

Results: Binomial logistic regression model was statistically significant, $\chi^2(2) = 20.508$, $p < .0005$. The model explained 46.8% (Nagelkerke R²) of the variance and correctly classified 70.8% of cases. Sensitivity was 78.6%, specificity was 60.0%, positive predictive value was 73.3%, and negative predictive value was 66.7%. Both predictor variables, parent reported BEARS ($p = .001$) and child-reported BEARS ($p = .049$), were significant. Children with higher BEARS parent report scores had 3.27 times higher odds, and those with higher self-report scores had 2.88 times higher odds, of exceeding the CSHQ cut-off than those with lower scores. ROC curve analysis revealed that the BEARS parent and self-report scores had excellent diagnostic utility (Hosmer et al., 2013) for accurately classifying children who exceeded the cut-off on the CSHQ from those who did not (area under the curve [AUC] = 0.849, SE = 0.054, 95% CI = .742 to .956, $p < .001$).

Conclusions: The results of the current study indicate that the BEARS has excellent diagnostic utility for accurately classifying sleep problems. Additionally, it is quick to administer making it a practical screening tool for clinicians to include as part of a comprehensive neuropsychological assessment.

Categories: ADHD/Attentional Functions

Keyword 1: sleep

Keyword 2: assessment

Keyword 3: psychometrics

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38 Efficacy of Caregiver Psychoeducation Sessions on Attention-Deficit/Hyperactivity Disorder and Executive Functioning Difficulties

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Objective: Children with attention-deficit/hyperactivity disorder (ADHD) commonly exhibit impairments in their executive functions. Caregivers are primarily responsible for the daily management of their children's ADHD and executive functioning difficulties.

Psychoeducation, a cornerstone of ADHD treatment, can empower caregivers by providing them the knowledge and resources they require to support their child with ADHD. This study examined the efficacy of a suite of six caregiver psychoeducation sessions delivered by a specialised ADHD service. Two of these sessions pertained to (i) Understanding ADHD and (ii) Executive Functioning in ADHD. The other four covered information around Family Self-Care and Stress Management, Social Connectedness and Communication, Sensory Processing and Self-Regulation in ADHD and, Medication.

Participants and Methods: All sessions were delivered between May 2016 and July 2022, in 2 to 3-hour sessions each. Caregivers completed pre and post-session questionnaires, rating (i) their understanding of each of the topics, (ii) whether they identified effective strategies to help their child with ADHD meet their needs, and (iii) whether they improved their knowledge of resources they can access to assist with ADHD management. Altogether, 666 caregiver responses were collected across all sessions, 35% ($n=234$) of which were from the Understanding ADHD sessions and 4.2% ($n = 28$) from the Executive Functioning sessions.

Results: Wilcoxon signed-rank tests with Bonferroni adjusted alpha level of 0.016 were conducted to examine each session's pre- and post-session responses. Results showed that the Understanding ADHD workshops impelled significant improvements in attendee-rated levels of topic understanding ($z = -8.79$, $p \leq .001$, $r = -.41$), strategies gained ($z = -8.54$, $p \leq .001$, $r = -.40$) and perceived resource accessibility ($z = -6.40$, $p \leq .001$, $r = -.30$). Attendees reported moderate to large improvements following the Executive Functioning in ADHD sessions, including in their topic understanding ($z = -4.18$, $p \leq .001$, $r = -.57$), strategies gained ($z = -3.93$, $p \leq .001$, $r = -.54$) and perceived resource accessibility ($z = -4.23$, $p \leq .001$, $r = -.61$). Improvements across all three areas were also noted across the other four caregiver sessions, except for the medication session where no significant changes in strategies gained and perceived access to resources were noted.

Conclusions: This study provides evidence that caregiver sessions within a Tier-4 service are efficacious and can (i) meet caregivers' needs to better understand ADHD, executive functioning difficulties as well as of other ADHD-related issues, and (ii) may equip caregivers with the knowledge to access resources to appropriately manage their children with ADHD – a possible precursor to improved clinical and functional outcomes in children. That the session on ADHD medications only led to improved understanding of the topic but not to perceived gains in strategies or perceived access to strategies could be attributed to low pre-and post-session questionnaire response rates as well as to the nature of those sessions which were purely informative and did not discuss strategies and resources. Nonetheless, longitudinal studies, with control groups, should determine whether any post-intervention improvements are sustained over time and should establish whether these are associated with improved outcomes in children.

Categories: ADHD/Attentional Functions

Keyword 1: executive functions

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39 Anxiety as a Longitudinal Compensatory Factor for Executive Functioning Abilities in Youth with ADHD

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Objective: ADHD and anxiety symptoms are highly comorbid in childhood. While worse functional outcomes are typically expected for children with comorbid ADHD and anxiety symptoms, an emerging body of literature has suggested that anxiety symptoms may actually contribute to compensatory effects for executive functioning (EF) skills in children with ADHD symptoms. However, the results of studies investigating this claim have been quite mixed,

possibly due to the use of smaller sample sizes and cross-sectional datasets. The current study extends the previous literature by examining the possible compensatory effects of anxiety symptoms in the context of ADHD symptoms on EF abilities (e.g., working memory [WM] and inhibition) both cross-sectionally and longitudinally in a large, well-validated sample. **Participants and Methods:** 547 children and adolescents (8-16 years) were included from a population-based sample of twins (CLDRC sample) with enrichment for reading and attention challenges. Participants were retested at a second time point approximately 5 years later. ADHD symptoms (inattention and hyperactivity-impulsivity) were measured by a DSM-based ADHD rating scale, anxiety symptoms were measured by the RCMA, inhibition was measured by stop-signal reaction time (SSRT), and working memory was measured by Digit Span Backwards (WISC/WAIS-R/III). Covariates included age and sex assigned at birth. Multiple regression models examined cross-sectional and longitudinal associations between ADHD (inattention and H-I) symptoms, anxiety symptoms, and the interaction between ADHD and anxiety symptoms on WM and inhibition abilities.

Results: As expected, higher anxiety, inattention, and H-I symptoms were generally associated with lower inhibition and WM abilities both cross-sectionally and longitudinally. While no significant interactions between ADHD and anxiety symptoms were identified cross-sectionally at Time 1, significant interactions between Time 1 ADHD and anxiety symptoms predicted Time 2 inhibition scores. An inattention x anxiety interaction ($p=.002$) and a H-I x anxiety ($p=.016$) interaction significantly predicted Time 2 inhibition. Simple slopes analysis confirmed a compensatory interaction pattern, where ADHD symptoms showed a stronger association with inhibition weaknesses in children without anxiety symptoms compared to those with anxiety symptoms. This suggests that anxiety symptoms may be serving as a compensatory factor for children with ADHD symptoms as compared to their peers without ADHD symptoms.

Conclusions: These findings help clarify a previously mixed literature. Our findings suggest that the compensatory effect of anxiety symptoms on inhibition abilities in children with ADHD symptoms may be a developmental mechanism that takes time to emerge. The fact