

BRIEF SUMMARY

Simons, J. S., Lee, A. C. H., Graham, K. S., Verfaellie, M., Koutstaal, W., Hodges, J. R., Schacter, D. L., & Budson, A. E. (2005). Failing to get the gist: Reduced false recognition of semantic associates in semantic dementia. *Neuropsychology, 19*, 353–361.

In two experiments involving patients with semantic dementia, the impact of semantic memory loss on both true and false recognition was investigated. The first experiment examined recognition memory for categories of everyday objects that shared a predominantly semantic relationship. There were significant differences between patients and controls in true and false recognition of objects from categories for which a large number of related exemplars were studied, but impairments diminished when category sizes were reduced. Consistent with these results, the patients showed preserved item-specific recollection for the pictorial stimuli, but compared with controls showed significantly reduced utilization of gist information regarding the categories of objects, a result consistent with the patients' degraded semantic knowledge. To test this hypothesis, a second experiment used categories of abstract objects that were related to one another perceptually rather than semantically. Patients with semantic dementia showed no significant impairments in true or false recognition, and were indistinguishable from controls in terms of item-specific recollection and gist memory. Direct comparison between the two tasks confirmed a dissociation in semantic dementia between gist utilization for semantically- versus perceptually-related objects. These results suggest that the reduction in gist memory in semantic dementia is largely specific to semantic representations and cannot be attributed to general difficulty with abstracting and/or utilizing gist-like commonalities between stimuli.

KEYWORDS: frontotemporal dementia, temporal lobe, episodic memory, semantic memory, false memory
