

Adopting and Fostering Children from Hard Places Fact Sheet: Sensory Deprivation

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Moms and dads who assume the challenge of fostering or adopting children from “hard places”—kids with a history of chronic maltreatment, physical, mental, or emotional neglect or abuse, or early separation from their birth parents—should be prepared to deal with the long-term physiological and psychological ramifications of childhood trauma. One commonly misunderstood and misdiagnosed result of early developmental distress is Sensory Deprivation or Sensory Processing Disorder (SPD).

Definition. Sensory Processing Disorder (SPD) can be defined as a practical inability to use information received through the senses so as to function smoothly and normally in everyday life. SPD is not a single specific disorder but rather an umbrella term that covers a variety of neurological disabilities, including the following sub-types:

- *Sensory Modulation Disorder*
 1. Sensory over-responsivity: the child is subject to sensory overload; simple sensations of sight, sound, and touch overwhelm and terrify him.
 2. Sensory under-responsivity: the child is lethargic and seems unmoved by sensory stimulation.
 3. Sensory seeking: the child craves more and more sensations of various kinds (spinning, hanging upside down, jumping, etc.).
- *Sensory Discrimination Disorder:* the child has difficulty differentiating between stimuli, misgauges the importance of sensory messages, and thus has problems with body awareness and the interpretation of visual-spatial relations.
- *Sensory-Based Motor Disorder*
 1. Postural problems
 2. Dyspraxia: the child displays an inability to plan and carry out simple tasks.

Children with SPD may experience difficulties with any or all of the following: *touch*, or the *tactile* sense; the *vestibular* sense, or *balance* and *motion* awareness; *proprioception*, or deep touch (“position” or “muscle sense”); the *visual* sense; and the *auditory* sense.

Origins. Sensation—touch, taste, sight, hearing, balance—and the discerning and skillful *interpretation* and *use* of sensation are not the same thing. We are born with the one; the other is honed and shaped as a child moves through the natural stages of growth and development.

Babies fine-tune their perception of sensory information primarily within the context of nurturing experiences with a loving caregiver. As a nursing child snuggles close to her mother’s breast, looks up into her mother’s eyes, and sees her own expression mirrored in

her mother's face, her brain begins to form healthy neural and chemical connections that enable her to grasp the *meaning* of these sensory interactions with her environment. The process begins prenatally and evolves as the child matures.

Early trauma of any kind can interrupt this natural developmental flow, causing sensory deficits which often surface later in the form of behavioral and learning difficulties. For obvious reasons, children of abuse or neglect are at special risk for deficiencies of this nature. If left unaddressed, the problem tends to become more pronounced as the child grows older.

Detection and Diagnosis. SPD often goes undetected for the simple reason that its symptoms mimic those of several other childhood disorders such as ADHD, learning disabilities, speech and language problems, poor auditory or visual discrimination, allergies, nutritional deficiencies, and emotional imbalances. For this reason, it's imperative that parents become skillful detectives and learn to discern the signs of SPD through careful observation. Here are some practical strategies to keep in mind:

- *Know the risk factors.* First, familiarize yourself with your child's history. If you have a handle on his past, you'll be in a much better position to determine whether his problems are rooted in sensory issues. There are six major risk factors to be aware of:
 1. Stressful pregnancy
 2. Difficult birth
 3. Early hospitalization
 4. Abuse
 5. Neglect
 6. Trauma
- *Look for tell-tale signs.* When parenting a child from a "hard place," it's imperative to realize that "misbehavior" often conceals a subtle cry for help. It's possible that many of the aggravating things your child does can be best understood as survival tactics. Kids with SPD—especially those who suffer from sensory overload—often manifest a *fight, flight, fright, or freeze* reaction to sensory input. Spend some intentional time watching your child to see whether her behavior might fit into any of these categories. Does she avoid interaction with other children or display an aversion to transitions? Does she overreact to loud noises or bright lights? Be aware of the "sensory triggers" that seem to "set her off" or lead to "meltdowns."
- *Document your observations.* It can be helpful to keep a journal in which you jot down your findings and record the specifics of your child's behavior at different periods of the day—for example, in the early morning, before and after meals, at school and at home—and on different days of the week. Watch for patterns that have a potential connection with sensory issues. Carol Kranowitz's book, *The Out-of-Sync Child*, provides several detailed

checklists that can help you recognize the marks of the various sub-categories of sensory dysfunction. Here are a few specific examples:

1. *Sensory Modulation Problems:* The child reacts with fight or flight to unexpected touch, intense light, getting dirty, or certain textures of food or clothing (*over-responsive*); the child is unaware of messy face, hands, or clothes (*under-responsive*); the child wallows in mud or chews on inedible substances (*sensory-seeking*).
 2. *Sensory Discrimination Problems:* The child cannot tell where on his body he has been touched; cannot feel himself falling, especially when his eyes are closed; appears clumsy and seems unable to gauge the appropriate amount of force needed to handle pencils or toys; cannot tell the difference between distinct smells such as lemons, vinegar, and soap.
 3. *Sensory-Based Motor Problems:* The child is either tense or has “loose and floppy” muscle tone; loses balance easily or “trips on air;” has difficulty using both sides of the body when jumping, clapping, swinging, or pouring water into a cup; has difficulty with manual tasks such as drawing, writing, buttoning, doing jigsaw puzzles, or using eating utensils; shows signs of low self-esteem.
- *Consult with a specialist who deals with children from high-risk backgrounds.* If the data you’ve collected leads you to believe that your at-risk child may be struggling with sensory processing difficulties, seek out the assistance of a professional who is trained to diagnose problems of this nature. This consultation may take the form of either 1) a short, informal *screening*, during which the examiner looks for developmental deficiencies and checks to see whether your child has acquired certain specific skills, or 2) a full *evaluation* conducted by an occupational therapist, developmental optometrist, audiologist, speech/language pathologist, pediatrician, psychologist, special education specialist, and/or social worker.

