

Parent 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 problems, listed below.



Children with SPD may not enjoy common childhood experiences.

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

Children with SPD often demonstrate problems with:

- + Attention and behavior
- + Social skills or self-esteem
- + Play Skills
- + Fine,/gross/oral motor skills
- + Daily living skills (i.e. eating or dressing)
- + Sleep/ eating/ elimination

In addition, **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
- + In Post-institutionalization

Signs of Sensory Processing Disorder

Sensory Modulation Disorder

Common Signs

- Easily distracted by noises
- Overly sensitive to sounds
- Dislikes nail/ hair cutting
- Dislikes clothing of certain textures/ fits/ or styles
- Upset about seams in socks
- Difficult time falling or staying asleep
- Reacts defensively to tastes/ textures of food
- Easily distracted by visual stimuli

Definition

A problem in regulating responses to sensory inputs resulting in withdrawal or strong negative responses to sensations that don't 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

- Jumps a lot on beds
- 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 qualities of stimuli. It is commonly seen with problems in processing body sensations from touch, muscles and joints (proprioception) and head movements (vestibular—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
- Feels heavier than anticipated when lifted
- Has flat feet

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

- Problems with daily life tasks like dressing or using utensils
- Eats in a sloppy manner
- 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

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.
- Problems may be seen in natural or adoptive children living in birth, foster, or adoptive families.
- Children do not “outgrow” the problem. Difficulties persist into adulthood, although sometimes severity of symptoms may appear less as individuals learn coping strategies.
- 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 with **SPD** have significantly poorer coping skills than typical peers. Their sensory processing problems are significantly related to coping abilities. (May-Benson, 1999)
 - * Children’s motor coordination problems are highly related to decreased participation in leisure activities.
(Koomar & May-Benson, 1999)

Birth History Information (May-Benson, Koomar, & Teasdale, 2006)

- Children with **SPD** often had difficulties during labor and delivery. Conservatively estimated prenatal and birth problems are:
 - * 42% had complications during labor or delivery
 - * 32% delivered by assisted delivery methods
 - * 25% mothers had infections or illnesses during pregnancy
 - * 18% mothers had unusual stresses during pregnancy
 - * 13% were pre-term, ≤ 37 weeks
 - * 5% had cord wrap/ prolapse at birth
- Children with **SPD** appear to be at a greater risk for early childhood health problems. A recent study found:
 - * 62% had chronic ear infections
 - * 40% had allergies/ asthma
 - * 27% experienced serious injuries or illnesses
 - * 25% had jaundice at birth
 - * 20% had colic as infants

Parent Information (Cohen, May-Benson, Teasdale, Callahan, 2006)

- Parents of children with **SPD** are impacted as well. Parent sense of competence is moderately related to their child’s sensory processing and strongly related to their behavior.
 - * 1 of 3 parents report being tense, frustrated, & anxious about parenting their child with **SPD**.
 - * 2 of 5 parents report feeling they cannot always figure out what is troubling their child with **SPD**.
 - * 2 of 3 parents feel that parenting their **SPD** child is often difficult and sometimes not manageable.

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.

Cohen, E., May-Benson, T., Teasdale, A., Callahan, M. (2006). *The Relationship Between Behaviors Associated with Sensory Processing and Parents' Sense of Competence*. The Spiral Foundation. 124 Watertown St., Watertown, MA 02472.

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: Hype-riion.

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.quirkykids.com

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