Methods: This was an observational, cross-sectional study of 243 male and female individuals between the ages of 12–26. The sample consists of participants in the Canadian Psychiatric Risk and Outcome Study (PROCAN) and included: asymptomatic participants at familial high risk for SMI (Stage 0; n=41); youth with early mood or anxiety symptoms (Stage 1a; n=52); youth with attenuated psychotic or affective syndromes and distress (Stages 1b; n=108); and HCs (n=42). The neurocognitive battery included the WRAT-4 reading task, WASI Vocabulary and WASI Matrix Reasoning tasks, and the Measurement and Treatment Research to Improve Cognition in Schizophrenia (MATRICS) Consensus Cognitive Battery (MCCB). All neurocognitive tasks were administered at baseline. Group differences in neurocognitive performance were analyzed using MANCOVA/ANCOVA analyses. Covariates included age and sex.
Results: Subjects in Stage 0 and Stage 1a did not significantly differ from any group. Subjects in Stage 1b (attenuated syndromes) had significantly lower neurocognitive scores in the domains of speed of processing, working memory, attention/vigilance and reasoning and problem solving, and on composite scores of neurocognitive performance and full-scale IQ compared to HCs. A secondary analysis demonstrated that subjects in Stage 1b who met CHR status according to Criteria of Psychosis-risk Syndromes (n=83) had lower scores in the domains of working memory, verbal learning, and reasoning and problem solving and on the overall composite score than the other participants in Stage 1b who did not meet CHR criteria.
Discussion: This study provides evidence for a growing literature which suggests that neurocognitive deficits may be markers of susceptibility for SMI development. It also increases what is known about neurocognitive performance associated with different stages of risk for SMI. Identification of such impairments could aid with detection of early mental health problems prior to illness onset.

S81. NEUROCOGNITIVE FUNCTIONING IN SCHIZOPHRENIA AND BIPOLAR DISORDER DURING THE REMISSION AND THE PSYCHOTIC STATES

Deniz Ceylan*[,1], Berna Binnur Akdede[2], Emre Bora[2], Ceren Hıdıroğlu[2], Zeliha Tunca[2], Köksal Alptekin[2], Ayşegül Özerdem[2]
[1]Izmir University of Economics; [2]Dokuz Eylül University, School of Medicine

Background: Previous literature comparing cognitive functioning between bipolar disorder (BD) and schizophrenia (Sch), particularly focused on remitted patients with BD (i.e. euthymics) and clinically stable patients with Sch; and suggested milder cognitive impairment in BD in comparison to Sch. Acute psychotic symptoms may lead poorer cognitive functioning in both disorders. Limited evidence suggests milder deficits in psychotic mania than in acute psychosis in Sch. We aimed to compare cognitive functioning in Sch and BD during the remission and the psychotic states.
Methods: Several domains of cognitive functioning were compared among patients with BD who had a history of psychosis [32 with a current psychotic manic episode, 44 in euthymia for at least 6 months] and patients with Sch [41 with psychotic symptoms, 39 remitted according to Andreassen et al. criteria (2006)] in comparison to 55 healthy controls (HC). Participants performed a cognitive battery including Wisconsin Card Sorting, Rey Auditory Verbal Learning, Stroop, Auditory Consonant Trigram, Trail Making, Digit Span, Controlled Word Association, Category Fluency and Digit Symbol tests.
Principal components analyses were performed to extract the 'global cognition' factor and for dimensionality reduction to identify neurocognitive domains among patients with BD and Sch. The optimum number of cognitive components was identified by inspecting the scree plot. Each factor score was assessed for normality by calculating tests of skewness and kurtosis. The factor scores were compared between patients with Sch and patients with BD using two-way analyses of variance (ANCOVA) adjusting for age. Pairwise comparisons with Bonferroni corrections were used for post-hoc analysis.
Results: Mean age, sex ratio levels of education were similar among patients with BD, patients with Sch and HCs. Principal components analyses revealed a global cognition factor that explains 52.6% of variance and a subsequent PCA revealed 5 factor domains including processing speed, verbal memory, visual memory, working memory and planning. Both patients with BD and patients with Sch have significantly poorer global cognition ($p<0.001$; $p<0.001$), processing speed ($p<0.001$; $p<0.001$); verbal memory ($p<0.001$; $p=0.007$); visual memory ($p=0.033$; $p=0.016$) and planning ($p=0.011$; $p=0.006$) than HCs. Patients with BD presented higher scores in global cognition, processing speed ($p=0.010$) and verbal memory ($p=0.011$) than patients with Sch ($p<0.001$). Global cognition and processing speed domains differ among groups with respect to both diagnosis [$F=18.466$, $p<0.001$; $F=7.864$, $p=0.006$] and state [$F=8.910$, $p=0.001$; $F=3.958$, $p=0.048$]. Processing speed, but not other components, displayed a significant interaction between diagnosis and state [$F=14.808$, $p<0.001$)].
Discussion: Deficits in global cognition was milder in BD, than those in Sch in both the remission and the psychotic states. Although diagnosis seems to be the major factor affecting the cognitive performance, our data present significant interactions of diagnosis and state in processing speed.

S82. GOAL MANAGEMENT TRAINING OF EXECUTIVE FUNCTIONS FOR PATIENTS WITH SCHIZOPHRENIA OR HIGH RISK OF SCHIZOPHRENIA: BASELINE CHARACTERISTICS AND PRELIMINARY RESULTS FROM AN RCT

Ingvild Haugen*[,1], Elisabeth Haug[1], Torill Ueland[2], Jan Stubberud[3], Merete Øie[1]
[1]Innlandet Hospital Trust; [2]Oslo University Hospital; [3]Lovisenberg Diaconal Hospital, University of Oslo

Background: About 85% of patients with schizophrenia have cognitive impairments, executive functions being particularly affected. Executive dysfunctions are important predictors of functional outcomes. Unlike psychotic symptoms, cognitive deficits do not improve during periods of remission and change only minimally with antipsychotic medications. Thus, effective interventions aimed at improving executive functions in this population are needed.
One of the most validated interventions for executive dysfunction is Goal Management Training (GMT). GMT is a compensatory intervention that relies on metacognitive strategies for improving participants' ability to organize and achieve goals in everyday life. GMT has received empirical support in studies of other populations, such as people with neurological conditions and in healthy elderly. To our knowledge no previous studies have investigated the effect of group-based GMT in patients with schizophrenia spectrum disorders or with high risk of schizophrenia. Thus, this is the main objective of the study. Baseline characteristis and preliminary results from the first patients will be presented.
Methods: Participants (16–67 years, males and females, IQ >70) with executive dysfunction, will be recruited among patients referred for treatment at Innlandet Hospital Trust in Norway from 2017 to 2020. The study aims to include patients treated for psychotic disorder for less than 5 years and new patients who either have symptoms that meet the DSM-IV criteria for a diagnosis of broad schizophrenia spectrum disorder or who are considered at high risk of psychosis. We aim to recruit one hundred participants for the current randomized controlled trial (RCT), with efficacy of GMT ($n = 50$) being compared with results of subjects in a wait-list condition (WL, $n = 50$).
Measurements include self-report of executive function, emotional health, and social- and everyday function. Informant reports of executive function will also be collected. Furthermore, neuropsychological tests designed