Methods: 122 patients diagnosed with either schizophrenia or schizoaffective disorder from the rural taluk of Thirthahalli and Turuvekere were compared with 97 patients with similar diagnosis visiting a teaching hospital with urban residence. All the 219 patients met the standardized criteria for remission from positive and disorganized symptoms and were compared on culturally validated tests of SC—Social Cognition Rating Tool in Indian Setting (SOCRATIS) & Tool for Recognition of Emotions in Neuropsychiatric Disorders (TRENDS) to assess theory of mind, social perception and emotion recognition and NC—(attention/vigilance, speed of processing, visual and verbal learning, working memory and executive functions). Groningen Social Disabilities Schedule (GSDS) was used for the assessment of social dysfunction of the patients. Based on past factor analytical studies on these tests, social cognition dimensions were grouped into inferential social cognition which comprised of 1st order theory of mind & 2nd order theory of mind Index & socio-emotional cognition which included faux pas recognition, emotional recognition & social perception indices. These were compared using analysis of covariance after controlling for neurocognitive composite performance and other confounders Correlation between social-cognition and functioning among the two groups was assessed using Pearson correlation.
Results: Patients from rural population had significantly better inferential social cognition whereas patients form urban population had significantly better socio-emotional cognition. ANCOVA showed that even after controlling for effects of age, gender, duration of illness, family history, number of hospitalization & neuro-cognition composite scores the differences were significant. Social cognition composite score was significantly (negatively) correlated with functional disability. The socio-emotional cognition component had a stronger association (proportion of variance explained) with functioning in both rural & urban samples (r= -0.411, r= -0.403 respectively). Inferential Social cognition from both rural & urban samples (r= -0.212, r= -0.238) also has significant association with functioning but of lesser magnitude as compared to the former
Discussion: The two distinct components of social cognition - inferential and socio-emotional- were differentially impaired among rural & urban patients. With respect to its relationship with functioning, the socio-emotional cognition had a stronger association with functioning in both the groups. The reasons for the difference need to be explored by studying the socio-cultural characteristics of rural & urban dwelling patients which can moderate their expression of social cognition. These observations are critical in understanding how our micro- and macro-level environments can influence cognitive performance

S69. CLINICAL HIGH RISK STATE: STRATIFICATION BASED ON CLINICAL PROFILE AND REDOX STATUS

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Background: The Clinical High Risk state (CHR) concept was implemented to promote the early detection of young help-seeking patients with higher risk of psychotic transition. This category is based on specific clinical criteria (EPA, 2015) and require narrow frequency/duration ratings of subclinical positive psychotic symptoms to allow its definition. Prevalence of CHR "category" appears nevertheless rare in help-seeking young people and the rate of psychotic transition of CHR state is lower than predicted by early studies. Therefore, the binary outcome of transition to psychosis proposed by the "CHR model" actually fails to be an efficient marker to stratify, in neurobiological studies, people with different psychopathological trajectories, notably those who develop psychosis from those who do not. In order to rely on a vulnerability model for schizophrenic psychosis more sensitive to psychosocial functioning and negative dimension, we study prospectively with three years of follow-up a population of help-seekers addressed for clinical suspicion of prodromal state of psychosis.
We aimed here to identify subgroups of patients in a sample of subclinical psychotic states using psychological and cognitive outcomes as profiling criteria, focusing not only on transition but also on psychosocial functioning as main outcome.
Methods: A total of 32 help-seeking adolescents and young adults aged 14 to 35 were referred by health care providers for a specialized evaluation in case of suspicion of a prodromal psychotic state and/or detected by the French version of the Prodromal Questionnaire (PQ-16; cut-off 6/16). Their CHR status was assessed by the Structured Interview for Psychosis-Risk Syndromes (SIPS) and the Schizophrenia Proneness Instrument, Adult (SPI-A). Individuals included in the study presented either a CHR status, a subclinical CHR status or negative symptomatology. All subjects performed an additional neuropsychological battery and blood test for redox markers (Glutathione Peroxidase (GPx) and Glutathione Reductase (GR) activities) (Xin et al, 2016). Based on their clinical profile, we made a stratification of the patients using a Principal Component Analysis.
Results: Cognitive and psychological outcome stratification of all help-seekers revealed two subgroups (called group1 and group2) of patients with distinct profiles. Individuals in group1 (n=18) had greater levels of basic symptoms and general symptomatology. On the other hand, in group2 (n=14), individuals showed a weaker self-esteem and a lower rate of "living independently". Cognitive scores for speed processing, attention, verbal learning and social cognition were significantly lower in group2 compared to group1. In addition, these cognitive outcomes were negatively correlated with negative symptoms only in group2. Analysis of redox markers revealed a positive correlation between GPx and GR activities in group1, a correlation disrupted in group2.
Discussion: Stratification of a cohort of young help-seekers with suspicion of prodromal psychosis, regardless of their CHR status, allowed us to distinguish two subgroups with different clinical profiles: group1 with higher levels of basic symptoms and general symptomatology, and group2 with weaker self-esteem, less autonomy and poorer neurocognition. In addition, analysis of redox markers revealed a redox dysregulation in patients with poorer cognitive profile. Considering the impact of neurocognitive impairment on functioning, special focus to patients of group2 is needed, mostly in clinical practice. Moreover, they might benefit of supplementation with antioxidant compounds such as NAC, which may improve cognitive deficits (Conus et al, 2018).

S70. PROFILES OF SOCIAL COGNITION AND METACOGNITION IN FIRST-EPISODE PSYCHOSIS: A LATENT PROFILE ANALYSIS.

