

Validation and translation of the Dutch Tinnitus Functional Index

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Key-words. Tinnitus, questionnaire, translation, validation, psychometric

Abstract. *Validation and translation of the Dutch Tinnitus Functional Index.* **Objectives:** Several questionnaires are used to survey how tinnitus affects quality of life, making comparisons across studies difficult. The questionnaires also are used to measure treatment outcome but were not designed for this purpose. To address these issues, a new questionnaire has been suggested, the tinnitus functional index (TFI), which is highly responsive to treatment-related change. The current study aim was to translate and validate the TFI for a Dutch-speaking population. Factor analysis was performed to characterize the TFI profile in a large tinnitus population.

Methods: The questionnaire was translated using a translation-back translation procedure, and 263 patients in the ENT department of Antwerp University Hospital with tinnitus-related complaints completed it. Factor structure was assessed using exploratory analysis with oblique rotation and compared with the original questionnaire. Internal consistency was measured using Cronbach's alpha coefficient. Spearman correlations with the percentage of time aware of the tinnitus and the visual analogue scales (VAS) for maximum tinnitus loudness and mean tinnitus loudness were calculated to investigate convergent validity.

Results: The original eight-factor structure could be confirmed in the Dutch version of the TFI. Internal consistency ($\alpha=0.96$) and convergent validity showed good results. Statistically significant correlations were found with the VAS for maximum loudness ($r=0.59$; $p<0.001$), VAS for mean loudness ($r=0.66$; $p<0.001$), and percentage of time aware of tinnitus ($r=0.58$; $p<0.001$).

Conclusions: The Dutch version of the TFI is suitable for measuring in clinical and research settings how tinnitus affects daily life, with psychometric properties in line with the original version.

Introduction

Tinnitus is the perception of sound in the absence of a corresponding external sound source. Approximately 25.3% of the US population experiences tinnitus, and 7.9% have it frequently.² People who experience a great impact of tinnitus on their daily lives seek medical help. Psychoacoustic measurements and questionnaires are used to survey tinnitus, but psychoacoustic measurements such as loudness match, frequency match, and minimal masking level give more information about the characteristics of the tinnitus. The questionnaires assess various aspects of daily life that tinnitus can influence, such as falling asleep, concentration, annoyance, emotional distress, tinnitus masking, and quality of life. A wide variety of questionnaires are in use, hindering the comparison of outcomes across studies. Further-

more, although the questionnaires also are used to measure treatment outcome, they were not designed for this purpose.³ Meikle *et al.*¹ have suggested a new questionnaire, the tinnitus functional index (TFI), which promises to be the new gold standard. The TFI has a Cronbach's alpha of 0.97 and a test-retest reliability of 0.78, with a promising convergent validity. High correlations were found with the Tinnitus Handicap Inventory (THI) ($r=0.86$) and the Visual Analogue Scale (VAS) ($r=0.75$). Discriminant validity showed good results, and a moderate correlation was found with the Beck Depression Inventory ($r=0.56$). In addition, the TFI was highly responsive to treatment-related change. The effect size of the TFI was higher than that of the THI or VAS¹.

The TFI is a self-report questionnaire consisting of 25 questions. The patient answers each question on a Likert scale from 0 to 10. Questions 1 and 3 are

Acknowledgements: The study was supported by a grant from the TOP-BOF project of the University of Antwerp.

Presented at the Annual Congress of the Royal Belgian Society for Ear, Nose, Throat, Head and Neck Surgery, B-audio, Brussels, November 15, 2013.

