Sensory Dysfunction

Signs of Sensory Dysfunction

Tactile Sense: input from the skin receptors about touch, pressure, temperature, pain, and movement of the hairs on the skin.

Signs Of Tactile Dysfunction:

1. Hypersensitivity To Touch (Tactile Defensiveness)

- becomes fearful, anxious or aggressive with light or unexpected touch
- as an infant, did/does not like to be held or cuddled; may arch back, cry, and pull away
- distressed when diaper is being, or needs to be, changed
- appears fearful of, or avoids standing in close proximity to other people or peers (especially in lines)
- becomes frightened when touched from behind or by someone/something they can not see (such as under a blanket)
- complains about having hair brushed; may be very picky about using a particular brush
- bothered by rough bed sheets (i.e., if old and "bumpy")
- avoids group situations for fear of the unexpected touch
- resists friendly or affectionate touch from anyone besides parents or siblings (and sometimes them too!)
- dislikes kisses, will "wipe off" place where kissed
- prefers hugs
- a raindrop, water from the shower, or wind blowing on the skin may feel like torture and produce adverse and avoidance reactions
- may overreact to minor cuts, scrapes, and or bug bites
- avoids touching certain textures of material (blankets, rugs, stuffed animals)
- refuses to wear new or stiff clothes, clothes with rough textures, turtlenecks, jeans, hats, or belts, etc.
- avoids using hands for play
- avoids/dislikes/aversive to "messy play", i.e., sand, mud, water, glue, glitter, playdoh, slime, shaving cream/funny foam etc.
- will be distressed by dirty hands and want to wipe or wash them frequently
- excessively ticklish
- distressed by seams in socks and may refuse to wear them
- distressed by clothes rubbing on skin; may want to wear shorts and short sleeves year round, toddlers may prefer to be naked and pull diapers and clothes off constantly
- or, may want to wear long sleeve shirts and long pants year round to avoid having skin exposed
distressed about having face washed
• distressed about having hair, toenails, or fingernails cut
• resists brushing teeth and is extremely fearful of the dentist
• is a picky eater, only eating certain tastes and textures; mixed textures tend to be avoided as well as hot or cold foods; resists trying new foods
• may refuse to walk barefoot on grass or sand
• may walk on toes only

2. Hyposensitivity To Touch (Under-Responsive):

• may crave touch, needs to touch everything and everyone
• is not aware of being touched/bumped unless done with extreme force or intensity
• is not bothered by injuries, like cuts and bruises, and shows no distress with shots (may even say they love getting shots!)
• may not be aware that hands or face are dirty or feel his/her nose running
• may be self-abusive; pinching, biting, or banging his own head
• mouths objects excessively
• frequently hurts other children or pets while playing
• repeatedly touches surfaces or objects that are soothing (i.e., blanket)
• seeks out surfaces and textures that provide strong tactile feedback
• thoroughly enjoys and seeks out messy play
• craves vibrating or strong sensory input
• has a preference and craving for excessively spicy, sweet, sour, or salty foods

3. Poor Tactile Perception And Discrimination:

• has difficulty with fine motor tasks such as buttoning, zipping, and fastening clothes
• may not be able to identify which part of their body was touched if they were not looking
• may be afraid of the dark
• may be a messy dresser; looks disheveled, does not notice pants are twisted, shirt is half untucked, shoes are untied, one pant leg is up and one is down, etc.
• has difficulty using scissors, crayons, or silverware
• continues to mouth objects to explore them even after age two
• has difficulty figuring out physical characteristics of objects; shape, size, texture, temperature, weight, etc.
• may not be able to identify objects by feel, uses vision to help; such as, reaching into backpack or desk to retrieve an item
Vestibular Sense: input from the inner ear about equilibrium, gravitational changes, movement experiences, and position in space.

