# Reading the mind of the avatar: Social Cognition Training in Virtual Reality (DiSCoVR) for people with a psychotic disorder

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| **Ethische beoordeling** | Positief advies |
| **Status** | Werving gestart |
| **Type aandoening** | - |
| **Onderzoekstype** | Interventie onderzoek |

## Samenvatting

### ID

NL-OMON24564

**Bron**
Nationaal Trial Register

**Verkorte titel**
DiSCoVR

**Aandoening**

Virtual Reality, Social Cognition, Schizophrenia, Psychosis, Social Functioning, Emotion Recognition, Theory of Mind.

Virtual Reality, Sociale cognitie, schizofrenie, psychose, sociaal functioneren, emotieherkenning, theory of mind

### Ondersteuning

**Primaire sponsor:** University Medical Center Groningen
**Overige ondersteuning:**  KIEM grant from NWO, registration number 628.005.007 (€75.000), used for software development.
 PhD position, salary and bench fee, financed by GGZ Drenthe, department of

Long-term care. 260.000
 Grad school BSS, fund for external PhD students, €8000, faculty of Behavioral and Social Sciences, University of Groningen. Used for participant compensation, participant travel expenses, material costs.
 Staff fund, €10.000, faculty of Behavioral and Social Sciences, University of Groningen
 Costs of VR headsets for VRelax, financed by GGZ Drenthe, €2632.

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

Social Cognition (emotion perception, social perception and Theory of Mind)
<br><br>
Change in scores (from baseline to post-treatment) on Ekman 60 Faces (emotion perception), The Awareness of Social Inferece Test (TASIT; theory of mind and social perception).

# Toelichting onderzoek

### Achtergrond van het onderzoek

People with psychotic disorders commonly have deficits in social cognition and social functioning. Current approaches to improve social cognition may not be ecologically valid, and patients cannot practice skills in dynamic social interactions, which could be solved by providing social cognition training (SCT) in Virtual Reality (VR), since VR allows for practice of skills in situations resembling real life, and at the same time is safe and controllable. To this end, DiSCoVR was developed, an individual 16-session VR-based SCT. In a multicenter Randomized Controlled Trial (n=100), we compare DiSCoVR to a VR relaxation training, VRelax, to assess the efficacy of DiSCoVR on social cognition, social functioning and other secondary measures such as psychiatric symptoms and self-esteem.

### Doel van het onderzoek

Deficits in social cognition and social functioning are commonly found in people with a psychotic disorder. While current approaches to improve social cognition are known to impact measures of social cognition, SCT may be improved by using Virtual Reality. VR is more realistic and interactive than conventional stimuli and can therefore better simulate social situations which can be used to learn and practice social cognition and functioning. We hypothesize that a VR SCT improves social cognition and social functioning, compared to an active VR control condition, and that this effect will still be present at follow-up three months after end of treatment.

### Onderzoeksopzet

Data will be collected at baseline (T0), post-treatment (T1) and three months after completion of treatment (T2). Some data will be collected in each session (e.g., behaviour in VR environment, emotions and stress in VRelax). Cyber sickness data will be collected in session 3 of both treatments. For DiSCoVR, state anxiety, dissociation and feature binding will be assessed between sessions 1 and 2.

### Onderzoeksproduct en/of interventie

Both arms receive treatment as usual. In addition, the DiSCoVR group receives a 16-session (8 weeks, twice per week) individual intervention aimed at improving social cognition. Participants in this group practice with social situations in Virtual Reality. The intervention is provided by a therapist who gives strategy coaching and feedback. The active control group, VRelax, completes an individual, 16 session (2x per week, 8 weeks) VR relaxation training. Participants visit relaxing virtual environments (e.g., swimming with dolphins). The intervention is provided by a therapist who teaches relaxation techniques and coaches the participant in applying these in daily life.

## Contactpersonen

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## Deelname eisen

## Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Age 18 - 65.

- Indication of impaired social cognition by treating clinician.

- Written informed consent.

- Diagnosis of psychotic disorder, as determined by a structured clinical interview in the past three years or as determined by a diagnostic interview (MINI plus) at baseline

## Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- An estimated IQ below 70, and/or a diagnosis of intellectual disability.

- Insufficient proficiency of the Dutch language.

- (Photosensitive) epilepsy

# Onderzoeksopzet

## Opzet

| | |
|---|---|
| Type: | Interventie onderzoek |
| Onderzoeksmodel: | Parallel |
| Toewijzing: | Gerandomiseerd |
| Blindering: | Enkelblind |
| Controle: | Geneesmiddel |

## Deelname

Nederland

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|---|---|
| Status: | Werving gestart |
| (Verwachte) startdatum: | 01-04-2018 |
| Aantal proefpersonen: | 100 |
| Type: | Verwachte startdatum |

# Ethische beoordeling

Positief advies

| | |
|---|---|
| Datum: | 05-12-2017 |
| Soort: | Eerste indiening |

# Registraties

## Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

## Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

| Register | ID |
|---|---|
| NTR-new | NL6693 |
| NTR-old | NTR6863 |
| Ander register | METC (UMCG); ABR number; UMCG : 2017/573; NL63206.042.17; 201700669 |

# Resultaten

**Samenvatting resultaten**
N/A