HAL
open science

Factors influencing acceptance of technology across age: Amid the COVID-19 pandemic

Panagiotis Kourtesis, Sarah A Whear, Graham Wilson, Mario A Parra

To cite this version:

Panagiotis Kourtesis, Sarah A Whear, Graham Wilson, Mario A Parra. Factors influencing acceptance of technology across age: Amid the COVID-19 pandemic. Alzheimer's & Dementia : the Journal of the Alzheimer's Association, 2022, 17 (12), 10.1002/alz.055102 . hal-03557633

HAL Id: hal-03557633

https://inria.hal.science/hal-03557633

Submitted on 4 Feb 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

DOI: 10.1002/alz.055102

DEMENTIA CARE AND PSYCHOSOCIAL FACTORS

POSTER PRESENTATION

Alzheimer's & Dementia®
THE JOURNAL OF THE ALZHEIMER'S ASSOCIATION

Factors influencing acceptance of technology across age: Amid the COVID-19 pandemic

Sarah A Whear[1] | Graham Wilson[1] | Panagiotis A Kourtesis[2,3] | **Mario A Parra[1]**

[1] University of Strathclyde, Glasgow, United Kingdom

[2] National Research Institute of Computer Science and Automation, Rennes, France

[3] Research Institute of Computer Science and Random Systems, Rennes, France

Correspondence
Mario A Parra, University of Strathclyde, Glasgow, United Kingdom.
Email: mario.parra-rodriguez@strath.ac.uk

Abstract

Background: Digital technologies are creating unprecedented opportunities to improve and increase support to older people with cognitive and mental health problems, and to their family and carers. However, barriers that preclude the implementation of technology driven programs for the assessment and intervention of adults at risk of cognitive decline need to be better understood. This study investigated these outstanding issues, as well as considering the impact that the COVID-19 Pandemic has had on such barriers.

Methods: A sample of 105 participants completed an online survey. Their ages ranged from 18 to 92 years. Of these, 72% were female, 83% had higher education and beyond, 42% were working, 42% were retired, and 14% were unemployed. The questionnaires assessed IT experience alongside awareness, attitudes, and stigmas regarding the use of technologies, particularly those used to support cognitive and mental health. Questionnaires also explored the impact of the COVID-19 pandemic on these technology-related factors. We compared these across groups of young (n=45), middle age (n=12) and older adults (n=48).

Results: Relative to younger participants, older participants were less aware of, and held stronger stigmas against healthcare technologies, even though they reported more IT experience. IT awareness was associated to more positive ($r=0.619$, $p<0.001$) and less negative IT Attitudes ($r=-0.271$, $p=0.015$), more acceptability ($r=-0.374$, $p=0.001$) and receptiveness towards technologies ($r=-0.610$, $p<0.001$). Male participants appeared to be more aware of such technologies than female participants. However, relative to men, women had increased the number of ways and frequency with which they used technologies since the COVID-19 pandemic started, and older people in general felt more inclined to endorse the need to learn more about healthcare technologies.

Conclusions: Having more accumulated IT experience throughout our lives may not necessarily lead to better acceptance of healthcare technologies. More awareness about such specific technologies will help overcome stigmas, and challenging environments such as those imposed by the COVID-19 pandemic may lead to positive changes in perception and acceptance of such technologies. These are necessary steps towards the personalisation of healthcare technologies to support vulnerable adults at risk of dementia.

© 2021 the Alzheimer's Association