Effectiveness of a Visual Attention Training Program on the Reduction of ADHD Symptoms in Preschool Children at Risk for ADHD in Isfahan: A Pilot Study

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Abstract

Background:
Attention deficit hyperactivity disorder (ADHD) symptoms are difficult to treat. As ADHD is naturally a disorder of attention and related executive functions, attention training (ATT) has been considered as a treatment for the disorder. Although there are few studies investigating the utility of ATT in the ADHD population, published studies provide support for ATT in reducing the symptoms of ADHD.

Objectives:
The aim of the current study was to examine the effects of training attention on ADHD symptoms in a group of preschool-aged children at risk for ADHD disorder.

Methods:
In this study, a group of 5-year-old children (n = 30) with ADHD symptoms were assigned randomly to either a training group who participated in 11 sessions of visual attention training based on Pay Attention Program or a non-trained control group. Both versions of Child symptom inventory-4 (CSI-4) were employed to assess ADHD symptoms based on parent and teacher's rating. Also the accuracy and the continuous performance of children were examined with Tolouse-Pieron test. The Assessment was performed in three phases: (1) before, (2) after, and (3) one month after the termination of training.

Results:
Results of the multivariate analysis of the covariance demonstrate that there was a significant difference (P < 0.05) in the decline of attention deficit symptoms between two groups based on teacher’s rating at post-test. In addition, there was a significant decrease (P < 0.05) on the scores of omission error of Toulouse-Pieron test at post-test and follow up for the training group. There was no significant reduction in hyperactivity symptoms in two groups.

Conclusions:
It seems that the performance of children’s attention with ADHD improves by visual attention training