expressed in percentages ranging from 0% to 100%. The total score is based on the mean of all answered questions multiplied by 10, but questions 1 and 3 have to be transformed to a 0-10 scale first. If seven or more questions are not answered, the total score is not reliable. In addition to the total score, the score on eight subscales can also be calculated. These subscales are intrusiveness (questions (Q):1-3), reduced sense of control (Q:4-6), cognitive interference (Q:7-9), sleep disturbance (Q:10-12), auditory difficulties attributed to tinnitus (Q:13-15), interference with relaxation (Q:16-18), reduced quality of life (Q:19-22), and emotional distress (Q:23-25). The total score ranges from 0 to 100. Scores below or equal to 25 indicate mild tinnitus with no need for intervention. Scores between 25 and 50 indicate that tinnitus is a more significant problem and that professional attention is needed as well as advice for coping better with the tinnitus. Scores above 50 indicate that tinnitus is a severe problem and that special tinnitus care is needed. A reduction of 13 points on the TFI is considered a meaningful reduction in annoyance experienced by the patient.¹

The aim of the present study was to translate and validate the questionnaire for a large Dutch-speaking population. Psychometric properties were analysed, including internal consistency and factor structure. Furthermore, the influence on the outcome of the TFI of the parameters of gender, duration of tinnitus, and patient age were analysed.

Materials and methods

Development of the Dutch version

The English version of the TFI designed by Meikle et al.¹ was translated into Dutch using a translation-back translation procedure. Researchers familiar with tinnitus translated the questionnaire into Dutch, and a native speaker performed the back translation. The final version of the Dutch TFI is presented in Figure 1 and the appendix.

Participants

In the ENT department of Antwerp University Hospital, 263 patients (98 women, 165 men) with complaints about tinnitus filled out the questionnaire.

TINNITUS - FUNCTIONELE INDEX PAGINA 1

Lees elke vraag aandachtig. Om een vraag te beantwoorden omcirkelt u **ÉÉN** getal bij elke vraag. Bijvoorbeeld (10%) of (1).

I	In de AFGELOPEN WEEK...	Niet	Volledig
		verstoord	verstoord
1.	Welk percentage van de tijd dat u wakker was, was u zich BEWUST VAN uw tinnitus? Nooit van bewust ► 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ◀ Altijd van bewust	▼	▼
2.	Hoe STERK OF LUID was uw tinnitus? Helemaal niet ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Uiterst sterk of luid sterk of luid	▼	▼
3.	Welk percentage van de tijd dat u wakker was, HINDERDE uw tinnitus u? Nooit ► 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ◀ Altijd	▼	▼
SC	In de AFGELOPEN WEEK...	Niet	Volledig
		verstoord	verstoord
4.	Had u het gevoel uw tinnitus ONDER CONTROLE te hebben? Heel goed ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Nooit onder controle onder controle	▼	▼
5.	Hoe gemakkelijk was het voor u om met uw tinnitus OM TE GAAN ? Heel gemakkelijk ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Onmogelijk om mee om te gaan	▼	▼
6.	Hoe gemakkelijk was het voor u om uw tinnitus te NEGEREN ? Heel gemakkelijk ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Onmogelijk te negeren	▼	▼
C	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...	Niet	Volledig
		verstoord	verstoord
7.	Uw vermogen om zich te CONCENTREREN ? Niet verstoord ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Volledig verstoord	▼	▼
8.	Uw vermogen om HELDER TE DENKEN ? Niet verstoord ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Volledig verstoord	▼	▼
9.	Uw vermogen om AANDACHT TE GEVEN aan andere dingen dan uw tinnitus? Niet verstoord ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Volledig verstoord	▼	▼
SL	In de AFGELOPEN WEEK...	Niet	Volledig
		verstoord	verstoord
10.	Hoe vaak hebt u vanwege uw tinnitus moeite gehad om IN SLAAP TE VALLEN of DOOR TE SLAPEN ? Nooit moeite gehad ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Altijd moeite gehad	▼	▼
11.	Hoe vaak hebt u vanwege uw tinnitus moeite gehad om ZOVEEL SLAAP te krijgen als u nodig had? Nooit moeite gehad ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Altijd moeite gehad	▼	▼
12.	Hoeveel van de tijd belette uw tinnitus u dat u zo DIEP OF RUSTIG kon slapen als u zou willen? Nooit ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Altijd	▼	▼

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TINNITUS - FUNCTIONELE INDEX PAGINA 2

Lees elke vraag aandachtig. Om een vraag te beantwoorden omcirkelt u **ÉÉN** getal bij elke vraag. Bijvoorbeeld (10%) of (1).

