Determining candidacy for (central) auditory processing evaluations

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In 2005, the American Speech-Language-Hearing Association (ASHA) convened a working group on auditory processing disorders that was charged with reviewing the ASHA technical report, *Central Auditory Processing: Current Status of Research and Implications for Clinical Practice.* The group was asked to determine the best format for updating the topic for the membership, which resulted in the creation of a technical report. In the section on diagnosing (C)APD, the report highlighted test principles that should be applied in determining the composition of a (C)AP test battery. It recommended that the audiologist be sensitive to "attributes of the individual... [which may] include language development, motivational level, fatigability, attention, and other cognitive factors; the influence of mental age; cultural influences; native language; and socioeconomic factors." This statement emphasized the need to understand and control for confounding factors to test performance to ensure that the behavioral assessment of auditory processing skills accurately reflects central auditory function.

As audiology practices design and implement programs for assessing children with suspected (C)APD, an important component of the program is initial screening of referrals to determine candidacy for the behavioral (C)AP assessment. Who, then, are appropriate candidates for assessment? We propose that the following criteria be considered when determining candidacy.

**AGE: Child must be 7 years or older**

Interpretation of (C)AP test results involves comparison of the child's performance to chronological age mates. For populations below age 7, normative data on many available auditory processing tasks are either unavailable or poorly defined, due to the significant variation in maturation rates.

**COGNITIVE STATUS: Child must have a normal overall IQ**

For the audiologist to interpret findings of the (C)AP battery, the child must be compared with age mates. Children with cognitive function below the low-average range cannot be reliably compared with age mates.

**LANGUAGE: Child must be proficient in English**

All (C)AP tasks are administered in English and involve the presentation of degraded/altered speech materials. To complete these tasks, the child must have adequate knowledge in English.

**HEARING: Child should have normal hearing bilaterally**

Most available (C)AP tasks have been normed on persons with normal peripheral hearing sensitivity. When interpreting test results on a patient with hearing loss, the audiologist must take care to determine whether reduced performance reflects peripheral problems, central problems, or a combination.

**SPEECH INTELLIGIBILITY: Child should not have a severe articulation disorder**

Behavioral (C)AP tasks involve repetition of information (numbers, words, sentences). In a person with reduced speech intelligibility, it may be difficult to determine whether an incorrect response is a result of hearing the stimulus incorrectly or repeating the item incorrectly due to articulation issues.

**EMOTIONAL STATUS: Child should not be diagnosed with a severe emotional disorder**

Children with severe emotional and/or behavioral disorders may have difficulty attending to or completing standardized testing.

**CONCLUSION**

We recognize that there are cases when a child who does not fully meet criteria should still be considered for assessment, e.g., a child with permanent hearing loss or with uneven cognitive performance on standardized measures. It is most important in such cases to have a good understanding of how these factors affect the child's performance and influence test interpretation. These variations should also be clearly delineated in the subsequent report.

In summary, we propose that audiology programs that evaluate children with suspected (C)APD determine candidacy for each child by conducting a paper review prior to setting an appointment.

The goal of auditory processing assessment in children is accurate identification of those with (C)APD. Implementation of screening procedures to determine candidacy for evaluation is one important component of the identification process. This information can be used not only to determine candidacy for the testing, but also in interpreting the results and in forming an appropriate treatment plan for these individuals.

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**REFERENCE**