Structural and functional neural correlates of the experience of selfagency in health and schizophrenia

Published: 30-08-2010 Last updated: 30-04-2024

Primary Objective: 1. Are the effects of conscious and unconscious priming effects on selfagency different in schizophrenia as compared to health?2. What are the functional and structural neural substrates underlying conscious and unconscious...

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

Summary

ID

NL-OMON34317

Source ToetsingOnline

Brief title Selfagency and schizophrenia

Condition

• Schizophrenia and other psychotic disorders

Synonym delusions, psychosis

Research involving Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Utrecht Source(s) of monetary or material Support: Ministerie van OC&W

1 - Structural and functional neural correlates of the experience of selfagency in h \dots 25-05-2025

Intervention

Keyword: neuroimaging, priming, schizophrenia, selfagency

Outcome measures

Primary outcome

Study 1:

- Performance of patients on selfagency paradigm compared to controls (off

line, i.e. no MRI scanner))

Study 2:

- Difference between patients and controls in volume (sMRI) or density (VBM) in selfagency related brain areas.

- Finding the areas in healthy controls that are involved when attributing

selfagency to one*s own actions using the BOLD signal (fMRI)

- Difference between patients and controls in brain activation (BOLD) while

doing a selfagency task

Secondary outcome

Baseline values or parameters which might intervene with the main study

parameter (age, gender, years of education, symptoms, level of functioning,

medication intake)

Study description

Background summary

The conscious experience of selfagency, i.e. the feeling that one causes one*s own actions and their outcomes, is fundamental to human self-perception. Recent

2 - Structural and functional neural correlates of the experience of selfagency in h ... 25-05-2025

research suggests that there are two routes to the experience of selfagency: (1) a conscious one, deriving from our intentions to produce a specific action-outcome; and (2) an unconscious one, following from enhanced pre-activation of outcome information outside of awareness (e.g., by means of subliminal priming). In both cases, people experience selfagency over behavior when outcome representations that are primed prior to action execution match with the actual outcome.

Thus far, previous research mainly addressed the cognitive processes underlying the conscious and unconscious effects on selfagency in healthy people. However, the anatomical underpinnings of the authorship ascription process remain a mystery. The present proposal focuses on this core issue by examining structural and functional neural correlates of conscious and unconscious processes underlying the selfagency in health and in schizophrenia - a psychiatric disorder strongly associated with a disturbed sense of agency.

Study objective

Primary Objective:

1. Are the effects of conscious and unconscious priming effects on selfagency different in schizophrenia as compared to health?

2. What are the functional and structural neural substrates underlying conscious and unconscious priming effects on selfagency in health?

Study design

case-control design, comparing patients with schizophrenia and matched healthy individuals

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.

No immediate benefits are to be expected from participation in this study for the subjects. In the long run, increased understanding of the etiology and pathophysiology of psychiatric illness in general and schizophrenia in particular, 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

Patients: -Do have a DSM-IV diagnosis of schizophrenia -Do not chronically use medication, other than psychiatric medication -Give written informed consent -Do not have a major medical history -Are not in an acute psychotic episode Healthy subjects: -Do not have a psychiatric history -Do not have a first-degree family member with a psychiatric illness with psychotic features. -Do not chronically use medication -Give written informed consent -Do not have a major medical history;Specific for the imaging study:

4 - Structural and functional neural correlates of the experience of selfagency in h ... 25-05-2025

Subjects have to satisfy the following criteria in order to participate in the study: -Do not have a pacemaker

-Do not have metal materials in the head (except for dental braces)

Exclusion criteria

All subjects:

-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

-Unable to give consent; Specific for the imaging study:

-Ferrous objects in or around the body (e.g. braces, glasses, pacemaker, metal fragments) -Claustrophobia

Study design

Design

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

Recruitment

| NL | |
|---------------------------|---------------------|
| Recruitment status: | Recruitment stopped |
| Start date (anticipated): | 19-11-2010 |
| Enrollment: | 96 |
| Туре: | Actual |

Ethics review

Approved WMO Date:

30-08-2010

5 - Structural and functional neural correlates of the experience of selfagency in h ... 25-05-2025

| Application type: | |
|--------------------|--|
| Review commission: | |

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
 NL32474.041.10