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An evaluation study on the Gerontech Ambassadors' training program: A technology acceptance model-based study

P. Lim, A. Tan, C. Ma

Purpose By 2030, every one in four residents in Singapore will be aged above 65 (NPTD, 2023). With this surge in the ageing population, it is critical for older adults to age well in the community. To age well is being able to live in an environment that supports and maintains one's intrinsic capacity and functional ability is key to healthy ageing (WHO, 2019). The use of assistive technology products appropriately can facilitate such an environment (Haufe et al., 2019). To increase the usage of assistive technology, Singapore University of Singapore (SUSS), SG Assist, funded by Ngee Ann Kongsi, established the Gerontech Ambassador (GTA) Program where older adults were recruited as GTAs. The GTAs underwent an experiential learning experience, where they learnt the theory, role play, as well as practicing as GTA in exhibitions and conferences. The purpose of this paper is to evaluate the effectiveness of the program. Mixed method, consisting of surveys and individual interviews, was used. Four components are investigated: (1) the acceptance level of gerontechnology of the participants; (2) the perception of the ease and sustainability to integrate gerontechnology to their daily lives; (3) the understanding, skills, and ability in gerontechnology as well as taking the role of the GTA; (4) the satisfaction of the program. Method 24 older adults from the community volunteered for the Gerontech Ambassadors (GTA) training program. They were given a premeasurement 10-scale survey. The survey consisted of four sections, namely Senior Technology Acceptance Model (STAM) (Chen et al, 2020), 6A model (Truglio-Londrigan et al, 2003), ASK model (Bakarman, 2011) and Kirkpatrick (Smidt et al, 2009). STAM measures their acceptance to gerontechnology; 6A measures the possible sustainability and usage of gerontechnology; ASK indicates the change in ability, skills, and knowledge; Kirpatrick measures the satisfaction of the program (Figure 1). At the end of the three-month program, a similar post-survey was done. 16 participants completed both pre-post surveys. Five of these participants were interviewed for greater understanding of their experience. Results and Discussion All components in ASK had significant (p=0.05) increases in score: ability (M=3.06, SD=2.86), skills (M=1.69, SD=2.61) and knowledge (M=1.81, SD=2.70). 6A had two components with significant increase in score: adequacy (M=1.00, SD=1.71) and awareness (M=3.06, SD=2.86). Kirpatrick had a high score of (M=9.00, SD=1.06). However, STAM score did not show significant changes. The above results indicate the participants had gained knowledge, skills and ability to conduct themselves as GTA, with improved awareness of gerontechnology and believed these products can sufficiently support those who need it. They were extremely satisfied with the program. Most of them who volunteered for the program had had very high STAM pre scores to begin with. They had a positive perception of technology, with some technical competence. In this case, no significant change in their technology acceptance level.

References

Chen, K., & Lou, V. W. Q. (2020). Measuring Senior Technology Acceptance: Development of a Brief, 14-Item Scale. *Innovation in Aging, 4*(3), igaa016. https://doi.org/10.1093/geroni/igaa016

Haufe, M., Peek, S. T. M., & Luijkx, K. G. (2019). Matching gerontechnologies to independent-living seniors' individual needs: development of the GTM tool. *BMC Health Services Research*, 19(1), 26. https://doi.org/10.1186/s12913-018-3848-5

Smidt, A., Balandin, S., Sigafoos, J., & Reed, V. A. (2009). The Kirkpatrick model: A useful tool for evaluating training outcomes. *Journal of Intellectual and Developmental Disability*, 34(3), 266-274.

World Health Organization (WHO). (2019). Decade of Healthy Ageing. https://www.who.int/docs/default-

source/documents/decade-of-health-ageing/decade-healthy-ageing-update-march-

2019.pdf?sfvrsn=5a6d0e5c_2#:~:text=Being%20able%20to%20live%20in,and%20the%20interaction%20between%20them.

Truglio-Londrigan M, Gallagher LP. Using the seven A's to determine older adults' community resource needs. *Home Healthc Nurse*. 2003 Dec;21(12):827-31. doi: 10.1097/00004045-200312000-00010. PMID: 14665970.

Bakarman, Ahmed. (2011). Attitude, Skill, and Knowledge: (ASK) a New Model for Design Education. *Proceedings of the Canadian Engineering Education Association*. 10.24908/pceea.v0i0.3894.

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Address: S R Nathan School of Human Development/ Gerontology Programmes, Singapore University of Social Sciences,

Singapore; SG Assist, Singapore

Emails: pollylim002@suss.edu.sg; carolmahk@suss.edu.sg; adrian.tan@sgassist.com



Figure 1. Gerontechnology training evaluation model