

was conducted through partial correlations, checking for possible confounding factors (positive, depressive, extrapyramidal symptoms and disorganization).

Results: The SZ, compared to the HC, showed higher rs-brain activity of the right inferior parietal lobule and of the right temporoparietal junction and lower rs-brain activity of the right dorsolateral prefrontal cortex, bilateral anterior dorsal cingulate cortex, bilateral ventral caudate and bilateral dorsal caudate. Furthermore, in the group of patients, the rs-brain activity of the left ventral caudate showed a moderate negative correlation with the Expressive deficit domain ($r = -0.401$; $p = 0.003$), but not with the Motivational domain.

Conclusions: The results of the present study, in line with the literature, demonstrated how the two domains of negative symptomatology are subtended by different pathophysiological mechanisms. Given the role played by the ventral caudate in neurocognitive processes, these results are in line with the hypothesis that Expressive deficit may have a common etiopathogenesis with cognitive deficits. A better understanding of the neurobiology of negative symptoms could foster the development of innovative treatment strategies targeting the two negative symptom domains.

Disclosure of Interest: None Declared

EPP0878

Beating the Odds: Is Mental Health at Stake for High-Achieving Children in Poverty in the ABCD Study?

S. Pacheco*, M. E. Ellwood-Lowe and S. A. Bunge

Psychology, University of California, Berkeley, Berkeley, United States

*Corresponding author.

doi: 10.1192/j.eurpsy.2023.1162

Introduction: Childhood family income is a powerful predictor of academic achievement and mental health. Here, we ask whether children living in poverty—those whose family incomes are not sufficient to meet their material needs—who beat the odds by succeeding academically are subsequently either protected from, or more at risk for, internalizing disorders. Prior research indicates that children in poverty with better academic performance and more depressive symptomatology tend to have higher temporal coupling between lateral frontoparietal network (LFPN; supports executive functions) and Default Mode Network (DMN; supports internally-directed thought) than lower-performing children in poverty, in direct contrast to the pattern observed for children above poverty. Thus, an open question is whether this pattern of connectivity adaptive for children in poverty has maladaptive long-term consequences, particularly for mental health.

Objectives: In this pre-registered study, we analyzed concurrent data from 8,091 children (1,307 in poverty) in the ABCD study at baseline (ages 9-10y). We performed linear mixed effects models to investigate whether both higher LFPN-DMN connectivity and grades are linked to more internalizing symptoms concurrently, and whether this differs for children above and below poverty.

Methods: We performed linear mixed effects models to investigate whether both higher LFPN-DMN connectivity and grades are linked to more internalizing symptoms concurrently, and whether this differs for children above and below poverty.

Results: We found that higher grades were associated with fewer internalizing symptoms for both children above and below poverty; this association was stronger for children below poverty. In addition, LFPN-DMN connectivity showed a significant negative correlation with internalizing symptoms at this age. However, when looking at internalizing symptoms separately - that is, anxiety/depression, withdrawal/depression, and somatic symptoms - we found that higher LFPN-DMN connectivity for children below poverty was associated with higher withdrawal/depression symptoms, but fewer somatic symptoms, pointing to a dissociation in what pattern of brain connectivity is most adaptive for the development of internalizing symptoms vs. physical health. These somatic symptoms highlight potential maladaptive consequences of resilience for children growing up in unequal structural conditions.

Conclusions: This research has important implications for supporting children in poverty by illuminating mechanisms for, and potential maladaptive consequences of, their resilience in academic contexts.

Disclosure of Interest: None Declared

EPP0879

White matter microstructure and local coherence of functional MRI in major depression

S. Breit^{1,2*}, N. Denier^{1,2}, N. Mertse^{1,2}, S. Walther^{1,2}, A. Federspiel², R. Wiest³ and T. Bracht^{1,2}

¹University Hospital of Psychiatry and Psychotherapy, University of Bern; ²Translational Research Center, University Hospital of Psychiatry and Psychotherapy, University of Bern and ³Institute of Diagnostic and Interventional Neuroradiology, University of Bern, Bern, Switzerland

*Corresponding author.

doi: 10.1192/j.eurpsy.2023.1163

Introduction: Anhedonia is a loss of pleasure and interest in activities and a core symptom of major depressive disorder (MDD). Diffusion tensor imaging studies show evidence for white matter (WM) alterations in the superior longitudinal fasciculus (SLF) of patients with MDD, already in the early stage of illness. SLF fibers extend from the parietal lobe to prefrontal regions that are important for attention, motivation, decision-making and reward processing.

Objectives: The present study focuses on the relationship between WM-integrity and anhedonia in patients with MDD. We hypothesize that WM-alterations are present in the SLF of depressed patients with motivational anhedonia.

Methods: Thirty-nine patients with MDD and 19 healthy controls matched for age and gender underwent diffusion-weighted magnetic resonance imaging. Voxel-wise statistical analysis of fractional anisotropy (FA) data was performed using FSL-Tract-Based Spatial Statistics (TBSS) software. Whole brain voxel-wise comparison in local coherence (LCOR), a measurement of resting state fMRI connectivity strength between a given voxel and the neighbouring areas in the brain, were compared between patients and healthy controls. We used the sum value of item 1 and 7 of the Hamilton rating Scale for depression (HAM-D) and the CORE non-interactiveness value to assess motivational anhedonia.