

Table 1s. SSQ17 and match (x) with other short forms.

	SSQ ^(a)	SSQ5 ^(b)	ssq6 ^(c)	SSQ12 ^(d)	Pragmatic scale ^(e)	Item (ordered according to the printed SSQ17 questionnaire)
	1.2				Speech in quiet	You are talking with one other person in a quiet, carpeted lounge-room. Can you follow what the other person says?
Speech subscale	1.4			x	Speech in noise	You are in a group of about five people in a busy restaurant. You can see everyone else in the group. Can you follow the conversation?
	1.5				Speech in noise	You are talking with one other person. There is continuous background noise, such as a fan or running water. Can you follow what the person says?
	1.7				Speech in speech contexts	You are talking to someone in a place where there are a lot of echoes, such as a church or railway terminus building. Can you follow what the other person says?
	1.9				Speech in speech contexts	Can you have a conversation with someone when another person is speaking whose voice is different in pitch from the person you're talking to?
	1.10		x	x	Multiple speech streams	You are listening to someone talking to you, while at the same time trying to follow the news on TV. Can you follow what both people are saying?
Spatial subscale	2.5				Localization	You are in the stairwell of a building with floors above and below you. You can hear sounds from another floor. Can you readily tell where the sound is coming from?
	2.6			x	Localization	You are outside. A dog barks loudly. Can you tell immediately where it is, without having to look?
	2.7				Distance and movement	You are standing on the footpath of a busy street. Can you hear right away which direction a bus or truck is coming from before you see it?
	2.9	x		x	Distance and movement	Can you tell how far away a bus or a truck is, from the sound?
	2.12				Distance and movement	Can you tell from their voice or footsteps whether the person is coming towards you or going away?
Qualities subscale	3.3				Segregation of sounds	You are in a room and there is music on the radio. Someone else in the room is talking. Can you hear the voice as something separate from the music?
	3.4		x		Identification of sound	Do you find it easy to recognise different people you know by the sound of each one's voice?
	3.8				Sound Quality and naturalness	When you listen to music, does it sound clear and natural?
	3.9	x		x	Sound Quality and naturalness	Do everyday sounds that you can hear easily seem clear to you (not blurred)?
	3.10		x		Sound Quality and naturalness	Do other people's voices sound clear and natural?
	3.18				Listening Effort	Do you have to put in a lot of effort to hear what is being said in conversation with others?

- (a) Numbering according to Gatehouse and Noble (2004)
- (b) Items shared with short form published by Demeester et al. (2012)
- (c) Items shared with postal questionnaire by Noble et al. (2012)
- (d) Items shared with short form published by Noble et al. (2013)
- (e) Pragmatic subscale proposed by Gatehouse and Akeroyd (2006)

Table 2s. Descriptive statistics for the study sample, n=1711. Number of subjects (N), mean PTA4 in the better ear (PTA4), and subjects of female gender in percent by age. Median (med) and interquartile range (IQR) of SSQ17 and the speech, spatial, and qualities subscales by age.

	Age/years	18–29	30–39	40–49	50–50	60–69	70–79	80+
N		207	249	382	338	243	210	82
Female gender	%	59	49	55	55	58	60	44
PTA4 / dB HL	mean	1	3	6	10	16	22	29
	sd	4.8	7.0	6.0	7.6	9.3	9.8	11.0
SSQ17	med	8.5	8.4	8.3	8.1	7.8	7.9	7.0
	IQR	1.3	1.4	1.6	1.6	1.9	2.1	2.5
Speech subscale	med	8.1	8.0	7.9	7.6	7.2	7.0	6.2
	IQR	1.6	1.8	2.3	2.3	2.7	2.6	2.9
Spatial subscale	med	7.8	8.1	8.0	8.0	7.4	7.6	6.7
	IQR	1.9	2.0	1.8	2.0	2.3	2.8	3.1
Qualities subscale	med	9.5	9.4	9.2	9.0	8.7	8.7	8.3
	IQR	0.9	1.2	1.6	1.5	1.6	1.9	2.6

Table 3s: Distribution of SSQ17 scores averaged by subject as a function of age derived in practically subclinical adults, i.e., no asymmetric hearing thresholds (interaural PTA4-difference > 10 dB HL), no self-reporting of hearing difficulties, tinnitus, ear diseases or health issues. Numerical results at the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 estimated using the quantile regression model displayed in Figure 3 of the article for the study sample (n=1711) and separately for female (n=946) and male (n=765) participants.

SSQ17		Age / years							
ALL	quantile	20	30	40	50	60	70	80	90
	0.9	8.9	9.0	8.9	8.8	8.7	8.7	8.6	8.4
	0.75	8.6	8.6	8.6	8.4	8.3	8.2	8.1	7.8
	0.5	8.1	8.2	8.2	8.0	7.8	7.7	7.5	7.2
	0.25	7.7	7.7	7.7	7.5	7.2	7.1	6.9	6.6
	0.1	7.3	7.3	7.1	6.9	6.6	6.4	6.2	6.1
Female									
	0.9	8.9	9.0	9.0	8.9	8.8	8.8	8.7	8.4
	0.75	8.5	8.7	8.7	8.5	8.3	8.3	8.2	7.9
	0.5	8.1	8.2	8.3	8.0	7.8	7.8	7.6	7.3
	0.25	7.6	7.8	7.7	7.5	7.2	7.1	7.0	6.8
	0.1	7.2	7.3	7.2	6.8	6.5	6.4	6.4	6.4
Male									
	0.9	8.9	8.9	8.8	8.7	8.6	8.6	8.5	8.3
	0.75	8.6	8.5	8.5	8.4	8.2	8.2	8.0	7.7
	0.5	8.2	8.1	8.0	7.9	7.8	7.6	7.4	7.1
	0.25	7.8	7.7	7.6	7.5	7.2	7.0	6.7	6.5
	0.1	7.5	7.3	7.1	6.9	6.7	6.3	6.0	5.8

