# The Auditory Skills of DHH Children

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### Purpose

 To determine the auditory skills of children with hearing loss compared to typically-hearing children



### The Children

Group	Number (n)
No hearing loss*	30
High frequency	13
Mild	59
Moderate	56
Moderate-Severe	15
Severe	19
Profound (CI)	25

Date of Visit: \_\_\_\_\_ Name: \_\_\_\_

\_\_\_\_\_

Amplification Device: \_\_\_\_\_ Date of Birth: \_\_\_\_

Amplification Date: Identification Number:

S = has skill E = emerging skill D = doesn't have skill

DE	TECTION		
	Does your child	Н	0
1	wear the amplification device during his/her weiking hours?		
2	use body language to indicate when something is heard (ex. Turn head, and/or eye widening, quiets, stops action, changes facial expressional)?		
3	show awareness (turns to the sound source, elerts or quiets in response to loud sound) of loud environmental sounds (ex. dog barking)?		
4	show awareness of soft environmental sounds (ex. microwave bell, clock licking)?		
5	show awareness of voices, spoke at typical loudness levels?		
6	detect the Ling Six Sounds (M, AH, OO, E, SH, S)?		
7	detect the speaker's voice when background noise is present?		
8	search to find out where a sound is coming from?		
9	localize correct sound source (to the direction the sound is coming from)?		
) 8	CRIMINATION		
	Does your child	Н	0
10	discriminate the voice of a speaker taiking and sounds in his/her environment?		
11	discriminate different types of environmental sounds (ex. dog barking versus a telephone ringing)?		
12	discriminate a speaker using a soft voice (whisper) and a loud voice (conversational level)?		
13	discriminate a person singing (ex. "Happy Birthday") from a person having a conversation?		
14	discriminate family members voices (ex. Dad's voice versus Morri's voice versus a sibling's voice)?		
_			

#### Does your child... но 17 identity his/her name when called? 18 identify an item with an associated sound (ex. a train goes choo choo)? 19 identify one-syllable words versus two and three-syllable words (ex. ball vs. holdog vs. computer)? 20 understand if the speaker is happy, angry, or surprised by the change in their vocal tones? 21 identify or recognize commonly used words (varies from child to child)? 22 identify the Ling Six Sounds (M, AH, OO, E, SH, S)? 23 identify familiar songs (ex. "Happy birthday", "Itsy Bitsy Spider", "Old McDonald")? COMPREHENSION Does your child... H O 24 follow one-step directions (ex. "Get your shoes.")? 25 follow two-step directions (ex. "Get your shoes and open the door.")? 26 follow three-step directions (ex. "Get your shoes, open the door, and walk outside.")? 27 have an auditory memory for #\_\_\_\_\_items ( ex. being able to remember boet, apple, cup, and shoe would be 4 items)? 28 have an auditory memory for phrases/sentences (ex. "The girl jumped over the fence to get the ball.")? auditority sequence a story with \_3 events, \_4 events, \_4+events (er. 1" event =Steve want to the store; 2" event=He bought dog bones; 3" event = Steve took the bones frome to the dog!? 29 30 understand the question forms \_\_\_\_What, \_\_\_\_Who, \_\_\_Why, \_\_\_When (ex. "Where is the dog?"; "Who broke the cup?")? 31 understand concepts in phrases and sentences (ex. in, under, between, in front/? 32 understand the use of negatives in phrases and sentences (ex. no, not, no more)? 33 understand frequently heard phrases/sentences (ex. "Brush your teeth and get ready for bed.")? 34 acquire information incidentally through audition alone? 35 understand most of what is said through audition alone?

S = has skill E = emerging skill D = doesn't have skill

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Auditory Skills Checklet

15 discriminate minimal pair words (Similar sounding words such as pat, bat, and mat)?

discriminate similar sounding phrases and sentences (ex. "How old are you?" versus "How are you?")?

16

- Designed to identify the auditory skills of children in four domains
  - Detection 8

7

7

12

- Discrimination –
- Identification –
- Comprehension –

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DE	DETECTION			
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3	show everteness (turns to the sound source, elerts or quiets in response to loud sound) of loud environmental sounds (ex. dog banking)?			
4	show awareness of soft environmental sounds (az. microwave bell, clock ficking)?		Γ	
5	show awareness of voices, spoke at typical loudness levels?		Γ	
6	detect the Ling Six Sounds (M, AH, OO, E, SH, S)?			
7	detect the speaker's voice when background noise is present?			
8	search to find out where a sound is coming from?			
9	localize correct sound source (to the direction the sound is coming from)?			
DIS	CRIMINATION			
	Does your child	н	0	
10	discriminate the voice of a speaker talking and sounds in his/her environment?			
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20	understand if the speaker is happy, angry, or surprised by the change in their vocal tones?		
21	identify or recognize commonly used words (varies from child to child)?		
22	identify the Ling Six Sounds (M, AH, OO, E, SH, S)?		
23	identify familiar songs (as: "Happy bithday", "Itay Bitay Spide", "Old McDonaid")?		
со	MPREHENSION		
	Does your child	н	0
24	follow one-step directions (ex. "Get your shoes.")?		
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28	have an auditory memory for phraseshertences (ex. "The girl jumped over the fence to get the ball.")?		
29	auditorly sequence a story with _3 events, _4 events, _4+events (ex. 1" event =Steve want to the store; 2" event=He bought dog bones; 3" event = Steve lock the bones home to the dog!?		
30	understand the question forms What, Whore, Whor, When (ex. "Where is the dog?"; "Who broke the cup?")?		
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35	understand most of what is said through audition alone?		

