

EFFECT OF CHEWING TECHNIQUE ON THE PHONATION OF FEMALE SPEECH-LANGUAGE PATHOLOGY STUDENTS: A PILOT STUDY

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Objective. The purpose of this study was to determine how use of the vocal facilitating technique, chewing, affected the phonation of healthy female speech-language pathology (SLP) students.

Methods. A pretest-posttest randomized control group design was used. Twenty-seven healthy female SLP students were randomly assigned into either an experimental group or a control group. The experimental group practiced chewing exercises across 18 weeks, whereas the control group received no vocal facilitating techniques. Both groups completed pre- and post- objective voice assessment measures (aerodynamic measurement, acoustic analysis, voice range profile, and Dysphonia Severity Index). Differences between pre- and post-data were compared between the experimental and control group using an independent sample t test.

Results. Compared to the control group, chewing resulted in a significant decrease in jitter and noise-to-harmonic ratio (NHR), a significant increase in fundamental frequency (f_0), a significant expansion of the voice range profile, and a significant increase in Dysphonia Severity Index (DSI). Shimmer and maximum phonation time (MPT) were not significantly different between groups.

Conclusions. The results of this pilot study suggest that the vocal facilitating technique, chewing, may improve objective vocal measures in healthy female SLP students.