S244. CHARACTERIZING OUTCOMES OF CLINICAL HIGH-RISK NON-CONVERTERS USING GROUP-BASED TRAJECTORY MODELING

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Background: The development of the clinical high-risk (CHR) prodromal criteria has facilitated advancement in understanding conversion to psychosis and has provided opportunities for early intervention and treatment for these individuals. However, the majority of CHR cases do not meet full criteria for conversion, yet continue to experience clinically significant symptoms and impairment in daily functioning. It is likely that many of these individuals would also benefit from additional intervention and treatment, but the outcomes and needs of these “non-converters” are not well characterized. Identifying common longitudinal patterns of symptoms and functioning of non-converters would support the identification of individuals who continue to require treatment and tailoring of services to their specific needs.

Methods: We used group-based trajectory modeling to identify common longitudinal symptom and functioning trajectories among CHR cases (N=561) in the second phase of the North American Prodrome Longitudinal Study (NAPLS2). Covariant trajectories of symptoms (including positive, negative, disorganized, and general) and functioning (including role and social) were examined. Models were tested for replicability in an independent sample of CHR cases (N=291) from the first phase of NAPLS (NAPLS1).

Results: We identified a subgroup of individuals who exhibited symptom remission and functioning within the normal range, as well as at least two additional subgroups that exhibited different patterns of ongoing, clinically significant symptoms and functional deficits.

Discussion: We are currently investigating the validity of these subgroups by assessing their association with a variety of risk factors and biomarkers.

S245. LOWER- AND HIGHER-LEVEL SOCIAL COGNITIVE FACTORS ACROSS INDIVIDUALS WITH SCHIZOPHRENIA SPECTRUM DISORDERS AND HEALTHY CONTROLS: RELATIONSHIP WITH NEUROCognition AND FUNCTIONAL OUTCOME

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Background: Individuals with schizophrenia spectrum disorders (SSDs) often suffer social cognitive deficits, which are associated with functional outcome. These include lower-level “simulation” processes (emotion recognition), thought to be subserved by a frontoparietal circuit, and higher-level “mentalizing” processes (theory of mind), involving cortical midline and lateral temporal regions. Despite evidence supporting the distinction of these constructs, little work has focused on the factor structure of social cognition. In schizophrenia, factor analytic results have been inconsistent, likely due to task and analytic approach variability, and inadequate sample sizes. Further, confirmatory factor analysis (CFA) has not been used to compare multiple models across people with SSDs and healthy controls. Thus, our objective was to elucidate the factor structure of social cognition across a large group of people with SSDs and healthy controls. We hypothesized that a two-factor model, including simulation and mentalizing factors, would demonstrate the best fit across participants. We also expected social cognitive and neurocognitive factors to load on separate respective higher-order factors, and social cognition to mediate the relationship between neurocognition and clinical and functional outcome measures.

Methods: Behavioural data was collected from 164 participants with SSDs and 102 healthy controls across three sites. Participants completed four tasks including measures of social cognition, ranging from basic emotion recognition to complex mental state inference. Participants also completed measures of functional outcome, symptom ratings, and the MATRICS Consensus Cognitive Battery. CFAs were conducted to test social cognitive models, as well as models of social cognition and neurocognition, and multi-group CFA was used to test measurement invariance between patients and controls.

Results: As predicted, a two-factor (simulation, mentalizing) model fit the social cognitive data well across participants with SSDs and healthy controls (RMSEA = .010, CFI = 1.00). This model also fit significantly better than a one-factor model (p < .001). Further, measurement invariance testing revealed factor structure invariance, loading invariance, and partial intercept invariance between groups, allowing for between-group comparisons. Participants with SSDs showed lower scores than controls for both simulation and mentalizing factors (p < .001), and scores on both factors correlated significantly with symptom ratings and functional outcome measures. Including neurocognitive data, a higher-order two-factor (social cognition, neurocognition) model fit the data well (RMSEA = .047, CFI = .971), and showed significantly better fit than a one- or two-factor model (p < .001). Lastly, social cognition was found to mediate the relationship between neurocognition and negative symptoms, as well as social functioning and quality of life measures (p < .05).

