

neuropsychologically-based psychoeducation approaches to improving health and science literacy related to COVID-19.

Categories: Aging

Keyword 1: aging (normal)

Keyword 2: everyday functioning

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8 Walking for Cognitive Function in Older Adults: A Systematic Review and Meta-Analysis

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Objective: The world population is rapidly aging, and consequently, cognitive decline is becoming a larger public health crisis. There is no cure for dementia, but exercise has been consistently shown to improve cognitive function and slow cognitive decline in older adults. Given the many barriers to starting an exercise routine, walking is a particularly appealing intervention because it is safe, low-impact, and highly accessible (i.e., no upfront costs, no necessary equipment, and can be done almost anywhere and by anyone, given they are ambulatory). This abstract describes a systematic review and meta-analysis on peer-reviewed studies that examined randomized walking interventions for cognitive function in older adults.

Participants and Methods: The analyses included 1,286 older adults aged 55 and older (mean age = 73.1 years) across 19 studies that met inclusion criteria. All studies were randomized controlled trials (RCTs) of walking interventions with pre-post cognitive outcome data. A total of eight cognitive domains were identified: global cognition, attention, processing speed, working memory, language, visuospatial skills, declarative memory, and executive function. Effect sizes, measured as net treatment gain, were extracted and converted to Hedges' g . Three-level meta-analysis was used to account for dependency of effect sizes. Meta-regression analyses were used to examine whether the following variables moderated effect sizes: (a) cognitive status, (b) baseline activity

level, (c) age, (d) walking intervention duration, and (e) duration of individual walking sessions.

Results: Participation in walking interventions significantly benefitted broad cognitive functioning (Hedges' $g = 0.19$). The cognitive domains that specifically benefitted from walking were global cognition ($g = 0.60$), processing speed ($g = 0.15$), working memory ($g = 0.22$), declarative memory ($g = 0.18$), and executive functioning ($g = 0.15$). Cognitive status moderated this relationship, so that cognitively impaired older adults showed greater cognitive benefit from walking interventions. Baseline activity level did not moderate the effect; being sedentary at baseline yielded an effect size significantly greater than zero. The remaining moderator analyses were nonsignificant.

Conclusions: This systematic review and meta-analysis shows that walking interventions are associated with broad improvement in cognitive function in older adults. Walking benefits global cognition, processing speed, working memory, declarative memory, and executive function—the same cognitive domains that decline with normal cognitive aging. These findings are particularly important because walking is among the safest and most universally accessible forms of exercise. This will help healthcare providers make better lifestyle recommendations to their older patients. Future research should more rigorously examine potential moderating variables, such as walking intensity.

Categories: Aging

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9 The Likelihood to Disclose Symptoms of Sickness During the COVID-19 Pandemic Increases with Age Across Adulthood

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