

(CNP). All participants were administered the Structured Clinical Interview for DSM-IV-TR (SCID-IV), which provided diagnoses used for group comparisons between adults with ADHD ( $n = 35$ ) and healthy controls ( $n = 577$ ). A computerized BART paradigm was used to examine impulsivity and risky decision-making, while participants also completed the Barratt Impulsiveness Scale (BIS-11), and ADHD participants completed the Adult Self-Report Scale-V1.1 (ASRS-V1.1). The BART presented two colors of balloons with differing probabilities of exploding, and participants were incentivized to pump the balloons as many times as possible without causing them to explode. The primary endpoint was “mean adjusted pumps”, determined as mean across trials of the number of pumps on trials that did not end in explosion. An index of reactivity to loss was calculated as the difference between the mean adjusted pumps following an explosion and the mean adjusted pumps following trials in which the balloon did not explode.

**Results:** The ADHD and control groups did not differ on mean adjusted pumps across trials, but they did differ in their reactivity to explosion of balloons that followed the most pumps, incurring the greatest level of loss ( $F(1, 551) = 7.1, p < 0.01$ ). Interestingly, ADHD participants showed a greater reactivity to loss on these balloons than controls ( $p < 0.05$ ), indicating that they reduced their number of pumps following balloon explosions more than controls. For participants as a whole, there were small correlations between loss reactivity and scales of everyday impulsivity on the BIS-II ( $ps < 0.05$ ). For ADHD participants, loss reactivity was unrelated to symptoms of inattention but was significantly correlated with symptoms of hyperactivity/impulsivity ( $p = 0.01$ ) and total ADHD symptoms ( $p < 0.05$ ) on the ASRS-V1.1.

**Conclusions:** In the context of a risky decision-making task, adults with ADHD showed greater reactivity to loss than controls, despite showing comparable patterns of overall performance during the BART. The magnitude of behavioral adjustment following loss was correlated with symptoms of hyperactivity/impulsivity in adults with ADHD, suggesting that loss sensitivity is clinically related to impulsive behavior in everyday life. These findings help to expand our understanding of motivational processing in ADHD and suggest new insight into the ways in which everyday symptoms of ADHD are related to sensitivity to losses and punishments.

**Categories:** ADHD/Attentional Functions

**Keyword 1:** attention deficit hyperactivity disorder

**Keyword 2:** inhibitory control

**Keyword 3:** motivation

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### 37 Clinical utility of the BEARS as a sensitive screener for sleep problems in ADHD.

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**Objective:** Many children and adolescents do not achieve adequate sleep durations. The prevalence of sleep problems has been estimated at 7% for typically developing children (Corkum, Tannock, & Moldofsky, 1998) and as high as 45% for representative samples of children, including participants with various diagnoses in proportion to what would be expected in the population (Sher-Fen Gau, 2006). For children with ADHD, the prevalence of sleep problems has been estimated at between 25-50% (Corkum, Tannock, & Moldofsky, 1998). Given the important role that sleep plays in children with ADHD, a brief and effective screener is needed to aid clinicians in assessing for sleep problems, especially when the referral for a neuropsychological evaluation concerns ADHD or any other neurodevelopmental disorder for which presenting concerns involve symptoms that overlap with ADHD. While the developers of the BEARS have demonstrated its utility as a screening tool, there is currently no independent published research replicating this finding. The current study aimed to replicate the findings of the BEARS developers by demonstrating its utility as a sensitive screening tool for sleep problems. It was predicted that the BEARS would demonstrate high sensitivity in identifying children with sleep problems.

**Participants and Methods:** Data from 54 school aged children (aged 6-147-13, Mage = 9.83) was analysed. Children were administered the BEARS, and caregivers completed the BEARS and Children's Sleep Habits Questionnaire (CSHQ), as part of a larger study.

**Results:** Binomial logistic regression model was statistically significant,  $\chi^2(2) = 20.508$ ,  $p < .0005$ . The model explained 46.8% (Nagelkerke R<sup>2</sup>) 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.