

Efficacy of Neuropsychological Skills Training on the Self-Control Skills and Social Competence in the Children with Attention Deficit Hyperactivity Disorder (ADHD)

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Extended Abstract

Aim

Childhood is a critical period during which the development of the human personality takes place. Adolescence and maturity are rife with inconsistencies and behavioral disorders that result from ignoring the emotional-behavioral problems and issues of childhood and failing to guide the child's growth and development. Indeed, childhood issues not only impede a child's performance and capabilities but also increase their susceptibility to subsequent problems and maladies. One of the neuro-psychological disorders that is associated with childhood is disordered attention deficit/hyperactivity disorder. Three distinct sets of visible symptoms characterize this disorder: attention deficit, hyperactivity, and impulsivity. These children suffer from attention deficit disorders, which hinder their ability to focus intently on tasks or activities, maintain attention in inappropriate situations, and pursue objectives. Additionally, they exhibit restless hands and feet, run away from objects, and exhibit hyperactivity and impulsivity in inappropriate situations. They climb, are overly active and talkative, and find it difficult to wait their turn the majority of the time. Children diagnosed with attention deficit/hyperactivity disorder encounter a significant challenge in the form of inadequate self-control, which fosters an environment conducive to the deterioration of social skills and competence. The purpose of the present study was to investigate the effectiveness of neuropsychological skills training in enhancing self-control abilities among children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD).

Methodology

Experimental methodology (control and experimental groups), three-stage design (pre-test, post-test, and follow-up), and a two-month follow-up period comprised the study. The minors residing in the city of Tehran during the academic year 2021-2022 who were diagnosed with Attention Deficit Hyperactivity Disorder constituted the statistical population of the current study. A total of twenty-six children who were diagnosed with Attention Deficit Hyperactivity Disorder were chosen using a multi-stage clustered random sampling method. These children were then allocated at random into two groups: the experimental group comprised fourteen children, while the control group comprised twelve. Over the course of one and a half months, the children in the experimental group were instructed in neuropsychological skills for a total of twelve sixty-minute sessions. The present study utilized the Attention Deficit Hyperactivity Questionnaire (ADHDQ) (Brock & Clinton, 2007), the Self-Control Questionnaire (SCQ) (Kendal & Wilcox, 1979), and the Social Competence Scale (SCS) (Cohen & Rosman, 1972). The data were subjected to analysis using mixed ANOVA in the SPSS-23 software.

Findings

Children diagnosed with Attention Deficit Hyperactivity Disorder who received neuropsychological skills training demonstrated significant improvements in both self-control skill ($p < 0001$, $\eta^2 = 0.54$, $F = 28.42$) and social competence ($p < 0001$, $\eta^2 = 0.60$, $F = 37.13$). The children diagnosed with Attention Deficit Hyperactivity Disorder exhibited notable improvements in their average scores on measures of self-control ability and social competence as a result of this intervention. These results remained consistent throughout the follow-up phase.

Conclusion

According to the basis of the present study's findings, it is possible to conclude that neuropsychological skills training can be an effective method for enhancing the social competence and self-control abilities of children with Attention Deficit Hyperactivity Disorder by bolstering executive functions, attention, and concentration, as well as cognitive and mental organization. Thus, children with attention deficit/hyperactivity disorder enhanced their cognitive processing speed through the utilization of these neuropsychological abilities, which included information processing speed, perceptual organization processes, and performance speed. Enhancing the velocity of cognitive processing additionally induces these children to reflect and halt prior to engaging in impulsive actions that ultimately result in the deterioration of social relationships. This process induces a development of self-control abilities. Additionally, the neuropsychological skills training sessions placed significant emphasis on behavioral and psychological self-regulation. As a result, these children acquired the understanding that they must exercise control over their personal and social conduct.

Keywords: Attention Deficit Hyperactivity Disorder, Neuropsychological Skills, Self-Control Skill, Social Competence.