



Please cite this article as: Ishak M, Gani A., (2023), Facilitating Conditions Among the Elderly Towards The Intention To Use E-Health, Jilid 4, Bilangan 3, Paper ID 26-115

## FACILITATING CONDITIONS AMONG THE ELDERLY TOWARDS THE INTENTION TO USE E-HEALTH

Nurul Farhah Mohamad Ishak, Norhaninah A.Gani  
\*Corresponding Author

- (a) Faculty of Business, Accounting and Social Science, University Poly-Tech Malaysia, [k12204010840@student.kuptm.edu.my](mailto:k12204010840@student.kuptm.edu.my)  
(b) Faculty of Business, Accounting and Social Science, University Poly-Tech Malaysia, [nurhaninah@uptm.edu.my](mailto:nurhaninah@uptm.edu.my)

DOI:

Received 18 November 2023, Accepted 20 December 2023, Available online 29 December 2023

### ABSTRACT

The observational quantitative approach was employed in this study to examine the adoption of e-Health. The Unified Theory of Acceptance and Use of Technology (UTAUT) model was utilized to conduct a more thorough analysis of the acceptance theory. The most recent unified model that can adequately describe why information systems are accepted and used is called UTAUT. The purpose of the study was to examine how the Fasa 1 L Community in Bandar Tasik Kesuma facilitated conditions of eHealth applications. For the purpose of this study, survey respondents are members of the Fasa 1 L Community sample population. The independent variables in this study were perceived usefulness, perceived ease of use, technology anxiety, social support, facilitating conditions, and performance expectancy while the dependent variable was intention to use E-health. Data were collected through questionnaires delivered via Google Form. The results showed that the high indicator of acceptance by the users was the time needed to input data to the e-Health application. This study concludes that the acceptance of e-Health by users of primary healthcare centers in Fasa 1 L Community in Bandar Tasik Kesuma is well received. This study suggests a more widespread dissemination of information regarding the use of e-Health along with technical assistance and guidance on the use of e-Health applications.

### ARTICLE INFO

**Keywords:**  
*facilitating condition,  
e-health*

Copyright: © 2023 The Author(s)

Published by Universiti Poly-Tech Malaysia Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

## 1.0 INTRODUCTION

The topic of facilitating conditions for the elderly in accessing e-health services is crucial in contemporary society due to the increasing reliance on e-health technologies to provide healthcare services to older adults (Wilson et al., 2021). Facilitating conditions, such as accessibility, ease of use, and social support, play a significant role in enabling elderly individuals to effectively engage with e-health platforms (Wilson et al., 2021). This is particularly important in today's digital era, where e-health technologies have become essential for remote healthcare delivery, especially during events like the COVID-19 pandemic (Changizi & Kaveh, 2017).

Factors like digital literacy, access to technology, and social support networks greatly influence the ability of older adults to adopt and utilize e-health services (Kruse et al., 2016). Addressing these facilitating conditions is essential for bridging the digital divide among the elderly and ensuring equitable access to healthcare resources (Kruse et al., 2016). By enhancing facilitating conditions, healthcare providers and policymakers can empower elderly individuals to actively manage their health and seek medical assistance when needed, ultimately leading to improved health outcomes and quality of life for older adults (Palas et al., 2022).

Research has shown that facilitating conditions are crucial in understanding the intention to use e-health among the elderly (Palas et al., 2022). Factors such as usability of e-health platforms, availability of support resources, and digital literacy levels are key considerations in promoting e-health adoption among older adults (Palas et al., 2022). By identifying and addressing barriers and opportunities related to facilitating conditions, interventions and policies can be developed to enhance digital inclusivity and healthcare outcomes for the elderly population (Wilson et al., 2021; Palas et al., 2022).

In conclusion, the presence of facilitating conditions is vital for promoting the adoption of e-health technologies among the elderly, thereby improving their access to healthcare services and overall well-being. Understanding and addressing factors that influence facilitating conditions are essential steps towards creating inclusive and accessible healthcare delivery systems for older adults.

