The Educational Diagnostician's role in dual disability identification: D/HH and AU

DANA WALKER

Facts

Autism: 1 in 59 children has been identified with autism spectrum disorder according to estimates from CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network.

Deaf/Hard of Hearing: Hearing loss occurs in 5 out of every 1,000 newborns. Approximately 3 million children in the U.S. have a hearing loss; 1.3 million of them are under the age of three

Know the signs: Characteristics of autism in children that are D/HH

- Resists being held or cuddled
- Doesn't respond to name when tapped or when attention is shared
- Has difficulty engaging in shared attention. Minimal response to social overtures from others
- Has difficulty imitating facial expressions and actions
- Makes limited use of eye contact even though it is needed for communication
- Has difficulty understanding others' needs and feelings

Know the signs: Characteristics of autism in children that are D/HH cont.....

- Has an unusual reaction to the environment that cannot be attributed to hearing loss
- Language development is below average of same age peers, signing skills develop slower
- Has difficulty understanding language even when simplified
- Social play is rigid, unimaginative, restricted
- Stereotypic movements
- Difficulty interacting with other D/HH peers if in a deaf education program
- Resists changes in routines

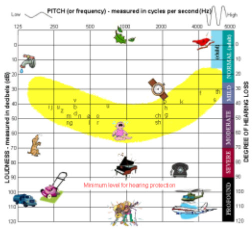
What is your role

- Participate in the assessment- you can't do the entire evaluation, but you will need to be part of all areas of testing; I.e. Part A B C, speech, psychological, IQ, play based testing, achievement……
- Notice to Release Confidential Information forms need to be obtained for agencies that work with the child; I.e. audiologist, private therapy providers, day care workers, doctors
- Be direct with the parents. Let them know what eligibilities you suspect.

Step 1: Audiologist

Meet with the audiologist. Is the behavior in question because of the type of hearing loss? Mild, Moderate, Severe, Profound……Bilateral or Unilateral…..Type of amplification used…..date of amplification (what is the hearing age)

Are the observed behaviors a result of the child not having amplification and the need to communicate



Audiogram

What type of hearing loss does the child have?

Characteristics of autism may look like hearing loss and vice versa. If a child cannot hear : he/she may not respond to name, behaviors or social interactions are impacted

Step 2: Home Language Survey

Case Study: Bryan is a 3rd grade student that has a profound hearing loss. Bryan is nonverbal and is being educated in a program where curriculum is taught using sign language. Bryan has been in the program since the age of 3 years old. Bryan's parents are DEAF and only use AMERICAN SIGN LANGUAGE to communicate.

Do you expect Bryan to have a strong L1 (first language)?

*Vice versa a student with a mild loss that has access to hearing

Step 3: Deaf/Hard of Hearing Assessment

Physical: Part A (Otological), Part B(Audiological), Part C (Communication Summary)

Additional Screener and PLAAFP Information: Karen L. Anderson documents https://successforkidswithhearingloss.com/about-the-author/

To be done by an AI teacher or assessment staff with a working knowledge on how to test children with a hearing loss

- Two observations (at minimum)
- Teacher interviews - Children's Auditory Performance Scale (C.H.A.P.S) and Screening Instrument for Targeting Educational Risk (S.I.F.TE.R)
- Language Sample-I try to use pictures that the kid may be interested in
- Quick Phonics Screener (QPS)
- Phonological Awareness Screener
- Functional Listening Evaluation
- Student Appraisals for listening and self advocacy

D/HH Screener Examples

Children's Auditory Performance Scale (CHAPS)

https://www.phonakpro.com/content/dam/phonakpro/gc_hq/en/resources/counseling_tools/documents/child_hearing_assessment_childrens_auditory_performance_scale_chaps_2017.pdf

Screening Instrument for Targeting Educational Risk (S.I.F.T.E.R)

https://successforkidswithhearingloss.com/wp-content/uploads/2017/09/SIFTER.pdf

Step 4: How do you contribute to the Speech & Language Assessment

Sit in on the assessments and look for red flags

- Utterances are not fluent, and the child often jumps from one sign to another rapidly without taking time to process thoughts. Presenting with repetitions during signed utterances.
- Listening and Expression scores are in the < 1%ile
- Not using the correct signs but instead using gestures/classifiers. Examples: 1. picture of two girls fighting over a teddy bear: mad my pull pull break pull fall break mad mad girl girl two mad mad mad 'close eyes open eyes' (sit) pull 'not yours mine' (sit) 2. picture of a boy holding up a shirt with a hole in the center (gesture) break clothes 'hold up' (sit) (gesture) is (SEE sign) new not like (classifier) why why why said 3. picture of a girl holding a baseball bat looking at a broken window. baseball break ball uh-oh (gesture) see mom hold break (gesture) bad see girl baseball not glass break bad
- Pragmatic Language Scores are low

Speech & Language tests

- Oral and Written Language Scales
- Language Sample
- Bracken Basic Concept Scale Revised
- Carolina Picture Vocabulary Test ** ***
- ROWPVT and EOWPVT
- Pragmatics Language Skills Inventory
- Test of Pragmatic Language, Second Edition
- PLS-5
- Peabody Picture Vocabulary test

Things to consider

Are their language levels different for the degrees of hearing loss?

AI teacher interviews: I believe language levels would be different. The mild loss might have greater access to spoken language or their hearing loss might be more easily/accurately addressed with amplification/listening devices. Also, because their loss is less to begin with, they might have more language to start off with and build on, and maybe also have better coping skills for accessing language the way they need. The profoundly deaf child might need more services or support to develop language, which might take longer than for an age-peer with a lesser hearing loss.

