POSTER

Work and Leisure

Y. PAN, C. XIONG, A.J. ASTELL. Touchscreen game play in Chinese Mandarin-speaking persons living with dementia. Gerontechnology 2018;17(Suppl):199s; https://doi.org/10.4017/gt.2018.17.s.194.00 Purpose We have previously shown that people with dementia can use tablet devices for playing games that are both familiar and unfamiliar^{1,2}. The majority of the participants showed enjoyment¹ during the gaming sessions, have positive feelings related to higher self-esteem plus a sense of achievement. These prior studies explored iPad game-play across a range of dementia care settings conducted exclusively in English, but there has been a lack of focus on the Chinese-speaking population, which represent more than 16.43% of all Canadians. Thus this project will examine how people with dementia interact with and experience tablet games over time in Chinese language, and whether there are cultural differences influencing the outcome of the gaming sessions. Methods Chinese-Mandarin speaking individuals with dementia are recruited to play tablet games (Mahjong, Bubble Explode, Fruit-Matching) selected using an adapted version of the app evaluation framework³. Consent is obtained from the participants, and an assessment of cognitive function using the Beijing version of the Montreal Cognitive Assessment (MoCA⁴) conducted to assign each participant to a game type. Each participant is completing three game-play sessions during a five-day period, and an interview following each session (Figure 1). During each gaming session, we are video recording their facial expressions and interaction with the tablet screen. Data analysis will be performed using Observer video analysis system to evaluate their game play experience. **Results & Discussion** Since the study is still at the stage of data collection, full results will be provided once the study is complete. As the first study of its kind to our knowledge that examines the use of tablet games among the Chinese-Mandarin-speaking population in Canada, the results have potential for significant implications for services and activity plans of long-term care facilities serving residents of Chinese heritage. The study can also contribute to tablet game development, providing meaningful activities for people living with dementia at home.

References

- 1. Astell A, Joddrell P, Groenewoud H, de Lange J, Goumans M, Cordia A, Schikhof Y. Does familiarity affect the enjoyment of touchscreen games for people with dementia? International Journal of Medical Informatics. 2016;91:e1-e8
- 2. Groenewoud H, Lange J, Schikhof Y, Astell A, Joddrell P, Goumans M. People with dementia playing casual games on a tablet. Gerontechnology. 2017;16:37-47
- 3. Joddrell P, Hernandez A, Astell A. Identifying existing, accessible touchscreen games for people living with dementia. International Conference on Computers Helping People with Special Needs. Springer International Publishing; 2016:509-514
- 4. Index of /wp-content/uploads/2015/tests-instructions [Internet]. Mocatest.org. 2018 [cited 15 January 2018]. Available from: http://www.mocatest.org/wp-content/uploads/2015/tests-instructions/?C=M;O=A

Keywords: tablet games, Chinese-language, dementia care Address: Ontario Shores Centre for Mental Health Sciences, Canada; E: pany@ontarioshores.ca



Figure 1. Participant playing on the tablet game: Mahjong