A	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...	Niet	Volledig
		verstoord	verstoord
13.	Uw vermogen om DUIDELIJK TE HOREN ? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
14.	Uw vermogen om MENSEN TE VERSTAAN die aan het praten zijn? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
15.	Uw vermogen om GESPREKKEN in groep of op bijeenkomsten te VOLGEN ? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
R	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...	Niet	Volledig
		verstoord	verstoord
16.	Uw STILLE, RUSTGEVENDE ACTIVITEITEN ? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
17.	Uw vermogen om U TE ONTSPANNEN ? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
18.	Uw vermogen om van RUST EN STILTE te genieten? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
Q	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...	Niet	Volledig
		verstoord	verstoord
19.	Genieten van SOCIALE ACTIVITEITEN ? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
20.	GENIETEN VAN HET LEVEN ? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
21.	Uw RELATIES met familie, vrienden en anderen? 0 1 2 3 4 5 6 7 8 9 10	▼	▼
22.	Hoe vaak hebt u vanwege uw tinnitus moeite gehad met uw WERK OF ANDERE TAKEN , zoals huishoudelijk werk, schoolwerk of zorgen voor kinderen of anderen? Nooit moeite gehad ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Altijd moeite gehad	▼	▼
E	In de AFGELOPEN WEEK...	Niet	Volledig
		verstoord	verstoord
23.	Hoe ONGERUST OF BEZORGD voelde u zich vanwege uw tinnitus? Helemaal niet ongerust of bezorgd ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Uiterst ongerust of bezorgd	▼	▼
24.	Hoe GEËRGED OF VAN STREEK was u vanwege uw tinnitus? Helemaal niet geïrriteerd of van streek ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Uiterst geïrriteerd of van streek	▼	▼
25.	Hoe DEPRESSIEF was u vanwege uw tinnitus? Helemaal niet depressief ► 0 1 2 3 4 5 6 7 8 9 10 ◀ Uiterst depressief	▼	▼

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The questionnaire was translated using a translation - back translation procedure. The translation matches the original text as closely as possible.

Figure 1
The Dutch version of the TFI

Table 1
Results from principal component analysis with oblique rotation.

Item	Factor						
	1	2	3	4	5	6	7
	Cognitive Quality of life	Sleep	Auditory	Emotional	Intrusive	Relaxation	Sense of control
8	.799						
7	.731						
9	.700						
22	.645						
21	.625						
20	.554			.452			
19	.550				.450		
10		.844					
12		.818					
11		.817					
14			.928				
15			.910				
13			.902				
23				.837			
24				.783			
25	.517			.637			
1					.755		
2					.665		
3					.624		
18						.775	
16						.774	
17		.501				.564	
4							.747
6	.411						.548
5					.418		.445
Cronbach Alpha	.92	.94	.95	.87	.81	.89	
Initial Eigenvalue	12.64	2.42	1.41	1.13	1.03	.97	.72
% of variance	50.54	9.67	5.63	4.54	4.14	3.88	2.88
Cumulative %	50.54	60.21	65.84	70.37	74.51	78.39	81.27

Based on the Jolliffe's criterion (eigenvalues >0.7) seven factors could be extracted. The correlations between each item and the seven factors are displayed. The eigenvalues of the different factors and the variance explained by them are also described. The values less than 0.4 were suppressed in the table.

The mean reported age was 47 years (SD=14.22) with a range of 18 to 83 years. The duration of tinnitus among the patients fluctuated from a minimum of 15 days to a maximum of 30 years. The median duration was 2 years.

Statistical analysis

Data were analysed with SPSS statistical software version 20. The different components were extracted from TFI with exploratory factor analysis. First, Bartlett's test of Sphericity and Kaiser-Meyer-Olkin (KMO) were calculated to assess the appropriateness of factor analysis.⁴ A principal

component analysis with oblique rotation was performed to extract the different factors. The Jolliffe's criterion was used to determine the number of factors and yielded a suggested cut-off for eigenvalues greater than 0.7.⁵

To measure the reliability of the Dutch version of the TFI, internal consistency was measured with Cronbach's alpha coefficient. Also, Spearman correlations were calculated to investigate the convergent validity.

