

The Speech, Spatial, and Qualities of Hearing Scale (SSQ) for Children with Impaired Hearing

(Based on the adult SSQ developed by William Noble &
Stuart Gatehouse; modifications by Karyn Galvin)

Child's Name: _____ Age: _____yrs_____mths__

Evaluation point: _____

Device Condition: Unilateral: Cochlear Implant Hearing Aid
Bilateral: Cochlear Implants Hearing Aids
Cochlear Implant + Hearing Aid

Right device: Type: _____ Date fitted: _____

Current usage: all day school only other: _____

Left device: Type: _____ Date fitted: _____

Current usage: all day school only other: _____

INFORMATION & INSTRUCTIONS FOR CLINICIAN

Background

This Scale is based on the SSQ developed for adults by William Noble (University of New England, Australia) and Stuart Gatehouse (MRC Institute of Hearing Research, Scotland) (Gatehouse & Noble (2004) *The Speech, Spatial, and Qualities of Hearing Scale*, International Journal of Audiology 43(2): 85-99; Noble & Gatehouse (2004) *Interaural asymmetry of hearing loss, SSQ disabilities, and handicap*, International Journal of Audiology 43(2): 100-114). The Scale was modified separately for parents of children with impaired hearing, for children, and for teachers by Karyn Galvin (The University of Melbourne, Australia). All appropriate aspects of the original Scale were retained; difficult or not applicable questions (such as those asking for judgements of the naturalness of sound or related to driving a car) were deleted, language was changed to suit the target respondents, and listening situations were changed to suit a child's lifestyle. Significant additions were also made. In the Scales for parents and for teachers, "pre-scale observation periods" have been included so that the child can be observed in the types of listening situations described in the Scale. In the Parent Scale, additional questions ask how often a particular listening situation occurs for the child, and how important the respondent considers it for the child to have the listening skills required in that situation.

Structure of the Scale

There are many aspects of listening with a cochlear implant or hearing aid that are not evaluated during standard speech perception testing. This Scale aims to obtain information about three areas of a child's daily functioning when listening with cochlear implant(s) and/or hearing aid(s):

- *Section A: Speech* – speech understanding in quiet, in background noise, in groups, in reverberant environments, and on the telephone.
- *Section B: Spatial Hearing* – the perception of the position, movement, and distance of sound sources.
- *Section C: Qualities of Hearing* – the identification of sounds and voices, segregation of sounds, and ease of listening.

Completing the Scale

As a general guide, the Scale may be attempted with children around eleven years of age if the child has age-appropriate language. Individuals will vary in their ability to comprehend all of the questions, however some useful information may be obtained even if the entire Scale cannot be completed. Some children may have difficulty grasping the concept of the ruler representing the performance range. It will not be possible to collect valid, reliable results in this case.

The Scale should be completed by the child under the close supervision of the clinician, as it is vital that the questions are correctly interpreted. The clinician should select a mode of presentation that will maximise the child's understanding, i.e., use oral, manual and/or written presentation as appropriate.

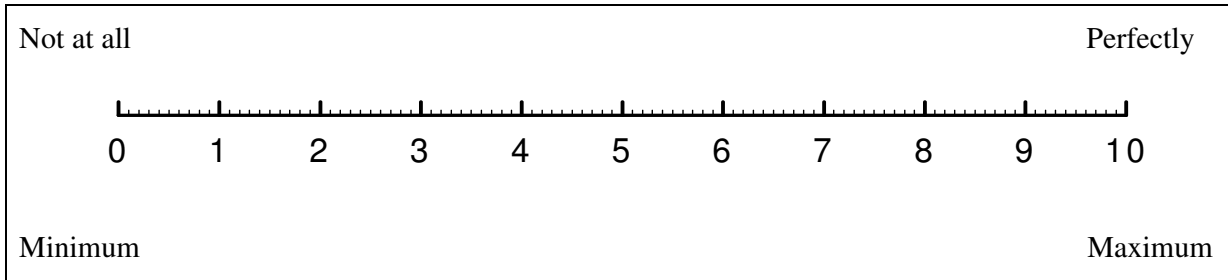
How to instruct the child

In instructing the child on how to complete the Scale the clinician should demonstrate how to answer the questions using the sample situation at the end of these instructions. The following points should be emphasised:

- An arrow is marked on the ruler to indicate the number representing the child's estimate of their typical listening performance in the situation described; the arrow may be positioned anywhere on the ruler.
- For most items, the ruler represents the performance range between the descriptors of "Not at all" and "Perfectly", however other terms are also employed so the ruler needs to be read carefully.
- If listening performance cannot be judged the appropriate alternative response is ticked:
 - "Would not hear it" indicates that the voice or sound described in the listening situation cannot even be heard.
 - "Not applicable" indicates that the described listening situation is not experienced.

Sample Listening Situation

You are outside your house. Your Mum or Dad is talking to you from across the street. Can you understand what they are saying?



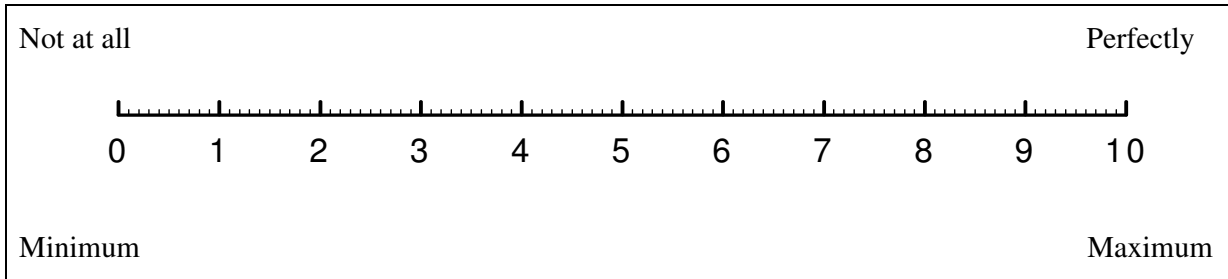
Would not hear it

Do not know

Not applicable

Section A: Speech

1. You are talking with your Mum or Dad and there is a TV on in the same room. Without turning the TV down, can you understand what your Mum or Dad is saying to you?

