

Leach, L., & Samuel, A. (2007). Lexical configuration and lexical engagement: When adults learn new words. *Cognitive Psychology*, 55(4), 306-353.

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Summary: People know thousands of words in their native languages and each of these words must be learned at some time in the person's lifetime. A large number of these words will be learned when the person is an adult, reflecting the fact that the mental lexicon is continually changing. This research explored how new words get added to the mental lexicon and provides empirical support for a theoretical distinction between what is called lexical *configuration* and lexical *engagement*. Lexical configuration is the set of factual knowledge associated with a word (e.g., the word, sound, spelling, meaning, or syntactic role). Lexical engagement is the ways in which a lexical entry dynamically interacts with other lexical entries and with subliminal representations.

Learning conditions were systematically varied, and separate measures of lexical configuration and engagement were used. Several surprising dissociations in behavior were found that demonstrated the importance of the theoretical distinction between configuration and engagement.

Assumptions:

- People know thousands of words in their native languages.
- Each new word a person learns includes a configuration of facts.
- Teaching fewer new words make the learning of each one easier.
- Training with meaning produces stronger engagement.

Results:

- The analysis of lexical configuration demonstrated that the poor lexical engagement could not be attributed to any simple intentional resource limitation.
- The production component of word learning has a positive effect on lexical configuration coupled with a negative effect on lexical engagement.
- Phonological encoding provides poor support of later lexical engagement.
- Semantic encoding enhanced engagement.
- Evidence suggested that when a literate person hears a word, a lexical representation is created that includes an extensive orthographic code.

Conclusions:

- This study demonstrated the importance of the theoretical distinction between configuration and engagement.
- Research results provide excellent base of distinguishing between simply configuring certain phonological information versus establishing a representation that can fully engage in lexical behavior.
- Training with meaning produced stronger evidence of engagement; training without meaning, via phoneme monitoring, led to weak lexical engagement.
- It is relatively easy to establish lexical configuration information that captures the phonological form, but it takes more time/training to develop lexical structures

based on meaning that are capable of lexical engagement.

Suggestions for Teachers:

- Teachers should understand that different things are being learned when lexical configuration and lexical engagement are considered.
- Keep in mind that students were found to be more able to associate an utterance with an object if the utterance was a particular word that had just been learned, rather than an utterance made of syllables that they had heard that did not have high co-occurrence properties.

Suggestions for Literacy Leaders:

- Help educators to keep apprised of new information and trainings regarding lexical configuration and engagement.
- Provide teacher awareness/training on how students add new words to their mental lexicon.