



## Virtual reality exercises effectiveness on increasing physical activity of sedentary elderly in district 2 of Tehran during covid-19

### Poster Presentation

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### Abstract

**Introduction:** The corona pandemic has overshadowed the lives of all age groups. The elderly, along with all the problems related to their age factor, suffered much physiological and psychological damage.

**Methods:** This study included 36 selected older adults in the age group of 65 to 80 years who had been playing table tennis for 150 minutes to 600 minutes per week in Sepehr Park, Region 2, before the Corona pandemic, and their activity has been decreased to less than 50 minutes per week due to Corona pandemic. They are now suffering from variety of aches and pains caused by inactivity and depression. The subjects were randomly selected as the research sample and then randomly divided into 18 experimental and control groups. The experimental group's pre-test and post-test were taken by performing virtual table tennis exercises for six weeks and 3 sessions per week, and the control group performed their daily activities. Descriptive statistics calculated the average and standard deviation, and for measuring pre-test and post-test within the group, independent and dependent (t) was used at a significant level of  $P < 0.05$ .

**Results:** The results showed that the experimental group had better reaction and strength, and endurance movements in the post-test than the control group. The correlated t-test showed a significant difference between pre-test and post-test in the experimental group. In contrast, no significant differences were observed between pre-test and post-test in the control group.

**Conclusion:** The use of virtual reality facilities for improving movement and reaction and increasing their happiness in line with the new experience of using this technology in sedentary elderly is strongly recommended different time and place conditions.

### Keywords

Sedentary; Elderly; COVID-19; Cheerfulness; depression; Virtual Reality; table tennis

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