impact, supporting circumstances, hedonistic motivation, price value, also habit, which were adopted from a study Assessing human actions when using telemedicine programs the COVID-19 epidemic: evidence of emerging nation markets (Rahi, 2021). In order to offer a more comprehensive model and more explanatory power, the other one variable was added to this study which was perceived security and reliability adopted from a journal title Assessing telemedicine revenue for adult individuals in Brazil (Serrano et al.,2020)

The constructs items are measured with a one to seven-point scale range, where a scale number 1 means strongly disagree, the ratio number 7 means strongly agree and consistent with the previous study (Yamin & Alyoubi, 2020), (Mansour, 2021) and (Johns, 2010)

Design of Survey and Data Collection

Data collection is carried out by survey questionnaire method via email, WhatsApp, and Instagram distributed throughout Indonesia. There were 746 respondents, and along

the first filter, 144 released because the filling is not aligned; data analysis was conducted on 602 valid respondents (response rate 80.69%) to analyze users' behavior toward the use of telemedicine's applications after COVID-19 in Indonesia.

In Indonesia, telemedicine applications existed before the covid-19 pandemic, including HaloDoc, Alodokter, YesDok, and GrabHealth (a collaboration between Grab and Good Doctor) and during the covid-19 pandemic, several applications that appeared included HaloDoc, Alodokter, YesDok, GrabHealth, Good Doctor, SehatQ, DokterSehat, KlikDokter, ChatDokter, RSCM Kirana (specifically for patients of Cipto Mangunkusumo Hospital)

Even though this telemedicine application already existed in Indonesia before and along the COVID-19 outbreak, researchers still added general questions in the form of filters to respondents related to whether he is a regular towards telemedicine programs or not. The goal is for respondents to have basic insight regarding the program of telemedicine to answer survey questionnaires meaningful and with quality.

To conduct data analysis, researchers use the SPSS program through Descriptive Statistics, Inferential Analysis by using regression analysis to find relationships between independent and dependent variables and interpretation of results.

RESULTS AND DISCUSSION

Demographic characteristics of respondents

From 620 valid responses collected, majority of the respondents 66% are male, while the remaining 34% are female. The largest age group of the respondents falls within the age 31-40 (43%), followed by the age 21-30 (36%). Only a small percentage of respondents (2%) are above 50 years old. In term of education, the largest percentage of respondents (61%) has a bachelor's degree and professional qualifications. Looking at the split by household spending (32%) respondents spend between Rp. 5,000,000,- to Rp. 10,000.000,- monthly, while only a small percentage of respondents (3%) have an average monthly spending of more than Rp. 30.000.000. Regarding the location, majority of respondents (42%) are from Java, with 35% from the Megapolitan Jabodetabek (Jakarta, Bogor, Depok, Tangerang, Bekasi), 11% from Sumatra, 4% from Sulawesi, and 3% from Kalimantan.

Respondent profiles indicate that the survey was performed among a group of people who represent Indonesia consumers who are receptive and open to new information and technology. They are aware of telemedicine application.

N = 620	n	%
Gender		
Male	395	66%
Female	207	34%
Age		
17-30 years old	219	36%
31 - 40 years old	261	43%
41 - 50 years old	108	18%
> 50 years old	14	2%
Marital Status		
Single	158	26%
Married	444	74%
Education		
Diploma (D1/D3/Sederajat)	63	10%
Bachelor S-1 (Sarjana) & profesi	368	61%
Master S-2 (Magister)	41	7%
Doctor S-3 (Doktoral)	2	0%
High school (SMA/SLTA/SMK/STM)	128	21%
Average household monthly spending		
up to Rp. 3.000.000,-	130	22%
Rp. 3.000.000, - Rp. 5.000.000,-	173	29%
Rp. 5.000.000, - Rp. 10.000.000,-	192	32%
Rp. 10.000.000, - Rp. 30.000.000,-	90	15%
> Rp.30.000.000,-	17	3%
Location		
Sumatra	65	11%
Jawa	255	42%
Jabotabek	211	35%
Kalimantan	21	3%
Sulawesi	23	4%
Others	27	4%

Table 1. Demographic profile of respondets

Next, referring to Anderson also Gerbing (1998), a two-step methodology has applied at this research. First, the types of studies presented are to evaluate its reliability also validity, and after that the type of structure evaluated to confirm the hypotheses.

