

# Multiple sclerosis researchers find role for working memory in cognitive reserve

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Kessler Foundation scientists have shown that working memory may be an underlying mechanism of cognitive reserve in multiple sclerosis (MS). This finding informs the relationships between working memory, intellectual enrichment (the proxy measure for cognitive reserve) and long-term memory in this population.

"Working memory mediates the relationship between intellectual enrichment and long-term memory in [multiple sclerosis](#): An exploratory analysis of [cognitive reserve](#)" was published online ahead of print by the *Journal of the International Neuropsychological Society* on July 14. The authors are Joshua Sandry, PhD, and research scientist James F. Sumowski, PhD, of Neuropsychological & Neuroscience Research at Kessler Foundation. Dr. Sandry is a postdoctoral fellow funded by a grant from the National MS Society.

Cognitive symptoms, including deficits in long-term memory, are known to affect approximately half of individuals with MS. This study was conducted in 70 patients with MS, who were evaluated for intellectual enrichment, verbal long-term memory, and [working memory](#) capacity. "We found that working memory capacity explained the relationship between intellectual enrichment and long-term memory in this population," said Dr Sandry. "This suggests that interventions targeted at working memory in people with MS may help build cognitive reserve to protect against decline in [long-term memory](#)."

**More information:** [www.ncbi.nlm.nih.gov/pubmed/25017699](http://www.ncbi.nlm.nih.gov/pubmed/25017699)

Provided by Kessler Foundation

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