F78. OVERCOMING A BOTTOM-UP ATTENTIONAL BIAS BY PROVIDING TOP-DOWN INFORMATION DURING WORKING MEMORY ENCODING IN SCHIZOPHRENIA

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**Background:** Cognitive impairments including deficits in working memory are commonly observed in schizophrenia. A bottom-up attentional bias has been suggested for encoding visually salient yet irrelevant information. To date it is not known if this bias persists when additional top-down information in the form of a predictive cue is provided. We were motivated to clarify this issue.

**Methods:** 40 patients with schizophrenia were measured and matched with 40 healthy control participants. During a change detection task four Gabor patches (two flickering and two non-flickering) with varying orientations were shown and participants had to memorize the orientations of the Gabor patches. A colored fixation cross was displayed before the stimuli either cueing two (predictive cue) or all four (non-predictive cue) Gabor patch locations resulting in a 2 x 2 design of four conditions with the factors salience (flickering vs. non-flickering) and cue (predictive cue vs. non-predictive cue). During retrieval a single Gabor patch was displayed, and participants reported if the orientation was the same or had changed in that location. At the beginning of each block participants were instructed to either encode the flickering or non-flickering patches (targets) whose location could either be cued or uncued. In 80% of trials, a target was probed during retrieval.

**Results:** Patients encoded less information than healthy controls in all four conditions. Both healthy controls and patients encoded more visually salient information than non-salient information, and performance was near chance level during non-target trials. Patients encoded significantly more information when a predictive cue was provided before encoding visually non-salient information.

**Discussion:** Patients were able to overcome their bottom-up attentional bias of encoding visually salient irrelevant information when provided with top-down information. These findings are in line with previous reports of a bottom-up attentional bias during working memory encoding in schizophrenia. We propose that this bias can be overcome by providing additional top-down information.

F79. ATTRIBUTION OF INTENTIONS IN PATIENTS WITH SCHIZOPHRENIA SPECTRUM DISORDERS WITH PERSECUTORY DELUSIONS

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**Background:** Social cognitive deficits are considered hallmark features of schizophrenia spectrum disorders. Consistent patterns of relationships have been established between theory of mind impairment and severity of negative symptoms. Some studies have suggested that patients, specifically those with persecutory delusion, can over attribute intentions. Difficulties in theory of mind in patients with schizophrenia can vary between hypo and hyper – mentalization depending on the level of symptoms. The aim of the study was to test model which proposed hypo-mentalization vs. hyper-mentalization deficit in patients with schizophrenia spectrum disorders with persecutory delusions.

**Methods:** 40 patients diagnosed with schizophrenia spectrum disorder, 19 patients with anxiety, affective and personality disorders without persecutory delusions, and 28 healthy controls were enrolled in the study. Diagnoses were established according to ICD-10 criteria. Animation Task was used for theory of mind assessment. Task consists of 12 videos (moving triangles) with three types of stimuli (random, goal-directed and theory of mind – condition). Stimuli were presented in fixed, random order before symptom assessment. Participants were asked to describe content of videos, and the degree of intentionality and appropriateness was evaluated by two raters according to task’s manual. Mutual rating of raters was used in the present analysis. Brief Psychiatric Rating Scale was used for assessment of symptoms severity.

**Results:** A repeated measures ANOVA with stimulus type as within-factor and group as between-factor revealed significant effect of Stimuli type (F= 171.585, p < .001), and interaction of factors (F = 5.401, p = .001) on rating of intentionality. Group effect was not significant (F=.836, p = .437). Patients with schizophrenia had significantly lower ratings of intentionality in theory of mind condition, specifically. A second repeated measures ANOVA analyzed differences in levels of appropriateness. Results revealed significant effect of stimuli type (F= 12.698, p < .001), group (F= 6.966, p = .002) and interaction of factors (F = 3.211, p = .020). Responses of patients with schizophrenia were less appropriate than controls in goal-directed and theory of mind condition compared to the random condition. Severity of negative symptoms was associated with lower level of intentionality in random condition. Hostility and suspiciousness were associated with higher level of intentionality in goal directed (rs=.330, p=.037) and theory of mind conditions (rs=.348, p=.028). Severity of suspiciousness was moderately to strongly associated with appropriateness of descriptions in all conditions (rs from .423 to .517).

**Discussion:** Results of study highlighted importance of distinguishing between hyper- and hypo-mentalization in patients with schizophrenia as specific impairments were associated with positive and negative symptoms, respectively. Over attribution of intentions to random movement was moderately associated with paranoid symptoms. Patients provided less appropriate descriptions which was associated with higher level of suspiciousness. Implications for development, maintenance treatment of persecutory delusions will be discussed.

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F80. COGNITIVE TRAJECTORIES OVER 6 YEARS IN FIRST-EPISODE SCHIZOPHRENIA AND HEALTHY CONTROLS – A PROSPECTIVE LONGITUDINAL MULTI-ASSESSMENT STUDY

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**Background:** Patients with first-episode schizophrenia (FES) have consistently showed impaired cognitive functioning compared to healthy controls across a broad array of cognitive domains. After psychosis onset the cognitive performance in FES seems to remain stable or even improve over time. Many earlier studies, however, did not include healthy control groups which made it unclear whether cognitive changes were due to genuine improvements or other arbitrary factors. Thus, the development of individual cognitive domains over time is not yet fully examined.

**Methods:** The present study has a multi-assessment design, and includes data from eight follow-ups over six years. For the patient group, assessments were conducted yearly, apart from the first year where assessments were conducted every six months. Healthy controls were assessed at baseline, after two years and after six years. A total of 28 FES-patients and 28 healthy controls participated in the study, with 79% of patients retained at the 6-year follow-up. Cognition was assessed with MATRICS Consensus Cognitive Battery. Data were analyzed with linear multilevel models.