Children's Occupational Therapy

Sensory—Modulation



Many different sensory experiences help us to respond appropriately in a given situation. For example, a cup of coffee might make you feel more alert during a long meeting, or a warm bath might help you relax at the end of a hard day. We often develop preferences because certain types of sensory input work better for some people than for others. For example, listening to music helps some people concentrate but is distracting to others.

We are constantly receiving sensory input from many sources including movement and gravity, sounds, vision, touch and smell. Our brains must be able to organise and process this sensory input, and to use that input to respond appropriately to a particular situation.

It is a great challenge to integrate all this information and use it to help us make sense of our world and behave in the right way in a certain situation. For example, sitting still and paying attention in the classroom for an hour is a common expectation in the life of an 8 year old. However, for the child to achieve this, they must be able to take in all the sensory information around them including noises outside the window, colourful wall displays, teacher's voice, smells from the canteen, awareness of their body movement and the feel of the desk beneath their hands. They must then be able to sort out what information is important and ignore what is not. Finally, they must use the important information to help them stay still and upright in their chair, listen to the teacher and maintain their attention.

Many children don't know how to cope with the different sensory input they receive. They have difficulty processing and organising sensory information. This makes it difficult for them to perform the many complex tasks necessary for learning and functioning in the world.

For children with these sensory issues, it is essential that the people around them have a good understanding of why they behave in a certain way. It is also important that the child's environment is set up in a way that avoids the most difficulty sensory issues and supports their learning and development.



SENSE	CALMING	WAKING UP
Oral – taste and chewing	Chewing on chewy sweets e.g. wine gums, riesen	Sour, salty, spicy or bitter tastes e.g. Haribo Tangtastics
	Sucking on hard sweets	Hot (e.g. Curry) or cold foods e.g. Ice lollies
	Crunchy and chewy foods e.g. pop corn, cut up vegetables	Carbonated drinks
	Blowing bubbles	
	Sucking thick liquids through a straw (e.g. milkshake)	
Propriocepti on	"Heavy Work" meaning working hard so muscles, tendons and joints can feel the work	Proprioceptive based activities tend to be calming rather than waking up
	E.g. Wheel barrow walking, monkey bars, climbing frames, pulling and pushing furniture, carrying heavy equipment, tug-o-war, digging in the sand pit or garden	
	Cleaning the black board	
Touch / Tactile	Fidgeting or squeezing play dough, putty, stress balls	Light touch such as tickling, light back scratch, petting a dog or cat
	Deep pressure through firm prolonged touch to the body especially around the shoulders, chest and hips using palms of hands	
	"Hot Dog" game – wrap up in a blanket and "squash", deep "bear hug" or massage	
	Warm bath or wrapping up in a warm blanket	
	Playing with resistive equipment such as play dough or clay	



Vestibular / Regular, rhythmical bouncing Fast, irregular and non-rhythmical on Movement therapy ball, trampoline, swing or movements on trampoline or rocking chair swing Up and down and front to back Circular and rotatory movements movements Variations in noise levels Hearing Consistency in noise levels Quiet calm and well paced voices Erratic, loud or screaming voices Consistent rhythms Variations in rhythms eq. fast and slow music combined Sudden unexpected noises Vision Soft, consistent lighting Variations in colour Minimal bright lights and visually Fluorescent lighting distracting objects **Natural lighting Artificial lighting** Pastel colours **Bright colours** Sparsely decorated rooms Cluttered rooms From Northumberland Children's Occupational Therapy Service.

