Semantic and affective priming in patients with non-affective psychosis and their first-degree family members. An Event-Related-Potential-study.

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Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Schizophrenia and other psychotic disorders
Study type	Observational non invasive

Summary

ID

NL-OMON31455

Source
ToetsingOnline

Brief title
Semantic and affective priming in patients with psychosis

Condition

- Schizophrenia and other psychotic disorders

Synonym
Psychosis, Schizophrenia

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Maastricht

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: ERP, psychosis, semantic and affective priming, vulnerability

Outcome measures

Primary outcome

Reaction times in the different conditions will be compared between the three groups.

Mean amplitude and latency of the N400, P3 and the LPP ERP components will be compared between the different conditions and between the groups.

Source localization will be conducted for each condition and each group.

All words or combinations of words from the participants will be analysed if it is a existing word of the narratives or if it is a non-existing word of the narratives. The amount of words, and the longest phrase - counted as the number of words reported by the participant - comprised the length of speech illusion (LSI score).

Correlations between reaction times and ERP components of the different conditions and the level of positive and negative symptoms will be investigated.

Secondary outcome

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Study description

Background summary

Several studies have shown that patients with psychosis may have disturbances of language processing (e.g. disturbed associational processes). It has been suggested that the semantic network of patients with psychosis shows disinhibited spread of activation. This disturbance of the semantic network is reflected in an abnormality of the N400 component, an EEG component sensitive to semantic relations between words. Furthermore, these language disturbances of patients with psychosis are influenced by the emotional quality of the information. For example, patients showed more language abnormalities when talking about emotional themes. The lexical decision task is a widely used method to investigate the semantic network. Furthermore, with the multiple-speakers task it is possible to investigate differences in speech-perception in patients with psychosis, healthy family members and healthy control participants.
Using stimulus material with emotional valence the influence of emotional processes can be investigated. Because of an increased genetic vulnerably in first degree relatives of patients with psychosis, a qualitatively similar disturbance of the semantic and affective network at a more attenuated level is expected.

Study objective

The aim of the present study is to investigate the neural correlates of the semantic network of patients with recent non-affective psychosis, first degree relatives of patients with psychosis and healthy controls. Furthermore, the relationship between semantic and affective priming and the multiple speakers task and positive and negative symptoms of patients with psychosis will be investigated.

Study design

In this study, brain activity of all participants will be measured with EEG while the participants conduct a lexical decision task at the computer. The participants will read words presented on the computer screen and indicate if the word is a real Dutch word or a non-word using buttons. After the EEG experiment, the participants will conduct the multi-speaker task. This task consists of a multi-speaker phonetic noise or *babble*, which consists of six narrative speakers (three male speakers and three female speakers). All narratives of each speaker were simultaneity recorded in a *babble* fragment of 2.30 minutes. The babble will be presented though a headphone.
After these experimental tasks, the participants will fill in a questionnaire about symptoms over the last years. Further, a word test and a short interview about well-being in the last two weeks will be administered.

Study burden and risks

Medical and mental risks of the study for the participants are limited. The

duration of the study will be around 3 hours one-time for each participant. Due to experiences from earlier studies this is acceptable for this group of patients.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

1. between 18 and 50 years
2. native speakers of Dutch
3. able to read and understand the inform consent
4. patients: (a) Diagnosed with a non - affective psychosis (b) first contact with a psychiatric institution because of psychotic symptoms 10 years maximum
5. first-degree relatives: brother or sister of the patient who was diagnosed with a non-affective psychosis

6. healthy controls: (a) never diagnosed with a lifetime diagnosis of non-affective psychosis; (b) none of first-degree relatives were diagnosed with a psychotic disorder

Exclusion criteria

1. mental retardation (IQ<70)
2. head trauma (with loss of consciousness)
3. psychotic disorder due to a general medical condition
4. alcohol and drug related substance disorder according to the DSM-IV

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-11-2007
Enrollment:	90
Type:	Actual

Ethics review

Approved WMO

Date:	08-08-2007
Application type:	First submission
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)

Approved WMO Date:	29-04-2008
Application type:	Amendment
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL17175.068.07