Categories: Cognitive Intervention/Rehabilitation
Keyword 1: information processing speed
Keyword 2: cognitive rehabilitation
Keyword 3: aging (normal)
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2 Cognitive Processing Speed Training in Individuals with Multiple Sclerosis

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Objective: Cognitive impairment is observed in up to two-thirds of persons with Multiple Sclerosis (MS). Impairments in cognitive processing speed (PS) is the most prevalent cognitive disturbance, occurs early in the course of disease and is strongly associated with disease progression, various brain parameters and everyday life functional activities. As such, cognitive rehabilitation for PS impairments should be an integral part of MS treatment and management. The current study examines the efficacy of Speed of Processing Training (SOPT) to improve processing speed (PS) in individuals with Multiple Sclerosis (MS). SOPT was chosen because of its significant positive results in the aging populations.
Participants and Methods: This double-blind, placebo-controlled randomized clinical trial included 84 participants with clinically definite MS and impaired PS, 43 in the treatment group and 41 in the placebo control group. Outcomes included changes in the Useful Field of View (UFOV) and neuropsychological evaluation (NPE) including measure of PS (e.g., Pattern Comparison and Letter Comparison). Participants completed a baseline NPE and a repeat NPE post-treatment. Treatment consisted of 10 sessions delivered twice per week for 5 weeks. After the 5 weeks, the treatment group was randomized to booster sessions or no contact. Long-term follow-up assessments were completed 6 months after completion of treatment. The primary outcome were tests of PS including UFOV and neuropsychological testing.
Results: A significant effect of SOPT was observed on both the UFOV (large effect) and Pattern Comparison with a similar pattern of results noted on Letter Comparison, albeit at a trend level. The treatment effect was maintained 6-months later. The impact of booster sessions was not significant. Correlations between degree of improvement on the UFOV and the number of levels completed within each training task were significant for both Speed and Divided Attention indicating that completion of more levels of training correlated with greater benefit.
Conclusions: SOPT is effective for treating PS deficits in MS with benefit documented on both the UFOV and a neuropsychological measure of PS. Less benefit was observed as the outcome measures became more distinct in cognitive demands from the treatment. Long-term maintenance was observed. The number of training levels completed within the 10-sessions exerted a significant impact on treatment benefit, with more levels completed resulting in greater benefit.

Categories: Cognitive Intervention/Rehabilitation
Keyword 1: cognitive rehabilitation
Keyword 2: multiple sclerosis
Keyword 3: information processing speed
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3 CI Cognitive Therapy: Initial Application in a Pilot Study to Improve Cognitive Impairment in Chronic Stroke Survivors

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Objective: CI Cognitive Therapy (CICT) is a combination of behavioral techniques derived from CI Movement Therapy (CIMT) modified to apply to the cognitive domain, and Speed of (Cognitive) Processing Training (SOPT). SOPT is effective in improving cognitive function in the treatment setting and driving ability in everyday situations. The data concerning the effect of

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