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Tam Approach: The Role Of Perceived Usefulness On Attitude In The Use Of Hospital Applications In Indonesia

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Abstract. The development of information technology has changed the way patients interact with hospitals. The Minimum Service Standard Indicator for Hospitals in Indonesia shows that the number of registrations via mobile applications has still not reached the target and the results of the review show that there are still complexities and difficulties in using the application. Understanding the factors that influence patient intention to use the hospital mobile application is essential to optimize its adoption and use. This study aims to test the Technology Acceptance Model in understanding patient intention to use the Hospital mobile application. This quantitative study with the causality method used a sample of 100 users of the application who met the criteria. Data were collected through questionnaires and analyzed using path analysis. The results showed that perceived ease of use and perceived usefulness had an indirect effect on behavioral intention to use through attitude. Research findings show that Perceived Usefulness is the most dominant factor in influencing users attitudes towards applications. The implications are improvements in simplifying features, design, increasing the function of hospital mobile applications, as well as considering patient expectations of the application in order to increase user intention to adopt the application. These findings provide insight for hospital management to design mobile applications that are easier to use and provide benefits to patients, to increase adoption and use of the application.

Keywords: Perceived Ease of Use, Perceived Usefulness, Attitude, Behavioral Intention

1. INTRODUCTION

The increasingly rapid development of information and communication technology has brought about significant changes in various sectors, including the health services industry (Mccool et al, 2022). One innovation that is currently being adopted by many hospitals is a mobile application for patients (patient mobile application) (Wood et al, 2019). This application aims to facilitate interaction and communication between patients and the hospital, as well as making it easier to access information and health services (Yang et al, 2024). As well as overcoming distance barriers between doctors and patients (Marin, Goga, and Stanciu, 2019).

As one of the leading private hospitals in Indonesia, has developed a special mobile application for its patients. This application offers various features that are expected to improve patient satisfaction and experience. This application is available on Google Play (playstore). The application has been downloaded more than 1 million, but the application still gets a rating of 2.5 and 7, 701 votes.

However, the success of implementing a patient mobile application is not only determined by the available features, but also by the level of acceptance and intention to use of the patient himself. Although the application offers several benefits, there are still several areas that can be improved to provide a more optimal user experience.

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Based on the Minimum Service Standard Indicators for Hospital, it is known that the number of registrations using the mobile application has not met the target. The indicator for the number of registrations using the mobile application obtained an achievement percentage of 49.11 percent, this has not yet reached the target set by the hospital of ≥ 60 percent.

The results of the review survey (Google Review) on Google Play have not met the target of 5, only reaching 3.9. From several of these reviews, users stated that there was ambiguity or complexity in the user interface of the Hospital mobile application which made potential users find it difficult or uncomfortable to use. Another user stated that the latest version of the application could not be used so that users found it difficult in the registration process, in the end they continued to contact the call center for reservations.

Based on data obtained from the results of a pre-survey of 15 users who had downloaded the hospital mobile application, 40 percent of respondents stated that the application was easy to use, while 60 percent of respondents stated that the application was not easy. to use. This shows that there are still many users who feel that the application is not easy to operate. There were 53.3 percent who considered this application useless and only 26.7 percent of respondents liked using the application to access health services. Furthermore, 60 percent do not intend to continue using this application.

Based on these problems, understanding the factors that influence patients' intention to use mobile applications is important for hospitals in their efforts to increase adoption and continued use of these applications.

In the opinion of experts, the success of using the m-Health mobile application is largely determined by the user's acceptance and intention to use it. Therefore, the technology acceptance model (TAM) has been widely used in various research on mobile-based technology, especially to examine intentions to use technology in the context of information systems (Yang et al, 2024; Davis, 1989). The Technology Acceptance Model (TAM) approach is a well-established framework for understanding and predicting technology adoption, including hospital mobile applications (Yang et al, 2024). TAM is one popular model that helps model how society accepts and utilizes new technologies. This model focuses on the factors that determine the behavioral intention to use new technology from the end user's perspective (Kalayou, Endehabtu, and Tilahun, 2020).

