

76 The Effects of Strategies-Based Training in Improving Memory Outcomes in Healthy Older Adults

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Objective: The goal of our study was to examine the possible effects of a strategies-based training intervention on objective memory performance and subjective memory in healthy older adults. While slight declines in memory naturally occur in the aging process, these changes may impact the quality of life for older adults.

Participants and Methods: Patients ($n = 11$, aged 50-80, mean age = 70.73, $SD = 4.41$) with subjective memory complaints were recruited from memory clinics within an academic medical center. All participants engaged in one-on-one, three one-hour memory training sessions over the course of several weeks to undergo strategies-based training intervention (e.g., mnemonics). All participants completed neuropsychological battery of tests at baseline and at post-intervention (about 8-10 weeks after baseline). Tests included the Montreal Cognitive Assessment (MoCA), the Hopkins Verbal List Test (HVLT-R), the Visual Reproduction subtest of the Wechsler Memory Scale (WMS-IV), and the Multiphasic Memory Questionnaire.

Results: Data were analyzed using a mixed between-within subjects ANOVA and t -tests. Groups were created based on the participant's MoCA score. While a total of 11 participants completed baseline testing and the memory training sessions, two did not return for post-intervention testing; as such their data were excluded from analyses. Older adults with a MoCA score of 26-30 ($n = 6$), but not older adults with a MoCA score 25 and below ($n = 3$), had a significant improvement in visual learning and encoding, $F(1, 7) = 10.028$, $r = .50$, $p < .05$. The high MoCA performers demonstrated an improved performance in their immediate visual memory from baseline ($M = 10$, $SD = 3.53$) to post-intervention ($M = 12$, $SD = 3.35$), $t(9) = .895$, $p = .001$ (two-tailed). Ratings of memory satisfaction among high MoCA performers also increased from baseline ($M = 48$, $SD = 11.47$) to post-intervention ($M = 51$, $SD = 5.43$), $t(9) = .707$, $p < .05$ (two-tailed). Among both groups, a significant increase in perceived memory ability was demonstrated from baseline ($M = 50$, $SD =$

10.1) to post-intervention ($M = 54$, $SD = 12.35$), $t(8) = .807$, $p < .05$ (two-tailed).

Conclusions: These findings indicate that a brief memory training program may improve visual encoding and subjective memory in healthy older adults with memory concerns. Individuals with subjective memory concerns who undergo a cognitive training program seem to demonstrate improved encoding of nonverbal material. These participants also reported a greater memory satisfaction and improved perceived memory ability after completion of a memory training program. Interestingly, these findings were only seen in adults whose MoCA performance was within normal limits. Although a systematic review suggests the improvement of memory performances on cognitively impaired participants (Simon, Yokomizo, & Bottino, 2012), this may not have been demonstrated in the current study due to a low sample size and/or to the brief duration of the cognitive training. Future directions include increasing sample size and offering booster sessions to explore whether cognitively impaired adults may benefit from repetition.

Categories: Cognitive Intervention/Rehabilitation

Keyword 1: memory training

Keyword 2: mild cognitive impairment

Keyword 3: aging (normal)

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77 Feasibility and Effectiveness of a Telehealth-Delivered Inductive Reasoning Training Program for Older Adults

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Objective: Inductive reasoning training has been found to be particularly effective at improving inductive reasoning, with some evidence of improved everyday functioning and driving. Telehealth may be useful for increasing access to, reducing time and travel burdens of,