To analyse the influence on TFI outcome of the parameters of gender, duration of tinnitus, and patient age, linear regression was calculated. Significance level was set at $p < 0.05$.

Table 2
Results from principal component analysis with oblique rotation with fixed factors.

Item	Factor							
	1	2	3	4	5	6	7	8
	Sleep	Auditory	Cognitive	Quality of life	Emotional	Intrusive	Relaxation	Sense of control
10	.837							
11	.828							
12	.824							
14		.927						
15		.911						
13		.902						
8			.825					
7			.810					
9			.689					
21				.823				
19				.649				
20				.626				
25				.568	.556			
22			.437	.541				
23					.841			
24					.782			
1						.804		
2						.704		
3						.611		
18							.775	
16							.770	
17	.497						.559	
4								.861
6								.586
5								.462
Cronbach Alpha	.94	.95	.92	.90	.87	.81	.89	.82
Eigenvalue	12.64	2.42	1.41	1.13	1.03	.97	.72	.68
% of variance	50.54	9.67	5.63	4.54	4.14	3.88	2.88	2.71
Cumulative %	50.54	60.21	65.84	70.37	74.51	78.39	81.27	83.98

Although the eigenvalues of the last factor were smaller than or equal to 0.7, the correlations between the items and their factors were high. The eight-factor structure can be retrieved in the Dutch version of the TFI. The values less than 0.4 were suppressed in the table.

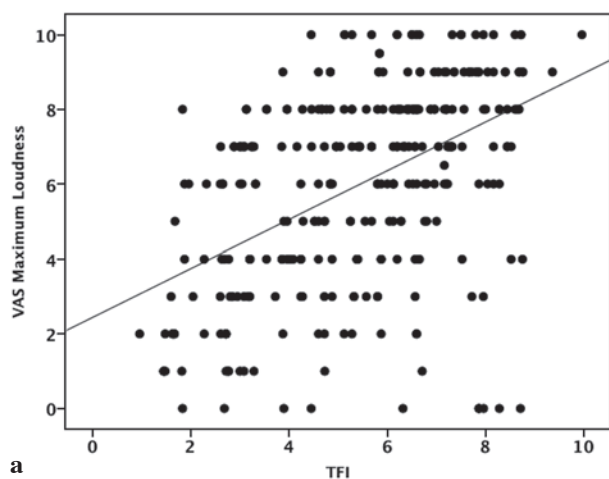
Validation measures

The convergent validity of the TFI was calculated with the VAS for maximum loudness and for mean loudness of the tinnitus. The patient had to rate the loudness of the tinnitus on a scale from 0 to 10, with 0 indicating a very soft sound that is not audible and 10 indicating a sound that is as loud as possible, i.e., the tinnitus could not be louder. Finally, the convergent validity was calculated with the percentage of time the patient was aware of the tinnitus. The patient gave a number between 0 and 100, with 0 indicating no or very little consciousness of the tinnitus and 100 indicating awareness at all times.

