Exergaming can reduce sedentary time and increase social wellbeing

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Digital gaming has generally been perceived to increase individuals' sedentary time. According to Tuomas Kari's dissertation, gaming can also act as a medium to promote health. Exergaming is a form of digital gaming that combines games with physical activity. The game requires physical activity from the player in order to play, and the outcome of the game is partly determined by that physical activity. Examples of such games are console-based dance games and different mobile exergames, such as Zombies Run and Pokémon GO.

"One central advantage of exergames is their ability to combine enjoyment and utility, and for many, that is the underlying reason for playing. This way the games can offer physical activity to their players on the side of gaming without the players necessarily even realising this. Thus, these games can act as a mean to make exercise more fun, especially for those who are otherwise less interested in exercising," Kari says.

Traditional video gaming has increased the health detriments of sedentary time. Exergames, on the other hand, require physical activity and thus, reduce the detriments of sedentary activities such as sitting. Considering this, exergames can be recommended as an alternative to traditional video gaming. Exergaming can provide exertion of the recommended intensity, is generally enjoyed, and can evoke some health benefits, but on a longer-term scale, these games alone are not sufficient to increase physical activity and fitness levels sufficiently for significant physical health benefits, and other forms of physical activity should be

used alongside exergames.

"For many, one central influence for playing is friends. Exergames are played more often in a group than individual setting. Through gaming, meeting new people and acquiring new friends can be easier. Therefore, exergaming can also increase social well-being," Kari says.

The dissertation reveals that exergaming is equally popular among men and women, but participation is more common among the younger age groups. Physical activity background does not influence the frequency of playing exergames, but those who are more active digital gamers in general tend to be also more active exergamers.

The results highlight the importance of hedonic enjoyment perceptions behind usage intentions and the actual use of exergames; however, for the continued use of exergames, the perceptions of utilitarian benefit also have an important role.

Kari's thesis provides valuable new knowledge to the scientific community. Kari also presents several practical implications for different stakeholders. One key implication is to design the games with entertainment as a spearhead. Gaming should be fun; a mere health benefit is not sufficient to motivate playing. However, for the continued use of exergames, it would valuable if the games could present the potential health benefits of playing to the player, Kari advises.

Kari followed a user-centric approach in his dissertation and investigated relevant aspects throughout the entire use cycle of exergames: intention to use, adoption and usage habits – as well as the reasons for not using – and use continuance after exergaming experiences.

More information: Exergaming usage : hedonic and utilitarian aspects. jyx.jyu.fi/dspace/handle/123456789/52866

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