



The Parenting Buzz

Auditory Processing Disorder

Auditory Processing Disorder (or APD) is a condition where the brain doesn't filter and interpret sounds correctly. People with APD have normal hearing abilities but their brains just have difficulties filtering and interpreting the sounds. So, put simply, they have normal hearing but find it hard to listen.

It can also be called Central Auditory Processing Disorder (CAPD).

It's not curable but is treatable, mostly through speech therapy and specialised literacy intervention programs. Children with APD can use listening devices to help support their auditory learning.



Signs of Auditory Processing Disorder:

Children with Auditory Processing Disorder (APD) find it difficult to:

- *Hear speech in noisy environments or if there is background noise.*
- *Learn in group environments.*
- *Register and remember what others are saying.*
- *Learn to read.*
- *Express themselves clearly.*
- *Follow directions / instructions.*
- *Maintain their attention (they can have poor listening skills and a tendency to be easily distracted).*
- *Rhyme (due to only tuning into the beginning of the word).*
- *Detect subtle changes in tone.*
- *Have conversations on the phone.*

These children may:

- *Miss information in conversations.*
- *Have a short attention span.*
- *Misunderstand or mishear what is said to them.*
- *Frequently ask for information to be repeated or ask for clarification.*
- *Be slow to process and respond to auditory information.*
- *Not hear the subtle differences in spoken sounds.*
- *Have trouble locating the source of a sound.*
- *Have poorer verbal abilities - use the incorrect sound when pronouncing words (after the time when they should be pronouncing these correctly).*
- *Become distracted and have inattentive behaviour.*
- *Have delayed language development (including delayed phonological awareness).*
- *Have difficulties academically – such as poor reading and spelling.*
- *Have behaviour problems.*
- *Have social difficulties*

These children don't have sufficient skills to be able to effectively decode language (that most children develop naturally and with ease).

The 4 Basic Skills in Auditory Processing

- **Auditory Discrimination**

This is the child's ability to be able to hear the subtle differences in words and be able to tell the difference between sounds that may be similar but not the same. Such as "bat" and "pat".

- **Auditory Figure-to-Ground Discrimination**

This is the child's ability to differentiate between important sounds and background noise. Such as in a classroom a child may have troubles listening to the teacher's voice, over all the other classroom noise and chatter. They have troubles filtering out all of the noise they don't need to be taking in.

- **Auditory Memory**

This is a child's ability to remember and recall what they hear (both short term & long term). Such as children may find it difficult to remember the words to a nursery rhyme or the contents of a written talk they are to present to the class (unless it is written down).

- **Auditory Sequencing**

This is the child's ability to understand, remember and recall the order of sounds. For example, they might say "ephelant" instead of "elephant". They can also mix the order of numbers too so they may say 26 instead of 62.

Supporting Children with Auditory Processing Disorder

The New Zealand Audiological Society (2019) state in the New Zealand Guidelines on Auditory Processing Disorder that:

"Untreated APD commonly leads to reduced communication, which in turn can lead to a variety of psychosocial effects including loneliness, social anxiety, depression, anger and fear."

Younger children who have APD may benefit from extra support with their phonological and phonemic awareness. There are a number of programs that parents can access or the child can see a speech pathologist.

Auditory Processing Disorder in the Classroom

The most important thing is that the school and teachers are aware of the student's difficulties. It is important the teacher has good teaching practices as this makes a huge difference to the student's achievements in the classroom. In some cases a student may use an FM Sound System – this has actually been proven to improve students' achievements at school (Speld QLD, no date specified).

Some strategies to help the student in the classroom include:

- Sitting the child closer to the front of the class but off to the side.
- Ensuring the distance between the teacher and student isn't too far.
- The teacher should face the student to let them see their mouth when they speak.
- Speak clearly and at a slightly reduced rate.
- Gain the child's attention before speaking.

- Reduce background noise.
- Reduce visual distractions (only display content needed for teaching and learning).
- Provide a quiet area for the student to complete their work.
- Repeat or rephrase when needed and ensure the student understands what has been said.
- Provide supplementary visual aids.
- Teachers can use an FM System, a Roger Amplification Kit or a Soundfield system.
- Allow special accommodations for tests and exams if necessary.

A FM System and Roger Amplification Kit are personal amplification systems, where the teacher wears a small wireless microphone or it can be placed in the middle of a group for class discussions etc. and the student wears a receiver behind their ear (or it can be connected to hearing aids for students with hearing loss). This enables the child to hear the speaker's words directly in their ear.

A Soundfield system transmits and amplifies the voice of the teacher to the whole classroom clearly. The teacher wears a small wireless microphone which helps the students with attention difficulties, hearing loss and APD to be able to hear their teacher, even when the teacher is not facing them.

It's also important to check in with the student to ensure they have understood what is being taught and allow them to have breaks when they need them to prevent auditory fatigue.

Diagnosis

It's really important that children with APD get a diagnosis so they are able to access the support they need to be able to improve their ability to listen, which is so important, especially in the childhood years when most of their academic learning is taken in by listening to others.

Audiologists are the recognised allied health professional here in Australia that will complete the assessments and diagnosis for APD. Usually they will complete a hearing test first to ensure the hearing is normal and then they will have a series of other tests to assess the student's ability to process words and signals in differing conditions.

References

Child Mind Institute, Caroline Miller & Matthew Cruger PhD, 'What is Auditory Processing Disorder', USA, March 8 2024, <https://childmind.org/article/what-is-auditory-processing-disorder/> , (accessed 27/5/24).

ADDitude, Nathaly Pesantez, 'Auditory Processing Disorder: Symptoms, Diagnosis & Treatment', USA, March 24 2023, <https://www.additudemag.com/what-is-auditory-processing-disorder/> , (accessed 28/5/24).

Speld QLD, 'Auditory Processing Disorder', Australia, (no date specified), <https://www.speld.org.au/auditory-processing-disorder> , (accessed 28/5/24) .

Education Department of South Australia, Australia, (no date specified), <https://www.education.sa.gov.au/docs/support-and-inclusion/practice-guidance/auditory-processing-disorder-practice-guidance.pdf> , (accessed 29/5/24).

South Australian Speech and Hearing Centre, 'How Can A Soundfield System Benefit Your Child?', Australia, no date specified, <https://www.sashc.com.au/how-can-a-soundfield-system-benefit-your-child/> , (accessed 29/5/24).

South Australian Speech and Hearing Centre, 'What Is A Soundfield System', Australia, no date specified, <https://www.sashc.com.au/what-is-a-soundfield-system/> , (accessed 29/5/24).

South Australian Speech and Hearing Centre, 'Roger Amplification', Australia, no date specified, <https://www.sashc.com.au/roger-systems-adelaide/> , (accessed 29/5/24).

New Zealand Audiological Society, 'New Zealand Guildelines on Auditory Processing Disorder', New Zealand, 2019, <https://audiology.org.nz/assets/Uploads/APD/NZ-APD-GUIDELINES-2019.pdf> , (accessed 29/5/24).

