The Effect of Associative Memory Exercises in Older Adults

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Memory lapse is a common concern among the elderly. It is known that age is associated with decreasing memory [Luo2008]. At any age, however, it is possible to sharpen and strengthen memory [Kes2011]. The purpose of this study is to investigate the effect of brain exercises on associative memory in individuals 70 years and older with no apparent sign of impaired cognition. We hypothesize that frequent and regular exercise of associative memory improves the mental state of the elderly. To test our hypothesis, two associative memory exercises targeting the connection between the left and right brain hemispheres were designed and applied to 9 elderly volunteers between 70 to 90 years of age, during 8 consecutive weeks, with 3 exercise sessions/week and an hour/session. All participants’ memory and mental condition were assessed using the Wechsler Memory Scale (WMS III) questionnaire and the Montreal Cognitive Assessment (MOCA). These two assessments were run at the beginning and the end of the exercise regime. The results show that, on average, participants’ memory and mental states improved significantly over the eight weeks of trials. For instance, in one of the WMS subtests the mean (±standard deviation) before starting the exercise period was 31.7±13.6 and after the last session of the exercise regime the mean was 51.1±8.4. The results are encouraging; they suggest that the designed memory exercises could be used as a tool to improve the cognitive state of older people. Hence, engaging on the proposed memory exercises regularly may delay the onset of dementia or Mild Cognitive Impairment.

REFERENCES
