

## Occupational Therapy Using a Sensory Integration–Based Approach With Adult Populations

### What are Sensory Processing Problems in Adults?

Sensory processing problems can result from difficulties in how the nervous system receives, organizes, and uses sensory information from the body and the physical environment for self regulation, motor planning, and skill development. These problems impact self-concept, emotional regulation, attention, problem solving, behavior control, skill performance, and the capacity to develop and maintain interpersonal relationships. In adults, they may negatively impact the ability to parent, work, or engage in home management, social, and leisure activities. Examples of indicators of sensory processing problems in adults follow.



**Indicators of Sensory Processing Problems in Adults<sup>1</sup>**

Sensory Systems	Performance Skills
<p><b>Tactile</b></p> <ul style="list-style-type: none"> <li>• Sensitive to texture and fit of clothing resulting in avoidance of some types of clothing (e.g., ties, turtlenecks, pantyhose).</li> <li>• Dislikes crowds or jostling in public places (e.g., standing in lines or shopping).</li> <li>• Becomes irritated with light or unexpected touch. May have difficulty with intimate touch.</li> </ul> <p><b>Vestibular</b></p> <ul style="list-style-type: none"> <li>• Difficulties with balance, dislike of walking on uneven surfaces.</li> <li>• Dislikes or disoriented in elevators or on escalators.</li> <li>• Becomes nauseous when riding in the car. Needs to ride in the front seat or be the driver.</li> <li>• Fearful of leaving the house or of flying.</li> </ul> <p><b>Auditory</b></p> <ul style="list-style-type: none"> <li>• Sensitive to loud sounds.</li> <li>• Irritated by sounds not usually bothersome to others (e.g., pencils or pens scratching, lights buzzing, others eating, candy wrappers rustling).</li> </ul>	<p><b>Motor Performance</b></p> <ul style="list-style-type: none"> <li>• Difficulty driving, parking, shifting gears, or entering a freeway with an automobile.</li> <li>• Difficulty managing common home and office equipment.</li> <li>• Clumsy or awkward with motor activities (e.g., exercise, leisure, or self-care tasks).</li> </ul> <p><b>Social Performance</b></p> <ul style="list-style-type: none"> <li>• Difficulty discriminating visual and auditory cues, impacting social interactions and role performance.</li> <li>• Difficulty with body awareness, affecting body boundaries and body image.</li> <li>• Difficulty discriminating sounds and following verbal directions.</li> </ul> <p><b>Emotion Regulation</b></p> <ul style="list-style-type: none"> <li>• Difficulty discriminating visual and auditory cues, decreasing the ability to understand the emotional expressions of others, resulting in frustration, anxiety, and anger management issues.</li> </ul>

### Who Can Benefit From a Sensory Integration–Based Approach?

Sensory processing problems may occur in isolation, or contribute to or be comorbid with other conditions such as anxiety and panic disorders, depression, posttraumatic stress disorder, or schizophrenia. Those with learning disabilities, attention deficit disorder, developmental disabilities, autism spectrum disorders, or Asperger syndrome may also have these difficulties.

## What Is the Role of Occupational Therapy With Adults With Sensory Processing Issues?

Occupational therapists have unique training and skills in neuroscience, anatomy, and activity/environmental analysis and use sensory integration–based approaches to identify and treat sensory processing, motor, psychosocial, and occupational performance problems in adults with sensory processing problems. They work with caregivers and medical, educational, and mental health professionals to increase awareness of the signs and symptoms of sensory processing–related problems and types of interventions used with adults.

Sensory integration–based occupational therapy services are offered through consultation, individual therapy sessions, and/or group therapy in settings, such as private, hospital, or community-based outpatient clinics; residential and day programs; acute and long-term-care hospital settings; state hospitals; forensic settings; skilled nursing facilities; rehabilitation centers; and military-based programs, such as the Veterans Association’s hospitals and clinics.

Sensory-based occupational therapy services provided for adults most often use the Ayres Sensory Integration® approach; however, specific approaches vary greatly depending on the persons needs and may include the following:<sup>2</sup>

- **Remedial Intervention** involving the skilled use of sensory and motor treatment activities and equipment, including engagement in activities that provide increased tactile and movement opportunities, such as suspended equipment (e.g., bolster or platform swings), tactile activities (e.g., brushes or massagers), and activities that promote motor planning (e.g., completing obstacle courses).
- **Accommodations and Adaptations** such as wearing ear plugs or noise cancelling headphones or using a loofa sponge when showering, to manage hyper sensitivities, improve attention, promote self-regulation, or improve organizational difficulties to increase effectiveness in performing school, work, household management, or parenting tasks.
- **Sensory Diet Programs** involving a daily schedule/plan with a menu of individualized, supportive sensory strategies (e.g., rocking chair, quiet space, aromatherapy, weighted blanket) and materials (e.g., sensory kits containing music, stress balls, items for distraction). These are used throughout the day to help manage sensory processing problems (e.g., touch or auditory sensitivity) and related emotions and behaviors such as anxiety or self-injury, to help change processing patterns, minimize crisis escalation, or promote calming for overall health and wellness.<sup>3</sup>
- **Environmental Modifications** and adaptations such as lighting, use of white noise machines, wall murals, and other types of furnishings and equipment to increase or decrease the sensory stimulation a space provides. In some settings, sensory rooms, sensory stations, or sensory carts may be used to achieve these goals.
- **Education** of individuals, family members, caregivers, administrators, and policymakers about sensory processing problems in adults and how to minimize their negative impact on function; proactively help prevent and deescalate maladaptive behaviors; and, in some settings, decrease the need for the use of seclusion or restraint.

## Conclusion

Occupational therapy plays a vital role in identifying and treating sensory integration problems in adults and supporting their ability to fully participate in meaningful life roles, routines, and important daily activities. Administrators and organizations benefit from working with occupational therapy practitioners to enrich the services offered to adults.

## References

1. May-Benson, T. (2009). Occupational therapy for adults with sensory processing disorder. *OT Practice*, 14(10), 15–19.
2. Sensory Processing Disorder Foundation. (n.d.). *About SPD*. Retrieved February 18, 2011, from <http://www.spdfoundation.net/about-sensory-processing-disorder.html>
3. Champagne, T. (2010). *Sensory modulation & environment: Essential elements of occupation (3rd. ed. Rev)*. Sydney, Australia: Pearson Assessment.

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Occupational therapy enables people of all ages live life to its fullest by helping them to promote health, make lifestyle or environmental changes, and prevent—or live better with—injury, illness, or disability. By looking at the whole picture—a client’s psychological, physical, emotional, and social make-up—occupational therapy assists people to achieve their goals, function at the highest possible level, maintain or rebuild their independence, and participate in the everyday activities of life.

