

Supplementary File 3: Univariate analysis to examine association between predictor variables and outcome variable

Table 1: Participant demographic characteristics (n=228)

Characteristic	N (%)	Mean (SD)
Demographic characteristics		
Age (in years)		55.14 (12.92)
Gender		
▪ Female	98 (43%)	
▪ Male	130 (57%)	
Highest level of education		
▪ High school or below	59 (26%)	
▪ College	47 (21%)	
▪ Vocational training	31 (14%)	
▪ Bachelor's degree	61 (27%)	
▪ Masters degree or above	30 (13%)	
Employment		
▪ Manager	27 (12%)	
▪ Professional	46 (20%)	
▪ Technical	13 (6%)	
▪ Administrative	17 (7%)	
▪ Skilled tradesman	11 (5%)	
▪ Service occupation	11 (5%)	
▪ Medical	6 (3%)	
▪ Sales	8 (3%)	
▪ Homemaker	4 (2%)	
▪ Student	1 (0%)	
▪ Retired	73 (32%)	
▪ Unemployed	11 (5%)	
Loud noise exposure		
▪ Yes	103 (45%)	
▪ No	125 (55%)	
Diagnosed with a psychological condition		
▪ Yes	50 (22%)	
▪ No	178 (78%)	
Working less due to tinnitus		
▪ Reduced hours	8 (4%)	
▪ Stopped work	32 (14%)	
▪ Disability allowance	7 (3%)	
▪ No	181 (79%)	
Tinnitus and hearing-related characteristics		
Baseline tinnitus severity (measured using Tinnitus Functional Index)		57.93 (19.17)
Tinnitus duration (in years)		17.68 (19.42)
How often tinnitus is heard		

<ul style="list-style-type: none"> ▪ Occasionally ▪ When taking out my hearing aid(s) ▪ At night ▪ Most of the time ▪ All the time 	4 (2%) 3 (1%) 4 (2%) 63 (27%) 154 (68%)	
Tinnitus location <ul style="list-style-type: none"> ▪ One ear ▪ Both ears ▪ In my head ▪ Other location ▪ Unsure 	61 (27%) 109 (48%) 34 (15%) 3 (1%) 21 (9%)	
Type of tinnitus sound (answering Yes) <ul style="list-style-type: none"> ▪ Ringing ▪ Buzzing ▪ High pitched sound ▪ Low pitched sound ▪ Pulsating ▪ Clicking ▪ Music ▪ Voices ▪ Humming 	71 (31%) 75 (33%) 130 (57%) 16 (7%) 28 (12%) 14 (6%) 4 (2%) 3 (1%) 21 (9%)	
Multiple sounds heard <ul style="list-style-type: none"> ▪ Yes ▪ No 	73 (32%) 155 (68%)	
Presence of a hearing loss <ul style="list-style-type: none"> ▪ No ▪ Both ears ▪ One ear ▪ Unsure 	49 (21%) 104 (46%) 46 (20%) 29 (13%)	
Treatment-related characteristics		
Past tinnitus treatment sought <ul style="list-style-type: none"> ▪ Yes ▪ No 	58 (25%) 170 (75%)	
Sounds can distract from tinnitus <ul style="list-style-type: none"> ▪ Fully ▪ Partially ▪ Not at all 	26 (11%) 178 (78%) 24 (10%)	
Hearing aid use <ul style="list-style-type: none"> ▪ No ▪ Unilateral ▪ Bilateral 	159 (70%) 19 (8%) 50 (22%)	
Medication use <ul style="list-style-type: none"> ▪ Yes ▪ No 	130 (57%) 98 (43%)	

Table 2: Univariate analysis with the Chi-square/ Fishers exact test results on the association between the demographic predictor categories and outcome variable (success as defined by a TFI-score changes ≥ 13 points or a failure). *Indicates use of Fisher's exact test results due to less than 5 cases in subcategories.

Predictor variable	Sub-Categories	Crude Odds Ratio (95% CIs)	P-Value
Age	>57 years	0.85 (0.50, 1.47)	0.57
	≤ 57 years	Ref	
Gender	Female	1.12 (0.64, 1.94)	0.70
	Male	Ref	
Education level	College	0.61 (0.31, 1.42)	0.01*
	Vocational training	1.70 (0.75, 4.88)	
	Bachelor's degree	1.30 (0.67, 2.92)	
	Master's degree or above	3.47 (1.32, 12.51)	
	High school or less	Ref	
Employment type	Professional	0.59 (0.25, 1.82)	0.95*
	Technical	0.40 (0.13, 1.89)	
	Administrative	0.40 (0.14, 1.66)	
	Skilled tradesman	0.56 (0.18, 3.00)	
	Service occupation	0.80 (0.24, 4.66)	
	Medical	1.00 (0.22, 11.54)	
	Sales	0.80 (0.21, 6.00)	
	Home maker	0.27 (0.06, 3.00)	
	Student	0.40 (0.05, 35.47)	
	Retired	0.74 (0.32, 2.12)	
	Unemployed	0.80 (0.24, 4.66)	
	Manager	Ref	
Loud noise exposure	Yes	0.80 (0.46, 1.38)	0.43
	No	Ref	
Presence of a psychological condition	Yes	1.72 (0.85, 3.46)	0.13
	No	Ref	
Work less due to tinnitus	Reduced hours	1.05 (0.31, 6.18)	0.89*
	Stopped work	0.81 (0.41, 1.89)	
	Disability allowance	0.53 (0.16, 2.88)	
	No	Ref	

