Objective: Deficits in short term memory have been suggested to be important in attention-deficit/hyperactivity disorder (ADHD). Computer-based cognitive remediation program can improve cognitive skills in children with ADHD.

Method and material: This study assessed the efficacy of a 10-week Digit span memory training program for 6 children (ages 7–8) who had Attention-Deficit Hyperactivity Disorder (ADHD) without stimulant medication. They were assigned to computer-assisted cognitive remediation program in multiple baseline design. The main outcome measure were forward and backward digit span of WISC. Cognitive rehabilitation was done with CogniPlus Software that was composed of structured tasks that activate sustained attention and back and forward memor. Participants received 10 weeks of computer-assisted Cognitive rehabilitation (30 minutes sessions, two times per week).

Results: all cases showed improvement in forward and backward digit span of WISC.

Conclusion: These findings suggest that computer-assisted cognitive remediation may be applied to remediation of memory deficits in ADHD.

ADHD, Computer-assisted cognitive remediation, forward and backward digit span.