# Schizophrenia affects working memory in a process- and modality-specific way

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The general purpose of the present study is to test whether people with schizophrenia perform differently when assessing working-memory tasks measuring different components. A better knowledge of working memory impaiment in schizophrenia could lead...

Ethical review Approved WMO

**Status** Pending

**Health condition type** Schizophrenia and other psychotic disorders

**Study type** Interventional

# **Summary**

## ID

NL-OMON30563

#### Source

**ToetsingOnline** 

#### **Brief title**

Schizophrenia and working memory

## **Condition**

Schizophrenia and other psychotic disorders

#### **Synonym**

madness, psychotic disorder

## Research involving

Human

## **Sponsors and support**

Primary sponsor: Katholieke Universiteit Nijmegen

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

## Intervention

**Keyword:** maintenance, manipulation, reaction times, schizophrenia, working memory

## **Outcome measures**

## **Primary outcome**

Reaction times and errors made while comparing the patientpopulation with the control group.

## Secondary outcome

none

# **Study description**

## **Background summary**

The last decades, a lot of research is done about schizophrenia, a social disabling disease often accompanied with cognitive deficits. There is a general consensus that working memory (Baddeley, 1986) is impaired in schizophrenic patients (Fleming, 1997). It is often cited as a central feature of vulnerability (Silver et al., 2003). There are a lot of studies measuring working memory, which consists of multiple components. However, the relative impairment of these to one another remain uncertain (Keefe, 2000).

## Study objective

The general purpose of the present study is to test whether people with schizophrenia perform differently when assessing working-memory tasks measuring different components. A better knowledge of working memory impaiment in schizophrenia could lead to better diagnostics and treatment.

## Study design

To measure this, a 2 (Group: Patient, controls) x 2 (Task: No delay, Delay) x 2 (Modality: Verbal, Visuospatial) x 4 (Target: Same, Different, Same and rotated, Different and rotated) design will be used. In this, the condition Group is a natural variable, the conditions Task and Modality will be counterbalanced. The condition Target will be randomized.

### Intervention

none

## Study burden and risks

The psychology-experiment will take an hour to complete. There will not be used medical interventions. The experiment consists of 4 blocks, during which the participant has to press yes/no behind a computer. By this, the burden and risks of the experiment will be kept minimal.

## **Contacts**

## **Public**

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## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

## Inclusion criteria

Patiënts have to meet the ICD10 or DSMIV criteria for schizophrenia. Patiënts will have to be stable for a significant period and are receiving anti-psychotics.

Controls have to meet matching-criteria (estimated intelligence, age, gender).

## **Exclusion criteria**

For patients and controls: influence by drugs other than medication (e.g. sedating drugs, sleeping medication). We try to control for the Extra Pyramidal Syndrome (EPS), which is known to slow reaction times.

Controls with a psychiatric or neurologic history of illness.

Participants with dyslexia will be excluded. The number of left-handed participants will be minimized.

# Study design

## **Design**

Study type: Interventional

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Diagnostic

## Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-01-2007

Enrollment: 40

Type: Anticipated

## **Ethics review**

Approved WMO

Application type: First submission

Review commission: CMO regio Arnhem-Nijmegen (Nijmegen)

# **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 NL15275.091.06