

Comparative Voice Analysis in Children by Praat and Speech Station Software

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ABSTRACT

Introduction: Voice is defined as the laryngeal modulation of the pulmonary air stream which is further modified by the configuration of vocal tract (Michel & Wendhal (1971). The parameters that can be obtained through acoustic analysis are formant pattern, spectrum, duration, jitter, shimmer, Harmonic to noise ratio and fundamental frequency. The research in synthetic speech lends support to formant pattern as a primary cue for the vowel perception. Thus, vowels have been characterized with a very simple set of acoustic descriptors namely the frequencies of the first three formants i.e. F1, F2, F3 (Kent & Read 1995). **Aim of study:** The aim of present is to compare the acoustic parameters of voice samples measured using the software PRAAT and Speech station. **Objectives:** To analysis voice parameters of normal children within the age range of 5 to 11 years by using PRAAT. To analysis voice parameters of normal children within the age range of 5 to 11 years by using SPEECH STATION. To compare the common voice parameters among the two software PRAAT and SPEECH STATION in normal children within the age range of 5 to 11 years. **Summary and conclusion:** In the present study, a total of 150 participants were involved (75 males and 75 females) within the age range of 5-11 years. The acoustic analysis of the voice collected from the participants were subjected to analysis using two