

Supporting children with Sensory Processing difficulties



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Introduction

This booklet has been designed as a guide to support early years practitioners to understand, identify and support children who may have sensory processing difficulties.

It is important that if you identify a child as having a sensory processing difficulty that you support the child's parents to speak with their GP to get a referral to an Occupational Therapist.

The activities and suggestions given within the booklet are designed to be inclusive and can be done with all children.

This booklet has not been designed to replace the advice given by an Occupational therapist and if you are working with a child who is being seen by an Occupational therapist then it is vital that you follow the advice and recommendations that they provide.

What are the seven senses?

There are seven senses in the human body. These are:

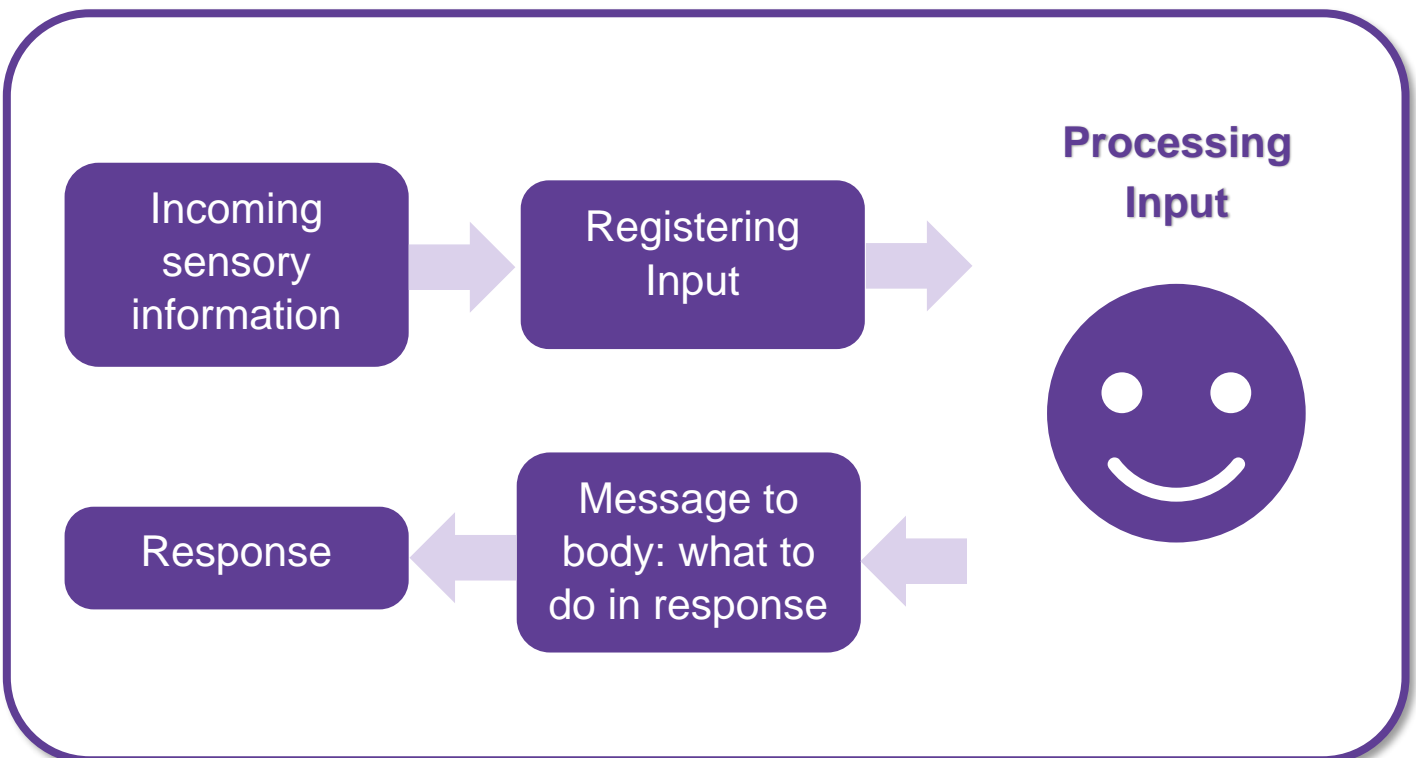
- Tactile- sense of touch, discriminating pressure, temperature and pain
- Taste (gustation) - what is detected by the taste cells, located on the front and back of the tongue and on the sides, back and roof of the mouth
- Smell (olfactory) - ability of perceiving odours or scents by means of the organs in the nose
- Vision- seeing what is ahead and to the side in our immediate environment
- Auditory- hearing and locating sounds
- Proprioception- sense of where our body parts are
- Vestibular- sense of movement and balance

We use all of these senses to react and respond to the world around us and to help us to deal with different situations.

What is Sensory Processing?

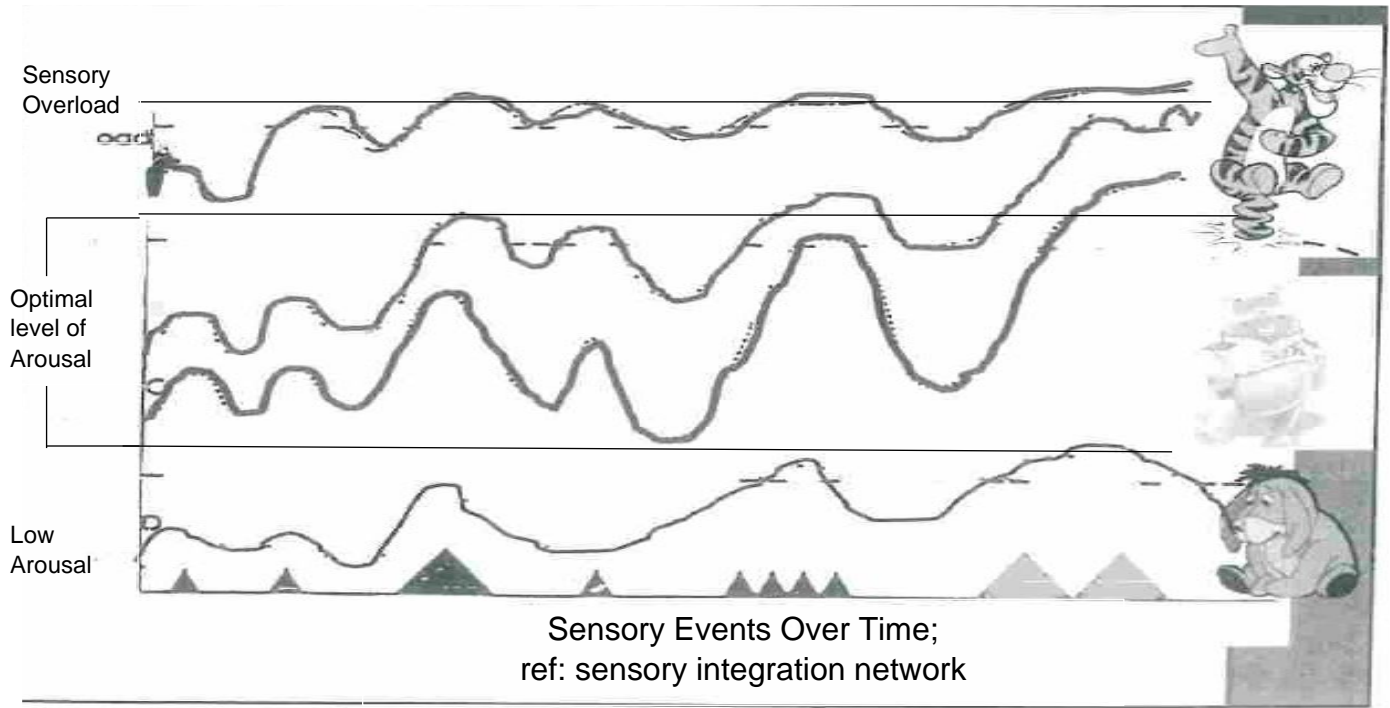
The term “Sensory Processing” represents how we relate all the information provided by our senses within our bodies and from our surroundings.

This information is accepted, sorted and linked to offer us an understanding of who we are, where we are and what is taking place within our surroundings.



