

Sensory Processing Challenges & Occupational Therapy: Caregiver Guide

Understanding your child's sensory processing challenges can be difficult. Occupational Therapists (OTs) are here to guide you through this journey, focusing on the unique ways these challenges might be affecting your child's daily life, learning, & social interactions. Children with and without additional diagnoses, such as Autism or ADHD, can experience sensory processing challenges.

The 8 Sensory Systems

Children interact with their world through eight distinct sensory systems which play a role in receiving and processing information from their environment.

- **The Big 5:** Visual (sight), Tactile (touch), Olfactory (smell), Gustatory (taste), and Auditory (hearing) are the five basic senses that allow us to understand and explore our world.
- **Vestibular:** The vestibular system sense helps regulate balance, coordination, and spatial orientation which is crucial for movement and posture.
- **Proprioceptive:** The proprioceptive system informs us of our body's position and movement in space which enables coordinated and purposeful movement.
- **Interoceptive:** The interoceptive system allows us to feel internal sensations such as hunger, thirst, temperature, and the need for the bathroom which contributes to self-regulation and well-being.

Types of Sensory Processing Challenges

When your child struggles with sensory processing, it can impact everything from dressing and eating, playing and interacting with others, and their ability to calm themselves. Some children may be overly sensitive to sensory stimuli such as sounds, lights, or textures (*hyper-responsive*), while others may seek more intense sensory experiences (*sensory-seeking*) or not react as expected to sensory input (*hypo-responsive*).

Example of Hyper/Hypo-responsive & Sensory Seeking Responses in a Sensory System:

- **Vestibular System:**
 - **Hyper-Responsive:**
 - Easily carsick/dizzy
 - Limits movement
 - Delayed motor milestones
 - **Hypo-Responsive:**
 - Does not become dizzy regardless of intensity of spinning
 - Low muscle tone
 - Poor balance/coordination
 - **Sensory Seeking:**
 - Frequent spinning and running
 - Takes greater risks

How OTs Help

- **In-Depth Assessments:** We start by understanding your child's sensory world. Using formal tools like the Sensory Profile, observing them across different environments, and assessing how sensory processing challenges affect their daily activities helps OTs create a plan tailored just for them.
- **Tailored Intervention Strategies:** Therapy sessions are crafted to address the distinct needs of your child. Interventions include customized strategies & activities aimed at enhancing sensory processing to enable individuals to participate more fully in daily life.
- **Some Examples of Intervention Strategies Utilized in OT:**
 - **Sensory Diet Creation:** Just like a nutritional diet balances food intake, a sensory diet balances sensory experiences. We'll work together to design daily activities that provide the sensory input your child needs to stay regulated and focused.
 - **Environmental Adaptations:** Creating a sensory-friendly environment at home and school can make a big difference. We can guide you on setting up spaces that help your child feel more comfortable and engaged.
 - **Education and Advocacy:** Empowering you with knowledge about sensory processing challenges and strategies to support your child is one of our goals. We also collaborate with schools to ensure your child's learning environment meets their sensory needs.

Video Example:

Sensory Processing Disorder: Occupational Therapy Demonstration

Ann & Robert H. Lurie Children's Hospital of Chicago

OT demonstration of activities occurring during an OT session that can help kids maintain a calm, organized state throughout the day.



Navigating Sensory Processing Challenges Together

With the right support and interventions, children with sensory processing challenges can thrive. Together we can create a positive path forward, ensuring your child reaches their full potential.

Additional Resources

Video:

PARENT - Daily Occupations and Sensory Processing Training

NHS Tayside CYP Occupational Therapy Service

36:06



Podcast:

All Things Sensory by Harkla

Rachel Harrington, COTA/L, AC & Jessica Hill, COTA/L
Certified OT Assistants who answer questions related to all things sensory, OT, parenting, self-care, nutrition, & health, from a therapist's perspective



Please check with your occupational therapist prior to implementing these strategies

Sources:

- American Occupational Therapy Association. (2020). Occupational therapy practice framework: Domain and process (4th ed.). *American Journal of Occupational Therapy*, 74(Suppl. 2), 7412410010. <https://doi.org/10.5014/ajot.2020.74S2001>
- Arky, B., Ayres, A. J., Biel, L., & Lord, C. (2023, December 20). *Treating sensory processing issues*. Child Mind Institute.
<https://childmind.org/article/treating-sensory-processing-issues/>
- ASD Clinic. (n.d.). *Occupational therapy for sensory processing disorder*. ASD Clinic: Social, Behavioural, & Communication Therapy.
<https://www.asdclinic.co.uk/conditions/sensory-processing-disorder/occupational-therapy-for-sensory-processing-disorder.php#:~:text=The%20goal%20of%20Occupational%20Therapy,complete%20day%20to%20day%20activities.>
- Cosbey, J., Johnston, S. S., & Dunn, M. L. (2010). Sensory processing disorders and social participation. *American Journal of Occupational Therapy*, 64, 462-473.
<https://doi-org.ezproxy.ups.edu:2443/10.5014/ajot.2010.09076>
- Ismael N, Mische Lawson L, Hartwell J (2018) Relationship between sensory processing and participation in daily occupations for children with autism spectrum disorder: a systematic review of studies that used Dunn's sensory processing framework. *American Journal of Occupational Therapy*, 72(3), 1-9.
<https://doi-org.ezproxy.ups.edu:2443/10.5014/ajot.2018.024075>
- Liatis, L. (2019). "Doing amazing things: One mom's appreciation for the value of OT for addressing sensory issues. *OT Practice Article*.
- Piller, A., & Bye, C. (2020). Using sensory-based interventions within an interprofessional practice model. *SIS Quarterly Practice Connections*, 5(1), 2-4.
- Polatajko, H. J., & Cantin, N. (2010). Exploring the effectiveness of occupational therapy interventions, other than the sensory integration approach, with children and adolescents experiencing difficulty processing and integrating sensory information. *The American Journal of Occupational Therapy*, 64(3), 415-429.
<https://doi.org/10.5014/ajot.2010.09072>