



Children's Home Inventory for Listening Difficulties

Rationale and Applications

Rationale

Trying to determine how well children hear goes far beyond obtaining an audiogram. Hearing loss can impair the quality of life and the everyday function of children and their families, as well as adults. To date, there has not been a family-centered instrument designed to reveal the communication needs of children within the context of their home environment. Furthermore, there is a need to monitor how well a child is improving his or her listening skills within the home, which is the primary learning environment of young children.

Administration of the CHILD

The CHILD is appropriate for use by families with children who are at a developmental level as low as age 3 (plays with others) to as old as approximately age 12. It can be utilized in a variety of ways by clinical audiologists or early educators working with families of children with hearing loss. The CHILD questions should be completed by family members who know the child's habits well. Completion may take considerable time. There is also a version of the instrument that can be administered to the older child by the audiologist within the context of an amplification evaluation appointment or with facilitation at home by the parent. Reliability of an inventory completed by a child depends on the age, maturity, and comprehension of the individual, just as for other self report measures. A minimum age for a child to complete the Inventory is 7-8 years.

Applications of the CHILD

- (a) The parent self-refers or is referred to an audiology clinic due to concerns about how their child seems to be hearing. The CHILD can be used as a way to help the parent identify or confirm his or her areas of concern. It can be mailed to the parent at the time an appointment is made for an initial hearing evaluation. Less optimal would be to ask the parent to complete the CHILD within the waiting room, prior to the evaluation. Information obtained can guide the audiologist in the need to intervene with children who may require further evaluation.
- (b) A child who is a hearing aid user comes for a routine audiological evaluation and has elderly hearing aids. Ask the parent and child to complete the CHILD for the purpose of obtaining pretest information. This information can provide valuable information about different challenging listening environments, which will aid the audiologist in possible selection or programming of hearing instruments. Following a trial period with new amplification, the CHILD can be readministered as a post-test to evaluate the functional benefits of the new hearing aids within the home communication environment.
- (c) The CHILD can be used as a counseling tool with parents. Identify possible situations in which listening difficulties occur, and address the accommodations that a parent needs to be aware of (i.e., controlling distance, noise, guiding use of communication repair strategies). Additionally, the information revealed by the CHILD can assist a parent in understanding the consequences of newly identified hearing losses, especially hearing loss which has subtle, and often mislabeled, communication effects (e.g., attention span, following directions, behavior).
- (d) Addressing assistive listening device needs is as important with children as it is with adults. The CHILD provides a brief review of typical listening circumstances that could be addressed with suggested assistive devices. Personal FM coupled with hearing instruments can be objectively discussed with parents based on the challenging listening situations in noise and distance that they have identified for their child within the home. A trial period can then occur, using the CHILD as a pretest/post-test to determine the efficacy of FM use. Assistive devices such as alarms, closed captioning, and amplified telephone use can also be considered.
- (e) It is of interest to determine if improvements in communication behavior, possibly due to listening training over time or successful use of devices, carry over from the school environment into home listening situations. The CHILD may be useful to monitor auditory functionality over time.



Children's Home Inventory for Listening Difficulties

Questions for Parent to Answer

Try the following situations with your child or recall how your child has responded under these various situations. Everyone has some difficulty hearing clearly and understanding in some situations. Choose the level on the Understand-O-Meter you think describes your child's abilities most closely and place this number in the blank at the end of each question. This can be very difficult but try to estimate the child's listening abilities as best you can.

Child's Name: _____

Parent Completing CHILD: _____

Understand-O-Meter

1. Sit next to your child and look at a book together or talk about something in front of you using familiar words and a normal conversational manner. Talk in a quiet place and sit so your child is not looking at your face as you talk together. How difficult does it seem for your child to hear and understand what you say? _____
2. Gather your family together for a meal at home or in a fairly quiet restaurant. Sit across the table from your child and ask some questions about a familiar topic or event. How difficult does it seem to be for your child to hear and understand ? _____
3. When your child is in his or her bedroom playing quietly, walk into the room and tell or ask the child something. Do not say the child's name or try to get their attention first. How difficult does it seem for your child to hear and understand ? _____
4. Watch a TV show or video (not cartoons) with your child. Ask questions about what was said or events in the show that were understood by listening to the dialogue. How difficult does it seem for him or her to hear and understand what people are saying on the TV show? (Show is seen for the first time and not closed captioned) _____
5. Observe your child playing inside with a friend, brother or sister. Watch for the other child to ask him or her to do something. How easy does it seem to be for your child to hear and understand other children when they talk? _____
6. When your child is watching TV or playing with a noisy toy, walk into the room and talk to him or her without first getting the child's attention. How difficult does it seem for your child to hear and understand the person when the noise from the TV or toy is on? _____
7. Call your child's name from another room when he or she is not able to see you. How difficult does it seem for him or her to hear and realize you are calling? _____
8. Use a clock radio or alarm when it is time for your child to get up. How difficult does it seem to be for him or her to hear an alarm clock or clock radio go off? If no clock is used how difficult is it for him or her to hear your voice and wake up without having to be touched or shaken? _____