Several studies show that the main elements of TAM are perceived ease of use and perceived usefulness and attitude towards technology has a strong impact on behavioral intention to use health mobile application technology (Kalayou, Endehabtu, and Tilahun, 2020; Wang et al, 2022). Research by Atinafu et al. also found that attitude plays a role as a partial

intervening (partial mediation) perceived usefulness and behavioral intention to use and plays a role as an intervening (full mediation) between perceived ease of use and behavioral intention to use (Atinafu et al, 2023).

Based on a literature review, the TAM approach shows that perceived ease of use and perceived usefulness influence behavioral intention to use both directly and indirectly through attitude as an intervening variable. However, there has been no research that specifically investigates the influence of perceived ease of use and perceived usefulness on behavioral intention to use by involving attitude as an intervening variable in the Hospital mobile application. Therefore, this research aims to fill this knowledge gap and provide a better understanding of the factors that influence user intentions in using the Hospital mobile application.

2. METHOD

This research analyzes the influence of two independent variables, namely perceived ease of use (X1) and perceived usefulness (X2), on one dependent variable, namely Behavioral Intention (Y), through one mediating variable, namely Attitude (Z).

This research uses quantitative methodology with a causality approach with a cross-sectional research design.

Research Population and Sample

The population in this study were all owners of the application who had registered patients and had used it either once or several times. The sampling technique in this research used purposive sampling. The criteria: Users who have used < 3 times and aged between 21 years and 56 years. The sample size in this research uses quota sampling (Sugiyono, 2017). The number or quota in this study was determined at 100 people. Research data was collected using questionnaire distributed via Google Form.

Instrument

The measurement of the perceived ease of use variable refers to (Venkatesh & Davis' theory 2000) with 12 statements adopting research by (Wang et al, 2022 and Sinha et al, 2021). The measurement of the perceived usefulness variable refers to Venkatesh & Davis' theory, 2000 with 12 statements adopting research by (Wang et al, 2022), Sinha et al, 2021, and An, 2021). The measurement of attitude variables refers to the theory of Davis et al. 1989 with 9 statements adopting Ren & Zhou's, 2023, An, 2021 and Wang et al, 2022 research. Behavioral Intention measurement refers to the theory of Davis et al. 1989 with 9 statements adopting Chiu & Cho's, 2021, Ren & Zhou, 2023, and An, 2021 research. Statements from each variable are

measured using a 1-4 Likert Scale, namely from scale 1 (strongly disagree) to scale 4 (strongly agree).

Data analysis technique

The analysis technique used is the path analysis method. This analysis is assisted by AMOS (Analysis of Moment Structure) software. The mediation test in this study used the Sobel Test. The criteria for acceptance or rejection for a hypothesis are that HA is accepted and HO is rejected if the p-value is <0.05.

3. RESULTS AND DISCUSSION

RESULTS

The results of the analysis of the characteristics of the respondents in this study can be seen in Table 1 below:

Table1. Distribution of Respondent Characteristics

Demographic	Category	Frequency	Percentage (%)
Age	21-30 Years	34	34.0
	31-40 Years	42	42.0
	41-50 Years	14	14.0
	51-56 Years	10	10.0
Total		**100**	**100**
Gender	Man	48	48.0
	Woman	52	52.0
Total		**100**	**100**
Education	Not completed in primary school	6	6.0
	Elementary School Equivalent	9	9.0
	Middle School Equivalent	11	11.0
	High School Equivalent	39	39.0
	Diploma	5	5.0
	Bachelor	30	30.0
Total		**100**	**100**
Work	Doesn't work/ Housewife	13	13.0
	Student/ Student	8	8.0
	Self-employed/ Businessman	30	30.0
	Civil servants	11	11.0
	Private employees	38	38.0
Total		**100**	**100**
Application Usage in 1 year	1 time	64	64.0
	2 times	36	36.0
Total		**100**	**100**

