



Evaluation of the Child with Hearing Loss: Challenges for the School Psychologist

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Who would have imagined that the many advances in hearing technology would make the jobs of educators of the Deaf/Hard of Hearing (DHH) more complicated? While advances in technology have provided near miracle results in the hearing of our students, many are given the misimpression that the child is now “fixed” and should be treated just like any other student. Our challenge is to help others understand that putting on hearing aids/Cochlear Implants (aided) neither means that the child now has normal hearing nor understands the information that is heard in the same way a hearing child does. This article hopes to provide some understanding of the challenges faced by school psychologists without a specialization in working with DHH students and how you can use your expertise as a teacher of the DHH to help.

So what are the challenges for the school psychologist?

Best practice states that assessments should be completed by those with specialty in working with students with hearing loss. In the past, these specialists were usually connected to residential schools for the deaf. With new amplification technologies (Cochlear Implants, in particular), students that would have previously attended residential schools are now enrolled in local schools and spread further apart. Now an aided student may appear to be “normal” after a quick conversation and thus inaccurately determined to have adequate hearing to be tested like every other student. We also know that many of our DHH students will not share when they do not understand something or ask for clarification—they pretend they heard, especially with strangers. Then the psychologist may use the same “cookie cutter” battery of tests which they are most familiar without regard to the hearing loss. Unfortunately, psychologists typically do not have the training or understanding of the global impacts of a hearing loss. Many just do not understand that putting on hearing aids is nothing like putting on glasses; glasses clarify information that a child has seen all their life, aided hearing provides fragmented information to the auditory system that may take years for the brain to decode into meaningful information.

Intelligence Testing

Intelligence testing is often used as the basis for student learning potential. Most intelligence testing is very verbally based in presentation/questioning and language loaded measures. Many measures ask questions requiring the use of synonyms, antonyms, defining words, analogies, etc. Since these language measures have a high correlation to academic success in the general public, they are also weighted heavily in the overall cognitive ability score. Obviously, the intelligence of our students with hearing loss is often underestimated using these standard cognitive batteries. This is especially prevalent in students

that had late identified hearing loss, were not amplified or consistently amplified, or who come from an environment with limited language usage. Even if our students have improved in language skills, they may have missed out on early language experiences and lack the fund of knowledge to answer the questions.

Often a psychologist does consider the hearing loss and chooses the “non-verbal” measures of a standard cognitive battery. What they may not realize is the actual requirement of a nonverbal measure is very verbally based, “point to and tell me what is wrong in this picture”, for example.

Over the last few years, the majority of the standard cognitive batteries have been updated to include a broader variety of types of measures. Typically, the manuals now give guidance on which parts of the test battery can be used with children with hearing loss, if any. This results in measurements of specific skill sets that should not be generalized as an overall measure of intelligence.

Sometimes, processing information/executive functioning are determined to be the primary difficulty. While we understand that a deficit in how the student processes auditory information is likely, many other processing difficulties may be misidentified simply because of the hearing requirement. The student’s difficulty repeating lists of words or numbers accurately may be identified as a short-term memory deficit, when the student may have simply struggled to hear the prompts, for example.

Academic Achievement

Measuring academic achievement is another area of great concern. I’ve read statements such as, “Standardized achievement measures were used to determine student’s skills as all students have the same grade level expectations.” While there is a purpose in providing evidence that students with hearing loss have educational needs, we must be sure that they are administered fairly. All of our students still exhibit a hearing loss, even when amplified, as compared to their peers—often with the greatest impact on perceiving high frequency sounds. So the results of a spelling test using words with plural-s endings, or past tense-ed endings may be difficult for our students without some modifications in presentation.

Another weakness in standardized academic testing for students with hearing loss is the limited samples that are used. Often reading comprehension measures are based on short paragraphs or cloze sentence exercises. While these measures may generalize to longer passages for hearing students, the scores may not be representative of the actual skills of students with hearing loss who find longer passages much more challenging to process. This is also a concern for written expression when only a sentence or two are required in the response. Just like reading, our students often have difficulties putting together several paragraphs on a single topic with a cohesive message, using a variety of sentence structures and vocabulary, proper grammar and punctuation.

Reading Measurement

Reading measurements of decoding words, including nonsense words, are much more complicated than most realize. The first consideration should be if the student can completely perceive and form all the sounds of spoken words. Assessment in a quiet room with the person speaking less than a few feet away would provide ‘best case’ results, but not be representative of how the student can actually perform in the large group learning environment. Also, even if the student completely understands and decodes the word properly, the spoken response may be inaccurate because of articulation errors. We often

experience students that mispronounce words repeatedly until they learn decoding skills and see them in print. With a high frequency loss, saying “expresso” until reading the word “espresso” for example. Most psychologists do not understand the precise hearing skills needed to develop decoding and encoding skills.

Math Assessment

Even measures of math applications can be invalid for students with hearing loss. The examiner is asked to read a prompt aloud. The idea in doing so is that reading the prompt takes away the reading requirement so it measures mathematics without a reading bias. Instead, this adds a more challenging listening comprehension requirement for the student with hearing loss. For example, a student is asked to listen to a multi-step math problem with multiple sentences, which includes a sentence unrelated to the problem. The examiner can only read the entire prompt again and is not allowed to answer clarification questions. In the end, the results of the student’s ability to use math to solve word problems is inaccurate.