Discussion: Our results provide evidence that social cognition includes lower- and higher-level dimensions across both individuals with SSDs and healthy controls. They also suggest that both aspects are associated with clinical and functional outcome indices, and act as a mediator between neurocognition and these measures. This provides support for distinguishing lower- and higher-level social cognition between and across people with SSDs and healthy controls, and suggests that they may indeed have partially distinct underlying mechanisms. Further, results confirm the importance of social cognition as it relates to clinical and functional outcomes, and thereby as a potential treatment target for patients with SSDs.

S246. PSYCHOMETRIC PROPERTIES OF THE DANISH VERSION OF BNSS (BNSS-DA)

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Background: The concept of negative symptoms (NS) has been known since early 19th century but the development of assessment instruments and treatment methods has yet proved inadequate. The Brief Negative Symptoms Scale (BNSS) was designed to evaluate NS according to a consensus definition by the National Institute of Mental Health from 2005. This study examines the validity and reliability of the Danish version of BNSS (BNSS-Da).
Methods: 49 participants with schizophrenia or schizoaffective disorder were included, counting in- and outpatients as well as users of community housing facilities. Participants were assessed with BNSS-Da, Positive And Negative Syndrome Scale (PANSS), Scale for the Assessment of Negative Symptoms (SANS), Calgary Depression Scale for Schizophrenia (CDSS), St. Hans Rating Scale for extrapyramidal syndromes (SHRS), Personal and Social Performance Scale (PSP), Trail Making Test A and B, (TMT-A/B) and Digit Symbol Substitution Test (DSST). 19 of included subjects had their BNSS-Da interviews rated separately by two raters in order to evaluate interrater agreement. The convergent and divergent validity of BNSS-Da was assessed by its relationship with the aforementioned scales and tests.

Results: Of 49 included subjects, 45 were diagnosed with schizophrenia and 4 with schizoaffective disorder. The mean age was 33.1 (SD: 10.8) years and 65.3% were male. Mean duration of illness was 9.7 (SD: 9.2) years and the mean PANSS total score was 65.7 (SD: 17.6). Interrater reliability for BNSS-Da was estimated by calculating the intraclass correlation coefficient based on a mean-rating (k=2), absolute-agreement, 2-way mixed-effects model, which showed to be 0.953 (95%CI: 0.880–0.982). To examine convergent and divergent validity, Spearman’s rank correlation coefficients were calculated. PANSS negative and SANS total (n=38) were both well correlated with BNSS-Da (ρ=0.813, p<0.001 and ρ=0.852, p<0.001). Also, BNSS-Da seemed to correlate well with PANSS total (ρ=0.736, p<0.001), and to a lesser extend PANSS positive (ρ=0.552, p<0.001) and PANSS general (ρ=0.628, p<0.001). More infirm correlations were found between BNSS-Da and CDSS (ρ=0.314, p=0.028), PSP (ρ=0.480, p<0.001), DSST (subgroup, n=47, ρ=0.393, p=0.006) and TMT-B (subgroup, n=39, ρ=0.357, p=0.025), while no significant correlations were found with TMT-A (subgroup, n=39) or SHRS, except the Parkinsonism subscale (ρ=0.420, p=0.003).

Discussion: The interrater reliability for the BNSS-Da proved to be excellent. Regarding convergent validity, the scale correlated well with the standardized assessment tools for NS, indicating the presence of a common construct of NS. Social functioning, as measured by PSP, was fairly correlated with BNSS-Da, demonstrating how NS are associated with functional outcome. As for divergent validity, the poor correlations between BNSS-Da and CDSS and most domains of SHRS suggested a good capacity for distinguishing between primary NS and NS secondary to depression or adverse effects of neuroleptics. However, the Parkinsonism subscale of SHRS had a rather firm correlation with BNSS-Da, probably because lack of facial expressions is measured in both scales. PANSS positive also seemed to correlate with BNSS-Da. This correlation assumedly stems from NS secondary to positive symptoms, since the present study included acutely psychotic subjects, unlike most other studies on translations of BNSS. The cognitive tests, TMT-A/B and DSST, were infirmly correlated to BNSS-Da, illustrating that cognitive function and NS likely are associated yet still separable through BNSS-Da. In conclusion, BNSS-Da holds appropriate psychometric properties in terms of reliability and validity.

