Smartphone use by older adults in Singapore

Zhang, X.; Vu, S.; Foo, Schubert; Pang, Natalie

2014

Zhang, X., Vu, S., & Foo, S., Pang, N. (2014). Smartphone use by older adults in Singapore. *Gerontechnology*, 13(2), 270.

<https://hdl.handle.net/10356/99441>

<https://doi.org/10.4017/gt.2014.13.02.324.00>

© 2014 Creative Commons CC-BY-NC-ND. After acceptance of their manuscripts authors who choose immediate Open Access, a so called ‘Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported’ License (http://creativecommons.org/licenses/by-nc-nd/3.0/deed.en_US) is instituted on the accepted article, meaning that everyone is free to copy, distribute and transmit the article, including self-archiving (green open access). Conditions of this licence may be summarized as follows: (i) Attribution: When using a published article, link it to its source; (ii) Noncommercial: Commercial use will need an additional license from the International Society for Gerontechnology, and (iii) No derivative works: The article should remain intact with no alteration or transformation. The Creative Commons license is non-exclusive and does not entail a transfer of intellectual rights.

Downloaded on 26 Apr 2023 19:53:59 SGT

Smartphone use by older adults in Singapore

N. PANG, X. ZHANG, S. VU, S. FOO. **Smartphone use by older adults in Singapore.** *Geron-technology* 2014; 13(2):270; doi:10.4017/gt.2014.13.02.324.00 **Purpose** The unprecedented penetration of smartphones into the Singapore market offers potentially cost-effective and sustainable solutions for people to stay connected with their families, friends and communities. However, due to financial constraints and limited technology literacy, older adults often lack the access needed to tap into the benefits of this type of communication technology. To reduce isolation and open their world to new experiences, Singtel, a local telecommunication company, has initiated a project called Silverline. It calls for the donation of used iPhones and chargers for use by needy older adults. Our on-going study seeks to explore to what extent and in what ways smartphones influence the quality of life of older adults, as well as unique and/or significant factors in their appropriation and reinvention of smartphones. **Method** In 2013, twenty-seven used iPhones were collected and donated to older adults living alone. We conducted semi-structured interviews with nine recipients (six males, three females, between the ages of 63 to 82 years old) (*Figure 1*). The interview questionnaire was divided into two sections: Section A solicited data on the respondent's profile such as gender, age, race, as well as life satisfaction and ability to care for one's self; Section B used a modified version of the Technology Acceptance Model (TAM)^{1,2}, that included questions used to assess the older adult's perceptions of smartphone usefulness, ease of use, internal and external controls, willingness to use, as well as intention for future use. Whilst the questionnaire was made up of structured questions, they were also accompanied by open-ended questions that were later extracted and coded to ensure that responses were not confined within the limits of existing theoretical frameworks. The interviews ranged between one to two hours, were conducted in their preferred language and were audio-recorded. **Results & Discussion** In spite of living alone, all our interviewees demonstrated an ability to live independently and expressed moderate to high satisfaction towards their current life. Generally, they had a positive attitude toward smartphones. They found them to especially useful and entertaining, to the extent that some expressed they were not willing to have the iPhone taken away from them. Aside from making phone calls to their family and friends, iPhones were most commonly used to take pictures and play games — the main reason for this was the iPhones' ability to help the elderly overcome loneliness and boredom. Only one older adult was active on a social networking site (Facebook) to keep in touch with his family members overseas. Findings were gathered with regard to the problems encountered by older adults due to declined physical, cognitive and perceptual abilities. They had a difficult time quickly finding certain applications or necessary information (e.g. SMS, contacts) on the phone, the ability to update/download new apps from the online store, or to use the phone to take clear pictures. Nevertheless, those problems were easily overcome by persistence or seeking help from others (e.g. family, friends). For older adults, the social context of use is thus argued to be one of the most significant factors driving the adoption and appropriation of smartphones. Some interviewees viewed the smartphone as a status symbol, since they perceived that those with smartphones are younger and have higher incomes. Unsurprisingly, cost is a major hurdle for their adoption of smartphones.

References

1. Davis FD. *MIS Quarterly* 1989;13(3):319-340; doi:10.2307/249008
2. Davis FD, Bagozzi RP, Warshaw PR. *Management Science* 1989;35(8):982-1003; doi:10.1287/mnsc.35.8.982

Keywords: communication & governance, older adults, smartphone, technology acceptance
Address: COSMIC, Nanyang Technological University, Singapore; E: NLSPang@ntu.edu.sg

Figure 1: Interviewees playing with iPhones