

◆◆◆ OCCUPATIONAL THERAPY

SENSORY TEMPERAMENT – “Low Registration”

There are many children for whom low registration is a major component of who they are; it is an important part of the child's sensory temperament. Children with low registration tend to not notice many things in the environment. When they stay still, which they often do, the lack of movement and sensory input triggers the nervous system to shut down and stop processing information. These children often seem lethargic, uninterested, or off in a world of their own. Low registration children are not as in touch with their bodies, and may demonstrate low muscle tone, decreased endurance, and delayed motor skills. These are most often not indicative of weakness, but of decreased levels of arousal. These children have high neurological thresholds and a tendency to go along with those thresholds.

Children with low registration need more sensory input in order to help them to be alert, and so we should try to provide them with the same type of sensory diet we provide to a sensory seeker. The difference is that a child with low registration may not be as enthusiastic about sensory activities and may need more support to engage in the types of activities that will help. Examples of sensory activities that help people to be more alert include:

- bright lighting and fresh, cool air
- fast swinging, especially with rotation, bounce
- quick unpredictable movement (bouncing on a ball, lap or mini trampoline)
- drink ice -water or carbonated drink, suck through a straw
- cold water play, playing with goop, slime, mars mud, etc. novel things to feel like squishy balls, stretchy lizard, etc.
- crunchy chewing
- running - tag games, hide'n'seek, errands
- sitting on a ball chair, water mat or air pillow, bouncing on your lap while listening or watching
- mist cool water from spray bottle on face, cool cloth
- loud, fast music and sudden noises, upbeat and lively auditory environment
- cause and effect toys with sounds and lights
- strong odours (perfume, peppermint, etc)
- visually stimulating rooms, lots of colours, lights (If you want the child to only attend to some things, make other aspects of the environment bland in contrast.)

When children with low registration engage in these type of activities, they become more able to process information from around them and are more likely to be successfully engaged in meaningful tasks and activities. It is often helpful, therefore, to use alerting activities just before important activities. If you engage a child with a swing, trampoline, brisk play, etc. then the child should be more alert and ready to process information when you sit the child down to do academics or any kind of focused work. If you can allow the child to have cold sips or to sit on a ball or air cushion, the child should be able to remain alert for longer periods. When you see signs of lethargy or inattention, it may be time for another alerting strategy. It is much more respectful to provide the child with input that will help him or her to achieve the level of arousal that is necessary for learning than to try to manage inattention as if it were a deliberate and negative behaviour that must be changed.

Try to engage as many senses as possible to promote attention and nervous system processing. Use brisk arm and back rubs on occasion, touchy feelie boxes, face massage, head rubs, etc. Soft sensory brushes to hands and palms before fine motor activities increases feedback from the hands and makes it more likely that the child will process information from the hands during fine motor or desk work. Putting work on a wall, easel, slant board, etc. increases

the visual impact of the work and increases attention to it. Using sandpaper under colouring increases feedback and increases attention and visual regard.

Ideas to use all senses:

(The more intense the input is, the more alerting it is, generally.)

Tactile: touching objects, fidget items, wash hands, wash desk with shaving cream, wear jewelry. Input that is light and ticklish is generally alerting, as is goopy and slimy.

Visual: spinning tops, mobiles, watching fast movement or sports, make target materials bright against a dull background, let child climb high and watch activity. Input that is fast, bright, colourful, and changing tends to be alerting

Proprioceptive: jump, push things, bounce, wall pushes, crab walk, chair push-ups, squeeze hands, provide touch pressure, carry things. Input that involves being prone, upside down or changing tends to be alerting.

Vestibular: add movement with pacing, rocking, or spinning; provide movement in linear, lateral or orbital planes, rocking chair, beach ball seat, swings, stairs, walk across room. Input that is fast and changing tends to be alerting.

Auditory: sing, hum, repeat directions, (wait up to 20 seconds between a comment or request to allow time for processing), expand the vowel in a word to increase attention to the key word, use action words, play music in background (lively music, marches, etc.) headphones. Input that is loud, has a fast beat, changing, high pitch tends to be alerting.

Oral: sip drink, chew objects, provide cold or crunchy snack, water bottle, chew straws. Input that is cold, sour is generally alerting.

Olfactory: smell or sniff objects, make a smell kit or play a game with identifying smells. Citrus is alerting

When giving directions or addressing children with low registration, allow more time for attention shifting. The child may not hear your first few words or sentences if the child is lethargic or attending to something else. Many learning challenges can be avoided by getting the child's attention before explaining or demonstrating a task or giving verbal directions. Some children can shift (with time) to auditory cues. Other children will need a tap on the shoulder or arm, or a hand under the chin directing the gaze in the proper direction. Visuals are very helpful.

Children with low registration to sensory input will benefit from learning to use picture schedules, lists, and other reminders about task performance. Without these aids, we are likely to miss relevant input and directions. In moments of alertness, we then tend to interact with whatever is salient enough to grab attention, and this may not involve desired tasks. Visual schedules and supports are EXTREMELY important for these people. We often stop using them, saying: "the child already knows how to do that". I already know how to do my job or grocery shopping, but am not nearly as effective without my calendar or a list.

During task performance, it may be important to keep the environment neat and relevant. For example, a child with low registration might benefit from some intense visual input as part of a sensory diet to help the child be ready to work. Once working, however, visual distractions may lead to the child 'zoning out' or drifting from the task at hand. Finding a balance is important, and each child is different. Our goal should be to help the child have enough sensory stimulation to be alert and attentive, but not so much that the child becomes overwhelmed or frazzled, which may lead to shut down. It is helpful to study the child's sensory profile and learn to build a flexible sensory menu that will help the child to function to his or her ability. Consultation with an occupational therapist with sensory experience can be very helpful.