analyses of sleep quality and clinical improvement included participants with three PSQI rating timepoints over 6–7 months of CSC (n=38). Overall PSQI ratings did not change significantly over time. BAI and BDI-II scores significantly decreased over time, indicating subjective clinical improvement with treatment. There was a trend for positive correlations among PSQI, and BAI and BDI-II scores. When stratified by improvement, those rated ‘much improved’ group greater reduction of PSQI scores.

**Discussion:** We found that improved sleep quality was present in participants who experienced much global clinical improvement over 6 months of CSC. In addition, better sleep quality correlated with reduced depression and anxiety symptoms. Though these findings do not address direction of causality, our findings indicate that improving sleep quality should be a specific focus in treatment of early psychosis. Further analysis will be conducted to investigate the relationship between sleep and clinical improvement using other clinical measures, such as symptom severity, and the dataset will be expanded to include data through the end of 2017.

**F217. BASIC SELF-DISTURBANCE IN ADOLESCENCE AND SCHIZOPHRENIA-SPECTRUM DISORDERS IN YOUNG ADULTHOOD: A 7-YEAR FOLLOW-UP STUDY AMONG TREATMENT-SEEKING ADOLESCENTS**

Dan Koren*, 1, Yair Tzivoni1, Liat Schalit1, Noa Reznik1, Merav Adres1, Josef Parnas2

1University of Haifa; 2University of Copenhagen

**Background:** Phenomenological research indicates that disturbance of the basic sense of self may be a core phenotypic marker of schizophrenia spectrum disorders. Basic self-disturbance refers to a disruption of the sense of first-person perspective and self-presence that is associated with a variety of anomalous subjective experiences. Recent cross-sectional and prospective pilot studies provided preliminary support for the notion that SD may provide a means of further “closing in” on individuals truly at high-risk for psychosis, particularly of schizophrenia spectrum disorders (SSD). The goal of this study was to replicate and extend these pilot findings by examining the long-term persistence of SD and the degree to which their level in adolescence predicts SSD seven years later in young adulthood.

**Methods:** The 7-year stability of SD and their association with later in life SSD were explored in a sample of 40 young adults. SD was assessed with the Examination of Anomalous Self-Experience (EASE), prodromal symptoms and syndromes were assessed with the Structured Interview for Prodromal Syndromes (SIPS), present and lifetime diagnoses of schizophrenia-spectrum and other co-morbid disorders were assessed with the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS) in adolescence and the Operational Criteria (OPCRIT) checklist for psychotic and affective illness in young adulthood, level of distress with the Mood and Anxiety States Questionnaire (MASQ), and psychosocial functioning with the Strength and Difficulties Questionnaire (SDQ).

**Results:** Forty young adults (Mean age=23.7, S.D.=1.3) out of the 82 who had participated seven years earlier in a study on the association between SD and attenuated psychosis symptoms (APS) were available and agreed to participate in the 1-year follow-up (Mean=1.4, S.D.=0.8). There were no significant differences between those who were available and those who lost for the follow-up assessment on any of the major socio-demographic or clinical variables at baseline. Eight (20%) of the 40 participants in the present study met diagnostic criteria for an SSD (2 Schizophrenia, three non-organic psychotic disorder, and three schizotypal personality disorder). The total EASE score was slightly higher in young adulthood compared to seven years earlier. However, this can reflect a difference in the administration method of the EASE between the two occasions. Consistent with our first hypothesis, the correlation between the total EASE score at baseline and 7-year follow-up was moderate and significant (r=0.59, p<.001). Similarly, consistent with our second hypothesis, SD at baseline was a significant predictor of an SSD diagnosis in young adulthood.

**Discussion:** These results provide further support for the temporal stability of SD over time. Also, they provide further support for the notion that SD is a phenotypic indicator of risk for SSD.

**F218. REAL-TIME ASSESSMENT OF AUDITORY HALLUCINATIONS USING A SMARTPHONE APPLICATION; RESULTS FROM A PILOT STUDY**

Josef Bless*, 1, Runar Smelror2, Ingrid Agartz2, Kenneth Hugdahl1

1University of Bergen; 2Norwegian Center of Excellence for Mental Disorders Research, University of Oslo, Diakonhjemmet Hospital; 3University of Bergen, Norwegian Center of Excellence for Mental Disorders Research, University of Oslo, Haukeland University Hospital

**Background:** A challenge in current research on auditory hallucinations (AHS) is that the assessment of symptom dimensions largely depends on structured interview scales, such as the PANSS, PSYRATS etc. In order to collect more ecologically valid data, we developed a smartphone app that can be used by patients to report on their experience in real-time, i.e. when the voices are actually present. The aim of this study was to investigate feasibility of the app and whether it can provide new phenomenological information on the temporal fluctuations of AHS in adolescent patients with early-onset schizophrenia (EOS).

