# Dynamic Interactive Social Cognition Virtual Reality training for adults with Autism Spectrum Disorder (DISCoVR-A): a pilot study

Published: 12-09-2018 Last updated: 11-04-2024

To determine the feasibility and acceptability of VR SCT on patients and for clinicians and to explore the effect of VR SCT on behaviour, social cognition and social anxiety in people with ASD.

**Ethical review** Approved WMO **Status** Recruiting

Health condition type Developmental disorders NEC

Study type Interventional

## **Summary**

#### ID

NL-OMON48561

#### **Source**

**ToetsingOnline** 

**Brief title** DISCoVR-A

# Condition

• Developmental disorders NEC

#### Synonym

Autism, Autism spectrum disorder

## Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam

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Source(s) of monetary or material Support: Stichting HJ Sipkema

### Intervention

**Keyword:** Autism, Social Cognition Training, Virtual Reality

### **Outcome measures**

## **Primary outcome**

Acceptability, utility and feasibility of the intervention, measured using questionnaires and interviews.

## **Secondary outcome**

Social cognitive and neurocognitive outcome measures

# **Study description**

## **Background summary**

People with autism spectrum disorder (ASD) commonly experience deficits in social cognition and social functioning. Social cognition training (SCT) has been shown to have beneficial effects on social cognition tasks, but generalization to social functioning in daily life is limited. Current individual SCT do not seem to be ecologically valid, and patients cannot practice skills in dynamic social interactions. We propose that this problem could be solved by providing SCT in Virtual Reality (VR). VR allows for practice of skills in situations resembling real life, yet remaining safe and controllable.

#### Study objective

To determine the feasibility and acceptability of VR SCT on patients and for clinicians and to explore the effect of VR SCT on behaviour, social cognition and social anxiety in people with ASD.

#### Study design

This study is a feasibility study with a patient group with an autism spectrum disorder. Patients will receive the intervention, baseline post-intervention and follow-up assessments will be obtained.

## Intervention

The VR SCT consists of sixteen sessions, during a 12-week timeframe. Session lasts 60 minutes. During sessions, social cognition is trained in virtual environments. The intervention consists of three modules: facial affect recognition, emotion recognition within a context & theory of mind and interaction training.

## Study burden and risks

Participants will be interviewed and tested at baseline, post intervention, and at follow-up, with an average total duration of approximately one hour for each measurement. The intervention will take sixteen hours in total (sixteen sessions of 60 minutes each). We expect patients to benefit from the therapy by increasing social cognitive skills. Some patients might experience simulator sickness symptoms during the therapy. No major adverse events are expected or have been documented.

## **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

- 1. Diagnosis of an autism spectrum disorder, determined by a structured interview (ADOS/3Di) in the previous three years or a confirmed ASD diagnosis by a clinician
- 2. Age 18 \* 65
- 3. Indication of impaired social cognition by the treating therapist

## **Exclusion criteria**

- 1. An estimated IO below 70
- 2. Substance dependence
- 3. Insufficient proficiency of the Dutch language
- 4. Presence of a relevant psychiatric or neurological disorder such as dementia, epilepsy or organic brain damage

# Study design

## **Design**

Study type: Interventional

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 04-10-2018

Enrollment: 25

Type: Actual

# **Ethics review**

Approved WMO

Date: 12-09-2018

Application type: First submission

Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam

(Rotterdam)

# **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 NL65384.078.18
Other Trial NL8069