Scientific Research Publishing

Open Journal of Social Sciences, 2022, 10, 344-359
https://www.scirp.org/journal/jss
ISSN Online: 2327-5960
ISSN Print: 2327-5952

Factors Influencing Continuous Intention to Use Telemedicine after the COVID-19 Pandemic in China: An Extended Technology Acceptance Model

Jing Wang, Yang Cao

School of International Pharmaceutical Business, China Pharmaceutical University, Nanjing, China
Email: Caoyang6926@sina.com

How to cite this paper: Wang, J., & Cao, Y. (2022). Factors Influencing Continuous Intention to Use Telemedicine after the COVID-19 Pandemic in China: An Extended Technology Acceptance Model. *Open Journal of Social Sciences, 10,* 344-359.
https://doi.org/10.4236/jss.2022.1012023

Received: October 17, 2022
Accepted: November 13, 2022
Published: November 16, 2022

Abstract

Introduction: Telemedicine played a significant role in cross-infection reduction, time savings, and medical treatment satisfaction during the COVID-19 period. However, the factors promoting the continued development of telemedicine after the pandemic have not been studied. The goal of this research is to find out what elements influence the Chinese public's decision to keep using telemedicine after the pandemic. **Methods:** From March to May 2022, study data was collected via an online questionnaire survey. The characteristics that affect the intention to continue utilizing telemedicine were studied using the partial least squares (PLS) approach. **Results:** PLS results showed that attitude towards telemedicine had a direct and significant effect on continuance intention ($P = 0.000$). Perceived usefulness and satisfaction had direct and significant impact on telemedicine attitude ($P = 0.000$). Perceived usefulness and perceived ease of use positively affected satisfaction ($P = 0.016$ and $P = 0.002$). Self-efficacy had a significant effect on perceived ease of use ($P = 0.000$) but had no significant effect on perceived usefulness ($P > 0.5$). In addition, social influence had a positive impact on perceived usefulness and perceived ease of use ($P = 0.000$ and $P = 0.013$). Satisfaction was negatively affected by perceived risk ($P = 0.031$). **Discussion:** Social influence, perceived usefulness, perceived ease of use, satisfaction, and attitude all impacted people's intention to continue using telemedicine. This study helped promote the popularity of telemedicine for policymakers and healthcare providers in the future.

Keywords

Telemedicine, TAM, Continuance Intention, PLS, China

1. Introduction

Since novel coronavirus-2 has spread around the world and the number of infected cases has increased exponentially, which brings a profound and heavy impact on the medical system and economic development of many countries. The WHO has declared this to be a pandemic by March 11, 2020. Some countries have taken active actions to cope with the outbreak, including social distancing, mask use, and telemedicine. Among numerous reports on the spread of the virus, it has been recognized that telemedicine could be a vital tool in the global outbreak response (Smith et al., 2020). The most notable advantages of telemedicine were in minimizing needless patient visits, increasing self-isolation, lowering emergency department overuse (Moazzami, Razavi-Khorasani, Dooghaie Moghadam, Farokhi, & Rezaei, 2020). Telemedicine is defined as the exchange of accurate and valid information using information and communication technologies. Telemedicine has emerged as a crucial weapon in the fight against COVID-19 during this pandemic (Monaghesh & Hajizadeh, 2020). In the United States, a strong association between searches and interest in telemedicine as well as increased cases of COVID-19 was discovered by quantifying searches on Google (Hong, Lawrence, Williams, & Mainous, 2020a). To cope with the COVID-19 pandemic in Canada, regulatory modifications were implemented at the provincial level to allow home phone calls and video conferencing (Folk et al., 2022). In China, for example, a 5G telemedicine network was developed in Sichuan Province, combining newly established 5G services, smartphone apps, and existing telemedicine technologies (Hong et al., 2020b). According to relevant studies, telemedicine was acceptable with high satisfaction. In a study, the experience and usefulness of telemedicine were highly positively evaluated by conducting 27 studies of outpatient telemedicine implementation (Hincapie et al., 2020).