Measure Validity & Reliability

In order to determine whether it was appropriate to move forward with the analysis, validity test was performed to assess the magnitude of the relationship between benchmarks in a construction through minimum factor weights value 0.700. Then, KMO a measure of sample precision is implemented (Malhotra, N. K. et al. 2017). Any item that cannot be loaded in factor one is 0.50 or is not loaded removed; however, there isn't just one the items was removed in this discussion. The factor discussion stage is repeated until all items contain 0.50 or more than one and only one factor (Hair et al., 2010).

Cronbach's alpha is an indicator reliability analysis for measure of internal consistency, indicating the how far the lists in a ratio are located interrelated and measuring the same underlying construct, (Nunnally, 1978) recommends a minimum level of 0.700

Table 2 showed that all variables have relatively high Cronbach's alpha values, in the range between 0.872 to 0.954, which exceeded minimum of 0.70. No problem was found in reliabilities if Cronbach's α values above the criterion of 0.700 (Hair et al., 2010), emphasizing the survey instrument is reliable to measure all constructs consistently and free from random error.

Measure	Loadings	KMO	Cronbach's α
Performance Expectancy (PRE)		0.739	0.918
PRE1: The use of telemedicine application is useful in daily life	0.917		
PRE2: The use of telemedicine application enables me to take care of my health conveniently	0.950		
PRE3: The use of telemedicine health application will improve my health	0.917		
Effort Expectancy (EFE)		0.844	0.907
EFE1: Interaction with telemedicine application is clear	0.842		
EFE2: The use of telemedicine application is easy	0.918		
EFE3: Learning telemedicine application is easy for an individual	0.873		
EFE4: It is easy for me to become skillful while using telemedicine application	0.906		
Social Influence (SOI)		0.749	0.898
SOI1: Individuals who are important to me suggest to use telemedicine health application	0.900		
SOI2: Social circle influence on citizens behavior to adopt telemedicine health application	0.914		
SOI3: Citizens are being encouraged by application services providers to use telemedicine application for health services	0.922		
Facilitating Condition (FCN)		0.734	0.872
FCN1: For the use of telemedicine application, I have necessary IT resources	0.904		
FCN2: If I feel difficulty, I will get assistance for use of telemedicine application	0.871		
FCN3: For telemedicine application, I have necessary knowledge	0.904		
Hedonic Motivation (HDM)		0.764	0.952
HDM1: The use of telemedicine application is entertaining for me	0.962		
HDM2: The use of telemedicine application is fun for me	0.963		
HDM3: The use of telemedicine application is enjoyable for citizens	0.940		
Price Value (PRV)		0.737	0.868
PRV1: The use of telemedicine health application will reduce services cost	0.899		
PRV2: The use of telemedicine health application does not require advance payment	0.877		
PRV3: The use of telemedicine application is enjoyable for citizens	0.898		
Habit (HBT)		0.832	0.914
HBT1: The use of telemedicine application will become a habit for me	0.902		
HBT2: The use of telemedicine application will become natural to me.	0.920		
HBT3: Citizens can use telemedicine application for health services.	0.873		
HBT4: Citizens will become addicted while using telemedicine application	0.875		
Perceived security and reliability (PSR)		0.918	0.952
PSR1: I would feel safe sending personal health information using the internet	0.877		
PSR2: I believe teleconsultation services are reliable	0.922		
PSR3: I believe that information about my vital signs (obtained through devices such as smartwatches) or photos will be correctly transmitted to the doctor of the teleconsultation	0.915		
PSR4: I believe the teleconsultation has the same degree of security as a traditional	0.919		
PSR5: I believe the telemedicine has the same degree of quality as a traditional consultation	0.877		
PSR6 I have a favorable position for using telemedicine services	0.901		
Intention to Adopt (INT)		0.761	0.954
INT1: I intend to use telemedicine health application in the next few months	0.962		
INT2: I predict I will use telemedicine health application at everyllopportunity in next few month	0.969		
INT3: I plan to use telemedicine health application in near future	0.944		