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- Points are given per question for a total max of 70
  - <u>2 points</u> = child has skill
  - <u>1 point</u> = skill is emerging
  - <u>0 points</u> = child does not have skill

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_	search to find out where a sound is coming from?		t
8	search to time our where a sound is coming itom?		L
8	went to bit to du went a contra coming train?		l
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9	localize correct sound source (to the direction the sound is coming from)?	н	l
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- Originally used to determine skill progression in children with cochlear implants
  - Based on months post implant

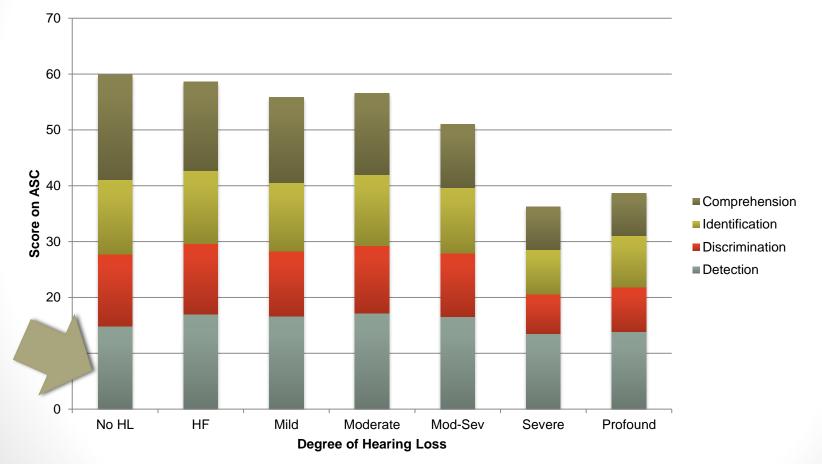


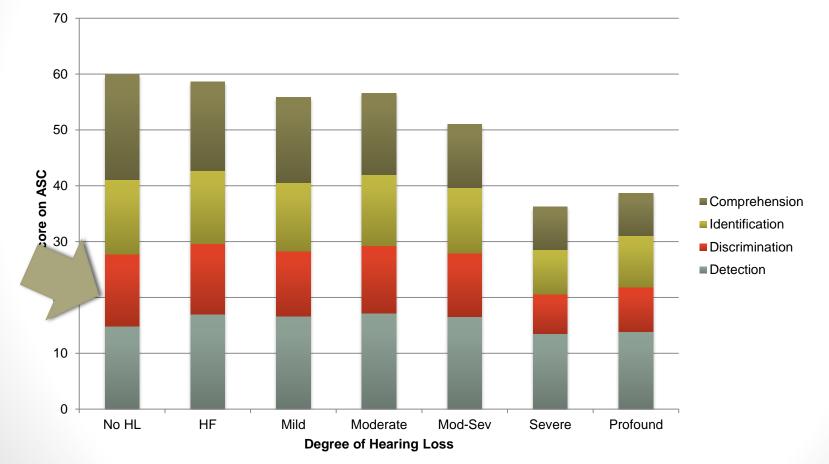
Kirsten

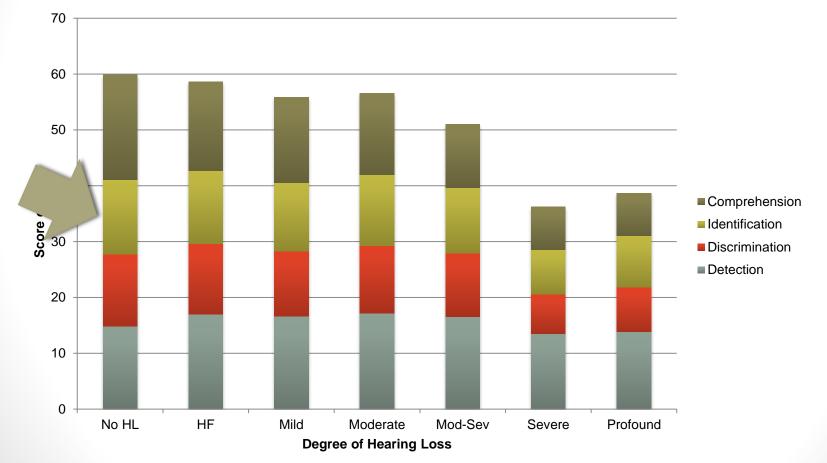
- Originally used to determine skill progression in children with cochlear implants
  - Based on months post implant
- But we use it for all DHH children

