and 9,609 controls. Across mental disorders, cases demonstrated impaired emotion regulation compared to controls. For the DERS, differences between cases and controls were large and significant for all comparisons, with effect sizes ranging from 0.94 (95% CI: 0.67 to 1.21) for bipolar disorder to 2.55 (95% CI: 2.28 to 2.83) for borderline personality disorder.
Conclusions: The capacity to regulate emotions is significantly impaired across major mental disorders. This suggests that the development of novel interventions that improve emotion regulation could be beneficial to prevent or treat many mental disorders.
Keywords: Emotion Regulation, Mental disorders, Borderline Personality Disorder, Mood disorders, Anxiety Disorders

39. Environmental Risk for Adolescent Obesity: Relevance for Mental Health

Kevin Hoffman[1], Elina Visoki[2], Kate Tran[2], Martins Gatavins[2], Ohyoon Kwon[3], Joshua Gordon[4], and Ran Barzilay[5]

[1]Children's Hospital of Philadelphia, [2]Lifespan Brain Institute, Children's Hospital of Philadelphia, [3]Perelman School of Medicine, University of Pennsylvania, [4]Pittsburgh VA Medical Center, [5]Lifespan Brain Institute, Children's Hospital of Philadelphia, and University of Pennsylvania

Background: Adolescent obesity and psychopathology are increasing in prevalence and interconnected. We tested the role of poly-environmental (exposomic) risk in the relationship between obesity and psychopathology.
Methods: We analyzed data from the Adolescent Brain Cognitive Development Study (ABCD, N= 11,119, mean age at baseline 9.9 years) that assessed multiple environmental exposures and included longitudinal measurements of weight and of mental health. To quantify environmental risk of obesity (defined as age-sex standardized BMI percentile $>$ 95), we ran an exposome-wide-association-study of obesity using 290 individual-level environmental exposures and generated a weighted aggregate exposomic risk score. We then tested associations of the obesity exposomic risk score with psychopathology, adjusting for demographics.
Results: Participants with obesity (20.8%) had greater youth-reported (Brief Problem Monitor scale (BPM)) and parent-reported (Child Behavior Checklist scale (CBCL)) overall psychopathology (BPM t-score 0.92 and CBCL t-score 3.44 higher in youth with obesity vs controls; p's $<$ .001). Of the 290 environmental measures we included, 49 were significantly associated with obesity (31 risk and 18 protective factors). The exposomic risk score for obesity was associated with greater overall psychopathology (for youth report, standardized coefficient, 0.39, $p < 0.001$; for parent report, standardized coefficient, 0.31, $p < 0.001$). There was no significant mediation effect for psychopathology on the path from exposomic risk to obesity a year later.
Conclusions: In a large diverse cohort, obesity was associated with psychopathology. Environmental risk for obesity is associated with psychopathology independent of actual obesity outcomes. More research is needed to clarify causal pathways.
Funding Source: K23MH120437
Keywords: Obesity, Exposome, child development, Adolescent stress

40. Hypoxia-Associated Birth Complications and Offspring Childhood Internalizing and Externalizing Symptoms

Nicole Davies[1], Madeline Pike[1], Emma Smith[1], Barbara Cohn[2], Nickilou Krigbaum[2], Piera Cirillo[2], Thomas Olino[1], and Lauren Ellman[1]

[1]Temple University, [2]Child Health and Development Studies, Public Health Institute

Background: Hypoxia-associated birth complications (termed fetal hypoxia, herein) have been linked to increased schizophrenia risk, autism spectrum disorder and attention deficit hyperactivity disorder. However, no study has examined the associations between hypoxia-associated birth complications and the emergence of childhood internalizing and externalizing symptoms during childhood. The aim of this study was to examine the relationship between fetal hypoxia and childhood internalizing and externalizing symptoms.
Methods: Participants (n=1,536) were drawn from the Child Health and Development Studies Birth Cohort, in which pregnant women were enrolled from 1959-1966. A subsample of offspring was followed up in childhood from ages 9 to 11. Mother/offspring dyads were included in analyses for pairs for whom fetal hypoxia at birth data was available through medical records and interviews, with childhood internalizing or externalizing symptom data including only "true" and "not true" dichotomous responses.
Results: A hierarchical linear regressions model was conducted to examine the association of fetal hypoxia with offspring childhood internalizing and externalizing symptoms from ages 9 to 11, controlling for maternal education. For internalizing symptoms, fetal hypoxia explained an additional 0.49% of the variance (R^2=0.0049, F(1,1524)=7.56, p=0.006). There was not a significant association between fetal hypoxia and externalizing symptoms, and the inclusion of fetal hypoxia did not significantly increase the variance explained (R^2=0.0001, F(1, 1,531)=0.24, p=0.626).
Conclusions: Results indicate that hypoxia-associated birth complications are associated with greater risk of offspring childhood internalizing symptoms from ages 9 to 11.
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Keywords: obstetric complications, Hypoxia, Internalizing symptoms, Externalizing symptoms

41. A Large-Scale Methylome-Wide Analysis of Cell-Type Specific Associations With Lifetime Anxiety

Sarah Ingram[1], Srimann Ramachandruni[2], Ryan Smith[3], Natalia Carreras-Gallo[3], Varun B. Dwarka[3], Edwin J.C.G. van den Oord[2], and Shaunna L. Clark[1]

[1]Texas A and M University, [2]Virginia Commonwealth University, [3]TruDiagnostics