

Auditory Processing Disorder

APD is a difficulty in the way auditory information is processed. It is not a sensory (inner ear) hearing impairment. Individuals with APD usually have normal peripheral hearing ability. APD is a term that describes a variety of listening problems that can interfere with the processing of auditory information.

APD can share common characteristics with specific difficulties such as dyslexia, ADHD, language difficulties and autistic spectrum disorder.

APD tends to manifest as poor listening skills or an inability to process auditory information and is often accompanied by motor problems.

Auditory processing is an internal cognitive function that impacts all aspects of learning.

Because there is generally no hearing loss or evidence of neurological disorders associated with auditory processing disorder, it often goes undetected.

Another complication in recognizing appropriate auditory development is that symptoms of APD often overlap with specific language impairment, ADD/ADHD, developmental dyslexia or delayed learning.

The Three Types Of Signs of APD To Look For

Auditory processing disorder has been likened to listening to sound through water. As a result, there are three areas of APD-related difficulty:

Sound discrimination. If a child cannot pick sounds out, “frill” instead of “thrill” speaking, reading and spelling are at risk

Auditory memory. If the language sounds muddy, it does not always make sense and so it is hard to organize and commit to memory. This impacts math facts, following directions, etc.

Language processing. This is where auditory processing disorder causes the most havoc. It impacts the ability to understand and think about language, spoken and written. This has academic and social consequences.

It is important that parents do not disregard the indicators of APD – the earlier the condition is identified, the more likely that intervention will have a positive effect.

Signs may include sound sensitivity, tuning out behaviour and auditory processing difficulties. They may exhibit the following behaviours:

- Puts hands over ears or runs from sounds
- Cries in response to loud sounds

- Tunes out auditory input – acts as though deaf, daydreams, attention drifts, or inability to stay focused
- Avoids noisy, crowded group situations
- Has auditory comprehension problems, is better at visual learning, fails to follow spoken directions
- Has a history of ear infections
- Does not pay attention to verbal instructions
- Is easily distracted by background noises or drifts from paying attention
- Has difficulty with phonics
- Learns poorly through the auditory channel
- Has a diagnosed language or speech difficulties
- Displays slow response time to verbal stimuli
- Covers ears to avoid sounds
- Frequently gives odd or inappropriate responses in conversation
- Needs physical prompts to follow verbal commands.
- Responds to only part of a verbal command,
- Is easily distracted by random noises,
- Has slow response time,
- Has speech and language delay or disorder
- Inconsistent educational performance
- Tantrums easily
- Hears sounds such as aeroplanes, etc. before anyone else, and often runs away from them
- Avoids eye contact
- Hums or makes noises
- Has difficulty organising the day
- Is fatigued by end of the day
- Needs constant activity or visual stimuli
- Has difficulty finding the exact words to express themselves
- Is non verbal

Does your child frequently demonstrate any of the following problems with expressive language?

- Doesn't speak fluently or articulate clearly
- Has poor vocabulary, sentence structure and grammar usage
- Displays illogical flow of stories or ideas
- Uses vague words such as 'thing', 'stuff', 'whatever'

Problems with receptive language?

- Needs to hear instructions/directions more than once

- Appears overwhelmed when there is a lot of auditory activity
- Misinterprets verbal messages
- Confuses similar words or sounds
- Seems distracted or unable to sustain attention when receiving verbal messages

Problems with other language tasks?

- Cannot associate sounds with their written symbols
- Tends to spell words phonetically (eg. spelling 'fire' as 'fier')
- Reads slowly and has poor reading comprehension
- Problems with auditory sensitivity?
- Finds neutral sounds unpleasant or painful
- Puts volume of music or television unusually high or unusually low

Things to look for

What are the signs that a child might have auditory processing challenges? Here are some behaviors you or your child's teacher might have noticed:

- Doesn't pick up nursery rhymes or song lyrics
- Has trouble following directions
- Doesn't remember details of what she's heard
- Appears to be listening but not hearing
- Often mistakes two similar-sounding words
- Has difficulty understanding speech in noisy environments
- Has trouble learning to read and spell
- Finds it hard to follow conversations
- Finds it hard to express himself clearly
- Frequently asks people to repeat what they've said

These are all behaviors that can indicate auditory processing problems, but they are also behaviors that can have other causes. Some of them appear in children with ADHD or other language or learning disorders, so determining the cause of the behavior is crucial to diagnosing the child's challenges correctly.

Because these symptoms overlap with other disorders, auditory processing disorder cannot be diagnosed just from a checklist of symptoms. While a teacher, educational therapist or speech-language pathologist can evaluate how a child is functioning in terms of language and listening tasks, the condition is only diagnosed by audiologists, who use tests that measure specific auditory processing functions. Children can be weak in one or more of them.

General Strategies

Gain attention

Make sure the child is looking at you as you speak and use their name at the start of a sentence.

Check comprehension

Do not assume that they have understood fully what has been said: it may be good to ask them to repeat back to you what they think they have heard.

Rephrase and restating instructions and information will help.

Use brief instructions

They will find it hard to process large amounts of information and they will respond better to short 'chunked' sentences.

Slow down your speech if necessary

Don't interrupt

They will take longer to convey their message if their flow of conversation is interrupted.

Allow for longer processing time

They will need sufficient time to process what they hear: it may take them a little longer to respond to questions, or indeed to prepare their own questions.

Strategies in School

Visual timetable

Visual aids such as visual timetables, charts and pictures can be used to promote understanding, organisation skills and offer reassurance as to 'what is happening next?'

Classroom placement

Make sure they have a clear view of any board or adult during carpet time and at the

table. An adult standing in front of the light makes it harder for them to see.

Promoting understanding

Listing key vocabulary can reduce tendencies to 'mishear' or misunderstand what has been said. Using mind maps, written instructions and visual timetables also promotes understanding by reducing the reliance on auditory processing.

Explain lesson objectives

Pupils with APD symptoms often like to see the 'whole picture' and work better if they know what they are trying to achieve or the purpose of the task.