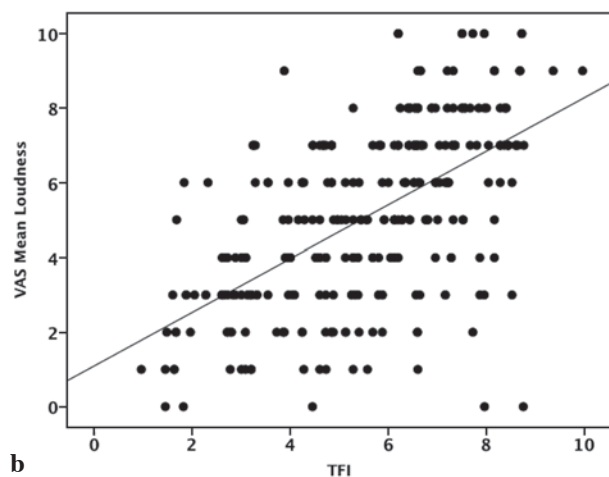
Results

Factor structure

The Bartlett's test of Sphericity was significant ($p < 0.001$), demonstrating that the items of the TFI are correlated. A high KMO ratio of 0.93 was also obtained for the Dutch version of the TFI, indicating that factor analysis should reveal distinct and reliable factors. Both conditions were met, so the sample size was adequate for factor analysis. A principal component analysis with oblique rotation was performed, and the communalities ranged from 0.69 to 0.94. Finally, the number of components of the translated questionnaire was defined based on



a



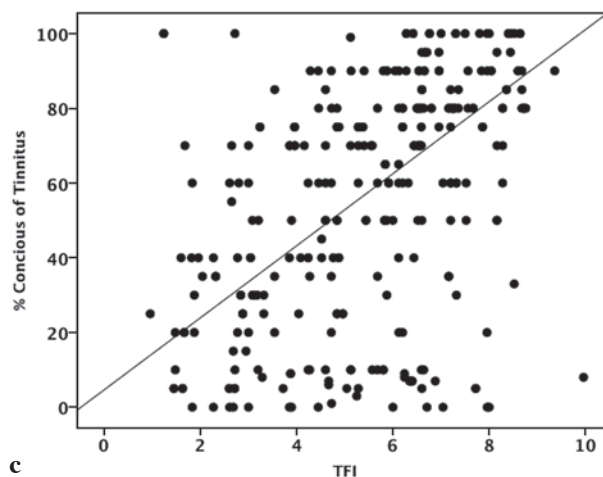
b

the eigenvalues; using the Jolliffe's criterion (eigenvalues >0.7), a seven-factor structure was found (Table 1), and the seven factors explained 81.27% of the total variance. The other factors did not explain total variance sufficiently to represent unique factors. Nevertheless, the original TFI represented eight factors. When an oblique rotation was performed with eight fixed factors, the eight subscales of the original version of the TFI showed good correlations with each factor as shown in Table 2.

Reliability

To assess the reliability of the Dutch version of the TFI, the internal consistency was measured using Cronbach's alpha coefficient, and a Cronbach's alpha greater than 0.70 was considered acceptable.⁶ The identified Cronbach's alpha of 0.96 for the Dutch version of the TFI indicated a very high internal consistency.

The internal consistency of the eight factors also was analysed (Table 2), giving Cronbach's



c

The convergent validity was moderate with the following questionnaires: VAS of maximum loudness ($r=0.59$; $p<0.001$), VAS mean loudness ($r=0.66$; $p<0.001$) and percentage conscious of tinnitus ($r=0.58$; $p<0.001$).

Figure 2
Convergent validity

alpha values between 0.81 and 0.95 and indicating good reliability for each scale. The values with one item deleted from the questionnaire were between 0.95 and 0.96, so we can conclude that deleting an item did not increase the internal consistency. Finally, the item-total correlation was calculated for 164 variables; the smallest item-total correlation was found for question 15 (0.50) and the highest for question 20 (0.85), indicating that all of the items correlated well with the total score.

Convergent validity

To investigate convergent validity, Spearman correlations were calculated between the TFI values and the VAS for maximum loudness, the VAS for mean loudness, and percentage of the time patients were conscious of their tinnitus (Figure 2). Statistically significant moderate correlations were found between these rating scales and TFI (Figure 2), as follows: VAS for maximum loudness: $r=0.59$, $p<0.001$; VAS for mean loudness: $r=0.66$, $p<0.001$; and percentage of time aware of tinnitus: $r=0.58$, $p<0.001$.

Influence of parameters on total TFI score

We also analysed by linear regression the influence of gender, duration of tinnitus, and patient age on the total TFI score. Gender ($p=0.234$), duration of

tinnitus ($p=0.879$), and age ($p=0.394$) did not affect the total TFI score.

