

Abstract

Background

In addition to physical diseases, obesity in children can also cause social and psychological problems. Therefore, considering the beneficial effect of exercise on weight loss, the aim of this study was to investigate the effectiveness of virtual exercise training on self-esteem and self-concept of obese girls.

Material & Methods:

The method of this study was a randomized controlled clinical trial in which 104 girls aged 7 to 10 with obesity were randomly divided into two intervention groups (52) and control (52). The intervention program includes 8 weeks of sports training, which was prepared in the form of an educational video and provided to the intervention group. The self-esteem and self-concept scale was completed by the children's parents in the pre-test and post-test stages. The data were analyzed using paired t-tests and analysis of variance (ANCOA) in Stata-16 software environment.

Results:

A total of 104 people participated in this study with a response rate of 100%. The results indicated that there was a significant statistical difference between the average score of self-concept and its subscales in the control (59.75 ± 2.78) and experimental (43.48 ± 4.32) groups after the intervention ($F=1182.60$, 0.01). Also, a statistically significant difference was found between the average score of self-esteem and its subscales in both control (19.75 ± 3.62) and experimental (36.09 ± 3.37) groups after the intervention ($F=387.84$, $P \leq 0.01$).

Conclusion:

Teaching sports exercises using educational videos showed a positive and significant effect on the level of self-esteem and self-concept of obese female students. The self-esteem and self-concept scores of the students in the intervention group improved significantly after the implementation of the exercise program. Considering the importance of self-esteem and self-concept in psychological health and prevention of psychological-social problems, it is suggested that obese children be encouraged to

participate in sports training programs. The intervention program designed in this study can be considered in the tele health framework of the medical care system.

Keywords: Self-esteem, self-concept, sports training, obesity, girls