Phonetic Complexity and Phonotactic Probability of Stuttered Utterances
Geoff Coalson, MS, CCC-SLP, Courtney T. Byrd, PhD, CCC-SLP, Barbara L. Davis, PhD, CCC-SLP
The University of Texas at Austin

Introduction

A number of studies have shown that phonotactic complexity of words can be a reliable indicator of stuttering severity, with increased phonotactic complexity of words being associated with increased likelihood of stuttering (Coalson et al., 2017). However, the relationship between phonotactic complexity and stuttering has been less clear, with some studies finding a positive relationship (Coalson et al., 2017) and others finding no relationship (Byrd et al., 2009).

Method

Participants

14 children who stutter (CWS) were included in the study.

Data Collection

CWS were classified as either “normal” or “high-risk” based on age and severity of stuttering.

Data Analysis

A logistic regression analysis was conducted to determine if phonotactic complexity, number of syllables, and number of words in the sentence were significant predictors of stuttering.

Results

When controlling for number of syllables per utterance, a significant increase in phonotactic complexity was found (p < 0.05).

Discussion and Conclusions

These findings suggest that phonotactic complexity may be a useful indicator of stuttering severity and may be a helpful tool for predicting the likelihood of stuttering in children.