Table 2.
Validity & Realibility

R Square adjusted result is 0.684 which predicting the proportion of variance in the respondent variable that can be explained by the predicted variable. The findings indicated that intention for use telemedicine application is estimated simultaneously by performance assumptions, effort expectancy, social impact, supporting circumstances, hedonistic spirit, tariff value, habit, perceived security and reliability, which explained 68.4% variance at measuring users' behaviour toward use of telemedicine program.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	0.830	0.689	0.684	0.78937	0.689	163.974	8

Table 3. Coefficient of determination R2

Hypothesis testing

The result explaining the correlation between constructs in the assessment model is exhibited at Table 4 below. the analysis of the regression coefficients confirmed Three (H1, H7, H8) out of the eight the hypothesis presented is accepted. Performance expectancy (PRE), habit (HBT), and perceived security and security (PSR) are significant factors and have positive effects to the desire for use telemedicine post-COVID-19 outbreak in Indonesia.

Hypotesis	Relationship	Coefficients			Result
		Strandardized Coefficients Beta	t	sig.	
H1	PRE → INT	0.132	3.341	<,001	Supported
H2	EFE → INT	-0.082	-1.758	0.079	Not Supported
H3	SOI → INT	-0.085	-1.862	0.063	Not Supported
H4	FCN → INT	-0.032	-0.793	0.428	Not Supported
H5	HDM →INT	0.096	1.906	0.057	Not Supported
H6	PRV → INT	-0.071	-1.933	0.054	Not Supported
H7	HBT → INT	0.418	8.375	<,001	Supported
H8	PSR → INT	0.471	11.250	<,001	Supported

Table 4. Hypothesis testing

Whilst Effort Expectancy also Social Influence has no statistically significance impact thus rejected. These facts are relevance with previous studies (Serrano et al., 2020).

Other three factors FCN, HDM and PRV are also not supported to show relationship that influences the intention for uses telemedicine post COVID-19 in Indonesia, however, contradicts with previous study (Rahi. 2021)

Discussion

Focusing on individuals' perceptions, this study aimed to further assess the factors influencing an individual when using telemedicine using the modification category UTAUT2. By the eradicated COVID-19 outbreak due to successful vaccination, telemedicine was been changing is on standard healthcare attentions & services for years also are here, even has

grown a new business ecosystem in Indonesia. Named Halodoc, Alodokter, GrabHealth, and SehatQ platforms, it became a sunrise opportunity, especially in Indonesia, as its populated healthcare recipients.

The modified UTAUT2 type applied This study helps expand its implementation in telemedicine. Empirical results show two original UTAUT2 constructs, PRE also HBT, has a significance, direct and positive impact on usage intentions telemedicine. Perceived security & reliability (PSR) as an additional construct in the UTAUT2 model was proven the most important independent variable, which also has a significance, direct and positive impact. Empirical acceptance of use positively, significance, also direct impact of the sense of security received also reliability, habit, and performance expectancy, framework was added as the most recent matter in this study, it has also founded.

Most of respondents find telemedicine helpful in their daily life, paving the path as a habit and natural to them. It is essential for individuals to feel secure and safe when they share information on telemedicine. Those factors drive the intention for used telemedicine at Indonesia during post covid-19 outbreak.