Before the outbreak of the epidemic, telemedicine had been used as a supplement to the medical service systems. The acceptance and utilization rate of telemedicine by patients and medical staff were not very high. In Australia, telehealth accounts for less than 1% of all specialist consultations (Wade, Soar, & Gray, 2014), and the situation is similar in the United States, where telemedicine has been used by less than 1% of people living in remote areas. In Bangladesh, the infrastructure of telemedicine is not stable to support telemedicine, people lack the experimental innovation of new technologies and enough knowledge about telemedicine, and the general proficiency rate of adults aged 15 and above is 73.91% (Khan, Rahman, & AnjumIslam, 2021). With the outbreak of the pandemic, we have seen the prospect of telemedicine, especially at present, the viral is still spreading around the world, and strict community control is still carried out in various places, thus there is a great space for the development of telemedicine.

A review of the previous literature on the use of telemedicine revealed that most studies focused on patients' acceptance and initial use of these applications

(An, You, Park, & Lee, 2021; Jansen-Kosterink, Dekker-van Weering, & van Velsen, 2019; Rho, Choi, & Lee, 2014), while few studies focused on the continuance use of telemedicine. From the perspective of telemedicine providers, the continued use of a portal by users is a key factor in determining the ultimate success and sustainability of an information technology (IT) portal, which is more valuable to study than just the first use (Bhattacherjee, 2001b). In other words, IT or IS's long-term success depends more on its continuous use than on its initial deployment. Therefore, this paper aims to gain a deeper understanding of the factors that influence patients' intention to continue using telemedicine to increase the actual usage of it and to meet people's medical needs.

2. Research Model and Hypotheses

2.1. Technology Acceptance Model

Theory of Reasoned Action (TRA) was used to investigate people's acceptance of information systems. In 1989, Davis projected technology acceptance model (TAM) as shown in **Figure 1** stemmed from TRA (King & He, 2006). TAM contained two main factors: perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness reflects the extent to which an individual reckons that using a specific system will improve his work performance; perceived ease of use is defined as how easy a particular system is perceived to be. It aims to better understand the reason that users accept technology or not and to predict the acceptance or rejection of new technologies (Ammenwerth, 2019).

The theoretical model is first used to study the initial adoption of users. With the in-depth development and application of the TAM, scholars have updated the variables of the model, changing the behavioral intention to continuous usage intention and actual use to continuous use behavior, to predict and explain users' post-adoption behavior and continuous use behavior. Therefore, this study integrates constructs from TAM and introduces two external variables according to the characteristics of telemedicine in order to explore which factors influence continuance intention to use telemedicine.

2.2. Proposed Conceptual Model

By reviewing previous studies on TAM applied in telemedicine, we proposed an extended TAM in this study as shown in **Figure 2**. The model showed that continuance intention to use is determined by attitude to use which is affected by satisfaction. Besides, both perceived usefulness and perceived ease of use have an influence on satisfaction, which is also affected by perceived risk. Moreover, perceived usefulness is determined by both perceived ease of use and external variables, and perceived ease of use is also determined by external variables. In this study, we introduced two external variables: self efficacy and social influence. The following section explained the hypotheses developed in this study for investigating the research question.

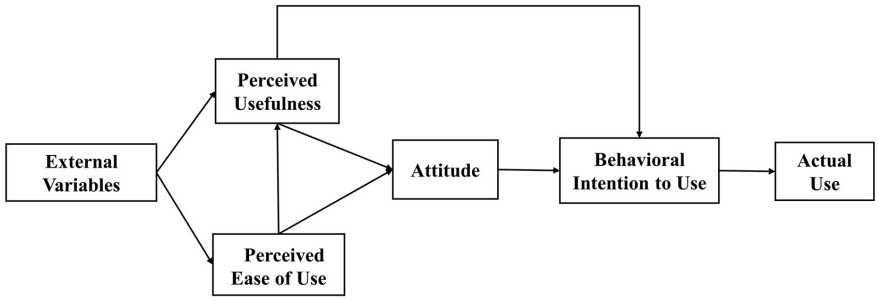

Figure 1. Technology acceptance model (TAM).

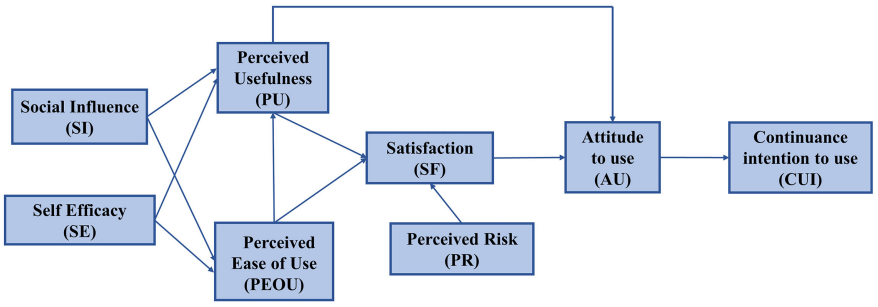

Figure 2. Proposed conceptual model.

