Why speech therapist are using Non-Words to treat Speech Sound Disorders in children

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Abstract

This poster aims to examine why speech therapists use non-words (NWs) to treat speech sound disorders (SSDs) in children. The science behind lexical and phonological learning can play a role in using non-words in therapy. Both real and non-words have been used to treat speech sound disorders. Using real words in treatment can help the child with sound generalizations, while using non-words, the child focuses exclusively on the words' articulation and phonological forms. Knowledge of what non-words, phonological, and lexical representations are willing better help understand the benefits of using non-words in therapy sessions.

Learning Objectives

1. Explain the difference between non-words, phonological and lexical representations.

2. State the clinical implications so far in research over using non-words in therapy.

3. Explain the effectiveness of using non-words in treating speech sound disorders in the current studies.

Discussion

- Speech therapists' most conventional practice is using real words in treating speech sound disorders.

- Research has shown that using non-words can potentially have more significant phonological learning outcomes.

- "NWs may help reduce cognitive processing demands, which may allow for more automatic sound and word productions" (Cummings, Hallgrimson, & Robinson, 2019)

Definitions

- Lexical representation: corresponds to a word as a whole unit (e.g., /dag/ for "dog") (Cummings, Hallgrimson, & Robinson, 2019)

- Non-Words: words that are real words but have no real meaning (e.g., sab, steg)

- Phonological representations: corresponds to the individual sounds or sound sequences that make up the word (e.g., /d/, /a/, /g/, /da/, /ag/) (Cummings, Hallgrimson, & Robinson, 2019)

Semantic Representation | Phonological Representation | Motor Program | SPEECH RECOGNITION (Phoneme perception, Auditory lexical decision, Speech gating) | SPEECH PRODUCTION (Picture naming, Repetition, Vowel distinctness)

- Picture modified from the Dyslexia, Developmental." *International Encyclopedia of the Social & Behavioral Sciences.*
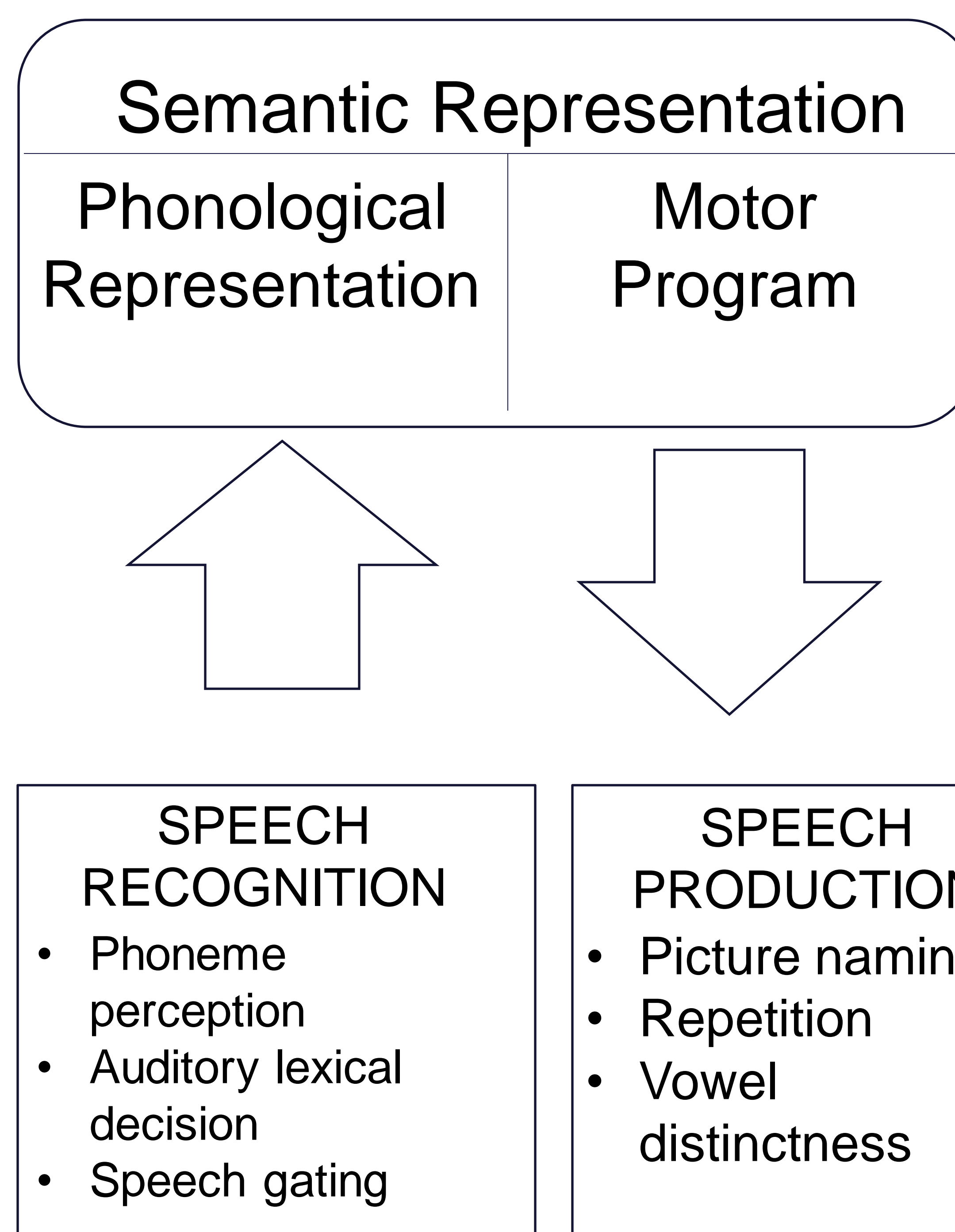
Discussion continued

- "The fact that the NWs were novel may have allowed the children to focus on the articulation of the treated sounds, without having to deal with frozen phonological forms or incorrect production habits" Cummings, & Barlow, (2011)

- "NWs and RWs seemed to have comparable effects on which properties of children's sound systems evidenced greater generalization (i.e., treated sounds)" (Gierut, J. A., Morrisette, M. L., & Ziemer, 2010)

Conclusion

Few studies have used non-words in treating children with speech sound disorders. A few studies say there needs to be more research on boosting phonological learning with word characteristics. In contrast, some say that using non-words may increase learning interventions and have more significant phonological knowledge. Children with speech impairments might have a more challenging time with non-words due to their understanding of phonological representations than children without speech impairments. Using non-words unknown to children can be more effective than real words because they use their phonological and lexical representation skills.

References