# Sensory training script 6

This script is for use by Interpreters and is planned to work alongside the slides in the power-point presentation. Please feel free to print this off if required, and then translate each slide in sequence and in time with the presentation. Each section of the training has a script available.

# Slide 1:

Welcome to Derbyshire Healthcare NHS Foundation Trust's Community Paediatric Occupational Therapy team's Sensory Training for Parents and Carers. This training is designed to help you understand and develop sensory strategies to support your child.

During this training I will explain sensory processing and sensory processing difficulties.

- Help you to understand how you can support your child through every day by making life changes for all of the family.
- And explain some basic sensory techniques that you can use with your child

The training is delivered in different sections: an Introduction, Information about The senses, Sensory strategies you can use with your child.

And finally there are two samples of a sensory timetable that you might find helpful in making a plan for your child and family. One is for Early Years and Primary school aged children and the other is for older secondary aged children.

When you have completed this training we hope that you will practice some of the skills with your child for at least 3 months. You can then contact our Administration team who will invite you to attend a one-off virtual group where you will meet with other parents and carers and one of our occupational therapists for further advice.

# Slide 2:

- Sensory processing is a function of the brain and the spinal cord.
- Sensory information comes to us from our environment and from our bodies all of the time, information is received by sensory receptors and transported to the brain.

Once information is received the brain needs to understand what information to attend and respond to and equally importantly what information to ignore because

it does not require a response, this is information about such things as the feeling of clothing or of repetitive background sounds.

The next process is what response or action is needed; for example:

to put a jumper on because of feeling cold.

to use more muscle strength to push the door open.

Or to run away or fight - if feeling in danger.

All of this is sensory processing.

Sometimes the brain is unable to identify information that requires a response from the less important information it can ignore; this is when the brain is paying attention to all incoming sensory information, such as constantly being alert to the sensation received from clothing, or of sounds. This level of sensory awareness can cause distress.

# 1. <u>Slide 3:</u>

# Good processing happens when the brain receives information in a way that can be used to plan a meaningful or an adapted response

It is good processing when the response or action taken is at the 'just right' level.

For the most part, good processing is not noticed by others as the response is what is expected or typical."

# Slide 4:

We notice when someone is experiencing poor processing because their responses or reactions are not typical.

Reactions can be extreme, such as being very distressed and crying because of a loud noise, OR not reacting after falling over and injuring themselves.

What we see is that there is a miss-match between the level of response and the sensory situation.

The child is not able to adapt to or function within their sensory environment."

#### Slide 5:

# Poor sensory regulation:

When a child is unable to respond to a sensory situation in the 'just right' way we call this poor sensory regulation. What we see is the result of chemical changes within the body.

Some children will respond with a fight-flight-freeze reaction.

These are all self-protection responses, and are a reaction of the primitive part of the brain.

Some children will always respond to sensory situations in the same way, others will vary day to day and hour by hour.

# Slide 6

These self-protective responses will involve the release of adrenaline or cortisol into the body. This is not a choice, this response happens automatically and very quickly.

These hormones work by changing normal processes within the body, such as stopping digestion, supressing hunger, they will increase the heart and breath rate preparing the body to act.

The release of these hormones effectively stops access to the thinking, planning part of the brain. This means that a child in this state cannot make a good choice or listen to advice.

# Slide 7

Throughout the following training you will be given information about techniques you can use to prepare your child for expected sensory challenges. These techniques include desensitisation, 'heavy work' to help your child learn how to respond in more typical ways.

If your child is aware of their difficulties you can also use techniques to plan how to respond to new situations and learn through practice how to react differently. To do this use Social Stories, and how am I today tools such as thermometer gauges (these are demonstrated in the Sensory day section later in the training). You can also do an internet search for these tools.

# <u>Slide 8</u>

# The senses:

We all know the five main senses. Touch (tactile), taste (Gustatory which is taste and mouth touch), smell (Olfactory), sight or vision, and Hearing (Auditory).