Table 4s: Distribution of speech subscale scores averaged by subject as a function of age derived in practically subclinical adults, i.e., no asymmetric hearing thresholds (interaural PTA4-difference > 10 dB HL), no self-reporting of hearing difficulties, tinnitus, ear diseases or health issues. Numerical results at the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 estimated using the quantile regression model displayed in Figure 3 of the article for the study sample (n=1711) and separately for female (n=946) and male (n=765) participants.

Speech		Age / years							
ALL	quantile	20	30	40	50	60	70	80	90
	0.9	8.6	8.7	8.6	8.5	8.4	8.4	8.2	7.9
	0.75	8.2	8.2	8.1	8.0	7.8	7.8	7.6	7.2
	0.5	7.6	7.7	7.6	7.4	7.2	7.1	6.8	6.5
	0.25	7.1	7.1	6.9	6.7	6.4	6.3	6.1	5.7
	0.1	6.5	6.5	6.2	5.9	5.6	5.4	5.2	5.0
Female									
	0.9	8.7	8.8	8.8	8.6	8.5	8.6	8.4	8.1
	0.75	8.2	8.3	8.3	8.1	7.9	7.9	7.7	7.3
	0.5	7.7	7.8	7.8	7.5	7.2	7.2	7.0	6.7
	0.25	7.1	7.3	7.1	6.7	6.4	6.4	6.3	6.0
	0.1	6.5	6.6	6.4	5.9	5.6	5.6	5.5	5.3
Male									
	0.9	8.5	8.5	8.4	8.4	8.2	8.2	8.0	7.8
	0.75	8.1	8.0	7.9	7.8	7.7	7.6	7.4	7.0
	0.5	7.6	7.5	7.4	7.2	7.1	6.9	6.7	6.3
	0.25	7.1	6.9	6.8	6.6	6.4	6.2	5.9	5.6
	0.1	6.6	6.3	6.2	5.9	5.6	5.3	5.0	4.8

Table 5s: Distribution of spatial subscale scores averaged by subject as a function of age derived in practically subclinical adults, i.e., no asymmetric hearing thresholds (interaural PTA4-difference > 10 dB HL), no self-reporting of hearing difficulties, tinnitus, ear diseases or health issues. Numerical results at the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 estimated using the quantile regression model displayed in Figure 3 of the article for the study sample (n=1711) and separately for female (n=946) and male (n=765) participants.

Spatial		Age / years							
ALL	quantile	20	30	40	50	60	70	80	90
	0.9	8.7	8.8	8.8	8.7	8.7	8.6	8.6	8.5
	0.75	8.1	8.3	8.3	8.2	8.1	8.0	7.9	7.7
	0.5	7.4	7.6	7.8	7.6	7.4	7.3	7.1	6.8
	0.25	6.7	6.9	7.1	6.9	6.6	6.5	6.2	6.0
	0.1	6.0	6.2	6.2	6.0	5.7	5.5	5.4	5.2
Female									
	0.9	8.5	8.8	8.8	8.7	8.6	8.6	8.6	8.5
	0.75	7.8	8.2	8.3	8.1	8.0	7.9	7.9	7.7
	0.5	7.2	7.5	7.7	7.5	7.2	7.2	7.1	6.9
	0.25	6.4	6.8	7.0	6.7	6.4	6.3	6.2	6.1
	0.1	5.6	5.9	6.0	5.7	5.4	5.4	5.4	5.5
Male									
	0.9	8.9	8.8	8.8	8.8	8.8	8.8	8.7	8.5
	0.75	8.4	8.3	8.3	8.4	8.3	8.2	8.0	7.7
	0.5	7.8	7.8	7.8	7.8	7.7	7.5	7.2	6.8
	0.25	7.2	7.1	7.2	7.2	7.0	6.7	6.4	6.0
	0.1	6.6	6.5	6.5	6.5	6.2	5.9	5.5	5.1

Table 6s: Distribution of qualities subscale scores averaged by subject as a function of age derived in practically subclinical adults, i.e., no asymmetric hearing thresholds (interaural PTA4-difference > 10 dB HL), no self-reporting of hearing difficulties, tinnitus, ear diseases or health issues. Numerical results at the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 estimated using the quantile regression model displayed in Figure 3 of the article for the study sample (n=1711) and separately for female (n=946) and male (n=765) participants.

Qualities		Age / years							
ALL	quantile	20	30	40	50	60	70	80	90
	0.9	9.7	9.6	9.6	9.5	9.4	9.4	9.3	9.1
	0.75	9.4	9.4	9.3	9.2	9.1	9.0	8.9	8.7
	0.5	9.1	9.0	8.9	8.8	8.6	8.5	8.3	8.1
	0.25	8.7	8.6	8.5	8.3	8.1	7.9	7.7	7.4
	0.1	8.3	8.1	7.9	7.7	7.5	7.2	7.0	6.7
Female									
	0.9	9.7	9.7	9.7	9.6	9.5	9.5	9.4	9.2
	0.75	9.5	9.5	9.4	9.3	9.2	9.1	9.0	8.7
	0.5	9.2	9.1	9.1	8.9	8.7	8.6	8.5	8.1
	0.25	8.8	8.7	8.6	8.4	8.2	8.1	7.8	7.4
	0.1	8.3	8.2	8.0	7.8	7.6	7.4	7.1	6.8
Male									
	0.9	9.6	9.6	9.5	9.4	9.3	9.3	9.2	9.1
	0.75	9.4	9.3	9.2	9.0	8.9	8.8	8.8	8.7
	0.5	9.1	8.9	8.8	8.6	8.5	8.3	8.2	8.1
	0.25	8.7	8.5	8.3	8.2	7.9	7.7	7.6	7.5
	0.1	8.3	8.0	7.9	7.6	7.3	7.0	6.8	6.6

Table 7s. Association of SSQ17 scores and PTA4 in practically subclinical participants. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (left panel) and Table 1 in the article. Reference categories in brackets.

