Title

Semantic diversity, frequency and learning to read: A mini-mega study withchildren

Permalink

https://escholarship.org/uc/item/29k1r5bx

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 39(0)

Authors

Hsiao, Yaling
Nation, Kate

Publication Date

2017

Peer reviewed

Semantic diversity, frequency and learning to read: A mini-mega study with children

Yaling Hsiao
University of Oxford

Kate Nation
University of Oxford

Abstract: Children who read more tend to be better readers than children who read less. Reading exposure captures not only the number of times words are experienced but also the breadth of the contexts words appear in. Using a large children's corpus of written language, we quantified the former as word frequency and the latter as Semantic Diversity (SemD) (Hoffman et al., 2013). SemD was indexed using Latent Semantic Analysis to calculate the degree of semantic dissimilarity between the contexts in which each appeared. We selected 300 words that varied in SemD for a visual lexical decision and naming task with 9-year-old children (N=114). Results showed that both frequency and SemD were associated with performance, independently accounting for variation in speed and accuracy. Those words high in frequency and high in SemD were read more efficiently. These findings show that factors beyond frequency are important in determining children's word reading.