



Sensory processing signs of difficulty - Proprioception (position)

You will have heard about our 8 sensory systems: hearing, sight, taste, smell, touch, vestibular, proprioception and interoception. You will have also heard about how we process our sensory information; we receive and organise sensation from the environment, then we process that information and make an effective meaningful response.

Now we can consider what it may look and feel like if we have a difference in our proprioception sensory system.

Proprioception (position)

Proprioception is our sense of body awareness and position in space. Activities which provide information to muscles, joints, tendons and ligaments are proprioceptive. The bigger the resistance of these activities, the more proprioceptive input is received. This information enables the brain to know where each part of the body is and how it is moving. It happens at a sub-conscious level in the brain.

Processing proprioception sensory information



You will remember that we used cups to describe how we register sensory information.

When we have a little cup it does not take much information before we notice it - your little cup fills up very quickly! We call this over responsive.

When we have a big cup it takes a lot more information for us to notice - it takes more to fill up our cup. We call this under responsive.

Remember that this is not always a problem, and that our ability to register, process and integrate our sensory information can sometimes feel difficult - when we are tired, unwell or overwhelmed it can feel like our cup fills up quickly.

Signs of Difficulty:

Over Responsive 	Under Responsive 
<ul style="list-style-type: none">• Dislikes others being too close• Dislikes busy crowds or busy queues• Creates own boundaries i.e. likes being at the start or end of queues.	<ul style="list-style-type: none">• Stands too close to others• Frequently bumps and trips over people or objects• Watches feet when using stairs• Misjudges the force of their movements

Strategies to support:

Under Responsive



- Jumping Clapping hands and/or stamping feet i.e. star jumps, action songs.
- Animal Walks, Yoga, Obstacle courses
- Carrying heavy objects (back-pack with weight in it, pile of books)
- Pushing objects i.e. moving boxes from one end of a room to another, wall press up, chair push ups.
- Using a therapy/gym ball:
 - Use as a seat and bounce to a beat
 - Child lays on the floor on stomach and ball rolled over legs and back with pressure they like
 - Child rolling over ball on tummy, weight going through arms
- Rolling - child can be rolled up in a thin mat or thick towel. Deep pressure can be given (adult can firmly press on the child through the mat/blanket)
- Make a 'sandwich' out of your child between the couch cushions. Gently add pressure as you pretend to put on pickles, lettuce, cheese
- Have the child help with 'heavy work' activities around the home i.e. carrying in the groceries, carrying the laundry basket, shopping, pulling bags of grass/leaves after mowing the lawn, taking out the rubbish bins, Hoover, sweep, mop, dust, wash car etc.
- Give the child extra proprioception input when he/she is learning a new skill. For example, wearing a light wrist weight when a child is trying to throw a ball may give a little extra feedback about the position of his/her arm.
- Provide gentle but firm pressure if your child enjoys this. Try rubbing arms and legs to wake him/her up, applying gentle pressure to the shoulders and head to calm them down, or massage their hands before the child tries a different fine motor task.