SSQ17		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB	10	6.9	7.5	8.0	8.5	8.9
	15	6.7	7.3	7.9	8.4	8.8
	20	6.5	7.1	7.6	8.2	8.7
	25	6.3	6.8	7.4	8.0	8.5
	30	6.1	6.6	7.2	7.8	8.4
	35	5.9	6.5	7.0	7.6	8.3
Age / years (ref. 18-39)	40-49	-0.1	0.0	0.0	0.0	0.0
	50-59	-0.4	-0.2	-0.1	-0.1	-0.1
	60-69	-0.3	-0.1	-0.1	-0.1	-0.1
	70-79	0.0	0.2	0.3	0.3	0.2
	80+	-0.3	-0.2	-0.1	-0.1	-0.2
Gender (ref. Male)	Female	-0.1	-0.1	0.0	0.0	0.1
Education (ref.High)	Basic	-0.5	-0.4	-0.3	-0.2	-0.2
	Intermediate	-0.1	-0.1	-0.1	-0.1	-0.1
Health issues		-0.6	-0.6	-0.5	-0.4	-0.3
Hearing difficulties		-0.9	-1.0	-0.9	-0.9	-0.9
Asymmetry		-0.7	-0.7	-0.6	-0.5	-0.5
Tinnitus		-0.3	-0.3	-0.2	-0.2	-0.2

Table 8s. Association of speech subscale scores and PTA4 in practically subclinical participants. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (right panel) and Table 2 in the article. Reference categories in brackets.

Speech		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	6.0	6.7	7.4	8.0	8.5
	15	5.6	6.4	7.1	7.7	8.3
	20	5.3	6.0	6.7	7.4	8.0
	25	4.9	5.7	6.4	7.1	7.8
	30	4.6	5.4	6.1	6.8	7.5
	35	4.3	5.1	5.8	6.6	7.2
Age / years (ref. 18-39)	40-49	-0.2	-0.1	0.0	0.1	0.1
	50-59	-0.4	-0.2	0.0	0.0	0.1
	60-69	0.0	0.1	0.2	0.2	0.2
	70-79	0.4	0.5	0.7	0.7	0.7
	80+	0.3	0.3	0.4	0.4	0.3
Gender (ref. Male)	Female	-0.2	-0.1	0.0	0.1	0.1
Education (ref. High)	Basic	-0.3	-0.2	-0.2	-0.1	-0.1
	Intermediate	0.1	0.1	0.1	0.0	0.0
Health issues		-0.8	-0.7	-0.6	-0.4	-0.3
Hearing difficulties		-1.3	-1.3	-1.3	-1.3	-1.3
Asymmetry		-0.8	-0.8	-0.7	-0.6	-0.5
Tinnitus		-0.6	-0.4	-0.3	-0.3	-0.3
ia: Female*Hearing Difficulties		0.4	0.2	0.2	0.2	0.2

Note. This model includes an interaction term (i.a.) between age and education to adjust for the additional dependency between the two variables. Regression coefficients were very small and therefore omitted from the table.

Table 9s. Association of spatial subscale scores and PTA4 in practically subclinical participants. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (left panel) and Table 3 in the article. Reference categories in brackets.

Spatial		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	5.9	6.8	7.5	8.2	8.7
	15	5.8	6.6	7.5	8.2	8.8
	20	5.7	6.5	7.4	8.2	8.8
	25	5.7	6.4	7.3	8.2	8.9
	30	5.6	6.3	7.2	8.2	8.9
	35	5.6	6.2	7.2	8.2	9.0
Age / years (ref. 18-39)	40-49	0.4	0.3	0.2	0.1	-0.1
	50-59	-0.1	0.1	0.1	0.0	-0.2
	60-69	0.0	0.1	-0.1	-0.2	-0.4
	70-79	0.3	0.4	0.3	0.1	-0.2
	80+	-0.4	-0.2	-0.4	-0.5	-0.6
Gender (Male)	Female	-0.7	-0.5	-0.4	-0.3	-0.2
Education (ref. High)	Basic	-0.7	-0.6	-0.5	-0.4	-0.3
	Intermediate	-0.2	-0.2	-0.2	-0.2	-0.2
Health issues		-0.5	-0.5	-0.4	-0.3	-0.3
Hearing difficulties		-0.8	-0.7	-0.7	-0.7	-0.7
Asymmetry		-0.6	-0.6	-0.6	-0.5	-0.4

Table 10s. Association of qualities subscale scores and PTA4 in practically subclinical male participants. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (right panel) and Table 4 in the article. Reference categories in brackets.