In addition we are going to talk about three more senses which are important to understanding sensory experiences and to help you support sensory processing for your children. These are Proprioception, which is the muscle sense, and tell us what our body is doing, Vestibular which is the sense which tells us how our body is moving and Interoception, which is the sense that tells us if we are hungry, full, hot or cold.

We will talk about the senses separately; this is in order to understand what each sense does. However in reality our senses work together and we are always processing experiences through several sensory systems at once.

This is the end of the Introduction. Please go to Sensory Training Part two Touch.

# Part Two - Touch

# Slide 1:

Welcome to Part two of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams Sensory Training for Parents and Carers.

#### Slide 2 the senses: Touch

#### In this section we are going to talk about the touch sense.

#### Slide 3

We experience our sense of touch through our skin. Touch tells us if what we are touching is living or an object, whether it is hot or cold, solid or soft.

Touch also allows us to understand, identify and make decisions about the nature of what we are touching. This sense gives us the ability to discriminate, which enables us to find specific items in a bag, drawer or pencil case using feel alone. We can adjust how we use our hands to perform functional actions in the most effective way.

We use our touch sense in many varied and subtle ways, applying pressure and manipulating items in order to control tools – such as to get dressed, use a knife and fork, play on a i-pad or to write."

There are two main types of touch we need to consider when thinking about our senses.:

Light tickly touch and deep pressure or sustained touch."

# Slide 4:

Light tickly touch is received by many sensory receptors that sit near the surface of the skin. The brain pays attention to this input, because it brings our attention to possible dangers, and in doing so, it has a protective function - light touch therefore, raises our awareness or alerts us!

An over response in this sense can cause some children to struggle with the feeling of clothing, to avoid messy play, or some foods. Many of us will experience some discomfort for some touch experiences, like disliking the feeling of wet cotton wool, or 'Brillo' pads. This discomfort or avoidance is only a problem to us if it is related to more than one experience or if the experience stops us being able to undertake normal daily living activities.

# Slide 5:

"Deep pressure receptors are situated deeper within the skin layer, there are fewer of these receptors; but they are large and carry a lot of information to the brain and central nervous system.

Deep touch is often sustained, we experience this when we lean against or hold something for a while. It is also the information we receive when we are given a hug.

Generally Deep touch reassures us and calms us.

We use deep pressure touch as one of our most important sensory tools. "

# Slide 6:

Outlining is when we use firm deep pressure touch to go around a child's body outline. In order to do this you need to move your hands over your child's shoulders, back, and sides. Your movements should be slow and definite – it is important to avoid any tickle-type of contact.

# Slide 7: photo outlining:

Here Mum is facing her child and using deep pressure on both sides of his body she is moving her hands down his arms. This can be done in a slow firm slide down the arms or as a series of deep pressure squashes that move slowly down the arms. You can outline the back and down the sides of the legs also. It is important to avoid light tickle touch, and do not be tempted to introduce tickle play when doing this activity.

Mum is very quiet during this process, she is avoiding direct eye contact, but is watching to see how her child reacts to this touch, she will stop if he starts to become giggly or resists the pressure. If these unwanted responses are noticed, pause, wait for your child to become calm and then carry on with the outlining.

If your child struggles to get away, don't try to stop them. Continue to offer the technique at a different time, you might need to build acceptance slowly over time.

This technique is a good preparation tool when you know your child will find something challenging.

# Slide 8:

Deep pressure: This can be a hug, a lean against, a side by side hold or a squash on the sofa. The hug should be maintained, however it is important that the child can move away from this contact if they need to.

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

# Slide 9 phot sofa:

Here we see Mum sitting next to her son who is squashed against the arm of the chair. It is important that the boy can move away if he wants to. This technique can also be used by allowing your child to be behind you when you are on the sofa. Many children seek this position themselves, or seek to squash themselves beside walls or between the sofa and the wall. If you see this behaviour your child is seeking this sensation.

