

Consonant-to-Vowel F2 Transition Duration in Speech of Kannada and Malayalam Speaking Healthy Adults

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ABSTRACT

Formant transition is the rapid change in frequency of a formant for a vowel immediately before or after a consonant. The present study aimed to assess F2 transition duration from consonant-to-vowel (C-to-V) in Kannada and Malayalam bisyllable words. 40 adults native Kannada speakers (20 male and 20 female) and 40 adults native Malayalam speakers (20 male and 20 female) in the age range of 20 to 25 years participated in this study. Kannada and Malayalam bisyllabic words (C₁V₁C₂V₂) were prepared with voiceless stop consonant /P/ (non-aspirated) in word initial position followed by vowels /a/, /ɪ/, /u/. Participants were instructed to say each word three times in their respective languages with normal rate and loudness into the microphone kept at a distance of 15 cm from their mouth. The recorded stimulus were subjected to acoustic analysis using Praat software to extract the F2 transition duration from consonant-to-vowel. The results of the present study revealed that there were no significant differences among gender in both the group. It also observed that F2 transition duration varies with respect to language and type of vowel following consonant.

Keywords: F2 transition duration, consonant-to-vowel, Kannada, and Malayalam language.