



The Woodcock-Muñoz Foundation

RESEARCH BRIEF

DOCTORAL DISSERTATION ABSTRACT

EVALUATION OF ATTENTION AND EXECUTIVE CONTROL WITHIN A MODEL OF G_f-G_c COGNITIVE FUNCTIONING

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The Woodcock-Muñoz Foundation (WMF) is a private non-profit operating foundation that supports the advancement of contemporary cognitive assessment practices. The Doctoral Dissertation Abstract Project is part of the Foundation's efforts to disseminate research findings that bridge the theory-to-practice gap in cognitive assessment.

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Abstract

The G_f - G_c model (McGrew, 2003; McGrew & Flanagan, 1998) guided the development of most contemporary cognitive ability tests (Kaufman & Kaufman, 2004; Wechsler, 2003), as it enumerates general cognitive ability through the evaluation of its multiple components. This study involved an investigation of the G_f - G_c domains including added attention and executive control domains, which was measured by the Wechsler Intelligence Scale for Children, 4th Edition (WISC-IV) and Conners' Continuous Performance Test, 2nd Edition (CPT-II). These domains were compared via factor analysis of the WISC-IV and CPT-II.

In addition, Structural Equation Modeling was used to test the structure of the Dean-Woodcock Neuropsychology Model (Dean et al., 2003), particularly the primacy of attention and the interaction of executive control with other cognitive skills. The current study provided support for the addition of separate attention (G_{at}) executive control (G_{ec}) components within a G_f - G_c cognitive model. In addition, a significant interaction was found between attention and processing speed, which supports attention as a primary cognitive skill.