

Effects of Semantic Diversity on Word Learning in Second Language Learners

Chun-hsien Hsu & Ting-Hsin Yen

Institute of Cognitive Neuroscience, National Central University, Taiwan

Abstract

This study aims to link the role of semantic diversity with word learning. To see whether learning words with high semantic diversity, which are distributed in dissimilar documents, would be more efficient than learning words with low semantic diversity. The semantic diversity defined here is based on measurements of semantic similarity between documents using the Universal Sentence Encoder, which encodes texts into high-dimensional vectors. After reading documents, participants' recognition accuracy is significantly higher to new words presented in high semantic diversity context than to words presented in low semantic diversity context.