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Sensory Processing Challenges in Children

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What we are going to cover

- The role of OT – linking it with the children you work with
- Sensory processing
 - What is it?
 - How does it impacts on every day activities
 - What's the link?
- Strategies to support the families

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What is Occupational Therapy?



Going to the park Clearing up after play Getting dressed Scribbling and drawing Eating and drinking

Listening to stories
Singing songs with actions Playing with toys Sleeping
Having a bath Playing outside

Children and Families you work with



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How do we respond to stress?



- One off experiences – tend to recover
- Pro-longed – impacts on regulation, attention behavior and function

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





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Our Senses

Touch 	Touch response to shape, size, texture, temp	Taste 	Taste (salty, spicy, bitter, sweet)
Hearing 	Hearing in terms of loudness, direction, interpretation	Vestibular 	Position and movement in relation to gravity
Vision 	Seeing in terms of brightness, shapes, interpretation	Proprioception 	Joint and muscle sensation (pressure and force)
Smell 	Smells (pleasant, unpleasant, dangerous)	Interoception 	Sensation originating in the body (pain, temp, itch, hunger, thirst, stomach ache...)


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What do our senses do?








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INFORM




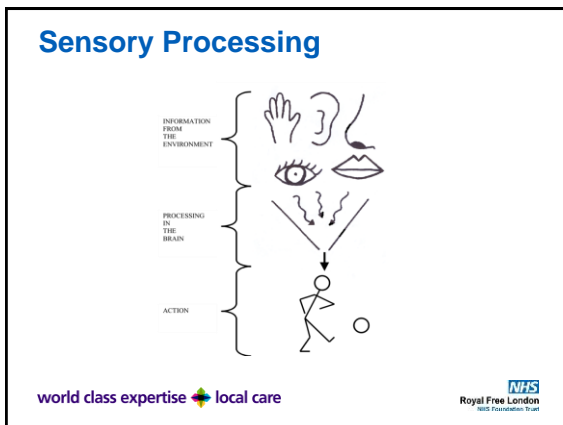
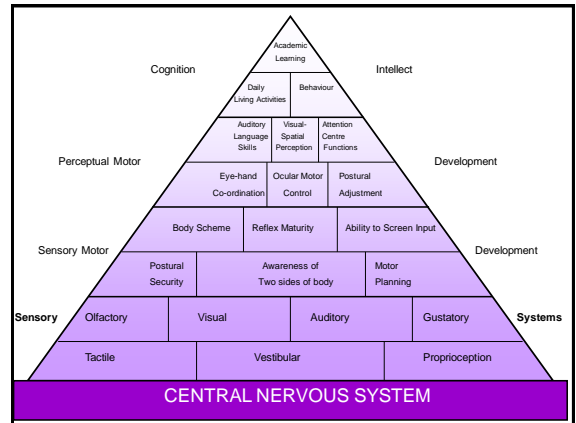
PROTECT




REGULATE

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- ### Sensory Processing
- It is the ability to take in, sort, process and respond to sensory input
 - A difficulty can occur at any of these stages
 - Inappropriate or problematic responses may be observed in
 - Motor actions
 - Behaviour
 - Attention
- **Only a problem if /when it causes significant difficulties with daily routines and tasks/participation****
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Three main areas of sensory difficulties

1. Sensory Discrimination
2. Sensory Modulation
3. Sensory-Based Movement Difficulties

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Sensory Discrimination

- Ability to interpret the temporal and spatial qualities of sensation
- Provides the individual with clear, rapid and precise details such as quality, quantity, location, size and shape
- Helps us to differentiate between similar stimuli

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Activity



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Sensory Based Motor Disorder

- Relates to postural skills and motor coordination skills
- It is not about regulating your response to sensory stimuli.
- But sensory based motor difficulties can have a HUGE impact on your regulation!



