quality of life, and their serum BDNF levels at both baseline and after the intervention. Additionally, comparisons of the effects of the different genotypes of the Val66Met polymorphism at the BDNF gene on the outcome variables were also performed.
Results: The patients in the CRT group presented with improvements in cognition. However, no significant changes were detected in the serum levels of BDNF. Interestingly, we found a significant positive interaction effect between the serum BDNF levels and the different BDNF genotypes. The Val/Val group showed significantly higher serum levels after the CRT treatment.
Discussion: The replication of the previous finding of increased serum BDNF levels after cognitive remediation in clinically stable individuals with schizophrenia was not achieved. However, our data indicated that genetic variability may be mediating serum BDNF activity in the context of CRT. All in all, the current consideration of BDNF as a biomarker of cognitive recovery in schizophrenia is promising but still premature.

S26. HERITABILITY OF SOCIAL MISTRUST IN CHILD AND ADOLESCENT NON-CLINICAL SAMPLES: A HEALTHY TWINS STUDY

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Background: Paranoia, or excessive suspiciousness of others, has been one of the core psychotic symptoms of schizophrenia. Recent studies have extended the study of psychotic symptoms in clinical groups to psychotic-like experiences in the general population. Few studies have systematically examined the prevalence of paranoid thinking or its attenuated form, social mistrust, in young children in the community. The present study examined the Social Mistrust Scale (SMS) and utilized it to examine the structure, prevalence, and heritability of social mistrust in a large sample of Chinese children and adolescents.
Methods: We administered the SMS to 1047 pairs of healthy twins aged 8 to 14 years and conducted structural equation modelling (SEM) to assess the structure of the SMS. Heritability of social mistrust was estimated in a subsample of twins (n=959 pairs). Finally, we examined administered the SMS to 32 adolescents with childhood-onset schizophrenia and 34 healthy controls to examine the convergent validity between the SMS and the Positive and Negative Syndrome Scale (PANSS).
Results: The SEM showed a three-factor structure for social mistrust (home, school, and general mistrust). Social mistrust was moderately heritable (39%, 95% CI [21%-59%]) with context-dependent sex differences. The SMS exhibited good discriminant validity in distinguishing adolescents with childhood-onset schizophrenia from healthy controls (AUC=0.80), and good convergent validity with the Positive and Negative Syndrome Scale (rs = 0.33–0.45).
Discussion: Taken together, the present findings showed a stable latent structure of the SMS in a large-scale non-clinical sample of children and adolescents. We found a moderate heritability estimate for social mistrust (39%) in a large healthy-twin sample. In addition, significant gender differences were found, where home mistrust was heritable for males (58%) but not for females, and school mistrust was heritable for females (54%) but not for males. Finally, we also demonstrated that the SMS possesses good discriminate validity in identifying adolescents with childhood-onset schizophrenia from healthy controls and convergent validity with standardized clinical measures of schizophrenia symptoms.

S27. RELIABILITY OF SCHIZOPHRENIA DIAGNOSES IN CHILDREN AND ADOLESCENTS IN DENMARK

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Background: Schizophrenia in children and adolescents are diagnosed using the same criteria as for adults, but the assessment may be more complex due to both developmental issues, premorbid difficulties and a less elaborated symptomatic presentation. There is a great scarcity of studies looking into validity of schizophrenia in children and adolescents.
Methods: We aimed to assess 1) the concordance and validity of schizophrenia register diagnoses among children and adolescents (early onset schizophrenia=EOS) in the Danish Psychiatric Central Research Register (DPCRR), and 2) the validity of clinical record schizophrenia diagnoses. Furthermore, to extract data from psychiatric records with confirmed schizophrenia in order to describe premorbid characteristics, history and symptomatology.
Psychiatric records from 200 patients with a first-time diagnosis of schizophrenia (F20.x) <18 years between 1994 and 2009 in the DPCRR was randomly selected for the study. The psychiatric records were evaluated by experienced clinicians according to ICD-10 criteria, using a predefined checklist. All records were assessed by two raters and inter-rater reliability was assessed.
Results: We were able to retrieve 178 of the 200 psychiatric records. The mean age of patients was 15.2 years, and 56.2% were male. The register-based and clinical diagnosis matched in 158 cases. In the 10.2% registration errors, the records reported schizophrenia as a rule-out tentative diagnosis in the majority of cases. Among the 158 psychiatric records with a clinical diagnosis of schizophrenia, the raters confirmed 132 records (83.5%) as schizophrenia and a total of 145 records (91.8%) as in the schizophrenia-spectrum. Interrater reliability was substantial with Cohen's kappa >0.78–0.83. Compared to diagnoses made in outpatient settings, EOS diagnoses during hospitalizations had fewer registration errors and a higher validity between raters' diagnosis and clinical diagnosis.
Among the cases with EOS confirmed by raters, 85.8% had family history of mental disorders, 93.1% had experienced adverse life events during childhood with 46.9% having experienced trauma. Hallucinations were present in 76.9%, negative symptoms in 57.4% and formal thought disorder symptoms in 34%. Catatonic symptoms were described in 4.7% cases.
Discussion: To our knowledge, the study is the largest to date investigating validity of schizophrenia diagnosed in children and adolescents in clinical settings. The study confirms assessment of schizophrenia in children and adolescents to be complex, especially in outpatient settings. All evaluations by raters were conducted by use of psychiatric records retrospectively. As the diagnoses were made 8 - 24 years ago, it is believed to be the best method, however, the possibility exists that some cases were not confirmed due to lack of adequate description of psychopathology in the records. Furthermore, the raters were not blinded to the diagnoses, as only patients with a register diagnosis of schizophrenia were included.