Mum is not looking directly at her son; she is also not talking to him. If you want to give a voice cue to this technique it is recommended that you use one word 'squash' as a label rather than give a lot of verbal information.

# Slide 10: photo cushions:

Here we are watching Mum using deep pressure through cushions. This technique can be done in bed in the morning to help prepare your child for getting up. In bed use a pillow to squash across your child's body.

Make sure the squash is firm, but not too heavy for your child. With practice you will learn how much pressure your child likes.

Always make sure you can see your child's face and stop if they show distress. Apply the squashing pressure slowly. You can let your child know you are going to squash them by saying the word Squash. In this photo Mum is calm and quiet, she is not adding any additional sensory information to this interaction. By keeping a low sensory approach, Mum reduces the demand of the situation and the environment for her son, this allows the deep pressure technique to work most effectively. It can be challenging to maintain this low sensory approach, and this technique needs to be practised.

# Slide 11: Photo Deep pressure walking:

Here we see Mum providing deep pressure touch through the whole left side of her child, Mums right hand is also providing deep pressure to her son's shoulder. This is a good technique to practice as it can be used out in community settings and can be very discrete.

As with the other techniques, make sure the pressure is consistent and avoid tickle touch.

# Slide12: New Techniques

Introduce any new technique at a quiet time for your child. Not when they are already challenged.

If your child is able to understand, talk about the plan and agree how to practise this.

Many techniques will need to be familiar before the child can respond by calming, it is important not to give up if any new technique does not work immediately.

A good time to introduce a new technique is during a quiet time, such as when relaxing on the sofa watching TV.

If your child is not able to be part of the plan on how to introduce techniques to your child, start by introducing the strong hand to shoulder touch for a few seconds and then remove your hand. If your child does not find this difficult repeat and sustain the contact for longer. If your child finds this contact to be OK, repeat the following day. You can call the contact 'squash', but do not add too many words to the practise. Repeat until you feel your child is able to accept this touch without becoming distressed. Then you can try the same contact to support calming when your child is becoming distressed, or even in preparation to challenging activities.

This is the end of Section two Touch. Please go to Section Three Taste. If you do not need any other sensory information please go to the sensory day section of this training, there are two options one for Early Years and Primary aged children and one for Secondary aged children. At the end of these sections you will be given information about how to access a follow up session.

# Section three Taste



# Slide 1:

Welcome to Part three of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams Sensory Training for Parents and Carers.

# Slide 2

# This section is entitled Gustarory /taste and touch

# Slide 3: Gustatory/Taste

It is important to remember that we have touch sensors within our mouth, so some unwanted responses to foods might be linked to the sense of touch NOT taste!

The gustatory touch sense informs us about the texture (crunchy, smooth, lumpy), temperature and size of foods or items in our mouths.

Cold or hot foods are more alerting whilst warm foods are more calming. Some children struggle with a variation or mixture of different textures. "

#### Slide 4:

Our taste sensory receptors or 'taste buds' are densely packed on the tongue.

We can recognise salty, sour, sweet, bitter and earthy or umarmi flavours.

Salt, sour and bitter flavours are generally alerting to our sensory responses.

Umarmi and sweet flavours are more calming.

#### Slide 5 Techniques:

Use crunchy, sour or salty foods to alert your child. These can be used at all meal times or just at breakfast to help your child get 'ready to go'; and during the day as 'sensory snacks'.

OR you can also use warm 'comfort' foods that require chewing, are sweet or umarmi (like mushroom or beetroot flavours) as a 'sensory snack' to calm."

# Slide 6 Food challenges:

It is natural for children to avoid new or unfamiliar foods, typically it takes a minimum of 20 taste trials for a new food to be accepted as part of the normal diet.

Restricted diets might be limited due the colour, texture or temperature of foods, some children struggle with combinations of wet and dry foods, such as breakfast cereals, and will opt for dry foods.

