

# Evidence-based Cognitive Intervention for Mild Cognitive

## Impairment and Mild Dementia

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## **Abstract**

**We developed a multimodal nonpharmacological intervention named “Multimodal Cognitive Enhancement Therapy (MCET)” that consists of six nonpharmacological interventions (cognitive training, cognitive stimulations, reality orientation, physical therapy, reminiscence therapy, and music therapy) that received an “A-grade” recommendation for improving cognition, mood, behavioral symptoms, activities of daily living (ADL), or quality of life (QoL) of people with dementia in a previous meta-analysis. In this study, we conducted a multi-center, double-blind, randomized, placebo-controlled, two-period crossover clinical trial (two 8-week treatment phases separated by a 4-week wash-out period) to**

compare the efficacy of the MCET with that of a mock-therapy.

Sixty-four participants with MCI or dementia whose Clinical Dementia Rating was 0.5 or 1 were randomized to the MCET group or the mock-therapy (placebo) group. Outcomes were measured at baseline, week 9, and week 21. Fifty-five patients completed the study. Mini-Mental State Examination (effect size = 0.47,  $p = 0.013$ ) and Alzheimer's Disease Assessment Scale-Cognitive Subscale (effect size = 0.35,  $p = 0.045$ ) scores were significantly improved in the MCET compared with mock-therapy group. Revised Memory and Behavior Problems Checklist frequency (effect size = 0.38,  $p = 0.046$ ) and self-rated Quality of Life - Alzheimer's Disease (effect size = 0.39,  $p = 0.047$ ) scores were significantly improved in the MCET compared with mock-therapy. MCET improved cognition, behavior, and quality of life in

people with MCI or mild dementia more effectively than

conventional cognitive enhancing activities did. (*DOI:*

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