Qualities		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	7.8	8.4	8.9	9.3	9.6
	15	7.6	8.2	8.8	9.2	9.5
	20	7.3	8.0	8.6	9.1	9.4
	25	7.0	7.6	8.3	8.9	9.3
	30	6.7	7.4	8.1	8.8	9.2
	35	6.3	7.2	8.0	8.7	9.1
Age / years (ref. 18-39)	40-49	-0.1	-0.1	-0.1	-0.1	-0.1
	50-59	-0.2	-0.2	-0.2	-0.2	-0.2
	60-69	-0.1	-0.2	-0.3	-0.3	-0.2
	70-79	0.2	0.1	-0.1	-0.1	-0.1
	80+	0.0	-0.2	-0.3	-0.4	-0.2
Gender (Male)	Female	0.1	0.1	0.2	0.2	0.2
Education (ref. High)	Basic	-0.6	-0.4	-0.3	-0.2	-0.1
	Intermediate	-0.1	-0.1	-0.1	-0.1	0.0
Health issues		-0.5	-0.5	-0.4	-0.3	-0.2
Hearing difficulties		-1.0	-0.9	-0.8	-0.6	-0.5
Asymmetry		-0.8	-0.6	-0.4	-0.4	-0.3

Table 11s. Association of scores and PTA4 in practically subclinical participants for SSQ item 1.2^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (right panel) and Table 2 in the article. Reference categories in brackets.

Speech in quiet 1.2		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	8.0	8.7	9.2	9.6	9.8
	15	8.1	8.7	9.2	9.5	9.8
	20	8.1	8.6	9.0	9.4	9.7
	25	8.1	8.5	8.9	9.3	9.7
	30	8.3	8.5	8.8	9.3	9.6
	35	8.4	8.5	8.8	9.2	9.6
Age / years (ref. 18-39)	40-49	-0.5	-0.3	-0.2	-0.1	0.0
	50-59	-0.9	-0.5	-0.3	-0.2	-0.1
	60-69	-1.3	-0.8	-0.5	-0.3	-0.2
	70-79	-1.4	-0.7	-0.3	-0.1	-0.1
	80+	-2.2	-1.3	-0.7	-0.4	-0.2
Gender (ref. Male)	Female	0.2	0.2	0.2	0.1	0.1
Education (ref. High)	Basic	-1.1	-0.8	-0.5	-0.3	-0.2
	Intermediate	-0.1	-0.1	0.0	0.0	0.0
Health issues		-0.2	-0.2	-0.2	-0.2	-0.1
Hearing difficulties		-1.3	-0.9	-0.6	-0.4	-0.2
Asymmetry		-0.4	-0.4	-0.3	-0.2	-0.1
Tinnitus		-0.5	-0.3	-0.2	-0.1	-0.1
ia: Female*Hearing		-0.2	-0.2	-0.2	-0.1	0.0

^aYou are talking with one other person in a quiet, carpeted lounge-room. Can you follow what the other person says?

Table 12s. Association of scores and PTA4 in practically subclinical participants for SSQ speech item 1.4^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (right panel) and Table 2 in the article. Reference categories in brackets.

Speech in noise 1.4		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	5.7	6.7	7.5	8.3	8.9
	15	5.1	6.1	7.1	8.0	8.7
	20	4.5	5.6	6.7	7.6	8.4
	25	3.9	5.1	6.4	7.3	8.0
	30	3.5	4.7	6.1	7.0	7.7
	35	3.1	4.4	5.8	6.7	7.5
Age / years (ref. 18-39)	40-49	-0.4	-0.2	-0.1	0.0	0.1
	50-59	-0.3	-0.2	-0.1	-0.1	0.0
	60-69	0.5	0.5	0.3	0.3	0.3
	70-79	1.2	1.2	1.0	0.9	0.8
	80+	0.9	0.9	0.7	0.7	0.6
Gender (ref. Male)	Female	0.0	0.0	0.0	0.1	0.1
Education (ref. High)	Basic	-0.1	-0.1	-0.1	0.0	0.0
	Intermediate	0.2	0.1	0.1	0.1	0.1
Health issues		-0.9	-0.7	-0.5	-0.4	-0.3
Hearing difficulties		-1.3	-1.5	-1.6	-1.6	-1.5
Asymmetry		-0.9	-1.0	-0.9	-0.8	-0.7
Tinnitus		-0.6	-0.6	-0.5	-0.4	-0.3
ia: Female*Hearing		0.3	0.3	0.2	0.2	0.3

^aYou are in a group of about five people in a busy restaurant. You can see everyone else in the group. Can you follow the conversation?

Table 13s. Association of scores and PTA4 in practically subclinical participants for SSQ speech item 1.5^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (right panel) and Table 2 in the article. Reference categories in brackets.

Speech in noise 1.5		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	6.1	7.0	7.8	8.5	9.1
	15	5.8	6.7	7.5	8.2	8.9
	20	5.5	6.4	7.2	8.0	8.6
	25	5.2	6.1	6.9	7.7	8.4
	30	4.9	5.9	6.7	7.4	8.2
	35	4.7	5.8	6.5	7.2	8.0
Age / years (ref. 18-39)	40-49	-0.3	-0.2	-0.1	-0.1	0.0
	50-59	-0.7	-0.6	-0.4	-0.3	-0.2
	60-69	-0.6	-0.5	-0.3	-0.2	-0.1
	70-79	-0.2	-0.1	0.1	0.2	0.2
	80+	0.0	-0.1	0.1	0.2	0.1
Gender (ref. Male)	Female	-0.4	-0.2	-0.1	-0.1	0.0
Education (ref. High)	Basic	-0.1	-0.2	-0.1	-0.1	0.0
	Intermediate	0.2	0.1	0.1	0.1	0.1
Health issues		-0.8	-0.7	-0.6	-0.4	-0.2
Hearing difficulties		-1.5	-1.5	-1.4	-1.3	-1.1
Asymmetry		-0.6	-0.6	-0.5	-0.4	-0.3
Tinnitus		-0.4	-0.3	-0.2	-0.2	-0.2
ia: Female*Hearing		0.4	0.2	0.1	0.1	0.0

^aYou are talking with one other person. There is continuous background noise, such as a fan or running water. Can you follow what the person says?

