The Effects of Retrieval Practice on False Recall

Kimberly K. Wear¹, David S. Gorfein², & Charles J. Brainerd³

¹High Point University, ²The University of Texas, Arlington, & ³Cornell University

Abstract

Contrasting predictions for false recall were generated for the retrieval-induced-forgetting model (Anderson, 2003) and recollection rejection model (Brainerd, Reyna, Wright, & Moijardin, 2003). These predictions were tested by having participants differentially practicing different portions of DRM lists (Stadler, Roediger, & McDermott, 1999). Retrieval-induced forgetting (Anderson, 2003) predicts that the practice of any item will suppress its strongest competitors. Therefore practicing items highly associated to the critical lure should suppress the recall of the lure. Recollection rejection (Brainerd, Reyna, Wright, & Moijardin, 2003) predicts that the practice of low associates forms a different gist than that of high associates, and the resulting gist is not similar enough to include the critical lure. In a test phase, free recall of previously studied items was collected to assess the effects of differential practice.

Method

Participants
- 41 Introductory Psychology students
- 16 DRM lists chosen from Stadler, Roediger, & McDermott (1999)
- 12 associates for each lure from Roediger, Watson, McDermott, & Gallo (2001)

Procedure
- Informed Consent
- Experimental Task – Retrieval Practice Paradigm
  - Study – DRM list 1 minute
  - Study for Memory Test
  - Retrieval Practice – 2 minutes
  - Word Fragment Completion
  - Each Practiced Item presented for completion 3 times
  - Free Recall – 4 minutes
- F(2, 320) = 51.80,
- Interaction between Similarity & whether items were presented at study or not (Lure) F(3, 280) = 2.98, MSE = 0.07, p < .05

The Effect Degree of Similarity on Recall of False Lure

F(3, 120) = 2.91, MSE = 0.11, p < .05

Conclusion

The results for the false lure items clearly support the Recollection Rejection model.

References