Overview of Auditory Processing Disorder (APD)

What is APD?

Auditory Processing Disorder is a sensory processing deficit that commonly impacts listening, spoken language comprehension and learning. Most people with auditory processing problems have normal intelligence and normal hearing sensitivity.

“It is what the brain does with what the ear hears.” (Katz, 1994).

What are APD skills? (How do they apply to the classroom?)

- Sensation: recognizing the presence of sound
- Sound discrimination: discriminating among sounds of different frequency, duration, or intensity *(Important for following directions, reading, spelling and writing skills)*
- Localization of sound *(important for general listening effectiveness)*
- Auditory attention *(can be misinterpreted as ADHD)*
- Word discrimination: discriminating among words that sound acoustically similar *(Important for accurate interpretation of a verbal message)*
- Auditory closure: understanding messages with missing parts/degraded signals *(Important for understanding accented speech or speech with limited visual cues)*
- Auditory synthesis: synthesizing isolated phonemes into words *(Critical to the reading process)*
- Auditory analysis: identifying phonemes or morphemes embedded into words *(Important for distinguishing verb tenses and other morphological markers that may be distorted by background noise)*
- Auditory association: attaching meaning to words *(Fundamental skill for developing Auditory Memory)*
- Auditory memory: recalling an acoustic signal after it has been labeled and stored *(Important to informational recall in general)*
  - Auditory short-term memory: immediate recall
  - Auditory sequential memory: recall of a series of details

What are the common characteristics found in child with known APD?

<table>
<thead>
<tr>
<th>Sensitive to loud sounds</th>
<th>Appears to be confused in noisy places</th>
<th>Awkward or clumsy</th>
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</thead>
<tbody>
<tr>
<td>Short attention span</td>
<td>Difficulty following directions</td>
<td>Lacks self confidence</td>
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<tr>
<td>Impulsive</td>
<td>Reverses words, numbers, letters</td>
<td>Unmotivated</td>
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<tr>
<td>Easily frustrated</td>
<td>Inappropriate social behavior</td>
<td>Inattentive</td>
</tr>
<tr>
<td>Forgetful</td>
<td>Fakes illnesses or dislikes school</td>
<td>Shy or anxious</td>
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<tr>
<td>Seeks attention</td>
<td>Academic performance below potential</td>
<td>Acts hearing impaired</td>
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<tr>
<td>Uncooperative</td>
<td>Disruptive or rowdy</td>
<td>Tires easily</td>
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</tbody>
</table>
How does APD impact reading skills?

Reading is a visual symbol superimposed on previously acquired auditory language. That language develops through nearly exclusive dependence on the auditory channel. When weaknesses within the auditory channel are evident, reading development may be adversely affected.

The three most important auditory processes for reading are:

- Discrimination of particular phonemes within words
- Auditory discrimination of words
- Auditory closure

Reading behaviors that may be present in children with Auditory Processing Disorders (APD include):

- Inability to hear the similarities in the initial and final sounds of words
- Cannot perceive the similarities in words (e.g., fat/that)
- Unable to hear the double consonant sounds in consonant blends
- Lack of discrimination of short vowels (e.g., ten, tin, ton)
- Cannot break words into syllables
- Cannot break words into individual sounds
- Inability to combine parts of words to form a whole word
- Cannot remember the sounds for the printed symbols or the names for the printed word
- Difficulty in distinguishing similarities and differences in sounds
- Lack of retention of sounds or syllables long enough to make matches or blends
- Inability to relate the visual components of words to their auditory counterparts
- Does not relate a part of a word to the whole word
- Inability to synthesize or analyze unfamiliar words

What actions should I take if I am concerned about APD?

Auditory Processing Disorders can be diagnosed in children as young as 6-7 years of age by a licensed Audiologist. Younger children can be screened for possible delays in auditory development depending on their maturity and tolerance for testing. Remediation for these delays or disorders can be very successful for APD children and may help improve their reading, listening, studying or memory skills greatly. It is also very important to rule out the influence of APD on other known educational or psychological disorders.

If a child exhibits several of these characteristics, he/she may be experiencing a Central Auditory Processing (CAP) delay or disorder. If an Auditory Processing Disorder is suspected, please call us at (770) 744-2451 to schedule Central Auditory Processing (CAP) testing. Appropriate identification of reading difficulties is crucial to proper remediation, class placement and intervention.