

# WELCOME

9:30-10am: Arrival and Coffee

10am-12pm: Sensory Needs Workshop

12-12:30pm: Lunch

12:30-1:30pm: Dr Tina Axup – Introduction to the Educational Psychology Service

## Before we start...

- No fire drill planned, meeting point is front of the school
- Toilets at reception
- Mobile phones on silent please
- Respect each others views and stories
- We learn from each other
- No question, is a silly question
- It is an information workshop, not a parenting course.
- You are the expert in your child.
- To provide you with more tools to the toolbox you already have.
- We will not discuss individual cases but please ask questions and add comments along the way.

# Sensory Needs & Strategies



## We Will Cover...

- The sensory systems
- How stimuli is processed
- Sensory processing patterns
- Strategies

## The Sensory Systems

'Sensory' relates to sensations we register using different parts of the human body.

The 'stimuli' is the thing(s) or event(s) that cause the sensory response

**What are the 8 sensory systems that are continually transmitting or receiving sensory information?**

## The Sensory Systems

- **Hearing** - Allow us to hear someone talking to us, be aware of dangers and enjoy our favourite music and sounds. The intensity of sounds can also have an effect on our rhythm of body movement, either alerting or calming us, depending on frequency.
- **Taste & Smell** - Chemical receptors in the tongue are closely entwined with smell system and provide us with information about different types of taste. It is linked closely with the tactile system and our mouth is able to determine the temperature, texture and movement of food or other objects in our oral cavity.
- **Touch** -The tactile system is designed to alert us to threats, to give our body boundaries and (when combined with proprioceptive system) give us body image and self-awareness. It is located in the nerves supplying our skin – these nerves send information to the brain. It exists all over body, including mouth.



hearing



taste



smell



touch

## The Sensory Systems

- **Sight** - Provides us with the ability to see. Difficulties with visual perception of depth can make navigating stairs and curbs can be tricky.
- **Movement** - Responsible for detecting movement and how our body reacts against gravity. Provides sense of balance, orientates us within our environment and affects gross and fine motor skills. It is needed for good stability and balance.
- **Body Positioning** - Allows us to know where our body parts are without looking at them. Provides us with a sense of body awareness, this includes a person's ability to place body parts in a position in space and to judge the direction and pressure of movement at an unconscious level.



## The Sensory Systems

### What is INTEROCEPTION?

**Interoception** is a sense that allows us to notice internal body signals like a growling stomach, racing heart, tense muscles or full bladder. When we notice these body signals our brain uses them as clues to our emotions.

Interoception helps us to feel many important emotions including:

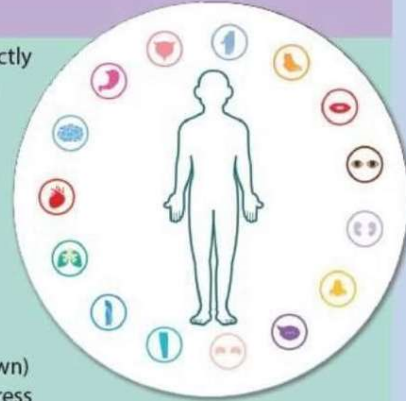
Hunger	Pain	Sleepiness	Anxiety	Calm
Fullness	Illness	Need for Bathroom	Distraction	Boredom
Thirst	Body Temperature	Anger	Focus	Sadness

# The Sensory Systems

## Differences in Interoception

are very common and can lead to challenges in identifying exactly how one feels. Common signs of interoception differences can include **difficulty** with one or more of the following:

- Recognizing when hungry, full or thirsty
- Toilet training (daytime and/or night time)
- Identifying when sleepy
- Overly sensitive or not sensitive enough to pain
- Pinpointing symptoms of illness
- Identifying emotions in self
- Identifying emotions in others
- Recognizing building signs of distress (before a full meltdown)
- Independently using coping strategies during times of distress



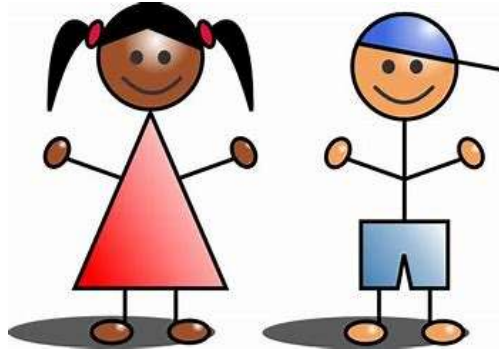
# The Sensory Systems

How well do I know myself?

