

New study examines relationship between emotion regulation and brain connectivity in ASD

21 June 2017



Credit: Mary Ann Liebert, Inc., publishers

Emotional control varies among children with autism spectrum disorder (ASD), and researchers using functional magnetic resonance imaging (fMRI) for whole brain analysis identified relationships between emotional lability and neuronal activity in two brain regions. They report their findings in the article "The Neural Correlates of Emotional Lability in Children with ASD," published in *Brain Connectivity*.

Coauthors Randi Bennett and Amy Roy, Fordham

University, Bronx, NY and Krishna Somandepalli and Adriana Di Martino, NYU Child Study Center of the Langone Medical Center, New York, NY, used resting-state fMRI to study the variability in emotional lability between a group of children 5-12 years of age. Whole brain analysis led the researchers to focus on neuronal circuits in two brain areas of interest, the middle frontal gyrus and the posterior insula. The researchers suggest that differences in neuronal network interactions may have a role in emotion regulation variability in individuals with ASD.

"Exaggerated mood changes are symptomatic hallmarks of [autism spectrum disorder](#). Ms. Bennett and her colleagues have made an important contribution to the autism literature by identifying novel brain-behavior relationships that may lead to a greater understanding of the central linkage between [emotional control](#) and autism," states Christopher Pawela, PhD, Editor-in-Chief of *Brain Connectivity*.

Research reported in this publication was supported by the National Institute of Mental Health under Award Numbers K23MH087770, R01MH105506, and R01MH081218 and the National Institute of Child Health and Human Development under Award Number R01HD065282. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

More information: Randi H. Bennett et al, The Neural Correlates of Emotional Lability in Children with Autism Spectrum Disorder, *Brain Connectivity* (2017). [DOI: 10.1089/brain.2016.0472](https://doi.org/10.1089/brain.2016.0472)

Provided by Mary Ann Liebert, Inc

APA citation: New study examines relationship between emotion regulation and brain connectivity in ASD (2017, June 21) retrieved 4 May 2021 from <https://medicalxpress.com/news/2017-06-relationship-emotion-brain-asd.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.