

8-1-2022

An Empirical Study on the Improvement of Attention by Exercise Game Intervention in Children with ADHD

Xinyue Mao
East China Normal University

Xiaozan Wang
East China Normal University

Meiyuan Chen
East China Normal University

Follow this and additional works at: <https://scholarworks.boisestate.edu/ijpah>



Part of the [Exercise Science Commons](#), [Health and Physical Education Commons](#), [Public Health Commons](#), and the [Sports Studies Commons](#)

Recommended Citation

Mao, Xinyue; Wang, Xiaozan; and Chen, Meiyuan (2022) "An Empirical Study on the Improvement of Attention by Exercise Game Intervention in Children with ADHD," *International Journal of Physical Activity and Health*: Vol. 1: Iss. 2, Article 45.

DOI: <https://doi.org/10.18122/ijpah.1.2.45.boisestate>

Available at: <https://scholarworks.boisestate.edu/ijpah/vol1/iss2/45>

An Empirical Study on the Improvement of Attention by Exercise Game Intervention in Children with ADHD

Abstract

This study aims to verify the attention improvement of ADHD children after sports game intervention, and provide a green and safe intervention path to help ADHD children improve their attention. 16 children with ADHD (experimental group: 10, control group: 5) were selected to carry out exercise game intervention for 24 weeks, 4 times a week, each intervention lasted about 60 minutes. D2 attention test was carried out twice in the experimental group and the control group respectively to observe the attention of children, and the results of attention change in ADHD children before and after the intervention were analyzed. Data were analyzed in SPSS23.0 by independent sample t-test and paired sample t-test. Before the experiment, there was no significant difference between the experimental group and the control group in the scores of each dimension of attention test. After the experiment, the experimental group had significant differences in TN and CP dimensions, but did not have significant differences in other dimensions. Intervention of rich and interesting sports games can effectively improve the selective attention and concentration ability of ADHD children. Therefore, in order to develop the attention of children with ADHD, sports game environment can be created to carry out challenges of team cooperation.

An empirical study on the improvement of attention by exercise game intervention in children with ADHD

Xinyue Mao^a, Xiaozan Wang^a, Meiyuan Chen^a

^aEast China Normal University

Abstract

This study aims to verify the attention improvement of ADHD children after sports game intervention, and provide a green and safe intervention path to help ADHD children improve their attention. 16 children with ADHD (experimental group: 10, control group: 5) were selected to carry out exercise game intervention for 24 weeks, 4 times a week, each intervention lasted about 60 minutes. D2 attention test was carried out twice in the experimental group and the control group respectively to observe the attention of children, and the results of attention change in ADHD children before and after the intervention were analyzed. Data were analyzed in SPSS23.0 by independent sample t-test and paired sample t-test. Before the experiment, there was no significant difference between the experimental group and the control group in the scores of each dimension of attention test. After the experiment, the experimental group had significant differences in TN and CP dimensions, but did not have significant differences in other dimensions. Intervention of rich and interesting sports games can effectively improve the selective attention and concentration ability of ADHD children. Therefore, in order to develop the attention of children with ADHD, sports game environment can be created to carry out challenges of team cooperation.