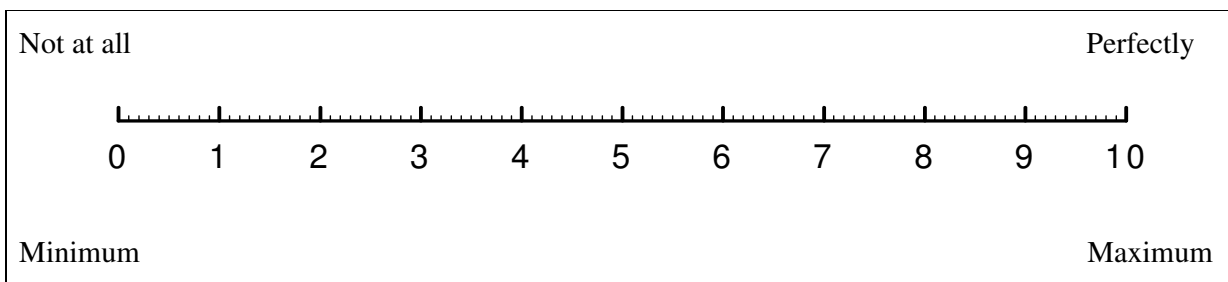


Would not hear it

Do not know

Not applicable

2. You are talking with one person in a quiet room with carpet. Can you understand what the other person is saying to you?

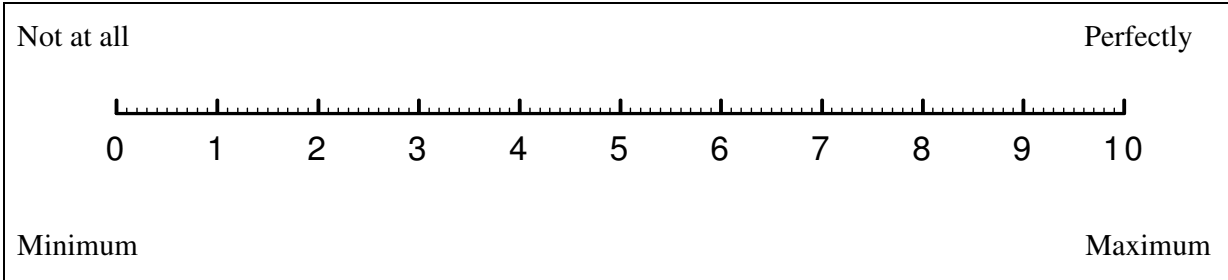


Would not hear it

Do not know

Not applicable

3. You are in a group of about five people, sitting round a table. It is a quiet place. You can see everyone else in the group. Can you understand what the group is talking about?

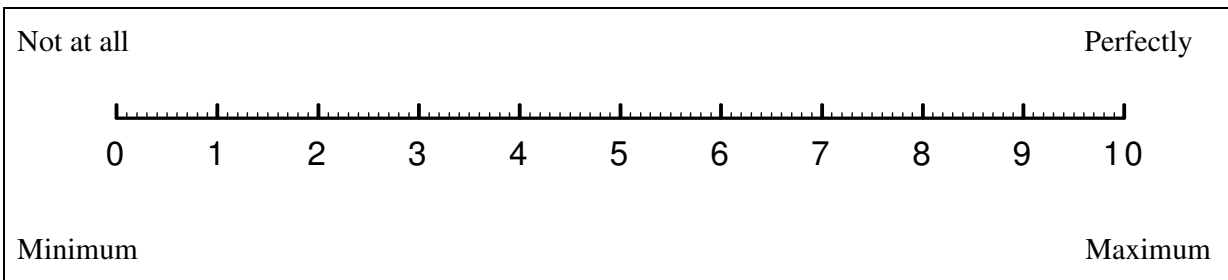


Would not hear it

Do not know

Not applicable

4. You are in a group of about five people, sitting round a table. It is a noisy room, like a busy classroom where students are moving around and talking. You can see everyone in the group around your table. Can you understand what the group is talking about?

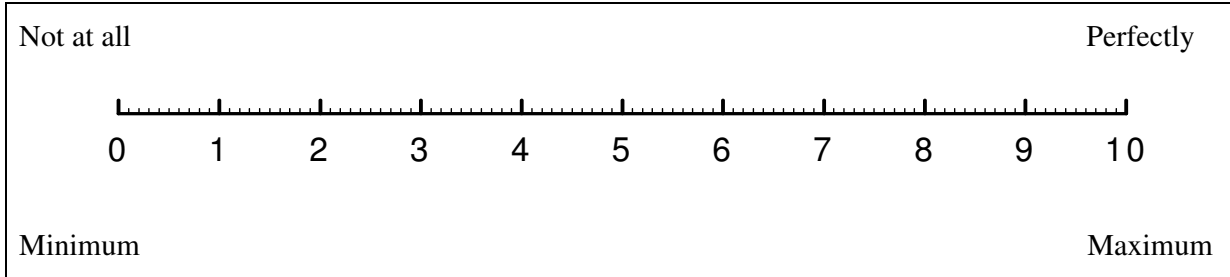


Would not hear it

Do not know

Not applicable

5. You are talking with one person. There is noise in the background, like a tap running or a fan. Can you understand what the person is saying to you?