2.3. Hypotheses Development

Self-efficacy theory was proposed by Albert Bandura in 1977, which explained motivation in particular situations from the perspective of social learning. An individual's level of self-efficacy affects the choice to behave, the ability to acquire skills, and continuous intention (Hsu, Wang, & Chiu, 2009). Several studies suggested that self-efficacy influenced the behavioral intention through PEOU and PU (Thong, Hong, & Tam, 2002). In the telemedicine field, we suppose that self-efficacy significantly affected both PEOU and PU (Wu, Chen, & Lin, 2007).

H1: Self efficacy has a positive impact on perceived usefulness.

H2: Self efficacy has a positive impact on perceived ease of use.

Social influence refers that an individual tends to change behaviors and attitudes to be consistent with social dominance under social pressure. It may have a stronger impact on the general public as users of telemedicine because they are more susceptible to peer pressure than doctors. Therefore, according to the above discussion, we hypothesized:

H3: Social influence has a positive impact on perceived usefulness.

H4: Social influence has a positive impact on perceived ease of use.

TAM claims that users' perceptions of the usefulness of technology are impacted by its ease of use. If people consider the system is easy to use, they will regard it as usefulness (Venkatesh, 2000). Miao et al. explored that patients' perceived ease of use of mobile health affirmatively affected its usefulness that patients' perceived (Miao et al., 2017). Hence, it was hypothesized that:

H5: Perceived ease of use has a positive impact on perceived usefulness.

Expectation confirmation theory (ECT) was proposed by Oliver in 1980 to research customers' satisfaction with a specific product or service after the purchase. According to ECT, users' satisfaction with IT was positively affected by perceived usefulness. Moreover, telemedicine incorporates modern communication technology. The more difficult people perceive it, the less satisfied they are.

The theory of perceived risk was first put forward by Bauer in 1960. He believed that consumers could not accurately predict the consequences of the purchase behavior, and there might be unpleasant consequences, so they took certain risks when they took the purchase behavior.

H6: Perceived ease of use has a positive impact on satisfaction.

H7: Perceived usefulness has a positive impact on satisfaction.

H8: Perceived risk has a negative impact on satisfaction.

Perceived usefulness and perceived ease of use are two main factors related to people's attitudes towards the IT system (Davis, 1989). People are more likely to adopt a certain technology when it is useful for them. To our knowledge, with the improvement of patients' satisfaction, patients will trust the telemedicine system more and use it again and even recommend it to the surrounding people. Thus, the above discussion resulted in the following hypotheses:

H9: Perceived usefulness has a positive impact on attitude towards telemedicine.

H10: Satisfaction has a positive impact on attitude towards telemedicine.

According to TAM, people's attitudes towards the system are the direct factor influencing the behavioral intention; Positive attitudes about technology, such as a high level of preference and satisfaction, can improve people's willingness to utilize it (Or et al., 2011).

H11: Attitude towards telemedicine has a positive impact on continuous intention.

3. Methodology

3.1. Measurement Instruments

The measurement items of the questionnaire were all from existing studies at home and abroad, and the scenarios of some items were revised in combination with the characteristics of telemedicine. This scale includes 8 latent variables and 24 measurement items. Each variable has three related problems to describe. Among them, the measurement items of self efficacy, social influence and attitude were obtained from Deng et al., 2014; perceived risk was obtained from Dinev & Hart, 2006, Venkatesh, Thong, & Xu, 2012; satisfaction was obtained from Bhattacherjee, 2001a, Bhattacherjee, 2001b; perceived usefulness was obtained from Bhattacherjee, Perols, & Sanford, 2015, Lai & Chen, 2011; perceived ease of use was obtained from Bhattacherjee et al., 2015, Lai & Chen, 2011; continuance intention items were from the maturity scale in the research of Davis et al., 1989. **Table 1** shows the related questions used to measure variables in the research model.

Table 1. Summary of construct with measurement items.

