

## **Sensory training script 9**

### **Part Nine. Interoception**

#### **Slide 1:**

Welcome to Part Nine of the Derbyshire Healthcare NHS Foundation Trust's Community Paediatric Occupational Therapy team's Sensory Training for Parents and Carers.

#### **Slide 2**

Interoception: this is the final sense we are going to talk about in this training.

#### **Slide 3: Interoception receptors:**

Receptors are throughout the internal organs of our bodies. This sense regulates vital bodily functions such as hunger, thirst, digestion, heart-rate, temperature control and toilet need awareness.

This sense also helps us to recognise and make sense of the messages from our body when we are in pain, or have feelings of sickness or excitement.

This is the sense that recognises when our heart rate is high which alerts us to fear, risk and danger.

#### **Slide 4: interoception 2**

This is a difficult sense to support as it is harder to recognise when someone else is not receiving or correctly interpreting these internal sensory messages. We might see a child who does not recognise when the weather is cold, so does not put on a coat or tries to go out in short sleeves. This presentation alone does not indicate interoception difficulties as this might be due to dysfunction of the tactile/touch system or due to the rigidity associated with autism.

Toilet behaviours are particularly difficult to interpret as children can avoid going to the toilet for a multitude of sensory reasons, it might be due to the noise in an echoic bathroom, or a fear of the sound of hand-dryers in public toilets, it might be the sensation of passing stools or urine, it might be the experience of hygiene processes on the tactile or touch system, or it might be the smell of being in a toilet or using a toilet that your child finds difficult. Any and all of these can cause reluctance or avoidance of toileting.

To recognise interoceptive dysfunction we must look for clusters of difficulties in typical bodily function.

**Slide 5: Introducing techniques.**

Current practice recommends the use of 'heavy work' to help regulate and prepare this system, and to support calming. Introduce any new technique at a quiet time for your child, and avoid introducing too many changes at one time.

If your child is able to understand, talk about the plan and agree how to practise new skills, use social stories to help discuss sensory experiences. There are some excellent books that explain about going to the toilet. Many techniques will need to be familiar before the child can respond by calming and being more organised.

**Slide 6: Deep pressure techniques.**

Outlining : deep firm, definite touch around your child's outline in slow movements

Deep pressure hug. This can be a hug, a lean against, a side by side hold or a squash on the sofa.

Deep pressure with cushions or a gym ball.

Deep pressure touch to prepare the child for a challenging experience such as for meal times/teeth cleaning, or nail cutting.

See part 2 of this training for details of these techniques.

**Slide 7: Proprioceptive Techniques:**

Use 'heavy work' to prepare your child before a known challenging activity such as teeth cleaning, eating a meal or toileting.

Use weighted 'heavy work' during challenging activities, make sure you follow the guidance about the amount of weight to use and the duration that the weight is applied.

Use monitored bouncing activities to support calm down after challenging situations. You will need to carefully observe your child and work out how much time is just right for your child, stop them from going on too long as this will risk behaviours becoming more chaotic and less controlled.

See Part 7 of this training for details of these techniques.

**Slide 8: Techniques:**

Use any of the techniques discussed throughout this training. Avoid introducing too many changes in routine at one time, you will not know what is working and might fail to get a positive change because your child is overwhelmed by the number of differences.

Develop routine to support behavioural changes, this works well for developing patterns around meal times, toileting and self-care such as bathing and showering.

Use visual timetables and timers. In the final section of this training there are examples of a sensory day timetable.

Use and write social stories that fit for your child. Once you are familiar with social stories it is easy to write a story that exactly fits your child's need. Keep it short and dedicated to one activity at a time.

Demonstrate responding to bodily needs. Rub your tummy and talk about feeling hungry, use these demonstrations and a social story together to help your child piece together ideas of hunger, temperature or tiredness.

### **Slide 9: Sleep**

Manage the bedroom environment. Avoid clutter, keep walls blank and plain, keep pictures to one wall preferably the wall at the bed head to limit your child's view at bedtime. Keep the temperature as even as possible not too hot. Use blackout curtains. Consider tucking bedding in or using a sleeping bag to give your child a cocooned feeling.

Stop using technology at least 2 hours before bedtime. If this is a change in pattern it will take time to become accepted. There is overwhelming evidence that technology disrupts sleep, both because of the light devices emit but also because of the engagement your child has with the activity, this engagement keeps the brain alert and ready for action, neither of these states will help your child to sleep.

Establish a routine. Have a routine bedtime and stick to it, try to avoid changes at weekends or special times until your child has a well-established pattern. Support the routine by using a visual timetable and social stories.

Prepare for bed using deep pressure techniques such as using a towel to apply deep pressure squashes to dry your child after a bath, avoid rubbing the skin as this can be alerting.

If your child has very disrupted sleep patterns and you have tried all of the above techniques Consult GP/Paediatrician, you might require a referral to another service or medication advice.

Slide 10: End of Part Nine.

**Make sure you have seen all of the recommended Parts of this training. Please now go to the sensory day section.**