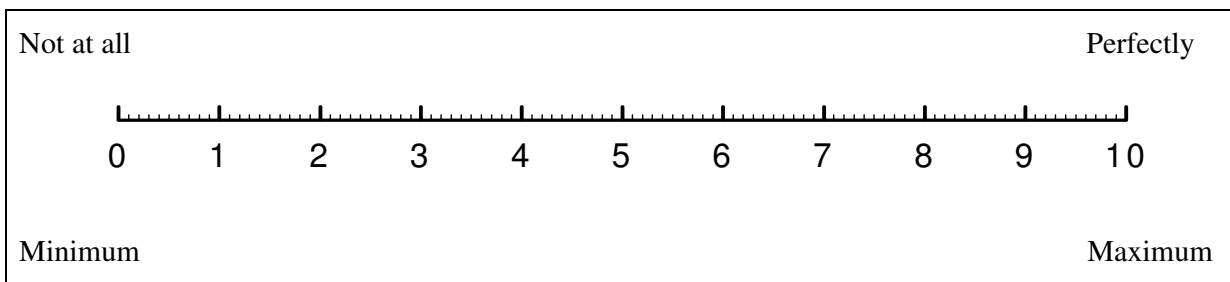


Would not hear it

Do not know

Not applicable

6. You are in a group of about five people, sitting round a table. It is a noisy room, such as a busy classroom where students are moving around and talking. You cannot see everyone in the group around your table. Can you understand what the group is talking about?

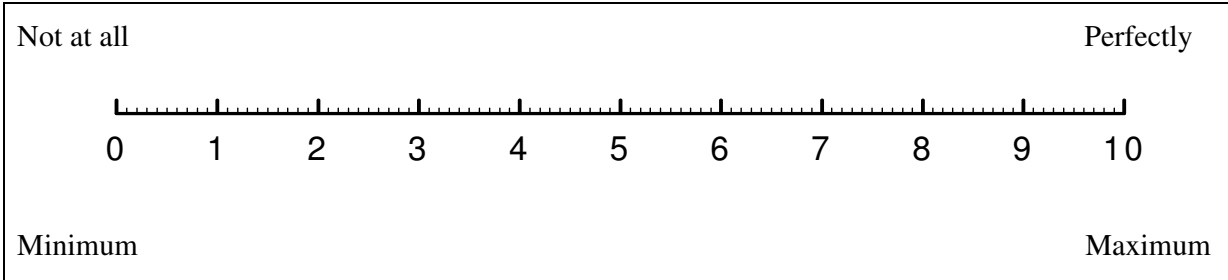


Would not hear it

Do not know

Not applicable

7. You are talking to someone in a place where there are a lot of echoes, like a school assembly hall. Can you understand what the person is saying?

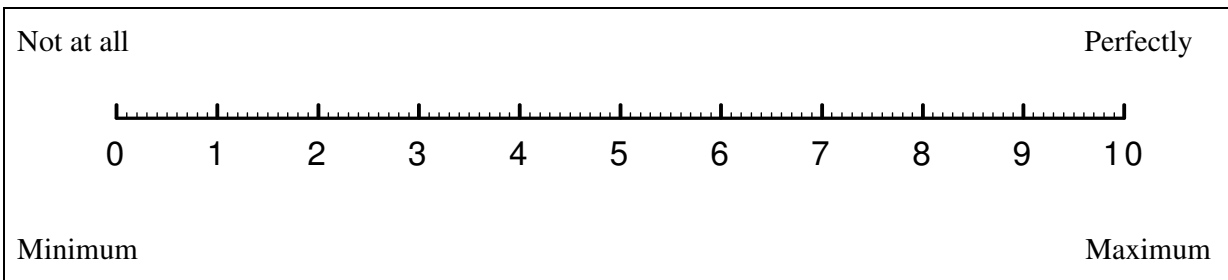


Would not hear it

Do not know

Not applicable

8. You are talking to one person in a room in which there are many other people talking. Can you understand what the other person is saying?

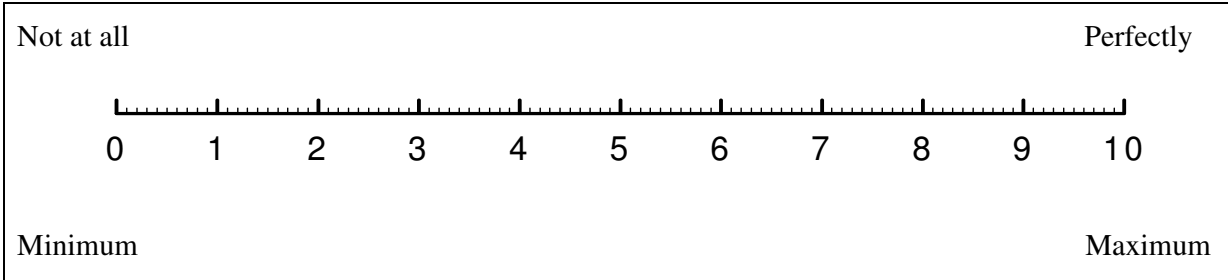


Would not hear it

Do not know

Not applicable

9. You are talking with a group of friends and everyone is taking a turn to talk. Can you understand what is being said without missing the start every time a new person starts to talk?