## 2.0 LITERATURE REVIEW

The topic of facilitating conditions for the elderly in accessing e-health services is crucial in contemporary society due to the increasing reliance on e-health technologies to provide healthcare services to older adults (Wilson et al., 2021). Facilitating conditions, such as accessibility, ease of use, and social support, play a significant role in enabling elderly individuals to effectively engage with e-health platforms (Wilson et al., 2021). This is particularly important in today's digital era, where e-health technologies have become essential for remote healthcare delivery, especially during events like the COVID-19 pandemic (Changizi & Kaveh, 2017).

Factors like digital literacy, access to technology, and social support networks greatly influence the ability of older adults to adopt and utilize e-health services (Kruse et al., 2016). Addressing these facilitating conditions is essential for bridging the digital divide among the elderly and ensuring equitable access to healthcare resources (Kruse et al., 2016). By enhancing facilitating conditions, healthcare providers and policymakers can empower elderly individuals to actively manage their health and seek medical assistance when needed, ultimately leading to improved health outcomes and quality of life for older adults (Palas et al., 2022).

Research has shown that facilitating conditions are crucial in understanding the intention to use e-health among the elderly (Palas et al., 2022). Factors such as usability of e-health platforms, availability of support resources, and digital literacy levels are key considerations in promoting e-health adoption among older adults (Palas et al., 2022). By identifying and addressing barriers and opportunities related to facilitating conditions, interventions and policies can be developed to enhance digital inclusivity and healthcare outcomes for the elderly population (Wilson et al., 2021; Palas et al., 2022).

---

**Copyright: © 2023 The Author(s)**

Published by Universiti Poly-Tech Malaysia Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

In conclusion, the presence of facilitating conditions is vital for promoting the adoption of e-health technologies among the elderly, thereby improving their access to healthcare services and overall well-being. Understanding and addressing factors that influence facilitating conditions are essential steps towards creating inclusive and accessible healthcare delivery systems for older adults.

### 3.0 METHODOLOGY

There are two main research methods in social science studies, quantitative method and qualitative method. The quantitative method gets general ideas through a large amount of data. The objective of this thesis is to investigate the elderly's acceptance of E-health, it is therefore of vital importance to examine the elderly's perception of E-health. Accordingly, the quantitative method of the questionnaire including 31 questions will be effective in gathering data from the community. In the study, a quantitative approach of questionnaires including multiple choice was utilized for data collection. A questionnaire at a descriptive stage mainly focuses on studying general numerical results of the elderly's preferences in E-health. Likert scale questions are expected to concentrate on the exploratory analysis of the elderly's acceptance of E-health. The questionnaire was administered online and shared by the link through various forms of social media since the Internet is the most effective way to involve a large number of samples. For example, WhatsApp. The distribution period for collecting data was from 16th October to 20th October.

Concerning the validity and reliability of the data, the Google Form began with an explanation of terms to avoid any misunderstanding. In addition, the Google Form was anonymous, which was notified in the message when distributed. A total of 120 respondents were involved in the survey and 107 valid feedbacks were collected. The thesis used SPSS methods to analyze the reliability of the results.

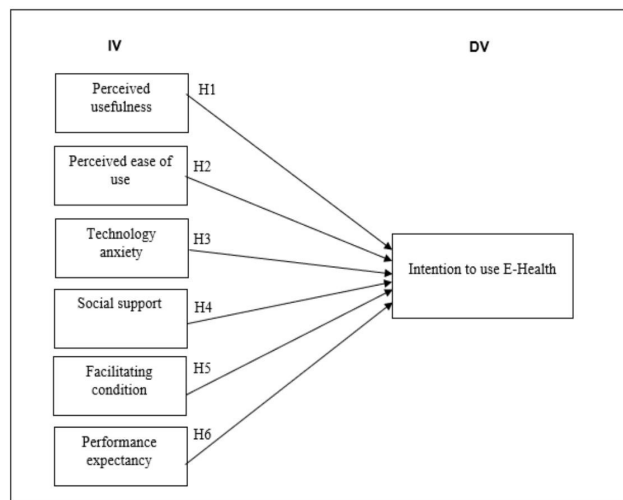


Figure 1. conceptual framework

The figure 1 refers to the independent variables (IV) and dependent variables (DV) of this research. The research framework consists of two variables which are the independent variable and the dependent variable. Perceived usefulness, perceived ease of use, technology anxiety, social support, facilitating condition and performance expectancy as the independent variable. Intention to use E-Health as the dependent variable of the study. This figure shows the relationship between perceived usefulness, perceived ease of use, technology anxiety, social support, facilitating condition and performance expectancy among the elderly towards the intention to use E-Health.

