Co-morbidities in Chinese children with attention deficit/hyperactivity disorder and reading disabilities.

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Abstract

The co-morbidity of attention deficit/hyperactivity disorder (ADHD) and reading disorder (RD) is more frequent than expected. This investigation assessed the potential uniqueness of the co-morbidity of ADHD and RD and extended existing findings to the Chinese language. A parallel group design with a post hoc analysis of group differences was employed to compare 4 groups of children (30 with ADHD, 33 with RD, 28 with ADHD + RD, and 30 typically developing) regarding their reading comprehension, attention, reading-related abilities, and cognitive abilities. The findings indicated that children with RD and/or ADHD symptom(s) exhibited diverse cognitive profiles, and the distinguishing factor contributed to different inhibitions. Additionally, Chinese-speaking children with the co-morbid symptoms of RD and ADHD demonstrated greater deficits in auditory working memory and rapid naming than did the pure-deficit groups. Furthermore, although problems with phonological awareness were similar between the 2 groups, the deficiency of orthographic knowledge was more severe in children with RD than in the co-morbid group. The ADHD + RD group's cognitive and reading-related abilities displayed a relatively complicated pattern that should be considered in the diagnosis of either RD or ADHD and their remediation design.