

# Client Perspective: Acceptability of Combining Cognitive Remediation and transcranial Direct Current Stimulation for People with Severe Mental Illness

Anika Poppe<sup>1,2</sup>, Leonie Bais<sup>2</sup>, Daniëlle van Duin<sup>3,4</sup>, Branislava Ćurčić-Blake<sup>5</sup>, Gerdina H.M. Pijnenborg<sup>1,6</sup>, Lisette van der Meer<sup>1,2</sup>

<sup>1</sup>University of Groningen, Groningen, The Netherlands. <sup>2</sup>Lentis Psychiatric Institute, Zuidlaren, The Netherlands. <sup>3</sup>Trimbos-Institute, Utrecht, The Netherlands. <sup>4</sup>Phrenos Center of Expertise, Utrecht, The Netherlands. <sup>5</sup>University Medical Center Groningen, Groningen, The Netherlands. <sup>6</sup>GGZ Drenthe, Assen, The Netherlands.



## Introduction

**Cognitive impairments** commonly limit **everyday functioning** in people with **severe mental illness (SMI)**

**Cognitive remediation (CR)** targets cognitive impairments and can improve everyday functioning.

**Transcranial direct current stimulation (tDCS)** targets neural plasticity and may **enhance** the learning effects from cognitive remediation.

**Objective:** Is combining CR and tDCS a feasible and acceptable intervention for people with SMI?

## Method

**Participants:** 24 service users with SMI living in residential psychiatric settings

**Intervention:** 16 weeks, 32 sessions, 20-45 mins CIRCuITS combined with active tDCS (n=16) or with sham tDCS (n=16)

**Feasibility** assessed by retention and drop-out rates

**Acceptability** assessed by interviews with participants using the Theoretical Framework of Acceptability (Sekhon et al., 2017)

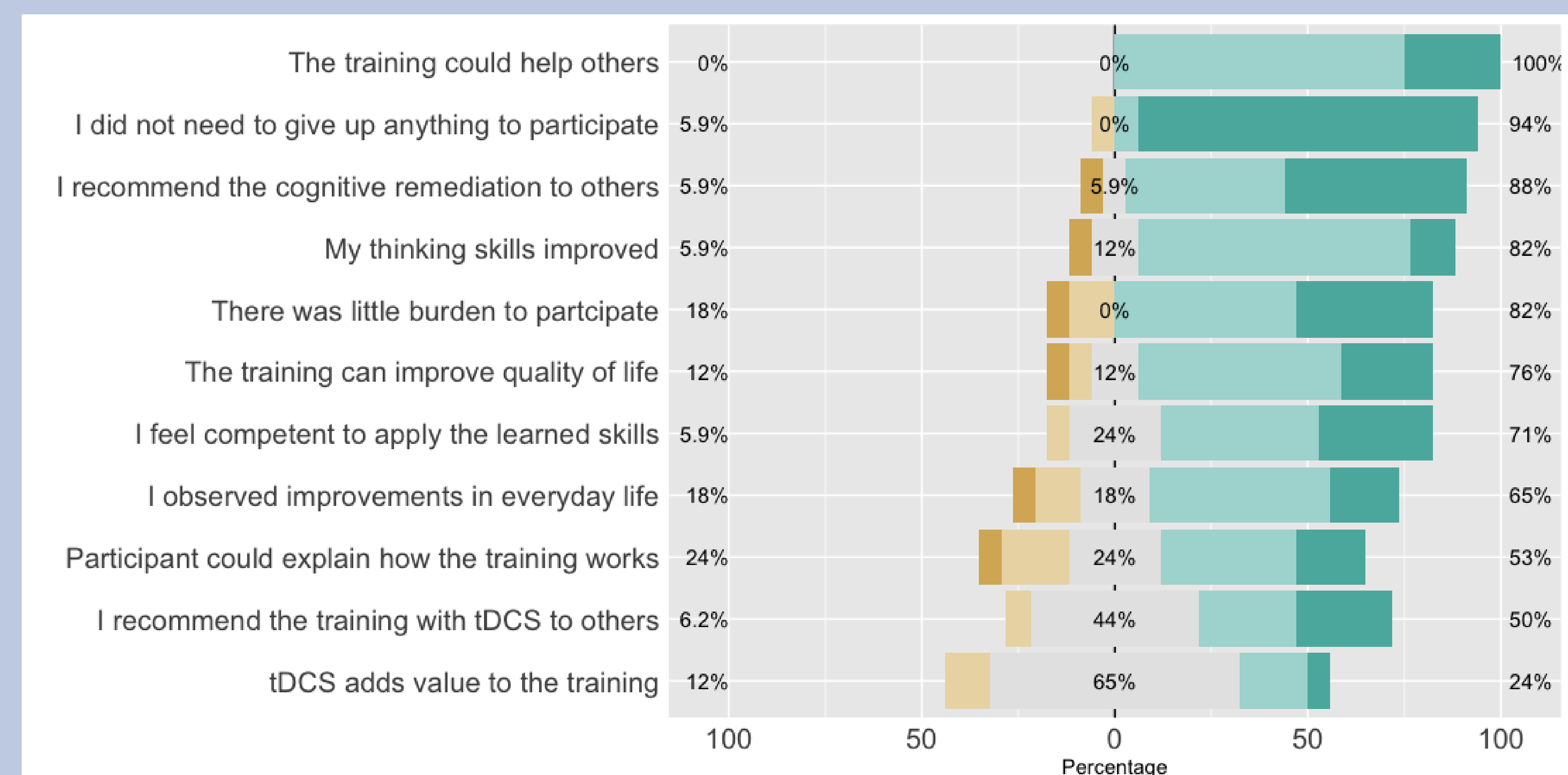


Find more information about the trial in the study protocol (Poppe et al., 2021, *Trials*)

## Results

### Acceptability

Interviews with 11 treatment completers and 5 non-completers



### Feasibility

**Retention rate** (completing 20+ sessions)  
Expected: >60%  
Actual: 62.5%

**Drop-out rate**  
Expected: 20%  
Actual: 17.5%

## Conclusions & Take-home

Combination of CR and tDCS is **feasible** and **acceptable** to service users with SMI  
**Completers and non-completers** of the training reported **personal benefits** to their cognitive and everyday functioning

Completers and non-completers **recommend** the training to others.

Participants experienced **little burden**, but are unsure whether tDCS adds value to the training.

Any questions? Get in touch:



Anika Poppe  
a.poppe@rug.nl