

Creating a Multidimensional Tinnitus Personality Profile

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Clinicians and scientists working with tinnitus have known for years that psychological factors may have significant bearing on its effects on any individual person. Tinnitus research has documented the influence of social and emotional traits, as well as personality type, locus of control, anxiety sensitivity, feeling of self-control, and other factors. Some tinnitus questionnaires, such as the *Tinnitus Functional Index* and *Tinnitus Handicap Questionnaire* seek to identify some of those traits so a clinician may quantify the level of disturbance tinnitus is causing in a person's life.

A group of researchers is expanding on that research and is attempting to create a multidimensional personality profile for tinnitus sufferers. The researchers, from the Department of Audiology at the University of Auckland (New Zealand) and led by Dr. Grant Searchfield, recruited 154 participants with tinnitus (81 male, 73 female), along with 61 control participants. Participants took a web-based personality survey consisting of questions about self-control, stress reaction, alienation, and social closeness. The questions were particularly relevant, as they were taken from subtests of the *Multidimensional Personality Questionnaire*, *Hearing Handicap Inventory-Screening Version*,

Tinnitus Functional Index, and *Tinnitus Case History Questionnaire*. Participants were adults of all ages, although only three respondents were in the 21 to 30-year-age range (1 with tinnitus, 2 without), well over half were over 60 years old. Participants had hearing loss of varying severity — slight to profound. Those indicating they did not have hearing loss were excluded.

Analysis of scores showed that tinnitus sufferers reported greater reaction to stress, higher degrees of alienation, significantly lower levels of self-control, and lower social closeness than the control group of participants without tinnitus. Many interactions between parameters also were examined. For instance, participants with slight hearing loss showed lower reaction to stress in the 41 to 50-year-old age group, compared to those from 51 to 60-year-old age group. In addition, the control group showed significantly higher social closeness for females than the group with tinnitus. No differences in personality traits were found for those participants whose tinnitus changed in the presence of environmental noise, versus those whose tinnitus did not.

Findings also indicated that individuals who had sought several treatments for tinnitus were more likely to react strongly to stress than those who had not sought treatment. This may reflect the greater need for

treatment of those people whose tinnitus is interfering with daily activities. The authors also found that a greater stress reaction and alienation from others correlated strongly with a tendency to experience hyperacusis.

These results correlate well with studies investigating individual traits and tendencies in people with tinnitus. However, the authors of this study sought to compare multiple personality traits, demographic data, and perceptual characteristics to uncover the combinations of factors that may lead to a decreased ability to adapt to tinnitus. For instance, many individuals have been observed to live with “benign” tinnitus until a significant life event or environmental influence causes it to worsen and become bothersome.

We do not yet have the science to determine whether tinnitus truly changes in the brain, but we now may have information that describes the risk factors leading to troublesome tinnitus — e.g., tinnitus that requires treatment. Clinicians also may be able to develop more specific treatment regimens based on the personality traits of the individual patient, so that habituation is enhanced and appropriate therapeutic methods are chosen earlier in the treatment process. 

Searchfield, G., O'Keeffe, M., & Durai, M. (2017). The Personality Profile of Tinnitus Sufferers and a Nontinnitus Control Group. *JAAA* 28:271–282.