If your child's diet is limited BUT they are a good weight, keep to their preferred diet and introduce new flavours in a similar presentation slowly over time.

# Slide 7:

You can add new foods to your child's diet by choosing similar textures to those they prefer, apple can be presented in a variety of ways, including juice, it is not recommended to routinely give juice to children through bottles or feeder beakers as this can damage teeth over time.

Consider how to present the food:

- Whole to bite
- Halved or in quarters easier to pick up and nibble
- Peeled and chopped into bite sized chunks some children will struggle with the different textures between skin and flesh of the apple.
- Partially cooked with varied texture consider if temperature might make a difference and consider serving warm.
- Apple that is Cooked and very soft (again consider the temperature)
- Liquidised apple or apple puree

**Or as apple Juice please note** it is not recommended to routinely give juice to children through bottles or feeder beakers as this can damage teeth over time.

# Slide 8: Consistency

Where possible, try to make new foods as predictable and consistent as you can, this will help your child accept it.

Whole or fresh foods vary, fruit can sometimes be ripe, or under ripe, so soft or hard, it might be juicy or dry, sweet or sour, this makes it difficult for a child to know what taste experience is coming even with familiar foods.

# Slide 9:

When introducing new flavours, have a small sample in the texture most like the foods your child will eat, place it in a separate dish near your child's food and tell your child what it is. Do not pressure your child into trying the food, if they do that is good, but try to keep any praise low key to avoid adding another sensory impact to the event ( a big celebration might be difficult for your child to cope with and therefore they might avoid the food to avoid the praise).

Keep presenting the food for several days and move it onto their plate but away from other food on the plate once they accept it being there.

You can also support your child becoming familiar with new foods by getting your child involved in preparing foods baking a cake, or biscuits, stirring and weighing out ingredients, chopping and peeling foods. Demonstrate tasting the food but don't try to get your child to do this. It is good to demonstrate tasting foods regularly both at meal times and other times during play.

Use the Sensory techniques of outlining and Deep pressure squash as shown in Section 2 Touch to prepare your child for meal times.

# Slide 10:

Some children will be very rigid about what foods and brands of foods they will eat. If the food of choice is not limited by a specific texture, or combination of textures or by temperature, this is likely to be a behavioural preference rather than a sensory challenge.

Some children who have Autism have very heightened awareness of differences, including differences of taste. Some of these children will be able to taste any change or addition to familiar foods in very tiny amounts, it is especially important NOT to try to disguise foods in familiar food for these children, if you do, you might end up making your child mistrust presented foods, and make mealtimes even more difficult.

# Slide 11 Risk:

If your child's food intake is restricted and they are underweight, you must consult your Doctor or paediatrician, you might require a referral to another service.

Pica is a behaviour associated with Learning Difficulties or Autism, this is not a sensory issue and needs to be managed via behavioural techniques, using distraction and engagement, and your child requires adult supervision at all at risk times. (Hand out link)



# Slide 12: End

This is the end of Section three Gustatory and Taste. Please go to Section Four. If you do not need any other sensory information please go to the sensory day section of this training, there are two options one for Early Years and Primary aged children and one for Secondary aged children. At the end of these sections you will be given information about how to access a follow up session.

# Section Four: Smell

#### Slide 1

Welcome to Part Four of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams Sensory Training for Parents and Carers.

#### Slide 2

# **Olfactory/Smell**

# In this section we are going to be looking at the Olfactory sense or the sense of smell.

#### Slide 3:

Smell receptors are found in the back of the nose.

Smells can be calming or alerting.

Our sense of smell has close links with the memory and emotional centres of the brain. This means that we can have very powerful responses to smells, both good and bad.

We respond quickly to smells within our environment.

If you are not sure what sensory information is causing your child distress, ask yourself if there is a smell present that might be challenging to your child.

#### Slide 4: Smells to calm

Avoid using too many different smells. Try to limit the number of smells, such as floral disinfectant, pine toilet freshener, musk perfumes, these can add together and make an environment that is challenging and unpleasant.

