The promise of gerontoludic design

Purpose As Western society is rapidly aging, there has been a growing interest in the application of digital games to facilitate health benefits and to combat cognitive decline in later life. While research has indicated that playing digital games can produce many positive effects[4], the academic literature on the study of digital gaming interventions for older adults often fails to adopt a holistic focus. The majority of studies on games and older adults explore either (i) potential cognitive or physical benefits[1,2], or (ii) usability considerations[5,6]. While these lines of research are and should remain an integral part of the research agenda concerning games and older adults, an often overlooked third component is 'gerontoludic design' (i.e., the design of technology for older adults that strives for intrinsic motivation, engagement and enjoyment through a focus on meaningful play). Furthermore, as research[3] indicates that functional limitations and severe disabilities are postponed by medical advances, a possible future beckons where the gerontoludic value of digital games is more important to its players than the potential benefits. **Method** The argument for the importance of gerontoludic design in game-based interventions for older adults is first made theoretically through a multidisciplinary literature review, drawing from a variety of academic fields. Next, a design research study (n=10), a quantitative study (n=124), and a qualitative study (n=35) are analyzed. **Results & Discussion** Through the analysis, key components of gerontoludic design were developed. The analysis identifies game design elements components that have been discussed for younger audiences as well, such as challenge, progression, flow, complexity, pacing, etc. However, the analysis revealed how certain groups of older adults have specific preferences for these game elements. For example, some respondents of the qualitative study discussed the importance of control over the speed of a game in order to accommodate them, or a preference for games that require the use of imagination while playing. The analysis also revealed components that have not been discussed for younger audiences, such as self-cultivation, connectedness to family, contribution to society, keeping pace with the times, nostalgia, and compensation. Based on this framework, a number of empirically supported design recommendations are presented.

References

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