Learning how to control your voice

Let’s assume that a singer is wearing earplugs or headphones and can’t hear their own voice. Would they still know whether they are singing high or low notes or singing quietly or loudly? Or whether they are singing in key? They would, says Dr. Anke Ziethe from the Department of Otorhinolaryngology at Universitätsklinikum Erlangen. However, this skill varies from person to person. Using her logopaedics research as a basis, Ziethe has developed a training programme that has delivered promising results in initial tests and that is now to be trialled using participants in a research project funded by the Federal Ministry of Education and Research.

‘The process that enables us to ‘feel’ as it were the sound that we generate using our voice is called kinaesthetic perception,’ explains the speech and language therapist. It’s a type of perception of movement, in this case in the larynx and the vocal chords. Experts distinguish between this kinaesthetic perception and auditory perception, which is the impression created when we actually hear the noise from our own larynx. The better our kinaesthetic perception is, the easier it is to regulate, that is influence the sound we produce, even if we don’t hear it. The good news is that this can be trained.

The first step of the training is a comprehensive diagnosis, which involves making a recording of the patient’s voice and analysing what it sounds like, how well the patient can control it and how successful they are at kinaesthetic and auditory regulation. After this, the patients complete training according to Ziethe’s instructions twice a week for 5 weeks. During the training, ‘auditory masking’ is used to hide the sound that patients produce using background noise or by ‘switching off’ the patient’s hearing completely by making them wear headphones.

Ziethe takes further measurements at the end of the training phase and evaluates how successful the training has been. Measurements are also taken after the end of the training to check whether patients can still use the skills they have learned. Ziethe’s aim is to help people who have voice-related problems and also to provide those who use their voices in a professional capacity with a tool for improving how they sense and regulate the sounds they produce.

The training unit is due to be tested on 20 to 30 people initially who should ideally have not yet received professional voice coaching.

Anyone interested in taking part can contact Dr. Ziethe directly to find out more about the training programme.

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(Image: Jörg Ziethe)