Auditory Processing

Did you know that people with perfect hearing can still struggle to understand verbal instructions and follow directions? Having the ability to hear and process those sounds is two different things that can profoundly affect people of all ages. Kids in school may pass a hearing test with flying colors but be unable to:

- Pay attention to verbal directions
- Follow through with verbal instructions
- Read or spell fluently

Most people don't realize these can all be symptoms of auditory processing disorder. Parents and kids worldwide are learning a natural way to improve auditory processing that is enjoyable and only takes 15-minutes a day.

After dealing with the daily struggles in her child's life, one mom said this news was "music to her ears," and it can be for yours too!

What is Auditory Processing?

Auditory processing might be a new term for some people. To explain it, one needs simply to break down the term into each separate word. In that case, it's easy to see that auditory processing involves one's ability to process sounds taken in via the ears. In central auditory processing, the brain must identify the incoming sounds and analyze those sounds and attach meaning to them.

This is very different from hearing, so a person with excellent hearing can still struggle to process the sounds coming into the auditory system.

Auditory processing is traditionally viewed as what the brain does with what it hears, involving specific attention and perceptual skills. Audiologist Jay R. Lucker, EdD, CCC-A/SLP, FAAA identified many facets of daily life that are impacted by processing auditory information successfully. Those include:

- Self-regulation
 La
 - Language
- Emotion
- Cognitive decision making
- Memory

While not well understood, auditory processing is an integral part of nearly every aspect of life, social situations, and learning. When the auditory processing system isn't working as well as possible, many problems can arise.



What is Auditory Processing Disorder?

As mentioned previously, Auditory Processing Disorder is different from hearing loss. A person with APD can listen to sounds—in fact, many have typical audiogram results. With APD, the way the brain translates those sounds is disrupted, resulting in jumbled messages.

ADVANCED BRAIN

CHNOLOGIES

For example, during a typical conversation, a person with auditory processing disorder will miss certain portions of the message, resulting in misunderstanding or a need to constantly fill in the blanks, which is mentally and emotionally exhausting. In a school setting, it could result in a child not following verbal directions due to not understanding them and being off task more often than not.

APD can profoundly impact people of all ages and shows up in many different ways.

Signs of Auditory Processing Disorder

Individuals with APD often cannot hear sounds as words and have difficulty in daily life. Often at school, this results in learning problems, including difficulty being able to:

- Focus on a person speaking
- Interpret the meaning of spoken words
- Follow verbal directions
- Stay on task in a school setting
- Differentiate between similar-sounding words
- Recall words spoken aloud
- Read and spell fluently
- Verbal communication

Not only can Auditory Processing Disorder affect school, but also social situations and self-regulation abilities, including the tendency to be:

- Clumsy
- Careless
- Impulsive
- Difficulty calming
- Difficulties transitioning



While APD can profoundly impact people in all facets of life, there is hope. Science has shown that APD results from poor ear and brain connections. Fortunately, The Listening Program® (TLP) provides the perfect amount of stimulation to the ear and brain to rewire these connections, allowing people of all ages to improve their auditory processing abilities.

Using the specific music inside TLP to improve auditory processing is something Occupational Therapist and TLP Certified Provider Sheila Allen, MA, OT has done with her clients for years. After seeing the effectiveness of TLP on APD, she explains the process as one who has seen the results repeatedly in her practice.

Improving Auditory Processing with Music

Music supports auditory processing abilities. But how?

DVANCED BRAIN

CHNOLOGIES

Listening to music that has been intentionally recorded and produced to increase the value of

influence on the auditory system, brain, and body. Strangely enough, you don't need to have excellent auditory processing skills to enjoy and reap the benefits of music listening. Regardless of our auditory processing skills, most of us love listening to our favorite music and can likely benefit from listening to the enriched music of The Listening Program. Imagine boosting the potency of the most well-known source of all-around brain stimulation. That's the power of TLP!

music's natural elements...increases music's inherent

Over the years, I've recognized that those with auditory attention limitations often notice their attention to music, especially their favorite music, is significantly better than their attention to spoken language or other crucial acoustic information. Many individuals with sensitivities to specific sound frequencies or volume dynamics in daily life can handle music's frequency and volume characteristics with far less if any difficulty. Those challenged by processing auditory/language information sequences can retain music's rhythm, melodic, and



lyrical sequences. Many who feel anxious in response to everyday circumstances feel calm and alert when listening to or making music.

