



Title	Psychological Distance of Semantic Categorization in Schizophrenia
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server rating scales and a comprehensive neuropsychological examination were conducted in all subjects. All BPD-Patients reported traumatic events and 50% suffered from a comorbid PTSD. With regard to neuropsychological performance, most patients were unimpaired, but some showed extremely heterogeneous neuropsychological profiles. Severity and age of traumatization were correlated with neuropsychological impairment, primarily memory dysfunction. These findings support the notion of an association between traumatic stress and functional and/or structural brain dysfunction. This association might be explained by neurotoxic effects of stress hormones of the HPA-axis or, alternatively, by the fact that people with subtle brain dysfunction are more likely to develop a trauma related disorder.

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R. CHAN & E. CHEN. Psychological Distance of Semantic Categorization in Schizophrenia.

This study aimed to examine the psychological distance of categorization in schizophrenia. A cross-sectional design was adopted with a total of 187 patients with schizophrenia and 98 normal controls. Participants were asked to generate as many exemplars from within a semantic category as they could in 3 minutes. The categories selected for this study were "Animal", "Means of Transport", "Food" and "Furniture". Analysis using the Rasch Model was undertaken. The findings indicated that the psychological distance, in terms of logits unit, was not at an equal interval within each category across the 3-min interval in both patients and healthy controls. The psychological distances between different categories were also found to be inconsistent in both groups. These preliminary findings suggest that we should not simply equate different category scores when we study semantic categorization. Such a simple "count" of categories may not sufficiently reflect the actual psychological distance perceived by patients and healthy controls. Future study should further examine a more representative and accurate measurement of semantic categorization.

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T. CHERNIGOVSKAYA, S. DAVTYAN, & K. STRELNIKOV. Prosody Perception in Schizophrenic Patients: Hemispheric Involvement.

Schizophrenic patients were recently shown to differ from healthy subjects in brain functional asymmetry in both automatic and controlled processing. Among other findings left hemisphere abnormalities revealed in dichotic testing were associated with auditory hallucinations. However, brain mapping studies of language perception in schizophrenia gave no evidence of reduced activity in the left hemisphere, with decreased level of cerebral asymmetry possibly resulting from failure to inhibit the right hemisphere. We administered a dichotic listening procedure to 50 patients with 50 healthy controls. Stimuli were phrases with different types of linguistic and emotional prosody. Percentage of mistakes and reaction time were analysed for each ear. No evidence of ear advantage in number of correct reactions in both groups was found. In contrast, right ear advantage (REA) in latency was shown for healthy subjects processing utterances with logical stress *versus* left ear advantage (LEA) in processing emotional and unfinished utterances. In patients with schizophrenia REA for utterances with different logical stress was revealed with no asymmetry for the other types of prosody. Negative correlation between relevant responses and duration of illness, age, early onset, and ratings of negative symptoms were shown. There was no significant correlation with illness course type, rating of positive symptoms, level of education, or gender. We argue that the level of hemispheric activation in schizophrenia may differ depending both on the actual status of a patient (e.g., contribution of the negative and positive symptoms) and specificity of linguistic procedures.

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R. DRECHSLER, A.C. LANG-DULLENKOPF, H.-C. STEINHAUSEN, & D. BRANDEIS. Processing of Facial Affect in Early-Onset Schizophrenia: An ERP Study.

Objective: Characteristic patterns in the processing of facial affect have been reported in adult schizophrenic patients. Neuropsychological studies indicate that they have difficulties in correctly labeling facial expression, and that their brain electric activity following the face-specific N170 component is reduced. The aim of our study was to examine whether these characteristics can also be found in adolescents with schizophrenia, which to our knowledge has not been studied before. *Method:* A group of patients with early-onset schizophrenia, a group of clinical controls, and a group of healthy adolescents, ages 13 to 17, participated in the study. Neuropsychological and electrophysiological measures were combined: A task of labeling facial expressions was performed during a 47 channel ERP recording. A series of faces of adolescents and young adults with emotional or neutral expressions was presented on a PC screen. Each face was followed by a word representing an emotional category which could be accepted or rejected. *Results:* Preliminary results indicate that adolescents with schizophrenia ($N = 4$) seem to present reduced amplitudes compared to adolescent healthy controls during the P100 and N170 components, which recent work implicates in affective face processing. In the categorization task of facial affect, however, schizophrenic adolescents followed a similar pattern as seen in controls, although they made more errors over all emotional categories. *Conclusion:* Further research will show whether these results can be replicated and whether the observed effects are due to a deficiency in the processing of facial affect or to more basic problems in information processing.

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K. FAST, S. HERPERTZ, & K. SCHNELL. Controlling Emotional Arousal in Patients With Borderline Personality Disorder (BPD).

Biological and behavioral data suggest that emotions are control signals that regulate responses to changing circumstances. BPD is hallmarked by a dysregulation of emotional arousal. It is suggested that a decreased tolerance towards high arousing fear stimuli is related with trait anxiety in general. We used multiple measures to compare attention during self-controllable exposure to emotional arousing stimuli. 12 BPD patients and 12 healthy controls were examined with a paradigm of stochastic variations of emotional arousing visual stimuli. All participants are instructed to control the length of presentation of negative high arousing, negative low arousing, and neutral pictures by pressing a button. Compared with controls, BPD patients were characterized by a delayed reaction time, hyperactivity of amygdala, and hypoactivity of prefrontal regions for negatively arousing pictures. The results support that strong negative pictures capture attention more than weak negative pictures as well as provoke a higher subjective arousal and a slower habituation time-line. Studies have shown in healthy people stimuli that pose an immediate threat to survival automatically attract attention. The influence of threatening stimuli on attention is moderated by trait anxiety. Dysregulation in BPD might be explained by an increased signal function of high arousing negative stimuli but a reduced behavioral profit (fight/flight response) as a consequence of trait anxiety. Future research should explore the role of emotions as control signals in self-regulating and intentional behavior in BPD patients.

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T. HEINKS, M. GRAY, & J. FORD. Impairment of Working Memory and Mismatch Negativity Generation in Schizophrenia.

Schizophrenia is a severe mental disorder associated with a very heterogeneous pattern of cognitive and neuropsychological performance. However, short-term-memory dysfunction represent a fairly consistent finding in this disorder. Event-related potentials (ERP) provide a reliable tool to investigate potential mechanisms underlying some of the perceptual and cognitive dysfunctions in schizophrenia. Mismatch-negativity (MMN) is