Treatment. It’s vital to underscore the point that there is *hope* for every child who struggles with Sensory Processing Disorder. Here, as in almost every area of parenting children from hard places, the *bad news* and the *good news* are the same: the human brain is *plastic*, and as a result it can always reorganize itself, whether to deal with danger and trauma or to adapt to a new environment of safety and trust:

- You can begin to build that new foundation and counteract the effects of early sensory deprivation by working with an *occupational therapist* who specializes in *sensory integration (OT/SI)*. *Occupational therapy* can be defined as “the use of purposeful activity to maximize the independence and the maintenance of the health of an individual who is limited by a physical injury or illness, cognitive impairment, a psychosocial dysfunction, a mental illness, a developmental or learning disability, or an adverse environmental condition” (Carol Kranowitz).

- Choose a therapist who makes a point of working with *parent and child* together. Therapy sessions should only be a jumping-off point for the work you'll be doing with your child at home. In between visits with the OT, partner with your child by helping him interpret and verbalize his sensory experiences in meaningful words. Build his self-esteem by telling him, "You are an extremely sensitive person—you perceive the world in a way that most people can't." Become his advocate at school, at church, in the neighborhood, and wherever there are people who don't understand sensory deprivation and Sensory Processing Disorder.
- The treatment should be *holistic* in nature—in other words, it must take the whole child into account and proceed by way of a complete restructuring of his environment. It should also be based on a *developmental model*. A well-known axiom in the field of child development maintains that "recovery of function recapitulates development of function." In other words, we can make up for the sensory deprivation a child suffered during his early years by starting over at the beginning and "re-doing" the entire developmental process. Even under ideal circumstances, the human brain requires three years of mentoring to begin to develop normally. Parents of kids with SPD should expect to invest a comparable amount of time in the task of bringing their at-risk children back "online." Healing comes from deep, intuitive insight into the child's early experiences and a patient, painstaking reversal of their negative effects.
- There is no "quick fix" for SPD, but by building a sensory-rich environment, engaging in playful interaction, and providing appropriate sensory activities for our children, we can actually begin to change their brain chemistry. Here are a few activities that you and your occupational therapist may want to include in the therapeutic process:
 1. *Alerting activities* for an under-responsive child, such as crunching food, taking a shower, bouncing a ball, crashing and bumping, or jumping on a trampoline.
 2. *Calming activities* for an over-stimulated child, such as sucking, rocking, swaying, cuddling, back-rubs, pushing against walls, or taking a bath.
 3. *Organizing activities* for children who have trouble regulating their responses to stimuli, such as chewing, hanging by their hands, pushing or pulling, or assuming an upside-down position.
 4. *Activities to develop the tactile sense*, such as water play, finger painting, sand play, and handling pets.
 5. *Activities to develop the vestibular system*, such as rolling, swinging, sliding, jogging, or balancing on a teeter-totter.
 6. *Activities to develop the proprioceptive system*, such as lifting and carrying heavy loads, pushing and pulling, bear hugs, and making a "people sandwich" (positioning your child between two pillows or mattresses and then applying pressure to the top of the "sandwich").

7. *Activities to develop the visual sense*, such as making shapes, jigsaw puzzles, building blocks, cutting activities, mazes, and dot-to-dot activities.
8. *Activities to develop motor skills*, such as flour-sifting, stringing beads, and collecting and organizing shells, buttons, or bottle caps.
9. *Activities to develop motor planning*, such as, walking like animals, or playground games like Simon Says and Ring-Around-the-Rosy.
10. *Activities to promote bilateral coordination*, such as catching a ball, body rhythms, ribbon dancing, jumping, swimming, and riding a bike.

As noted above, playful interaction of this nature helps to re-shape the brain and reorganize your child's responses to sensory stimulation. It will take time, but as the healing process moves forward, fight, flight, fright, or freeze mechanisms will eventually subside as your child gains a sense of safety and security and learns to become more comfortable with his world.

If you need help locating an occupational therapist who emphasizes sensory integration, your family pediatrician may be able to recommend a suitable practitioner. If not, Focus on the Family's Counseling Department can provide referrals to qualified individuals practicing in your area—feel free to call us Monday through Friday between 6:00 a.m. and 8:00 p.m. Mountain time at 800-A-FAMILY (800-232-6459). You may also be able to find the resources you need by visiting the Web site of The Sensory Processing Disorder Foundation [www.spdnetwork.org] or the TCU Institute of Child Development [www.child.tcu.edu]. Additional information from author and Sensory Processing Disorder expert, Carol Kranowitz, can also be found at her Web site, The Out-of-Sync Child [www.out-of-sync-child.com].

Resources

Books

Carol Kranowitz, M.A., *The Out-of-Sync Child*.

Carol Kranowitz, M. A., *The Out-of-Sync Child Has Fun*.

DVDs

Karyn Purvis, Ph. D., *A Sensory World* (TCU Institute of Child Development)

Karyn Purvis, Ph. D., *Playful Interaction* (TCU Institute of Child Development)

Karyn Purvis, Ph. D., *Empowering, Connecting, and Correcting Principles* (TCU Institute of Child Development).