Source: Primary Data, 2024

Table 1. Shows that of the 100 respondents, the highest percentage was in the 31-40 year age range, namely 42% and the lowest was in the 51-56 year age range, 10% of the total respondents. The composition of female respondents has a slightly higher percentage, namely 52% compared to 48% male. The highest composition of respondents was those with a high school or equivalent education, namely 39%, while the lowest was a Diploma with 5% of the total respondents. The highest composition of respondents was those working as private employees, namely 38%, while the lowest were students with 8% of the total respondents. The

highest composition of respondents was those who used the application only once a year, namely 64%, while the lowest was those who used the application only once a year with 36% of the total respondents.

Data Analysis Requirements Testing

The validity test was carried out at the beginning of the research as pre-sampling which was carried out in the second week of July 2024 and distributed questionnaires to 30 respondents. The results of the validity test using Pearson's Product Moment correlation showed that r count > r table, so all statement items for each variable were declared valid. The results of the reliability test show that all variables, namely Perceived Ease of Use, Perceived Usefulness, Attitude, and Intention to Use, have a Cronbach's Alpha value greater than 0.60, so each variable used in the research has good reliability and can be relied upon in measuring the constructs in question.

Path Analysis Test Results

In this research, the analysis used is path analysis with the help of the AMOS program. As for the form of the path diagram resulting from data processing using AMOS 24 software, the following results were obtained:

Table 2. Relationship between research variables

Ha	Path	Standardized Regression	CR	P	R Square
H1	Perceived ease of use→Attitude→behavioral intention	0.081		0.009	0.346
	Perceived usefulness→Attitude→behavioral intention	0.156		0.006	0.480
H2	Perceived ease of use→Attitude	0.260	3,169	0.002	
H3	Perceived usefulness→Attitude	0.407	6,072	0,000	
H4	Perceived ease of use→behavioral intention	0.194	2,525	0.012	
H5	Perceived usefulness→behavioral intention	0.394	4,605	0,000	
H6	Attitude→behavioral intention	0.314	3,499	0,000	

Source: SmartPLS 3.0 Processed Results (2024)

Table 4 shows the results of the hypothesis test for the perceived ease of use variable on behavioral intention through attitude, showing that the estimated value (Standardized Regression Weights) is positive at 0.081 with a p-value of 0.009 < 0.05. This means that perceived ease of use indirectly has a significant positive influence on behavioral intention through attitude by 8.1%. Furthermore, perceived usefulness of behavioral intention through attitude shows a positive estimate value (Standardized Regression Weights) of 0.156 with a p-value of 0.006 < 0.05. This means that perceived usefulness indirectly has a significant positive influence on behavioral intention through attitude by 15.6%. Based on these results, it shows

that there is an influence of perceived ease of use and perceived usefulness on behavioral intention to use with attitude as an intervening variable, so the first hypothesis is accepted .

The estimated value (Standardized Regression Weights) on the influence of perceived ease of use on attitude is positive at 0.260 with a p-value of 0.002 < 0.05. This means that perceived ease of use has a significant positive effect on attitude by 26%, so the second hypothesis is accepted.

The estimated value (Standardized Regression Weights) on the influence of perceived usefulness on attitude is positive at 0.407 with a p-value of 0.000 < 0.05. This means that perceived usefulness has a significant positive influence on attitude by 40.7%, so the third hypothesis is accepted.

The estimated value (Standardized Regression Weights) on the influence of perceived ease of use on behavioral intention to use is positive at 0.194 with a p-value of 0.012 < 0.05. This means that perceived ease of use has a significant positive effect on behavioral intention to use by 19.4%, so the fourth hypothesis is accepted.

The estimated value (Standardized Regression Weights) on the influence of perceived usefulness on behavioral intention to use is positive at 0.394 with a p-value of 0.000 < 0.05. This means that perceived usefulness has a significant positive influence on behavioral intention to use by 39.4%, so the fifth hypothesis is accepted.

