

Title: "The Role of Orthographic Redundancy, Versatility, and Spelling-Sound Correspondences in Word Identification"

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Subject(s): Phonics and Decoding

Grade Level: K-6

Synopsis: Two experiments were done to evaluate the effect of *versatility* on identification of a word and its meaning. *Versatility* is the number of different words that exemplify a letter or phoneme. The authors hypothesized that "one part of the word identification process involves the transfer of knowledge about positional letter functions, gained through experience with a number of different words." They tested this hypothesis by creating two lists of words, one in which "positional letters occur in a large number of different words," and one in which "positional letters occur in a few number of different words." (p. 74) They controlled for "orthographic redundancy (total frequencies of letter patterns), letter-sound correspondences, and word frequencies." (p. 74)

In the first experiment (Task 1, *lexical*), subjects saw a word or non-word projected on a screen. The researchers measured reaction time (RT) to decide if the display was a word or a non-word. In the second experiment (Task 2, *meaning*), subjects saw a word and two pictures on the screen. The researchers measured reaction time to decide which picture was being named. Two groups of subjects were used: 24 undergraduate students and 24 children in second and fifth grade.

Older and better readers had faster RTs. On Task 2, "low frequency, nonversatile, and nonversatile words with hard decodable spelling-sound patterns have particularly long RT's. Such words have patterns which are harder to match to sound equivalents. Like Johnson (1970), we believe versatility (as it reflects exposure to *different* words with similar patterns) is more influential than orthographic redundancy (as it reflects only number of exposures to certain patterns and can be inflated by a small number of high frequency words) and is more influential in leading to sound generalizations." (pp. 79–80)

Quote(s): "On a practical level our results suggest that the teaching of word identification will be more successful if learners are exposed to a variety of *different* words with similar patterns than exposed to more repeated, but less varied, presentations of a smaller word set (e.g., in the long run, all else being equal in learning the word 'feet,' 25 exposures to the word 'feet' will be less instructionally effective than 25 combined exposures to 'feet,' 'meet,' 'feed,' etc.)." (p. 82)