When our senses are combined properly we are then able to react appropriately to the feelings within. For example, we know to put on appropriate clothing in cold weather or move away from a source of heat to avoid harm, etc.

For this to happen we need to be in a 'Just Right' state and as practitioners we need to help children with sensory processing difficulties to reach this state as depending on their sensory need they could be over or under stimulated, and certain activities can simulate or calm children.



What happens when a child experiences sensory processing differently?

Children with sensory processing challenges may find it difficult to recognise what is happening both within and outside of their own bodies. This is because the sensory information their body is trying to process may not be correct.

Take a moment to think about how you may react within a typical class room environment where:

- the paint colour and/or art work constantly hold your attention because your brain doesn't convey that this has been seen before;
- any child nearby makes you highly anxious that one of them may graze past you, as this could be uncomfortable and even painful.
- you are frustrated by and simply unable to put on a pair of socks with poor balance and hand-eye coordination. This is because your body cannot process all the information required to balance and manipulate your arms and legs where they need to be as you actually require continual movement to gain that additional feedback.

These challenges could be referred to simply as "defective wiring". The majority of adults can make independent choices and recognise their own sensory needs and preferences when appropriate.

Children with sensory processing difficulties will react, often inappropriately, to their instincts, they may struggle to express their thoughts, feelings and often be detached within the world in which they are growing.

It is therefore important that we are considerate to a child's individual needs and be able to support and offer these children specific support and interventions to enable them to feel more safe and secure.

Reference/source:

Leicestershire City Council: www.leicester.gov.uk/sensory-processing-early-years

These senses are the building blocks for all other skills we learn and use in life

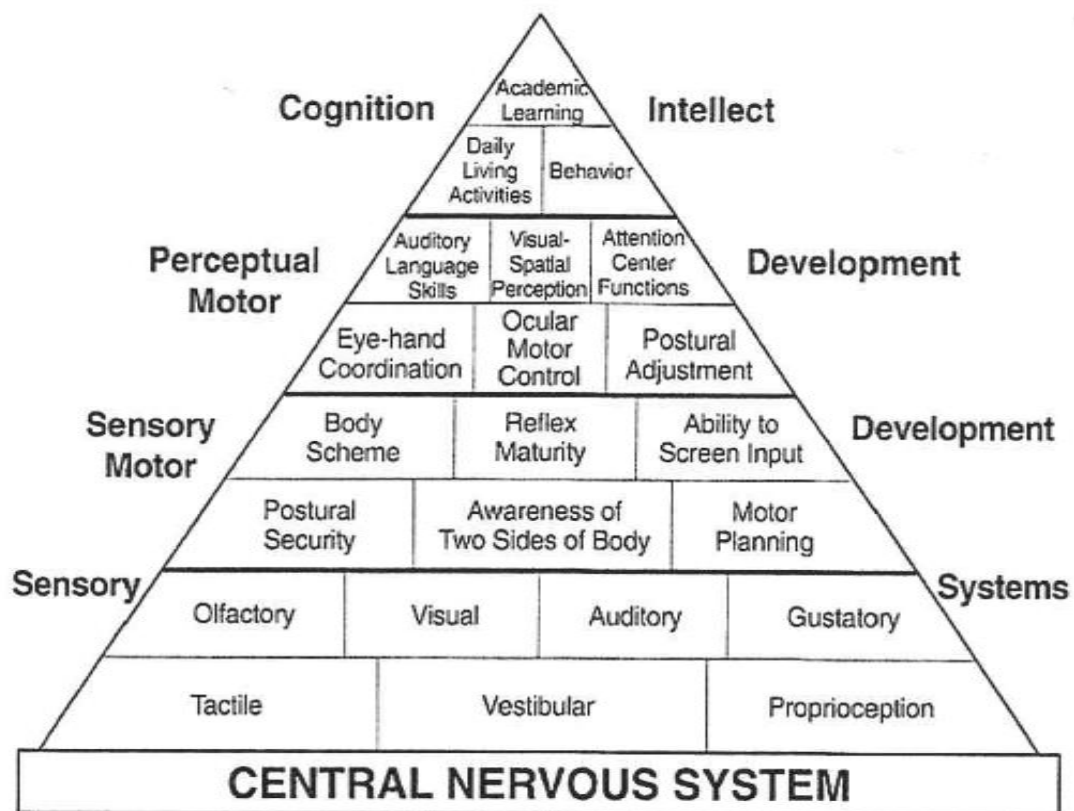


Figure 1-3.

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The seven senses are explained in this booklet, each sense has its own section which is divided into:

- A description of the sensory system.
- What happens when a child experiences this differently?
- Ways to help – suggestions on strategies/activities that may help.

Remember if a child is being seen by an Occupational Therapist then the setting must follow their advice and recommendations. This booklet is a guide and not a prescribed programme.

Tactile (touch)

The largest and most sensitive organ is the skin. Within our skin are receptors that enable us to respond to pain, temperature and light touch. These receptors will give us the information about how our skin feels and warn us about potential dangers to enable us to respond effectively.

There are two functions within the Tactile system:

The “Protective” Function

This is the information received through the skin regarding potential dangers, how it is processed and understood and our resulting response/reactions.

The “Discriminative” Function

This is the information received regarding the pressure applied to the skin. It is through touch that we gather the information around where and how we are positioned (space) and how we process that information to enable us to refine our gross and fine motor skills.



Remember, it is through “touch” that we are able to calm, feel comfortable and interact with both objects and people. For some children, they may experience a simple “touch” very differently but when applied appropriately it can assist a child to be alert, calm and ready to learn.

A common sensory challenge for a child is finding “touch” over stimulating/sensitive. As a result a child may demonstrate certain behaviours, such as:

- Becoming overly distressed when asked to take part within messy play activities, or applying simple avoidance tactics when noticing these specific activities within the environment.
- Does not like cuddles or close interaction, including being pushed or knocked as another brushes past.
- A simple “tickle” causes anxiety levels to rocket.
- A complete “melt down” that they or their clothes are wet or messy. Also, having the tiniest marks/mess on hands or face can cause the upmost distress.
- Clothing can be particularly distracting and/or annoying eg. tags itch or don’t sit right or simply isn’t tight fitting enough.
- When they fall over, receives a bump or scrape, will over react screaming and/or crying loudly and for sustained periods.
- Appear “scared” and are in a consistent state of anxiousness looking ready to run at any opportunity.
- Simple care giving experiences are distressing, such as nappy changes.
- Have a need to touch and/or move anything within their environment to feel “in control”.

The opposite of having over sensitive sensory “touch” challenges is being under sensitive to “touch”. Under sensitive sensory behaviours may appear as:

- Having no awareness of being messy or wet.
- Can be hurt, bruised or even bleeding but is unaware or concerned
- Doesn't need clothes to fit properly or to even wear them correctly eg. shoes on wrong feet, clothes on inside out, etc.
- Will wrap themselves tightly in blankets or squeeze into tight spaces.
- Holds onto people and resources tightly.
- Body temperature awareness – a child may get distressed when hot or cold, or crave hot/cold temperatures. Weather conditions may affect behaviours for fear of getting too hot/too cold when playing outside.
- Seek stimulation from rubbing certain materials over their faces/bodies and will actively seek these materials to gain this sensory feedback.

Ways to help with Tactile (touch)

How to help when a child is **over sensitive**

Incorporate familiar toys into messy play such as cars in paint or animals in shaving foam.

Initially allow the child to use tools, such as paintbrushes, lolly sticks etc. when taking part in messy play activities so they don't have to touch it.

Place cling film over messy activities or provide gloves for the child to wear.

Introduce textures slowly, starting with dry textured* resources and slowly introducing wet textured** resources (or vice versa depending on the child's aversion).

Play messy games such as water fights and splashing in the puddles where it is acceptable to get wet.

Show the child a solution if they get wet or messy such as they can swap their top for an identical one, dry it off on the radiator then change it back or have wet wipes easily accessible so that they can clean themselves if they are messy.

Build up fun interaction on a 1:1 with the child starting with no touching involved e.g. blowing bubbles. Use objects instead of 'skin to skin' contact e.g. roll a ball over their hand/body. Experiment with a variety of different touch for example try a firmer hug rather than light touch or vice versa.

