POND NETWORK
Province of Ontario Neurodevelopmental Disorders

Communicating Research in Clear Language

Children with Neurodevelopmental Disorders Share Problems Identifying Emotions

What is the research about?

Many children and young people with neurodevelopmental disorders (NDs) have deficits in their ability to recognize the emotional states of others (e.g., anger, fear, or sadness). The goal of this study was to compare patterns of this social perception ability in children diagnosed with obsessive-compulsive disorder (OCD), attention-deficit/hyperactivity disorder (ADHD), or autism spectrum disorder (ASD), compared to a control group. The researchers wanted to see if the different groups shared similar difficulties with social perception and if there were differences in their severity.

What did the researchers do?

The researchers recruited 265 children, of whom 118 were diagnosed with ASD (28% female), 71 with ADHD (13% female), and 42 with OCD (23% female). The control group consisted of 34 children (15% female) without a psychiatric diagnosis or history of premature birth.

The parents or caregivers completed rating scales of their child's symptoms. The researchers gave all 265 children the Reading the Mind in the Eyes Test–Child Version (RMET). In this test, children are shown photos of the eyes of adults and are asked to choose the emotions or mental states for each picture. The accuracy in identifying the emotion or mental state of each group of children was then compared to the accuracy rates of typically developing children. The accuracy rates were also compared according to the difficulty of the task and whether the photos represented positive, negative, or neutral emotions or mental states.

What did the researchers find?

The researchers found that the children with ADHD and ASD scored lower than the other groups in their ability to identify emotions or mental states. When IQ was also considered, participants with OCD performed better than controls, although differences between the other groups were less evident. The participants with ASD scored the lowest on easy items. Those with ASD and ADHD scored lower than other groups on photos showing positive emotions. Higher levels of social communication problems and hyperactivity/impulsivity, but not OCD traits/symptoms, were related to lower scores on the RMET, no matter the diagnosis**.**

Take home message

Children and youth with NDs can have problems recognizing the emotional and mental states in others, but to varying degrees. These difficulties seemed to be related to the severity of their social communication deficits. The researchers suggest that these findings highlight the existence of similar thinking problems in children with ADHD, ASD, and OCD.

NOTE: *The original Research Report was written by D. Baribeau and colleagues and published in the Journal of the American Academy of Child and Adolescent Psychiatry. 2015*