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Background: Social cognition and metacognition have emerged as cornerstones of research and treatment of schizophrenia. Both constructs are known to influence the onset of psychosis, to predict functional outcome and to be associated with symptoms. However, whether the deficits in first-episode psychosis are homogeneous or group in patterns remains to be studied. This study aimed to analyze patterns of social cognitive and metacognitive variables in a sample of subjects with first-episode psychosis.
Methods: We recruited 192 subjects with first-episode psychosis from ten public mental-health services in Spain. We collected: demographic information, measures of functioning, performance in social cognition (the Faces Test, IPSAQ and the Hinting Task), a battery of metacognitive tasks (BCIS, and the Beads Task) and a neuropsychological assessment. We performed a Latent Profile Analysis (LPA) with the metacognitive and social-cognitive variables. The variable importance was assessed via a classification tree (CART) and the mean differences among the resulting groups for clinical, neuropsychological and functioning variables were calculated with ANOVA and Kruskal-Wallis tests.
Results: Our sample was comprised of 192 (62 women) with first-episode psychosis. The mean age of the sample was 27.93(1.39). The mean PANSS total score of the sample was 58.48 (17.79). The average GAF score was 58.93 (12.25). We included 174 cases with complete social-cognitive and metacognitive data in the cluster analysis. We identified three type-VEE clusters (i.e. ellipsoidal clusters with equal shape and orientation) according to BIC (BIC=-3600.651). The 85-15 condition of the Beads Task and the Hinting Task emerged as the most important variables in determining the clustering structure. The first cluster (60.9%) was characterized by average scores in most of the metacognitive and social cognitive variables, but the presence of the jumping to conclusions bias. The second cluster (5.7%) was characterized by low self-reflectiveness, presence of personalizing bias and an excessive number of trials in the beads task. The third cluster (33.5%) was characterized by average scores in all metacognitive tasks but low scores in the social cognitive tasks.
Discussion: We found three clusters in a large sample of subjects with first-episode psychosis. Our results indicate that the three groups differ in the proneness to present deficits in specific domains. Furthermore, in our sample, patients may not exhibit a homogeneous deficit in all social-cognitive and metacognitive variables. Instead, the impairment may be particularly prominent in either social-cognitive or metacognitive variables. Subjects in different clusters may present differences in their clinical characteristics, what could be relevant in the treatment. Therefore, with further research, a thorough assessment of social cognition and metacognition may help personalize the treatment according to the person's subtype of the deficit.

S71. CLINICAL, BEHAVIOURAL AND NEURAL VALIDATION OF THE POSITIVE AND NEGATIVE SYMPTOM SCALE (PANSS) AMOTIVATION FACTOR

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Background: Negative symptoms of schizophrenia are suggested to map onto two distinct factors – amotivation and diminished expression, which relate to different aspects of behaviour and neural activity. Most research in patients with schizophrenia is conducted with broad symptom assessment scales, such as the PANSS, for which factor solutions allowing the distinction between amotivation and diminished expression have only recently been reported. We aimed to establish whether the PANSS factor structure corresponds to the well-established two-factor structure of the Brief Negative Symptom Scale (BNSS) and whether it allows distinguishing specific behavioural and neuronal correlates of amotivation.
Methods: In study 1 (N=120) we examined the correlations between the PANSS factors and the BNSS factors. In study 2 (N=31) we examined whether PANSS amotivation is specifically associated with reduced willingness to work for reward in an effort-based decision making task. In study 3 (N=43) we investigated whether PANSS amotivation is specifically correlated with reduced ventral striatal activation during reward anticipation using functional magnetic resonance imaging.
Results: On the clinical level, the PANSS amotivation and diminished expression were highly correlated with their BNSS counterparts. On the behavioural level, PANSS amotivation factor but not the diminished expression factor was specifically associated with reduced willingness to invest effort to obtain a reward. On the neural level, PANSS amotivation was specifically associated with ventral striatal activation during reward anticipation.
Discussion: Our data confirm that the two domains of negative symptoms can be measured with the PANSS and are linked to specific aspects of behaviour and brain function. To our knowledge, this is the first study employing behavioural and neural measures to validate a new approach to clinical measurement of negative symptoms. Our results warrant a re-analysis of previous work that used the PANSS to further substantiate the distinction between the two factors in behavioural and neuroimaging studies.

S72. MCCB COGNITIVE PROFILE IN CHINESE FIRST EPISODE SCHIZOPHRENIA PATIENTS AND SUBJECTS AT CLINICAL HIGH RISK FOR PSYCHOSIS

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Background: Cognitive dysfunction is acknowledged as one of the most pivotal symptoms in schizophrenia. Although many studies have assessed cognitive functioning in first-episode schizophrenia (FES), the pattern and severity of impairment across cognitive domains remain unclear. Moreover, few studies have directly compared the pattern of cognitive performance between FES and subjects at clinical high risk for psychosis (CHR). The objective of the study was to examine the cognitive profile of Chinese patients with FES and to compare that to the profile of patients with subjects at CHR and healthy controls (HC).
Methods: We applied the MATRICS Consensus Cognitive Battery to evaluate the cognitive function of 56 first-episode patients with schizophrenia aged between 19–32 years old), 42 cases of clinical high risk for psychosis (aged between 18–28 years old) and 62 healthy controls (aged between 21–29 years old).All data were analyzed using SPSS 20.0 statistical software.
Results: FES showed impaired performance across all MCCB domains relative to HC ($P < 0.05$) . With the exception of relative preservation of reasoning and problem solving (P=0.21) and social cognition (P=0.16) in CHR, the MCCB domain scores were similar in CHR and FES.