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Sensory Modulation

- The ability to organise the degree and intensity and nature of response to sensory input in a graded and adaptive manner
- **Under / over responsiveness** to sensory input from the body or the environment
- Relates to **self-regulation**

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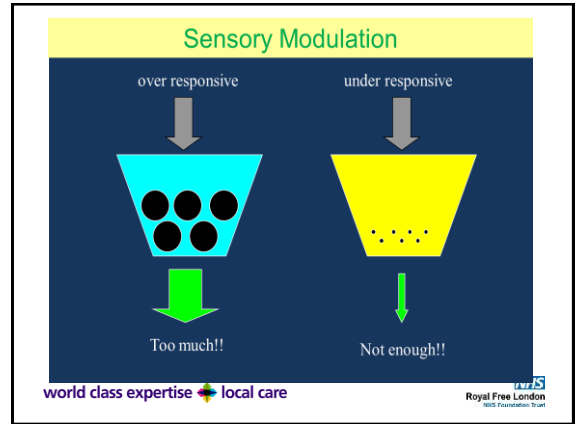
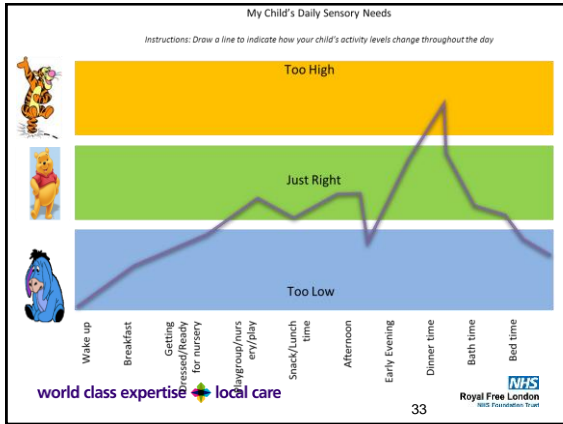

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What is self regulation?

- **Monitoring** and **controlling** one's own feelings, emotions and behaviour
- Relies the **ability to block out irrelevant stimuli, control impulses** and **persist** in tasks
- Sensory processing at it's foundation → take in cues from within our body and from the environment, process them accurately, and prioritise what to focus on in order to perform daily activities.

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Sensory Over Responsivity	Sensory Under Responsivity	Sensory Craving
<ul style="list-style-type: none"> Very reactive Experience a sense of overload Sensory information can be experienced as painful and scary, triggering a fight or flight reaction 	<ul style="list-style-type: none"> Process sensory information slowly They require increased frequency or intensity Look like they have a poor inner drive and desire to play. 	<ul style="list-style-type: none"> Become more disorganised with sensory input. Display extreme over arousal with constant movement In your face and in your space!!!!

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Sensory sensitivities...

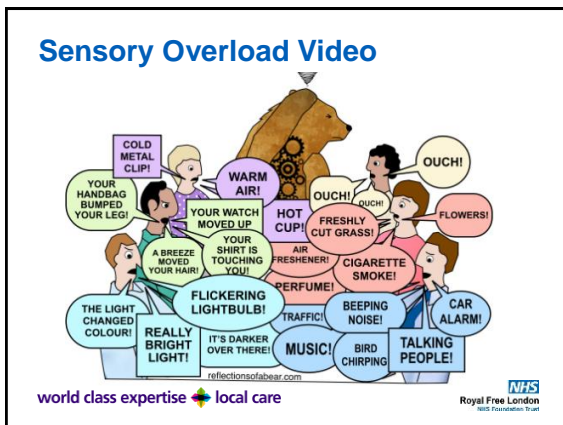
...tend to be more severe in early years, may become milder over time, but **do not go away**.

The Haircutting Kit for Sensory-Sensitive Kids

Sensitive Sam: Sam's sensory adventures have a happy ending!

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Sensory strategies

- If we're too **high** - we want to **calm** down

- If we're too **low** - we want to be more **alert**

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Strategies

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1. Information sharing & understanding individual needs

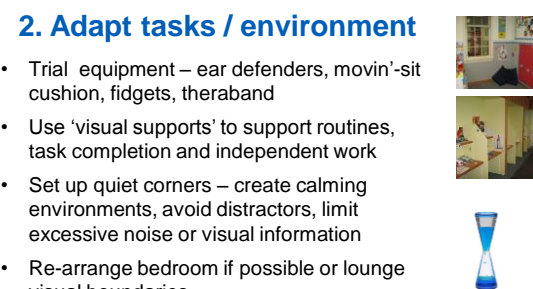


- Be a detective: explore the causes of the observed behaviour
- If you suspect it is linked to a 'sensory' cause – share information with school and parents, same presentation in lots of different situations?
- Problem-solve, decide what strategies to try and in which contexts. How long for? Document response from child. Has it worked?