Table 14s. Association of scores and PTA4 in practically subclinical participants for SSQ speech item 1.7^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (right panel) and Table 2 in the article. Reference categories in brackets.

Speech in speech contexts 1.7		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	6.2	7.1	7.9	8.6	9.1
	15	5.4	6.4	7.3	8.1	8.8
	20	4.6	5.7	6.7	7.6	8.4
	25	3.8	5.0	6.1	7.0	7.9
	30	2.9	4.3	5.4	6.5	7.5
	35	2.1	3.6	4.9	6.0	7.1
Age / years (ref. 18-39)	40-49	0.2	0.2	0.1	0.1	0.0
	50-59	0.1	0.0	0.0	0.0	0.0
	60-69	0.6	0.4	0.3	0.2	0.1
	70-79	1.6	1.3	1.0	0.8	0.7
	80+	1.7	1.3	0.9	0.6	0.4
Gender (ref. Male)	Female	-0.3	-0.2	-0.1	-0.1	0.0
Education (ref. High)	Basic	-0.2	-0.2	-0.1	0.0	0.0
	Intermediate	0.1	0.2	0.2	0.2	0.2
Health issues		-0.7	-0.6	-0.5	-0.4	-0.2
Hearing difficulties		-0.6	-0.9	-1.1	-1.1	-1.0
Asymmetry		-0.9	-0.9	-0.8	-0.8	-0.7
Tinnitus		-0.6	-0.4	-0.3	-0.3	-0.3
ia: Female*Hearing		0.2	0.3	0.4	0.4	0.4

^aYou are talking to someone in a place where there are a lot of echoes, such as a church or railway terminus building. Can you follow what the other person says?

Table 15s. Association of scores and PTA4 in practically subclinical participants for SSQ speech item 1.9^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (right panel) and Table 2 in the article. Reference categories in brackets.

Speech in speech contexts 1.9		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	6.1	7.0	7.8	8.5	9.1
	15	5.7	6.6	7.5	8.3	8.9
	20	5.2	6.2	7.1	7.9	8.6
	25	4.7	5.7	6.7	7.6	8.3
	30	4.2	5.2	6.4	7.3	8.0
	35	3.7	4.8	6.0	6.9	7.7
Age / years (ref. 18-39)	40-49	-0.3	-0.1	0.0	0.0	0.0
	50-59	-0.2	0.0	0.0	0.1	0.0
	60-69	0.2	0.3	0.3	0.3	0.3
	70-79	0.7	0.8	0.7	0.7	0.6
	80+	0.7	0.6	0.5	0.5	0.4
Gender (ref. Male)	Female	-0.4	-0.2	-0.1	0.0	0.0
Education (ref. High)	Basic	-0.2	-0.1	-0.1	0.0	0.0
	Intermediate	0.1	0.1	0.1	0.1	0.1
Health issues		-0.9	-0.9	-0.7	-0.6	-0.5
Hearing difficulties		-1.1	-1.0	-1.0	-0.9	-0.8
Asymmetry		-1.0	-0.9	-0.8	-0.6	-0.5
Tinnitus		-0.6	-0.4	-0.3	-0.3	-0.2
ia: Female*Hearing		0.7	0.4	0.3	0.2	0.3

^a Can you have a conversation with someone when another person is speaking whose voice is different in pitch from the person you're talking to?

Table 16s. Association of scores and PTA4 in practically subclinical participants for SSQ speech item 1.10^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 4 (right panel) and Table 2 in the article. Reference categories in brackets.

Multiple speech streams 1.10		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	3.6	4.7	5.9	6.9	7.8
	15	3.7	4.6	5.7	6.8	7.7
	20	3.8	4.6	5.6	6.6	7.6
	25	3.9	4.6	5.5	6.5	7.5
	30	4.0	4.6	5.5	6.5	7.4
	35	4.2	4.6	5.5	6.5	7.4
Age / years (ref. 18-39)	40-49	0.1	0.2	0.2	0.2	0.1
	50-59	0.0	0.3	0.4	0.4	0.3
	60-69	0.2	0.5	0.5	0.5	0.4
	70-79	-0.1	0.5	0.7	0.7	0.7
	80+	-0.4	0.2	0.4	0.4	0.4
Gender (ref. Male)	Female	0.2	0.3	0.4	0.4	0.4
Education (ref. High)	Basic	-0.3	-0.2	-0.2	-0.1	0.0
	Intermediate	0.0	0.0	-0.1	-0.1	-0.1
Health issues		-0.4	-0.5	-0.6	-0.5	-0.4
Hearing difficulties		-1.3	-1.2	-1.2	-1.2	-1.1
Asymmetry		-0.6	-0.6	-0.6	-0.5	-0.3
Tinnitus		-0.3	-0.3	-0.3	-0.2	-0.2
ia: Female*Hearing		0.3	0.1	0.0	0.0	0.0

^aYou are listening to someone talking to you, while at the same time trying to follow the news on TV. Can you follow what both people are saying?