Construct	Measurement items	References
SE	SE1: I am confident that I can solve the operational problems in the process of using the telemedicine platform. SE2: I am confident to deal with difficulties in the process of telemedicine service. SE3: I can skillfully use telemedicine without help from others.	(Deng, Mo, & Liu, 2014)
SI	SI1: Recommendations for telemedicine by people who influence me (family, friends, etc.) will impact my use of telemedicine services. SI2: Everyone around me uses telemedicine, and I want to be consistent. SI3: The outbreak of COVID-19 will make my decision to use telemedicine services for remote medical treatment.	(Deng et al., 2014)
PR	PR1: I think the adoption of telemedicine will increase doctor-patient disputes. PR2: I think personal and transaction information will be disclosed to third parties when using telemedicine services. PR3: I am concerned that the use of telemedicine is not as effective as expected.	(Dinev & Hart, 2006; Venkatesh, Thong, & Xu, 2012)
SF	SF1: The overall medical experience of telemedicine is poor. SF2: The overall medical experience of telemedicine is satisfying. SF3: Telemedicine can meet my medical needs.	(Bhattacherjee, 2001a; Bhattacherjee, 2001b)
PU	PU1: It is useful to treat my health through telemedicine. PU2: Telemedicine services are beneficial to me. PU3: Telemedicine services are valuable for my medical needs and health management.	(Bhattacherjee, Perols, & Sanford, 2015; Lai & Chen, 2011)
PEOU	PEOU1: The telemedicine consultation process is simple for me. PEOU2: It can save my time to use telemedicine. PEOU3: It is a wise choice to use telemedicine.	(Bhattacherjee et al., 2015; Lai & Chen, 2011)
AU	AU1: Telemedicine services, in general, have advantages for me. AU2: In terms of medical choice, telemedicine service will attract me more. AU3: Medical treatment through the telemedicine platform is a pleasant experience.	(Deng et al., 2014)
CUI	CUI1: I would like to continue using telemedicine services. CUI2: I would like to recommend telemedicine to my friends. CUI3: I plan to use telemedicine more in the future.	(Davis, Bagozzi, & Warshaw, 1989)

3.2. Questionnaire Design and Data Collection

This study adopts the research strategy of questionnaire survey, which has the advantage of measuring the variables required for the sample efficiently, cost-effectively, and accurately. Among many questionnaire survey methods, online questionnaires were selected for this study. Online surveys can span time and distance as well as collecting large sample sizes. China has a large population and has many telemedicine users. Therefore, online questionnaires were chosen and distributed on the major social platforms and major online medical platforms.

The design of the questionnaire was divided into three parts: The first part

mainly investigated the participants' use of telemedicine, so as to screen the sample. The second part focuses on the demographic characteristics of the subjects, including gender, age, education level, income per month, location and chronic diseases. The third part is the measurement items of the study variables in the model, including self efficacy, social influence, perceived usefulness, perceived ease of use, perceived risk, satisfaction, attitude and continuance intention. A 5-point Likert type scale is used to express the degree of agreement of respondents to the survey content (1 - 5 indicates the range from "strongly disagree" to "strongly agree") and respondents were asked to give a score that best matched their actual feelings based on their actual use of telemedicine.

Surveys were conducted from March 2022 to May 2022. Of the 300 answer sheets that we collected, 286 were valid questionnaires, yielding an effective rate of 95.30%. To better test their intention to continue using telemedicine, the 211 questionnaires were selected due to their experience in telemedicine.

3.3. Data Analysis Process

SPSS 25.0 and Smart PLS 3.0 were used to analyze the data. The descriptive statistics of the data were assessed using SPSS 25.0. To test the research model and hypotheses, the partial least squares (PLS) method was used to verify the structural equation model (SEM) (Leguina, 2015). The two-step method of the PLS technique was used. The first step is to evaluate the measurement model, and the second step is to evaluate the structural model. First, the reliability of latent variables was evaluated using Cronbach's alpha. Second, aggregate validity was assessed using combined reliability, mean-variance extract (AVE), and standardized factor loading. The threshold value for factor loading and combination reliability (CR) was established at 0.5 and 0.7. The AVE score must be at least 0.5 to be considered acceptable. Additionally, to test discriminant validity, the square root of the AVE for each construct was compared to the correlation coefficients for all components. The questionnaire has strong discriminant validity if the square root of AVE for each concept exceeds the correlation coefficient or latent variable. The results of the analysis were shown in the next section.