These exciting observations make me think that it's easier to process auditory stimulation when organized as music. Further, they lead me to view TLP as a progression of musical experiences that facilitates auditory processing. It makes sense to me that heightening the temporal structure (beat/tempo/ rhythm), sound frequency relationships, volume dynamics, and spatiality of musical sound, along with the usefulness of recorded music as a means of repetition of sound stimulation that otherwise would pass with time, serves to provide acoustic inspiration that can motivate listening and engagement, change the brain and develop skills.

– Sheila Allen, MA, OT

TLP Can Improve Auditory Processing for Anyone

As Sheila stated, music is all around us and constantly impacts our brains in ways we don't realize. Its impact is astonishingly far-reaching! What we do with what we hear and our nervous systems do with sound extends beyond auditory processing into an extensive yet individualized area called sound brain health.

ADVANCED BRAIN TECHNOLOGIES

While any music can affect people, only highly specialized music can improve auditory processing abilities. TLP was carefully designed to do just that.

TLP music is enhanced by organizing sound, frequency, volume, space, and time elements through aesthetically pleasing and acoustically modified themes. It is then specially arranged, recorded, and created to provide a music-listening therapy effective in helping people change.

Essentially, TLP targets the tiny muscles in the middle ear and portions of the brain responsible for auditory processing to gently strengthen those connections and improve auditory processing abilities. While it is a process of letting sound do its work, it's not just any sound.

Each of the four TLP Core Programs stimulates and improves the different functions of the auditory processing system to enable the brain to better receive, process, store, and use the auditory information we receive in our daily lives.

TLP Certified Provider Tracey Butler uses TLP regularly to improve auditory processing disorder in her clients. Tracey is the Australia/New Zealand representative for Advanced Brain Technologies, an international speaker, trainer, and practitioner. Because of the results, she's seen with TLP and APD, Tracey has been involved with clinical work, assessments, and treatments for people with Auditory Processing Difficulties since early 2000. Recently she conducted one of the most extensive studies ever published in the auditory and listening therapy field, studying over 456 subjects ranging in age from 5 to 50, showing considerable improvements on the SCAN test of auditory processing. Each subject was tested before a 10-month regime of listening to TLP 2 times daily for 15-minute sessions. Read about this exciting open-access journal article from Tracey Butler, Jane Schueler, and Dr. Jay R. Lucker.

Tracy sees improvements in her clients very quickly in her practice as they listen to one to two 15-minute sessions daily.

"Most of our children experience change within the first couple of weeks." – Tracey Butler

Riley and Jordan, two of her clients, started working with Tracey as they struggled in school and at home due to APD. They began regularly listening to TLP Level One five days a week.

After 11 weeks of listening to two 15 minute music sessions, Riley and Jordan's mom noted, "The difference is incredible. The boys are so much more relaxed and so much more in control. When the boys are asked to do things, they just do it. Before, if you gave them more than one instruction, they couldn't do it. It seems like they have more direction now."

Teachers started noticing a difference right away as well. Riley put his hand up a lot more in class, wrote neater, and his testing scores went from the 13th percentile academically to the 96 percentile.

Jordan, in class, was noted to have "more eye contact, more focus, improved behavior, reduced frustration, and was able to stay on task more."

ADVANCED BRAIN TECHNOLOGIES

Riley and Jordan quickly saw that their success was possible because of the improvements in their ability to process the sound and information they were receiving throughout the day. TLP helped rewire the boys' brains to improve their auditory processing abilities, which positively affected their ability to selfregulate, pay attention, and perform to their potential in school. With improved processing, anyone will become increasingly attuned to themselves and the world around them. The benefits of enhanced auditory processing extend beyond just paying attention and expanding one's perception and deeper meaning of situations. TLP can help people of all ages to improve their ability to process auditory information and show up as the person they truly are.

Extra Content:

In this PrimeTime feature on The Listening Program, Tracey Butler talks about how TLP can benefit those with auditory processing issues.

Watch Video