Table 17s. Association of scores and PTA4 in practically subclinical participants for SSQ spatial item 2.5^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (left panel) and Table 3 in the article. Reference categories in brackets.

Localization 2.5		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	5.3	6.5	7.4	8.2	8.9
	15	5.4	6.5	7.5	8.4	9.1
	20	5.4	6.5	7.5	8.4	9.2
	25	5.4	6.4	7.4	8.3	9.2
	30	5.5	6.3	7.3	8.3	9.3
	35	5.6	6.4	7.4	8.4	9.4
Age / years (ref. 18-39)	40-49	0.2	0.2	0.0	-0.1	-0.2
	50-59	-0.2	-0.1	-0.1	-0.2	-0.3
	60-69	-0.5	-0.4	-0.4	-0.6	-0.7
	70-79	0.2	0.1	0.0	-0.2	-0.5
	80+	-0.7	-0.6	-0.8	-1.0	-1.1
Gender (ref. Male)	Female	-0.4	-0.3	-0.2	-0.1	0.0
Education (ref. High)	Basic	-0.6	-0.5	-0.4	-0.4	-0.3
	Intermediate	0.1	0.0	-0.1	-0.1	-0.1
Health issues		-0.7	-0.7	-0.6	-0.5	-0.4
Hearing difficulties		-1.2	-1.2	-1.1	-1.0	-0.9
Asymmetry		-0.7	-0.7	-0.6	-0.6	-0.7

^aYou are in the stairwell of a building with floors above and below you. You can hear sounds from another floor. Can you readily tell where the sound is coming from?

Table 18s. Association of scores and PTA4 in practically subclinical participants for SSQ spatial item 2.6^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (left panel) and Table 3 in the article. Reference categories in brackets.

Localization 2.6		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	6.1	7.1	7.9	8.6	9.2
	15	5.8	6.8	7.8	8.5	9.1
	20	5.4	6.5	7.5	8.4	9.0
	25	5.1	6.2	7.3	8.2	8.9
	30	4.9	6.0	7.0	8.0	8.8
	35	4.9	5.8	6.9	7.9	8.7
Age / years (ref. 18-39)	40-49	0.6	0.5	0.3	0.2	0.1
	50-59	0.5	0.5	0.4	0.2	0.1
	60-69	0.6	0.5	0.3	0.1	0.0
	70-79	1.0	0.9	0.8	0.6	0.4
	80+	0.5	0.4	0.2	0.1	0.0
Gender (ref. Male)	Female	-0.8	-0.6	-0.5	-0.3	-0.2
Education (ref. High)	Basic	-0.3	-0.2	-0.2	-0.1	-0.1
	Intermediate	0.1	0.0	0.0	-0.1	-0.1
Health issues		-0.6	-0.6	-0.6	-0.5	-0.4
Hearing difficulties		-0.8	-0.7	-0.7	-0.6	-0.5
Asymmetry		-0.7	-0.6	-0.6	-0.5	-0.5

^aYou are outside. A dog barks loudly. Can you tell immediately where it is, without having to look?

Table 19s. Association of scores and PTA4 in practically subclinical participants for SSQ spatial item 2.7^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (left panel) and Table 3 in the article. Reference categories in brackets.

Distance and movement 2.7		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	6.0	7.1	7.9	8.6	9.2
	15	6.0	7.0	7.9	8.6	9.3
	20	5.9	6.8	7.7	8.5	9.2
	25	5.8	6.6	7.6	8.4	9.2
	30	5.8	6.6	7.4	8.4	9.2
	35	6.1	6.7	7.6	8.5	9.3
Age / years (ref. 18-39)	40-49	0.2	0.2	0.2	0.1	0.0
	50-59	-0.3	0.0	0.0	0.0	-0.1
	60-69	0.0	0.2	0.2	0.0	-0.1
	70-79	0.1	0.4	0.4	0.3	0.0
	80+	-1.6	-0.9	-0.6	-0.6	-0.7
Gender (ref. Male)	Female	-0.7	-0.6	-0.4	-0.3	-0.2
Education (ref. High)	Basic	-0.9	-0.7	-0.5	-0.4	-0.2
	Intermediate	-0.4	-0.3	-0.2	-0.2	-0.1
Health issues		-0.5	-0.5	-0.4	-0.3	-0.2
Hearing difficulties		-1.0	-0.9	-0.8	-0.7	-0.6
Asymmetry		-0.7	-0.6	-0.6	-0.5	-0.5

^a You are standing on the footpath of a busy street. Can you hear right away which direction a bus or truck is coming from before you see it?

Table 20s. Association of scores and PTA4 in practically subclinical participants for SSQ spatial item 2.9^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (left panel) and Table 3 in the article. Reference categories in brackets.

Distance and movement 2.9		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	4.6	5.7	6.7	7.6	8.3
	15	4.4	5.4	6.5	7.5	8.4
	20	4.2	5.2	6.3	7.4	8.3
	25	4.0	4.9	6.0	7.2	8.2
	30	3.8	4.6	5.7	7.0	8.1
	35	3.5	4.4	5.5	6.9	8.1
Age / years (ref. 18-39)	40-49	0.4	0.5	0.3	0.2	0.0
	50-59	0.1	0.2	0.2	0.0	-0.2
	60-69	0.0	0.3	0.2	0.0	-0.3
	70-79	0.5	0.7	0.6	0.2	-0.2
	80+	-0.6	-0.2	-0.1	-0.4	-0.7
Gender (ref. Male)	Female	-0.8	-0.7	-0.6	-0.4	-0.3
Education (ref. High)	Basic	-1.0	-0.8	-0.7	-0.4	-0.3
	Intermediate	-0.4	-0.3	-0.2	-0.2	-0.2
Health issues		0.0	-0.2	-0.3	-0.2	-0.3
Hearing difficulties		-0.1	-0.2	-0.2	-0.3	-0.4
Asymmetry		-0.6	-0.5	-0.4	-0.3	-0.1

^a Can you tell how far away a bus or a truck is, from the sound?