**Methods:** Using the experience sampling method, one adolescent EOS patient used the app for a period of 16 days, during which the patient received random reminders five times per day, to answer questions on five dimensions relevant to AHS: Control (no – full), Content (negative – positive), Localization (outside head – inside head), Intensity (yelling – whispering), and Influence (not troublesome – very troublesome). The answers were registered on visual analog scales (VASs) implemented in the app.

**Results:** The patient responded to the notifications in 87% of the cases and in addition completed the questions 15 times on own initiative. In 73% of all responses, the patient indicated to experience AHS at the time of response. The results from the VASs showed that AH-dimensions are not stable but fluctuate over time. Several AH-dimensions were significantly correlated (p < .01) with each other: Influence correlated with Content (r = -.71), Intensity (r = -.37), and Control (r = -.76), whereas Content correlated with Intensity (r = .39) and Control (r = .57). showed several correlations a negative correlation with content of however, only localization (voices coming from outside - inside the head) correlated significantly with the number of days in use. In addition, the participant reported more internal voices over the course of 16 days (p < .01, r = .36) and later hours of the day (p < .05, r = .22).

**Discussion:** The app captures the ebb-and-flow of AHSs and provides a unique profile of symptom severity and interrelationship between AH-dimensions. Such information has potential relevance for patient-tailored intervention.

**F219. NOVEL OBJECTIVE ASSESSMENT OF ACTIVITY ENGAGEMENT IN SCHIZOPHRENIA USING WIRELESS MOTION CAPTURE**

Isghra Siddiqui*, 1, Gary Remington1, Gagan Fervaha1, Paul Fletcher1, Aristotle Voinikos1, Sarah Saperia1, Konstantine Zakzanis2, George Foussias1

1Centre for Addiction and Mental Health; 2University of Toronto Scarborough

**Background:** Amotivation and reduced engagement in goal-directed activities are prominent features of schizophrenia. Previous investigations of patients’ engagement in activities have largely relied on accounts of
F21. SELECTIVE ATTENTION BIAS FOR FEAR STIMULI AND HALLUCINATION IN PATIENTS WITH SCHIZOPHRENIA: A PRELIMINARY STUDY
Jiyun Yun1, Han-Suk Kim1, Ho Jun Seo2,*,1
1The Catholic University of Korea

Background: Several studies have shown the association between affective dysregulation and severity of psychotic symptoms in schizophrenic patients. Attentional biases, which operate automatically to favor the processing of emotionally negative information in early stages of information processing, are known to play a causal role in the etiology of anxiety and other negative affective states. This study was conducted to evaluate the association between selective attention bias for fear stimuli and psychotic symptoms in patients with schizophrenia.

Methods: A total of 66 patients with schizophrenia were included in the study. Attentional biases were measured with the dot-probe task with facial expression of neutral and fear emotional. To measure the psychotic features of the participants, the Positive and Negative Symptom Scale (PANSS), Psychotic Symptom Rating Scale (PSYRATS), the Scale to Assess Unawareness of Mental Disorder (SUMD), and Clinical Global Impression–Severity scale (CGI-S) were used.

Results: Attentional vigilance scores were calculated by subtracting the median RT in congruent trials (dot at the position of the fear face) from the median RT in incongruent trials (dot at the position of the neutral face) Attentional vigilance scores was moderately correlated with the hallucination subscale of PSYRATS (r=0.268, p=0.029) in the participants. No correlation was found between selective attention bias and the scores of PANSS, PSYRTATS-delusion, SUMD, and CGI-S. When the participants were divided into biased and non-biased groups by the attentional vigilance scores of +40 msec, no significant difference was found in the clinical measures. However, a statistical trend was found in hallucination severities between the biased and non-biased groups (p=0.092).

Discussion: As a pilot study, the results suggest that the emotional information processing might affect the subjective severity of psychotic features in schizophrenia. Further study would be needed to clarify this association.