S247. GENDER DIFFERENCES IN FUNCTIONALITY IN INPATIENT POPULATION AFFECTED WITH SCHIZOPHRENIA AND OTHER PSYCHOSIS

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Background: Studies that have examined gender differences in social functioning have found better performance in women but other studies failed to detect these differences (Ochoa et al., 2012).

We aim to study gender differences in functionality in a severe sample of schizophrenia and schizoaffective spectrum disorder patients, and to analyse the relationships between functionality, psychopathological dimensions and gender.

Methods: Multicenter cross-sectional naturalistic study sample of 124 (66.9% men) schizophrenia and non-affective schizophrenia spectrum disorder inpatients from a University Hospital Acute Unit setting. Diagnosis was made following DSMIV-TR. Severity of psychopathology was assessed using Positive and Negative Syndrome Scale (PANSS) Lindenmayer’s Factors (Kay et al., 1987). The deficit of insight and its three dimensions were evaluated by the Scale of Unawareness of Mental Disorders (SUMD) (Amador et al., 1993). Functionality was measured by the Global Assessment of Functioning Scale (GAF) and the Personal and Social Performance scale (PSP) (Morosini et al., 2000). Premorbid Intelligence Quotient (IQ) was estimated by verbal sub-scale of WAIS. Bivariate analysis and parametric correlations were performed in order to make a multiple linear regression model of insight dimensions.

Results: The sample included a 42.7% of people affected of schizophrenia, with a severe psychopathology (mean total PANSS scores 83.7, sd. 23) and different clinical situations. In our sample, there were no significant differences in functionality neither with the GAF or the PSP global scores. Women performed significantly worst in the PSP self-care subscale (p=0.024), and men performed significantly worst in the PSP disturbing and aggressive behaviours subscale (p=0.033).

In the regression analysis, the total sample (men and women) showed a model for the PSP global scores including only the PANSS Lindenmayer’s Desorganized/Cognitive Factor (R2 0.412). PSP self-care subscale showed a model including only PANSS Lindenmayer’s Desorganized Factor (R2 0.319). PSP socially useful activities subscale showed a model including only PANSS Lindenmayer’s Negative Factor (R2 0.213). PSP personal and social relationships subscale showed a model including the PANSS Lindenmayer’s Negative and the Excitatory Factors (R2 0.533). PSP disturbing and aggressive behaviours subscale showed a model including only PANSS Lindenmayer’s Excitatory Factor (R2 0.363). Gender and other clinical, sociodemographical or outcome factors did not have influence in the models.

In men sample a model for the PSP global scores included only the PANSS Lindenmayer’s Desorganized Factor (R2 0.511). PSP self-care subscale showed a model including both PANSS Lindenmayer’s Desorganized Factor and IQ (R2 0.585). PSP socially useful activities subscale showed a model including only PANSS Lindenmayer’s Negative Factor (R2 0.394). PSP personal and social relationships subscale showed a model including only the PANSS Lindenmayer’s Negative Factor (R2 0.626). PSP disturbing and aggressive behaviours subscale showed a model including only PANSS Lindenmayer’s Excitatory Factor (R2 0.478).

In women in our sample, there were no significant differences in functionality neither with the GAF or the PSP global scores. Women performed significantly worst in the PSP self-care subscale (p=0.024), and men performed significantly worst in the PSP disturbing and aggressive behaviours subscale (p=0.033).

Discussion: According to our data, men and women seem to be similar in levels of global functionality. Nevertheless, they showed several differences in specific domains of functionality measured by PSP. Model explaining the association of functionality with psychopathological and clinical variables showed a significant relationship of isolated psychopathological factors and functional domains.

S248. RELATION BETWEEN CHILDHOOD TRAUMA AND PSYCHOTIC SYMPTOMS IN SCHIZOPHRENIA

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Background: There is renewed interest in the relationship between early childhood trauma and risk of psychosis in adulthood. Trauma and stressful events in childhood and adolescence are known to be more prevalent among individuals with schizophrenia and other psychotic disorders than

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