The estimated value (Standardized Regression Weights) on the influence of attitude on behavioral intention to use is positive at 0.314 with a p-value of 0.000 < 0.05. This means that attitudes have a significant positive influence on behavioral intention to use by 31.4%, so the sixth hypothesis is accepted.

Three-Box Method Index Analysis

The results of the Three-Box Method analysis show that the Perceived Ease of Use indicator is statement number 9 in the "Easy to Use" dimension, which states "The application is designed with an intuitive interface, so I can quickly master all the application features.", has the lowest index compared to other statements on the Perceived Ease of Use variable, namely 64.75, which is in the medium category. The Perceived Ease of Use indicator with statement number 10 in the "Easy to Get the System" dimension, which states "The application is a digital health service available responsively to patient needs", has the highest index compared to other statements in the variable Perceived Ease of Use, namely 80.25, is in the high category. Overall, the average answer score index for the Perceived Ease of Use variable was 74, in the medium category.

Perceived Usefulness Indicator with statement number 3 in the "Improves job performance" dimension, which states "This application makes it easier for me to manage health information, from medical history to examination schedules", has the lowest index compared to other statements on the Perceived Usefulness variable, namely 59.75, which is in the medium category. The Perceived Usefulness indicator with statement number 8 in the "Enhances Effectiveness" dimension, which states "This application provides tools that enable me to make more appropriate health decisions", has the highest index compared to other statements in the Perceived Usefulness variable, namely 86.25 is in the high category. Overall, the average answer score index for the Perceived Usefulness variable was 71.85, which is in the medium category.

Attitude indicator with statement number 3 in the "Cognitive" dimension, which states "I feel this application has clear benefits for me",has the lowest index compared to other statements on the attitude variable, namely 65.50, which is in the medium category. The attitude indicator with statement number 5 in the "affective" dimension, which states "I feel enthusiastic when using the mobile application for hospital patients", has the highest index compared to other statements in the attitude variable, namely 80.75 which is in the high category. Overall, the average answer score index for the atitude variable was 74.25, which is in the medium category.

Indicator of intention to use with statement number 4 in the dimension "Plan to continue to use it in the future", which states "Plans to continue using the application in the future are always on my mind.", has the lowest index compared to other statements on the attitude variable, namely 71.75, which is in the medium category. Indicator of intention to use with statement number 8 in the dimension "Motivate others to use", which states "There is convenience and usefulness offered by the Application, I need to encourage people around me to try and take advantage of the features of this application", has an index highest compared to other statements on the intention to use variable, namely 81.25 which is in the high category. Overall, the average response score index for the intention to use variable was obtained at 77.78, which is in the high category.

Table 3. Three Box Method Analysis Average Matrix

Variable	Score			Behavior
	Low (25-50)	Moderate (51-75)	High (76-100)	
Perceived Ease of Use		74.00		Unresponsive
Perceived Usefulness		71.85		Limited
Attitude		74.25		Passive
Intention to Use			77.78	Intend

Based on the Three Box Method matrix Table 3, it is known that the Perceived Ease of Use value is in the medium category, indicating unresponsive behavior, indicating that the system is not fast or slow in responding.The Perceived Usefulness value which is in the medium category indicates limited behavior. The attitude of users in the medium category shows passive behavior. Users' intention to use the application is in the high category, indicating intentional behavior.

DISCUSSION

The influence of perceived ease of use and perceived usefulness on behavioral intention to use with Attitude as an intervening variable

The research results show that there is an influence of perceived ease of use and perceived usefulness on behavioral intention to use with attitude as an intervening variable. This means that perceived ease of use and perceived usefulness have an indirect effect on behavioral intention to use, with attitude as a variable that mediates this relationship. The more users perceive the application as easy to use and useful, the more positive attitudes they will have, which will then increase their intention to use the application.

