

BRIEF SUMMARY

Gold, C. A., Marchant, N. L., Koutstaal, W., Schacter, D. L., & Budson, A. E. (2007). Conceptual fluency at test shifts recognition response bias in Alzheimer's disease: Implications for increased false recognition. *Neuropsychologia, 45*, 2791–2801.

The presence or absence of conceptual information in pictorial stimuli may explain the mixed findings of previous studies of false recognition in patients with mild Alzheimer's disease (AD). To test this hypothesis, 48 patients with AD were compared to 48 healthy older adults on a recognition task first described by Koutstaal et al. [Koutstaal, W., Reddy, C., Jackson, E. M., Prince, S., Cendan, D. L., & Schacter, D. L. (2003). False recognition of abstract versus common objects in older and younger adults: Testing the semantic categorization account. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 29*, 499-510]. Participants studied and were tested on their memory for categorized ambiguous pictures of common objects. The presence of conceptual information at study and/or test was manipulated by providing or withholding disambiguating semantic labels. Analyses focused on testing two competing theories. The semantic encoding hypothesis, which posits that the inter-item perceptual details are not encoded by AD patients when conceptual information is present in the stimuli, was not supported by the findings. In contrast, the conceptual fluency hypothesis was supported. Enhanced conceptual fluency at test dramatically shifted AD patients to a more liberal response bias, raising their false recognition. These results suggest that patients with AD rely on the fluency of test items in making recognition memory decisions. We speculate that AD patients' over-reliance upon fluency may be attributable to (1) dysfunction of the hippocampus, disrupting recollection, and/or (2) dysfunction of the frontal cortex, disrupting post-retrieval processes.

KEYWORDS: false recognition, Alzheimer's disease, conceptual fluency, response bias, ambiguous images
