

Publication

Computerized working memory training in healthy adults: A comparison of two different training schedules

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This study compared a high intensity working memory training (45 minutes, 4 times per week for 4 weeks) with a distributed training (45 minutes, 2 times per week for 8 weeks) in middle-aged, healthy adults. The aim was to clarify whether a computerised working memory training is effective and whether intensity of training influences training outcome. To evaluate the efficacy and possible transfer effects, a neuropsychological test battery assessing short- and long-term memory, working memory, executive functions and mental speed was applied at baseline and at retest. Our results indicate that the distributed training led to increased performance in all cognitive domains when compared to the high intensity training and the control group without training. The most significant differences revealed by interaction contrasts were found for verbal and visual working memory, verbal short-term memory and mental speed. These results support the hypothesis that cognitive enhancement by cognitive intervention is effective in healthy individuals, and that a distributed training schedule is superior to a high intensity intervention.

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