In line with the theory that User attitudes play an important role in forming intentions to use the application. Theoretically, these findings support and strengthen the technology acceptance model (TAM), which states that Perceived Ease of Use and Perceived Usefulness are the main factors that determine user acceptance of a technology (Davis et al. 1989). These findings also strengthen the role of Attitude as a mediating variable that connects user perceptions with behavioral intentions to use.

Similar findings to previous research reveal that attitude is a mediator of the influence of perceived ease of use on behavioral intention to use (Atinafu et al, 2023) . Meanwhile, other research reveals that attitude plays a partial intervening role (partial mediation) in perceived usefulness and behavioral intention (Atinafu et al, 2023) .

Based on the three-box method analysis, there are four variables studied, the lowest average index obtained for the Perceived Ease of Use, Perceived Usefulness and Attitude variables is in the medium category, while the Behavioral Intention to Use variable is in the high category. The lowest indicator of Perceived Ease of use is "The application is designed with an intuitive interface, so I can quickly master all the application features." This shows that the majority feel that the application is still considered complicated by respondents, such as there are steps or features that confuse users when using the application. The lowest indicator for the Perceived Usefulness variable is "This application makes it easier for me to manage health information, from medical history to examination schedules." This shows that the

features related to managing health information in the application do not fully meet user expectations and needs. The lowest indicator of the Attitude variable is "I feel this application has clear benefits for me". This shows that the features related to managing health information in the application do not fully meet user expectations and needs. Meanwhile, the indicator with the highest index is "Because of the convenience and benefits offered by the Application, I need to encourage people around me to try and take advantage of the features of this application." This mattershows that users have a very positive perception of the ease of use and benefits offered by the Application. Users feel that the Application offers features that are easy to use and provide real benefits for users.

The Influence of Perceived Ease of Use on Attitude

The research results show that perceived ease of use has a significant positive influence on attitude by 26%. This means that the user's perceived ease of use contributes directly by 26% in influencing the user's attitude towards the application. The easier the application is to use, the more positive the user's attitude will be towards the application.

These findings support and strengthen the Technology Acceptance Model (TAM) theory, which states that Perceived Ease of Use is one of the important factors that influences technology acceptance by users. The results of this research are also in line with previous studies which have identified a positive relationship between Perceived Ease of Use and Attitude in the context of technology adoption (Kalayou, Endehabtu, and Tilahun, 2020; Muljo et al, 2020; Correa et al, 2020) . Previous research also showed similar findings that perceived ease of use influences attitudes towards various patient mobile applications, such as the Hospital Information Management System Salinding and Hasyim, 2020, telehealth utilization (An, 2021), health information technologies (chits) Sinha et al, 2021, Mobile Medical Platforms (Wang et al, 2022), mobile phone to receive mental health (Atinafu et al, 2023).

Based on the three-box method analysis of indicators on the Perceived Ease of Use variable with the "Easy to Use" dimension, which states "The application is designed with an intuitive interface, so I can quickly master all the application features.", has the lowest index compared with other statements on the Perceived Ease of Use variable in the medium category. This means that respondents felt that they could not quickly master the features of the application. This shows that the majority feel that the application is still considered complicated by respondents, such as there are steps or features that confuse users when using the application.

The influence of perceived usefulness on attitude

The research results show that perceived usefulness has a significant positive influence on attitude by 40.7%. This means that the user's Perceived Usefulness contributes directly by 40.7% in influencing the user's attitude towards the application. The more users perceive that an application is useful and useful, the more positive their attitude towards the application will be.

These findings support and strengthen the Technology Acceptance Model (TAM) theory, which states that Perceived Ease of Use is one of the important factors that influences technology acceptance by users. The results of this research are also in line with previous studies which have identified a positive relationship between Perceived Ease of Use and Attitude in the context of technology adoption (Kalayou, Endehabtu, and Tilahun, 2020; Muljo et al, 2020; Correa et al, 2020) . Previous research also showed similar findings that perceived ease of use influences attitudes towards various patient mobile applications, such as the Hospital Information Management System Salinding and Hasyim, 2020, telehealth utilization (An, 2021), health information technologies (chits) Sinha et al, 2021, Mobile Medical Platforms (Wang et al, 2022), mobile phone to receive mental health (Atinafu et al, 2023).