Prior to activities that may lead to anxiety children may benefit from some heavy work activities such as pushing/pulling or deep touch/pressure as these are calming to the nervous system and may help to reduce inappropriate reactions.

When their peers are taking part in hand holding games use a 'no-pressure' approach and allow the child to watch from a distance. See if the child will tolerate you holding their sleeve or arm.

During circle times create a space using a mat or cushion at the edge of the group. When lining up allow them to stand at the end of a line.

Ensure changing mat is not cool and place a towel underneath the child when changing them. Determine if the child requires a firm or light touch and use single quick movements.

Discuss with parents if wearing a fitted vest or body stocking would help to comfort the child against irritating fabrics, some children feel more secure when they have tighter fitting under garments on such as a Lycra body suit

*Easy textures: with these the child has more control over contact.

Dry textures that fall away from your hand: dried rice, dry sand, dry lentils, or cotton wool.

Dry textures that mostly fall away but some particles or bits may stick to the hand: play dough, sterile compost, clean mud, or chalk.

**Difficult textures: with these the child has less control over contact.

Wet textures that stick to the hand but the child can easily break contact with (e.g. by lightly wiping): baked beans, wet sand, or sensitive shaving foam etc.

Wet textures that stick to the hand but the child has less control when breaking contact (e.g. by repeatedly wiping): yoghurt, finger-paint, wet mud, mashed potato or ice cream

How to help when a child is under sensitive

Provide as many tactile experiences as possible such as messy play (ice cubes, shaving foam, corn flour, lentils, play dough etc.)

Provide a feely box (a box with a sleeve attached to one) with different textures inside, rough, smooth, silkily.

Play hide and seek games such as hiding objects of different sizes and shapes in a bowl filled with things such as lentils, rice, sand pasta etc.

Start with familiar objects and textures then introduce new ones to increase exploration of other materials/objects.

Expose the child to different variations of touch e.g. light and firm, this will help the child to learn to identify the different sensations.

Play games that identify different body parts and use a firmer touch.

When the child is rubbing objects on face or body turn this motion into a game – imitate the child – gain their eye contact - moving game on gradually to “car down my leg and into the garage!”

Find similar sensations to use at other times, rubbing a special piece of fabric, toy or massager.

Provide weighted cushions or blankets for the child to use and create safe small spaces (such as cardboard boxes, pop up tents) that can be used at certain times by the child.

Support children who get easily hot or become distressed when cold using visual systems such as a social story or photo/symbol routines to highlight the right time to wear different clothes (jumper/coat).

Provide children with periods of time when they can access safe forms of heat e.g. Wheaties microwave teddy, play with warm spaghetti or warm water play.

Check the temperature, ensuring the child's work area is not near to warm pipes or a radiator or near a cold open window.

Give child a coping strategy to talk themselves through changes in temperature. “Coat on, hat on, car then heater on...”

Reference/source

Leicestershire City Council: www.leicester.gov.uk/sensory processing early years

Coventry Community Health service: www.covkidsot.co.uk/sensory processing disorder advice for schools

Taste and Smell



Our sense of smell and taste are closely connected. To explain this further, when we have a cold our sense of smell is often affected and food can taste quite different. This is because our brains are wired so we are able to react appropriately and smell travels directly to the part of our brains that control our emotions, memory and learning.

You will remember a bad smell or taste but it isn't distracting and you can move on. However, certain smells will still arouse a certain response eg. burning and we will act accordingly.

When a child experiences taste and smell differently they are either over or under sensitive to tastes and smells.

A child presenting as over sensitive to taste and smell will often display behaviours such as:

- During activities such as cooking, a child could be highly anxious and distracted and not willing to take part.
- Simple daily resources such as play dough may smell “differently” and the child will be unable to focus and engage.
- Finds certain foods difficult to chew or swallow and may result in a “gagging” reflex.
- Will respond adversely to or become fixated on certain foods, tastes or smells
- Simple care giving experiences are intolerable, such as teeth cleaning.

Subsequently, the opposite of over sensitivity is a child presenting with under sensitivity to taste and smell. These children will often display behaviours such as:

- Inappropriate exploration of smell, for example:
- Smells own faeces
- Smells toys before playing or may put objects up their nose
- Sniffs people and food
- Inappropriate exploration for taste, for example
- Will chew clothes – collars and cuffs
- Will “mouth” everything they touch
- May lick objects, food or people
- Excessively grinds teeth
- Dribbling sometimes uncontrollably and excessively
- Will seek strong flavours
- Does not know when to stop feeding by overfilling mouths or unaware when food is still in their mouths.
- Will bite others without reason or concern

Ways to help with Taste and Smell

How to help when a child is **over sensitive**

Regularly play smell games, where the child can learn to smell individual pieces of food and label them. This may help them to remember the different smells.

Prior to food being prepared or served give a visual warning to the child to reduce anxiety

Allow them to have their favourite scent or an object that they like the smell of to block out the ‘offensive smell’

Approximately 10 minutes prior to mealtimes.

Engage in a calming activity such as gentle rocking, deep pressure massage over child's back or through the shoulders, gentle bouncing on a therapy ball.

Encourage the child to copy your movements as you both apply deep pressure with your fingers to your lips, cheeks, inside the mouth and around your gums and teeth. This can help to desensitize the child’s mouth and aims to prepare the mouth for new sensations.

Use a wet flannel and then a dry flannel to wipe around the child’s mouth to prepare and sensitise the mouth.

Playing fun imitation games such as “this is the way we...”

A visit to the dentist or referral to specialist dentist may be helpful to rule out any dental problems causing discomfort.

How to help when a child is under sensitive

Role model using a variety of methods, other than smell, to identify objects/resources such as by touch/texture/shape.

Allow children to smell different fragrances on large pieces of fabric or use scratch and sniff books demonstrating the appropriate distance to hold things when smelling them.

Replace the desire to smell own faeces (at toilet/nappy changing) by allowing them to hold a ball of strong smelling play-dough or a fragrant washable toy

Begin to teach the child to explore items/objects through touching with their hands rather than their mouths.

Provide a 'chew toy' for children who constantly need to chew clothing/resources or bite others
If a child licks others try diverting the child, offer different way of identifying people around them through touch or smell to reduce this.

Encourage the child to sniff adult's wrists often this helps to identify the person better due to fragrances worn. It is also more appropriate to sniff here!

Provide a chew box which could contain crunchy foods such as carrot or a chew toy to be used if they feel the need to bite.

If a child has a preference for biting, encourage people to approach the child slowly from the front, ensuring they do not touch the child as they may be experiencing too much overload from the adult e.g. touch, lack of space as well as demand

Use a mirror to show child that they have a piece of food in their mouth as often children need to see something to understand it is there.

Stimulate the mouth by playing lots of games where the child is encouraged to blow, suck and swallow, such as blow bubbles, whistles, sucking a straw, and drinking thick shakes and smoothies through a straw.

Remember the child could simply be at the exploratory stage of their play development and like very young children are exploring objects through their mouths.

However chewing can help with anxiety and can help calm down a child and when overstimulated a child with special needs may feel the need to bite or chew to help regain balance.

Dribbling could be a sign of hypo-sensitivity or oral dyspraxia so it is best to liaise with the child's Speech and Language Therapist (SALT) to eliminate a possible diagnosis. A speech and language therapist will also offer advice and guidance for children experiences issue around food.

Over filling of the mouth may be a sign of hypo-sensitivity in the mouth, where a child simply cannot sense their mouth has food in it until it's packed full.

If the child is grinding their teeth ensure a visit to the dentist to check for any dental problems, as a referral to a special dentist may be required.

Reference/source

Leicestershire City Council: [www.leicester.gov.uk/sensory processing early years](http://www.leicester.gov.uk/sensory-processing-early-years)

Coventry Community Health service: [www.covkidsot.co.uk/sensory processing disorder advice for schools](http://www.covkidsot.co.uk/sensory-processing-disorder-advice-for-schools)

Vision



There are two facets of our visual system:

- **Eye Movements** - Our eye movements are controlled by muscles which enable us to focus, re-focus, follow, scan and fix on numerous points eg. books and moving targets etc.
- **Visual Processing** - Our brains select and respond to the visual stimuli that surrounds us, supporting us to process what we see and enabling us to concentrate and not be distracted. For example, selecting the right utensil within the cutlery drawer.

