Poster presentation

Self-monitoring in schizophrenia

K Roikou*[1], V Bozikas[2], M Kosmidis[1], C Andreou[2], A Piachas[2], A Giazkoulidou[1] and A Karavatos[2]

Address: [1]Department of Psychology, Aristotle University of Thessaloniki, Greece and [2]1st Department of Psychiatry, Aristotle University of Thessaloniki, Greece

* Corresponding author

Background

Our purpose in undertaking the current study was to investigate self-monitoring, that is, the ability to monitor effectively their own willed actions, in patients with schizophrenia.

Material and Methods

We compared the performance of a group of 35 patients (25 men and 10 women) with schizophrenia (DSM-IV), all receiving antipsychotic medication at the time of the study, with that of 34 age- and education-matched normal controls (14 men and 20 women) on a self-monitoring task. This task is consisted of three conditions. In the 1st condition, participants had to generate simple abstract drawings without being able to see what they drew. Immediately after each trial, four copies of the same drawing were presented to the participant (each rotated 0°, 90°, 180° or 270°), who was asked to select the correct orientation in which the drawing had originally been made. The 2nd condition employed an identical procedure to the 1st, but the participant was told what to draw. The 3rd condition also employed the same procedure as the 2nd, but the participant was now able to watch him/herself draw each object. Symptoms of schizophrenia were measured with the Greek version of the Positive and Negative Syndrome Scale (PANSS). Also, a battery of neuropsychological tests was administered to assess the following cognitive domains: executive functions, visuospatial perception, memory (verbal and visual), attention, and verbal skills.

Results

Patients with schizophrenia performed significantly worse than normal controls for each of the three conditions of the self-monitoring task. Scores in the 1st condition correlated significantly with memory [r(35) = 0.513] and visuospatial perception [r(35) = 0.467]. Scores in the 2nd condition were significantly correlated with the negative [r(35) = -0.438] and cognitive component of the PANSS [r(35) = -0.357]. Furthermore, performance on the 2nd condition correlated significantly with executive functions [r(35) = 0.589], memory [r(35) = 0.661], attention [r(35) = 0.543], visuospatial perception [r(35) = 0.444], and verbal skills [r(35) = 0.439]. Finally, there was a significant correlation between performance on the 3rd condition and executive functions [r(35) = 0.488], memory [r(35) = 0.488], attention [r(35) = 0.463], and visuospatial perception [r(35) = 0.342]. After controlling for the cognitive domains that were found to be associated with the three self-monitoring conditions, differences between the two groups in all the self-monitoring conditions were no longer significant.

Discussion

Our findings suggest that patients with schizophrenia are impaired in self-monitoring, but this impairment appears to reflect more basic neuropsychological deficits.