

A young boy with short dark hair, wearing a light-colored button-down shirt, is smiling broadly. He is outdoors in a grassy area with trees in the background. A large blue circular graphic is partially visible in the top left corner of the page.

Dysregulation profile risk may be identified in infancy

By Dr. Jessica K. Edwards

The “dysregulation profile” (DP) describes a child psychopathology construct that measures broad-based, generalised emotional and behavioural dysregulation using the Child Behaviour Checklist.¹ As the DP is highly heritable,² siblings of children with autism spectrum disorder (ASD) may be at an increased risk of a broad range of atypical developmental outcomes. However, the preschool manifestations of non-ASD psychopathology in at-risk children are unclear.

Now, researchers at the University of California and Purdue University have started to address this issue by examining the factor structure and predictors of the DP in 36-month-old typically developing infants, with (n=253) or without (n=162) an older sibling with ASD. They found that a bi-factor model best described the DP in preschool children, whereby the DP consists of a general syndrome of dysregulation and individual (specific) syndromes characterised by affective (Anxious/Depressed Behaviour), behavioural (Aggressive Behaviour) and cognitive (Attention Problems) symptoms.

They also identified that a family history of ASD was associated with broad dysregulation problems, particularly in the Anxious/Depressed dimension, from as early as 3 years of age. As examiner ratings — particularly over-activity at 18 months-of-age — were longitudinally associated with the DP at 36 months-of-age, the researchers suggest that examiner observations made as early as 18 months old might help identify risk for later DP.

Referring to:

Miller, M., Iosif, A-M., Young, G.S., Bell, L.J., Schwichtenberg, A.J., Hutman, T. and Ozonoff, S. (2018), The dysregulation profile in preschoolers with and without a family history of autism spectrum disorder. *J. Child Psychol. Psychiatr.* doi: 10.1111/jcpp.13003.

Further reading:

¹Bellani, M. et al. (2012), The dysregulation profile in children and adolescents: A potential index for major psychopathology? *Epidemiol. Psychiatr. Sci.* 21: 155-159. doi: 10.1017/S2045796011000849.

²Althoff, R.R. et al. (2006), Latent class analysis shows strong heritability of the Child Behavior Checklist - juvenile bipolar phenotype. *Biol. Psychiatry* 60: 903-911. doi: 10.1016/j.biopsych.2006.02.025.

Glossary:

Dysregulation profile (DP): a broad indicator of concurrent affective, behavioural, and cognitive dysregulation, often measured with the anxious/depressed, aggressive behaviour, and attention problems syndrome scales of the Child Behaviour Checklist (as defined by Deutz, M.H.F. (2018) in doi: 10.1017/S0954579417000955).