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This week’s sensory topic is: Defensive Senses:
When Sensation is Overwhelming

Sometimes, sensory input is overwhelming. When this happens, individuals may avoid or become distressed by sensory input. Over-responsivity to sensory input affects an individual’s ability to concentrate on academic or play tasks, organize their behavior, and respond emotionally and physically to the environment.

We are all overwhelmed at times. Think about how overwhelmed your senses become when Christmas shopping, in rush hour traffic, in a large crowd, in a perfume store, or after a trip to the local amusement park. What about when you feel something crawling up your leg or arm unexpectedly? Some individuals with autism and with sensory differences feel the same way in the presence of everyday environmental stimulation.

**Gravitational Insecurity:** An overactive vestibular responder may have gravitational insecurity or be hyper-sensitive to any type of movement. This may affect an individual’s ability to move throughout the school environment, particularly in accessing playground equipment. A child may also display fear or anxiety in situations that require movement, such as a bus ride, during PE, or with physical activity in the classroom. Not participating in play and activities prevents active exploration of the world and opportunities for natural learning. A skilled occupational therapist may be able to work with individuals to improve vestibular processing. They may recommend ways to help children safely explore play opportunities that encourage movement, sensory rocking movement activities, or weighted items to improve gravitational security.

**Tactile Defensiveness:** An overactive tactile response can have dramatic impact on a student in the classroom. If an individual reacts negatively to touch, they may find
themselves struggling with building relationships, maintaining behavior at school, tolerating crowds, completing ADL’s, and during fine motor or art activities. Tactile defensiveness can be perceived as a behavioral problem if an individual reacts emotionally to touch or fabrics or “melts down” in situations when they are overwhelmed. Individuals with tactile defensiveness may also have a specific touch input that calms them and they may seek that type of touch to organize their system, like a blanket or teddy bear.

Some touch input may calm an overwhelmed tactile system

Multi-sensory over-responsivity: As with gravitational insecurity and tactile defensiveness, individuals can also have an exaggerated nervous system response to oral, olfactory, visual, or auditory input. These sensory inputs can trigger the same types of responses and can cause physical, emotional, and social withdrawal from input or those providing it. Oral sensitivity can impact feeding and speech development. Auditory sensitivity makes blocking out specific noise or overwhelming noises very difficult.

Here are some strategies and activities to try for individuals with over-reactive and over-responsive sensory systems. Please remember to match the system with the activity and consult with a trained therapist if you are unsure.

- Work with your occupational therapist on developing activities to improve sensory processing and tolerance for inputs
- Accommodate for sensory defensiveness by offering choices with reduced input

If finger paints aren’t tolerated, allow to use a brush

- Designate a safe, “quiet” sensory space to go to when overwhelmed (not classroom punishment space)

Example of a quiet space from pinterest.com
- For tactile defensiveness, start with dry and non-messy play with bare hands and use containers, wear gloves for messy textures, and slowly move towards messier play as tolerated.
- Approach from the front, to allow vision to accommodate for touch.
- Encourage bath play with textures (i.e. shaving cream or soap) and use unscented lotions after bath time to reduce sensitivity of skin, towel dry firmly, and/or consult with OT about brushing program training.
- Consider textures of food, clothing, and bedding and adapt as needed. Weighted blankets may also be used at bedtime.
- Use weighted blankets or weighted backpacks and toys to provide input.

Weighted blankets, weighted toys, & weighted backpacks provide organizing and calming input.

- Wear sunglasses and/or hats when outside.
- Provide alternatives for play when playground equipment is too high, fast, or unstable.
- Wear ear-buds or headphones in noisy environments.
- Prepare visually for noisy or sensory-rich moments when possible, unless this increases anxiety.

A visual support or narrative explaining what is going to happen can help prepare for unpleasant sensory input.

If you observe over-responsivity to sensory input, explore ways to reduce, accommodate, and adapt the input in order to reduce anxiety, while also implementing therapeutic strategies to improve the individual’s processing in a safe and non-threatening way. Never force an individual to tolerate an input if they are truly overwhelmed. This will only increase the intensity of their fear and anxiety with the sensory input next time.