- 8 **GREAT**
Hear every word, understand everything
- 7 **GOOD**
Hear it all, miss part of an occasional word, still understand everything
- 6 **PRETTY GOOD**
Hear almost all the words and usually understand everything
- 5 **OKAY BUT NOT EASY**
Hear almost all the words, sometimes misunderstand what was said
- 4 **IT TAKES WORK BUT USUALLY CAN GET IT**
Hear most of the words, understand more than half of what was said
- 3 **SOMETIMES GET IT, SOMETIMES DON'T**
Hear words but understand less than half of what was said
- 2 **TOUGH GOING**
Sometimes don't know right away that someone is talking, miss most of message
- 1 **HUH?**
Don't know that someone is talking, miss all of message



Children's Home Inventory for Listening Difficulties

Understand-O-Meter

9. Observe your child playing with a group of children inside a house. It's noisy. (birthday party, cub scouts, etc.) How difficult does it seem to be for your child to understand what the children are saying as they play as a group?_____
10. A grandparent, family member or friend wants to talk to your child on the phone. How difficult does it seem to be for him or her to hear and understand what is said over the phone?_____
11. Observe your child playing outside with other children. How difficult is it for him or her to hear and understand what other children are saying when the children are outside and are not standing close to the child?_____
12. Go to a crowded store or mall with your child. When you are standing behind the child and he or she is looking at something, ask a question. How difficult does it seem to be for your child to hear and understand what you say?_____
13. Go into a large room with your child and speak to him or her from across the room. How well does he or she seem to hear and understand what you say?_____
14. Travel in the car with your child in the backseat. From the front seat say something to your child or ask a question. How easy does it seem for him or her to hear and understand what is said?_____
15. Sit in a quiet place, face your child and have a conversation or ask questions. How difficult does it seem for him or her to hear and understand what you say?_____

Total of responses:
Average of responses: (Total divided by 15)

Comments:

- | |
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A Guide to Successful Communication with your Child

1. Distance is critical

The best way to be sure your child can hear you is to be within 5 feet when you talk to him/her. Communication from distances beyond this "listening bubble" will likely cause parts of your message to not be heard. Depending upon the degree of your child's hearing loss the "listening bubble" can be larger or smaller than 5 feet. Get to know the distance your child can hear you from reliably and respect that distance. Dad's voice might be easier for the child to hear and the listening bubble bigger or smaller depending upon the voice characteristics of the family member. It is the child's responsibility to respond to you when you are within the "listening bubble." As your child becomes older he or she will need to recognize the critical listening distances in environments with various noise levels. He or she will need to learn to take the responsibility to adjust to different talkers and under varying listening conditions. Hearing aids are designed to work best in close, quiet listening situations. Talking from across a room or over a distance outside will be frustrating for you and your child unless you make accommodations to be sure he/she gets the message.

2. Noise interferes with understanding

Noise covers up soft parts of speech and makes it more difficult for everyone to understand. People with hearing loss typically hear all of speech much more quietly than persons with normal hearing. Add noise to the listening environment and their ability to detect speech is impacted and their ability to understand the speech they do detect can be severely affected. To improve understanding, the size of the "listening bubble" must be adjusted. Your child may be able to respond to speech at 5 feet in quiet and only 2 feet in noise. Get closer, stop or move away from the noise, or provide your child with enough visual cues that he or she can understand what you say. Recognize that communicating when noise is present will be more frustrating for you and your child. Be patient. You may want to try a personal FM system for use in home communication situations.

3. Use the eyes to help out the ears

Communication occurs most easily when your child is looking at your face when you talk. This is especially important when there is background noise or the child is at a distance from you. Call his or her name to get attention first. Train your child to look up when he hears his name. A child with normal hearing can passively monitor conversations around him. A child with hearing loss must put much more effort into listening and understanding what is said around him or her. Speechreading, gestures, facial expressions all help your child understand what you are trying to say.

