Sequenced neurocognitive and behavioural parent training for the treatment of ADHD in school-age children.


Abstract

The present study examines the potential of sequencing a neurocognitive intervention with behavioural parent training (BPT) to improve executive functions (EFs), psychiatric symptoms, and multiple indices of functional impairment in school-age children aged 7 to 11 years who have been diagnosed with attention-deficit/hyperactivity disorder (ADHD). Specifically, in a randomised controlled trial design, 85 children were assigned to either Cogmed Working Memory Training (CWMT) followed by an empirically supported, manualized BPT intervention, or to a placebo version of CWMT followed by the same BPT intervention. Working memory maintenance (i.e., attention control/short-term memory), working memory processing and manipulation, ADHD and oppositional defiant disorder (ODD) symptoms, impairment in parent-child dynamics, familial impairment, and overall functional compromise were evaluated as outcomes. The results suggest specific effects of the combined CWMT and BPT program on verbal and nonverbal working memory storage and nonverbal working memory processing and manipulation but no incremental benefits in regard to ADHD symptoms, ODD symptoms, and functional outcomes. The present findings do not support the hypothesis regarding the complementary and augmentative benefits of sequenced neurocognitive and BPT interventions for the treatment of ADHD. These results, the study's limitations, and future directions for research are further discussed.