Predictors and Moderators of Treatment Outcome in Cognitive Training for Children With ADHD

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Abstract

Objective:
To explore whether clinical variables and initial cognitive abilities predict or moderate (far) transfer treatment outcomes of cognitive training.

Method:
A total of 98 children (aged 8-12 years) with ADHD were randomly assigned to Cogmed Working Memory Training or a new cognitive training called “Paying Attention in Class.” Outcome measures included neurocognitive assessment, parent and teacher rated questionnaires of executive functioning behavior and academic performance. Predictor/moderator variables included use of medication, comorbidity, subtype of ADHD, and initial verbal and visual working memory skills.

Results:
Parent and teacher ratings of executive functioning behavior were predicted and moderated by subtype of ADHD. Word reading accuracy was predicted by subtype of ADHD and comorbidity. Use of medication and initial verbal and visual spatial working memory skills only predicted and moderated near transfer measures.

Conclusion:
Cognitive training can be beneficial for certain subgroups of children with ADHD; individual differences should be taken into account in future trials.