4. Results

4.1. Survey Participant Demographics Characteristics

Table 2 summarizes respondent demographic information. 211 participants of all 286 (74%) claimed they had previous experience with telemedicine service in the past two years. Of the 211 participants, 46% of the respondents were male; the highest frequency of respondents' ages was observed in the 19 - 25-year age group. Most respondents had a bachelor's degree (51%). Less than 2000 CNY were the most reported incomes (32%). Most of the respondents were located in town (44%). In terms of chronic diseases reported, the top three with the highest percentage were following: hypertension (25%), rheumatoid arthritis (17%) and heart disease (12%).

Table 2. Demographics of respondents.

Measure	Items	Frequency	Percentage
Telehealth experience	Use	211	74%
	Heard but not used	69	24%
	Not heard	6	2%
gender	Male	97	46%
	Female	114	54%
age	<18	28	13%
	19 - 25	53	25%
	26 - 30	51	24%
	31 - 40	37	18%
	41 - 60	29	14%
	>60	13	6%
education	High school education or lower	16	8%
	High school graduate	48	23%
	Bachelor's degree	107	51%
	The Master's degree or other	40	19%
Income[a]	<2000	68	32%
	2001 - 5000	64	30%
	5001 - 8000	43	20%
	8001 - 10,000	28	13%
	>10,000	8	4%
Location	Rural	61	29%
	Town	92	44%
	City	58	27%
Chronic disease	Heart disease	26	12%
	Hypertension	52	25%
	Diabetes	15	7%
	Asthma	3	1%
	The tumor	5	2%
	Rheumatoid arthritis	35	17%
	Chronic bronchitis	6	3%
	Others	18	9%
	No chronic diseases	51	24%

a. Income: disposable income per month, CNY.

4.2. Measurement Model

The consistency of internal items of latent variables was evaluated by two criteria: the value of composite reliability (CR) should satisfy the prescribed limit of 0.7 and Cronbach's alpha (α) coefficients should exceed 0.7. Table 3 showed that the Cronbach's alpha (α) coefficients ranged from 0.738 to 0.843, and composite reliability ranged from 0.849 to 0.904, thus both greater than the threshold values.

We used a varimax with Kaiser Normalization to combine all items from all structures. Each construct's items are loaded onto one factor. Each construct was likewise subjected to one factor analysis. The loadings on all items were greater than 0.50 (Table 3).

Table 3. The measurement model.

Constructs	items	loadings	Cronbach's Alpha	CR	AVE
Self Efficacy (SE)	SE1	0.889	0.789	0.876	0.703
	SE2	0.836			
	SE3	0.787			
Social Influence (SI)	SI1	0.875	0.812	0.889	0.727
	SI2	0.851			
	SI3	0.831			
Perceived Usefulness (PU)	PU1	0.842	0.807	0.886	0.721
	PU2	0.837			
	PU3	0.868			
Perceived Ease of Use (PEOU)	PEOU1	0.841	0.796	0.880	0.710
	PEOU2	0.851			
	PEOU3	0.835			
Perceived Risk (PR)	PR1	0.896	0.843	0.904	0.759
	PR2	0.878			
	PR3	0.838			
Satisfaction (SF)	SF1	0.724	0.738	0.849	0.654
	SF2	0.842			
	SF3	0.854			
Attitude to Use (AU)	AU1	0.864	0.810	0.888	0.725
	AU2	0.848			
	AU3	0.843			
Continuous Intention to Use (CUI)	CUI1	0.810	0.784	0.873	0.697
	CUI2	0.840			
	CUI3	0.855			

Besides, to our knowledge, the average variance extracted (AVE) contributes to test the convergence validity. However, the discriminant validity of the constructs are often examined by square root of AVE. Between constructs, if the variance shared by them is lower compared to the square root of the AVE, it is suggested that the constructs of the model have sufficient discriminant validity (Davis et al., 1989). We can see from **Table 4** that the square root of the AVE for the particular construct is all greater than the correlations between each pair of constructs.

4.3. Hypothesis Testing

Table 5 presented the results of the structural model testing. **Figure 3** showed the path coefficients. The path between *SI* and *PEOU*, *PEOU* and *SF*, *PU* and *SF*, *PR* and *SF* were significant at the $P < 0.05$ level, but the path between *SE* and *PU* was insignificant at the $P < 0.05$ level. Especially, the path between *PEOU* and *PU*, *PU* and *AU*, *SE* and *PEOU*, *SI* and *PU*, *SF* and *AU*, *AU* and *CUI* were highly significant at the $P < 0.01$ level. The proposed continuance intention model explained 21.6% of *CUI*. *PU* and *SF* accounted for 31.8% of *AU*, *PU*, *PEOU*, and *PR* accounted for 30.1% of *SF*, while *SI* and *PEOU* accounted for 37.9% of *PU*. Moreover, *SI* and *SE* accounted for 27.9% of *PEOU*.