**Table 1. Individual Characteristics of E-Health Users**

DEMOGRAPHIC	CATEGORIES	FREQUENCY	PERCENTAGE (%)
Gender	Male	54	50.5
	Female	52	48.6
Age	Less than 20 years old	4	3.7
	20-30	23	21.5
	31-40	14	13.1
	41-50	41	38.3
	Above 50 years old	25	23.4
Occupation	Government	28	32.2
	Non-profit sector	4	4.6
	Student	18	20.7
	Private sector	34	39.1
	Others	23	22.1
Education level	PHD Degree	6	5.8
	Master degree	12	11.7
	Bachelor degree	41	39.8
	Diploma	24	23.3
	SPM	20	19.4
	Others	1	0.9
	-form 4	1	0.9
	-Sijil animation	1	0.9
	2D	1	0.9
	-SKM		
-STPM			
Race	Malay	77	72.6
	Chinese	13	12.3
	Indian	16	15.1
	others	1	0.9
Experience	Yes	56	52.3
	No	50	46.7

No	Measurement Item	Agree	Strongly Agree	Neutral	Disagree	Strongly Disagree	Mean Std Deviation
1	I Have The Resources Necessary To Use E-Health	53 49.5%	21 19.6%	28 26.2%	3 2.8%	2 2.9%	3.83 0.841
2	I Have Necessary Support To Use E-Health	61 57%	18 16.8%	21 19.6%	5 4.7%	2 1.9%	3.83 0.829
3	E-Health Is Compatible With Other Technologies I Use	62 57.9%	20 18.7%	19 17.8%	5 4.7%	1 0.9%	3.87 0.797

Table 2. descriptive statistic of facilitating condition

Copyright: © 2023 The Author(s)

Published by Universiti Poly-Tech Malaysia Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Table 2 shows the result of the mean and analysis on the independent variable of facilitating condition. The highest mean was item 3, which had a 3.87 mean and a standard deviation of 0.797. This shows that using E-health is compatible with other technologies they use. Item 1 shows the lowest mean, which is 3.83, while the standard deviation was 0.841, which shows that they have the resources necessary to use e-health.

No	Measurement Item	Agree	Strongly Agree	Neutral	Disagree	Strongly Disagree	Mean Std Deviation
1	I Intend To Continue Using E-Health In The Future	61 57%	20 18.7%	22 20.6%	2 1.9%	2 1.9%	3.88 0.792
2	I Will Always Try To Use E-Health In My Day-To-Day Life	60 56.1%	19 17.8%	24 22.4%	3 2.8%	1 0.9%	3.86 0.753
3	I Plan To Continue To Use E-Health Frequently	53 49.5%	17 15.9%	32 29.9%	4 3.7%	1 0.9%	3.78 0.801

Table 3. descriptive statistic of intention to use E-health

Table 3 shows the result of the mean and analysis on the dependent variable of intention to use E-health. The highest mean was item 1, which had a 3.88 mean and a standard deviation of 0.792. This shows the intention to continue using E-health in the future. Item 3 shows the lowest mean, which is 3.78, while the standard deviation was 0.801, which shows that they plan to continue to use E-health frequently.

#### 4.0 FINDINGS AND DISCUSSION

Since the research focused on the relationship between Fasa 1L Community Bandar Tasik Kesuma in the acceptance of E-health by the elderly in Malaysia, the results have relatively high validity in the elderly accepting the application of E-health. By contrast, it has less validity in other types of applications. Concerning the validity and reliability of the data, the Google Form began with an explanation of terms to avoid any misunderstanding. In addition, the Google Form was anonymous, which was notified in the message when distributed. A total of 120 respondents were involved in the survey and 107 valid feedbacks were collected. The thesis used SPSS methods to analyze the reliability of the results.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.891	3

The reliability test including Cronbach’s alpha is a coefficient tool to measure the internal concept consistency of the Likert scale question, examining the reliability of all the statements in scaled questions (Goforth, 2015). The data result was presented in the Reliability Statistics Table, which was the reliability of 6 Likert scale questions.

