

Sensory Processing

Children learn about their bodies and the environment around them by taking in information from their 7 senses. When thinking about senses, we often refer to sight, hearing, smell, taste and touch. In addition to this, we have sense of movement (vestibular) and position of movement (proprioception). As a child develops, they make sense of this information and lay down motor memories. They develop adaptive responses to sensation and this enables attention and the ability to use higher cognitive skills for academic learning. Some children do not process these senses as effectively as others. This results in difficulties with behavioural response, attention and motor skill development. Children may be over responsive to stimulus, resulting in fight/flight/fright responses, or they may be under responsive, resulting in low arousal or sensory seeking. A child's sensory profile can be spiky and can also change. More information on this can be found at www.multisensory.lgfl.net.

Difficulty processing sensory information can result in a range of presentations:

1. Over sensitivity to stimulus

- Dislike of noise, touch, taste, smell, movement – more response than other children
- Emotional outbursts or shut down
- Hitting out or running away
- Avoidance behaviours
- Seeking out certain movements to overcome sensitivity

2. Under sensitivity to stimulus (not registering)

- Reduced awareness of pain
- Lack of response to sound, touch taste, smell or movement
- Seeking out additional sensory stimulus to alert themselves
- May appear like a daydreamer – often very good temperament
- Low tone

3. Coordination

- Difficulties with motor planning and bilateral skills
- Slow to learn new movements – more than other children
- Delayed motor skills development
- Difficulty learning school sport activities
- Cloning behaviours or avoidance
- Difficulty with self care

- Reduced core stability and tone
- Difficulty with constructional tasks

Activities to support children with sensory processing challenges

Activities to support over sensitivity –

- Reduce stimulus where possible – sit away from classroom traffic, windows, not too close to peers etc.
- Provide activities that will calm senses – deep pressure, squashy corner in classroom, jumping, chair push ups, class errands involving carrying objects
- Warn where possible if there is going to be something strong in stimulus – fire alarm tests, dinner hall smells, changing for PE and so on.
- Encourage the child to identify feeling over stimulated using a red card or similar indicator for showing that moving away from stimulus is required.
- Provide a safe space and be understanding if a child becomes overwhelmed
- Be firm in any activity requiring touch – light touch will activate the protective touch sense

Activities to support under sensitivity

- Ensure learning tasks are presented in a stimulating way
- Promote lots of movement to wake up sensory systems - this can reduce sensory seeking behaviours
- Don't assume that passivity is good – check the child has heard instructions etc
- Monitor alertness and try to wake up the sensory system of the child if you feel they are under responding to activity

Activities to support coordination difficulty

Many of these are highlighted in specific movement based advice pages.

- Sensory circuits – commence daily small group sensory circuits for children to practice movements with support in a non competitive way. This can be done as a breakfast club, lunchtime group or after school activity to prevent impacting learning time but is essential to support ability to learn skills.
- Sensory circuits can be completed in a clear room with minimal equipment with stations to carry out activities such as obstacle courses
- Set stations with a variety of challenges – jump in and out of a hoop, sit and bounce in gym ball, donkey kicks, throw and catch a ball, bouncing a ball, animal walks

For further information on this, Sheena Rufus recommends 'Sensory Circuits – A Motor Skills Programme for Children' by LDA publishers. This gives a detailed approach to setting up sensory circuits and can be completed by willing TAs, LSAs and teachers.

- Complete upper limb and handwriting warm ups (See Movement: Writing) before writing challenges are set – arm raises, arm circles, push hands together, open and close hands, wriggle fingers and so on.
- Provide visual cues for sequenced activities such as dressing or construction activities.
- Promote chair push ups, marching on the spot, jumping on the spot to give the body information about movement and positioning (See Movement: Focus).
- Get the child to talk through tasks as they are completing them.
- Repeat tasks that are difficult to provide practice.