Smells such as lavender, camomile or earthy smells like pine are calming, using these smells in toiletry products, air fresheners or perfumes can help your child to be more calm.

Some children find the smell of a parent or loved ones perfume or body spray to be reassuring and calming – spray these onto handkerchiefs that the child can carry and use discretely throughout the day to help them be calm and feel safe.

Herbal teabags, such as camomile, or fruit teas can also be carried to support calming for your child.

# Slide 5 smells to alert:

Citrus, ginger and tea-tree are alerting smells using these smells in toiletry products, air fresheners or perfumes can help your child to be more alert. Starting the day with a citrus smelling face wash can help to alert some children.

Your child can carry a handkerchief with one of these smells sprayed onto it to help them alert themselves during the day."

# Slide 6 Introducing new Techniques

Introduce any new technique at a quiet time for your child.

If your child is able to understand, talk about the plan and agree how to practise this.

Many techniques will need to be familiar before your child can respond by calming.

# Slide 7 Techniques

Desensitise your child to smells

Use Social stories to help your child accept smells such as toilet smells.

Prepare your child before they go into environments that have challenging smells.

Use the outlining and deep pressure squash techniques demonstrated in deep pressure touch section two.

# Slide 8

This is the end of Part Four Olfactory/smell. Please go to Section Five. If you do not need any other sensory information please go to the sensory day section of this

training, there are two options one for Early Years and Primary aged children and one for Secondary aged children. At the end of these sections you will be given information about how to access a follow up session.

# Section Five: Vision

#### <u>Slide 1</u>

Welcome to Part Five of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams Sensory Training for Parents and Carers.

# Slide 2 This section is about the sense of vision or sight

# Slide 3:

Our visual sense receptors are found in the back of the eyes.

Vision gives us lots of important information about our environment, and it also acts to tell us of changes in the environment that we might have to respond and adapt to – such as enabling us to avoid an obstacle in our path, or recognising that something is moving towards us and we need to change direction or stop to avoid.

Our vision helps us to identify objects such as toys, to recognise letters when reading, it tells us about colours, textures and the size of objects.

Our vision also helps us to understand depth/height perception which is important when we are moving around.

# Slide 4 Techniques at home:

At home:

Avoid cluttered or clashing visual environments. – Think about your home, limit wall hangings (posters, pictures); use neutral colours to create a calm space.

Avoid bright flashing lights or busy TV/computer screens. Confine Christmas decorations to one corner of the room, and make sure your child can sit in a position to avoid looking at them if they need to.

Create a blackout space, behind the sofa, under a blanket over two chairs or a black out tent can help.

Use black out blinds or curtains in bedrooms.

Most importantly of all - STOP USING SCREEN DEVICES AT LEAST 2 HOURS BEFORE BEDTIME

# Slide 5 Techniques out and about:

Out and About:

Lots of people moving around in a space can be overly alerting to our visual system and can cause distress. Use of a cap and/or sunglasses can reduce the amount of movement your child sees. Your child can wear a hood that will also reduce what they can see around them.

If your child becomes distressed, get them to turn to face your body to cut out the movement around them, guide them out of the situation.

Choose a quiet time to go to shopping areas, when there are fewer people about.

Investigate Autism Aware shopping times, cinema, theatre, sports opportunities.

Prepare your child using visual cues, such as visual timetables before any outdoor activity.

Slide 6: Introducing new techniques

Introduce any new technique at a quiet time for your child.

If your child is able to understand, talk about the plan and agree how to practise this.

Many techniques will need to be familiar before the child can respond by calming.

Slide 7:

Desensitise to visual environments slowly over time.

Use the Deep pressure techniques of outlining and deep pressure squash as demonstrated in Section Two Touch.

Use Social Stories to explain what is going to happen and what your child will see.

Use visual timetables.

If your child uses specific smells to help them calm use these during challenging environments.