AI teacher interview: "I definitely believe kids act differently at different levels of hearing loss. The child learns to compensate as much or as little as they need to for their lack of hearing, and this compensation will vary depending on how much they lack."Fiona Cato, AI teacher, Sugar Land

Step 5: How do you contribute to the Emotional Behavior Assessment

- Sit in on the assessment. Interpret if necessary or allow a comfortable staff member to stay in the room
- Help the LSSP score the testing. Include your information from the D/HH screeners. Review possible autism red flags for children who have a hearing loss. Is the behavior observed typical of an AI kid?
- Share the self-advocacy interviews the student completed. Are student concerns related to hearing loss or autism
- Karen L Anderson- Social Communication Child Role Play Measure

Emotional Behavior tests

- Child Self-Report Projection Inventory (CSRPI)
- House Tree Person (HTP)
- Gilliam Autism Rating Scale, 3rd edition
- Autism Spectrum Rating Scales (ASRS)
- Behavior Assessment System for Children, 3rd edition
- Childhood Autism Rating Scale, Second Edition (CARS2-ST)
- Questionnaire for Parents or Caregivers (CARS2-QPC)
- Behavior Rating Inventory of Executive Function
- Conner's Continuous Performance Test

Things to consider

Do different levels of hearing have the same eye contact?

AI teacher interviews: No, because a child with mild hearing loss would be more aware of someone speaking to them than a child with profound loss. So they'll know to look at the speaker more commonly than the profound hearing loss child. Conversely, it could also work the other way, with the mild hearing loss being comfortable enough in what they can hear to not feel the need for eye contact while listening, while the more severe loss would feel like they need to be looking at the speaker more to be able to understand. Either way we are built with an intrinsic need to communicate with others. Even if Non-Verbal the child would point, pull, gesture.

Case Study: RM

- Mild hearing loss in the left ear and normal hearing in the right ear. Does not wear amplification
- HLS: English
- No ECI and has been in general education with 504 accommodations
- Language: Behavioral observations and formal testing indicates a receptive and expressive communication delay, pragmatic language weaknesses and an articulation disorder. Also of concern was establishment and maintenance of eye contact, using speech for a variety of pragmatic functions and emotional regulation including appropriate communication of emotions
- Behavior: struggles with completing tasks, disruptive, limited to no social interactions with peers, teacher states "he seems distant" during class, requires behavior support during the school day to increase compliance, obsessed with Legos, memorizes driving directions and does not want them to change, poor eye contact, does not like being touched, fearful of new situations, sings nursery rhymes over and over. ASRS scales very elevated, CARS 2 total t-score 53 Severe range
- IQ: Full-Scale IQ SS 85 WPPSI-IV
- Achievement: Limited growth in academics due to behavior

Case Study: BO

- Profound hearing loss bilaterally and wears hearing aids at school only
- HLS: American Sign Language (both parents profoundly deaf)
- ECI since age 1 and has been in a Total Communication program from PPCD/Brd grade
- Language: Uses 1-2 words to communicate in sign (only nouns and verbs), signs are repetitive, severe delay receptive/expressive language and vocabulary skills. A comparison to previous vocabulary testing indicates limited to no progress with single word vocabulary skills over the past three years, below average pragmatic skills in social interaction
- Behavior: poor eye contact, does not respect others personal space, non-compliant, defecates in pants at school and home and is not bothered by it, fixated with Legos, shows minimal or no response when others attempt to interact with him. ASRS scores not reported but indicated scales were elevated, GARS-3 Probable DSM-5 Severity Level for ASD: probable to very likely
- IQ: Nonverbal Full-Scale IQ 104, Memory SS 87, Processing Speed SS 98 Leiter-3. Adaptive behavior scores are all in the Extremely Low range
- Academics: Kindergarten level, limited growth

Case Study: YH

- Profound bilateral hearing loss identified at 2 years old and received first set of hearing aids at age 5
- HLS: Vietnamese
- No ECI, started PPCD at 4 years old in a Total Communication program
- Language development at a significantly slower rate than same age peers. In 2.5 years learned 166 signs and uses 72 spontaneous signs. Preferred to communicate with pictures. Dominate mode of communication basic sign language, gestures, body language. Nonverbal
- Behavior: difficulty with transition, repetitive behaviors (rocking), self-stim behaviors, hyperactive, comprised attention, urinates on self in acts of defiance, aggressive towards others. Eventually required 1-to-1 behavior support. IHT and Parent training
- IQ: Nonverbal Full-scale IQ SS85 Leiter 3, Nonverbal memory SS54, Nonverbal Processing speed SS58
- Achievement: Limited growth in academics due to behavior

Resources:

1. Dually Diagnosed: Autism and Hearing Loss; When a child who is deaf or hard of hearing also presents with autism symptoms, what can audiologists do to promote appropriate care?

https://leader.pubs.asha.org/doi/10.1044/leader.AEA.23042018.20#:~:targetText=Yet%20in%20reality%2C%20this%20combination,in%2059%20(see%20sources).

2. Data & Statistics on Autism Spectrum Disorder

https://www.cdc.gov/ncbddd/autism/data.html

3. When Autism and Deafness Coexist in Children: What We Know Now

https://files.eric.ed.gov/fulltext/EJ903163.pdf