



What is sensory processing?

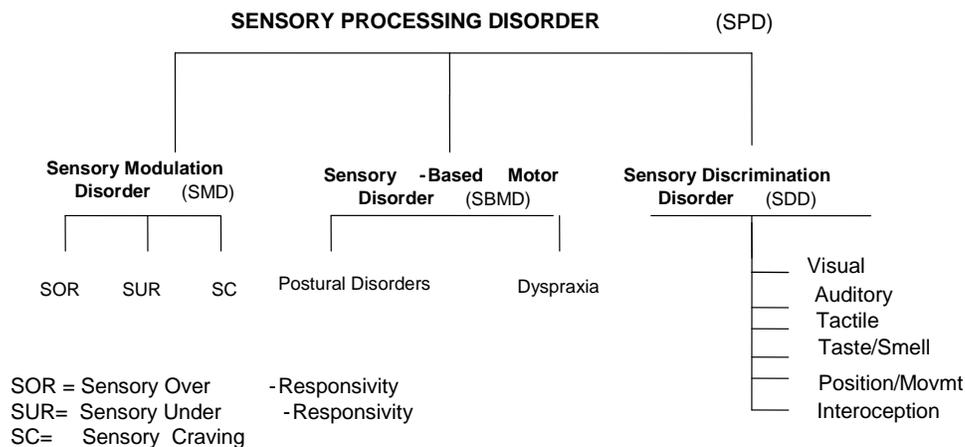
The term "sensory processing" includes:

1. Our ability to **take in** information through our eight senses:
 - a. the basic five: (touch, smell, taste, vision, hearing) plus
 - b. the "hidden three": proprioception (sensations of body parts in relation to each other), vestibular (sense of where body is in space relative to the earth's gravity), and interoception (sense of internal organs)
2. Our ability to **organize and interpret** the sensory information we perceive, and
3. Our ability to **make a meaningful response** to the sensory information coming into our brains.

For most people, this process is automatic. When our ability to process sensory input impacts our daily functioning we have significant "sensory challenges," or, in severe cases, Sensory Processing Disorder (SPD). SPD is a complex disorder of the brain that affects children and adults.

People with sensory challenges or SPD misinterpret everyday sensory information, such as touch, sound, and movement. They may feel bombarded by information, they may seek out intense sensory experiences, or they may be unaware of sensations that others feel. They may also have sensory-motor symptoms such as a weak body, clumsiness, and awkwardness or delayed motor skills.

Children and adults who have sensory challenges, however, don't experience this process in the same way. SPD affects the way their brains interpret the sensory information they perceive. SPD also affects how people react to sensory information. IF a person has SPD often the symptoms seem emotional, attentional, or motoric. There are at least six subtypes of SPD and many people have a combination of more than one. With eight sensory systems and six or more subtypes, there are many possible combinations. No wonder children with SPD can look so different.



Sensory Over-Responsivity

Individuals with sensory over-responsivity are more sensitive to sensory stimulation than most people. Their bodies feel sensation too easily or too intensely. They might feel as if they are being constantly bombarded with information. Consequently, these people often have a "fight or flight" response to sensation e.g. being touched unexpectedly or loud noise. They often try to avoid or minimize sensations, e.g., withdraw from being touched, or cover their ears to avoid loud sounds.

Sensory Under-Responsivity

Individuals who are under-responsive to sensory stimuli are often quiet and passive, disregarding or not responding to stimuli of the usual intensity available in their sensory environment. They may appear withdrawn, difficult to engage and or self absorbed and rarely initiate interactions with people. Their under-responsivity to tactile and deep pressure input may lead to poor body awareness and clumsiness or movements that are not graded appropriately. These children may not perceive objects that are too hot or cold or they may not notice pain in response to bumps, falls, cuts, or scrapes.

Sensory Craving (may have heard of it as Sensory Seeking)

Individuals with this pattern have an almost insatiable desire for sensory input. They tend to be constantly moving, crashing, bumping, and/or jumping. They may "need" to touch everything and everyone and be overly "affectionate" not understanding what is "their space" vs. "other's space".

Postural Control Disorder

Individuals with postural disorder have difficulty stabilizing his/her body during movement or at rest in order to meet the demands of the environment or of a motor task, e.g. poor "core strength". When postural control is good, the person can reach, push, pull, etc. and has good resistance against force. Individuals with poor postural control often do not have the body control to maintain a good standing or sitting position, especially when attempting functional tasks.

Dyspraxia/Motor Planning Problems

Individuals with Dyspraxia have trouble processing sensory information properly, resulting in problems planning and carrying out new motor actions. They may have difficulty in one or more of the following: 1) forming a goal or idea, 2) planning a sequence of actions or 3) performing new motor tasks. These individuals are clumsy, awkward, and accident prone. They may break toys, have poor skill in ball activities or other sports, or have trouble with fine motor activities. They may prefer sedentary activities or try to hide their motor planning problem with verbalization or with fantasy play.

Sensory Discrimination Disorder

Sensory discrimination is the process of identifying specific qualities of sensory stimuli and attributing meaning to them. Individuals with SDD difficulties have problems determining the characteristics of sensory stimuli. The result is a poor ability to interpret or give meaning to the specific qualities of stimuli (Do I see a "p" or a "q"? Do I hear "cat" or "cap"? Do I feel a quarter or a dime in my pocket? Am I falling to the side or backwards?). Those with SDD have difficulty detecting similarities and differences among stimuli. Individuals with poor sensory discrimination may appear awkward in both gross and fine motor abilities and/or inattentive to people and objects in their environment. They may take extra time to process the important aspects of sensory stimuli.

What is a development approach?

The Sensory KIDS model is based on Dr. Stanley Greenspan's DIR/Floortime (**D**evelopmental, **I**ndividual, **R**elationship-based Model) approach. A developmental approach focuses on helping children climb the developmental ladder, as opposed to addressing "splinter skills." We work with families to help children master the six functional social-emotional capacities, as identified by Dr. Greenspan:

1. *Shared attention and self-regulation*
2. *Engagement/relationship*
3. *2-way communication*: back and forth communication (verbal or non-verbal)
4. *Social problem solving*: shared social communication, imitation, social referencing, and joint attention
5. *Symbolic ideas*: including pretend play and pragmatic language
6. *Logical and abstract thinking*: expressing and reflecting on feelings, perspective taking

Instead of looking for a diagnosis we assess the developmental capacities and individual sensory differences of each child. We tailor unique therapy programs based on individual needs of children and families.

What is relationship-based therapy?

A child learns self-regulation, communication, and social cues through relationships with caregivers. Relationship-based therapy involves tailoring affective interactions to the child's individual differences and developmental capacities (as described above). The child's natural emotions and interest in the world are essential for learning and development. Interactions and engagement enable the brain and body to work together to build successively higher levels of social, emotional, and intellectual capacities. We follow a child's lead and adapt interests to promote an "adaptive response," whether it be an emotional, social, or motor response. A child should have fun in therapy and should look at sessions as play. It is essential that children feel comfortable and safe with their therapist and in the therapeutic environment.