Capturing daily-life executive impairments in adults: Does the choice of neuropsychological tests matter?

Abstract:
Neuropsychological studies have demonstrated that standardized tests of executive functioning (EF; abilities necessary for the control and regulation of behaviours) do not reliably capture EF-related difficulties reported in daily life. We aimed to determine if an ecologically relevant neuropsychological battery is more strongly associated with self-reported everyday EF impairments than classically used neuropsychological tests. Fifty-nine adults aged 18-49 self-rated their EF abilities using the Barkley Deficits in EF Scale (BDEFS) and were randomly assigned to complete either an EF test battery composed of measures with hypothesized ecological relevance, or one composed of traditional EF tasks. Correlations between neuropsychological tests and self-reported impairments were generally comparable across both batteries. Our results align with much of the existing literature suggesting that self-reported EF difficulties in daily life are not adequately captured by formal neuropsychological tests, even for performance-based measures which directly tap everyday constructs (e.g., planning a route, completing multiple tasks within a given time frame).