#### Slide 8: End of section

This is the end of Part Five Vision /Sight. Please go to Section six. If you do not need any other sensory information please go to the sensory day section of this training, there are two options one for Early Years and Primary aged children and one for Secondary aged children. At the end of these sections you will be given information about how to access a follow up session.

Section Six: Auditory/Hearing

Slide 1:

Welcome to Part Six of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams Sensory Training for Parents and Carers.

# Slide 2: Senses Auditory/Hearing

# Slide 3:

Our hearing sense tells us information about the immediate environment, how busy it is, it also tells us about the kind of environment we are in, indoors/or outside, large or small area, busy or quiet.

Our sense of hearing gives us advance notice of changes to our environment, for example if we are moving towards somewhere that is busy we hear more sounds of people; if we are moving towards an area with more traffic we are aware as we approach that this is the case.

We can pick up information about the nature of the people we share an environment with, for instance in a crowded place (in a football match crowd) we know that people are excited, elated or disappointed, by the sounds.

Sounds that move within our environment can inform us about potential dangers, for example the sound of vehicles moving towards us as we get near to a road. – We can usually tell whether a car is coming towards us or moving away by the way the sound is received.

# Slide 4:

Children can experience difficulties with some sound pitches either high pitched or more often deep resonant sounds can make children feel distressed. Some children will find it difficult to ignore background sounds, such as humming lights, fridges or the sound of others talking or eating near them. So be alert to every sound.

Others may have difficulty in selecting what sounds to pay attention and listen to, particularly in a noisy classroom or home.

Some children will be fearful of sudden unexpected sounds, (fire alarms, motor bikes driving past, a dog barking, or the hand dryer in public toilets).

Some children will make a noise themselves to try to block out the sounds that they find difficult to cope with, they might hum, whistle or make other repetitive sounds.

# Slide 5: Techniques

Use Ear defenders these can be used for specific challenges but try not to sue them for long periods of time as this will stop your child from learning how to cope with sounds in their environment.

Gradually desensitise your child to difficult sounds – this can be done by recording the sounds or finding samples on youtube. Desensitisation to sounds such as hand driers, by playing the recorded sound at very low volume so that your child can get used to the sound, gradually increase the volume over time, if possible let your child can control the increase in volume.

Encourage your child to listen to safe familiar sounds through headphones. Great care needs to be taken to ensure that they are not listening to sounds that are too loud. Generally speaking if a child is listening to sounds through head phones you should not be able to tell what they are hearing when you are sitting next to them, if you can hear the sound when sitting close the volume is too high.

Slide 6: Prepare the environment:

Think about limiting the number of appliances that are on at home. For instance try not to have the TV, or radio on at the same time a s the washing machine if your child is sitting down to eat a meal or do a task.

Plan where and how to position your child in new or challenging environments, sometimes it helps a child to be first in the environment and allow others to come into the space,m gradually increasing the noise in the environment, this means your child is gradually desensitised to that situation.

Investigate autism friendly shopping, these are planned to have lights and sounds that are less challenging, they are also often less busy times of the day. There are also friendly sports events theatre/cinema events where sounds are less loud. Consider use of disability lanyards to make others aware that you child has additional needs.



Slide 7: Prepare your child

Use social stories to explain the sounds and to prepare your child for these experiences.

Use sensory the calming techniques of outlining and deep pressure squash as demonstrated in section two Deep pressure touch.

Slide 8: end of section:

This is the end of Part Six Auditory/hearing. Please go to Section seven. If you do not need any other sensory information please go to the sensory day section of this training, there are two options one for Early Years and Primary aged children and one for Secondary aged children. At the end of these sections you will be given information about how to access a follow up session.

# Part Seven: Proprioception

#### Slide one :

Welcome to Part seven of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams Sensory Training for Parents and Carers.

# Slide 2

Proprioception the first of our additional senses.

# Slide 3:

The proprioception receptors are located in joints and muscles. This sense tells us constantly what our bodies are doing and where each limb is in relation to our whole.



