

Supplemental Material S1. Questionnaires and English translations.

The following tables show the English translation of the complete current situation questionnaires used. The original questionnaires were in German. The first column also indicates the nature of the question: SC – single choice, MC -multiple choice, SL – slider question, and TB – text box. Questions were posed in the order shown here (not necessarily reflected by the question number). If questions were asked only under certain conditions this is denoted underneath the question.

No	Translated question
Current situation questionnaire (mandatory short part)	
SC01	How satisfied are you with your hearing aids in this situation? <ul style="list-style-type: none"> • Absolutely delighted • Very satisfied • Satisfied • Neutral • Dissatisfied • Very dissatisfied
MC02	Whom or what are you listening to right now? <ul style="list-style-type: none"> • I do not actively listen to anyone • Music • Radio/TV/audiobook/talk • Conversation with one person • Conversation with several people • Telephone • Other/further details
TB03	Please describe whom or what you are listening to right now. <i>(only if MC02 = 'Other')</i>
MC04	What sounds are audible in the background? <ul style="list-style-type: none"> • Voices/other people • Traffic noise • Household noise • Music/television • Engines/machinery/ventilation • Wind • Silence • Other/further details
TB05	Please describe which sounds are audible in the background. <i>(only if MC04 = 'Other')</i>
SC06	To what extent has the situation changed by filling out the questionnaire? <ul style="list-style-type: none"> • Strongly, e.g. I leave the room/switch off the TV • Slightly, e.g. the conversation slows down • Not at all
SC05	Which situation are you rating right now?

	<ul style="list-style-type: none"> • The situation during filling out the questionnaire • The situation before filling out the questionnaire <i>(only if SC06 ≠ 'Not at all')</i>
SC07	Do you have time for further questions right now? <ul style="list-style-type: none"> • Yes, I have time • No
Current situation questionnaire (optional long part)	
SL07	How much speech so you understand in this situation? nothing ↔ every word <i>(only if MC02 includes conversation, telephone, radio/TV or 'Other')</i>
SC08	How much effort is it to listen to in this situation? <ul style="list-style-type: none"> • No effort • Very little effort • Little effort • Some effort • High effort • Extreme effort <i>(only if MC02 ≠ 'not actively listening ...')</i>
SC09	How satisfied are you with the sound quality in this situation? <ul style="list-style-type: none"> • Very satisfied • Satisfied • Somewhat satisfied • Dissatisfied • Very Dissatisfied
MC10	In what way is the sound quality not good. The sound is too ... <ul style="list-style-type: none"> • Dull • Reverberant • Unnatural • Sharp • Other <i>(only if SC09 = 'Dissatisfied' or 'Very dissatisfied')</i>
TB11	Please describe in what way the sound quality is not good. <i>(only if MC10 = 'Other')</i>
MC12	Where is the person/sound source you are listening to located? <ul style="list-style-type: none"> • Constantly directly in front of me

	<ul style="list-style-type: none"> • In my field of view, but not directly in front of me • Behind me or to the side (out of view) • At varying positions (e.g. changing speakers, in motion yourself) • Other <p><i>(not if MC2 = 'not actively listening ...')</i></p>
TB13	<p>Please describe where the person/sound source you are listening to is located relative to you.</p> <p><i>(only if MC12= 'Other')</i></p>
SC14	<p>Where are you right now?</p> <ul style="list-style-type: none"> • In the car/bus/train etc. • On the way on foot/ by bike • In a familiar environment, e.g. home, workplace • In a well-known environment, e.g. favorite pub • In an unfamiliar environment
SC15	<p>Can you orient yourself in your environment easily and reliably based on your sound impression?</p> <ul style="list-style-type: none"> • Yes • Rather yes • Rather no • No • Orientation not necessary right now
SC16	<p>Do you perceive everything you want to perceive in this situation?</p> <ul style="list-style-type: none"> • Yes, I think so • No • I don't know
MC17	<p>What are you not able to perceive well right now?</p> <ul style="list-style-type: none"> • I don't understand the speaker in front of me • I don't recognize if I am approached from the side or from behind • I don't recognize if someone/something is coming closer • I do not understand what

