



# Enhancing Older Adults' Social Connectedness through Digital Games

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## Opinion

Digital games are electronic games that involve human interaction with computers or other devices, operating using different interfaces, which can provide visual and auditory feedback. Digital games are now gradually replacing traditional games [1]. Although there are many games available for children and young adults, few game developers consider the real needs of seniors [2]. As an underrepresented digital gamer group, seniors seem to be a market population that has been forgotten by game designers, digital game publishing companies, and even by researchers who often do not consider seniors in digital gaming research [3]. However, the aging population is beginning to draw the attention of the digital gaming industry and academics. There is a rise in awareness and interest, among game designers and researchers, to consider the potential positive roles that digital games can play in terms of facilitating significant social benefits across the lifespan [4].

## Social Connectedness

Digital gaming is widely considered to be a promising way to promote social interaction and provide entertainment, and it is also used as a promising tool to increase quality of life, especially for seniors who have plenty of leisure time after retirement. Some researchers believe that, compared to physical and mental health, social connection and support from family and the community make a more significant contribution to seniors' conceptions of successful aging and that this type of connection requires more attention from society [5,6] found that older adults are actually embracing digital gaming contrary to the popular belief that seniors are reluctant to play digital games. The study's results highlight that older adults who play digital games, even occasionally, perform better than elderly non-gamers on some psychological functioning tests (e.g., well-being, affect, depression, and social functioning), which could reflect successful aging. In a study, conducted by Schell R [7] a group of seniors showed improvements in social connectedness and a decrease in loneliness, both in qualitative and quantitative analyses, after they had played the Wii Bowling game. also found

that playing Wii sports could bring to older adults greater social connections, fewer feelings of loneliness, a sense of achievement and an optimistic attitude. Older adults also showed improvement in life satisfaction after playing digital games [8].

Gerling KM, Schulte FP [9] studied the potential effects of the game Silver Promenade, a promising leisure activity for frail and elderly people in nursing homes. The results indicated that playing the game was an accessible activity for these older adults and that it could significantly increase the social interactions among the senior players. Further suggestions were given by the authors on how suitable digital games could be introduced into nursing homes to enrich the lives of elderly residents and encourage seniors to maintain active lives by playing digital games, thereby enhancing the social interactions among players [9]. In their study that examined whether playing Massive Multiplayer Online Role Playing Games (MMORPGs) could improve social and emotional well-being among older adults, Zhang & Kaufman D [10] also suggested that playing MMORPGs had great potential in increasing older adults' social interactions and supporting them in maintaining their physiological health.

Many older adults enjoy digital games for socializing with others, including family members, friends or people outside of their social network. Playing games can facilitate the generation of topics of interest that can open the lines of communication among a group of people, can decrease social distance while playing with strangers, and can contribute to an intimate and enjoyable environment when with family. Though many digital games can be played alone, sometimes it is their multiple-player feature that is the selling point that attracts gamers. The need for social bonding through game playing is fundamentally an important motivator for individuals in encouraging them to engage in digital games playing, and its importance is only expected to grow with age. Casual video games, which are free and integrated into social media and social networking sites, are gaining popularity among adults, especially among older adults aged over 50, who reported feeling more socially connected as a result of playing casual video games [11]. Wang F &



Burton J [8] also indicated that playing massively multiple online role-playing games (MMORPGs) may decrease older adults' feeling of loneliness and social disconnection from family and friends.

### Intergenerational Game Play

Researchers have also found that online games can help players obtain longer and better communications with their pre-existing social ties and their family members if they play the game together [12]. Due to this fact, it is no wonder that being able to interact socially with others is considered to be a main motivation for many seniors who play digital games. Among the kinds of social interactions, enhancing communication and interaction skills between older adults and younger generations is a personal and social need that is becoming more common. The results of a study by Meshel DS & McGlynn RP [13] showed that, after intergenerational contact, the attitudes of adolescents toward older people and older people toward adolescents improved. In addition, older adults showed a significant improvement in their life satisfaction.

Hence, there is potential in using technologies in facilitating intergenerational interactions. Over the past few years, an emerging interest in intergenerational games has been observed. This kind of game aims to increase the interactions and communications between different age cohorts. Social isolation among the members of the older generation has been found to be a significant problem among older adults who live alone, without the company of their children or grandchildren. Digital intergenerational gaming has provided great opportunities to improve the computer-mediated interactions between younger and older generations. Besides being used as a therapeutic tool, Ijsselsteijn W [14] stated that the research results of their study indicate that digital games can also offer benefits of enhancing the communication between different age cohorts while they are playing games, especially between grandparents and grandchildren.

However, different age groups have distinct requirements for game design; therefore, game designers are facing great challenges when making intergenerational games for children and senior [2]. In an intergenerational case study, which evaluated the gaming experience of children and seniors when they play a game together, Mahmud AA [2] found that older adults show great eagerness to play with their grandchildren, and they keep an open mind in terms of playing with their peers, too. However, their grandchildren stated a preference for playing with their friends of the same age, although they do not reject playing with their grandparents as long they can play the games they like. The results revealed that when designing a single intergenerational game for both children and seniors, designers should consider how game elements, themes, game types and play rules meet the requirements of both generations. Presented steps for designing an intergenerational gaming system that utilized user-centered design approaches. Their results showed widespread acceptance across the different age groups of players, especially among older players who gave the maximum rating indicated that they had fun interacting with other players.

### Conclusions

Much of the research on digital games for older adults has focussed on the cognitive and physical benefits. However, there is ample evidence to suggest that digital game play can provide social and emotional benefits to older adults as well as connecting them to the younger generation. Since social engagement is an important component of successful aging, older adults and long-term care facilities should be encouraged to include digital game play as one important leisure activity.

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