Signs Of Vestibular Dysfunction:

1. Hypersensitivity To Movement (Over-Responsive):
   - avoids/dislikes playground equipment; i.e., swings, ladders, slides, or merry-go-rounds
   - prefers sedentary tasks, moves slowly and cautiously, avoids taking risks, and may appear "wimpy"
   - avoids/dislikes elevators and escalators; may prefer sitting while they are on them or, actually get motion sickness from them
   - may physically cling to an adult they trust
   - may appear terrified of falling even when there is no real risk of it
   - afraid of heights, even the height of a curb or step
   - fearful of feet leaving the ground
   - fearful of going up or down stairs or walking on uneven surfaces
   - afraid of being tipped upside down, sideways or backwards; will strongly resist getting hair washed over the sink
   - startles if someone else moves them; i.e., pushing his/her chair closer to the table
   - as an infant, may never have liked baby swings or jumpers
   - may be fearful of, and have difficulty riding a bike, jumping, hopping, or balancing on one foot (especially if eyes are closed)
   - may have disliked being placed on stomach as an infant
   - loses balance easily and may appear clumsy
   - fearful of activities which require good balance
   - avoids rapid or rotating movements

2. Hyposensitivity To Movement (Under-Responsive):
   - in constant motion, can't seem to sit still
   - craves fast, spinning, and/or intense movement experiences
   - loves being tossed in the air
   - could spin for hours and never appear to be dizzy
   - loves the fast, intense, and/or scary rides at amusement parks
   - always jumping on furniture, trampolines, spinning in a swivel chair, or getting into upside down positions
   - loves to swing as high as possible and for long periods of time
   - is a "thrill-seeker"; dangerous at times
• always running, jumping, hopping etc. instead of walking
• rocks body, shakes leg, or head while sitting
• likes sudden or quick movements, such as, going over a big bump in the car or on a bike

3. Poor Muscle Tone And/Or Coordination:

• has a limp, "floppy" body
• frequently slumps, lies down, and/or leans head on hand or arm while working at his/her desk
• difficulty simultaneously lifting head, arms, and legs off the floor while lying on stomach ("superman" position)
• often sits in a "W sit" position on the floor to stabilize body
• fatigues easily!
• compensates for "looseness" by grasping objects tightly
• difficulty turning doorknobs, handles, opening and closing items
• difficulty catching him/her self if falling
• difficulty getting dressed and doing fasteners, zippers, and buttons
• may have never crawled as an baby
• has poor body awareness; bumps into things, knocks things over, trips, and/or appears clumsy
• poor gross motor skills; jumping, catching a ball, jumping jacks, climbing a ladder etc.
• poor fine motor skills; difficulty using "tools", such as pencils, silverware, combs, scissors etc.
• may appear ambidextrous, frequently switching hands for coloring, cutting, writing etc.; does not have an established hand preference/dominance by 4 or 5 years old
• has difficulty licking an ice cream cone
• seems to be unsure about how to move body during movement, for example, stepping over something
• difficulty learning exercise or dance steps

Proprioceptive Sense: input from the muscles and joints about body position, weight, pressure, stretch, movement, and changes in position in space.

Signs Of Proprioceptive Dysfunction:

1. Sensory Seeking Behaviors:

• seeks out jumping, bumping, and crashing activities
• stomps feet when walking
• kicks his/her feet on floor or chair while sitting at desk/table
- bites or sucks on fingers and/or frequently cracks his/her knuckles
- loves to be tightly wrapped in many or weighted blankets, especially at bedtime
- prefers clothes (and belts, hoods, shoelaces) to be as tight as possible
- loves/seeks out "squishing" activities
- enjoys bear hugs
- excessive banging on/with toys and objects
- loves "roughhousing" and tackling/wrestling games
- frequently falls on floor intentionally
- grinds his/her teeth throughout the day
- loves pushing/pulling/dragging objects
- loves jumping off furniture or from high places
- frequently hits, bumps or pushes other children
- chews on pens, straws, shirt sleeves etc.

2. Difficulty With "Grading Of Movement":

- misjudges how much to flex and extend muscles during tasks/activities (i.e., putting arms into sleeves or climbing)
- difficulty regulating pressure when writing/drawing; may be too light to see or so hard the tip of writing utensil breaks
- written work is messy and he/she often rips the paper when erasing
- always seems to be breaking objects and toys
- misjudges the weight of an object, such as a glass of juice, picking it up with too much force sending it flying or spilling, or with too little force and complaining about objects being too heavy
- may not understand the idea of "heavy" or "light"; would not be able to hold two objects and tell you which weighs more
- seems to do everything with too much force; i.e., walking, slamming doors, pressing things too hard, slamming objects down
- plays with animals with too much force, often hurting them

Signs Of Auditory Dysfunction: (no diagnosed hearing problem)

