

communicative effectiveness. A key finding is that younger caregivers, such as adult children, may report greater functional impairment in individuals with MCI. The current findings have implications for the use of perceived functional ratings, both for diagnostic purposes and as outcome measures in clinical trials.

Categories: Cognitive
Intervention/Rehabilitation

Keyword 1: mild cognitive impairment

Keyword 2: caregiver burden

Keyword 3: activities of daily living

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26 Improvement in Executive Function Following Goal-Oriented Attentional Self-Regulation Training in Veterans with mTBI

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Objective: Goal-Oriented Attentional Self-Regulation (GOALS) is a cognitive rehabilitation training that targets difficulties with executive control functions. Prior research has found that GOALS training improves executive function, functional outcomes, and PTSD symptoms in Veterans with comorbid PTSD and TBI. The objective of this study is to assess the effects of GOALS training versus an active time-matched Behavioral Health Education (BHE) intervention in military Veterans with history of mTBI and executive function difficulties.

Participants and Methods: Thirty-four veterans with a history of mild TBI (>6 months post-injury) and cognitive difficulties were randomized to GOALS or BHE group intervention. GOALS is a cognitive rehabilitation intervention that incorporates mindfulness-based attention regulation training, and goal management strategies applied to participant-defined goals. It consists of ten 2-hour sessions administered in small group format, and three individual 1-hour

sessions. The BHE group is a matched control condition that mirrors GOALS in terms of duration and level of involvement. Participants completed a comprehensive evaluation consisting of neuropsychological and ecologically valid functional performance measures of complex attention and executive function, before and after GOALS or BHE intervention. Overall neuropsychological attention/executive functioning included measures of working memory (Letter Number Sequencing, Auditory Consonant Trigrams), mental flexibility (Design & Verbal Fluency Switching, Trails B, Stroop Inhibition/Switching), inhibition (Stroop Inhibition), and sustained attention (Digit Vigilance). The Goal Processing Scale (GPS) was used to measure ecologically valid complex functional performance.

Results: Post GOALS training, but not post BHE, participants significantly improved on measures of attention /executive function including overall performance ($p=.02$), working memory ($p=.04$), sustained attention ($p=.03$), and inhibition ($p=.01$). On measures of complex functional task performance, post GOALS participants significantly improved in the domain of planning ($p=.02$).

Conclusions: GOALS training improved performance on neuropsychological and ecologically valid functional measures of complex attention and executive function in Veterans with mild TBI and cognitive difficulties. The current study highlights how mindfulness-based attention regulation and goal-management strategies applied to personal goals has positive effects across various outcomes. A percentage of individuals with mTBI continue to report persistent problems with cognition and daily functioning. Cognitive rehabilitation training such as GOALS may be beneficial for those with persistent difficulties following mTBI, even in chronic phase.

Categories: Cognitive
Intervention/Rehabilitation

Keyword 1: executive functions

Keyword 2: concussion/ mild traumatic brain injury

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