

# **MASSED VERSUS SPACED PRACTICE IN VOCOLOGY: EFFECT OF A SHORT-TERM INTENSIVE VOICE TRAINING VERSUS A LONGER-TERM TRADITIONAL VOICE TRAINING**

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**Purpose.** The purpose of this study was to compare the effect of a short-term intensive voice training with a longer-term traditional voice training on the vocal quality of vocally healthy non-professional voice users.

**Methods.** A pretest-posttest randomized control group design was used. Twenty healthy female non-professional voice users with a mean age of 21.7 years (range: 20-24 yrs.) were randomly assigned into a short-term intensive voice training group (IVT, n=10) and a longer-term traditional voice training group (TVT, n=10). Both groups received an identical 6-hour lasting voice training. Only the distribution of practice varied between groups: two hours a day for three consecutive days for the IVT group versus two 30-minute sessions a week for six weeks for the TVT group. In both groups, a voice assessment protocol consisting of subjective (questionnaire, participant's self-report, auditory-perceptual evaluation) and objective (maximum performance task, acoustic analysis, voice range profile, dysphonia severity index) measurements and determinations was used to evaluate the participants' voice pre- and post-training and at 6 weeks follow-up. Groups were compared over time using linear mixed models and generalized linear mixed models. Within-group effects of time were determined using post-hoc pairwise comparisons with Bonferroni corrections.

**Results.** No significant time-by-group interactions were found for any of the outcome measures, indicating no significant differences in evolution over time between the groups. Significant time effects were found for maximum phonation time, lowest intensity, highest frequency, and dysphonia severity index, all improving over time in both groups. More in-depth within-group analyses indicate a slight preference for the IVT group regarding the evolution of maximum phonation time and dysphonia severity index, and a slight preference for the TVT group regarding the evolution in lowest intensity.

**Conclusions.** A short-term intensive voice training may be equally effective in training vocally healthy non-professional voice users compared to a longer-term traditional voice training.