	<p>people next to me or behind me are saying</p> <ul style="list-style-type: none"> • I cannot localize or attribute sound from behind • Other
TB18	<p>Please describe what you would like to hear but cannot perceive well.</p> <p><i>(only if SC19= 'Yes')</i></p>
SC19	<p>Are you hearing something right now that you would prefer to perceive less strongly?</p> <ul style="list-style-type: none"> • No • Yes
MC20	<p>In what way would you prefer to perceive sounds less strongly?</p> <ul style="list-style-type: none"> • Background dominates everything • Background distracts me/irritates me • Background is hard to interpret • Sounds are uncomfortably loud • The person/sound source I am listening to is too loud • Other <p><i>(only if SC19= 'Yes')</i></p>
TB21	<p>Please describe which sounds you would like to perceive less strongly.</p> <p><i>(only if MC20= 'Other')</i></p>
SC22	<p>Which environment are you in right now?</p> <ul style="list-style-type: none"> • Outside • Small room, e.g. apartment/office • Large room, e.g. shopping center/ station concourse • Theater, concert hall, cinema • Restaurant, lively coffee shop • Public transport • Car • Other
TB23	<p>Please describe your current environment and its reverberance.</p> <p><i>(only if SC22= 'Other')</i></p>
SC24	<p>How loud are the sounds in the background?</p>

	<ul style="list-style-type: none"> • Very loud • Loud • Intermediate • Soft • Very soft • Inaudible
SC26	<p>Can you recognize in this situation where the sound is coming from?</p> <ul style="list-style-type: none"> • Yes • Rather yes • Rather no • No • That is not relevant right now
MC27	<p>In what way is it difficult to recognize where the sound is coming from or where the sound sources are located?</p> <ul style="list-style-type: none"> • The sound source seems to jump • I can't estimate the distance • I can't determine the direction • I can't recognize the direction in which the sound source moves. • I can't describe the problem • Other <p><i>(only if SC26 = 'No' or 'Rather no')</i></p>
TB28	<p>Please describe which problems you have in saying where the sound sources are.</p> <p><i>(only if MC26 = 'Other')</i></p>
SC27	<p>How stressed out are you in this situation?</p> <ul style="list-style-type: none"> • Very stressed/ in a big hurry • Stressed/ in a hurry • Rather stressed • Neutral • Rather relaxed • Relaxed • Very relaxed
SC28	<p>How tired are you right now?</p> <ul style="list-style-type: none"> • Very tired • Tired • Rather tired • Neutral • Rather fit

	<ul style="list-style-type: none"> • Fit • Top fit
SC29	<p>How is your current mood?</p> <ul style="list-style-type: none"> • Very bad • Bad • Rather bad • Neutral • Rather good • Good • Very good
SC30	<p>Are you having a good conversation right now?</p> <ul style="list-style-type: none"> • Yes, a very good one • Yes, a good one • Neither good nor bad • No, a bad one • No, a very bad one <p><i>(only if MC02 includes conversation)</i></p>
MC30	<p>What do you like about this conversation?</p> <ul style="list-style-type: none"> • I am having fun • It is interesting • My conversation partner is nice • I can relax • I think, I am making a good impression • Other <p><i>(only if SC30 = 'Yes, ...')</i></p>
TB31	<p>Please describe what you like about this conversation</p> <p><i>(only if MC30 = 'Other')</i></p>
MC32	<p>In what way is this conversation not good?</p> <ul style="list-style-type: none"> • It is boring • It is hard to follow • My conversation partner is unappealing • I am feeling insecure • Other <p><i>(only if SC30 = 'No, ...')</i></p>
TB33	<p>Please describe in what way this conversation is not good.</p> <p><i>(only if MC32 = 'Other')</i></p>
TB43	<p>Thank you very much for filling out the questionnaire. In case you want to tell us anything else, you can do this here.</p>

Questionnaire in case of missed current situation questionnaire	
SC99	<p>It can always happen that a questionnaire is missed. Please tell us why you missed the last questionnaire, so we can improve our study design.</p> <ul style="list-style-type: none"> • Filling out the questionnaire was not appropriate in that situation • Alarm not heard • Hearing aids not worn • Mobile phone not with me • (Technical) problems when filling out the questionnaire • Other
SC88 <i>opt</i>	<p>In what way was it inappropriate to fill out a questionnaire in this situation?</p> <ul style="list-style-type: none"> • It would have been impolite • For safety reasons • I had no time/was in a hurry • I did not feel like it • Other <p><i>(only if SC99= 'Filling out the questionnaire was inappropriate ...')</i></p>