

ABSTRACT

DISSERTATION: The Neuropsychology of Autism and Asperger's Disorder: Evidence For or Against a Shared Spectrum

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PAGES: 184

Given the broad public health concern, lack of reliability of diagnosis across providers and substantial resources needed to support individuals with Autism Spectrum Disorder, the current study serves to contribute to the field in informing the contexts of both research and clinical service. The utility of a standardized sensory-motor battery was investigated in regards to its ability (1) to determine what, if any, differences exist between ASD diagnoses or subgroups in both sensory functioning and motor functioning; and (2) to determine whether such discrepancies, if they exist, are capable of differentiating groups. Results from the quadratic discriminant analysis demonstrated that the factor scores derived from the *Dean-Woodcock Sensory-Motor Battery* significantly differentiated the ASD and nonclinical comparison groups. Factor 1 (Simple Sensory Skills) exhibited the strongest relationship, followed by Factor 2 (Cortical Motor and Complex Sensory Skills), then Factor 3 (Subcortical Motor Tasks and Auditory/Visual Acuity Skills). Findings from the study lend initial evidence of the use of the *DWSMB* as a potential measure to include within the two-stage diagnostic process for ASD. Use of the *DWSMB* as a screening measure may facilitate access to early intervention services given the primitive nature of sensory-motor tasks. In addition, the availability of the *DWSMB* as a standardized measure of sensory and motor functioning may promote increased sensitivity and

specificity among diagnostic providers thus improving outcomes of individuals with ASD who can access services more readily with earlier, more reliable diagnoses.