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

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON24564

Source
NTR

Brief title
DiSCoVR

Health condition

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

Sponsors and support

Primary sponsor: University Medical Center Groningen
Source(s) of monetary or material Support:  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.

Intervention

Outcome measures

Primary outcome

Social Cognition (emotion perception, social perception and Theory of Mind)

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).

Secondary outcome

- Social cognition scores (Ekman 60 Faces, TASIT) at follow-up, in comparison to post-treatment.

- Social functioning, as measured using an interview (PSP) and experience sampling (custom questionnaire). Experience sampling will inquire about participants' emotions and their (current and recent) experience of social situations (e.g., are they in company, how enjoyable is this social contact).

- Other secondary outcomes include self-esteem (SERS), social anxiety (SIAS), anxiety (BAI), depression (BDI), stress (PSS), psychotic symptoms (PANSS), information processing (TMT) and paranoia (GPTS). In the sessions, some additional behavioural and subjective experience data is collected, e.g., cyber sickness (SSQ; both groups), subjective emotions and stress (VRelax), behaviour and performance (e.g., distance from avatars, % of correct answers in exercises) in and experience of virtual environment (DiSCoVR), state anxiety (STAI; DiSCoVR), feature binding (picture task; DiSCoVR), and dissociation (CADSS; DiSCoVR).

Study description

Background summary

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.

Study objective

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.

Study design

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.

Intervention

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.

Contacts

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Eligibility criteria

Inclusion criteria

- 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

Exclusion criteria

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

- Insufficient proficiency of the Dutch language.

- (Photosensitive) epilepsy

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial

Masking:	Single blinded (masking used)
Control:	Active

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-04-2018
Enrollment:	100
Type:	Anticipated

Ethics review

Positive opinion

Date:	05-12-2017
Application type:	First submission

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
NTR-new	NL6693
NTR-old	NTR6863
Other	METC (UMCG); ABR number; UMCG : 2017/573; NL63206.042.17; 201700669

Study results

Summary results
N/A