POSTER 90

THE EFFECTS OF TDCS ON INDIVIDUALS WITH COMPROMISED COGNITION: A REVIEW OF THE LITERATURE

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Objectives: To review the literature pertaining to tDCS and its effects on cognition in individuals with neurological abnormalities, and to uncover a gap in knowledge in research on tDCS and propose future research to help fill this gap.

Methods: MEDLINE was searched using the keywords "transcranial direct current stimulation AND prefrontal cortex", with the search parameters "English only" and "2000-current". The search rendered 49 articles. Inclusion criteria for use in this literature review included: use of a sham or control group to compare to the experimental group, the research had to be conducted on cognitively impaired individuals, and age of the participants between 18-80 years. After certain articles were excluded based on these specific criterion, 20 articles remained to be used in the literature review.

Results: tDCS has shown to significantly improve cognitive functioning in individuals with compromised cognition due to neurological abnormalities. However, there is a gap in knowledge on the effects of tDCS for improving cognition with individuals with mild traumatic brain injury (MTBI).

Discussion: We propose a research study to measure the effects of tDCS on cognitive functioning in MTBI patients. If results show that cognition benefits from using this modality, occupational therapist may use this tool when rehabilitating their clients who have MTBI, in order to improve quality of life and lead to greater independence in daily activities.