

Supplementary Material

Supplementary Appendix A An overview of relevant studies

Study	Research focus	Theory used	Sample	Findings
Zhang et al (2017) ⁴³	Investigate the factors that influence individuals' acceptance of M-Health.	TAM	650 potential service users	Self-efficacy and response-efficacy are both positively associated with perceived ease of use and self-efficacy and response-efficacy moderate the impact of perceived usefulness toward adoption intention.
Cho et al (2017) ¹³³	Explore the roles of subjective norms, entertainment, recordability, and networkability in determining usefulness, easy to use, and intention to use diet/fitness apps.	TAM	College students in the United States and South Korea (304 United States and 204 Korea)	The four factors positively predicted the usefulness, and easy to use of diet/fitness apps. While the effects of the predictors on the three TAM components were generally stronger among U.S. students than Korean students, the effect of subjective norms on the intention to use diet/fitness apps was weaker among Korean students.
Cho (2016) ¹³⁹	Develop and test a model to explain the micromechanism that determines the continuance intention to use health apps.	PAM and TAM	343 Korean adults	Perceived usefulness, perceived ease of use, confirmation, and satisfaction were significantly associated with the continuance intention to use health apps.
Yuan et al (2015) ⁵³	Examine the predictors of the users' intention to adopt health and fitness apps.	UTAUT2	317 college-aged smartphone users at a Midwestern university in the United States	Performance expectancy, hedonic motivations, price value, and habit were significant predictors of users' intention of continued usage of health and fitness apps.
Cho et al (2015) ⁹⁴	Investigate how four factors related to body image impact college students' perception of the usefulness of such apps.	TAM	294 students	College students' evaluation of appearance and fitness decreased the usefulness of diet/fitness apps, their orientation toward fitness increased the same outcome variable.
Cho et al (2014) ¹⁴⁰	Examine the effects of cognitive and contingent factors on the adoption of smartphone health apps.	TAM	422 American college students	Subjective norm, health consciousness, health information orientation, and Internet health information use efficacy significantly affected the main components of TAM.
Alsharo et al (2019) ¹⁴¹	Explore the factors influencing health care professionals' attitude toward adopting a national HIS.	TAM	A total of 205 subjects who work in Jordan's public hospitals participated in the study	The study found that perceived usefulness of HIS is a major determinant of user attitude toward using the system. Also, health care professionals perceive a newly implemented HIS as difficult to use but this perception

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Supplementary Appendix A (Continued)

Study	Research focus	Theory used	Sample	Findings
				changes over time once they realize the system's value.
Aggelidis and Chatzoglou (2009) ¹⁴²	Explore health care professionals' willingness to use HISs.	Extended TAM	283 health care professionals in Greece	The study found an important role for training in user Intention to use HISs.
Jian et al (2012) ¹⁴³	Explore the factors influencing behavior and adoption of PHR in Taiwan.	TAM	1,465 subjects participate in this study in Taiwan	The study found that intention, usefulness, and patients' subjective norms significantly influence PHR adoption in Taiwan.
Yang (2013) ¹⁴⁴	Understand the determinants of undergraduate students' adoption of mobile learning	UTAUT2	182 student subjects participate in China	The study found that hedonic motivation, performance expectancy, social influence, and price positively affect students' mobile learning adoption.
Tavares and Oliveira (2016) ¹⁴⁵	Explore factors affecting patients' adoption of EHR portals.	UTAUT2	360 subjects participated in the study	The study found that performance expectancy, effort expectancy, self-perception, and habit affect users' behavioral intention.
Alsharo et al (2018) ¹⁴⁶	Explore the role of habitual behavior in continuous use of HIS in developing countries context.	Extended TAM	Data were collected from 293 health care professionals in Jordan	The study found a significant effect of habit on HIS's usefulness and ease of use evaluation by health care professionals in Jordan.
Hoque and Sorwar (2017) ²⁷	Investigate factors that influence the adoption and use of e-Health applications in Bangladesh from citizens' (patients') perspectives	TAM	350 participants in various private and public hospitals in Dhaka, the capital city of Bangladesh	Perceived ease of use and perceived usefulness and trust were significant factors influencing the intention to adopt e-Health. Privacy was identified as a less significant factor in the context of e-Health. Gender was strongly associated with the adoption and use of e-Health services.
Quaosar et al (2018) ²⁸	Explore factors influencing elderlies' intention to use M-Health services in developing countries.	UTAUT	Data were collected from 245 participants of age 60 years and above in Bangladesh	The study found that performance expectancy, effort expectancy, social influence, and perceived credibility had significant influence on elderlies' intention to use M-Health services.
Dwivedi et al (2016) ⁴⁰	Which antecedents affect the adoption of M-Health by users	UTAUT	Citizens from three countries: United States, Canada, and Bangladesh	UTAUT model could partially shape technology artifact behavior and the extended UTAUT must consider specific determinants relevant to cognitive, affective, and conative or behavioral aspects of citizens.

