

*La variabilità vocalica nelle persone con Sindrome di Down. Un'analisi acustica*

Patrizia Sorianello

Studi italiani di linguistica teorica e applicata XLIV, 3 (2015), pp. 508-520

SUMMARY

In this study, we present the first acoustic analysis on Italian vowel system concerning adults with Down Syndrome. These subjects show scarce speech intelligibility and a remarkable alteration of phonological structure, as documented in the international literature. A large presence of phonetic errors has been already reported for people with DS in many languages. Nevertheless, the phonetic aspects received little attention by researchers. In this regard, the acoustic vowel space of ten Italian young adults with Down Syndrome was investigated as compared to a control group of subjects with the same chronological age. Frequential values of the first two formants and the Euclidean Distance of each vowel to the Centroid were measured. Experimental findings showed, only for people with DS, high rates of vowel errors and a reduced vowel space. The vowel ellipses were always wide and strongly overlapped. The overlapping of formant values, particularly evident in connected speech, lowered the degree of intelligibility, determining a degraded speech production.