

Exergames Contribute to Reducing Sedentary Behavior in the Elderly?

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ISSN: 2577-1914



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Submission:  August 23, 2019

Published:  August 28, 2019

Volume 5 - Issue 2

How to cite this article: Bruno de Freitas C, Rafaela Gomes dos S. Exergames Contribute to Reducing Sedentary Behavior in the Elderly?. *Res Inves Sports Med.* 5(2). RISM.000606.2019. DOI: [10.31031/RISM.2019.05.000605](https://doi.org/10.31031/RISM.2019.05.000605)

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Opinion

According to population data, in recent years, the number of individuals aged 60 years or more has increased significantly in all regions of the world and it is hoped that this accelerated growth to remain for the next decades [1]. The population aging can be accompanied by many changes in the body as reduction of physical, physiological and cognitive. In addition, with the older age, one observes the reduction of work activities and the increase in exposure time to sedentary behavior that can be identified from the time that the individual spends performing activities like remain seated watching TV, chatting with friends, performing tasks, using computer, tablet, mobile phones or playing video games. Sedentary behavior is recognized as an emerging public health issue that may trigger some health problems like depression [2], cardiovascular disease [3,4], type 2 diabetes, mortality from all causes or cancer [4].

From the increase in the time of exposure to sedentary behavior presented by the elderly population, active games (exergames) emerge, which present themselves as an alternative to increase the level of physical activity and reduce the sedentary behavior. Unlike traditional videogames, exergames are electronic devices that enable participants active interaction with motion sensors from various types of games (e.g. walking, running, cycling, rowing, swimming, fights soccer and volleyball). In recent years, studies have shown that exergames can contribute to improving the health of people of advanced age. In a study involving 40 elderly residents in Spain and Switzerland, the participants performed at least 30 minutes of exergames per week for 3 months and after this period, it was possible to observe that the exergames contributed to the improvement of individual aptitude and self-reported health [5]. In a study conducted with 22 elderly women between 60 and 78 years who performed aerobic and balance exercises through exergames, it was found that there was improvement in mood, aerobic capacity, shoulder flexibility, gait, balance, increased strength muscle in the upper and lower limbs, contributing to the prevention of falls and improvement of the quality of life of these individuals [6].

In another study involving elderly residents in a community, it was verified that the use of exergames was beneficial to health from the improvement in the ability to walk, balance, gait speed and mobility [7]. Similarly, in a study involving 65 elderly individuals aged 65 years or older, improvements in the mobility of the elderly who used exergames were evidenced [8]. Given the above, there is evidence about the benefits of using exergames on the health of the elderly. However, has not been identified any study that could explain if the use of exergames contributes to the reduction of sedentary behavior in individuals with advanced age and that is why it is suggested to conduct studies to investigate the possible relationship between these variables.

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