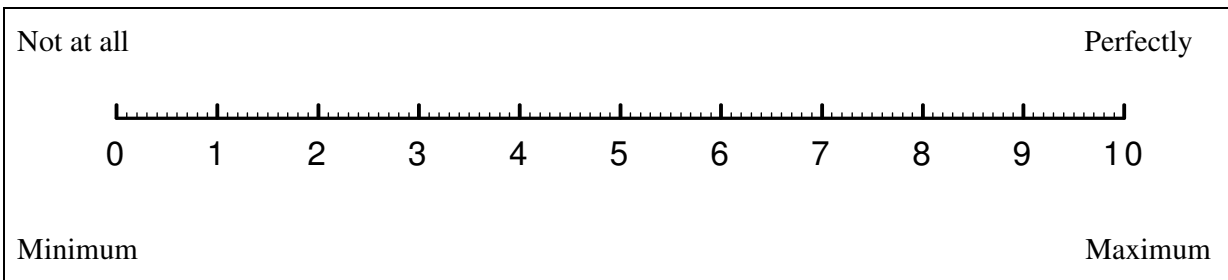


Would not hear it

Do not know

Not applicable

10. Is it easy for you to talk on the telephone with a friend or your Mum or Dad?



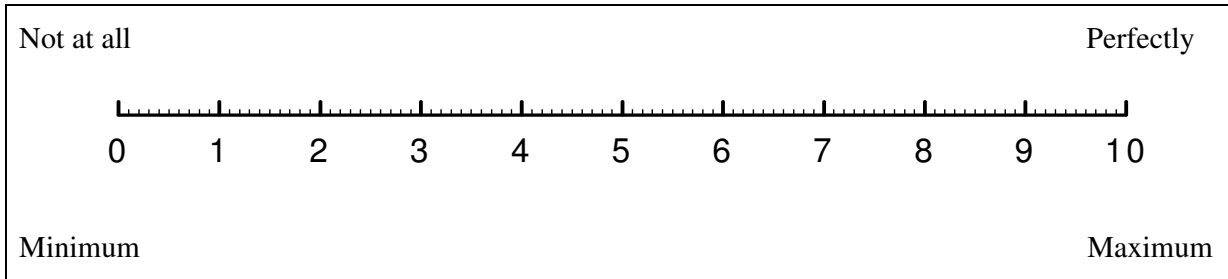
Would not hear it

Do not know

Not applicable

Section B: Spatial Hearing

1. You are outside in a place you haven't been before. There is a loud noise from a lawnmower or aeroplane that you can't see. Can you tell right away where the sound is coming from?

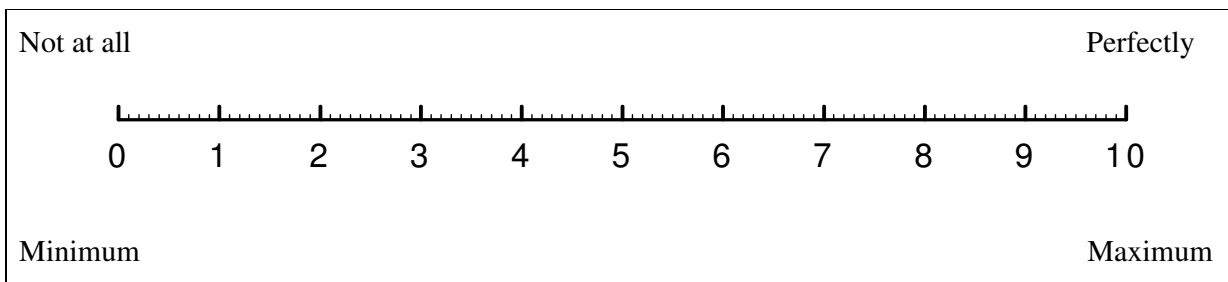


Would not hear it

Do not know

Not applicable

2. You are in a group of about 5 people, sitting round a table. You cannot see everyone in the group. Can you tell where any person is as soon as they start talking?

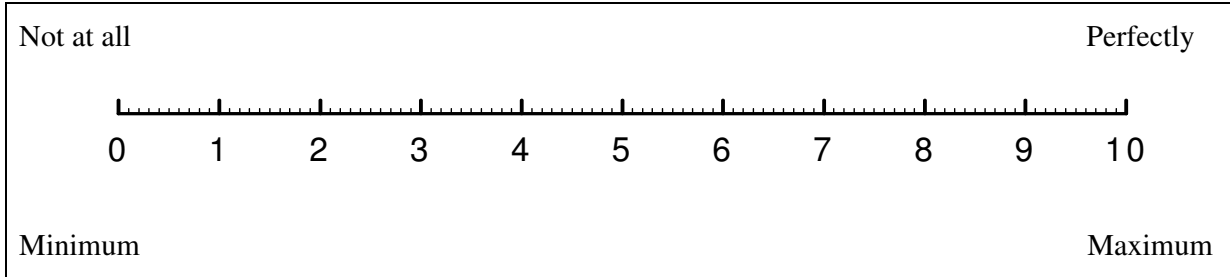


Would not hear it

Do not know

Not applicable

3. You are sitting between two friends. One of them starts to talk. Can you tell right away if it is the friend on the left or on the right who is talking, without having to look?

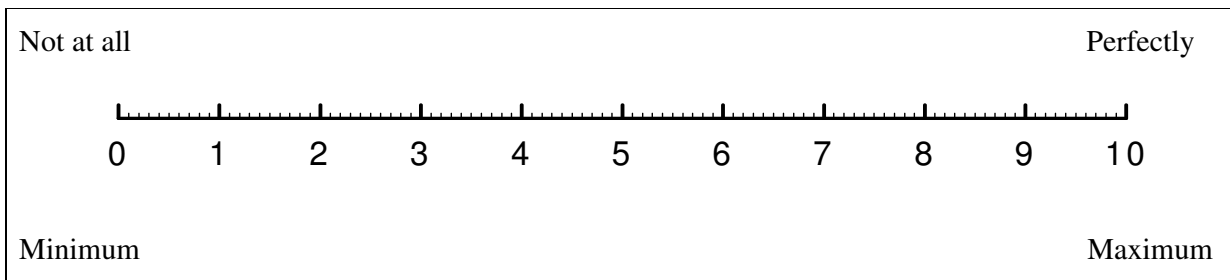


Would not hear it

Do not know

Not applicable

4. You are at home and it is quiet. Your Mum or Dad calls you from another room. Will you know where they are without having to look?