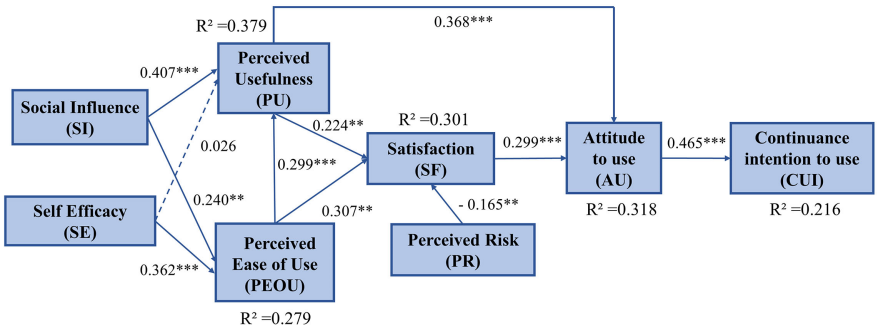

Figure 3. Structural analysis of the research model. Note: The solid lines represent significant paths, and dashed lines represent insignificant paths. *** indicates that there is a relationship at 1% significance level, and ** indicates that there is a relationship at 5% significance level.

Table 4. Correlation matrix and discriminant validity.

	AU	CUI	PEOU	PR	PU	SE	SF	SI
AU	0.852							
CUI	0.465	0.835						
PEOU	0.463	0.496	0.842					
PR	0.202	0.280	0.387	0.871				
PU	0.495	0.524	0.486	0.312	0.849			
SE	0.505	0.443	0.486	0.301	0.382	0.838		
SF	0.455	0.364	0.480	0.354	0.425	0.501	0.809	
SI	0.478	0.486	0.428	0.270	0.549	0.518	0.482	0.852

Table 5. SEM Results.

Hypothesis	Path	T-statistics	*P*-values	Supported
H1	SE -> PU	0.248	0.804	No
H2	SE -> PEOU	3.766	0.000	Yes
H3	SI -> PU	4.342	0.000	Yes
H4	SI -> PEOU	2.498	0.013	Yes
H5	PEOU -> PU	4.230	0.000	Yes
H6	PEOU -> SF	3.147	0.002	Yes
H7	PU -> SF	2.410	0.016	Yes
H8	PR -> SF	2.155	0.031	Yes
H9	PU -> AU	4.194	0.000	Yes
H10	SF -> AU	3.763	0.000	Yes
H11	AU -> CUI	6.765	0.000	Yes

5. Discussion

We proposed an extended technology acceptance model in this research validated to measure the influencing factors about the continuance intention of the Chinese public to use telemedicine after the pandemic. The findings showed that attitude towards telemedicine had a significant positive effect on continuance intention, which was in accord with Deng et al. (Deng et al., 2014). Social influence, perceived usefulness, perceived ease of use, and satisfaction all demonstrated significant indirect effects on continuance intention. This relates to the study's main question: what factors influence people's intention to use telemedicine in the future. The results showed that attitude, social influence, satisfaction, perceived usefulness, and perceived ease of use were the influencing factors of intention to accept and use telemedicine continuously.

In the original technology acceptance model, users' behavioral intention was proved to be positively impacted by perceived ease of use and perceived usefulness through attitude. This study confirmed that perceived usefulness positively and significantly affected the continuance usage intention through attitude. On the other hand, perceived ease of use had positively link with continuance intention which was indirectly affected by perceived ease of use through perceived usefulness and attitude. Before the COVID-19 epidemic, telemedicine had a low prevalence and awareness across the country, with technological issues and doubts about effectiveness deterring widespread use. During the outbreak of the pandemic, telemedicine has contended a crucial role in the medical service system, with the proportion of people using it gradually increasing. The public's impression of telemedicine's convenience and effectiveness has improved, and there is a greater desire to use it in routine monitoring after the epidemic. Based on that, medical institutions should actively promote medical information resources that users are interested in according to the different needs of individu-

als. Relevant departments should actively overcome the financial and technical obstacles in the construction of the telemedicine network platform and provide medical service providers with relevant telemedicine operation training.