This sense is the 'you are here' point on the map, and enables us to understand how we are moving.

This sense also enables us to learn new motor skills, to refine and develop skills so that we can do any chosen activity. Feedback from our movements enables us to grade the amount of force, the speed and the duration of movements and in turn this enable us to be highly effective in doing skilled activity. Proprioception enables us to put our socks on, and to feed ourselves.

# Slide 4:

Heavy work' – using our muscles in a regular, predictable manner acts to calm our sensory systems, and can be used to calm us or to prepare us to cope better with challenging experiences and sensory situations. (show )

'Heavy work' – can be any activity that means we use muscle strength in a sustained way, this can include daily chores, such as making a bed, vacuuming, or carrying a heavy bag, to play activities such as bouncing on a trampoline, hanging off of playground bars, scooting on a scooter, row-the-boat type action games or using gym equipment like weights, theraband or punch-bags.(show)

# Slide 5: prone photo

Here we see the son, positioned over the gym ball, he is taking his bodyweight through his hands whilst moving the jigsaw pieces, he has to shift his weight when he swaps hands, this gives lots of proprioceptive feedback through his hands, elbows, the large shoulder joints and muscles and through his back and neck. All of this feedback acts to organise and calm him, making it easier for him to do the task, and helping him to maintain his concentration and engagement. Note when using this activity to calm movement or rolling over the ball is kept to the minimum, it is important that this is a power activity, as this gives the strongest feedback through the proprioceptive system.

# Slide 6:

'Heavy work' can be used throughout your child's day, both at home and in school.

For the walk to school provide a rucksack that weighs 10% of your child's body weight – you can fill milk containers with water, marking the sides to show the filllevel to make this easy to do. Your child can carry the bag to and from school. This weight should only be carried by your child for 20 minutes, but if it is water in containers, you can throw this away. It is important to allow your child a break, without the weight for q minimum of 20 minutes. You can fill the containers again when needed and ask your child to carry them again for another 20 minutes. These timings mean that your child doesn't get used to the sensory feedback, and makes sure that the weight always impacts to help your child.

Your child can help push the trolley in the supermarket, or carry the shopping home.

# <u>Slide 7:</u>

In school:

School can use the rucksack, but they can also have a box or a bag that needs to be moved around school as an important task, for example the child can be the school secretaries monitor, and throughout the day carries a box to or from the school office to the class room, the box should weigh 10% of the child's body weight, this regular loading will help maintain the child in a 'just right' calm state.

The child can also help put resources out in the class room or gym, helping to move tables, mats or resources.

They can hold the heavy school doors open for their class mates when they move around the school.

Using climbing walls, drumming, cycling, digging or sweeping can also be effective ways of giving the child 'heavy work'.

Drinking through a sports bottle or straw, or drinking thicker liquids like milk shakes or juiced fruit and vegetables are calming.

# Slide 8:

See the Touch/tactile section as many of the techniques described there also give proprioceptive feedback and should be used in the same way.

Use the following:

- Outlining
- <u>Squash</u>
- Side by side squash
- <u>Cushion squash</u>

# Slide 9: End of Part Seven

This is the end of Part Seven, Proprioception. Please go to Part Eight Vestibular. If you do not need any other sensory information please go to the sensory day section of this training, there are two options one for Early Years and Primary aged children and one for Secondary aged children. At the end of these sections you will be given information about how to access a follow up session.

# Part Eight Vestibular:

# <u>Slide 1</u>

Welcome to Part Eight of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams Sensory Training for Parents and Carers.

# Slide 2:

Vestibular sense is the awareness of movement and balance.

# Slide 3:

The vestibular receptors are situated in our inner ear. The receptors tell us about the position and angle of our head in relation to the fixed force of gravity. This allow us to be able to reposition our bodies during and after movement.