Based on the three-box method analysis, the Perceived Usefulness indicator in the "Improves job performance" dimension, which states "This application makes it easier for me to manage health information, from medical history to examination schedules", has the lowest index compared to other statements in the variable Perceived Usefulness, in the medium category. This shows that the features related to managing health information in the application do not fully meet user expectations and needs.

The Influence of Perceived Ease of Use on Behavioral Intention to use

The research results show that perceived ease of use has a significant positive influence on behavioral intention to use by 19.4%. This is interpreted as Perceived Ease of Use contributing directly by 19.4% in influencing behavioral intentions to use the application. The more users perceive that the application is easy to use, the higher their intention to use the application.

These findings support and strengthen the Technology Acceptance Model (TAM) theory, which states that Perceived Ease of Use is one of the important factors that influences users' behavioral intentions in adopting technology. The results of this research are also in line with various previous studies which have identified a positive relationship between Perceived Ease of Use and Behavioral Intention to Use in the context of health mobile application technology

adoption (Kalayou, Endehabtu, and Tilahun, 2020; Mensah, 2022; Muljo et al, 2020; Chiu and Cho, 2021; Almasri, 2022) .

Based on the three-box method analysis, the Perceived Ease of Use indicator with the "Easy to Get the System" dimension, which states "The application is a digital health service available responsively to patient needs", has the highest index compared to the statements others in the Perceived Ease of Use variable are in the high category. This means that respondents' perceptions of the availability and responsiveness of the application in meeting patient needs are very good. A high index shows that respondents feel the application is easy to access and use to meet the need for digital health services.

The Influence of Perceived Usefulness on Behavioral Intention to Use

The research results show that perceived usefulness has a significant positive influence on behavioral intention to use by 39.4%. This means that the user's perceived usefulness contributes directly by 39.4% in influencing behavioral intentions to use the application. The more users perceive that the application is useful and useful, the higher their intention to use the application.

These findings support and strengthen the Technology Acceptance Model (TAM) theory, which states that Perceived Usefulness is one of the important factors that influences users' behavioral intentions in adopting technology. The results of this research are also in line with various previous studies which have identified a positive relationship between Perceived Usefulness and Behavioral Intention to Use in the context of health mobile application technology adoption (Yang et al, 2024; Kalayou, Endehabtu, and Tilahun, 2020; Mensah, 2022; Muljo et al, 2020; Chiu and Cho, 2021; Akritidi et al, 2022).

Based on the three-box method analysis, the Perceived Usefulness indicator in the "Enhances Effectiveness" dimension, which states "This application provides tools that enable me to make more appropriate health decisions", has the highest index compared to other statements in the Perceived variable. Usefulness, in the high category. This means that users have a very positive perception of the ability of the application to increase effectiveness in making more informed health decisions.

The Influence of Attitude on Behavioral Intention to Use

The research results show that attitude has a significant positive influence on behavioral intention to use by 31.4%. This means that user attitudes contribute directly by 31.4% in influencing behavioral intentions to use the application. The more positive the user's attitude towards the application, the higher the intention to use the application.

These findings strengthen the Technology Acceptance Model (TAM) theory which states that attitudes are one of the key factors that influence behavioral intentions in technology adoption. The results of this research are in line with many previous studies that have identified a positive relationship between Attitudes and Behavioral Intention to Use in the context of health mobile application technology adoption (Kalayou, Endehabtu, and Tilahun, 2020; Salinding and Hasyim, 2020; An, 2021; Ren and Zhou, 2023; Correa et al, 2020).

