

Abstract

Background:

Social motivational deficits are a common feature of schizophrenia, characterized by abnormal approach-avoidance tendencies. Previous studies suggested that negative symptoms of anhedonia and avolition were associated with social motivational deficits, but their relationships remain unclear. This study aimed to investigate the associations between approach-avoidance tendencies with schizophrenia symptom severity and predict changes in social anhedonia and avolition longitudinally.

Methods:

The Approach Avoidance Task (AAT) was used to measure implicit reaction-time-based approach-avoidance tendencies for happy, angry, and neutral faces with direct or averted gaze direction. Schizophrenia symptoms, including social anhedonia and avolition, were measured using the Revised Social Anhedonia Scale (R-SAS) and Positive and Negative Syndrome Scale (PANSS). Measurements were conducted at baseline and six-month follow-up.

Results:

The sample consisted of 68 patients with schizophrenia. Participants showed a significant anger approaching tendency and a marginally significant avoidance tendency from happy faces with averted gaze. Greater positive symptoms were correlated with smaller approach tendency towards happy faces with direct gaze but not when the gaze was averted. Additionally, greater anger approaching tendency was correlated with less severe positive, general psychotic, and social anhedonia symptoms. At follow-up (n=53), decrease in avoidance tendency from happy faces with averted gaze predicted an increase in social anhedonia, while an increase in approach tendency towards angry faces predicted an increase in avolition.