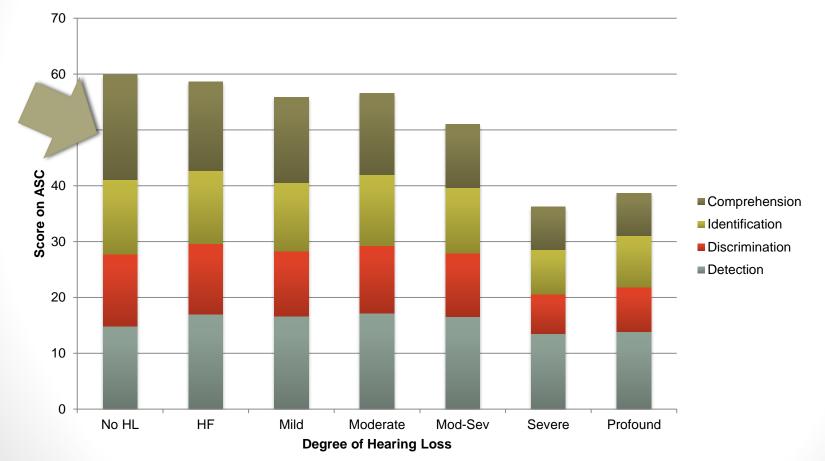


Mary







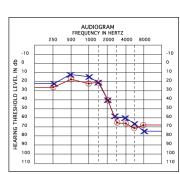


## **The Implications**

 Typically developing children achieve the highest scores overall



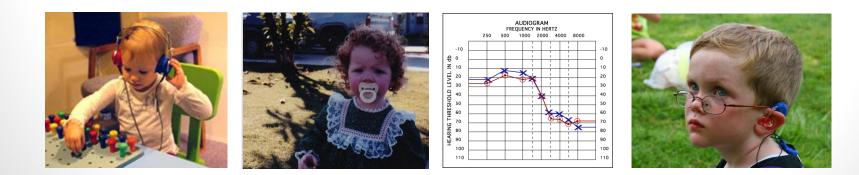






## **The Implications**

- Typically developing children achieve the highest scores overall
- As hearing loss increases, scores on the ASC decrease



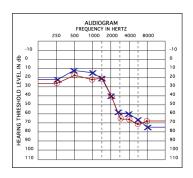
## **The Implications**

- Typically developing children achieve the highest scores overall
- As hearing loss increases, scores on the ASC decrease
- All children do better on the basic skills than they do on the higher-order skills
  - Detection
  - Discrimination
  - Identification
  - Comprehension











Difficulty

### **Other Directions**

- Maternal Level of Education
- Developmental Quotient



Waker

Hazel

### **Other Directions**

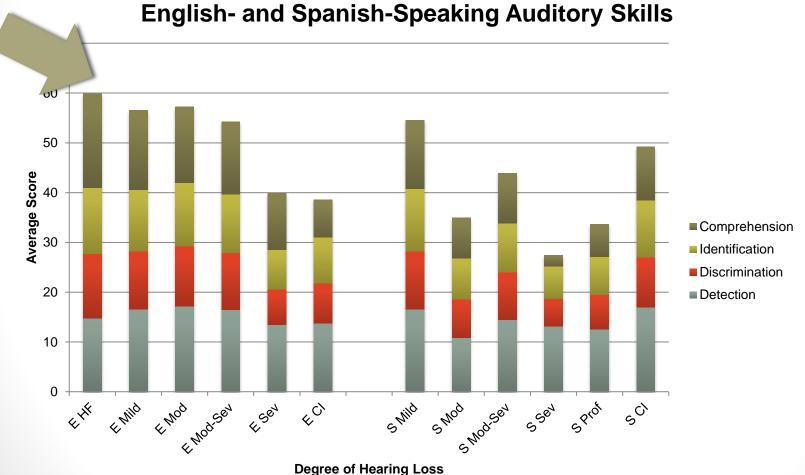
- Maternal Level of Education
- Developmental Quotient
- English vs. Spanish



Joy

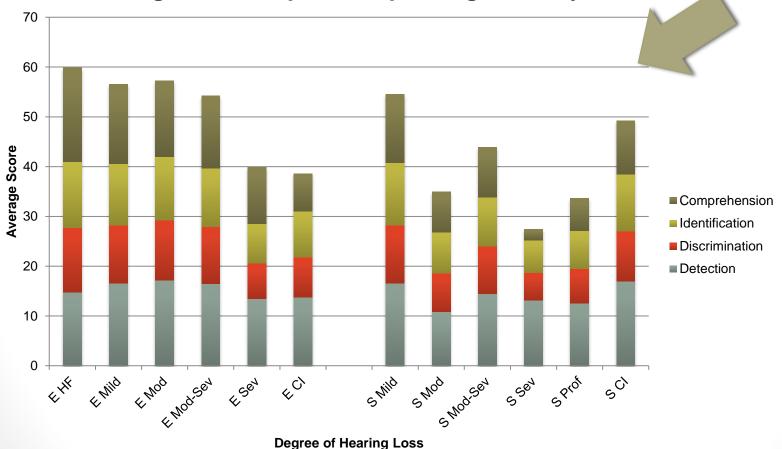


## A Segue...



## A Segue...

#### **English- and Spanish-Speaking Auditory Skills**



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