Discussion

The Dutch version of the TFI showed good reliability, and the internal consistencies of the Dutch (Cronbach's $\alpha=0.96$) and English (Cronbach's $\alpha=0.97$) versions of the TFI are comparable. Factor analysis was performed to extract the different factors. The original version of the TFI consists of eight factors, and with application of the Jolliffe's criterion (eigenvalues >0.7), seven factors could be extracted. Factor 1 included two subscales of the original TFI: quality of life and cognitive interference. Although both subscales are encompassed in one factor, the correlations for all of the questions were good and could be subdivided into the two scales. One explanation for this outcome could be that the ability to focus and concentrate in daily life activities is linked to the impact of tinnitus on quality of life. For the quality-of-life subscale, the correlations were between 0.50 and 0.66; for the cognitive interference subscale, correlations between 0.70 and 0.80 were found, possibly arguing for splitting up this factor.

Factor analysis with fixed factors was performed to verify whether the eight subscales of the original questionnaire could be found. Question 25 regarding the amount of depression caused by tinnitus showed equally good correlation with factor 4, 'Quality of life', and factor 5, 'Emotional'. The amount of depression determines not only the emotional state but also the quality of life of the tinnitus patient. Although the eigenvalues of the latter factor were less than or equal to 0.7 (eigenvalues of factor 8=0.7), the correlations between the items and their factors were high, ranging from 0.462 to 0.861. The last component analysis yielded very good correlations between the questions and the eight factors, which is an argument for using the same subscales for the Dutch version of the TFI as in the English version.

The convergent validity with the VAS for maximum loudness ($r=0.59$; $p<0.001$) and the VAS for mean loudness ($r=0.66$; $p<0.001$) was moderate. Meikle *et al.*¹ found a high correlation between the VAS for severity and the TFI ($r=0.75$). This difference in results can be explained by the fact that the two scales of loudness and severity measure different aspects of tinnitus, indicating

that the loudness of tinnitus is not the same as the annoyance caused by tinnitus. TFI also correlated more with the VAS for mean loudness than with the VAS for maximum loudness. Thus, TFI represents the mean experience rather than the worst experience of tinnitus.

Gender, duration of tinnitus, and patient age did not affect the total TFI score. The results of the TFI thus can be compared with each other without taking these parameters into consideration.

Conclusion

The results of this study demonstrate that the Dutch version of the TFI is suitable in clinical and research settings for measuring the impact of tinnitus. The reliability and validity are comparable with the original version of the TFI, and the eight subscales can also be used for the Dutch version.

Acknowledgements

The authors thank Dierdré Kleine Punte and Andrea Kleine Punte for helping us with the translation of the questionnaire.

