Introduction

This study investigates the factors that influence older people's continuance intention to use digital healthcare technologies (DHTs). DHTs are widely recognised as an important means of relieving the challenges presented by older people. The effectiveness of DHTs can be improved by engaging more elderly users and ensuring that they continue to use the technology. However, limited attention has been paid to investigating older people's continuance intention to use DHTs. In addition, the existing theories have not taken into account the elderly users' ageing-specific unique characteristics, needs, expectations, capabilities, and physical and cognitive limitations. This research aims to fill the research gap in the existing body of knowledge by understanding older adults' attitudes toward DHTs and exploring influential factors that may contribute to the continuance intention to use WTDs as a tool to manage their health.

Objectives

The objectives of this study are twofold: first, to develop a theoretical model based on the expectation-confirmation model (ECM) with ageing-specific constructs; second, to investigate the effect of ageing-specific constructs on continuance intention to use the DHTs among older people. By achieving these objectives, this research provides valuable insights into the factors influencing older adults' intention to continue using DHTs, helps them to facilitate the ubiquitous use of DHTs, and then practically benefits them with complex needs. This study explores the effect of health motivation, health consciousness, and confirmation of expectation on perceived usefulness. In addition to this, it examines the impact of satisfaction and ageing satisfaction on the continuance intention to use DHTs in the context of the elderly. Besides, it identifies the moderating effect of health anxiety, technology anxiety, and self-efficacy on the elderly's continuance intention to use DHTs.

Research Methodology

A mixed-methods approach was employed to collect data from over 65 years old British citizens. The qualitative phase started with a total of 20 semi-structured interviews which served to generate deep knowledge inductively and deductively on the constructs that affect intentions to continue to use the DHTs. Additionally, quantitative data will be gathered as part of a deductive process through an online survey to test the theoretical framework, which is

based on the literature review and findings of the qualitative phase. Thematic analysis was chosen to identify key themes and patterns in the qualitative data and quantitative data analysis will involve structural equation modelling to validate the theoretical model.

Findings and discussion

The findings of this study provide significant insights into the ageing-specific factors influencing the continuance intention to use DHTs among older adults. The qualitative analysis revealed that health motivation, health consciousness, and confirmation of expectation positively influence perceived usefulness. Furthermore, confirmation of expectations and perceived usefulness have a positive direct effect on satisfaction. Moreover, health anxiety, technology anxiety, and self-efficacy were found to moderate the relationships between satisfaction and continuance intention. The findings further revealed that satisfaction has a positive direct effect on ageing satisfaction and continuance intention to use, and ageing satisfaction influences continuance intention to use DHTs among older adults.

Theoretical and practical implications

The findings of this study have significant implications for the field of digital healthcare technologies (DHTs) by focusing on the continuance intention to use DHTs among older adults. By extending the expectation-confirmation model (ECM) with ageing-specific constructs, this research provides valuable insights into the factors influencing the sustained use of DHTs among older people. These findings offer practical guidance for brands and practitioners in informing the development of user-friendly and age-appropriate DHTs that cater to older adults' specific requirements. This can empower older adults to better manage their health and improve their overall well-being. Moreover, considering actual DHT users in the study contributes to a better understanding of the role of external factors in predicting continuance intention. Overall, these implications benefit both academia and stakeholders involved in marketing and developing effective strategies to promote the widespread adoption of DHTs among this population.

Research limitations

As this study relies on self-reported data through interviews and surveys, it may introduce response bias and social desirability bias, which potentially affects the reliability and accuracy of the results. Furthermore, the cross-sectional design of the research limits the ability to establish causality between variables. In order to provide more robust evidence of the relationships over time, a longitudinal study is more desirable. In addition, the study focuses on British citizens, which may limit the generalisability of the findings to other cultural contexts.

Conclusions

This study fills a research gap by investigating older adults' attitudes toward DHTs and providing valuable insights into the factors influencing the sustained use of DHTs among older people by extending the expectation-confirmation model (ECM) with ageing-specific constructs. The findings highlight the importance of health motivation, health consciousness, and confirmation of expectation in influencing perceived usefulness. Moreover, health anxiety, technology anxiety, and self-efficacy moderate the relationship between satisfaction and continuance intention. The study emphasises the need for user-friendly and age-appropriate DHTs that cater to the specific needs of older adults, enabling them to effectively manage their health and enhance overall well-being. The practical implications benefit both academia and stakeholders involved in marketing and promoting the sustained use of DHTs among older populations.