

Sensory Processing

at the Center for Autism and Related Disorders

Sensory processing is the ability to organize sensations from the environment for purposeful use. Children diagnosed with autism spectrum disorder (ASD) often have difficulty organizing and interpreting information from their senses. Difficulties with adequately processing sensory input can affect a child's attention span, behavior and learning, as well as motor, play and self-care skills. The role of an occupational therapist is to address the child's sensory systems so learning and skill development are not adversely affected. The sensory systems include:

- Sight
- Hearing
- Touch
- Taste
- Smell
- Vestibular/movement
- Proprioception/body awareness

The above senses play an important role in providing context and meaning to daily experiences. Our senses are responsible for detecting information from the environment so appropriate responses can be formed. Some children have an increased response to sensory experiences, while others have a decreased response.

For instance, when shown a bright or noisy toy, some children may experience increased activity and fear, and may be unable to play with the toy appropriately. Others may cover their ears when a plane flies by, or may cover their eyes when bright lights are turned on. Some children have heightened responses to touching or eating sticky or slimy foods, causing difficulties at mealtime. Other children show a decreased or limited response to sensory input. For example, they may not react to their names being called or notice a peer who walks into the room. Children who lack sensory responses may bump into others and demonstrate little regard for personal safety. Finally, some children simultaneously demonstrate both increased and decreased responses to sensory input.

Difficulties with regulating or modulating sensory systems affect children's social-emotional responses, along with their abilities to learn, play and successfully complete self-care tasks. It is important to consider the sensory environment when a child is facing such challenges.



The following questions should be considered:

- Is the play area organized?
- Is the work space free of extraneous clutter?
- Are visual and auditory distractions minimized?

For children who have increased responses to sensory information, it may be beneficial to dim the lights, turn off the television or radio, and provide comfortable seating. For children who have decreased responses to sensory information, it is important to provide sensory-rich experiences. Singing to them, providing them with intense movement breaks for activities like jumping and bouncing, and selecting toys, clothing, etc. of contrasting colors may be optimal for learning. Most children benefit from a multisensory approach to learning; however, it is essential to monitor the sensory input within the environment so they can remain focused without becoming under- or overstimulated.

We are all born with great potential.
Shouldn't we all have the chance to achieve it?



Center for Autism and Related Disorders
at Kennedy Krieger Institute

Evaluation and Treatment

Occupational therapists are trained in customizing treatment plans to address each child's specific and unique sensory needs. Occupational therapy evaluations are offered at the Center for Autism and Related Disorders. A referral for an evaluation may be made by a clinician or doctor, or a parent may request an evaluation.

Resources

- "Parenting a Child with Sensory Processing Disorder: A Family Guide to Understanding & Supporting Your Sensory-Sensitive Child," by Christopher R. Auer, Susan L. Blumberg and Lucy Jane Miller
- "The Out-of-Sync Child: Recognizing and Coping with Sensory Processing Disorder," by Carol Stock Kranowitz, with a preface by Lucy Jane Miller
- "Sensational Kids: Hope and Help for Children with Sensory Processing Disorder (SPD)," by Lucy Jane Miller, with a forward by Carol Stock Kranowitz
- "Understanding Sensory Dysfunction: Learning, Development and Sensory Dysfunction in Autism Spectrum Disorders, ADHD, Learning Disabilities and Bipolar Disorder," by Polly Godwin Emmons and Liz McKendry Anderson
- "Raising a Sensory Smart Child: The Definitive Handbook for Helping Your Child with Sensory Integration Issues," by Lindsey Biel and Nancy Peske, with a forward by Temple Grandin
- sensory-processing-disorder.com



Contact Information

Center for Autism and Related Disorders at Kennedy Krieger Institute

For more information about our program, please call **443-923-7630**. To schedule an appointment, please call **888-554-2080**. TTY users, please contact us at **443-923-2645** or dial **711** to make a Maryland Relay call.

KennedyKrieger.org/CARD

Physicians and Healthcare Professionals

To make a referral, call our Physician Referral Line at **443-923-9403**.

Main Locations

3901 Greenspring Avenue
Baltimore, MD 21211

1741 Ashland Avenue, 5th floor
Baltimore, MD 21205

For information about other locations, please call the numbers above.

Mailing Address

707 North Broadway
Baltimore, MD 21205

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