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I have the resources necessary to use e-health	7.7103	2.321	.772	.859
I have necessary support to use e-health	7.7103	2.264	.822	.813
E-health is compatible with other technologies I use	7.6636	2.452	.768	.861

Based on our research again If seen in section F which is about the conditions that make it easier for them to use E-Health, if based on the survey research, most of those who answered agree that E-Health is compatible with other technologies used by people who of this age, and the respondents who are that group are the most who agree with the statement, which is a percentage of (57.9%). Therefore, for them, it does not make them feel awkward to use E-health in their daily life.

**Correlations**

		FACILITATING CONDITION	BEHAVIOURAL INTENTION
FACILITATING CONDITION	Pearson Correlation	1	.600**
	Sig. (2-tailed)		<.001
	N	107	107
BEHAVIOURAL INTENTION	Pearson Correlation	.600**	1
	Sig. (2-tailed)	<.001	
	N	107	107

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Hypothesis**

There is a significant relationship between facilitating and the intention to use e-health. According to Pearson Correlation Analysis, the result shows that the facilitating and intention to use e-health have a moderate correlation

Copyright: © 2023 The Author(s)

Published by Universiti Poly-Tech Malaysia Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

with correlation coefficient of 0.600 while  $p < 0.001$ . This result shows that the research question was answered. Hence, this hypothesis was accepted.

## 5.0 CONCLUSION

In conclusion, understanding and addressing the specific barriers and facilitators influencing the adoption of e-health services among senior citizens is crucial for enhancing their engagement with these platforms and unlocking the potential of technology to mitigate challenges associated with traditional healthcare for this demographic. The review underscores the importance of tailoring e-health solutions to cater to the functional and physical needs of older adults, providing appropriate education and training to empower them to navigate technology effectively, dispelling any misconceptions stemming from past experiences, and implementing strategies to bolster the perceived legitimacy and trustworthiness of e-health services.

Key findings from the review suggest that older individuals are more inclined to utilize e-health services when these platforms are designed with their unique needs in mind. This includes features that accommodate limitations related to age and health status, as well as user-friendly interfaces that promote ease of use. Additionally, targeted education and training programs are essential to equip seniors with the necessary skills and confidence to engage with e-health technologies.

Addressing misconceptions and building trust in e-health services is also paramount. This involves providing transparent information about the benefits, functionalities, and security measures of these platforms, as well as leveraging techniques to enhance credibility and reliability.

Moving forward, further research is warranted to comprehensively explore the conceptual and practical barriers to, as well as facilitators of, e-health access for older individuals. By deepening our understanding of these factors, we can inform the development of more effective and inclusive e-health solutions tailored to the needs and preferences of senior citizens, ultimately improving their access to quality healthcare in the digital age.

## REFERENCES

- Changizi, M. and Kaveh, M. (2017). Effectiveness of the mhealth technology in improvement of healthy behaviors in an elderly population—a systematic review. *Mhealth*, 3, 51-51. <https://doi.org/10.21037/mhealth.2017.08.06>
- Kruse, C., Mileski, M., & Moreno, J. (2016). Mobile health solutions for the aging population: a systematic narrative analysis. *Journal of Telemedicine and Telecare*, 23(4), 439-451. <https://doi.org/10.1177/1357633x16649790>
- Palas, J., Sorwar, G., Hoque, M., & Sivabalan, A. (2022). Factors influencing the elderly's adoption of mhealth: an empirical study using extended utaut2 model. *BMC Medical Informatics and Decision Making*, 22(1). <https://doi.org/10.1186/s12911-022-01917-3>

Wilson, J., Heinsch, M., Betts, D., Booth, D., & Kay-Lambkin, F. (2021). Barriers and facilitators to the use of e-health by older adults: a scoping review. BMC Public Health, 21(1). <https://doi.org/10.1186/s12889-021-11623->

---

**Copyright: © 2023 The Author(s)**

Published by Universiti Poly-Tech Malaysia Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>