SELF-RATED ASSESSMENT OF ANTICIPATORY AND CONSUMMATORY PLEASURE IN SCHIZOPHRENIA

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Introduction: Anhedonia is one of the major domains of negative symptom in schizophrenia. Previous evidence suggested that compared to healthy controls, individuals with schizophrenia have diminished capacity to experience pleasure from anticipated future activities (anticipatory pleasure) rather than pleasure while doing the activities (consummatory pleasure). In the present study, we examined levels of anticipatory and consummatory pleasure among individuals with high (cases) and low severity (controls) of negative symptoms of schizophrenia. We hypothesized that cases and controls will differ significantly on their self-reports of anticipatory pleasure.

Methods: Participants for this study were selected from a previous study which assessed negative symptoms in schizophrenia. Previous study participants with the highest score on negative symptoms were invited to participate in the current study as cases, whereas those with the lowest scores on negative symptoms were invited as controls. 23 cases and 27 controls were recruited. Negative symptoms were assessed on the Clinical Assessment Interview for Negative Symptoms (CAINS). Calgary Depression Scale for Schizophrenia (CDSS) was used to assess depressive symptoms. Functioning was assessed using the Social and Occupational Functioning Scale (SOFAS). Participants self-rated the Temporal Experience of Pleasure Scale (TEPS). TEPS has 10 items to assess anticipatory pleasure (TEPS-ANT) and 8 items to assess consummatory pleasure (TEPS-CON). Independent sample t-test was used to compare means and Chi-square test was used to compare differences in proportions of sex between cases and controls. Spearman's rho was used to assess correlations between scores on TEPS, CAINS, SOFAS and CDSS.

Results: Cases and controls did not differ significantly on age, sex and duration of psychosis. Both TEPS-ANT (M=4.09, SD=0.96 in cases vs. M=4.71, SD=0.65 in controls; t=-2.705, p=0.009) and TEPS-CON (M=3.80, SD=1.12 in cases vs. M=4.66, SD=0.83 in controls; t=-3.105, p=0.003) were rated significantly lower by cases than controls. Among cases, TEPS-ANT showed strong correlations with CAINS total (r_s=-0.727, p<0.001), and CAINS anhedonia (r_s=-0.600, p=0.002) and moderate correlations with CAINS asociality (r_s=-0.482, p=0.020) and CAINS alogia (r_s=-0.472, p=0.023) whereas TEPS-CON was only significantly correlated to CAINS total score (r_s=-0.516, p=0.012). Though not statistically significant, correlation of SOFAS scores with TEPS-CON (r_s=0.363, p=0.089) was higher than that with TEPS-ANT (r_s=0.143, p=0.515) among cases. Among controls, TEPS-ANT and TEPS-CON showed no significant correlations with CAINS scores or SOFAS. None of the TEPS scores were significantly correlated to CDSS scores.

Discussion: We found that individuals with higher negative symptoms severity reported much lower anticipatory and consummatory pleasures than those with lower negative symptoms. Further, our study suggested that subjective experience of pleasure and objective ratings of negative symptoms had higher correlations in individuals with more severe negative symptoms. The negligible associations between TEPS scores and CDSS suggested that diminished pleasure assessed by TEPS was not related to depressive symptoms. Further research is needed to explore the correlates of diminished pleasure in schizophrenia. Different treatment options might be needed for different cohorts of patients with schizophrenia.