1. Hypersensitivity To Sounds (Auditory Defensiveness):

- distracted by sounds not normally noticed by others; i.e., humming of lights or refrigerators, fans, heaters, or clocks ticking
- fearful of the sound of a flushing toilet (especially in public bathrooms), vacuum, hairdryer, squeaky shoes, or a dog barking
• started with or distracted by loud or unexpected sounds
• bothered/distracted by background environmental sounds; i.e., lawn mowing or outside construction
• frequently asks people to be quiet; i.e., stop making noise, talking, or singing
• runs away, cries, and/or covers ears with loud or unexpected sounds
• may refuse to go to movie theaters, parades, skating rinks, musical concerts etc.
• may decide whether they like certain people by the sound of their voice

2. Hyposensitivity To Sounds (Under-Registers):

• often does not respond to verbal cues or to name being called
• appears to "make noise for noise's sake"
• loves excessively loud music or TV
• seems to have difficulty understanding or remembering what was said
• appears oblivious to certain sounds
• appears confused about where a sound is coming from
• talks self through a task, often out loud
• had little or no vocalizing or babbling as an infant
• needs directions repeated often, or will say, "What?" frequently

Signs Of Oral Input Dysfunction:

1. Hypersensitivity To Oral Input (Oral Defensiveness):

• picky eater, often with extreme food preferences; i.e., limited repertoire of foods, picky about brands, resistive to trying new foods or restaurants, and may not eat at other people's houses)
• may only eat "soft" or pureed foods past 24 months of age
• may gag with textured foods
• has difficulty with sucking, chewing, and swallowing; may choke or have a fear of choking
• resists/refuses/extremely fearful of going to the dentist or having dental work done
• may only eat hot or cold foods
• refuses to lick envelopes, stamps, or stickers because of their taste
• dislikes or complains about toothpaste and mouthwash
• avoids seasoned, spicy, sweet, sour or salty foods; prefers bland foods

2. Hyposensitivity To Oral Input (Under-Registers)

• may lick, taste, or chew on inedible objects
• prefers foods with intense flavor; i.e., excessively spicy, sweet, sour, or salty
• excessive drooling past the teething stage
- frequently chews on hair, shirt, or fingers
- constantly putting objects in mouth past the toddler years
- acts as if all foods taste the same
- can never get enough condiments or seasonings on his/her food
- loves vibrating toothbrushes and even trips to the dentist

**Signs Of Olfactory Dysfunction (Smells):**

1. **Hypersensitivity To Smells (Over-Responsive):**
   - reacts negatively to, or dislikes smells which do not usually bother, or get noticed, by other people
   - tells other people (or talks about) how bad or funny they smell
   - refuses to eat certain foods because of their smell
   - offended and/or nauseated by bathroom odors or personal hygiene smells
   - bothered/irritated by smell of perfume or cologne
   - bothered by household or cooking smells
   - may refuse to play at someone's house because of the way it smells
   - decides whether he/she likes someone or some place by the way it smells

2. **Hyposensitivity To Smells (Under-Responsive):**
   - has difficulty discriminating unpleasant odors
   - may drink or eat things that are poisonous because they do not notice the noxious smell
   - unable to identify smells from scratch 'n sniff stickers
   - does not notice odors that others usually complain about
   - fails to notice or ignores unpleasant odors
   - makes excessive use of smelling when introduced to objects, people, or places
   - uses smell to interact with objects

**Signs Of Visual Input Dysfunction (No Diagnosed Visual Deficit):**

1. **Hypersensitivity To Visual Input (Over-Responsiveness):**
   - sensitive to bright lights; will squint, cover eyes, cry and/or get headaches from the light
   - has difficulty keeping eyes focused on task/activity he/she is working on for an appropriate amount of time
   - easily distracted by other visual stimuli in the room; i.e., movement, decorations, toys, windows, doorways etc.
   - has difficulty in bright colorful rooms or a dimly lit room
• rubs his/her eyes, has watery eyes or gets headaches after reading or watching TV
• avoids eye contact
• enjoys playing in the dark

