The Effects of Speech Entertainment on Pediatric Speech Sound Disorders

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Abstract

Objective: This investigation examined the effectiveness of speech entrainment on the production accuracy of speech sounds in error in three school-aged children with a motor-based speech sound disorder. Speech entrainment is a motor-based treatment method and therapeutic strategy that requires individuals to modify speech behaviors via mimicry to align with an audio-visual speech model.

Method: Three students between the ages of 5;6 and 8;3 with a severe speech sound disorder participated in this combined nonconcurrent multiple baselines across participants and behaviors design. The dependent variable was the articulation accuracy of target phonemes within different contexts (i.e., isolation, syllables, or words). In addition, the percentage of productions correct with speech entrainment within the intervention phase was also analyzed. The independent variable was the implementation of speech entrainment during articulation therapy.

Results: All three participants exceeded or met their respective criteria within or under four intervention sessions. Additionally, analysis of within-session performance across participants and behaviors demonstrated a decline in audiovisual cue requirement with increased independent productions.

Conclusion: The results of this investigation provide preliminary data that speech entrainment may be an effective treatment method to remediate speech sound disorders. Future research is recommended to examine the application of speech entrainment as a speech sound disorder treatment across larger samples to determine the generalizability of skills to conversational speech.

Key Words: Speech sound disorder (SSD), Articulation, Speech entertainment, Motor-based disorder, Articulation treatment