

One-month worth of memory training results in 30 minutes

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A new study shows that when participants are taught an effective strategy for a working memory training task, they quickly improve their performance in the same way as those who have undergone typical working memory training without strategy instructions for a month or longer. The significance of strategies was evident also in the controls who did not receive any strategy advice: Use of self-generated strategies was associated with better working memory task performance at post-test.

These results suggest that a significant part of working memory training effects is a result of a fast development of [task](#)-specific strategies during training rather than an increase in working memory capacity, as was originally believed. This can explain why any substantial effects of typical working memory training are limited to the trained task and its untrained variants. There are a number of commercial working memory training programs available, but unfortunately, the training effects do not generalize much beyond tasks that are similar to the trained ones.

The study participants were 116 Finnish adults randomized into three groups. The first group received a short [strategy](#) instruction and trained a working [memory](#) updating task for a half-hour. The second group performed the same computerized [training](#) session without any strategy advice. The third group participated only in the pre- and post-test. Self-generated strategies were probed with questionnaires at the posttest.

The study has just been published at the peer-reviewed open access

journal *Scientific Reports*.

More information: Matti Laine et al, The early effects of external and internal strategies on working memory updating training, *Scientific Reports* (2018). [DOI: 10.1038/s41598-018-22396-5](https://doi.org/10.1038/s41598-018-22396-5)

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