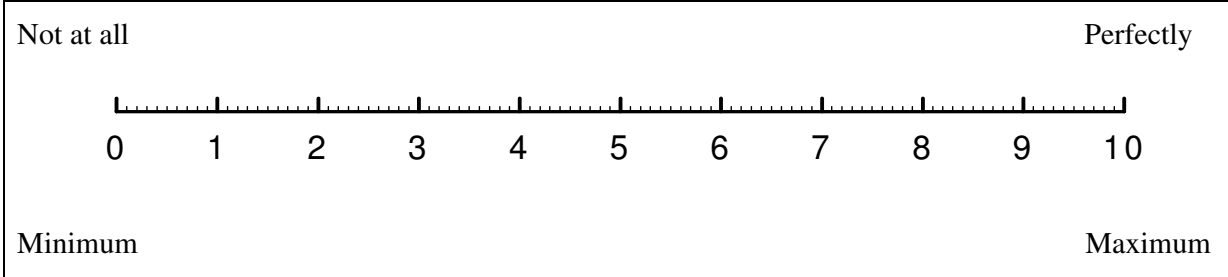


Would not hear it

Do not know

Not applicable

5. You are outside. A dog barks loudly. Can you tell straight away where the dog is, without having to look?

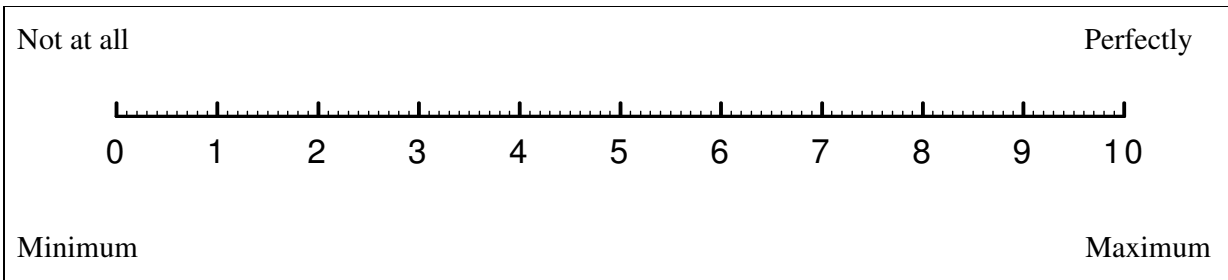


Would not hear it

Do not know

Not applicable

6. You are standing on the footpath of a busy street. You can hear a bus or truck. Can you tell right away where it is coming from before you see it?

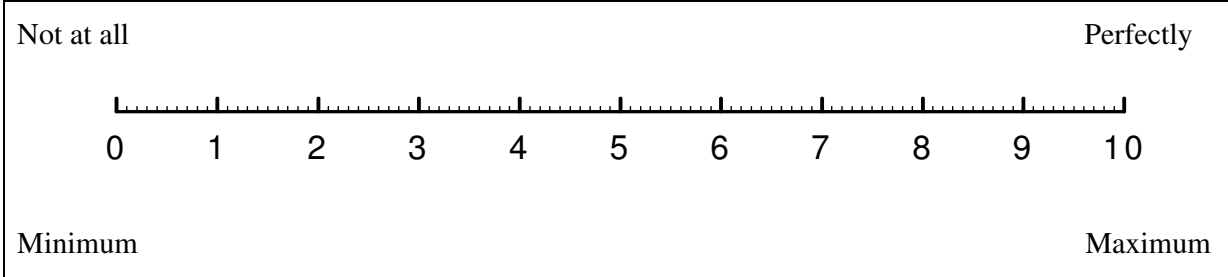


Would not hear it

Do not know

Not applicable

7. You can hear a bus or truck. Can you tell whether it is coming towards you or moving away just from the sound?

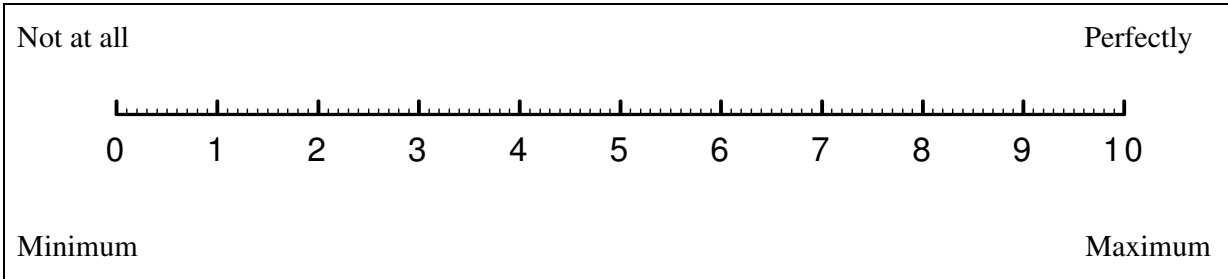


Would not hear it

Do not know

Not applicable

8. You can hear voices or footsteps. Can you tell if the person is coming towards you or moving away just by the sound?

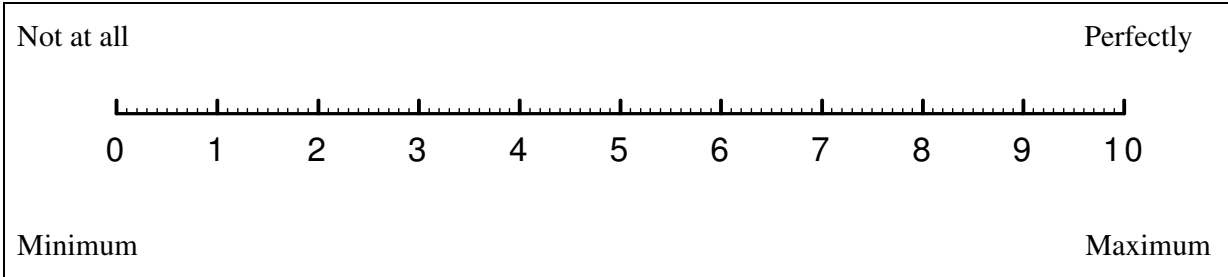


Would not hear it

Do not know

Not applicable

9. You can hear a bus or truck. Just from the sound, can you tell which direction it is moving (for example, from your left to your right, or from your right to your left)?

