Social Cognition and Social Functioning in Schizophrenia

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1.Social CognitiveA.Do schizophrenia patients, compared to unaffected controls, show impaired social cognition (perceiving, understanding, intentions and emotions of others), especially when it comes to self-other distinction processes (...

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

Summary

ID

NL-OMON44578

Source
ToetsingOnline

Brief title
Social Cognition and Social Functioning in Schizophrenia

Condition

- Schizophrenia and other psychotic disorders

Synonym
Schizophrenia

Research involving
Human

Sponsors and support

Primary sponsor: Psychiatrie
Source(s) of monetary or material Support: NWO VIDI

Intervention

Keyword: schizophrenia, self-other distinction, social cognition, social functioning

Outcome measures

Primary outcome

- Relation between classic social cognition, self-other distinction processes,

and social functioning in patients with schizophrenia, compared with matched

healthy controls.

- Relation between brain morphology (volume, cortical thickness, white matter

tracts) and social functioning and social cognition.

- Relation between fMRI activation in medial prefrontal cortex, amygdala

cingulate cortex and emotion processing and self referential task

- Relation between activation during self-referential or emotion processing

and self-other distinction and social functioning

Secondary outcome

n.a.

Study description

Background summary

Schizophrenia patients have great difficulty navigating through the social
world and find it difficult to cope with this disability. Social dysfunction,
which is not only present in schizophrenia patients but also in those at-risk
to develop the disorder, may underlie many of the invalidating aspects in their
lives, e.g., social withdrawal, poor interpersonal relationships and impaired
occupational functioning,. In addition, poor social functioning has been shown
to predict conversion to schizophrenia in high-risk youth, and can thus serve
as a key point for early intervention. This indicates the urgency to
investigate the underlying mechanisms of social functioning in schizophrenia.

Recent research suggests that social cognition (usually defined as mental processing of other people*s emotions, intentions, and behavior) plays a vital role in social functioning, and schizophrenia researchers increasingly take social cognition into consideration. One of the social cognitive processes that is shown to be disturbed in individuals suffering from schizophrenia is the understanding of intentions and emotions in others, also referred to as the theory of mind. However, when closely examining schizophrenia patients* impairments in theory of mind, they seem to result from difficulties in self-other distinction rather than difficulties in representing other people*s *minds*. As a consequence, patients may falsely project their own intentions or emotions onto others, or experience others* intentions or emotions as being their own.

Therefore, the proposed study will not only include measures of classic social cognition (e.g. emotion perception, theory of mind, attributional style), but also social cognition measures that tap into processes underlying self-other distinction. Furthermore, we aim to enhance our understanding of the neural substrates of self-other distinction processes during social interaction. By comparing performance of schizophrenia patients and matched healthy controls on these different measures, we aim to gain more insight in the underlying mechanisms of (impaired) self-other distinction processes and relate social cognitive performance to measures of social functioning.

We propose that difficulties with self-other distinction lie at the core of schizophrenia, thus insight in these mechanisms will enhance our understanding of the social issues patients struggle with the most, and as such crucially extend current research on social cognition and social functioning in schizophrenia that so far focused mainly on perceptual processes.

Study objective

1.Social Cognitive
A.Do schizophrenia patients, compared to unaffected controls, show impaired social cognition (perceiving, understanding, intentions and emotions of others), especially when it comes to self-other distinction processes (distinguishing intentions, action effects, and emotions of others from one*s own intentions and emotions)?
B.Do impairments in self-other distinction processes impede social functioning (as measured by self-report, social distancing, and life role plays) over and above impairments in classic social cognition?

2.Biological - imaging (MRI) and genetics
a.Is fMRI activation in medial prefrontal cortex and cingulate cortex during emotion processing and self referential task decreased in schizophrenia patients compared to matched controls?
b.Are the brain areas that are involved in self-referential (medial frontal) or emotion processing (amygdala and cingulate cortex), as measured with fMRI,

associated with performance on social cognitive measures of measures of social functioning?

c.Is impaired social cognition and social functioning in schizophrenia patients, relative to matched controls, associated with disruption of the white matter tracts connecting frontal, parietal and temporal areas and a thinner cortex in frontal, parietal and insular areas(as measured with DTI/sMRI)?

Study design

Patient-control design, comparing patients with schizophrenia and matched controls.

This study is a follow-up of the protocol *Structural and functional neural correlates of the experience of self-agency in health and schizophrenia.* (protocol number 10-177), which was previously approved by the METC.

Study burden and risks

A magnetic resonance imaging (MRI) scan session of approximately 60 minutes will be performed: MRI is a non-invasive technique, so there is no need for special preparation for the subject. There are no known risks associated with the MRI acquisition and the data are solely used for research purposes. However, structural cerebral pathology may be noticed. If medical treatment is indicated, the subject will be notified.

During two different social-cognitive tasks the participant will be videotaped to analyze emotions, physiological reactions and interpersonal skills. Participants will not be informed about the goals of these measurements before the start of the study, because this may interfere with the objectivity of the measurements. Therefore, we will debrief them after completion of the task. If a participant objects to the extraction and use of either emotional expressions and/or heart rate, we will make a note of this objection and not extract the respective data from the video material.

Subjects will experience no direct benefits from our study. In the long run, increased understanding of the etiology and pathophysiology of schizophrenia, may contribute to diagnosis, early detection and/or prediction of treatment outcome.

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

Aged 18-50
Give written informed consent
Dutch speaking
Premorbid IQ>80
Patients: DSM-IV diagnosis in the schizophrenia spectrum

Exclusion criteria

Drug or alcohol abuse over a period of six months prior to the experiment
History of closed-head injury
History of neurological illness or endocrinological dysfunction
Chronical use of medication (patients: medication other than psychiatric medication)

Study design

Design

Study type: Observational invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Other

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 14-03-2015

Enrollment: 120

Type: Actual

Ethics review

Approved WMO
Date: 11-09-2014

Application type: First submission

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

Approved WMO
Date: 26-11-2014

Application type: Amendment

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

Approved WMO
Date: 18-02-2015

Application type: Amendment

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

Approved WMO
Date: 12-08-2015

Application type: Amendment

Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	02-12-2015
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	05-04-2016
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	25-05-2016
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	09-11-2016
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	24-08-2017
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)

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	NL49719.041.14