## Attention Deficit Hyperactivity Disorder

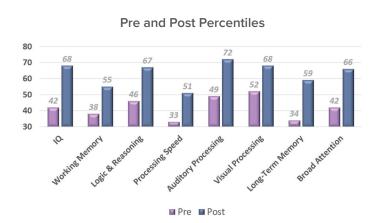
Number of Clients: 5,416

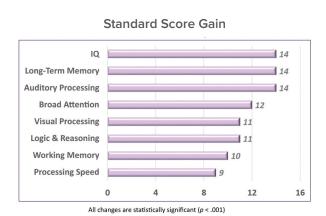
Mean Age: 12.3

Results: The following charts show the improvements in cognitive skills for clients who came

to LearningRx with a diagnosis of ADHD between 2010 and 2015. The changes in standard scores on the Woodcock-Johnson III—Tests of Cognitive Abilities were statistically significant for all skills (p< .001) assessed. Overall, the largest gains were seen in IQ, auditory processing, and long-term memory, followed by broad attention and logic & reasoning. The average pre-test IQ score was 96 and the average post-test IQ score was 110. The average age-equivalent gain in cognitive skill performance was

3.7 years.





Improvements based on 5,416 independently diagnosed ADHD clients:

- IQ scores improved by an average of 15 standard points
- Broad attention skills improved an average of 24 percentile points
- · Lowest pre-test skills included working memory, processing speed, and long-term memory
- Post-training percentiles were within the normal range of functioning

For a comprehensive report on LearningRx research and client outcomes please visit: www.learningrx.com/results

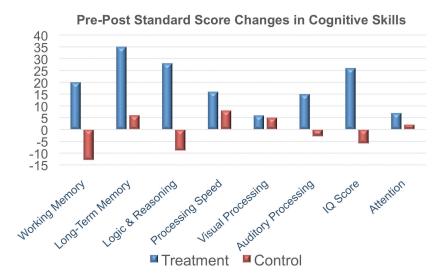


## Attention Deficit Hyperactivity Disorder

## ThinkRx Cognitive Training for Children with ADHD: Cognitive and Behavioral Transfer Effects

Abstract: In a randomized controlled trial, we examined the effects of the ThinkRx cognitive training program on IQ, memory, visual and auditory processing, processing speed, and reasoning as measured by the Woodcock-Johnson III—Tests of Cognitive Abilities and attention as measured by the NIH Cognition Toolbox on children ages 8-14 with ADHD. Participants were randomly assigned to either an experimental group (n = 6) to complete 60 hours of cognitive training, or to a wait-list control group (n = 7).

Results showed statistically significant differences between treatment and control groups on five variables—auditory processing, logic & reasoning, working memory, long-term memory, and IQ score. The treatment group outperformed the control group on all measures. All treatment group participants obtained clinically-significant change on GIA. Qualitative thematic analysis of survey and interview data from parents revealed three themes of behavioral improvements reported by the treatment group.



Reference: Moore, A.L., Carpenter, D.M., Miller, T., & Ledbetter, C. (2018). Clinician-delivered cognitive training for children with attention problems: Effects on cognition and behavior from the ThinkRx randomized controlled trial. *Neuropsychiatric Disease and Treatment*, 14, 1671-1683. doi: 10.2147/ndt.s165418

## **Real-Life Improvements\***

- Cooperative behaviors
- Academic performance
- Confidence & self-esteem
- Sports performance
- Self-discipline
- Sleep habits

\*Reported by the treatment group

