

MANAGING SOUND SENSITIVITY

Many on the spectrum are challenged by the complexities of processing what they hear...

BY LINDSEY BIEL, OTR/L

Imagine trying to have a conversation by the speakers at a rock and roll concert or reading when there's someone scraping their fingernails back and forth on a chalkboard. Both hearing and speaking would be quite difficult or even painful, and focusing on what is said close to impossible.

Keep in mind that listening is a complex skill that includes both hearing and processing what is heard. "Sound" includes intensity (loudness, measured in decibels); frequency/ pitch (the number of sound waves per second); duration (how long the sounds last); and localization (where the sounds are coming from). A person with sensory processing challenges may have difficulty putting all of these qualities together. Specific frequencies—like a high frequency hair dryer or a low frequency air conditioner—may be upsetting. The sound of the vacuum cleaner may trigger flight or fight reactions each and every time the person hears it. In noisy situations, a person's auditory system may become flooded and



▲ CAPTION  Caption

overwhelmed by the intensity, frequency, directionality, and duration.

A person may pass a standard hearing test with flying colors yet still have difficulties with sound sensitivity. First, while most people become uncomfortable when sound reaches a certain volume, an oversensitive person will become unhappy at a much quieter volume.

Second, while most of us start hearing somewhere between zero and 15 decibels of sound, a person with auditory hypersensitivity hearing hears too well, starting at zero or even

negative decibels of sound. A student in one classroom may be able to detect what is going on in the hallway, outside the window, as well as in the room next door. With so much sound bombarding the auditory system, this person would have a hard time tuning in by selecting just the important sounds and filtering out all of the irrelevant ones. Instead, she may feel overstimulated, overwhelmed, and hurt by the auditory chaos.

A FIVE-STEP PROGRAM

Step 1: Investigate. Consider whether there is an underlying medical issue. Is there hearing loss that alters the perception of different frequencies? Does the person have chronic ear infections that distort what he hears? Does she have frequent headaches or migraines that contribute to the auditory discomfort? In what situations is he overwhelmed by sound? What are the particular sounds that are distressing? Is it just a few particular sounds or is it when there are multiple sources of sound such as at a party?

If there are any auditory or language issues, be sure to get a thorough exam from an audiologist familiar with sensory issues. In addition to assessing hearing skills and testing for auditory processing skills such as sound discrimination and foreground/background discrimination, she should also be tested for auditory

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thresholds starting at negative 15 decibels of sound—not typically done since this is well below the threshold norm. Learning more about auditory strengths and challenges enables everyone to understand behavioral reactions in problematic situations and to develop a well-informed plan to help.

Step 2: Protect. If someone says or indicates that his ears hurt, believe it. It's invalidating and infuriating to be told a sound is not loud when it is, in fact, painful. Safeguard ultrasensitive ears by using earplugs, noise-canceling headphones, or sound-reducing earmuffs. Some great brands include Peltor and SensGard. You can find ear protection for babies, children, teens, and adults online at www.sensorysmarts.com under toys & equipment/sensory environment or at Amazon, www.peltor.com, www.sensgard.com or check your local drugstore, music supplier, or hardware store.

One note of caution: make sure the person does not wear ear protection all day because the brain and auditory system will get used to the dampened sound. Save them for specific situations that are especially challenging such as playgrounds, parties, school assemblies, and so on.

Step 3: Desensitize. Sometimes unfamiliar sounds are scary, and once scared, kids may stay scared of that sound. Repeated exposure can help when facilitated by a trusted parent, teacher, or therapist—especially if the context is changed. For example, if a child is afraid of the mooing cow at the children's zoo, it may help to record it and listen to it together at home, allowing the child to control the volume and turn it on and off. You can also listen to selections from Sound-Eaze and School-Eaze CDs (www.route2greatness.com), which pair many of the sounds children are most afraid of such as the vacuum cleaner, blender, toilet flushing, fire alarm, and thunder with pleasant, rhythmic songs to help the child predict and tolerate distressing sounds.

Step 4: Build skills. Work with an OT, speech language pathologist,

or audiologist who has expertise in building sensory tolerance and processing skills. Sound therapy programs such as Therapeutic Listening, Integrated Listening Systems (iLS), Solisten, and others are designed to strengthen and integrate the person's auditory system with other sensory and motor systems.

Meanwhile, the child may benefit from an FM Unit, a device that lets the teacher speak into a transmitter while the student listens through a receiver, usually headphones or a small speaker. FM units bring the teacher's voice to the foreground so the student won't miss what is said.

Step 5: Teach advocacy. Help children, teens, and families to speak up for themselves politely yet assertively. For example, a student can learn to ask the teacher to repeat an instruction and a teenager can request that music be turned down at a restaurant

if unable to hear his friends. The person should be empowered to say "The sound hurts my ears. I need a break" or "I need my earplugs."

Kids who are overwhelmed by movies might enjoy the Sensory Friendly Films program from the Autism Society and AMC Theatres. To provide a more comfortable experience, the theater turns down the volume, turns up the house lights, and allows people to bring their own snacks. ◀

FIND OUT MORE

To find a participating theater near you, go to www.autism-society.org/get-involved/events/sensory-friendly-film or Google "Sensory Friendly Films."

For more on auditory hypersensitivity and other sensory issues please see *Raising a Sensory Smart Child* and visit www.sensorysmarts.com.



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