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**APPENDIX
FUNCTIONERINGSINDEX VOOR TINNITUS (OORSUIZEN)**

Datum: _____ Uw naam _____
dag / maand / jaar *in drukletters*

Lees elke vraag aandachtig. Om een vraag te beantwoorden omcirkelt u ÉÉN getal bij elke vraag. Bijvoorbeeld 10% of 1.	
I	In de AFGELOPEN WEEK...
1. Welk percentage van de tijd dat u wakker was, was u zich BEWUST VAN uw tinnitus? <i>Nooit van bewust</i> ▶ 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ◀ <i>Altijd van bewust</i>	
2. Hoe STERK of LUID was uw tinnitus? <i>Helemaal niet</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Uiterst sterk of luid sterk of luid</i>	
3. Welk percentage van de tijd dat u wakker was, HINDERDE uw tinnitus u? <i>Nooit</i> ▶ 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ◀ <i>Altijd</i>	
SC	In de AFGELOPEN WEEK...
4. Had u het gevoel uw tinnitus ONDER CONTROLE te hebben? <i>Heel goed</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Nooit onder controle onder controle</i>	
5. Hoe gemakkelijk was het voor u om met uw tinnitus OM TE GAAN ? <i>Heel gemakkelijk</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Onmogelijk om mee om te gaan</i>	
6. Hoe gemakkelijk was het voor u om uw tinnitus te NEGEREN ? <i>Heel gemakkelijk</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Onmogelijk te negeren te negeren</i>	
C	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...
7. Uw vermogen om zich te CONCENTREREN ? <i>Niet verstoord</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Volledig verstoord</i>	
8. Uw vermogen om HELDER TE DENKEN ? <i>Niet verstoord</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Volledig verstoord</i>	
9. Uw vermogen om AANDACHT TE GEVEN aan andere dingen dan uw tinnitus? <i>Niet verstoord</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Volledig verstoord</i>	
SL	In de AFGELOPEN WEEK...
10. Hoe vaak hebt u vanwege uw tinnitus moeite gehad om IN SLAAP TE VALLEN of DOOR TE SLAPEN ? <i>Nooit moeite gehad</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Altijd moeite gehad</i>	
11. Hoe vaak hebt u vanwege uw tinnitus moeite gehad om ZOVEEL SLAAP te krijgen als u nodig had? <i>Nooit moeite gehad</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Altijd moeite gehad</i>	
12. Hoeveel van de tijd belette uw tinnitus u dat u zo DIEP of RUSTIG kon slapen als u zou willen? <i>Nooit</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Altijd</i>	

Lees elke vraag aandachtig. Om een vraag te beantwoorden omcirkelt u ÉÉN getal bij elke vraag. Bijvoorbeeld 10% of 1 .												
A	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...	Niet verstoord										Volledig verstoord
13.	Uw vermogen om DUIDELIJK TE HOREN ?	0	1	2	3	4	5	6	7	8	9	10
14.	Uw vermogen om MENSEN te VERSTAAN die aan het praten zijn?	0	1	2	3	4	5	6	7	8	9	10
15.	Uw vermogen om GESPREKKEN in groep of op bijeenkomsten te VOLGEN ?	0	1	2	3	4	5	6	7	8	9	10
R	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...	Niet verstoord										Volledig verstoord
16.	Uw STILLE, RUSTGEVENDE ACTIVITEITEN ?	0	1	2	3	4	5	6	7	8	9	10
17.	Uw vermogen om U TE ONTSPANNEN ?	0	1	2	3	4	5	6	7	8	9	10
18.	Uw vermogen om van RUST EN STILTE te genieten?	0	1	2	3	4	5	6	7	8	9	10
Q	In welke mate heeft uw tinnitus in de AFGELOPEN WEEK het volgende verstoord...	Niet verstoord										Volledig verstoord
19.	Genieten van SOCIALE ACTIVITEITEN ?	0	1	2	3	4	5	6	7	8	9	10
20.	GENIETEN VAN HET LEVEN ?	0	1	2	3	4	5	6	7	8	9	10
21.	Uw RELATIES met familie, vrienden en anderen?	0	1	2	3	4	5	6	7	8	9	10
22.	Hoe vaak hebt u vanwege uw tinnitus moeite gehad met uw WERK OF ANDERE TAKEN , zoals huishoudelijk werk, schoolwerk of zorgen voor kinderen of anderen? <i>Nooit moeite gehad</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Altijd moeite gehad</i>	0	1	2	3	4	5	6	7	8	9	10
E	In de AFGELOPEN WEEK...											
23.	Hoe ONGERUST of BEZORGD voelde u zich vanwege uw tinnitus? <i>Helemaal niet ongerust of bezorgd</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Uiterst ongerust of bezorgd</i>	0	1	2	3	4	5	6	7	8	9	10
24.	Hoe GEËRGERD of VAN STREEK was u vanwege uw tinnitus? <i>Helemaal niet geërgerd of van streek</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Uiterst geërgerd of van streek</i>	0	1	2	3	4	5	6	7	8	9	10
25.	Hoe DEPRESSIEF was u vanwege uw tinnitus? <i>Helemaal niet depressief</i> ▶ 0 1 2 3 4 5 6 7 8 9 10 ◀ <i>Uiterst depressief</i>	0	1	2	3	4	5	6	7	8	9	10