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### **Proceedings of the Annual Meeting of the Cognitive Science Society**

#### **Title**

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#### **Permalink**

<https://escholarship.org/uc/item/2nq403r6>

#### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43)

#### **ISSN**

1069-7977

#### **Authors**

Dymarska, Agata  
Connell, Louise  
Banks, Briony

#### **Publication Date**

2021

Peer reviewed

# **More is not necessarily better – how different aspects of sensorimotor experience affect recognition memory for words**

**Agata Dymarska**

Lancaster University, Lancaster, United Kingdom

**Louise Connell**

University of Lancaster, Lancaster, United Kingdom

**Briony Banks**

Lancaster University, Lancaster, United Kingdom

## **Abstract**

We investigated the effect of semantic information on word memory, using imageability and sensorimotor strength as predictors, with data from a mega-study of word recognition memory (Cortese et al., 2010; 2015), as well as from an online memory task. Memory performance was analysed in hierarchical linear regressions. Both sensorimotor strength and imageability had an effect on word memory performance, but not as strong as reported in previous literature. However, the effects were smaller when the memory task was unexpected, suggesting that the semantic effects are dependent on memory strategies (or context). Most importantly, different types of sensorimotor strength had a variable effect on memory, which was not in line with the prediction of the semantic richness effect, and highlighted the importance of a multi-dimensional approach to measuring and testing semantic experience, and its effect on cognitive processing. The findings have implications for the use of semantic variables in memory research.