2. Hyposensitivity To Visual Input (Under-Responsive Or Difficulty With Tracking, Discrimination, Or Perception):

• has difficulty telling the difference between similar printed letters or figures; i.e., p & q, b & d, + and x, or square and rectangle
• has a hard time seeing the "big picture"; i.e., focuses on the details or patterns within the picture
• has difficulty locating items among other items; i.e., papers on a desk, clothes in a drawer, items on a grocery shelf, or toys in a bin/toy box
• often loses place when copying from a book or the chalkboard
• difficulty controlling eye movement to track and follow moving objects
• has difficulty telling the difference between different colors, shapes, and sizes
• often loses his/her place while reading or doing math problems
• makes reversals in words or letters when copying, or reads words backwards; i.e., "was" for "saw" and "no" for "on" after first grade
• complains about "seeing double"
• difficulty finding differences in pictures, words, symbols, or objects
• difficulty with consistent spacing and size of letters during writing and/or lining up numbers in math problems
• difficulty with jigsaw puzzles, copying shapes, and/or cutting/tracing along a line
• tends to write at a slant (up or down hill) on a page
• confuses left and right
• fatigues easily with schoolwork
• difficulty judging spatial relationships in the environment; i.e., bumps into objects/people or missteps on curbs and stairs

Auditory-Language Processing Dysfunction:

• unable to locate the source of a sound
• difficulty identifying people's voices
• difficulty discriminating between sounds/words; i.e., "dare" and "dear"
• difficulty filtering out other sounds while trying to pay attention to one person talking
• bothered by loud, sudden, metallic, or high-pitched sounds
• difficulty attending to, understanding, and remembering what is said or read; often asks for directions to be repeated and may only be able to understand or follow two sequential directions at a time
• looks at others to/for reassurance before answering
• difficulty putting ideas into words (written or verbal)
• often talks out of turn or "off topic"
• if not understood, has difficulty re-phrasing; may get frustrated, angry, and give up
• difficulty reading, especially out loud (may also be dyslexic)
• difficulty articulating and speaking clearly
• ability to speak often improves after intense movement

Social, Emotional, Play, And Self-Regulation Dysfunction:

Social:
• difficulty getting along with peers
• prefers playing by self with objects or toys rather than with people
• does not interact reciprocally with peers or adults; hard to have a "meaningful" two-way conversation
• self-abusive or abusive to others
• others have a hard time interpreting child's cues, needs, or emotions
• does not seek out connections with familiar people

Emotional:
• difficulty accepting changes in routine (to the point of tantrums)
• gets easily frustrated
• often impulsive
• functions best in small group or individually
• variable and quickly changing moods; prone to outbursts and tantrums
• prefers to play on the outside, away from groups, or just be an observer
• avoids eye contact
• difficulty appropriately making needs known

Play:
• difficulty with imitative play (over 10 months)
• wanders aimlessly without purposeful play or exploration (over 15 months)
• needs adult guidance to play, difficulty playing independently (over 18 months)
• participates in repetitive play for hours; i.e., lining up toys cars, blocks, watching one movie over and over etc.

Self-Regulation:

• excessive irritability, fussiness or colic as an infant
• can't calm or soothe self through pacifier, comfort object, or caregiver
• can't go from sleeping to awake without distress
• requires excessive help from caregiver to fall asleep; i.e., rubbing back or head, rocking, long walks, or car rides

Internal Regulation (The Interoceptive Sense):

• becoming too hot or too cold sooner than others in the same environments; may not appear to ever get cold/hot, may not be able to maintain body temperature effectively
• difficulty in extreme temperatures or going from one extreme to another (i.e., winter, summer, going from air conditioning to outside heat, a heated house to the cold outside)
• respiration that is too fast, too slow, or cannot switch from one to the other easily as the body demands an appropriate respiratory response
• heart rate that speeds up or slows down too fast or too slow based on the demands imposed on it
• respiration and heart rate that takes longer than what is expected to slow down during or after exertion or fear
• severe/several mood swings throughout the day (angry to happy in short periods of time, perhaps without visible cause)
• unpredictable state of arousal or inability to control arousal level (hyper to lethargic, quickly, vacillating between the two; over stimulated to under stimulated, within hours or days, depending on activity and setting, etc.)
• frequent constipation or diarrhea, or mixed during the same day or over a few days
• difficulty with potty training; does not seem to know when he/she has to go (i.e., cannot feel the necessary sensation that bowel or bladder are full
• unable to regulate thirst; always thirsty, never thirsty, or oscillates back and forth
• unable to regulate hunger; eats all the time, won't eat at all, unable to feel full/hungry
• unable to regulate appetite; has little to no appetite and/or will be "starving" one minute then full two bites later, then back to hungry again (prone to eating disorders and/or failure to thrive)