Table 21s. Association of scores and PTA4 in practically subclinical participants for SSQ spatial item 2.12^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (left panel) and Table 3 in the article. Reference categories in brackets.

Distance and movement 2.12		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	5.9	6.8	7.7	8.4	9.1
	15	5.6	6.7	7.7	8.5	9.2
	20	5.3	6.5	7.6	8.6	9.3
	25	5.1	6.3	7.5	8.5	9.3
	30	5.0	6.3	7.5	8.6	9.4
	35	4.9	6.3	7.5	8.7	9.6
Age / years (ref. 18-39)	40-49	0.3	0.2	0.1	0.0	0.0
	50-59	0.1	0.1	0.0	-0.1	-0.2
	60-69	0.3	0.0	-0.2	-0.3	-0.4
	70-79	0.6	0.3	0.0	-0.3	-0.5
	80+	0.1	-0.2	-0.5	-0.7	-0.8
Gender (ref. Male)	Female	-0.6	-0.4	-0.3	-0.2	-0.1
Education (ref. High)	Basic	-0.7	-0.8	-0.6	-0.5	-0.4
	Intermediate	-0.1	-0.2	-0.2	-0.2	-0.2
Health issues		-0.4	-0.4	-0.3	-0.2	-0.2
Hearing difficulties		-0.8	-0.9	-0.8	-0.8	-0.7
Asymmetry		-1.1	-0.9	-0.8	-0.7	-0.6

^a Can you tell from their voice or footsteps whether the person is coming towards you or going away?

Table 22s. Association of scores and PTA4 in practically subclinical participants for SSQ qualities item 3.3^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (right panel) and Table 4 in the article. Reference categories in brackets.

Segregation of sounds 3.3		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	7.0	7.8	8.5	9.1	9.5
	15	6.7	7.7	8.5	9.0	9.5
	20	6.2	7.3	8.2	8.8	9.3
	25	5.6	6.8	7.8	8.5	9.1
	30	5.1	6.4	7.5	8.3	9.0
	35	4.7	6.1	7.3	8.2	8.9
Age / years (ref. 18-39)	40-49	-0.1	-0.1	-0.1	-0.1	-0.1
	50-59	-0.1	-0.2	-0.2	-0.2	-0.1
	60-69	-0.1	-0.3	-0.3	-0.3	-0.2
	70-79	0.3	0.1	0.0	0.0	0.0
	80+	0.3	-0.1	-0.4	-0.3	-0.2
Gender (ref. Male)	Female	0.1	0.2	0.2	0.2	0.2
Education (ref. High)	Basic	-0.5	-0.4	-0.3	-0.2	-0.1
	Intermediate	-0.2	-0.3	-0.2	-0.2	-0.1
Health issues		-0.6	-0.6	-0.5	-0.3	-0.2
Hearing difficulties		-0.8	-0.8	-0.8	-0.6	-0.4
Asymmetry		-0.9	-0.8	-0.7	-0.6	-0.5

^a You are in a room and there is music on the radio. Someone else in the room is talking. Can you hear the voice as something separate from the music?

Table 23s. Association of scores and PTA4 in practically subclinical participants for SSQ qualities item 3.4^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (right panel) and Table 4 in the article. Reference categories in brackets.

Identification of sounds 3.4		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	7.1	8.0	8.7	9.2	9.6
	15	6.7	7.8	8.5	9.1	9.5
	20	6.2	7.5	8.3	9.0	9.4
	25	5.7	7.1	8.1	8.8	9.3
	30	5.1	6.6	7.8	8.6	9.2
	35	4.6	6.3	7.5	8.5	9.1
Age / years (ref. 18-39)	40-49	0.1	0.0	-0.1	-0.1	-0.1
	50-59	0.1	-0.1	-0.2	-0.2	-0.1
	60-69	0.5	0.1	-0.1	-0.1	-0.1
	70-79	1.0	0.4	0.1	0.0	0.0
	80+	0.9	0.2	-0.1	-0.2	-0.1
Gender (ref. Male)	Female	-0.1	0.0	0.1	0.1	0.1
Education (ref. High)	Basic	-0.5	-0.4	-0.2	-0.1	-0.1
	Intermediate	-0.1	-0.1	0.0	0.0	0.0
Health issues		-0.9	-0.6	-0.4	-0.3	-0.2
Hearing difficulties		-0.6	-0.7	-0.6	-0.5	-0.3
Asymmetry		-0.7	-0.5	-0.4	-0.3	-0.3

^a Do you find it easy to recognise different people you know by the sound of each one's voice?

Table 24s. Association of scores and PTA4 in practically subclinical participants for SSQ spatial item 3.8^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (right panel) and Table 4 in the article. Reference categories in brackets.