Our findings suggested that satisfaction was positively affected by both perceived usefulness and perceived ease of use. Dohoon Kim and Chang drew the consistent conclusion that perceived usefulness had a significant effect on satisfaction, even though perceived ease of use was found to have an indirect effect on satisfaction through perceived usefulness, but had an insignificant direct effect on user satisfaction (Kim & Chang, 2007). The findings of the study indicated that perceived ease of use not only had a direct impact on satisfaction, but it also had a minor indirect effect on satisfaction via affecting perceived usefulness. However, perceived usefulness had no effect on continuance intention through satisfaction. In the telemedicine service process, people achieved diagnosis and treatment services across time and space, which can help save travel time and gain almost the same level of service quality as traditional face-to-face medical treatment. Thus, people had a high level of satisfaction with telemedicine, which leads to positive attitudes. We also found that the influence coefficient of perceived ease of use and satisfaction is higher than that of perceived usefulness and satisfaction, which may be because the complexity of technical operation for the telemedicine model is a more important influencing factor for people. If people find it easier to use, the attitude will be more positive.

According to the model path fitting results, we supported the positive and significant relationship between social influence and both perceived usefulness and perceived ease of use. Besides, self efficacy was verified to have a positive effect on perceived ease of use. J.Y.L. Thong et al. proposed the consistent opinion that people's use experience gradually increased over time, which can improve their confidence and further increase their sense of self-efficacy (Thong et al., 2002). This study explained that due to the convergence of Internet information technology, it may become a big obstacle to the public, especially to the elderly. As people's experience and skills increased, it improved people's successful experience and confidence, thus positively affecting the perceived ease of use. However, the results of this study showed that self efficacy had no significant effect on perceived usefulness, which was inconsistent with the results of some studies (Hsu et al., 2009; Shih, 2006). It was due to a reason that information asymmetry in the medical industry, medical service providers played a leading role in telemedicine. The quality of the service they provided, and the architecture of the telemedicine service model determined the perceived usefulness to a certain extent. Consequently, it seems reasonable that the study found self efficacy had no significant relationship with perceived usefulness. Furthermore, the research shows that social influence can indirectly influence the intention of continuous use by influencing perceived usefulness and attitude, the result of which was confirmed by Holden & Karsh (Holden & Karsh, 2010). They also suggested that when the general people were the respondents, they were more

affected by the social aspect than doctors. In this study, we added a measurement item about the impact of the COVID-19 pandemic to the social influence variable, to be closer to the research background. This is due to the sudden public health incidents across the country, we have to adopt an indirect mode of medical treatment, and the introduction and recommendation of telemedicine by people around us will also affect our choices. Therefore, internet media can be used to broadcast the current epidemic prevention and encourage people to consciously stay at home, seek medical treatment remotely, and monitor themselves. Moreover, medical institutions should actively construct a telemedicine system, build a smooth, orderly, and stable remote network of health service centers, and encourage the public to seek medical treatment nearby.

In addition, the results of the research demonstrated that perceived risk directly influenced uses' satisfaction with telemedicine at the *p*-value of 0.05, but present negative impact. We explained that patients' digital health information such as electronic medical records circulated on the telemedicine network platform. When using telemedicine, there may exist a risk that users' personal health information may be disclosed, which will make them feel suspicious and dissatisfied with the overall medical treatment process. The telemedicine network platform should strengthen the protection of user privacy, improve the stability and security of the system, and strictly control the flow of patient medical information, including medical data and electronic medical record information. However, this study did not prove that perceived risk could influence attitudes and intentions of continuous use by influencing satisfaction.

6. Conclusion

This research studies the factors influencing the intention to continue using telemedicine since the outbreak of the COVID-19 pandemic, through a survey of people who experienced telemedicine visits during the pandemic in China. Based on the technology acceptance model, this study extends TAM by introducing variables self-efficacy, social impact, perceived risk, and satisfaction. The findings suggest that the integrated model is effective for studying the public's intention to continue using telemedicine. The findings provide empirical evidence for the continuous use of telemedicine. This study can help inform policymakers and healthcare providers in telemedicine decision-making, as well as the promotion of telemedicine in the normalization of the epidemic today and the daily medical services after that.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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