When a child experiences challenges with their vision, they may display behaviours, such as:

Eye Movements:

- Only able to focus on one part of an object and not the whole thing.
- “Tunnel” vision – not noticing those objects around them (peripheral vision).
- Finds it challenging scanning pictures on a page.
- Moving focus from a general area to a specific resource eg. room/weather to writing/drawing.
- Not being able to sustain eye contact
- Spatial awareness – challenge to judge distances, bumping into people, stepping on resources to move through area.
- Bring objects up close to their eyes or holding them away to the side (peripheral) – NOTE: this behaviour should also be assessed by Ophthalmologist to ensure the child does not have short sighted vision difficulties.

Visual Processing:

- Over stimulated by flashing lights
- Looks directly at particular lighting for sustained periods, alternatively covers their eyes to avoid lighting.
- Gets excited when able to see self on reflective surfaces/mirrors.
- May become agitated when lighting is altered – blinds being pulled down blocking sunlight and requiring artificial lighting or cloud movement over sun

Ways to help with Vision

How to help with eye movement difficulties

Provide a low distraction area for focused/adult led activities by separating a quiet space with a divider (such as a folding clothes drier) covered in plain fabric, placing plain fabric over 'busy' resources, large box (opened out) or a pop up tent.

Avoid books with busy backgrounds by creating simple picture books that have one image on a page. If using a now and next white board ensure marks are completely erased before writing/drawing.

Some children find holding toys closely to their eye helps them to filter out any irrelevant information and focus; support by modelling and encouraging them to gradually move the object/item further back.

A child may use their peripheral vision in the same way, as this particular angle can provide them with a clearer image. Model and gently encourage them to focus on the bigger picture without causing too much overload of information.

If the child is holding objects to their eye ensure that they are not suffering from short sighted vision by asking their parent to take them to the opticians.

How to help with visual processing

Use a large umbrella or pop up tent to create relaxing spaces where overhead lights are less visible.

Ensure any laminated visuals are made using matt laminating pouches as some children can get distracted by the reflection on the card rather than focusing on the picture/symbol.

Fix pictures/symbols to strong card or a board which will help to reduce flicking of the card and enable the child to focus on the information being provided.

Allow periods of sensory play using fibre-optic lights and mirror play ensuring the activity is time limited to reduce over stimulation.

Only use flashing light toys for short periods as a motivator/reward.

Avoid strobe lighting, especially those that flicker. Sensory rooms are useful and often relaxing for children that stare at lights. Interaction using switches and voice activated light boards can be useful to encourage less solitary play.

Have the child sit in front of the adult at carpet times to help them to focus and have carpet session take place in an area with minimal distractions or bright displays.

Try placing cardboard around the sides of the table to create an enclosed space during adult led activities to help the child to focus on the activity and not be distracted by what is going on around them.

Avoid sitting the child by a window. Fitting a blind to windows may help the child to feel more in control of sunlight/clouds

Reference/source

Leicestershire City Council: [www.leicester.gov.uk/sensory processing early years](http://www.leicester.gov.uk/sensory-processing-early-years)

Coventry Community Health service: [www.covkidsot.co.uk/sensory processing disorder advice for schools](http://www.covkidsot.co.uk/sensory-processing-disorder-advice-for-schools)

Auditory (Sound)

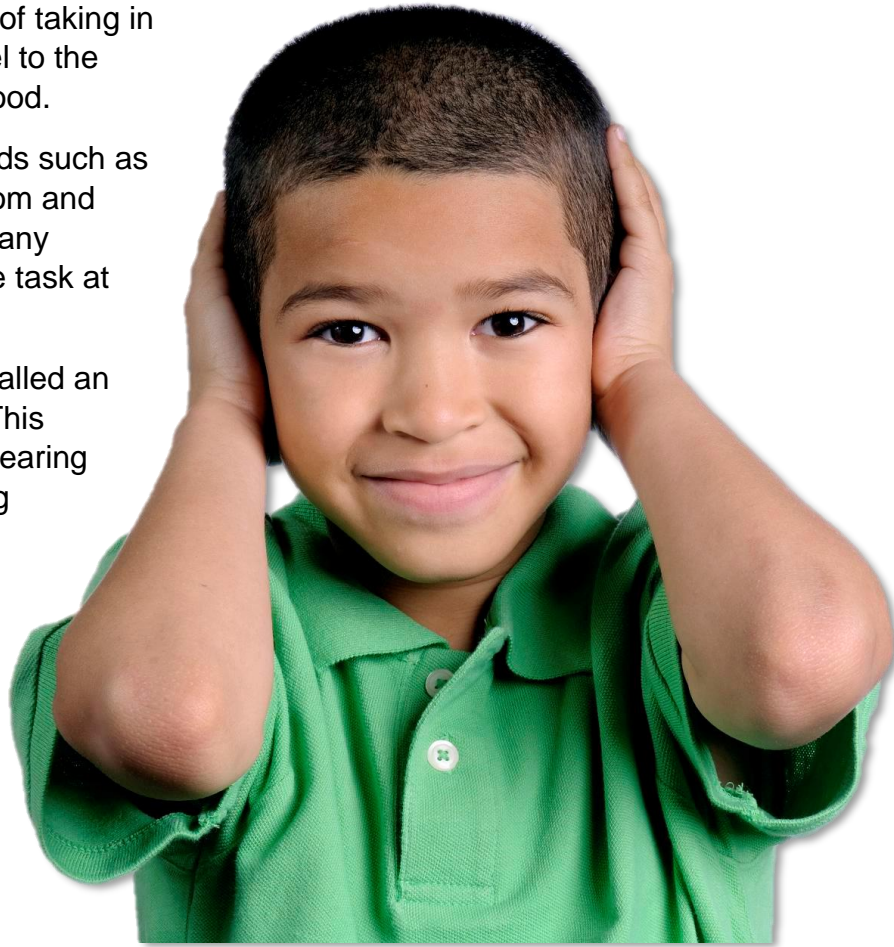
Auditory Processing is a natural process of taking in sound through the ear and having it travel to the language area of the brain to be understood.

We are able to distinguish between sounds such as loudness, pitch and where it is coming from and respond appropriately, often “tuning out” any unwanted sounds and concentrate on the task at hand.

To have a breakdown in this process is called an auditory processing disorder or “delay.” This deficit is present despite having normal hearing and it is advised to always seek a hearing assessment to rule out any medical concerns.

When a child has auditory processing difficulties they may present with being:

- over sensitive - making noise uncomfortable
or
- under responsive - not able to process sounds



If a child has difficulties with over sensitivity to noise, a child may display the following behaviours:

- Becomes highly anxious, covering ears, screaming and running away from sudden unexpected and loud noises eg. fire alarms, hand dryers, CD player
- Use own sounds to block out external noises eg. humming
- Background noises may be distracting – ambient music
- May have immediate and excessive reactions to sounds that are not easily heard or understood by others eg. screaming, hands over ears etc.
- May try to stop people talking or singing by placing hand over people’s mouths.