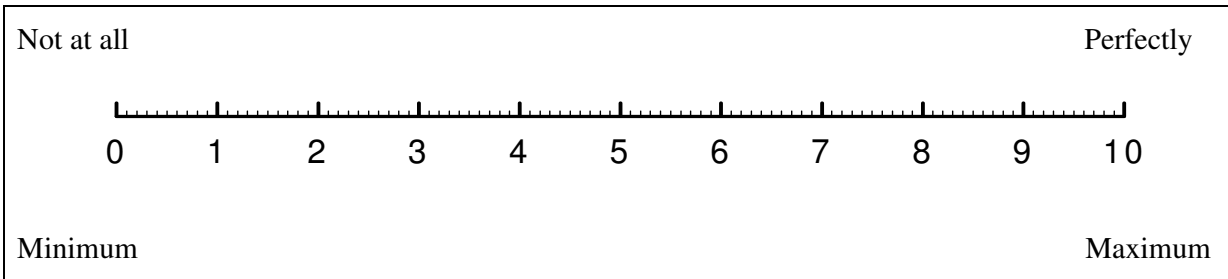


Would not hear it

Do not know

Not applicable

10. You can hear voices or footsteps. Just from the sound, can you tell which direction the person is moving (for example, from your left to your right, or from your right to your left)?

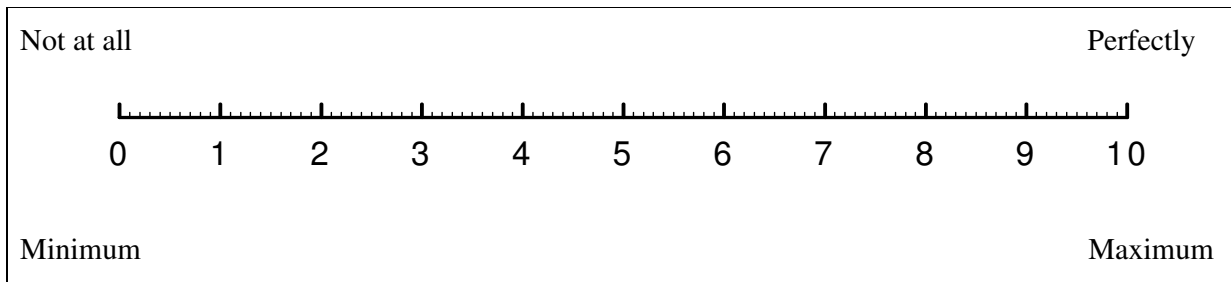


Would not hear it

Do not know

Not applicable

11. You can hear a bus or truck. Can you tell how far away it is just from the sound?

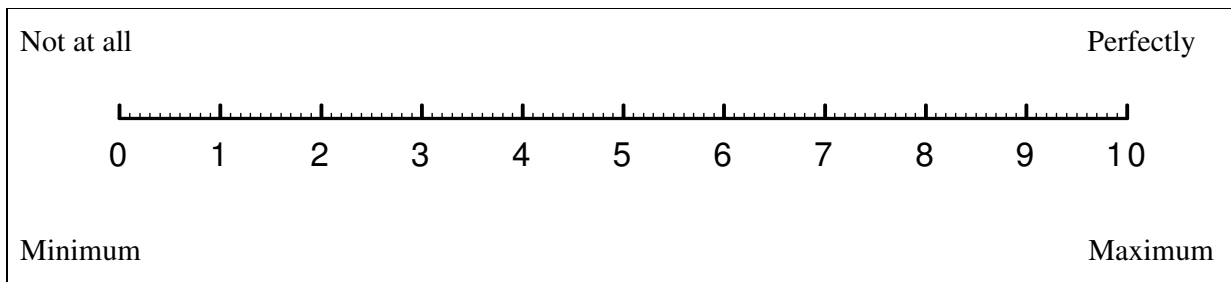


Would not hear it

Do not know

Not applicable

12. You can hear voices or footsteps. Can you tell how far away the person is just from the sound?

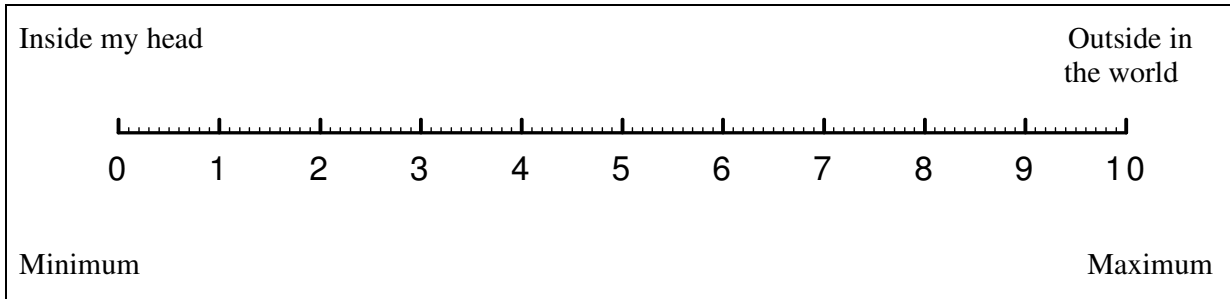


Would not hear it

Do not know

Not applicable

13. Do the things you can hear seem to be inside your head rather than outside in the world? For example, if you can see a dog barking across the street, does it sound to you like the dog is across the street or does it seem to be inside your head?



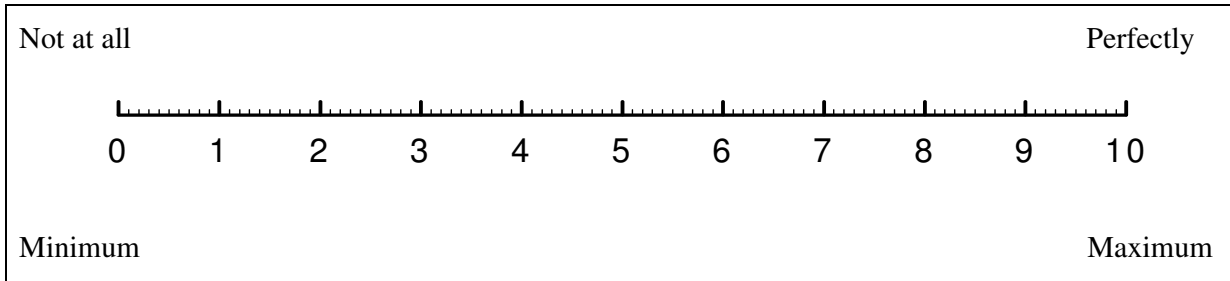
Would not hear it

Do not know

Not applicable

Section C: Qualities of Hearing

1. You are in a room with music playing. Someone starts to talk. Will you know that someone has started speaking (even though you may not know what they are saying)?

