

Games going gray: A longitudinal study on the adoption and use of technology by
older adults in assisted and independent living communities

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A frequently overlooked population that can benefit from computer-mediated games is older adults. They form an increasing percentage of the world's population. By 2030, it is projected that adults over the age of 65 will comprise over 19% of the population of the United States (Administration on Aging, 2013). Yet, this age group is rarely included in the discussion about the potential advantages and uses of games. Games can not only provide an engaging pastime for older adults, but they can also demonstrate to this community a reason to personally use technology. A key to adopting technology, especially for the older adult, is seeing the personal advantages that can be gained from using it (Eggermont, Vandebosch, & Steyaert, 2006). Games can be personally entertaining and help participants to feel comfortable using computing devices. They can also be a method for connecting individuals to others (Jung et al, 2009). Using social games could help older adults who feel isolated from family regain a sense of connectedness. The use of social games allows for continued interaction with remote family and friends (Jung et al, 2009).

The purpose of this study is to examine the occurrence and frequency of game playing among a sample of older adults in assisted and independent living communities. We also examine whether game playing is associated with quality of life outcomes. Participants were part of a larger randomized controlled trial that brought technological access and training to older adults in 19 different assisted and independent living communities. The overall purpose of the larger study was to determine whether using information and communication technologies could enhance social capital and quality of life among older adults in these communities. For this study, we utilize the subsample of participants who received technology training and who remained in the study until the end of the study (n=65). Participants were surveyed at five time points: pretest, posttest, and at 3, 6, and 12 month intervals. Quality of life outcomes examined included geriatric depression, life satisfaction, loneliness, mattering, and other quality of life measures.

At the pretest, only 15% of the sample reported ever playing games. However, by the posttest survey, 58.5% reported playing games at least once every few months. The largest gains occurred during the initial 3 months of the intervention, when those who played games at all increased by 93.3%. Those who played frequently, at least several times a month, increased by 58.3%. This initial increase for frequent players declined somewhat by the posttest. Ultimately, 80% of those who participated in the technology training reported using games at least some of the time. Preliminary examination of the relationships between game playing and quality of life outcomes, show interesting, yet complex results, with gaming associated with both positive and negative quality of life outcomes. Additional analyses will further explore these relationships across the five survey time points to determine if there is an inflection point at which gaming has positive or negative impacts on various aspects of quality of life.

The results of this study should be informative to game designers, researchers, health care providers, and individuals who have relatives or friends in this

demographic group. The results of this study suggest that there is a need to develop games that can meet the particular interests of older adults. Yet, the particular challenges that older adults may face must be kept in mind in developing these games. As people age, reduced mobility, visual limitations, and cognitive issues often limit their ability to engage in many games that are promoted in the mass market. Providing this community with games that allow them to stay cognitively engaged and maintain physical mobility will not only help delay further deterioration of faculties, but it may also improve their quality of life (Jung et al., 2009).

Resources

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