Sound quality and naturalness 3.8		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	7.9	8.6	9.1	9.5	9.7
	15	7.5	8.3	9.0	9.4	9.7
	20	6.9	7.9	8.7	9.3	9.7
	25	6.4	7.6	8.5	9.2	9.6
	30	5.9	7.3	8.3	9.1	9.6
	35	5.3	6.9	8.2	9.1	9.5
Age / years (ref. 18-39)	40-49	-0.1	-0.1	-0.1	-0.1	-0.1
	50-59	0.0	-0.1	-0.2	-0.2	-0.2
	60-69	0.4	0.1	-0.1	-0.2	-0.2
	70-79	1.0	0.5	0.1	-0.1	-0.2
	80+	1.3	0.5	0.0	-0.3	-0.3
Gender (ref. Male)	Female	0.1	0.1	0.2	0.2	0.1
Education (ref. High)	Basic	-0.3	-0.2	-0.2	-0.1	-0.1
	Intermediate	0.0	0.0	0.0	0.0	0.0
Health issues		-0.5	-0.4	-0.3	-0.3	-0.2
Hearing difficulties		-0.8	-0.7	-0.7	-0.5	-0.4
Asymmetry		-0.6	-0.4	-0.3	-0.2	-0.1

^aWhen you listen to music, does it sound clear and natural?

Table 25s. Association of scores and PTA4 in practically subclinical participants for SSQ qualities item 3.9^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (right panel) and Table 4 in the article. Reference categories in brackets.

Sound quality and naturalness 3.9		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	7.9	8.5	9.0	9.4	9.7
	15	7.5	8.3	9.0	9.5	9.7
	20	7.1	8.1	8.8	9.4	9.7
	25	6.8	7.8	8.7	9.3	9.7
	30	6.4	7.6	8.7	9.3	9.7
	35	6.1	7.4	8.6	9.4	9.7
Age / years (ref. 18-39)	40-49	0.0	-0.1	-0.1	-0.1	-0.1
	50-59	0.1	-0.1	-0.2	-0.3	-0.2
	60-69	0.3	0.0	-0.3	-0.3	-0.2
	70-79	0.7	0.3	-0.1	-0.2	-0.2
	80+	0.8	0.1	-0.4	-0.6	-0.5
Gender (ref. Male)	Female	0.1	0.2	0.2	0.2	0.1
Education (ref. High)	Basic	-0.6	-0.5	-0.3	-0.2	-0.2
	Intermediate	-0.2	-0.1	-0.1	0.0	0.0
Health issues		-0.5	-0.5	-0.4	-0.3	-0.2
Hearing difficulties		-1.2	-1.0	-0.8	-0.7	-0.4
Asymmetry		-0.8	-0.7	-0.5	-0.3	-0.2

^a Do everyday sounds that you can hear easily seem clear to you (not blurred)?

Table 26s. Association of scores and PTA4 in practically subclinical participants for SSQ qualities item 3.10^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using the regression model displayed in Figure 5 (right panel) and Table 4 in the article. Reference categories in brackets.

Sound quality and naturalness 3.10		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	7.9	8.5	9.1	9.5	9.8
	15	7.8	8.5	9.0	9.5	9.8
	20	7.5	8.2	8.8	9.3	9.6
	25	7.2	7.8	8.5	9.1	9.5
	30	6.9	7.6	8.3	9.0	9.4
	35	6.6	7.4	8.3	9.0	9.4
Age / years (ref. 18-39)	40-49	-0.2	-0.2	-0.2	-0.2	-0.1
	50-59	-0.4	-0.3	-0.3	-0.3	-0.2
	60-69	-0.4	-0.4	-0.4	-0.4	-0.3
	70-79	-0.2	-0.2	-0.2	-0.2	-0.2
	80+	-0.1	-0.2	-0.4	-0.4	-0.3
Gender (ref. Male)	Female	0.2	0.2	0.2	0.2	0.1
Education (ref. High)	Basic	-0.8	-0.6	-0.4	-0.3	-0.2
	Intermediate	-0.3	-0.2	-0.1	-0.1	0.0
Health issues		-0.6	-0.5	-0.4	-0.3	-0.2
Hearing difficulties		-1.4	-1.1	-0.9	-0.7	-0.4
Asymmetry		-0.8	-0.6	-0.4	-0.3	-0.3

^a Do other people's voices sound clear and natural?

Table 27s. Association of scores and PTA4 in practically subclinical participants for SSQ qualities item 3.18^a. Intercept for selected PTA4 values and parametric coefficients for other variability factors estimated for the quantiles 0.1, 0.25, 0.5, 0.75, and 0.9 using quantile regression (model constructed for item 3.18). Reference categories in brackets.

Listening effort 3.18		0.1	0.25	0.5	0.75	0.9
PTA4 better ear/dB HL	10	6.0	7.0	7.9	8.6	9.1
	15	5.6	6.6	7.6	8.4	9.0
	20	5.0	6.1	7.2	8.0	8.7
	25	4.5	5.6	6.7	7.6	8.4
	30	4.0	5.2	6.3	7.2	8.1
	35	3.6	4.8	6.0	6.9	7.8
Age / years (ref. 18-39)	40-49	0.3	0.1	0.0	-0.1	0.0
	50-59	0.3	0.1	-0.1	-0.1	-0.1
	60-69	0.4	0.2	0.0	-0.1	-0.1
	70-79	1.2	0.9	0.6	0.4	0.4
	80+	1.5	1.0	0.5	0.2	0.1
Gender (ref. Male)	Female	0.3	0.3	0.3	0.2	0.2
Health issues		-0.8	-0.7	-0.6	-0.4	-0.3
Hearing difficulties		-1.9	-1.9	-1.8	-1.6	-1.3
Asymmetry		-0.7	-0.7	-0.6	-0.5	-0.4
Tinnitus		-0.3	-0.3	-0.3	-0.3	-0.3

^a Do you have to put in a lot of effort to hear what is being said in conversation with others?