

Educator Fact Sheet

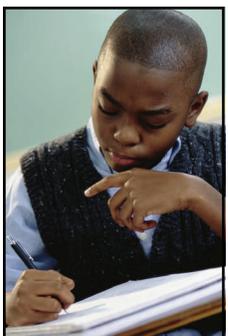
Signs and Symptoms of Sensory Processing Disorder



What is Sensory Processing Disorder?

Sensory Processing Disorder (SPD), first identified by Dr. A. Jean Ayres, is a problem in how children use sensory information for self-regulation and skill development.

Also known as Sensory Integration Disorder (DSI), children with **SPD** may demonstrate behaviors characteristic of one or more types of sensory processing problem, listed below.



Children with SPD may not be successful in school.

It is estimated that between 5—13 % of children entering school have **SPD** and that 3 of 4 are boys.

Have you ever taught children like Sam and Anna? They have SPD.

Sam is unable to be with his class during circle time without rocking in his chair, chewing on his shirt & twirling his hair. He has trouble standing in line and often complains that others are hurting him. He dislikes the sound of the school bells ringing.

Anna often breaks her pencil by pressing down too hard. She is often falling out of her chair and she dislikes physical education class, although she loves the swings at recess. She has a hard time organizing her desk and homework and gets easily frustrated.

Signs of Sensory Processing Disorder

Sensory Modulation Disorder

Common Signs

- Easily distracted by noises
- Overly sensitive to sounds
- Difficult time falling or staying asleep
- Reacts defensively to being touched lightly or unexpectedly
- Easily distracted by visual stimuli
- Overly active
- Strong outbursts of anger

Definition

A problem in regulating responses to sensory inputs resulting in withdrawal or strong negative responses to sensations that do not usually bother others. Problems are often seen in fluctuating emotions that are made worse by stress, and vary with the situation.

Sensory Discrimination Disorder

Common Signs

- Bumps or pushes others
- Grasps objects too tightly or uses too much force
- Frequently drops things or knocks things over
- Mouths, licks, chews, or sucks on non-food items
- Craves movement, e.g. likes to spin self around
- Afraid of heights/ swings or slides
- Has poor balance

Definition

A problem in recognizing/ interpreting differences or similarities in the qualities of stimuli. It is commonly seen with problems in processing sensations from touch, muscles and joints (proprioception) and head movements (vestibular or inner ear sensations).

Postural-Ocular Disorder

Common Signs

- Seems weaker than other children
- Fatigues easily
- Frequently moves in and out of seat
- Slumps while sitting
- Difficulty making eye contact/ tracking with the eyes, e.g. reading
- Falls and tumbles frequently
- May seek quantities of swinging or spinning

Definition

A problem with control of posture or quality of movements seen in low muscle tone or joint instability and/ or poor functional use of vision. It is often seen with vestibular and proprioceptive problems.

Dyspraxia

Common Signs

- Difficulty following multi-step directions
- Strong desire for sameness or routines
- Has an awkward pencil grasp
- Has poor handwriting
- Dislikes or reluctant to participate in sports
- Intense and easily frustrated
- Problems with daily life tasks like dressing or using utensils

Definition

A problem with planning, sequencing & executing unfamiliar actions resulting in awkward & poorly coordinated motor skills typically seen with a sensory processing deficit. It is usually seen with difficulty doing new activities or those that are done infrequently. (May-Benson, Teasdale, & Koomar, 2006)

SPD Facts

Developmental Information (May-Benson, Koomar, & Teasdale, 2006)

- **SPD** is typically identified in early childhood or adolescence but may be seen throughout the lifespan. They do not “outgrow” the problem. Difficulties persist into adulthood, although sometimes severity of symptoms may appear less as individuals learn coping strategies.
- Problems may be seen in natural or adoptive children living in birth, foster, or adoptive families.
- Children with **SPD** often demonstrate difficulties in developmental activities. A recent study indicates parents report that:
 - * 47% did not go through the “terrible two’s” or did so late
 - * 37% have a brief or absent crawling phase
 - * 33% have strong positioning preferences as infants
 - * 32% have sleep problems
 - * 31% have feeding problems
 - * 28% were hesitant/delayed going down stairs
- **SPD** impacts many areas of children’s emotional and physical functioning:
 - * Children’s sensory processing problems have a strong relationship to their behavior difficulties.
(Cohen, May-Benson, Teasdale, Callahan, 2006)
 - * Children’s motor coordination problems are highly related to decreased participation in leisure activities.
(Koomar & May-Benson, 1999)
- **SPD** is often associated with other diagnoses such as:
 - * Learning disabilities/ attention deficit disorder
 - * Pervasive developmental disorder/ autism spectrum
 - * Language disorders
 - * Anxiety disorder/ depression
 - * Behavioral disorders
 - * Attachment and post-institutionalization

Coping Inventory Information (May-Benson, 1999)

- Children with **SPD** have a harder time than **typical peers**:
 - * Handling anxiety
 - * Managing high stress situations
 - * Handling frustration
 - * Staying on tasks to completion
 - * Effectively using fine and gross motor skills
- The more significant the sensory processing, motor skill & planning difficulties, the more poorly the child copes with both environmental and individual challenges.
- When comparing children’s sensory processing problems with coping abilities, the sensory processing problems were most strongly related to the children’s difficulty with their ability to:
 - * Handle new situations
 - * Shift plans
 - * Apply learning to new situations
 - * Balance independence and dependence
 - * Use self-protecting behaviors effectively
 - * Have an appropriate activity level
 - * Control impulses

For More Information
www.thespiralfoundation.org
617-923-4410

References and Resources

Research Articles

Ahn, R., Miller, L., Milberger, S., & McIntosh, D. (2004). Prevalence of parents' perceptions of sensory processing disorders among kindergarten children. *Am J Occup Ther*, 58(3), 287-302.

Koomar, J. & May-Benson, T. (September 25, 1999). *Avocational Skills and Sensory Processing in Typical Adults*. Mass Assoc for Occup Ther Conf, Marlboro, MA.

May-Benson, T. (April 16 – 20, 1999). *Sensory Processing and Coping Skills in Children with Sensory Integrative Dysfunction*. Poster presented at the Am Occup Ther Assoc Conf, Indianapolis, IN.

May-Benson, T., Koomar, J., Teasdale, A. (2006). *Prevalence of Pre- / Post-Natal and Developmental Factors in 1000 Children with SPD*. The Spiral Foundation. 124 Watertown St., Watertown, MA 02472.

May-Benson, T., Teasdale, A., & Koomar, J. (2006). *Prevalence of Sensory Behaviors in Children with SPD*. The Spiral Foundation. 124 Watertown St., Watertown, MA 02472

Books

Ayres, A. (2005). *Sensory Integration and the Child: Understanding Hidden Sensory Challenges*. Los Angeles: WPS.

Eide, B. & Eide, F. (2006). *The Mislabeled Child*. New York: Hyperion.

Klass, P. & Costello, E. (2003). *Quirky Kids*. New York: Ballentine Books.

Kranowitz, C. (2005). *The Out-of-Sync Child*. New York: Perigee.

Miller, LJ (2006). *Sensational Kids*. New York: Putnam.

Websites

www.spdnetwork.org
www.alertprogram.com
www.quirkykids.com