

Proprioceptive Dysfunction
The Reason Kids Crash, Jump, Trip, Fall, Write Too Dark, and Breaking Things!

Once you have an understanding of Proprioceptive Dysfunction, you will easily identify when a child is struggling with proprioceptive dysfunction! It is one of the most challenging aspects of sensory processing disorders, and can frustrate parents and effect a child's self-esteem.

If "proprioceptive" is a new term to you, here is how we would explain it. Our proprioceptive system is responsible gives us the ability to sense where we are in relation to our surroundings. Without our proprioceptive system, we are unable to know where different parts of our body are without looking. I bet right now, you could close your eyes and still touch your finger to the tip of your nose, right? Yep. That is because of your proprioceptive system. This system is responsible for helping us move through space and move our body effectively.

Anytime you climb stairs, run down the street, carry a load of laundry, sit, stand, bend or stretch, you are using your proprioceptive system. Proprioception is how our body receives information for the proprioceptive sense through our muscles and joints affecting our self-awareness, emotional security and our ability to feel safe and secure in our surroundings.

If this proprioceptive sense is not receiving or interpreting input correctly within these muscles, joints etc., then it is referred to as Proprioceptive Dysfunction. It is considered "one of the most challenging aspects," because it manifests itself as kids who appear to be just clumsy, uncoordinated, and have difficulty performing basic normal childhood tasks and activities. We have to remember that they don't experience the world like others.

Without proper messages regarding whether muscles are being stretched, whether joints are bending or straightening, and how much of each of these is happening, **children will have the following "clinical" signs of proprioceptive dysfunction:**

- **Difficulty "motor planning,"** or conceptualizing and figuring out what each part of his body needs to do in order to move a certain way or complete a task. This is an unconscious sense to us, becomes an active, conscious, frustrating sense to them.
- **Difficulty executing those planned movements or having "motor control,"** this is when the brain may know what to do, but they can't figure out how to make their body do it.
- **Difficulty "grading movement,"** or knowing how much pressure is needed to complete a task such as hold a cup of water, hold and write with a pencil, turn the page of a book, hit a golf ball into the hole, etc.
- **Difficulty with "postural stability,"** which is the ability to hold and maintain one's postural muscles and responses, giving you a sense of security and safety during movement. As a result, proprioception is impaired and "emotional security" can suffer.

Children with proprioceptive dysfunction, who are unable to move and use their body effectively can become easily frustrated, give up, and lose self-confidence. It is truly difficult to watch these kids try SO HARD and not be able to do what they want to do. Keeping in mind the aforementioned difficulties a child will have if this sense is not doing it's job correctly, you may notice some of the following signs.

Signs Of Proprioceptive Dysfunction:

If they are under responsive to proprioceptive input (sensory seeking) they may...

- Walk too hard, push too hard, bang too hard, write too hard, play with objects too hard, etc.
- Be the loud ones, rough ones, crashers, movers, shakers, runners, jumpers, and bouncers (i.e. an insatiable bundle of energy!)
- Shake his legs or constantly bang the back of his foot on the floor/chair while sitting in class.
- Play too rough (often hurting himself or others), jump off of or crash into ANYTHING he can.
- Crack his knuckles, chew on his fingers, bite his nails until they bleed, chew on pens, gum, pencils, clothing collars, sleeves, or strings, or inedible objects (i.e. paper clips, pieces of toys etc.)
- Enjoys TIGHT clothes (i.e. turtlenecks, tight belts, hoods, hats, jackets zipped ALL the way up, tight pajamas etc.)

If they have poor motor planning, body awareness, or motor control, they may...

- Have difficulty climbing, running, riding a bike, doing jumping jacks, hitting a ball, roller skating.
- Have difficulty tying shoes (this is a great resource... "Tie Your Shoes: Rocket Style/Bunny Ears ") or knowing how to move his body when you help him get dressed/undressed.
- Frequently bump into objects and people accidentally.
- Trip and fall often.
- Have difficulty learning to go up and down stairs, and may be frightened by them.

Signs of postural instability may include...

- Slumping at desk, dinner table etc.
- Appear to be "limp" and lethargic all the time.
- Needing to rest his head on his hands or lay his head down on his arm on the desk/table while working.
- Having poor posture during motor tasks.
- Being unable to stand on one foot and have difficulty with any balancing tasks.

Some children may avoid many typical play experiences, become shy, be afraid to try anything new, or develop a lack of self-confidence. *If you have a child you think may show signs of proprioceptive dysfunction an Occupational Therapy evaluation is highly recommended.*

If you have, or know, a child who has a sensory processing disorder, please understand there is a NEUROLOGICAL reason they are doing these things! The "sensory seeking" kids can try our patience, but understand one of the best ways we can help them is to give them appropriate and frequent opportunities for deep pressure activities and heavy work activities. This WILL help them stay more focused, calm, and within an optimal arousal level.

The clumsy and uncoordinated kids can tug at our heartstrings, make us angry, or frustrate us but know that if they get the proper treatment, they CAN overcome (or adapt to) many of the related challenges. Will they ever be a professional baseball player, ice skater, or gymnast? Probably not. But, with the right kind of help they will be able to button, tie, zip, hit a ball, catch a Frisbee, write an assignment without breaking their pencil tip and begin to gain self-esteem.

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