

Documents

Azuddin, M.^a, Malik, S.A.^b, Mahmud, M.^a

Mobile Devices: Older People's Learning Experiences

(2022) *2022 10th International Conference on Cyber and IT Service Management, CITSM 2022*, .

DOI: 10.1109/CITSM56380.2022.9936010

^a International Islamic University Malaysia, Department of Information Systems, Kuala Lumpur, Malaysia

^b Prince Sultan University, Department of Computer Science, Riyadh, Saudi Arabia

Abstract

Mobile devices are important to support older people in many ways, especially to promote independent ageing. However, rapid development of mobile devices which focus on younger people has incurred issues among older people to learn using it. Thus, this study aims to understand mobile device learning experiences among older people. Qualitative method was used in the study-interviews and focus groups, to collect data among 21 older people, aged 55 and above. It is found that older people initially experienced three stages of learning process: beginner, intermediate and advance. There are several learning techniques or resources required by older people to learn to use mobile devices. These resources are very critical for older people to maintain their positive emotions and attitudes. This study enhanced knowledge in user experience domain which can assist mobile designer to develop useful and usable mobile devices or technologies for older people and others. © 2022 IEEE.

Author Keywords

learning experience; learning process; mobile devices; older people; user experience

Index Keywords

Behavioral research, User experience; Focus groups, Learn+, Learning experiences, Learning process, Learning resource, Learning techniques, Older People, Qualitative method, Users' experiences, Young peoples; Learning systems

References

- (2014) *Statistical Brief Number Seventeen Hand Phone Users Survey 2014*,
- Hamid, T.A.
(2015) *Population Ageing in Malaysia: A mosaic of Issues, challenges and prospects*,
Universiti Putra Malaysia Press
- Kurniawan, S.
Older people and mobile phones: A multi-method investigation
(2008) *Int. J. Hum. Comput. Stud.*, 66 (12), pp. 889-901.
Dec
- Tullis, T., Albert, B.
(2008) *Measuring The User Experience*,
Morgan Kaufmann
- Tom, S.
User experience
(2015) *Behaviour*, 34 (10), pp. 949-951.
- (2012) *ESCAP population data sheet Population and Development Indicators for Asia and the Pacific, 2012*,
- Desa, U.N.
(2015) *World Population, Ageing*,
- (2012) *Report of the Asia-Pacific Policy Forum on Ageing*,
ESCAP and NPFPC

- (2015) *World Population Prospect: The 2015 Revision, World Population 2015 Wallchart*,
- (2011) *Demographic Yearbook 2009-2010*,
- *Definition of an older or elderly person*, WHO, [Online]. Available, [Accessed: 12-Dec-2012]
- Tinker, A.
(1992) *Elderly people in modern society, 3rd ed*, London: Longman
- (2013) *Pensions at a Glance 2013: OECD and G20 Indicators*,
- Hassan, K.H.
(2014) *Akta Umur Persaraan Minimum 2012 (Akta 753)*,
- (2011) *Pelaksanaan Saraan Baru Perkhidmatan Awam Bagi Pegawai Perkhidmatan Persekutuan. Malaysia: Jabatan Perkhidmatan Awam*, p. 18.
- (2008) *Tawaran Opsyen Pelanjutan Umur Persaraan Wajib Kepada 58 Tahun. Malaysia: Jabatan Perkhidmatan Awam*,
- Davidson, S., Rossal, P.
(2014) *Improving later life: Vulnerability and resilience in older people*,
- Kurniawan, S.
An exploratory study of how older women use mobile phones
(2006) *UbiComp 2006 Ubiquitous Comput.*, pp. 105-122.
- Barnard, Y., Bradley, M.D., Hodgson, F., Lloyd, A.D.
Learning to use new technologies by older adults: Perceived difficulties, experimentation behavior and usability
(2013) *Comput. Human Behav.*, 29 (4), pp. 1715-1724.
- Mallenius, S., Rossi, M., Tuunainen, V.K.
Factors affecting the adoption and use of mobile devices and services by elderly people-results from a pilot study
(2007) *6th Annual Global Mobility Roundtable*, 31, p. 12.
- Conci, M., Pianesi, F., Zancanaro, M.
Useful, Social and Enjoyable?: Mobile Phone Adoption by Older People
(2009) *INTERACT 2009*, pp. 63-76.
- Tang, C., Leung, R., Haddad, S., McGrenere, J.
(2012) *What Motivates Older Adults to Learn to Use Mobile Phones*, 76.
- Wilkowska, W., Ziefle, M., Arning, K.
Older adults ' navigation performance when using small-screen devices?: does tutor help?
(2009) *International conference on Work with Computer systems*,
- Leung, R., Findlater, L., McGrenere, J.
Multi-layered interfaces to improve older adults' initial learnability of mobile applications
(2010) *ACM Trans. Access. Comput.*, 3 (1), pp. 1-30.
- Bruder, C., Blessing, L., Wandke, H.
Adaptive training interfaces for less-experienced, elderly users of electronic devices
(2013) *Behav. Inf. Technol.*, 33 (1), pp. 4-15.
- Pattison, M.
Inclusive design and human factors: designing mobile phones for older users