Based at Baudier et al. (2020), Techatraiphum et al. (2016), also De Veer et al. (2015) PR (Performance Expectancy) considered as the critical user factors of behavioral intention to use (BIU). In fact, one of the main factor influencing the popularity of telemedicine is how much young patients think it would benefit them.

Other studies also emphasize the urgency Perceived security & reliability (Baudier et al., 2020; Cimperman et al., 2016; van Houwelingen et al., 2018; Techatraiphum et al., 2016), which explaining that despite of being digital natives or digital immigrants, audiences tend to be relatively wary about the securitys also dependability.

In our findings, the measured variable of Effort expectancy (EE) which is used technology is felt to be easy for used, proven has no effect at the intention to use telemedicine. More than 70% of our respondents are from millennial age group where they are already familiar with new technology. This is relevance into Baudier et al. (2020) which conducted a study targeted to Millennialist nation. Native citizens and online immigrants occupy the majority of the combination of internet, computer devices, health programs, and social facilities that are generally used to interact over long distances (Saigi-Rubio et al., 2016; Naszay et al., 2018). Unlike previous study done by (Cimperman et al., 2016; van Houwelingen et al., 2018; Huygens et al., 2015; Lu et al., 2019; Techatraiphum et al., 2016; De Veer et al., 2015) The target use of telemedicine in the elderly population shows that EE is a determining factor in BIU because this population finds it difficult to navigate through the latest technology.

Correlation between supporting conditions and the desire for using telemedicine indicated in this study is also not significant, contrary to a previous study by Rahi. 2021. It

referred to when the user feels that it is well equipped with technology, or technological infrastructure is available to assist them in fact it is not statistically significance. However, this result is relevant into the result of a research Venkatesh et al. (2003), which are not discover a connection among FC also behavioural intention, because the majority of the respondent believed they have sufficient knowledge also resources to visit and use hospital telecommunications services also not require assistance from other. Their intention to use the hospital's telecommunications program was not considerably influenced by facilitating condition.

Social influence who are important like family, colleagues, friends also social circle) did not show significance influence either, consistent with the previous study (Rahi, 2022). Baudier et al. (2020), Cimperman et al. (2016), also De Veer et al. (2015) Supporting the same results obtained is that Social Impact does not have a significant effect on willingness to use. Adult individuals tend to be relatively independent, because they do not depend on other individuals to solve their problems, especially those related to technology.

CONCLUSION

UTAUT is famous model to understand technology adoptions. To address the goals at this study inquiry, its successor, UTAUT2, has selected as the theoretical model at this research. Perceived security also reliability has been added to the model in addition to the original UTAUT2 items so to provide a more detailed and in-depth understanding of the matter factors that influence behavior toward the use of telemedicine applications post COVID-19 pandemic in Indonesia (Modified UTAUT2 Model).

The findings, which are confirmed in this study, demonstrate statistically significant influences of the additional construct: perceived security and reliability as well as some of the typical correlations found in UTAUT2.

Based on the findings, it is essential for healthcare professionals or those who have an interest in the telemedicine industry to carefully look at three key factors related to improving performance expectancy, building users' habits, and ensuring security and reliability in order to drive individuals' behavior to use telemedicine application in Indonesia post covid-19 pandemic.

This is especially noteworthy for new businesses that are considering the telemedicine sector as a potential market for growth. Our assessment can be used by managers, as well as medical professionals, to guide the way to successful implementation of telemedicine at future in light of the upcoming problems. The ease of virtual appointments was acknowledged by respondents, and they were also seen as a secure way to contact medical personnel.

However, respondents were collected randomly from some areas due to time limitations. Meanwhile, Indonesia is a large country with over 10,000 islands. The result may be applicable only in some areas.

Referring to the research limitation, future research suggests determining if any different factors influence the desire for used telemedicine on urban & suburban areas. Moreover, it would be even more interesting to investigate whether the complexity of disease and symptom severity positively relates to user behavior to adopt telemedicine. This would help determine and strengthen telemedicine service in di Indonesia and sustain long-term usage.

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