## The Potential of Virtual Reality Exposure Therapy for Social Anxiety Disorder Patients: A Pilot Study

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Master Thesis

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June 26, 2022

Previous research provided promising findings of the effectiveness of applying virtual reality in the treatment of social anxiety disorder (SAD). Especially virtual reality exposure therapy (VRET) is commonly applied to reduce symptoms of SAD, such as the fear of being negatively judged. However, more insight into the effectiveness of extensive and realistic VRET is crucial. The purpose of the present pilot study was to explore whether social anxiety disorder patients, participating in nine VRET sessions improve stronger in symptoms compared to patients, participating in one session VRET plus meditation and social skills training.

In the pilot study (within-subject multiple case design), patients (n=9) diagnosed with SAD, admitted to an inpatient clinic were included. Patients were randomly assigned to one of the experimental conditions (9xVRET vs. 1xVRET+meditation+social skills). Included measures pre-post were the Social Interaction Anxiety Scale, Social Phobia Scale, State-Trait Anxiety Inventory, Body Sensation Questionnaire, Agoraphobic Cognitions Questionnaire, and Beck Depression Inventory-II. A reliable change analysis was applied to assess symptom changes after-intervention per patient.

Improvement in symptoms after participating in the VR intervention were reported in both groups, across outcomes of social anxiety. Although patients differed in the extent of improvement and recovery, the degree of clinical improvement appeared to be similar in both the extensive VRET-9 treatment and the single VRET group.

Findings support the potential of VRET in the treatment of social anxiety disorder. The lack of difference between outcomes of the extensive VRET format vs. single session might indicate beneficial effects of VRET already after one session. Low sample size, lacking TAU-only control group, lacking follow-up, and other influencing factors such additional inpatient treatment, limit findings of the pilot study. Yet, the improved outcomes post-treatment legitimize the importance of further research.