- (2006) *PsychNology Journal.*, 4 (3), pp. 201-335.
- Holzinger, A., Searle, G., Nischelwitzer, A.
On some aspects of improving mobile applications for the elderly
(2007) *Univers. Access Hum. Comput. Interact.*, pp. 923-932.
 - Dickinson, A.
Domesticating technology. In-home requirements gathering with frail older people
(2003) *10th International Conference on Human-Computer Interaction HCI*, pp. 827-831.
 - Patton, M.Q.
(1990) *Qualitative Evaluation And Research Methods*,
SAGE Publications
 - Groenewald, T.
A Phenomenological Research Design Illustrated
(2004) *Int. J. Qual. methods*, 3 (1), pp. 1-26.
 - Creswell, J.W.
(2007) *Qualitative Inquiry & Research Design: Choosing among five approaches*,
Thousands Oaks CA: Sage
 - Englander, M.
The Interview: Data Collection in Descriptive Phenomenological Human Scientific Research*
(2012) *J. Phenomenol. Psychol.*, 43 (1), pp. 13-35.
 - Polkinghorne, D.
Phenomenological Research Methods
(1989) *Existential-phenomenological perspectives in psychology*, pp. 41-60.
New York: Plenum
 - Blandford, A.
52. Semi-Structured Qualitative Studies,
[Online]. Available, [Accessed: 25-Jun-2015]
 - Berg, B.L., Lune, H.
(2012) *Qualitative Research Methods for the Social Sciences*,
Pearson
 - Zainal, A., Razak, F.H.A., Ahmad, N.A.
Older People and the Use of Mobile Phones: An Interview Study
(2013) *2013 Int. Conf. Adv. Comput. Sci. Appl. Technol.*, pp. 390-395.
Dec
 - Chua, Y.P.
(2013) *Mastering Research Statistics*,
Malaysia: McGraw Hill Education
 - Githens, R.P.
OLDER ADULTS AND E-LEARNING: Opportunities and Barriers
(2007) *Q. Rev. Distance Educ.*, 8 (4), pp. 329-338.
 - Lee, Y.S.
(2007) *Older Adults' User Experiences with Mobile Phones: Identification of User Clusters and User Requirements*,
Blacksburg, Virginia
 - Holzinger, A.
(2007) *HCI and Usability for Medicine and Health Care*,
Springer Berlin Heidelberg

- Wang, Q.
The Effects of Interface Design About Mobile Phones On Older Adults' Usage
(2008) *2008 4th Int. Conf. Wirel. Commun. Netw. Mob. Comput.*, pp. 1-4.
Oct
- Hannah
Improving Older People's Lives Through digital Technology and Practices
(2021) *Gerontology and Geriatric Medicine.*, 7, pp. 1-4.
- Hsu, C.-W., Peng, C.-C.
What drives older adults' use of mobile registration apps in Taiwan? An investigation using the extended UTAUT model
(2022) *Informatics for Health and Social Care*, 47 (3), pp. 258-273.
- Lai, H.-J.
Investigating older adults' decisions to use mobile devices for learning, based on the unified theory of acceptance and use of technology
(2020) *Interactive Learning Environments*, 28 (7), pp. 890-901.

Publisher: Institute of Electrical and Electronics Engineers Inc.

Conference name: 10th International Conference on Cyber and IT Service Management, CITSM 2022

Conference date: 20 September 2022 through 21 September 2022

Conference code: 184252

ISBN: 9781665460743

Language of Original Document: English

Abbreviated Source Title: Int. Conf. Cyber IT Serv. Manag., CITSM

2-s2.0-85142916336

Document Type: Conference Paper

Publication Stage: Final

Source: Scopus

ELSEVIER

Copyright © 2023 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 RELX Group™