

INSTRUCTIONS FOR SCORING THE TINNITUS FUNCTIONAL INDEX (TFI)

1. Preparation for scoring:

- A. Two items to be transformed: Items #1 and #3 require a simple transformation from a percentage scale to a 0-10 scale, achieved by dividing the values circled by the respondent by 10. The examiner should write the transformed value in the margin beside the relevant item, preferably using ink of a different color than that used by the respondent.
- B. Ambiguous items: Because respondents differ in regard to how clearly they circle or mark their answers on the 0-10 scale for each item, the examiner should review every item to resolve any ambiguities. It is helpful if examiners note their decision about each answer in the margin beside the given item, using the differently-colored ink. Some commonly-occurring ambiguities and how to handle them are as follows:
- (1) More than one value marked on the 0-10 scale for a given item—Typically done by respondents whose tinnitus undergoes large variations over time. The clinic or the examiner should settle on a consistent procedure for all such responses, such as (a) averaging the multiple values indicated for a given item, or (b) marking the item “cannot code”, thus removing that item from consideration in the overall TFI score. (The latter choice reduces the information available for calculating the respondent’s overall score, and may be desirable only in extremely variable cases where the respondent’s reliability is questionable.)
 - (2) Respondent marks a value between the 0-10 values on the item scale— Again, the clinic or the examiner should settle on a consistent procedure for handling all such ambiguous responses in the same way, such as (a) noting a value of 3.5 in the margin, for a respondent who marked the scale between 3 and 4, or (b) collapsing the intermediate value either to the right (to 4) or to the left (to 3).
 - (3) Respondent does not make any response to a given item—The clinic or examiner should decide beforehand how they will indicate missing values, and that notation (e.g. “NA” for “No Answer”) should be entered in the margin. If the data will be entered into a computer database, a standard missing value such as “99” can be entered in the margin beside the relevant item. Of course, care must be taken to exclude “99” values if the examiner performs a manual calculation of the overall TFI score.
- C. Unambiguous items: To facilitate rapid scanning and summing of all valid answers to obtain the respondent’s overall TFI score, all of the unambiguous values indicated by the respondent should also be noted in the margin, each such value beside its corresponding item. The examiner can then quickly generate a valid score for the overall TFI.

2. Calculation of overall tfi score:

- (1) Sum all valid answers from both TFI pages (maximum possible score = 250 if the respondent were to rate all 25 TFI items at the maximum value of 10).
- (2) Divide by the number of questions for which that respondent provided valid answers (yields the respondent’s mean item score for all items having valid answers).
- (3) Multiply by 10 (provides that respondent’s overall TFI score within 0-100 range).

CAUTION—Overall TFI score is **not valid** if respondent **omits 7 or more** items. To be valid as a measure of tinnitus severity, the respondent must answer **at least 19 items** (76% of items).

3. Calculation of subscale scores

The 8 subscales address 8 important domains of negative tinnitus impact as indicated below. Each subscale has a brief title (in capital letters) and a 1- or 2-letter abbreviation (e.g. I for Intrusive , SC for Sense of Control):

<u>SUBSCALE NAME (and conceptual content)</u>	<u>ITEMS IN SUBSCALE</u>
I: INTRUSIVE (unpleasantness, intrusiveness, persistence)	#1, #2, #3
SC:SENSE OF CONTROL (reduced sense of control)	#4, #5, #6
C: COGNITIVE (cognitive interference)	#7, #8, #9
SL: SLEEP (sleep disturbance)	#10, #11, #12
A: AUDITORY (auditory difficulties attributed to tinnitus)	#13, #14, #15
R: RELAXATION (interference with relaxation)	#16, #17, #18
Q: QUALITY OF LIFE (QOL) (quality of life reduced)	#19, #20, #21, #22
E: EMOTIONAL (emotional distress)	#23, #24, #25

Each of the 8 subscales consists of 3 items except for the Quality of life subscale, which consists of 4 items (SEE ITEMS LIST ABOVE). For valid subscale scores, no more than 1 item should be omitted. Computation of subscale scores is as follows:

- 1) Sum all of that respondent's valid answers for a given subscale.
- 2) Divide by the number of valid answers that were provided by that respondent for that subscale.
- 3) Multiply by 10. For the respondent in question, this procedure generates a subscale score in the range 0-100 for each valid subscale.

CAUTION—Do not attempt to compute a respondent's overall TFI score by combining that respondent's valid subscale scores, as the valid subscales may encompass a total number of items that is different from the number of items accepted as valid for the overall TFI score.