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efforts. Moreover, campaigns that target mental illness stigma could aid in improving psychological functioning, and in reducing schizotypal personality traits.

F118. ARCHITECTURE OF PSYCHOSIS SYMPTOMS AND NEURAL PREDICTORS OF CONVERSION AMONG CLINICAL HIGH RISK INDIVIDUALS WITH AUTISM SPECTRUM DISORDER

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Background: Individuals with autism spectrum disorders (ASD) have symptoms, including social and sensory deficits, and neurobiological alterations that overlap with schizophrenia. Though there is evidence of high rates of psychosis symptoms in ASD, little is known about psychosis prodrome in ASD, or about predictors of psychosis conversion in this population. In this study, we leverage data from clinical high risk (CHR) patients from the NAPLS2 consortium to examine: a) baseline differences in psychosis symptoms and social functioning, b) relative risk of conversion, and c) whether neural response to sensory stimuli yields differential predictors of conversion in CHR individuals with and without ASD (CHR/ASD+; CHR/ASD-).

Methods: Clinical, electrophysiological, and 24-month follow-up data were available for 305 individuals (14 CHR/ASD+; 291 CHR/ASD-). We examined baseline differences on the SOPS, GFS, and TASIT. Conversion risk was computed with the Cannon conversion calculator, and conversion was defined as SOPS>6 at 2-year outcome. P300 event-related potentials (ERP) were extracted from ongoing EEG collected at baseline in response to Target and Novel auditory and visual stimuli, each presented on 10% of trials within streams of 80% standard stimuli in the same modality.

Results: In line with our expectations, CHR/ASD+ had worse functioning than CHR/ASD- on the GF-Social scale (t=-4.2, p<.01) and TASIT total score (t=-2.9, p=<.01), but groups did not differ in their psychotic symptoms on the SOPS (Positive: p=.72; Negative: p=.13; Disorganization: p=.13; General: p=.86). Groups did not differ in the rate at which they converted to psychosis (CHR/ASD+: 15.4%; CHR/ASD-: 11.1%; p=.50), and the Cannon risk score was equally predictive of 2-year conversion across groups (p=.39). EEG data revealed dissociable profiles regarding neural response to sensory stimuli in those who did versus did not convert to psychosis, depending on ASD status. P300 response over central electrodes to Novel visual stimuli was weaker in CHR- converters (n=71) than CHR- non-converters (n=220), but stronger in CHR/ASD+ converters (n=4) than CHR/ASD+ non-converters (n=10) (Novel Stimuli: Modality by ASD interaction, F=5.66, p=.02; Modality by ASD by Converter Interaction, F=3.57, p=.06). For both auditory and visual Target stimuli, P300 response over parietal electrodes did not differ between CHR/ASD- converters and non-converters; however, whereas CHR/ASD+ individuals who did not convert had amplitudes similar to all CHR/ASD- individuals, CHR/ASD+ converters had substantially greater auditory and visual P300 amplitudes (Target Stimuli: ASD by Converter interaction, F=12.12, p=.001).

Discussion: Individuals with ASD and CHR have greater social deficits than the general CHR population, but show similar psychotic symptoms and have similar risk for conversion to psychosis. Neural response to sensory stimuli is important for understanding risk for conversion, and differs among CHR individuals dependent on whether they have ASD. In particular, whereas all CHR individuals who do not convert share a common pattern of attenuated ERP amplitudes reflecting attention allocation to target and novel auditory and visual stimuli, CHR/ASD+ who convert have a unique pattern of globally heightened P300 responses to infrequent novel and target stimuli. These findings have two important implications: 1) individuals with ASD do convert to psychosis and have similar CHR symptom and risk profiles to non-ASD CHR patients clinically; 2) in CHR individuals with ASD in particular, examining neural markers of attention allocation to sensory stimuli may reveal important predictive clues about risk for conversion.

F119. MULTILEVEL ANALYSIS IMPROVES THE MODEL FIT OF THE DIMENSIONAL STRUCTURE OF THE PANSS IN PATIENTS WITH SCHIZOPHRENIA

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Background: Principal component analyses (PCA) studies show that schizophrenia symptoms are usually grouped into five domains. However, to infer a latent dimensional structure, confirmatory factor analysis (CFA) is more appropriate than PCA. Most CFA studies addressing the five-factor model yielded poor fit indices. One single study achieved a good fit using a multilevel CFA structure with the interviewers as level. Other possible reasons for sample heterogeneity and subsequent poor model adjustments, such as differences in patients' clinical profiles across clinical units and clinical staging, were not measured in this study. We aimed to replicate the effect of the CFA multilevel analyses and evaluate the possible influence of other heterogeneity sources as levels, i.e., clinical staging, on the Positive and Negative Syndrome Scale (PANSS) five-factor structure.

Methods: 700 patients with schizophrenia at four different centers had their PANSS analyzed. A Confirmatory Factor Analysis (CFA) was conducted using the following fit index: Comparative Fit Index (CFI) and Non-Normed Fit Index (NNFI) >0.95, the Root Mean Square Errors of Approximation (RMSEA) <0.06, and Weighted Root Mean Square Residual (WRMR) <1.0. Thereafter, we performed multilevel analyses considering the following levels: i) centers, ii) interviewers and iii) clinical staging for schizophrenia (first episode, treatment-resistant schizophrenia and non-treatment resistant schizophrenia).

Results: The mean (SD) age was 34.9 (10.3) years, mean age of onset was 21.7 (7.5), mean duration of illness means was 13.2 (9.7) years, and 64.3% of the sample was male. The CFA model without multilevel analyses yielded poor fit indices: RMSEA = 0.102 (90% CI: 0.097 – 0.107; Cfit was <0.001), CFI = 0.921 and NNFI = 0.906 and WRMR = 1.952. When the multilevel analysis was applied, all models reached an acceptable fit: i) centers: RMSEA = 0.044 (90% CI: 0.038 – 0.049; CFit = 0.964), CFI = 0.981, NNFI = 0.977, and WRMR = 1.860; ii) interviewers: RMSEA = 0.047 (90% CI: 0.041 – 0.053; CFit = 0.765), CFI = 0.947, NNFI = 0.938, and