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75 Client Perspective: The Acceptability of Combining Cognitive Remediation and Transcranial Direct Current Stimulation for People with Severe Mental Illness

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Objective: A fundamental challenge for people with severe mental illness (SMI) is how to deal with cognitive impairments, which are common in this population and limit daily functioning. Cognitive remediation (CR) is a psychological intervention that targets these cognitive impairments to improve everyday functioning. However, reduced neural plasticity in people with SMI might hinder newly learned cognitive skills to sustain. Transcranial Direct Current Stimulation (tDCS) can promote this neural plasticity, which could enhance learning and result in longer-lasting improvements in cognitive and daily functioning. This study aimed to investigate the acceptability of the combination of CR and tDCS for people with severe mental illness who live in residential psychiatric facilities.
Participants and Methods: We interviewed participants of the ongoing HEADDSET pilot trial. In this pragmatic, randomized, controlled pilot trial, participants (individuals with SMI, 18 years or older, living in psychiatric facilities) received CR in combination with concurrent active tDCS (n = 13) or sham tDCS (n = 13) twice weekly for 16 weeks (32 sessions in total). We invited participants who finished the trial's training period (n = 16) to participate in the interviews. According to the Theoretical Framework of Acceptability (Sekhon et al., 2017), we assessed seven components of acceptability: Affective attitude, burden, intervention coherence, ethicality, opportunity costs, perceived effectiveness, and self-efficacy.
Results: Twelve of the 16 participants participated in the interviews: seven completers (attended at least 20 of the 32 sessions; M = 22.7, range = 20-25) and five non-completers (M = 11.6, range = 9-15). The reasons for not completing the protocol were mainly unrelated to the training (i.e., prolonged illness, substance abuse, personal circumstances). Only one participant did not complete the training because of its intensity. Independent of whether participants completed the intervention, they were positive about the training. They reported that they liked the CR program CIRCuiTS, that participating in the training was not a burden and that, in their opinion, the training could help others. Moreover, all participants observed improvement in their cognitive functioning, and six individuals (three completers and three non-completers) observed improvements in their everyday life (e.g., fewer problems with doing groceries, being more organized, and being able to concentrate and read a book). Overall, the participants would recommend the training to others. Non-completers of the intervention would recommend the CR with tDCS, while completers neither recommended nor advised against the addition of tDCS. Participants who understood and could explain how the training works reported more improvements in daily life, were better at formulating their treatment goals, and stated that the treatment goals were more relevant to them compared to the participants who were unable to do so.
Conclusions: The combined intervention of CR and tDCS was acceptable to individuals with severe mental illness, the participation in the training was no burden to both completers and non-completers, and participants reported personal benefits for their cognitive functioning and everyday life. Future studies should investigate the effectiveness of the intervention in larger randomized controlled trials.

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