Auditory Processing Disorders and The Listening Inventory

Donna Geffner, PhD / Deborah Ross Swain, EdD

Several years ago, the authors had a propitious meeting in Santa Rosa, California, after a California Speech-Language Hearing Association convention, to discuss our common concerns about identifying children with auditory processing disorders. At the time, there were few questionnaires available to screen youngsters at risk for APD, and some were very old and not well supported.

"One intention . . . was to differentiate among the many "look-alikes" that often mask APD or occur with it, among them AD/HD, Reading Disability, Emotional/Social Disorder, Sensory Integrative Processing Disorder, and Language Disorder."

It was a true collaboration: a Speech-Language Pathologist and an Audiologist. The intended outcome was to collaborate on an inventory/questionnaire for SLPs and other professionals to identify children at risk for having an auditory processing disorder, so that they would receive proper diagnostic testing and remediation. It could also help professionals monitor children affected by such childhood illnesses as otitis media with effusion, asthma, and other diseases that affect hearing.

One intention was to identify common characteristics among this population of children. Another was to differentiate among the many "look-alikes" that often mask APD or occur with it, among them AD/HD, Reading Disability, Emotional/Social Disorder, Sensory Integrative Processing Disorder, and Language Disorder. We wanted the questionnaire to differentiate the primary factors to classify a student in a given category. So questions were devised to probe behaviors such as attention, sound discrimination, musicality, sensory/motor skills, social/behavioral characteristics, organization, and understanding.

With Dr. Jack Katz and Dr. Nancy Martin, we developed 103 questions within six factors: Linguistic Organization, Decoding/Language Mechanics, Attention/Organization, Sensory/Motor, Social/Behavioral, and Auditory Processes. Since some questions apply to multiple factors, the rating for that characteristic will appear in more than one category. For example, APD shares many behaviors with AD/HD, language disorders, and reading disorders. The remarkable co-morbidity has been substantiated in a number of studies (ASHA, 2005; Sharma, Purdy, & Kelly, 2009; Corriveau, Goswami, & Thomson, 2010; Dynda, Geffner, & Martin, 2010). The TLI uses 760 sets of paired observations by teachers and parents from around the country, which were subjected to a thorough statistical analysis to derive criterion-referenced scores.

Clinicians often ask:

How Do I Use It? Ask the parent or caregiver to rate observed frequency of each behavior. Then the clinician tallies the scores for each column. The criterion cutoff scores show if the child's behaviors may indicate a disorder or dysfunction that calls for further testing.

When Do I Use It? Anytime a child presents with what appears to be an auditory processing problem—for example, he or she asks "what?" frequently, needs repetition, appears not to hear, mishears, or has trouble listening in noise—the TLI can be utilized. Further, as we often see clinically, we do not know whether the child truly has an auditory problem or an attention problem, or both! The TLI will help sort out the pattern, or at least alert the clinician to the probability of one or both disorders. Further testing and verification would then be in order.

References

American Speech-Language Hearing Association (ASHA) (2005), Central Auditory Processing Disorders: Technical Report. <u>http://www.asha.org/members/deskref-journals/deskref/default</u>, accessed May 2012.

American Academy of Audiology (AAA) (2010). Guidelines on Auditory Processing Disorders. <u>www.aaa.org</u>, accessed May 2012.

Corriveau, K. H., Goswami, U., & Thomson, J,M. (2010), Auditory Processing and Early Literacy Skills in a Preschool and Kindergarten Population. *Journal of Learning Disabilities*, *43*(4), 369-382.

Sharma, M., Purdy, S., & Kelly, A. (2009). Comorbidity of Auditory Processing, Language, and Reading Disorders. *Journal of Speech, Language, Hearing Research, 52,* 706-722.

© 2011 Academic Therapy Publications