

Abstract

Background

Schizophrenia is a heterogeneous disorder in terms of its underlying causes and clinical symptoms. Social motivation deficits are common in schizophrenia, which undermine the quantity and quality of interpersonal relationships of the patients. The goal of this study was to evaluate the motivation tendencies and their association with severity of specific symptoms in schizophrenia.

Method

Both implicit measures and self-reports were utilized. Individuals with early-stage schizophrenia participated in the implicit approach-avoidance task (AAT), which measured their motivational tendencies to happy and angry faces with direct and averted gazes according to the reaction time. The Revised Social Anhedonia Scale (RSAS) and the Revised Green et al. Paranoid Thoughts Scale (R-GPTS) were completed to measure their severity of anhedonia and persecutory delusion respectively.

Results

Forty-five first-episode participants showed a facilitated avoidance tendency to happy faces of both direct (bias score= -6.3 ms) and averted gazes (bias score= -51.4 ms), and an approach tendency to angry faces of both direct (bias score= 2.7 ms) and averted gazes (bias score= 13.4 ms) during AAT. Persecutory delusion severity was positively related to the facilitated avoidance tendency to direct ($r=-0.488$; $p= 0.001$) and averted happy faces ($r=-0.540$; $p= 0.001$), as well as angry face with direct gaze ($r=-0.424$; $p= 0.004$). The reduced approach to averted happy face was also positively related to anhedonia ($r=-0.340$; $p= 0.022$).