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The What, Not the How: A Stimuli Database for Treating Children with Speech Disorders

Approximately 8-9% of young children exhibit speech sound disorders (Law, Boyle, Harris, & Harkness, 2000; Shriberg, Tomblin, & McSweeny, 1999). Due to this high prevalence, it is critical to incorporate evidence-based practice to ensure treatment efficacy. Although evidence for treating speech disorders varies, one area of promise is the manipulation of language variables in selecting target words in therapy. Two variables of interest are *word frequency* (WF), or how frequently a word occurs in a language, and *neighborhood density* (ND), or the degree of a word's sound similarity (Stoel-Gammon, 2011). Previous research has found that words with high WF/high ND facilitate the most change in a child's sound system, even to untreated sounds (Gierut, Morrisette, and Champion, 1999; Morrisette and Gierut, 2002). Later studies support that high WF/high ND words result in generalization of progress to both treated and untreated sounds (Gierut, Morrisette, 2010).

Although research suggests the use of high WF/high ND words in therapy, clinicians have yet to incorporate this practice into treatment. In order to bridge the gap between theory and practice, a comprehensive stimuli database of high WF/high ND words for "The Late 8" sounds (*th* (as in "think"), *th* (as in "this"), *s*, *z*, *l*, *r*, *sh*, and *ch*) was created. For each sound, 10 high WF/high ND words were selected across each word position (initial, medial, final) in both singleton and consonant cluster positions for one-syllable, two-syllable, and three-syllable words. Stimuli properties were extracted from the Cross-Linguistic Easy-Access Resource for Phonological and Orthographic Neighborhood Densities, an online corpus of English words that provides lexical variables. Target criteria based on prior research were words with a raw count of 100+ occurrences per million, and words with 10+ neighbors. Once a pool of sufficient candidates were collected for each sound and word position, other factors were considered (non-target sounds, age-appropriateness). The final database serves as a valuable clinical resource for practicing professionals.