

Scientists confirm effectiveness of cognitive rehabilitation in multiple sclerosis

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Kessler Foundation researchers published long-term followup results of their MEMREHAB trial, which show that in individuals with MS, patterns of brain activity associated with learning were maintained at 6 months post training. The article, A pilot study examining functional brain activity 6 months after memory retraining in MS: the MEMREHAB trial, was published online ahead of print on June 14 by *Brain Imaging and Behavior*. The article appeared in the Neuroimaging and Rehabilitation Special Issue. The authors are Ekaterina Dobryakova, PhD, Glenn Wylie, DPhil, John DeLuca, PhD, and Nancy Chiaravalloti, PhD, of Kessler Foundation.

This pilot study was based on the Foundation's MEMREHAB Trial, which provided the first Class I evidence for the efficacy of cognitive rehabilitation in MS. (Chiaravalloti N, et al: An RCT to treat [learning impairment](#) in MS. *Neurology* 2013(81) [doi: 10.1212/01.wnl.0000437295.97946.a8S](#)), was released as an epub ahead of print on November 8. The 10-session memory retraining protocol used in the MEMREHAB study was the modified Story Memory Technique (mSMT).

For the [pilot study](#), participants underwent evaluation of memory performance and [brain activity](#) at baseline, immediately following memory retraining, and at 6-month followup. Results showed that the patterns of increased cerebral activation that correlated with learning were maintained at 6-month followup. "These results support the long-term effectiveness of [cognitive rehabilitation](#) in individuals with

cognitive impairment caused by MS," said Nancy Chiaravalloti, PhD, director of Neuroscience & Neuropsychology and Traumatic Brain Injury (TBI) Research at Kessler Foundation. "For optimal care, it is crucial for clinicians who care for this population to become familiar with the mSMT protocol."

The mSMT protocol has been translated into Spanish and is being used in the U.S., Mexico, and Argentina. A Chinese translation has also been completed for use in upcoming studies. The protocol is currently being tested in the population with [cognitive impairment](#) caused by TBI.

More information: [DOI: 10.1007/s11682-014-9309-9](https://doi.org/10.1007/s11682-014-9309-9)

Provided by Kessler Foundation

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