If a child has difficulties with being under responsive to sounds/noise, a child may display the following behaviours

- Despite the high volumes may hold the toy/radio to close to ear
- Does not respond to their own name
- Does not respond, appear away of sudden noises
- Likes repetitive sounds/noises
- Use own sounds such as humming in noisy situations

It should be recognised that some of these behaviours can also be observed within children that are over sensitive to noise/sounds. A child may not necessarily respond to their name as they are finding it difficult to distinguish sounds and voices within a noisy environment and may also using “humming” as a strategy to block out noises within the environment

Ways to help with Auditory

How to help when a child is **over sensitive to noise**

- Identify loud noises through visual and verbal labelling, which can help to reassure e.g. “wow it’s the balloon, look!”
- Support the child to visually identify the sound source, which will often ease anxiety. Over time see if the child will tolerate touching the sound source for example - if a radio turning it off and on.
- Provide opportunities for the child to watch an adult playing with noisy objects/resources and then support the child to play with them. Create fun games like blowing up the balloon and letting it go, releasing a small squeaky bit of air out, allowing the child to stay in control.
- When a noisy activity is taking place use a pop-up tent as a hide out, so they can still see what is happening but feel protected at the same time.
- Try to forewarn the child if there is going to be a loud noise (such as a bell or fire alarm) before they occur, using visual supports such as photos or symbol cue cards
- Remember being in tune with the child and verbally identifying the noise to the child as they occur can help to reassure them. If in walking distance take the child to the location of the noise, so the child can see where the noise is coming from or have a visual that you can show the child (such as of a fire engine) if this is not possible.
- Check that overhead strobe lighting isn’t buzzing as some children with over sensitivity or autism can hear very slight noises and become distracted or distressed by them.
- Create a low distraction/quiet area for the child to go to. The child may also benefit from wearing noise reducing headphones to help minimise noise around them.
- Prepare the child if more than one person will be talking/singing, ensuring that visual support is used, and try and keep groups numbers small.
- Ensure one adult at a time is talking to the child. If a child covers your mouth, stop talking straight away. Remember too many people singing/talking at once can cause confusion.
- Humming and covering ears is known as ‘blocking’. Auditory overload can mean that too many sounds and thoughts are happening at too fast a speed for the child to process.

How to help when a child is **under responsive to noise**

Often children who aren’t alarmed by a sudden loud noise are tuning into something they find far more interesting!

Reduce extraneous noise or wait until it has gone before speaking to the child.

Do not expect a child with these difficulties to be able to concentrate when there is a lot of noise around them. Reduce background noise where possible.

Try using an exaggerated expression and a higher tone to draw the child’s attention to a sudden loud noise.

Only speak to the child when they are facing you, get down to their level and use their name first to focus their attention

Reduce your language, give simple clear instructions (get coat) with visual support if needed. Start with one instruction and increase as the child is able to retain more information.

If the child has good language skills ask them to repeat the instruction to you. Remember that it can take 10 seconds for a child to process what has been said to them, and longer for some children.

If the child turns up the volume on toys encourage them to keep the toy at a safe distance so as not to damage the ear.

Eliminate hearing impairment by asking the parent to go to their GP for a referral to an audiologist

Reference/source

Leicestershire City Council: www.leicester.gov.uk/sensory processing early years.

Coventry Community Health service: www.covkidsot.co.uk/sensory processing disorder advice for schools

Movement



A child acquires movement through the development of the proprioceptive and vestibular system.

Integration of these systems can help children develop, not only within their fine and gross motor skills, but emotionally and socially as well. Their well-being can be greatly enhanced if they are given simple foundations in all areas during their early years.

Proprioception

This is our subconscious perception of movement and spatial orientation eg. knowing where our arms and legs are in space without looking, arising from stimuli within the body itself

Even when our bodies are resting, information is constantly being shared between our muscles and joints through our spinal cords to our brains. As a result, we can remain upright when sitting in a chair for example and supports us to manipulate and handle objects with the correct motion and force.

Vestibular

This is often referred to as the central sense. It is situated within our inner ears and manages our body movements.

The vestibular sense offers both physical and emotional well being when moving, routinely adjusting to prevent us falling over. It supports us against gravity and is activated when we move, eg. turn of head, keeping our position when bending, riding a bike or car and walking around. In finer details it helps us to maintain a seated position and concentration.

Our vestibular system reduces confusion when processing visual information. For example, when hanging upside down, the vestibular sense supports the child to understand that their environment hasn't just turned upside down too. The vestibular also supports us to steady our vision, eg. walking up moving stairs.

Information carried through our vestibular system communicates to the section of the brain that effects our concentration and excitement levels (sleep/wake cycles). This can be explained better around the example of holding a baby. In order to stimulate a baby you may tickle or bounce them, but to get them to sleep you may rock them in your arms, back and forth.

It is due to a lack of sufficient communication that complicates the processing of proprioceptive information. This is often when we may see a child looking for "sensory feedback". This may present as either hyperactivity or the complete opposite as having a lack of energy/enthusiasm to play, preferring to sit and watch.

If a child has proprioception/body sense challenges, they may display the following behaviours:

- A need to climb on, up and over things.
- Find negotiating space and obstacles challenging, often bumping into things, tripping over others or can even seek out opportunities to fall or bump themselves.
- Coordination difficulties – unable to negotiate body to move in and out of equipment.
- Seek out and prefer low impact style activities

- Have challenges within their fine motor skills
- Constantly fidgeting whilst sitting in chair or on a carpet, trying to make sense of their body position.
- Can be forceful when playing with toys or holding smaller objects eg. a pencil.
- Find it difficult to maintain a position for any length of time due to weaknesses within their arms and legs

Ways to help with Proprioception

How to help when a child has proprioception difficulties

When the child shows a desire to climb, divert the child to more appropriate resources and provide access to the outdoors or large play equipment

If the child seeks a rocking motion, practitioners can support by engaging the child in play such as 'row row row the boat' etc.

Use a large child sized ball (gym ball) and encourage child to lay across it. Encourage the child to push back and forth with feet on the floor to encourage rocking motion. Support the child by holding their hands if need be, but avoid pulling the. Using songs can help to keep them engaged.

Undertake regular 'Brain gym' activities

See appendix for additional activities.

What happens when a child experiences movement differently?

The Information that travels to the brain via the vestibular system, needs to be dealt with and our defensive reactions are subsequently aroused - this information is then assessed as to whether it is a threat/danger and whether we should we do it, not do it or be cautious?

A poor functioning vestibular system will prevent this normal reaction and being overly sensitive to movement may lead to exaggerated emotional responses compared to the actual potential threat. Some children with under sensitivity to movement may seek out further opportunities for movement feedback.

If a child has over sensitivity to movement, then they may display the following behaviours:

- Be more anxious around anything that is moving fast or makes them move fast, such as swings and slides, especially if they are not in control.
- Doesn't travel well and can get motion sick easily
- Walking downstairs and/or coming down a slide is highly threatening for them.
- If a child has under sensitivity to movement, they may display the following behaviours:
- Will seek out activities that move or make them move fast such as swings, slides and roundabouts.
- Likes to hang upside down where possible
- No awareness to danger or threats ie. When climbing.
- Hyperactive or constantly moving/fidgeting

- Regulate own movements and subsequently trips over their own feet
- Posture whilst seated is poor and the need to move around in the seat without obvious reason.
- May find balance challenging due to low muscle tone and find gross motor activities difficult.
- It is important to note that children with vestibular difficulties can easily feel sick and dizzy and can even fail to realise when they have reached their limit.
- Implement sensory strategies to support a child to feel calm, safe and secure. Offer children more control over the movement experiences they engage within to prepare them for more challenges within all movement activities.

Ways to help with Vestibular

How to help when a child is **overly sensitive to movement**

Practise fast angular movement(flexion and extension) during fun interaction that the child already tolerates e.g. like shaking their hands really fast

Teach child to use their feet to activate equipment and remain in control e.g. sitting and pushing along a skateboard, swinging self on a swing. Using a space hopper.

Gradually encourage one other child into his/her chosen area and facilitate quite low key non-threatening games.

Provide the child with a safe haven to go to if the setting is becoming too much to cope with (use of a pop-up tent) but encourage short periods of time with a small group to begin to desensitise the child to the activities.

Allow the child to be a spectator during more active play with no pressure to join in, but an open invitation.

Allow the child to play with low key activities alongside a busier group for short periods.

Use a firm supportive seat that will not tip, ensure the child's feet can stay flat on the ground as this will help them to feel stable and secure when at table top activities

How to help when a child is **under sensitive to movement**

In-between 'sit down' sessions, provide the child with regular bursts of gross motor play, for example use of soft-play; bouncing on a trampoline; having a run around outside or using lycra bands for pulling and pushing activities

Play games where the child has to negotiate their way around an obstacle course, using stepping stones, different surfaces and walking on straight lines.

Facilitate games using jumping and falling motions e.g.' ten green bottles', '5 little speckled frogs'. If the child likes to spin around then play games where spinning is part of the fun! e.g. 'ring a roses'

Provide as many opportunities as possible for activity work during the day such as mark making on the floor or a board on the wall instead of at the table.

