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**Feasibility, acceptability and preliminary efficacy of DiSCoVR, a virtual reality intervention to improve social cognition in people with psychotic disorder**

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**Learning Goal:**

Gain insight in the possibilities that virtual reality offers for social cognitive interventions, gain insight in user and therapist experiences.

**Abstract Text:**

Social cognitive deficits have been linked to social dysfunction in people with a psychotic disorder. Social Cognition Training (SCT) has received substantial research attention as a method to remediate social dysfunction by practicing with social stimuli and teaching compensatory strategies. Meta-analyses indicate that social cognition can be improved with SCT. However, current approaches may insufficiently incorporate application of social cognitive skills in real-life social interactions, which may limit generalization to social functioning. Virtual Reality (VR) can simulate social interactions very realistically, but can also be controlled and personalized, making it a promising tool for SCT.

We conducted a pilot study (n=22) on the feasibility, acceptance and preliminary effects of DiSCoVR (Dynamic Interactive Social Cognition Training in Virtual Reality), a 16-session individual VR SCT, on social cognition and psychiatric symptoms. Emotion perception, social perception and theory of mind, and social interaction are practiced in immersive, interactive virtual environments. Feasibility and acceptance were evaluated using a survey for participants and therapists. Social cognition was assessed using picture, video and story tasks. Psychiatric symptoms were measured using interviews and questionnaires.

Participants (completers: n=17) indicated that they enjoyed DiSCoVR (M=7.3 out of 10), liked the combination of VR and a therapist (M=7.9) and considered it to be helpful for daily social contact (M=7.0). 70% indicated that the opportunity to practice with social situations in VR was the most important strength of DiSCoVR. Emotion perception improved significantly ( $t=-4.79$ ,  $p<.001$ ). No change was found on the other measures.

The intervention was considered to be feasible and acceptable by participants and therapists. While emotion perception improved, no change was observed in higher-order social cognition. We are currently studying a new version of the DiSCoVR treatment protocol and software in a multicenter randomized controlled trial.

**ON THE HEALING POWER  
OF HUMAN RECONNECTION**