Cognitive predictors of sequential motor impairments in children with dyslexia and/or attention deficit/hyperactivity disorder

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Abstract

This study examined cognitive predictors of sequential motor skills in 215 children with dyslexia and/or attention deficit/hyperactivity disorder (ADHD). Visual working memory and math fluency abilities contributed significantly to performance of sequential motor abilities in children with dyslexia (N = 67), ADHD (N = 66) and those with a comorbid diagnosis (N = 82), generally without differentiation between groups. In addition, primary diagnostic features of each disorder, such as reading and inattention, did not contribute to the variance in motor skill performance of these children. The results support a unifying framework of motor impairment in children with neurodevelopmental disorders such as dyslexia and ADHD.