Provide 'heavy work' activities during the day e.g moving things in a wheelbarrow, especially prior to a targeted activity, where the child will need to be able to focus and attend, or an activity where the child will be expected to sit for a period of time such as carpet sessions.

Use a defined spot for them at carpet times or during small group work using either a carpet tile or cushion. Children may also benefit from a regular change of position during a focus activity to help maintain their attention e.g. moving from sitting to lying to kneeling. You could also try a short walk around the circle and then encourage them to sit down again.

The child may benefit from a move and sit (wobble cushion) which will allow them to have the sensation of movement during times when they need to sit.

Remember to timetable movement/ brain breaks throughout the day when you know the child usually needs to move, so that you are pre-empting their need to move in a more structured way.

See appendix for additional activities.

Reference/source

Leicestershire City Council: www.leicester.gov.uk/sensory processing early years

Coventry Community Health service: www.covkidsot.co.uk/sensory processing disorder advice for schools

Appendix

Activities to Support with Improve Core Strength Proprioception and Encourage Body Awareness

Activities to support children with:

- Help maintain concentration and attention
- Strengthen core stability and upper limb strength
- Increase awareness of where body parts are in space
- Increase memory of movement of body parts
- Improve balance

Activity

Use a large ball and roll it over the child gently pushing it down to make it bounce slightly. Do it on their front, back and sides name body parts as you go over them.

Encourage the child to complete activities (such as puzzles, sorting activities or looking at books) on their tummy or while laying over a gym ball (make sure the ball is small enough for the hands to reach the floor)

Helping with daily tasks such as cleaning the tables after meals, putting toys in a box at tidy up times or pushing chairs under tables, helping to sweep the floor.

Get the child to sit, kneel or stand and roll, bounce or catch a heavy ball.

Get the child to jump on the group or a trampoline. See how many jumps you can do or how many different ways you can jump.

Roll the child up in a blanket fairly tightly and roll them out of it. This will give the child a lot of sensation over their whole body. It can also be done down a sloping surface to get more speed if they like that.

Support the child to do Wheelbarrow walks by holing their legs and getting them to walk on their hands.

Get the child to drink using a straws, particularly thick drinks (or even yoghurt!) the longer the straw the better, so curly straws are particularly good to use

Play 'Simon says' or 'follow the leader' getting the child to point, pat or shake different body parts. and action songs that name body parts such as Head, shoulder, knees and toes

Sing action songs that involve naming body parts such as head, shoulders, knees and toes.

Drawing shapes, letters and numbers on the back of the child for them to feel the pressure. Take turns so the child gets to practice drawing on the adults back as well.

Get the child to lie down on their back and raise legs above their head and make bicycle movements with their legs. You could do this fast and slow

Play with Plasticine/clay/play dough - Encourage pressure through wrists and fingers by getting the child to use the item to do heavy kneading, pulling or pressing/ squeezing through individual fingers

Get the child to complete animal walks (see examples below)

Get the child to crawl on all fours and over different surfaces such as soft play blocks, carpet, cushions ect

Complete Obstacle Course, set up an obstacle courses in the garden or a large space where the child must crawl, go under and over objects, go through/ between objects, climb or negotiate around objects. You could also incorporate giving instructions such as 'go around the pole', "jump over the box', 'go under the blanket' etc.

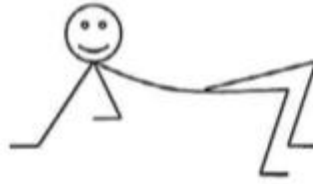
Draw or masking tape a line on the floor and get the child to walk along the line. You could them get them to walk on the left side of the line then the right side.

Get the child to complete puzzle or construction activities lying on the floor or standing at a table.

Play hide and seek games when you have hidden an object or toy in the room and the child has to follow you clues to find it.



BEAR



CRAB



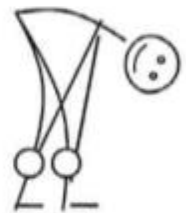
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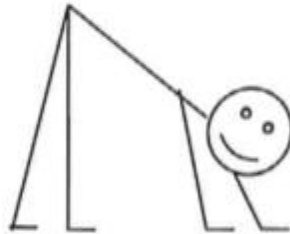
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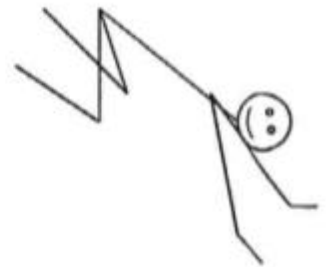
SEAL



MONKEY



MULE KICK



Tactile discrimination activities

Activities to support children with different tactile (touch) experiences

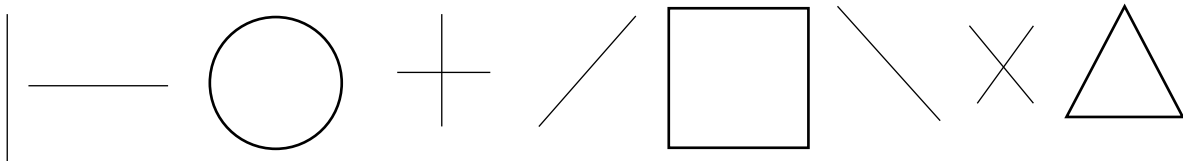
Activity

Have a 'feely box/bag' with a range of different textures inside such as soft, hard, spiky toys get the child to describe the toy.

Play in shaving foam on a protected surface or on a mirror.

Play a treasure hunt game where you hide small toys of different shapes in containers of sand, small balls, cotton wool, rice, lentils, beans or jelly. Encourage the child to describe the texture of the objects. For example the sand is rough, the cotton wool is soft the balls are round etc. Try to encourage the child to find the objects by touch only and not to look in the containers for the toy. To help with this you may want to make the opening of the container just big enough for the child's hand.

Do mark making in different textures such as rice, sand, cornflour and paint on a tray. Practice prewriting shapes:



Set up activities that will encourage the child to discriminate among various textures and states for example get the child to feel the objects then describe if they are soft or hard, smooth or rough, wet or dry, cold or warm, small or large.

Provide different shapes and encourage the child to identify them by feel. Emphasise that a square has 4 sides, triangle 3 etc.

Play "what's in the bag?" hide familiar objects in a bag and encourage the child to identify them by feel only.

Use a range of different textures materials to create pictures. For example wool for a rabbit or sand for the beach.

Helpful tips to expand the range of foods eaten:

1. Focus on the variety of foods and textures tried not how messy they get in the process
2. Offer a range of foods with different textures: soft and crunchy fruit and vegetables, hard, crispy, slimy, bitty, smooth, and thick. Try to vary these textures in the day.
3. Try changing the consistency of foods from smooth to puree to lumpy to shredded solids, to soft solids to normal solids.
4. Add herbs and spices to the food helping to sensitize your child's mouth.
5. Ensure that any new foods are offered in a fun and exciting manner. Give lots of praise for touching them and smelling them.
6. Make small gradual changes initially - try adding one small new thing at a time.
7. Try fizzy drinks as this is stimulating to the mouth.

Changes are likely to be gradual and over time, it is important to keep your approach consistent and uniform so that the child feels safe and comfortable trying new foods and drinks.

Reference

The Royal Marsden NHS Foundation Trust

How to help when a child is overly sensitive

Incorporate familiar toys into messy play such as cars in paint or animals in shaving foam.

Initially allow the child to use tools, such as paintbrushes, lolly sticks etc. when taking part in messy play activities.

Place cling film over messy activities or provide gloves for the child to wear.

Introducing textures start with dry resources and slowly introduce wet resources (or vice versa depending on the child's aversion).

Easy textures: with these the child has more control over contact.

Dry textures that fall away from your hand: dried rice, dry sand, dry lentils, or cotton wool.

Dry textures that mostly fall away but some particles or bits may stick to the hand: play dough, sterile compost, clean mud, or chalk.

Difficult textures: with these the child has less control over contact.

Wet textures that stick to the hand but the child can easily break contact with (e.g. by lightly wiping): baked beans, wet sand, or sensitive shaving foam.

Wet textures that stick to the hand and the child has least control of when breaking contact (e.g. by repeatedly wiping): yoghurt, finger-paint, mud, Angel Delight, or ice cream

Play messy games such as water fights and splashing in the puddles where it is acceptable to get wet.

