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An effect of body massage on voice loudness and phonation frequency in reading

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Abstract

In this experiment, the effect of massage on voice fundamental frequency Fo and sound pressure level SPL was investigated. Subjects were recorded when reading a three-minute passage before and after a 30-minute session of massage administered by a trained naprapathy therapist. Sixteen subjects were given the massage, while fifteen controls rested, lying down in silence for the same amount of time. The subjects were then recorded reading the same passage again. The Fo and SPL averages across the whole passage were measured for the pre-treatment and post-treatment recordings.

In the post-massage recordings, subjects had lowered their Fo by 1.1 semitones and their SPL by 1.0 dB, with very high statistical significance. The drop in Fo was somewhat larger for the males than for the females. The control subjects showed no effect at all.