Table 3: Univariate analysis with the Chi-square/ Fishers exact test results on the association between the tinnitus and hearing-related predictor categories and outcome variable (success as defined by a TFI-score changes ≥ 13 points or a failure). *Indicates use of Fisher's exact test results due to less than 5 cases in subcategories.

Predictor variable	Sub-Categories	Crude Odds Ratio (95% CIs)	P-Value
Baseline tinnitus severity	>55.2	2.65 (1.50, 4.67)	0.001
	≤ 55.2	Ref	
Tinnitus duration	>10.00 years	1.16 (0.66, 2.02)	0.60
	≤ 10.00 years	Ref	
How often tinnitus is heard	When taking out my hearing aid(s)	0.67 (0.02, 18.06)	0.19*
	At night	0.33 (0.02, 6.65)	
	Most of the time	0.39 (0.04, 3.96)	
	All the time	0.76 (0.08, 7.49)	
	Occasionally	Ref	
Tinnitus location	Both ears	1.41(0.48, 4.16)	0.90*
	In my head	0.94 (0.48, 1.80)	
	Unsure	1.35 (0.55, 3.34)	
	Other	1.13 (0.10,13.16)	
	One ear	Ref	
Tinnitus type: Ringing	Yes	1.30 (0.72, 2.37)	0.38
	No	Ref	
Tinnitus type: Buzzing	Yes	1.34 (0.74, 2.42)	0.32
	No	Ref	
Tinnitus type: High pitch	Yes	0.76 (0.44, 1.33)	0.34
	No	Ref	
Tinnitus type: Low pitch	Yes	0.89 (0.31, 2.56)	0.83
	No	Ref	
Tinnitus type: Pulsing	Yes	0.97 (0.42, 2.21)	0.94
	No	Ref	
Tinnitus type: Clicking	Yes	0.52 (0.17, 1.53)	0.23
	No	Ref	
Tinnitus type: Music	Yes	1.63 (0.17, 15.98)	1.00*
	No	Ref	
Tinnitus type: Voices	Yes	0.09 (0.00, 1.75)	0.04*
	No	Ref	
Tinnitus type: Humming	Yes	0.56 (0.23, 1.39)	0.21
	No	Ref	
Multiple tones heard	Yes	1.15 (0.64, 2.08)	0.63
	No	Ref	
Presence of a hearing loss	Both ears	1.20 (0.59, 2.41)	0.92
	One ear	1.19 (0.51, 2.74)	
	Unsure	1.41 (0.53, 3.73)	
	No	Ref	

Table 4: Univariate analysis with the Chi-square/ Fishers exact test results on the association between the treatment-related predictor categories and outcome variable (success as defined by a TFI-score changes ≥ 13 points or a failure). *Indicates use of Fisher's exact test results due to less than 5 cases in subcategories.

Predictor variable	Sub-Categories	Crude Odds Ratio (95% CIs)	P-Value
Past treatment sought	Yes	0.94 (0.50, 1.74)	0.83
	No	Ref	
Sounds can distract	Partially	4.34 (1.82, 10.34)	0.001
	Not at all	3.15 (0.99, 10.00)	
	Fully	Ref	
Hearing aid use	One ear	1.57 (0.61, 5.49)	0.26
	Both ear	0.69 (0.38, 1.39)	
	No	Ref	
Medication use	Yes	1.22 (0.71, 2.12)	0.46
	No	Ref	

Table 5: Univariate analysis with the Chi-square/ Fishers exact test results on the association between the clinical factors predictor categories and outcome variable (success as defined by a TFI-score changes ≥ 13 points or a failure). *Indicates use of Fisher's exact test results due to less than 5 cases in subcategories.

Predictor variable	Sub-Categories	Odds Ratio (95% CIs)	P-Value
Anxiety	Yes	1.53 (0.83, 2.82)	0.17
	No	Ref	
Depression	Yes	1.54 (0.62, 3.83)	0.35
	No	Ref	
Insomnia	Yes	1.27 (0.72, 2.23)	0.41
	No	Ref	
Hyperacusis	Yes	1.21 (0.56, 2.63)	0.62
	No	Ref	
Hearing disability	Yes	1.37 (0.77, 2.43)	0.28
	No	Ref	
Cognitive functions	Yes	0.99 (0.56, 1.74)	0.97
	No	Ref	
Life satisfaction	Yes	0.76 (0.44, 1.33)	0.34
	No	Ref	