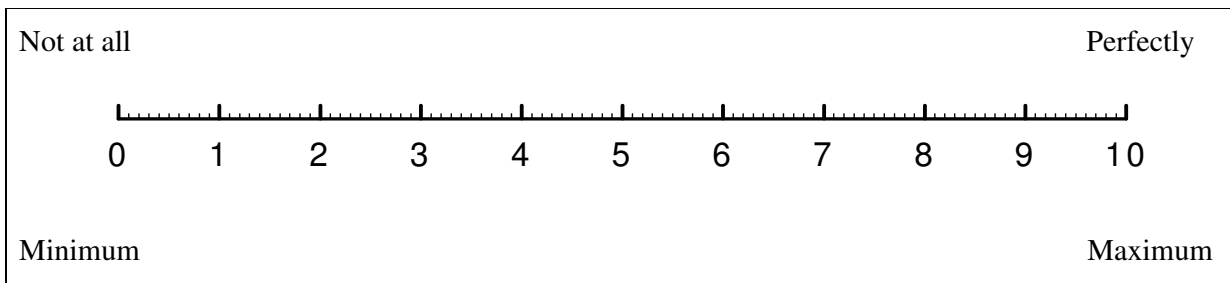


Would not hear it

Do not know

Not applicable

2. Think about when you can hear two noises at once, for example, water running into the bath and a radio playing, OR a truck driving past and the sound of knocking at the door. Do you hear these as two separate sounds?

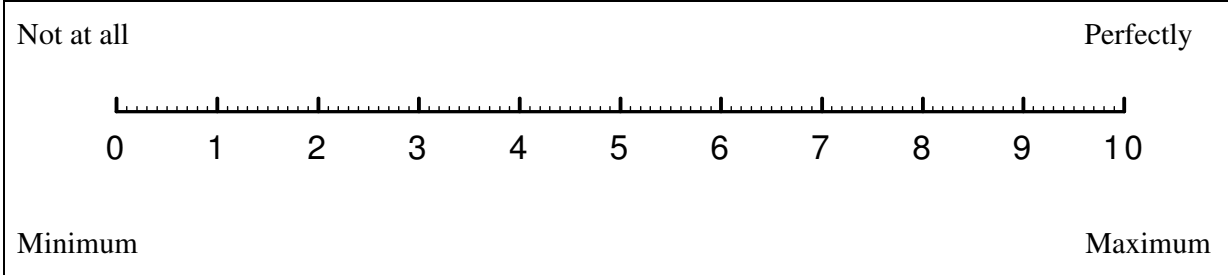


Would not hear it

Do not know

Not applicable

3. Do you know which person in your family is talking just by the sound of their voice, even if you can't see them?

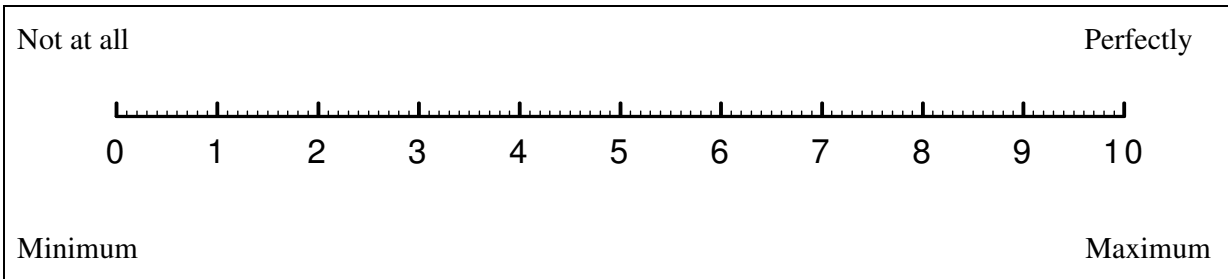


Would not hear it

Do not know

Not applicable

4. You can hear a song you know being played. Is it easy for you to tell what song it is just by listening?

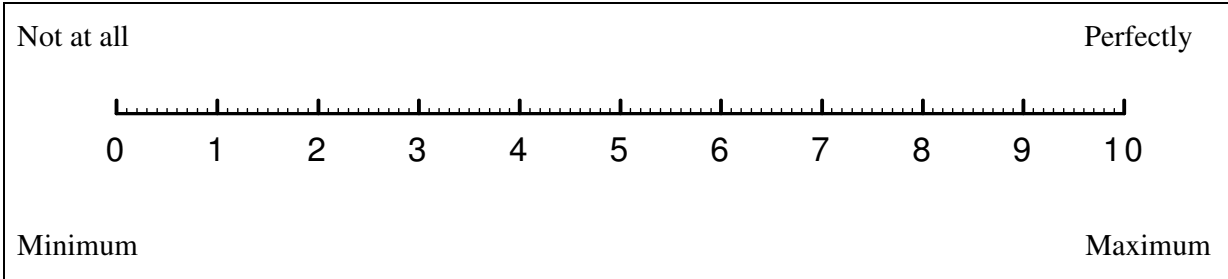


Would not hear it

Do not know

Not applicable

5. Can you tell the difference between noises that are a bit the same, like a car versus a bus, OR the tap running and a fan?