Show the child a solution if they get wet or messy such as they can swap their top for an identical one, dry it off on the radiator then change it back or have wet wipes easily accessible so that they can clean themselves if they are messy.

Build up fun interaction on a 1:1 with the child starting with no touching involved e.g. blowing bubbles. Use objects instead of 'skin to skin' contact e.g. roll a ball over their hand/body. Experiment with a variety of different touch for example try a firmer hug rather than light touch or vice versa.

Prior to activities that may lead to anxiety children may benefit from some heavy work activities such as pushing/pulling or deep touch/pressure as these are calming to the nervous system and may help to reduce inappropriate reactions.

When their peers are taking part in hand holding games use a 'no-pressure' approach and allow the child to watch from a distance. See if the child will tolerate you holding their sleeve or arm.

During circle times create a space using a mat or cushion at the edge of the group. When lining up allow them to stand at the end of a line.

Ensure changing mat is not cool and place a towel underneath the child when changing them. Determine if the child requires a firm or light touch and use single quick movements.

Discuss with parents if wearing a fitted vest or body stocking would help to comfort the child against irritating fabrics, some children feel more secure when they have tighter fitting under garments on such as a Lycra body suit.

How to help when a child is under sensitive

Provide as many tactile experiences as possible such as messy play (ice cubes, shaving foam, corn flour, lentils, play dough etc.) feely box (a box with a sleeve attached to one) with different textures inside, rough, smooth, silkily. Playing hide and seek games such as hiding objects of different sizes and shapes in a bowl filled with things such as lentils, rice, sand pasta etc.

Start with familiar objects and textures then introduce new ones to increase exploration of other materials/objects.

Exposing the child to different variations of touch e.g. light and firm, this will help the child to learn to identify the different sensations.

Play games that identify different body parts and use a firmer touch.

When the child is rubbing objects on face or body turn this motion into a game – imitate the child – gain their eye contact - moving game on gradually to “car down my leg and into the garage!”

Find similar sensations to use at other times. Rub a special piece of fabric/toy or massager.

Provide weighted cushions or blankets for the child to use and create safe small spaces (such as cardboard boxes, pop up tents) that can be used at certain times by the child.

Support children who get easily hot or become distressed when cold using visual systems such as a social story or photo/symbol routines to highlight the right time to wear a jumper/coat.

Provide children with periods of time when they can access safe forms of heat e.g. Wheaties microwave teddy, play with warm spaghetti or warm water play.

Ensure the child's work area is not near to warm pipes or a radiator or near a cold open window.

Give child a coping strategy to talk themselves through. “Coat on, hat on, car then heater on...”

How to help when a child is **overly sensitive**

Regularly play smell games, where the child can learn to smell individual pieces of food and label them. This may help them to remember the different smells.

Prior to food being prepared give a visual warning to the child to reduce anxiety

Allow them to have their favourite scent or an object that they like the smell of to block out the 'offensive smell'

Approximately 10 minutes prior to mealtimes.

Engage in a calming activity such as gentle rocking, deep pressure massage over child's back or through the shoulders, gentle bouncing on a therapy ball.

Apply deep pressure with your finger to child's lips, cheeks, inside the mouth around the gums and teeth. This can help to desensitize and aims to prepare the mouth for new sensations.

Use a wet flannel and then a dry flannel to wipe around the mouth to prepare and sensitise the mouth.

Playing fun imitation games such as "this is the way we..."

Experimentation with a variety of different toothbrushes e.g. manual or electric. Theme brushes (favourite TV character) may prove more interesting for the child.

A visit to the dentist or referral to specialist dentist may be helpful to rule out any dental problems causing discomfort.

How to help when a child is under sensitive

Although smell is not a bad way of identifying objects/resources, as long as they aren't too small as they may be inhaled, show children other ways such as by touch/texture/shape.

Allow children to smell different fragrances on large pieces of fabric or use scratch and sniff books demonstrating the appropriate distance to hold things when smelling them.

To replace the desire to smell own faeces with other highly fragrance materials e.g. whilst changing nappy allow them to hold a ball of strong smelling play-dough or fragrance washable toy

Remember the child could simply be at the exploratory stage of their play development and like very young children are exploring objects through their mouths.

Begin to teach the child to explore the item/object through touching with their hands rather than their mouths.

If a child licks others try diverting the child, offer different way of identifying people around them through touch or smell to reduce this.

Encourage child to sniff adult's wrists often this helps to identify the person better due to fragrances worn. It is also more appropriate to sniff here!

Dribbling could be a sign of hypo-sensitivity or oral dyspraxia so it is best to liaise with the child's Speech and Language Therapist (SALT) to eliminate a possible diagnosis. A speech and language therapist will also offer advice and guidance for children experiences issue around food.

Over filling of the mouth may be a sign of hypo-sensitivity in the mouth, where a child simply cannot sense their mouth has food in it until it's packed full.

Practitioners could use a mirror to show child that they have a piece of food in their mouth as often children need to see something to understand it is there.

To stimulate the mouth try playing lots of games where your child is encouraged to blow, suck and swallow, such as blow bubbles, whistles, sucking a straw, and drinking thick shakes and smoothies through a straw.

Drinking thick yogurt through a straw as provides deep pressure in the mouth which is calming.

If the child is grinding their teeth ensure a visit to the dentist to check for any dental problems, as a referral to a special dentist may be required.

If a child feels the need to bite consider allowing them to wear a small rubber ring that they can divert to.

You could also provide a chew box this may contain crunchy foods such as carrot or a chew toy to be used if they feel the need to bite.

If a child has a preference for biting, encourage people to approach the child slowly from the front, ensuring they do not touch the child as they may be experiencing too much overload from the adult e.g. touch, lack of space as well as demand.

How to help with eye movement difficulties

Provide a low distraction area for focused/adult led activities by separating a quiet space with a divider such as a folding clothes drier (covered in plain fabric), large box (opened out) or a pop up tent.

Avoid books with busy backgrounds by creating simple picture books that have one image on a page. If using a now and next white board ensure marks are completely erased before writing/drawing.

Some children find holding toys closely to their eye helps them to filter out any irrelevant information and focus; support by modelling and encouraging them to gradually move the object/item further back.

A child may use their peripheral vision in the same way, as this particular angle can provide them with a clearer image. Model and gently encourage them to focus on the bigger picture without causing too much overload of information.

If the child is holding objects to their eye ensure that they are not suffering from short sighted vision by asking their parent to take them to the opticians.

How to help with visual processing

Use a large umbrella or pop up tent to create relaxing spaces where overhead lights are less visible.

Ensure any laminated visuals are made using matt laminating pouches as some children can get distracted by the reflection on the card rather than focusing on the picture/symbol.

Fixing pictures/symbols to strong card or a board will help to reduce flicking of the card and enable the child to focus on the information being provided.

Allow periods of sensory play using fibre-optic lights and mirror play ensuring the activity is time limited to reduce over stimulation.

Only use flashing light toys for short periods as a motivator/reward.

Avoid strobe lighting, especially those that flicker. Sensory rooms are useful and often relaxing for children that stare at lights. Interaction using switches and voice activated light boards can be useful to encourage less solitary play.

Have the child sit in front of the adult at carpet times to help them to focus and have carpet session take place in an area with minimal distractions or bright displays.

Try placing cardboard around the sides of the table to create an enclosed space during adult led activities to help the child to focus on the activity and not be distracted by what is going on around them.

Avoid sitting the child by a window. Fitting a blind to windows may help the child to feel more in control of sunlight/clouds

How to help when a child is overly sensitive

Identify loud noises through visual and verbal labelling this can help to reassure e.g. "wow it's the balloon, look!"

Support the child to visually identify the sound source this will often ease anxiety. Over time see if the child will tolerate touching the sound source for example if a radio turning it off/ on.

Provide opportunities for the child to watch an adult playing with noisy objects/resources and then support the child to play with them. Create fun games like blowing up the balloon and letting it go, releasing a small squeaky bit of air out, allowing the child to stay in control.

When a noisy activity is taking place use a pop-up tent as a hide out, so they can still see what is happening but feels protected at the same time.

