

THE EFFECT OF DIFFERENT WARMING-UP SESSIONS ON THE SINGING VOICE

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The current literature agrees that even short, ten to fifteen minute long warming-up sessions have a beneficial influence on the singing voice. At the same time, there is a decades long argument about the possible role of the nasal cavities in phonation.

In this investigation recordings of the singing voice on sustained vowels of twenty female and ten male singing students were analysed. They arrived to the experimental session without any previous warming-up. At the beginning they sang all nine [i, é, e, ú, ő, á, a, ó, ú] Hungarian vowels, then came the first twelve minute long warm-up with the aim of connecting only the oral cavities to the singing voice. Then the recording all of the vowels was repeated. As the third step, the warm-up continued with a new session, aiming at connecting the nasal cavities to the singing voice, too. At the end, the recording of all nine Hungarian vowels was repeated. For analysis, three of the nine vowels were chosen, those that are generally used in the European languages [i, á, ú], and are on the poles of the well known „vowel formant isles” triangle. The recordings were analysed with the SIGVIEW 2.4. program and data were processed with SPSS 20.

Both of the warming-up sessions have beneficial effects on the singing voice. The sound pressure level (SPL) of the fundamental frequency (Fo) and the harmonics (H1...) became significantly stronger. Nasal warming-up enhances these effects, and makes the Fast Fourier Transformation (FFT) figure of the voice more articulated, also enlarging the value of the signal to noise ratio (SNR).

This investigation adds arguments and new aspects from a practical point of view to the pedagogical advantage of the use of nasal warming-up exercises in addition to the traditional oral warming-up tasks. Without the evaluation of any expert group, with the help of acoustical analysis, it is possible to demonstrate the effects on the singing voice.