

Biofeedback-based behavioural treatment for chronic tinnitus—results of a randomised controlled trial

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Abstract

Objectives: Many tinnitus sufferers believe that their tinnitus has an organic basis, and thus seek for medical rather than psychological treatments. Tinnitus has been found to be associated with negative appraisal, dysfunctional attention shift and heightened psychophysiological arousal. Because of this, cognitive-behavioural interventions and biofeedback are commonly suggested as treatments. This study developed and investigated the efficacy of a biofeedback-based cognitive-behavioural treatment for tinnitus.

Methods: One hundred and thirty tinnitus patients were randomly assigned to either an intervention or a waitlist control group. Treatment consisted of 12 sessions of a biofeedback-based behavioural intervention over a 3-month period. Patients in the waitlist group participated in the treatment after the intervention group had completed the treatment.

Results: Results showed clear improvements regarding tinnitus annoyance, diary ratings of loudness and feelings of controllability. Furthermore, changes in coping cognitions as well as changes in depressive symptoms were found. Improvements were maintained over a 6-month follow-up period where medium to large effect sizes were observed.

Conclusions: The treatment developed and investigated in this study is well accepted and leads to clear and stable improvements. Through demonstrating psychophysiological interrelationships, the treatment enables patients to change their somatic illness perceptions to a more psychosomatic point of view.