

Original Paper

Executive function and working memory in attention deficit / hyperactivity disorder and healthy children

Nejati V (PhD)*¹, Bahrami H (MA)², Abravan M (MA)³
Robenzade Sh (MA)², Motiei H (MA)⁴

¹Assistant Professor, Department of Psychology, Shahid Beheshti University, Tehran, Iran. ²MA in Child and Adolescent Clinical Psychology, Department of Clinical Psychology, School of psychology and Educational Science, Shahid Beheshti University, Tehran, Iran. ³MA in General Psychology. ⁴MA in Educational Psychology.

Abstract

Background and Objective: Attention deficit / hyperactivity disorder (ADHD) is a neurodevelopment abnormality. Inattentive behavior is considered a core and pervasive feature of ADHD. This study was done to compare the executive function and working memory in attention deficit / hyperactivity disorder and healthy children.

Materials and Methods: This case – control study was done on 50 children with ADHD as cases and 40 healthy children as controls. The disorder was diagnosed by applying Kanerz teacher test and confirmed by a psychiatrist. Stroop test, Wisconsin Card Sorting Test (WCST), Continuous Performance Test (CPT) and n-back test were used to assess the executive function and working memory.

Results: There was a significant difference between case and control groups in regard to executive function and working memory ($P<0.05$). Error omission was 16.98 ± 8.157 and 7.3 ± 3.824 in cases and controls, respectively ($P<0.05$).

Conclusion: Attention deficit / hyperactivity disorder reduces executive function and working memory in children.

Keywords: Attention deficit / hyperactivity disorder, Executive Functions, Working memory

* **Corresponding Author:** Nejati V (PhD), E-mail: nejati@sbu.ac.ir

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