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Comparison of the effect of virtual reality training and real-world training children's exercise motivation and Number of daily steps

Oral Presentation

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Abstract

Introduction: Virtual reality (VR) as a digital technology, can affect mental performance of children who are currently sedentary. The aim of this study was to compare the effect of virtual reality aerobic training and real aerobic training on children's exercise motivation and number of daily steps.

Methods: In this experimental study, 28 girls (age group 10 to 13 years) were divided into three groups; virtual reality aerobic exercise, aerobic exercise and control. The training groups, performed eight weeks of aerobic exercise with and without virtual reality glasses at home, during which time the control group did not exercise. Before and after the course, children participated in pre-test and post-test; Which included tests to measure the number of daily steps and the Exercise Motivation scale (EMS) was used to measure psychological indices. In this study, Paired-Sample t-test was used to examine the intragroup changes of research variables in the pre-test and post-test. Statistical analysis was performed using SPSS software version 25 at a significance level of $P \le 0.05$.

Results: Findings of the present study showed that eight weeks of aerobic training with and without virtual reality glasses increased athletic motivation and increased the number of daily steps in children at a significance level of $P \le 0.05$. While the largest increase was observed in the virtual reality group. Conclusion: The results of the present study showed that both training methods increase children's exercise motivation and the number of daily steps and no superiority was observed in the type of exercises.

Keywords

Exercise motivation; Real-world training; Virtual reality training

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