Based on the three-box method analysis, the attitude indicator with the "affective" dimension, which states "I feel enthusiastic when using the mobile application for hospital patients", has the highest index compared to other statements in the attitude variable in the high category. This indicates a strong emotional involvement for users with the application. A high index on this statement means that users have a very positive experience when using the hospital patient mobile application. The application is able to meet expectations and provide a pleasant experience for users.

4. CONCLUSION

In accordance with the results of the tests and analyzes that have been carried out, it can be concluded that perceived ease of use and perceived usefulness have an indirect effect on behavioral intention to use through attitude. Perceived ease of use and perceived usefulness have a direct influence on attitude and behavioral intention to use, and attitude has a direct influence on behavioral intention to use.

Theoretical Implications

Theoretically, these findings support and strengthen the technology acceptance model (TAM), which states that Perceived Ease of Use and Perceived Usefulness are the main factors that determine user acceptance of a technology [18]. These findings also strengthen the role of Attitude as a mediating variable that connects user perceptions with behavioral intentions to use.

The results of this research are also in line with various previous studies which have identified this relationship, namely that attitude is a mediator of the influence of perceived ease of use on behavioral intention to use. Meanwhile, other research reveals that attitude plays a partial intervening role (partial mediation) in perceived usefulness and behavioral intention. Research by Kalayou et al. 2020, Muljo et al. 2020, Ramírez-Correa et al. 2020 that perceived ease of use and perceived usefulness influence attitude and Behavioral Intention to Use in the context of adopting health mobile application technology (Kalayou, Endehabtu, and Tilahun, 2020; Muljo et al, 2020; Correa et al, 2020)

Managerial Implications

Based on research findings with the lowest index for each dimension of each variable, the managerial implications of the Perceived Ease of Use variable in the "Easy to Use" dimension have the lowest index compared to other statements, so system improvements in online patient registration are needed. The Perceived Usefulness variable in the "Improves job performance" dimension has the lowest index, so improvements to the patient health information system are needed. The Attitude variable in the "Cognitive" dimension has the lowest index, so it is necessary to improve the Integration System for the application.

RECOMMENDATION

Based on the managerial implications in this research, there are suggestions that can be put forward from this research. First, simplify the appearance and navigation of features, as well as arrange the location and shape of icons that are easier for users to understand. Second, providing more detailed and clear information on doctors' practice schedules and adding features that are more useful for patients such as patient medical records, patient diagnosis results and so on. Third, the application can serve online medicine orders, remote doctor consultations, interesting health education videos and so on.

BIBLIOGRAPHY

A. Almasri, “The Users' Behavioral Intention to use Mobile Health-Tech Application to Prevent the Spread of Coronavirus,” South East Eur. J. Econ. Bus., vol. 17, no. 2, p. 18–33, 2022.

B. Chen, Y. Chang, B. Wang, J. Zou, and S. Tu, “Technology acceptance model perspective on the intention to participate in medical talents training in China,” Heliyon, vol. 10, no. 4, p. e26206, 2024.

C.S. Wood et al., “Taking connected mobile-health diagnostics of infectious diseases into the field,” Nature, vol. 566, no. 7745, p. 467–474, 2019.

D. Akritidi, P. Gallos, V. Koufi, and F. Malamateniou, “Using an Extended Technology Acceptance Model to Evaluate Digital Health Services,” Stud. Health Technol. Inform., vol. 295, p. 530–533, 2022.

FD Davis, “Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology,” MIS Q., vol. 13, no. 3, p. 319–340, 1989.

FD Davis, RP Bagozzi, and PR Warshaw, “User Acceptance of Computer Technology: A Comparison of Two Theoretical Models,” Manage. Sci., vol. 35, no. 8, p. 982–1003, 1989.

H. Wang, J. Zhang, Y. Luximon, M. Qin, P. Geng, and D. Tao, "The Determinants of User Acceptance of Mobile Medical Platforms: An Investigation Integrating the TPB, TAM, and Patient-Centered Factors, " Int. J Environ. Res. Public Health, vol. 19, no. 17, 2022.