Emotional/Behavioral Issues

Of particular concern is the frequent misdiagnoses of emotional or behavioral problems with our students. Most psychologists depend on the input from a variety of sources and settings when making diagnostic decisions. Checklists are commonly used as “objective” measures to provide this information—BASC, Vanderbilt, Achenbach, Conner’s, etc. Typically, the results are then entered into a scoring program and the output is used to support a diagnosis. The problem is that individual items are often not examined with the student’s individual hearing loss in mind. The student with hearing loss that sits quietly in the classroom with limited interactions with peers is likely using a lot of mental energy to stay focused in class, but this behavior can result in ratings that suggest depression. A student that often asks for clarification from the teacher or has difficulty taking notes, may end up with ratings suggestive of ADHD.

Autism Spectrum Disorder (ASD) appears to be more often considered in our children with hearing loss than in the general population, especially when young. I know many of our students that teachers wished were less social/talkative that were all previously diagnosed with ASD. I am sure that we all have experiences with students with hearing loss who displayed delays in reciprocal interactions that either gradually improved as their pragmatic language developed or came back from a school vacation interacting like every other student after having had an extended period of intensive social interactions. Of course our students can have any of these emotional/developmental difficulties, but a specialist in working with children with hearing loss should be the first choice in making diagnoses.

Unfortunately, many families and professionals incorrectly estimate the skills of our students and inaccurately jump to the conclusion of an emotional or behavioral disorder, such as Oppositional Defiant Disorder. This seems more prevalent in our teens with hearing loss, who spend less time in close proximity to adults. So when given a direction or a question is asked, they may not respond in the manner the adult anticipates. This often comes up with principals bellowing a direction down a hallway, as well. The student that may use nonverbal cues/lip-reading to supplement hearing unconsciously is reported to “never listen, disobeys, etc.”

So what’s a teacher to do?

As a teacher, you can help your psychologists by sharing your expertise and knowledge of the student. Helpful information could include information such as:

- “Joe will not admit when he doesn’t hear/understand. Please use extra checks for understanding or practice items if possible”
- The “hearing age” of the student
- Adaptations that are successfully used when testing the student
- Please don’t forget the modifications that you do routinely with examples, such as modifying a spelling prompt to provide the student clarification of the past tense form of the word, “washed, Mom washed the dishes, washed” may need to be modified to “washed, Mom washed the dishes last night, washed.” Or the plurals, “books, Joe checked out books from the library, books” may need to be modified to “books, Joe checked out three books from the library, books.”
- The nature of the hearing loss, including specific sounds the student may have the most difficulty hearing or saying
- What amplification to use (if using a FM system, share the mic with the psychologist)
- Your estimate of the student’s academic achievement in all areas (yes, math too) based on work samples and your interactions with the student
- The student’s level of dependence on signed language or if an ASL interpreter should be used
- Provide examples of progress across all subjects, pointing out specific areas of difficulty
- Most importantly, share that verbal measures of intelligence may be a reflection of language delay/experiences because of the hearing loss and not actual intelligence.

It would be very helpful for the psychologist to have this information in writing before they work with the student to help them plan for the evaluation.

Eligibility Determination

While at eligibility meetings, keep in mind that you likely have more expertise in students with hearing loss than anyone else in the room. If the psychologist wants to use verbal intelligence measures in the decision making process, share your expertise regarding the challenges of fragmented hearing in combination with language development delays for children with hearing loss. Provide examples of your daily experiences with the student’s academic achievement, especially their tendency to break down when expected to process information as needed for extended responses. I know a case where a student identified with hearing loss was reevaluated in another district and while the psychologist insisted the student had an intellectual disability, it was the teacher that saved the day by pointing out skills the student demonstrated daily that were far above those of a student with a low IQ.

When the most appropriate setting/services are discussed, please use your expertise in sharing best practices to meet the student’s needs. Throughout most of special education, students realistically cannot be expected to ‘catch up’ to their class peers due to learning disorders. Hearing loss causes delays and learning differences due to the student not being able to access all of the communication occurring at school. These gaps can be closed, but only if there is sufficient specialized instruction provided. Providing itinerant services for an hour once a week is not going to help the student develop the specific skills needed to learn decoding skills, for example.

If you have an experience with a parent sharing a report from an outside agency, once again please share your expertise related to the points that have been made in this article. Very often the parent does not fully understand the report and is focused on the verbal explanation that was provided. My experience has been that outside agencies often state that the student has a hearing loss and then proceed to use the same standard tests they use with all students. Often reviewing the results with the parent and discussing how the hearing loss may have affected each of the measures is very helpful.

Advocate!

As a teacher of students who are deaf or hard of hearing you have the training and expertise to be an advocate for your students. Start by using your diplomatic skills to help the psychologist learn more about how communication access issues impact the overall performance of students with hearing loss. Offer and provide assistance to help the psychologist get the most accurate testing results possible. When the team meets, be an active/expert participant to help the team determine the most appropriate disability, educational setting, and services needed for the student to be successful.