RESEARCH FINDINGS

Children with neurodevelopmental disorders (NDDs), such as attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD), often have weaker cognitive control skills. Cognitive control describes the ability to regulate behaviors, such as planning, maintaining attention, and inhibiting impulses. Dr. Peisch and Dr. Arnett recently completed a study that examined the link between brain activity (measured with EEG), cognitive control, and neurodevelopmental symptoms.

They found that cognitive control fully mediated the association between brain activity and neurodevelopmental symptoms. These findings are shown in the figure above. Drs. Peisch and Arnett interpret these results to suggest that the EEG differences seen in children with ADHD may result from atypical development of brain networks that also support cognitive control, which in turn explains symptoms commonly observed in children with neurodevelopmental disorders (e.g., difficulty shifting attention away from a preferred task). As cognitive control skills are malleable and may be strengthened through interventions, these findings are important for the clinical care of children with ADHD and other related neurodevelopmental disorders.

MEET THE TEAM

Gini Peisch is a clinical-research postdoc fellow at the Developmental Medicine Center and joined the Arnett Lab in August 2021. Gini earned her PhD in clinical psychology from the University of Vermont in 2020 and would like to work at the intersection between research and clinical work. In her free time, she enjoys hiking, running, and traveling (often with her dog Hazel).

RECRUITING STUDIES

The RHINO Study is now recruiting! We are looking for: 1) 2.5-4 year old children with or without a family member who has ADHD and 2) 7-11 year old children with or without ADHD. If you know or have a child that qualifies for this study, please visit our website or contact us for more details. Participation in this study involves the completion of online questionnaires, a remote interview, and a single in-person visit to our laboratory, during which your child will complete an EEG and a neuropsychological evaluation. The visit takes about 3 hours and you will earn $40, plus reimbursement for parking and public transportation.