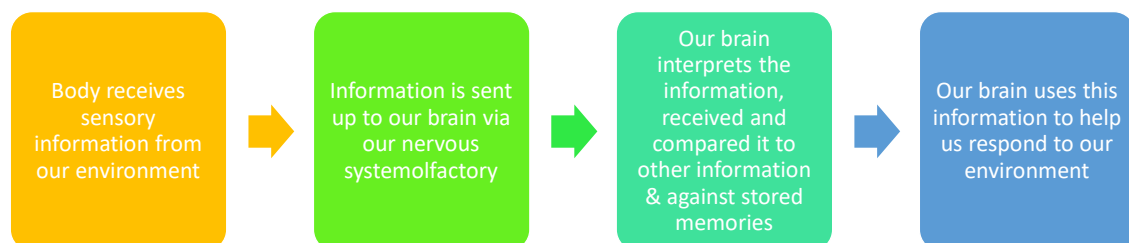


# The Sensory Systems

How about our children?





# Sensory Processing



## Sensory Processing

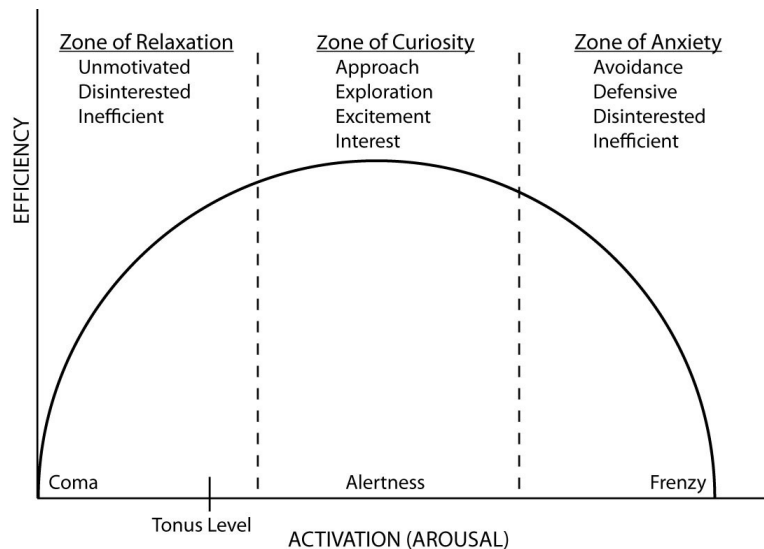
- If a person struggles to modulate incoming stimuli they cannot regulate/organise the incoming information they cannot:
  - Adapt to changes in environment
  - Have arousal or attention levels appropriate to the task
  - Block out irrelevant stimulation and attend to relevant stimulation
  - Respond appropriately and in proportion
- The brain uses past memories to process sensory information – this can mean children respond to stimuli we may not notice (i.e. smells, sounds) due to past negative experiences in a way that may appear extreme or unhealthy.

## Sensory Processing

	Passive response	Active response
 <b>High threshold to stimuli</b>	<b>Poor Registration pattern:</b> Misses cues, appears half asleep or passive, does not react to activities, takes longer to react	<b>Sensory Seeking pattern:</b> Attempts to gain sensations to increase arousal, high levels of energy, accident prone, or enjoys bumping and banging
 <b>Low threshold to stimuli</b>	<b>Sensitivity pattern:</b> Over sensitive to noise, may get agitated very easily around certain sensations.	<b>Avoiding pattern:</b> Avoids or escapes activities, in order to self calm and therefore child attempts to control their environment proactively as a means to limit sensory input.

<https://www.youtube.com/watch?v=D1G5ssZIVUw>

## The 'Just Right' State



## Sensory Diet - Strategies

- Sensory diets can be used for all children and can be a helpful way of giving access to sensory feedback which is alerting or calming.
- It can regulate the senses for the tasks and expectations at different times of the day.
- The idea is to provide regular access to a certain types of sensory stimulus, so that it may reduce harmful behaviours, help prevent sensory overload, and help a child calm or more alert and so access daily life to learn and be involved. Sensory diets can be used for all children and can be a helpful way of giving access to sensory feedback which is alerting or calming.



