Impact of global and local prosodic strategies on intelligibility in children with motor speech impairment K.P. Connaghan, R. Patel

The aim of this investigation is to assess the impact of global and local prosodic modulation strategies on acoustic and intelligibility measures in children with and without motor speech impairment. Global strategies are modifications that are applied across an utterance (Yorkston et al., 2007), such as generalized slowed rate or increased loudness, whereas local strategies target specific elements of an utterance, such as emphasizing a target word. In the current investigation, prosodic modulation strategies were elicited using a novel audio-visualization technique. Acoustic analyses were conducted to evaluate segmental and prosodic changes to speech when employing global and local strategies. Specifically, vowel formant centralization measures and intelligibility scores were compared across the strategies. Preliminary results indicate the feasibility of eliciting the prosodic modulation strategies with an audio-visualization technique, as well as changes in spectral changes between habitual speech and speech produced using global and local strategies. The findings are discussed in relation to the role of prosodic modulation strategies to improve intelligibility in childhood motor speech disorders.