

Working Memory Profile for Parenting Children with Neurodevelopmental Disorders and the Typically Developing: Same or Different?

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Abstract

Working memory (WM) as one of the components of Executive Functions (EF) has been studied in parents in the context of endophenotypes of children with Neurodevelopmental Disorders (NDD). But the examination of such cognitive functions that are pertinent for effective parenting skills in this group of parents has been limited. This study aims at understanding WM and what they reveal about parenting when examined on parents of children with NDD vis-a-vis a control group of parents with children who are typically developing (TD). NDD is defined in a novel unitary approach. Hence a cross-sectional two-group design was employed with 54 parents of the NDD group and 45 parents of the TD group, where all their children had homogeneous demographic characteristics except their developmental status. Parents were recruited using purposive and snowball sampling techniques. The parents had no psychiatric morbidity or cognitive impairments and belonged to high socioeconomic status (SES). N-back and Spatial span tasks were administered. Results revealed a significant difference in most of the n-back tasks but none in spatial span tasks between the groups. Task nature and their relevance in normal and clinical groups of adults were discussed with implications in parenting.

Keywords: Working memory, Parenting, N-back, Spatial-span, Parents, Neurodevelopmental disorders