Supplementary Appendix A (Continued)

Study	Research focus	Theory used	Sample	Findings
Ahadzadeh et al (2015) ⁴²	Examine the influence of perceived health risk and health consciousness on health-related Internet use	TAM and HBM	293 women in Malaysia who had Internet access	Perceived health risk and health consciousness had a positive influence on health-related Internet use. Perceived usefulness of the Internet and attitude toward Internet use for health-related purposes partially mediated the influence of health consciousness on health-related Internet use.
Hoque et al (2017) ¹³⁴	Investigate the factors that affect the adoption of M-Health services in Bangladesh	TAM	50 respondents in Dhaka, Bangladesh	Perceived ease of use, perceived usefulness, and subjective norm had significant positive impact on the intention to adopt M-Health services.

Abbreviations: e-Health, electronic health; EHR, electronic health record; HBM, health belief model; HIS, health information system; M-Health, mobile health; PAM, the Post-Acceptance Model; PHR, personal health record; TAM, Technology Acceptance Model; UTAUT, unified theory of acceptance and use of technology; UTAUT2, extended unified theory of acceptance and use of technology.

Supplementary Appendix B Survey questions

Construct	Item
PE	PE1: I would find M-Health useful.
	PE2: Using M-Health would enable me to get treatment more quickly.
	PE3: Using M-Health would increase my effectiveness in life.
	PE4: Using M-Health would increase my chances of getting better.
EE	EE1: My interaction with M-Health would be clear and understandable.
	EE2: It would be easy for me to become skillful at using M-Health.
	EE3: I would find M-Health easy to use.
	EE4: Learning how to use M-Health would be easy for me.
SI	SI1: People who influence my behavior think that I should use M-Health for better health.
	SI2: People who are important to me think that I should use M-Health for better health.
	SI3: People whose opinions that I value prefer that I should use M-Health for better health.
ITU	ITU1: Given the chance, I intend to use M-Health in the near future.
	ITU2: Given the chance, I predict I would use M-Health in the near future.
	ITU3: Given the chance, I plan to use M-Health in the near future.
FC	FC1: I have the technological resources necessary to use M-Health.
	FC2: M-Health is compatible with other technologies I use in my home (work).
	FC3: Some people (or group) should be available to help me when I run into difficulties of using M-Health.
RTC	RTC1: I do not want the M-Health to change the way I deal with the disease.
	RTC2: I do not want the M-Health to change the way I interact with other people.
	RTC3: Using M-Health produces anxiety and uncertainty for me.
PHT	PHT1: I am aware of my disease condition.
	PHT2: I am very concerned about disease.
	PHT3: I would take the effort to manage my disease.
Q	Q1: M-Health app looks attractive and uses fonts and color properly.

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Supplementary Appendix B (Continued)

Construct	Item
	Q2: M-Health app looks organized.
	Q3: M-Health app is always up and available 24/7.
	Q4: Content of M-Health app is useful and updated regularly.
CC	CC1: I think that it would be expensive to use M-Health.
	CC2: Cost-benefit analysis is very important for me when I adopt the M-Health.
	CC3: Overall, the cost is a very important decision factor in my adoption of the M-Health.
LQE	LQE1: I think that M-Health fits my lifestyle.
	LQE2: I think that using M-Health will not influence my routine social relationships.
	LQE3: I think that using M-Health will help me live independently.
	LQE4: Overall, I think the overall quality of my life would be improved by using M-Health.
PSR	PSR1: I am concerned that the information I will disclose to M-Health app would not be kept confidential.
	PSR2: I am concerned that someone could find identifiable health information (private information) about me (e.g., my identity, symptom, medication history, my location, and daily activities) by accessing M-Health.
	PSR3: Protecting my data from malicious attacks is important for me to use M-Health.
	PSR4: Keeping my data encrypted during transmission is important for me to use M-Health.

Abbreviations: CC, cost concern; EE, effort expectancy; FC, facilitating condition; ITU, intention to use M-Health; LQE, life quality expectancy; M-Health, mobile health; PE, performance expectancy; PHT, perceived health threat; PSR, privacy and security risk; Q, M-Health app quality; RTC, resistance to change; SI, social influence.