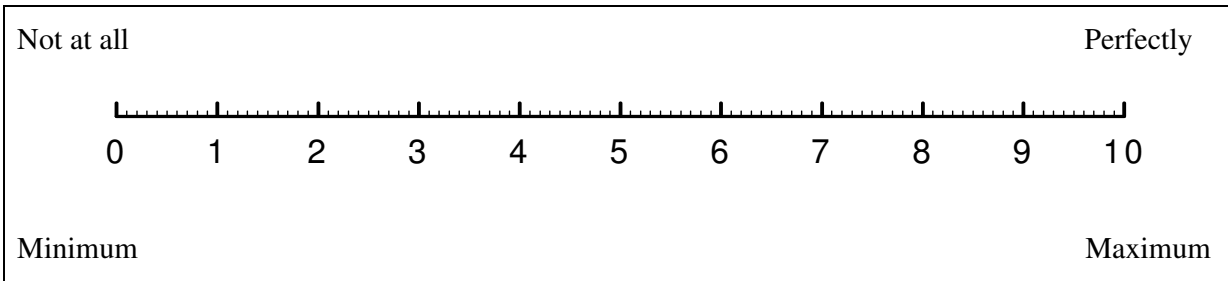


Would not hear it

Do not know

Not applicable

6. Can you tell how someone feels (happy, angry, sad) just by listening to their voice?

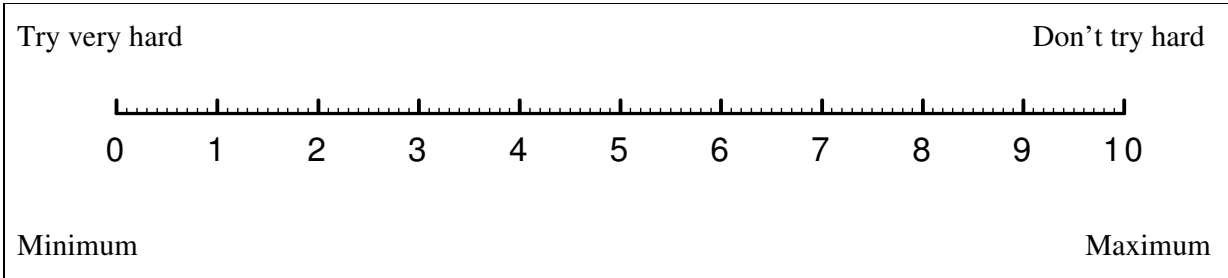


Would not hear it

Do not know

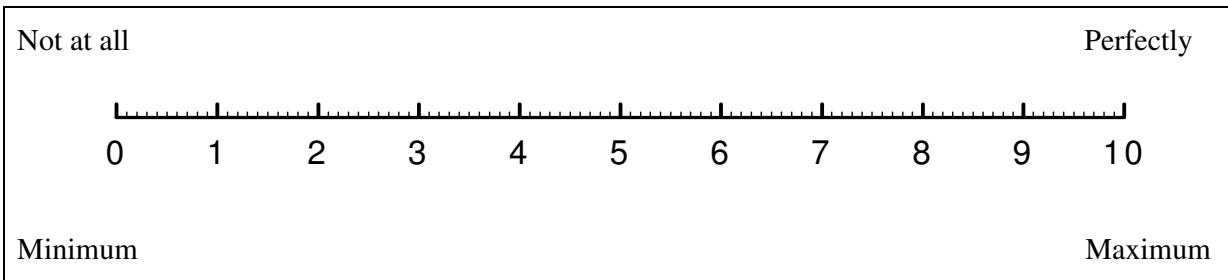
Not applicable

7. Do you have to try very hard when listening to someone or something?



Do not know

8. When you are travelling in the front seat of the car can you easily understand what the driver is saying to you?

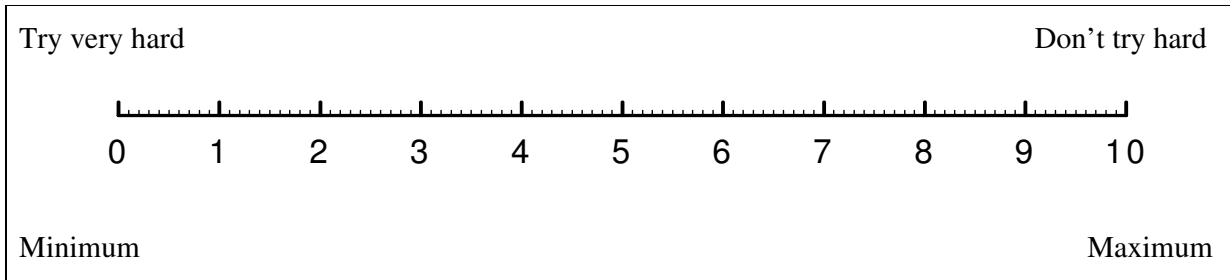


Would not hear it

Do not know

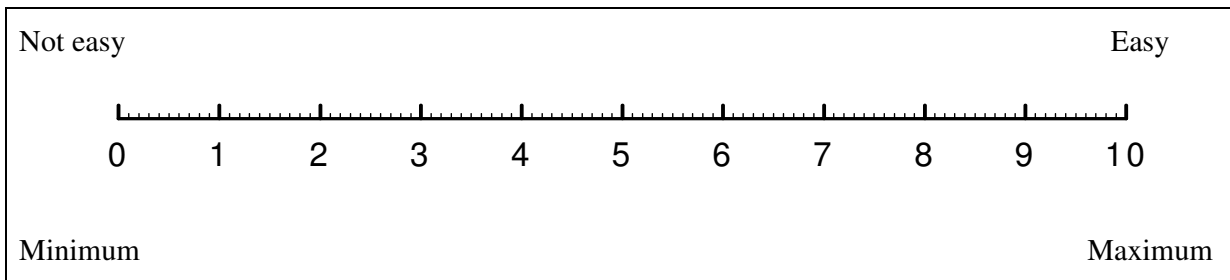
Not applicable

9. Do you have to try hard to understand what other people are saying?



Do not know

10. Is it easy for you to ignore other sounds when trying to listen to something?



Do not know

Not applicable