Results: At the sensor-level, we identified distinct temporal profiles of hierarchical PEs (peak effects: aPE at 112ms, vPE at 276ms). In source space, three sources showed significant effects for both PEs: anterior temporo-parietal junction (TPJ), dorsal middle cingulate cortex (MCC) and supplementary motor cortex (SMA).
To identify the connections that convey PEs, we compared two DCM families that allowed input to different nodes of the network, and different modulatory effects of PE magnitude. The family with input entering the SMA and propagating via MCC to TPJ explained aPE-evoked activity best, whereas the family with input into the TPJ and propagating in the opposite direction best described the effects of vPE-evoked activity. Bayesian model selection identified the winning model for aPE effects; this model proposed PE magnitude modulations of input gain and effective connectivity from TPJ to MCC, and MCC to SMA. Conversely, a model with connectivity modulation from MCC to TPJ best described the effects of vPE. Second, we investigated the impact of dopaminergic perturbations of the network by comparing DCM parameters of the winning models across pharmacological groups. Post hoc t-tests revealed that DA impacted on aPE-induced perturbations only, which is in line with previous findings that aPEs are represented in dopaminergic regions while vPEs are likely encoded by activity in cholinergic regions. Specifically, DA modulated TPJ-MCC and SMA-MCC connectivity.
Discussion: Model-based analysis of EEG data in a social learning task detects DA effects on connectivity, even when behavior (accuracy, reaction time) was not affected by the drugs. Currently, we are extending our computational approach to first-episode schizophrenia patients, where we hope to use parameters from neuronal and behavioral models to predict individual treatment response.

F238. COMPETENCE-PERFORMANCE DISCREPANCY IN SOCIAL FUNCTIONING IN PATIENTS WITH SCHIZOPHRENIA: THE IMPACT OF SOCIAL ANXIETY

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Background: Social functioning deficits are of critical importance in patients with schizophrenia, because they affect the long-term outcomes and quality of life (QOL) of the patients. Two aspects of social functioning, namely, competence (ability to perform skilled activities, that is, what one can do) and performance (actual performance of skilled activities, that is, what one actually does) are considered to have a significant influence on how well the patients can live independently in the community. Although the two aspects are usually thought to go hand in hand, discrepancy between the two is often observed in patients with schizophrenia in clinical practice. Some patients are not able to function in the community to the best of their ability; some patients appear to get along everyday living better than they would be expected to. The aim of the present study was to identify factors influencing the occurrence of such discrepancy of social functioning in patients with schizophrenia.
Methods: A total of 205 stable outpatients with schizophrenia aged 40 years old or under were recruited at the Toho University Omori Medical Center, Tokyo. Of the 205 patients, 100 were male (48.8%) and 105 (51.2%) were female. The mean age of the participants was 29.3 years and the mean estimated premorbid IQ was 100.8. The mean age at disease onset was 22.0 years old, and the mean duration of illness at the start of the study was 6.7 years. The social functioning, psychiatric symptoms, social anxiety, cognitive function, and QOL of the participants were assessed. The patients were divided into 4 groups by the cutoff points for competence and performance calculated using a comprehensive dataset of the Social Functioning Scale (SFS) obtained from multiple facilities.
Results: The subjects were divided according to their level of competence and performance as follows: good competence and good performance (CP) group, 108 (52.7%) patients; good competence but poor performance (Cp) group, 40 (19.5%) patients; poor competence but good performance (cP) group, 13 (6.3%) patients; poor competence and poor performance (cp) group, 44 (21.5%) patients. Among the 4 groups, the objects of particular interest in this study were the differences between CP and Cp groups and between the cP and cp groups. One-way ANOVA revealed significant differences among the groups in the scores on the Positive and Negative Syndrome Scale (PANSS), Liebowitz Social Anxiety Scale (LSAS), Global Assessment of Functioning Scale (GAF), World Health Organization-Quality of Life 26 (WHOQOL26), and Social Functioning Scale (SFS). Post-hoc comparisons revealed that the PANSS negative symptoms and general psychopathology scores, GAF score, WHOQOL26 score, and SFS total score were significantly worse in the Cp group than in the CP group, and that the LSAS score, GAF score, WHOQOL26 score, and SFS total score were significantly better in the cP group than in the cp group.
Discussion: In patients who are capable of living well in the community but do not perform well, negative symptoms may be involved in this discrepancy of social functioning. Patients who are able to maintain themselves well despite their poor social competence appear to have milder social anxiety symptoms as compared to patients who are neither competent nor capable of performing well in terms of social functioning in the community. Suitable and personalized approaches based on the patients' profile of dysfunction would seem to be indispensable for the recovery of such patients.

F239. THE ROLE OF DANCE/MOVEMENT THERAPY IN THE TREATMENT OF NEGATIVE SYNDROME AND PSYCHOSOCIAL FUNCTIONING OF PATIENTS WITH SCHIZOPHRENIA: RESULT FROM A PILOT MIXED METHODS INTERVENTION STUDY WITH EXPLANATORY INTENT

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Background: Optimizing psychosocial functioning and overall well-being by reducing the severity of negative symptoms are important outcomes for individuals with schizophrenia. Movement-based therapeutic approaches are uniquely capable of addressing the non-verbal nature of negative symptoms. Dance/Movement Therapy (DMT), a promising treatment for mental health conditions such as schizophrenia, has been found to reduce the occurrence and severity of negative symptoms and to have a positive impact on the psychosocial functioning. Although preliminary findings suggest DMT as a treatment intervention, limited research and inconclusive findings preclude generalizations and more research is needed. We aimed to examine the treatment effects of a 10-week (20 sessions) group DMT treatment program.
Methods: We employed a mixed methods intervention design with explanatory intent, in which a randomized controlled trial is followed by semi-structured exit interviews. Thirty-one severely ill individuals diagnosed with schizophrenia participated in the RCT that used a two-arm parallel group design to assess and show the difference between patients receiving standard care (SC) and patients receiving standard care plus DMT on measures of negative symptoms (as primary outcome; PANSS, BNSS) and psychosocial functioning (as secondary outcomes; WHO-DAS 2.0, SDS). Quantitative measures were taken pre and post- intervention. Participants who participated in a minimum of 50% of DMT sessions (n=15) were invited to an exit interview. This criterion was also used to analyze quantitative data, leaving n=28 for quantitative analysis.