

# Letter to the Editor

## TINNITUS HANDICAP INVENTORY

### To the Editor:

We are writing to point out an apparent anomaly in the classification of the subscale items of the Tinnitus Handicap Inventory (THI). In the original article describing the THI (Newman et al, 1996) and in a verification article published in *JAAA* (Newman et al, 1998), item 14 (Because of your tinnitus, do you find that you are often irritable?) is ascribed to the Functional subscale. In the text of Newman et al (1996), however, item 14 is clearly described as belonging to the Emotional subscale, and in Newman et al (1998), it is ascribed to the Emotional subscale by implication (from the numbers of items in each subscale).

Not all articles using the THI have explicitly stated to which subscale item 14 was ascribed, but Kinney et al (1997) considered it Emotional (this article included Dr Newman in the authors), whereas Rosenberg et al (1998) considered it Functional. Two papers have recently been published in verification of the THI. Baguley et al (2000) considered the convergent validity of the THI with the Tinnitus Questionnaire (designed by psychologists), and Zacharie et al (2000) translated the THI into Danish and conducted a verification study. Both of these studies followed the ascription of item 14 as Functional as per the original published text of the questionnaire.

This would be a nit-picking point if it were not for the fact that the THI is a patient-friendly, reliable, and robust mechanism for the quantification of tinnitus distress and for measuring the outcomes of treatment. We await the response of Dr Newman and colleagues with interest.

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### The Authors Respond

After reviewing the article describing the initial development of the Tinnitus Handicap Inventory (THI; Newman et al, 1996) and a subsequent article providing further psychometric support for the THI (Newman et al, 1998), we have determined that item 14 (Because of your tinnitus, do you find that you are often irritable?) does indeed belong to the Emotional subscale. Unfortunately, it was simply mislabeled as a Functional subscale item in Table 1 (page 146) in the original article (Newman et al, 1996) and in the Appendix of the article appearing in *JAAA* (Newman et al, 1998).

As described by the aforementioned authors, as well as Kinney et al (1997), the THI is a 25-item self-report measure comprised of three subscales: the Functional subscale (11 items), the Emotional subscale (9 items), and the Catastrophic subscale (5 items). After a recount of the number of items included within each subscale (Newman et al, 1996, Table 1; Newman et al, 1998, Appendix), it was apparent that there was an “extra” item for the Functional subscale and

that an item was "missing" from the Emotional subscale. Further, within the text of the original article, Newman et al (1996) indicated that "item 14, irritability" represented one of the affective responses to tinnitus belonging to the Emotional subscale. In addition, item 14 of the THI is comparable to item 4 (Does a hearing problem make you irritable?) of the Hearing Handicap Inventory for the Elderly (Weinstein and Ventry, 1983) and the Hearing Handicap Inventory for Adults (Newman et al, 1991). The latter two companion questionnaires to the THI ascribe the "irritable" item to the Emotional subscale as well.

Finally, the statistical analyses relating to the psychometrics of the THI (Newman et al, 1996, 1998) were conducted with item 14 constituting an Emotional subscale item. Accordingly, the psychometric adequacy of the THI is not altered, and its clinical utility is unchanged. We apologize, however, for our mistake in mislabeling this particular item within the text and are grateful to David Baguley and Dr. Norman for bringing this labeling error to our attention.

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