There are two types of receptors:

one type of receptor informs us about linear movements, such as moving forwards/backwards, up/down, or side-to-side. This sensory feedback tends to be organising and calming to the body. We get this input when we jump on a trampoline, ride a bike, or move with purposeful and rhythmical movements.

This sense is important for enabling us to keep our eyes still whilst we are moving, and this is important when we are learning how to read, enabling us to follow a sentence across a page or on the white board, and to relocate our vision when we are copying from the board to a text

# Slide 4:

The second type of receptor, tells us when our heads are tilted or moving in circular or rotational movements, such as doing gymnastics, handstands, leaning over the arm of a chair, or cockling on two legs of a chair and being wobbly. This receptor is also triggered by fast movements and sudden changes of direction when playing, this sensory feedback is alerting or sometimes disorganising to our sense of well-being. Children can get 'high' with this type of sensory activity.

These receptors can make us feel dizzy when we move, if a child moves a lot but does not feel dizziness, this sense is under-responsive. Some children will be over – responsive to movement and avoid it.

# Slide 5:

Smooth, regular rhythmical movements are calming, such as slow rocking, or swinging.(show)

Slow movements alongside 'heavy work' proprioception activities are also always calming and organising.

#### Slide 6: Row the boat

Here we see Mum and son playing row the boat, Mum controls the speed of the movement to keep it predictable and steady for calming, or if needing to alert her son, she can use movements that are less predictable and of different force and speed. In this photo, Mum is using the pull through her arms to give some proprioceptive feedback to calm and organise her sons responses to the movement. She could add more proprioception if her legs were laying over her sons legs.

For older children this type of activity can be done using theraband or by using gym equipment such as rowing machines or stair climbers.

# Slide 7 rolling over a gym ball:

Here we see the son rolling over a gym ball to place pieces of the puzzle, Mum is close to make sure movements don't become over fast which will disorganise him. His wide leg position shows that there is movement and control. He is taking weight through his right hand and this is providing proprioception which will help to organise and calm.

#### Slide 8 Bouncing:

Here we see the son, bouncing on the gym ball, he is maintaining a steady bounce pace, and Mum is helping to keep this regular by giving instructions to 'go' or 'stop'.

This activity might need to be followed by proprioceptive heavy work to keep the son well organised.

Bouncing can also take place on a trampoline.

#### Slide 9 Techniques Caution:

Monitor and be vigilant:

You will need to monitor responses of children during vestibular activity. Children's ability to organise activity can change quickly, too much and the child can become



over stimulated quickly and then behaviour becomes chaotic. Be vigilant and control the amount of movement activity your child does at any time, use the techniques in Tactile touch and Proprioception parts 2 and 7 of this training to support your child to be more organised. Time limit activity to get the best fit for your child.

#### Slide 10: Introducing new Techniques

Introduce any new technique at a quiet time for your child.

If your child is able to understand, talk about the plan and agree how to practise this.

Many techniques will need to be familiar before the child can respond by calming.

#### Slide 11: End of Part Eight

Please go to Part Nine Interoception If you do not need any other senses information Please see the sensory day section

#### Part Nine. Interoception

#### Slide 1:

Welcome to Part Nine of the Derbyshire Health care NHS Foundation Trust's Community Paediatric Occupational Therapy teams 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:

The 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 devises 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 see the sensory day section.

# The Sensory Day Timetable:

#### Slide 2:

You can now chose a sensory day timetable to give you ideas about how to manage your child's day, there are two samples available one for early years and primary aged children, one for Secondary school aged children, select the one that is right for your child.

# Slide 3 Next Steps

You now need to try the techniques for 3-4 months.

You can then contact our service and be offered the chance to attend a video group discussion. Places are limited. We are not able to offer individual assessments, the groups are for parents/cares only, there will be two places per child.

In order to make sure that the groups support specific needs you will be asked to complete a questionnaire you will then be invited to attend a group that meets your needs.

If the questionnaire is not completed we will not be able to offer you an invite to a group.

Groups will be for a maximum of 2 hours.