Try to forewarn the child if there is going to be a loud noise (such as a bell or fire alarm) before they occur using visual supports such as photos or symbol cue cards

Remember being in tune with the child and verbally identifying the noise to the child as they occur can help to reassure them. If in walking distance an impromptu walk around to the culprit, so the child can see where the noise is coming from can also be helpful or have a visual that you can show the child (such as of a fire engine) if this is not possible.

Check that overhead strobe lighting isn't buzzing as some children with autism can hear very slight noises and become distracted or distressed by them.

Create a low distraction/quiet area for the child to go to. The child may also benefit from wearing noise reducing headphones to help minimise noise around them.

Prepare the child if more than one person will be talking/singing ensuring that visual support is used and keep groups numbers small.

Ensure one adult at a time is talking to them. When a child covers your mouth stop talking remember too many people singing/talking at once can cause confusion.

Humming and covering ears is known as 'blocking'. Auditory overload can mean that too many sounds and thoughts are happening at too faster speed for the child to process.

How to help when a child is under sensitive

Eliminate hearing impairment by asking the parent to go to their GP for a referral to an audiologist.

Often children who aren't alarmed by a sudden loud noise are tuning into something they find far more interesting!

Reduce extraneous noise or wait until it has gone before speaking to the child.

Do not expect a child with these difficulties to be able to concentrate when there is a lot of noise around them. Reduce background noise where possible.

Try using an exaggerated expression and a higher tone to draw the child's attention to a sudden loud noise.

Only speak to the child when they are facing you, get down to their level and use their name first to focus their attention

Reduce your language, give simple clear instructions (get coat) with visual support if needed. Start with one instruction and increase as the child is able to retain more information.

If the child has good language skills ask them to repeat the instruction to you. Remember that it can take 10 seconds for a child to process what has been said to them and longer for some children.

If the child turns up the volume on toys encourage them to keep the toy at a safe distance so as not to damage the ear.

How to help when a child has proprioception difficulties

When the child shows a desire to climb, divert the child to more appropriate resources and provide access to the outdoors large play equipment

If the child seeks a rocking motion practitioners can support by engaging the child in play such as row row row the boat, going to the seaside song etc.

Use a large child sized ball (gym ball) encourage child to lay body over it and push back and forth with feet on the floor to encourage rocking motion. Again use of a song can help to keep them engaged.

Brain gym activities

See appendix for additional activities.

How to help when a child is overly sensitive

Practise fast angular movement(flexion and extension) during fun interaction that the child already tolerates e.g. like shaking their hands really fast

Teach child to use their feet to activate equipment and remain in control e.g. sitting and pushing along a skateboard, swinging self on a swing. Using a space hopper.

Gradually encourage one other child into his/her chosen area and facilitate quite low key non-threatening games.

Provide the child with a safe haven to go to if the setting is becoming too much to cope with (use of a pop-up tent) but encourage short periods of time with a small group to begin to desensitise the child to the activities.

Allow the child to be a spectator during more active play with no pressure to join in but an open invitation.

Allow the child to play with low key activities alongside a busier group for short periods.

Use a firm supportive seat that will not tip, ensure the child's feet can stay flat on the ground as this will help them to feel stable and secure when at table top activities

How to help when a child is under sensitive

In-between 'sit down' sessions provide children with regular bursts of gross motor play for example use of soft-play; bouncing on a trampoline; having a run around outside or using lycra bands for pulling and pushing activities

Play games where the child has to negotiate their way around an obstacle course, using stepping stones, different surfaces and walking on straight lines.

Facilitate games using jumping and falling motions e.g. ten green bottles, 5 little speckled frogs. If the child likes to spin around then play games where spinning is part of the fun! e.g. ring a roses

Provide as many opportunities as possible for activity work during the day such as mark making on the floor or a board on the wall instead of at the table.

Provide 'heavy work' activities during the day especially prior to a focus or targeted activity where the child will need to be able to focus and attend. Or before an activity where the child will be expected to sit for a period of time such as carpet sessions or lunch time.

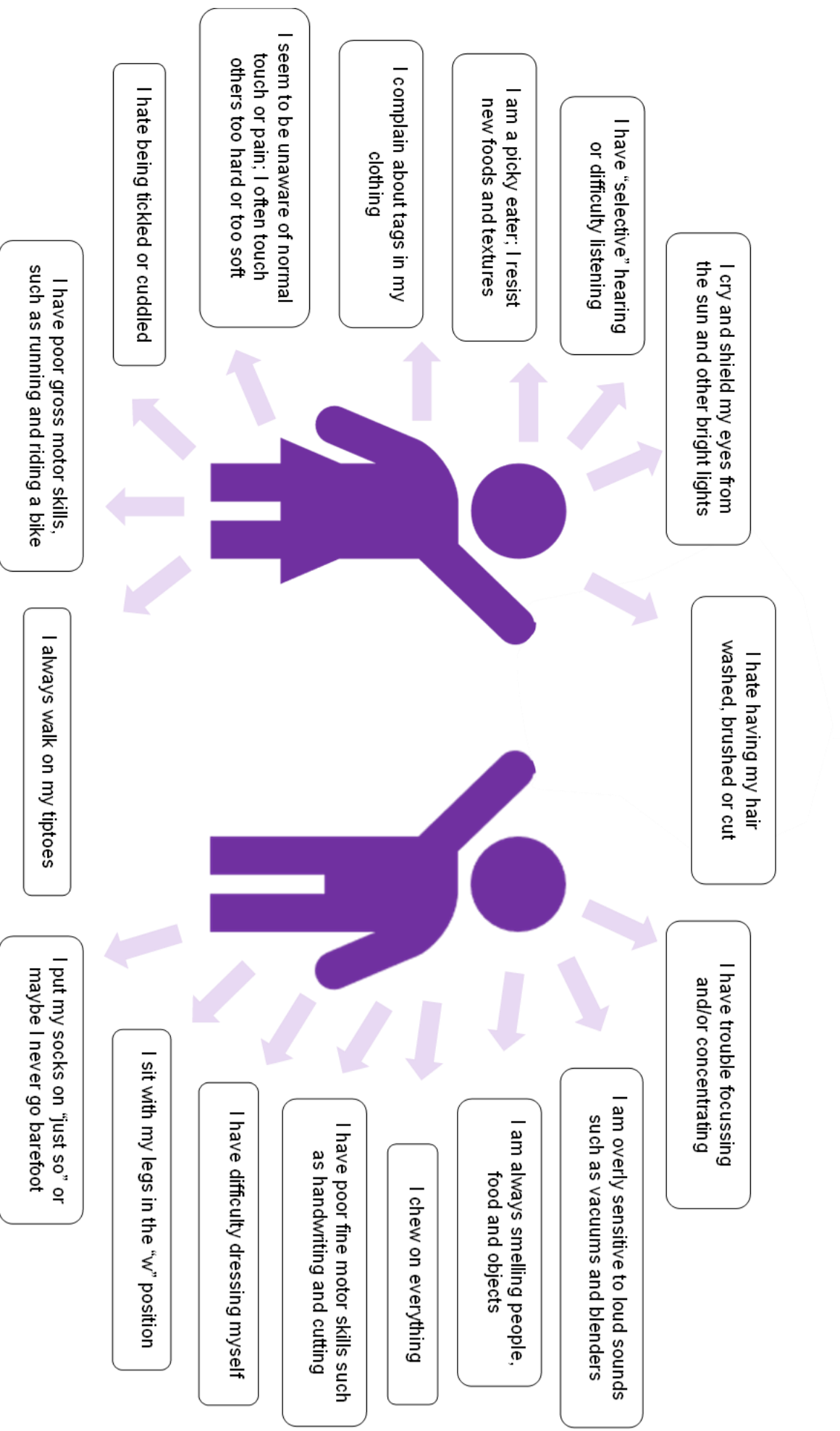
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The child may benefit from a move and sit (wobble cushion) which will allow them to have the sensation of movement during times when they need to sit.

Remember provide movement/ brain breaks throughout the day if possible timetabled for times of the day when you know the child usually needs to move so that you are pre-empting their need to move in a more structured way.

See appendix for additional activities.

Signs of Sensory Processing Disorders



Sensory Profile

Look at behaviours and find the patterns in order to support sensory integration

[illegible]