HH Muljo et al., "TAM as a model to understand the intention of using a mobile-based cancer early detection learning application," Int. J. online Biomed. Eng., vol. 16, no. 2, p. 80–93, 2020.

I. Marin, N. Goga, and R.-C. Stanciu, "Web application for self-diagnosis and drug recommendation based on user symptoms," J. Adv. Technol. Eng. Res., vol. 5, no. 2, p. 62–71, 2019.

IK Mensah, "Understanding the Drivers of Ghanaian Citizens' Adoption Intentions of Mobile Health Services," Front. Public Heal., vol. 10, no. June, 2022.

J. Mccool, R. Dobson, R. Whittaker, and C. Paton, "Mobile Health (mHealth) in Low- and Middle-Income Countries," Annu. Rev. of Public Heal., p. 525–539, 2022.

KSLT Zin, S. Kim, HS Kim, andIF Feyissa, "A Study on Technology Acceptance of Digital Healthcare among Older Korean Adults Using Extended Tam (Extended Technology Acceptance Model)," Adm. Sci., vol. 13, no. 2, p. 1–18, 2023.

M. Sinha, L. Fukey, K. Balasubramanian, P. Kunasekaran, NA Ragavan, and MH Hanafiah, "Acceptance of consumer-oriented health information technologies (chits): Integrating technology acceptance model with perceived risk," Inform, vol. 45, no. 6, p. 45–52, 2021.

M. Yang, A. Al Mamun, J. Gao, MK Rahman, AA Salameh, and SS Alam, "Predicting m-health acceptance from the perspective of unified theory of acceptance and use of technology," Sci. Rep., vol. 14, no. 1, p. 1–18, 2024.

MH An, SC You, RW Park, and S. Lee, "Using an extended technology acceptance model to understand the factors influencing telehealth utilization after flattening the COVID-19 curve in South Korea: Cross-sectional survey study," JMIR Med. Informatics, vol. 9, no. 1, 2021.

MH Kalayou, BF Endehabtu, and B. Tilahun, "The applicability of the modified technology acceptance model (Tam) on the sustainable adoption of ehealth systems in resource-limited settings," J. Multidiscip. Health c., vol. 13, p. 1827–1837, 2020.

P. Ramírez-Correa, C. Ramírez-Rivas, J. Alfaro-Pérez, and A. Melo-Mariano, "Telemedicine acceptance during the COVID-19 pandemic: An empirical example of robust consistent partial least squares path modeling," Symmetry (Basel), vol. 12, no. 10, 2020.

SG Salinding and RK Hasyim, "Acceptance Model of Hospital Information Management System: Case of Study in Indonesia," Eur. J. Bus. Manag. Res., vol. 5, no. 5, p. 1–8, 2020.

Sugiyono, Quantitative, Qualitative and R&D Research Methods. Bandung: Alfabeta, 2017.

V. Venkatesh and FD Davis, "Theoretical extension of the Technology Acceptance Model: Four longitudinal field studies," Manage. Sci., vol. 46, no. 2, p. 186–204, 2000.

W. Chiu and H. Cho, “The role of technology readiness in individuals' intention to use health and fitness applications: a comparison between users and non-users,” Asia Pacific J. Mark. Logist., vol. 33, no. 3, p. 807–825, 2021.

WT Atinafu, KN Tilahun, TM Yilma, ZA Mekonnen, AD Walle, and JB Adem, “Intention to use a mobile phone to receive mental health support and its predicting factors among women attending antenatal care at public health facilities in Ambo town, West Shoa zone, Ethiopia 2022,” BMC Health Serv. Res., vol. 23, no. 1, p. 1–16, 2023.

Z. Ren and G. Zhou, “Analysis of Driving Factors in the Intention to Use the Virtual Nursing Home for theElderly: A Modified UTAUT Model in the Chinese Context,” Healthc., vol. 11, no. 16, 2023.