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How Young is Too Young to Evaluate Children for Auditory Processing Disorders?

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Have you heard the following question from someone referring a child, “Do you test children for auditory processing disorders (APD) who are 5-years old?” Often, audiologists say, “You can’t test a child of that age; you must wait until he is 7-years old.” When asked “Why not?” audiologists may state something related to the child’s system not being developed enough to evaluate auditory processing at such a young age; or the audiologist might state that our professional associations do not recommend we test children so young. I have wondered for a long time what evidence exists to support such statements.

The question related to age has been discussed in the literature for many years.[1–5] Some say you can screen for possible APD at a younger age, but must wait until the child reaches 7 years for a diagnosis,[1] while others argue the need for early intervention indicating that the earlier you find the problem and remediate the disorder, the sooner the child can show improved development.[3–5] Lucker reported that professional associations do not recommend that one waits for a certain age to test young children for APD.[5] Actually, both the American Academy of Audiology[6] and the American Speech-Language-Hearing Association[7] indicate no limit to the age one can test a child for APD.

The ASHA technical report states that care must be taken when evaluating a person for APD to insure that results from testing are not reflecting factors such as low cognitive abilities, developmental disorders, and other non-auditory processing factors when making a diagnosis of APD.[7] Consider the following: a child 12 years old does not understand how to complete a measure of auditory processing, and the child fails that measure. In contrast, a child of 5 years is able to do the test appropriately and could pass the test, but the audiologist says “You can’t test a 5 year old for APD.” Just because the child is 5 years old, should we not test him for APD? He is able to do the task. In contrast, just because the other child is 12 years old, his inability to do the basic task could indicate that failure on that measure may have nothing to do with APD problems. Thus, age was *not* a significant factor.

In support of the need to test young children are the following factors. First, our profession

supports early identification and intervention. Second, the norms for almost all measures of auditory processing go down below 7 years of age (e.g., the SSW Test,8 the Phonemic Synthesis Test,[9] the SCAN-3:C,[10] measures of speech in quiet and noise,[11] and Pitch Pattern Perception.[12] Thus, most of the measures of auditory processing have norms below the 7 year old level.

In reviewing what our professional associations actually say about testing children for APD, the following was found. The ASHA document indicates that along with the need to use care in evaluating and diagnosing a child with APD, audiologists need to know and understand the influence of cognitive factors especially for people with mental ages below 7.[7] This does not mean that we cannot test children below 7 years of age. Further, the report indicates that "exceptions to the general care may occur following careful examination of the task's requirements and the child's capabilities and when using tests designed for use with young populations."

In support of waiting until the child is 7 years of age, Bellis indicates that "most of the tests of APD require that a child be at least 7 or 8 years of age because the variability in brain function is so marked in younger children that test interpretation may not be possible."[2] The most important word used is "may." The word "may" indicates that one must be careful when interpreting the results from APD testing. However, should care only be taken when a child is under the age of 7 or 8 as suggested in Dr. Bellis' writing or should care be taken no matter what is the age of the client evaluated? Care should always be taken interpreting any audiological test findings. We need to consider *all* variables that contribute to failure on APD measures including cognitive abilities, attention and motivational factors as well as many other non-auditory based issues.[13]

The AAA 2010 guidelines have identified tests of auditory processing that are appropriate for use with young children below 7 years of age: the PSI Test,[14] the SCAN-3:C,[10] and the SSW8 and further elaborate that these measures are helpful in identifying possible problems with auditory processing in young children. Thus, AAA supports evaluating children below 7 years of age when it is done appropriately.

Do audiologists routinely test auditory processing abilities in children below the age of 7 years? Definitely! Consider SRT testing. When we measure SRT and the intensity is close to threshold, the auditory system and brain are challenged to figure out which words were said. Such "figuring out" is another way to say "process" what was heard, which would be an auditory processing task. Additionally, we ask children to identify if a sound is heard or not heard and, for sound field results, we may ask the child to look in the direction of the sound. In both cases, we are not merely testing hearing but evaluating the child's abilities to process factors about sounds (auditory processing abilities). Thus, we have been testing auditory processing in children well below the age of 7 years for decades.

In the end the question arises "Can we test children below 7 years of age for auditory processing abilities?" The conclusion drawn is a simple, "Yes"! In order to provide appropriate interventions, accommodations, and treatments for children as earlier as possible it is necessary to test children for APD as soon as one questions whether a child might have such problems. It is emphasized that care must be taken interpreting test results, but it should be the responsibility of the audiologist to take such care. Audiologists who follow ASHA's and AAA's recommendations and carefully assess auditory processing abilities in young children provide a much needed service so that children with APD problems do not grow up confused having negative self-images.[13] We can and should evaluate auditory processing in young children below 7 years of age, and there is no evidence to support the need to wait until the child is 7 years old.

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