Factor Structure of the Wechsler Intelligence Scale for Children - Fourth Edition in Children with ADHD

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Objective: Recent evidence suggests that the factor structure of the Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) is better explained by a five-factor model rather than the four-factor model in the standardization sample. The current study examined the WISC-IV’s factor structure in a sample of children with ADHD.

Method: Participants included 314 children and adolescents who were diagnosed with ADHD. Confirmatory factor analysis was conducted on the 10 core subtests of the WISC-IV, and three models were examined including two based on Cattell–Horn–Carroll (CHC) theory.

Results: A five-factor model consisting of Gc, Gf, Gv, Gsm, and Gs factors provided the best fit for the data. The Perceptual Reasoning factor identified in the original four-factor model split into the two CHC factors, Gf and Gv, and cross-loaded the Symbol Search subtest onto the Gv factor.

Conclusion: A five-factor model based on CHC theory provided superior fit for the WISC-IV in children with ADHD, as has been found with the standardization sample.