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2. Adapt tasks / environment

- Trial equipment – ear defenders, movin'-sit cushion, fidgets, theraband
- Use 'visual supports' to support routines, task completion and independent work
- Set up quiet corners – create calming environments, avoid distractors, limit excessive noise or visual information
- Re-arrange bedroom if possible or lounge visual boundaries

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3. Include sensory input into daily routines



- Daily routines?
 - Morning
 - After school
 - Bath time
 - Bed time
 - Weekends
- Use calming/arousing activities to assist with arousal levels of a child

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4. Use Behavioural Strategies

- Graded exposure to sensory stimuli
- Reinforcing strategies towards more acceptable behaviours, model desired behaviour
- Behaviour analysis and addressing triggers – ABC chart
- Reward charts






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5. Work on Self Regulation

How to maintain a *calm/alert state*?

- For older students with higher cognitive ability (and verbal ability) and insight to understand and explore their own sensory responses
- The Alert Programme@ <https://www.alertprogram.com>
- Zones of Regulation®

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A bit more on self regulation...

- Sensory strategies
- Cognitive strategies
 - Mindfulness
 - Stop-Opt-Do
 - Goal-Plan-Do-Check
- Social thinking strategies

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What else helps?

- Deep pressure
- Active/self-directed
- Vestibular
 - Linear = Calming
 - Rotation = Alerting

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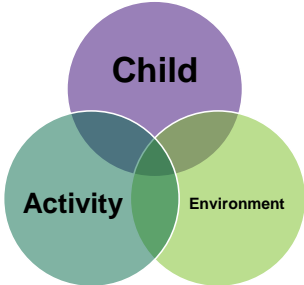
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Problem Solving

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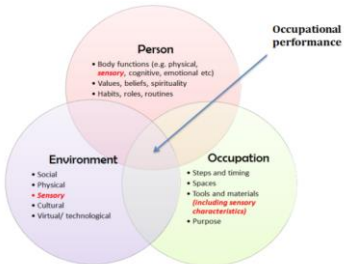
How do we problem solve?



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Where does sensory fit in?



Person

- Body functions (e.g. physical, sensory, cognitive, emotional etc)
- Values, beliefs, spirituality
- Habits, roles, routines

Environment


- Social
- Physical
- Sensory
- Cultural
- Virtual/ technological


Occupation

- Steps and timing
- Spaces
- Tools and materials (including sensory characteristics)
- Purpose

Occupational performance

Figure 1 – Factors to consider within an occupational therapy assessment (adapted from Fisher, 2013; Law et al., 1998)

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What is the problem activity?

Activity: **Putting on socks**



Sensory aspects ?

- Touch
- Hearing
- Vision
- Taste
- Smell
- Vestibular
- Proprioception
- Interoception

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Child

- I hate having my hair cut, washed or brushed
- I shield my eyes from bright lights or stare at them
- I can be oversensitive to loud sounds such as blenders or car horns
- I like to chew on different materials and textiles
- I can be very selective with food and resist to certain textures or smell
- I have poor fine motor skills such as hand writing, cutting or fastening buttons
- I can touch others too soft or too hard
- I like to smell people, food or objects
- I cannot tolerate specific textiles or tags on my clothing
- I have difficulty dressing myself
- I can detest being tickled and cuddled or I can adore being squeezed and massaged
- I have poor gross motor skills such as riding a bike or climbing a stairway
- I can be clumsy and stumble over things
- I like to wear the same shoes regardless of the weather or I always want to walk barefoot
- I can walk on my tiptoes

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What's going on in the environment?

Environment

- **Physical** environment – where is it taking place?
- **Temporal** environment – what time? Time pressures?
- **Social** environment – who else is there?
- **Cultural** environment – what is expected?

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Your turn

Child

Activity

Environment

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KEY TAKE AWAY

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