

Auditory Processing Disorder

Usha Patel, a learning difficulties Practitioner, tells us about Auditory Processing Disorder

Auditory Processing Disorder (APD) is a condition where those with normal hearing constantly mishear what is said. Whilst APD is of neurological nature and that it may be inherited or caused as a result of developmental problems, research has also shown that early childhood ear infections can be a significant contributory factor in causing it.

Children develop critical language skills between the ages of 6 months to 3 years. Language centres within the brain learn to map out sounds and store it for language processing. When a child starts reacting to words with a smile or start speaking its first words, it is effectively associating these sounds with meanings.

If, a child suffers from constant middle ear infection during the critical period, then the ability to process language/speech can be affected.

Sounds which normally become imprinted in the brains memory and language centres are not properly established. The mishearing happens because the brain recognises aural information differently to what they actually are. A good example is commonly found when children can't differentiate between thirteen and thirty. Whilst hearing can be perfectly normal their brain just can not process those sounds accurately due to their similarity.

This inability of the brain to process what is heard accurately results in the Auditory Processing Disorder condition.

APD is often difficult to diagnose in children as they may have other learning difficulties such as dyslexia, attention deficit disorder, dyspraxia, which may mask the condition. It also cannot be established with standard hearing tests - It can only be diagnosed using specialist audiology testing.

Children with APD have also been observed to:

- Have trouble paying attention to and remembering information presented orally
- Have problems carrying out multi-step directions
- Have poor listening skills
- Need more time to process information
- Have low academic performance
- Have behaviour problems

- Have language difficulty (e.g., they confuse syllable sequences and have problems developing vocabulary and understanding language)
- Have difficulty with reading, comprehension, spelling, and vocabulary

Without proper intervention, those with APD can find it confusing to interpret verbal information. This problem is further exacerbated when in a noisy environment or when there are competing sounds around them. In a class room situation, if the child is not at the front of the class room or paying full attention, distracting sounds can make learning incredibly challenging.

Some of the ways in which help for APD can be offered, as suggested by National Institute of Health are :-

- Environmental modifications such as classroom acoustics, seating and placement..
- Auditory memory enhancement, a procedure that reduces detailed information to a more basic representation, may help. Also, informal auditory training techniques can be used by teachers and therapists to address specific difficulties.
- Exercises to improve language-building skills can increase the ability to learn new words and increase a child's language base.

The Raviv Practice London offers a dual approach to help children with this condition. First, Raviv Method, which is one-to-one motor-sensory therapy, is used for auditory memory enhancement. This therapy is neuro-cognitive and lays the foundation for learning taking around 20 weeks. This is followed by structured language programme called Fast ForWord. Fast ForWord is a computer based learning program, founded on over 25 years neurophysiological and behavioural research. These programs help with identifying specific auditory processing problems and have tailored exercises to address these problems. Each of the programmes take 8-12 weeks. For more information on Auditory Processing Disorder, contact Usha Patel 0776683616 or visit www.ravivpracticelondon.co.uk

For more information visit:

www.apduk.org for resources, information and links on Auditory Processing Disorder.

APDUK is a support group run by adults with APD and parents of children with APD.

www.ihr.mrc.ac.uk/research/apd.php/ Institute of Hearing Research

www.ndcs.org.uk/family_support/auditory_processing-disorder. National Deaf Children's Society (NDCS) is an organisation that supports deaf children and their families. If a deaf child also has APD they can provide support and services as requested by the family.