## Strategies – Poor Registration (passive response)

- Vestibular (movement) activities: dancing to music; see-saws/slides/playground swing; hammock swings; rocking chairs; trampolines; swimming
- Proprioceptive (body positioning) activities: fidget toys; drink through a straw; use of a gym/peanut ball; deep pressure (squeezing) activities; blowing bubbles; weighted items
- Taste: use strong flavoured, hot/cold temperature food, crunchy foods
- Smell: smells that increase arousal – this different for each child. Could include use of oil diffusers, a comforter with a familiar smell (i.e. mum's perfume, shampoo etc)
- Sight: Increasing lighting, natural daylight, brighter colours
- Touch: Deep pressure, 'people sandwich', weighted backpack or cap



## Strategies – Seeking (active response)

### Proactively

- Toys that can be pulled, chewed or stretched
- Crunchy/chewy foods
- Use of a 'chewy'
- Deep pressure
- Wobble cushion
- Fidget toys
- Regular movement breaks
- Sensory box

### If child becomes over-aroused:

- Use deep pressure
- Low slow voice
- Minimise gestures
- Minimise movement



## Strategies – Sensitive (passive response)

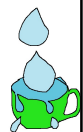
- Ear defenders (incl listen to calming music)
- Minimise visual stimulation i.e. lights, busy environment
- Using proprioceptive activities to calm
- Cut out labels in clothing
- Weighted items to help feel more grounded
- Avoid unexpected touch
- Use firm touch if required
- Consider proximity to peers
- Develop predictable routines



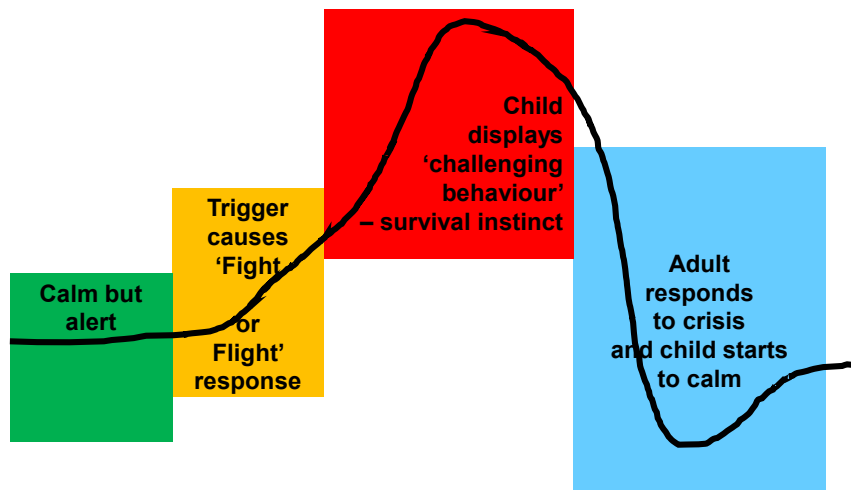
## Strategies – Avoiding (active response)

- Start where your child is, so allowing their need to avoid sensory input.
- Try calming activities to reduce their anxiety so they are then more tolerant of the sensory input they'd typically avoid
- When in a situation they are seeking to avoid, look for ways of helping them calm or distract them when things become stressful i.e. a smell they might like on a comforter.
- Small steps to help them maybe cope more with things they need to cope with
- Using physical strategies like dancing, walking, swinging, rocking, jumping, running, bath-time can help them tolerant more unpleasant sensory experiences

**This is true when a child is hypersensitive to any stimuli – whether they have an active or passive response**



## When to use Sensory Strategies



Sensory strategies are to be used **proactively**, **actively** and **reactively**. Different strategies may be successful at different points of your child's arousal curve.

## When to use Sensory Strategies

- Sensory strategies need to be used on a regular basis to help reduce sensory overload, which can increase anxiety, stress and therefore 'challenging behaviour'
- Children might need to try a few different strategies before they find the right one(s) for them
- Never try too many things at once
- What strategies your child benefits from at school may be different than at home
- It takes time, your child may not realise how a strategy is going to help them or they might resist it.

## Resources

- Sensory Strategies – by Corinna Laurie (National Autistic Society)
- The Pocket Occupational Therapist for Families of children with Special Needs by Cara Koscinski (Jessica Kingsley Publishers)
- No Longer a Secret – Unique Common sense Strategies for Children with Sensory or Motor challenges by Doreit S. Bialer and Lucy Jane Miller (Sensory World)
- A child's book to stay awesome and in control - Lauren Bruckner
- The Reason I Jump – Naoki Higashida

