# Cognitive remediation in psychiatric patients with an applied online cognitive game and assessment tool

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**Ethical review** Approved WMO **Status** Recruitment stopped

**Health condition type** Cognitive and attention disorders and disturbances

Study type Interventional

## **Summary**

#### ID

NL-OMON44811

#### Source

ToetsingOnline

#### **Brief title**

Cognition game

#### **Condition**

Cognitive and attention disorders and disturbances

#### **Synonym**

cognitive deficits; psychiatric disorders

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** MyCognition

**Source(s) of monetary or material Support:** MyCognition

#### Intervention

**Keyword:** Applied gaming, Cognitive deficits, Psychiatric disorders

## **Outcome measures**

## **Primary outcome**

The primary outcome measure of this research is cognitive functioning at 12 weeks.

### **Secondary outcome**

The secondary outcome measures include the severity of symptoms, blood marker abnormalities, electro-encephalogram (EEG), level of functioning and cortisol level.

# **Study description**

#### **Background summary**

A majority of patients with a psychiatric disorder such as major depressive disorder (MDD), schizophrenia or obsessive-compulsive disorder (OCD), suffers from cognitive dysfunction (e.g. in attention, memory, and planning ability). Cognitive dysfunction can play a major role in functional capacity and independence in everyday activities. Improving cognitive functioning in patients with psychiatric disorders may lead to being alble to keep or earlier return to employment and independent living and therefore to reduced healthcare and economic costs.

Availability of interventions to improve cognitive dysfunction is limited. The companies MyCognition and Preloaded have developed thegame Aquasnap designed to enhance and sustain performance leading to reduction in cognitive deficits. A potential advantage of tAquaSnap over and above existing cognitive remediation test batteries is that more subjects comply with treatment because playing the game is enjoyable.

## Study objective

The primary objective of this study is to investigate in a randomized controlled trial (RCT) if AquaSnap can improve cognitive functioning in patients with DSM-IV-TR diagnosis of schizophrenia/schizoaffective disorder,

OCD or MDD who have cognitive deficits. Secondary objectives are to investigate 1) the usability and acceptability of AquaSnap 2) the association of changes in cognitive functioning with biological, psychosocial and clinical parameters.

## Study design

The design is a randomized controlled trial. Subjects will be randomized at entry to one of two treatment groups: Current management (TAU) or Current management plus AquaSnap.

## Intervention

Subjects will receive either Treatment as Usual (TAU) or TAU plus a link with which they can play AquaSanp at home, at least three times a week for at least half an hour for 12 weeks.

## Study burden and risks

Subjects will be assessed at baseline, week 4, week 8 and week 12 with the MyCognition Cognitive Power Score (MYCQ). At baseline and week 12 they will also be assessed with the CANTAB, clinical self report scales, EEG hair cortisol and blood markers. Subjects in the treatment condition can play AquaSnap. Side effects of playing AquaSnap are not expected. Benefit for the patient may be improved cognitive functions.

## **Contacts**

#### **Public**

MyCognition

Moorgate 25 London EC2R 6AY GB

**Scientific** 

MyCognition

Moorgate 25 London EC2R 6AY GB

## **Trial sites**

## **Listed location countries**

**Netherlands** 

## **Eligibility criteria**

### Age

Adolescents (12-15 years) Adolescents (16-17 years) Adults (18-64 years) Elderly (65 years and older)

## Inclusion criteria

- DSM-IV-TR diagnosis of schizophrenia/schizo-affective disorder, obsessive compulsive disorder or major depressive disorder
- Fluent in Dutch
- Clinically stable
- Male or female 16 to 55 years

## **Exclusion criteria**

- High risk of suicide (score of 2 or more on HAM-D suicide item)
- Unstable medical disorder
- Current substance abuse disorder
- History of a clinically significant abnormality of the neurological system (including dementia and other cognitive disorders or significant head injury) or any history of seizure (excluding febrile seizure).
- Premorbid IQ < 70

# Study design

## Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

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Control: Active

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 12-01-2015

Enrollment: 80

Type: Actual

## **Ethics review**

Approved WMO

Date: 22-04-2014

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 19-11-2014

Application type: Amendment

Review commission: METC Amsterdam UMC

# **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 NL46634.018.13