4. Develop signals to get attention

Flash the overhead light, thump the wall or table with the palm of your hand, decide on a special vocal signal (name/ loud whistle), stomp your foot, wave your hand. Try whatever you think of and find what works for your family. Try not to put the child's siblings in the role of "fetcher's". Your child needs to develop responsibility for responding to and initiating communication appropriately. A "tap and fetch" system works well, but use it sparingly. It teaches the child to become dependent upon others instead of developing needed independence to be responsible for knowing when communication occurs. Your child's ability to tune into sounds or speech will improve somewhat as he or she gets older and listening skills develop.

5. Technology that can help

Technology is available that could be used to assist the understanding ability of a child with permanent hearing loss under difficult listening situations. Ask your audiologist about these items:

- a) **Waking up:** Bed shaker, pillow vibrator, alarm clock that uses a bright light
- b) **Overcoming noise and distance:** Personal FM system, FM built into or attached to hearing aids, parent wears microphone
- c) **Telephone listening:** Amplified phone handset, TTY (often free from the telephone company)
- d) **Understanding TV:** Closed captioner on TV, infrared TV system, hardwired or personal FM
- e) **Understanding movie:** Ask the theatre for an assistive listening device, they have them for use
- f) **Fire safety:** Lighted fire alarm, install loud smoke alarm near where he/she sleeps
- g) **Team sports:** Helmets with built in FM amplification systems can be made available
- h) **The future is promising:** Watch for improvements in amplification technology. DO NOT wait until your child's hearing aids quit from old age to replace them. The new technology in recent hearing aids (digital, programmable) really is better than older models and your child deserves the advantages brought by technological advances. Ask your audiologist for a 60-day trial and use the CHILD checklist to decide to yourself.



Children's Home Inventory for Listening Difficulties

Questions for the Child to Answer:

Picture yourself in the following situations. How easy is it for you to hear and understand? Use the Understand-O-Meter to pick the level that tells how easy or hard it is for you to understand and put the number in the blank after each question. Everyone has a harder time hearing in some situations. Only you know the right answer for you.

1. You are sitting next to your mom or dad. You are looking at a book together or talking about something in front of you. You are not looking at mom or dad's face as they talk to you. It's quiet. How difficult is it for you to hear and understand what they say? _____
2. Your family is together for a meal at home or at a restaurant. Someone across the table says something or asks you a question. How difficult is it for you to hear and understand what is said? _____
3. You are in your bedroom playing quietly. Mom or dad walk into the room without saying your name or getting your attention before they tell or ask you something. How difficult is it for you to hear and understand what is said if your parents don't get your attention before talking to you? _____
4. You are watching a TV show or video (not cartoons). How difficult is it for you to hear and understand what people are saying on the TV show (not closed captioned)? _____
5. You are playing inside with a friend, brother or sister. That child asks you to do something (Do you know where your yo yo is?). How easy is it to hear and understand when other children talk to you? _____
6. You are watching TV or playing with a noisy toy. Someone walks into the room and talks to you. How difficult is it for you to hear and understand the person when there is noise from the TV or a toy? _____
7. Mom or dad call you from another room. You can't see them and you are busy playing or doing homework. How difficult is it for you to hear them and know they are calling you? _____
8. It is time to get up and get ready for school. How difficult is it for you to hear an alarm or clock radio go off so you wake up? (or a parent telling you it is time to wake up, but not touching you?) _____
9. You are playing with a group of children inside a house. It's noisy. How difficult is it for you to understand what the children are saying as they play as a group? _____
10. A grandparent, family member or friend wants to talk to you on the phone. How difficult is it for you to hear and understand what is said over the phone? _____

Understand-O-Meter

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11. You are playing outside with other children (riding bikes, playing ball, skateboarding, playing on swing). How difficult is it for you to hear and understand what other children are saying when you are outside and they are not close to you? _____
12. You are in a crowded store with mom or dad. You are looking at something and mom or dad talk behind you. How difficult is it for you to hear and understand what they are saying? _____
13. You are at home with your family. Mom or dad talk to you from across a large room. How well do you hear and understand what is said? _____
14. You are in the backseat of the car. Mom or dad are driving and say something to you. How easy is it for you to hear and understand what is said? ("How was school? Do you have any homework?") _____
15. You and a family member are talking. It is quiet and you are able to see the person's face as they talk. How difficult is it for you to hear and understand what is said? _____

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