Adoption of digital technology in community settings for people living with dementia: Lessons learnt from the field A. Astell, E. Dove *Gerontechnology* 25(s)

Purpose Confidence and expertise to support older adults, including people living with dementia, their families, and community organizations to adopt digital technologies is lacking. Over the past 10 years, we have conducted multiple research projects with people living with dementia and relevant partners to support successful technology adoption in community settings. This presentation will share lessons learnt from three of these projects in terms of sustained technology adoption. **Method** A total of 339 participants, including 250 people living with dementia, 76 community staff and volunteers, and 13 family care partners, have taken part in three different multi-method technology projects (Let's Connect, Kinect Project, and CIRCA). Study 1 used off-the-shelf tablets and games/apps (e.g., jigsaw puzzle, word search) [1], Study 2 used off-the-shelf exercise video games (e.g., Xbox Kinect) [2], and Study 3 used a custom-designed/bespoke reminiscing technology called the 'Computer Interactive Reminiscing and Conversation Aid (CIRCA)' [4], displayed on a tablet or computer. Participants from all three studies were video recorded to capture their interactions with the device(s) and/or software, as well as other aspects of the gameplay environment (e.g., interactions with staff). Video data were analyzed descriptively and using behavioral analysis software: The Observer® XT [5]. **Results and Discussion** These three projects represent different experiences with implementation, adoption, and sustained use by community partners after the project ends. In consulting with community partners, three key aspects were identified as barriers and facilitators to successful technology adoption: (1) the technology itself; (2) the staff; and (3) the environment. Firstly, the rapidly evolving landscape of technology was a barrier to ongoing adoption (e.g., in the case of time-consuming software updates or device obsolescence). Secondly, staff and volunteer retention and ongoing training impacted technology use in the community (e.g., in day programs), with newer staff not always being trained to use the device(s) and/or software. Concurrently, family care partners are compressed by strain from competing demands (e.g., work), as well as by their own familiarity with technology, which impacts their ongoing ability to support family members with dementia in using technology at home. Finally, the environment can help or hinder technology adoption in communities, with important factors such as social support (e.g., encouragement), infrastructure (e.g., Wi-Fi, available outlets for charging, room size), and support to learn, whereby staff also need specific training in teaching people with dementia to use the device(s) and/or software. Through identifying barriers and facilitators to technology adoption by community organizations, older adults with cognitive impairment, and their families, we share strategies for addressing these factors based on real-world examples. These findings provide valuable insights for researchers and organizations interested in developing or implementing digital interventions with individuals or families seeking to adopt technologies to support people living with dementia.

References

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