

Interoception

Interoception is the sensory system that informs us of internal bodily changes.

It allows us to feel our internal organs and is responsible for maintaining homeostasis '*regulation of basic body functions designed to maintain life*' using the least amount of energy possible.

There are interoceptive nerve receptors all over our bodies including our internal organs, bones, muscles, and skin. These receptors send information to the brain which help us to determine how we feel. The area of the brain that receives most of the information regarding interoception is called the insular cortex, or insula for short.

Interoceptive awareness is the ability to feel what is happening inside our body. It is recognising hunger, needing to use the bathroom, changes in temperature, blood sugar levels, heart rate, swallow, breathing rate for example and knowing what to do about it.

If the body needs energy, you feel hungry, so you eat. If the body is fatigued, you feel tired so you sleep. Hunger, thirst, the need for the bathroom, body temperature, pain, sexual arousal..... all of these are conditions and many more are sensed by the interoceptive system. The insula is constantly monitoring interoceptive signals and uses the information sent from areas such as the heart, bladder and stomach and translates the incoming signals into a message that we can identify and respond to on a conscious level.

The interoceptive system is also responsible for allowing us to feel our emotions and manage these effectively. It is how emotional states such as anger, calmness, distraction, or fear reach our consciousness.

A feeling comes from inside: however, many children and adults will often externalise the emotion: for example, the dinner hall makes me feel frustrated; a spelling test makes me feel nervous. This results in feeling out of control. If we can recognise that the emotion is internal, then we can gain more control.

Interoception helps us to understand how we are feeling and enables us to respond to that feeling in an adaptive way.

What is Self-Regulation?

Self-regulation is our ability to control the way we feel and act accordingly. When self-regulation is successful it can help us to maintain attention on a task, match energy levels to the situation and maintain a feeling of contentment, for example.

Self-regulation allows us to be more resilient. We're more able to recover from adversity more quickly and even develop more quality relationships with those around us. Self-regulation is essential to promoting positive mental health.

Self-regulation is the ability to manage our emotions. To develop self-regulation skills, you first need to understand where those emotions come from: interoception enables us to answer the question "how do I feel?" at any given moment. This awareness of how we feel leads us to be able to manage or regulate our emotions much more effectively.

Many children and adults are not aware of what may actually be happening inside their bodies, therefore missing vital clues to their emotions and the way they feel in any given moment.

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However, explicitly teaching how their bodies provide vital clues to our emotions, can help CYP understand how to recognise, identify and regulate their emotions.

For many CYP, understanding how their bodies work and how they affect their emotions can be a very complex or complicated task. For example, tense muscles could be a clue that we are irritated or cross: a racing heart could be a clue that we are worried or nervous. Many adults and children are not familiar with these inner body signals and therefore, do not recognise them as potential clues to how they are feeling. Not understanding these vital clues can make their emotional experience unclear, leading to difficulty in identifying, understanding and managing their emotions. This is where interoception can play an essential role in self-regulation.

Self-regulation can have a positive impact on understanding your emotions: as children, we learn primarily through our senses, including interoception. We learn that touching something hot might burn us, that splashing a tap can make our clothes and skin wet, that walking on stones can be uncomfortable, and that certain flavours are pleasant whilst others are not. As children grow and develop, they learn more of these signs from their physical bodies and some of them become unconscious signals which they no longer have to actively think about. Many of these physical signals are also explicitly taught by adults: “don’t touch that, it’s hot”; “the lemon will taste sour”; “there’s a stone in your shoe, I bet that was uncomfortable.” This means that the physical learning that the child is experiencing is reinforced by modelling and conversations with adults. Interoceptive signals are not often taught in such an explicit way, but this can prove useful to learning to use them as clues to our emotions.

Poor interoceptive awareness can affect:

- Self-care and body regulation
- Self-esteem, confidence, and resilience
- Emotional well-being and understanding of self
- Self-regulation
- Learning
- Risk assessment

What you Might See

As described in the ‘What you might see’ overview

If a child or young person is **under responsive** to interoceptive input, they might...

- have an extremely high pain threshold
- have been delayed in toilet training (as they do not sense the need to urinate or empty their bowels)
- not feel when they need the bathroom and always appear to go to the toilet at the last-minute leading to accidents and/or constipation (as they don’t sense they need the bathroom until their internal sensation is extreme)
- not feel when they are hungry or thirsty and require reminders to eat and drink
- not be able to tell when they are full after eating
- have significant health issues or injuries but never complain of symptoms such as broken bones, fever, infections, burns etc as they do not feel the discomfort.

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- not recognise when they are tired and continue to the point of exhaustion as they are not able to read the internal signals
- not react to being hot or cold
- not be able to recognise the early signs of emotion so become over-whelmed resulting in outbursts or meltdowns.
- not be able to use calming strategies effectively as it is too late for them to recognise and react to their emotions.

If a child or young person is **over responsive** to interoceptive input, they might...

- experience intense reactions to hunger feeling like they are starving at the first tummy grumbles. They may even describe hunger as being painful.
- may report to be “starving” or “dying of thirst” all of the time
- complain of lots of aches and pains as the slightest discomfort is painful
- have difficulties with focus and attention (they may be too preoccupied with their internal stimuli)
- refuse to take their coat off when coming in from play or lunch breaks at school as it takes longer for the change in temperature to register
- experience extreme anxiety over minor dilemmas
- panic after a short period of exercise as they are highly sensitive to the changes in their heart rate, body temperature or breathing
- often feel nauseous
- ask to use the bathroom frequently (as they are extra sensitive to the urge to urinate or empty their bowels), unexplained by another medical condition
- report numerous internal sensations but are unable to determine their current emotion (as the signals they receive are too overwhelming)

Discrimination difficulties - the CYP cannot always pinpoint their exact feeling they sense internally. They might have a vague or general feeling but have difficulty identifying exactly what the sensation means, i.e.:

- If asked if they need to use the toilet the CYP may say “I don’t know” or “maybe”. They may feel they might need the toilet but can’t say if this need is imminent or if they can wait.
- A CYP may feel they are hungry or thirsty but when given food or a drink they hardly touch it. This may be because they are misreading the body sensation they recognise.
- The CYP complains of feeling sick but without having any specific symptoms. They may feel ill but the sensations they feel are vague so they say cannot be specific around where or how they feel ill.
- The CYP may insist they are ok when they are visibly angry, upset etc. They could again be misreading the body signals as they identify one sensation in isolation rather than linking them.
- The CYP may identify they are angry but don’t realise how angry.

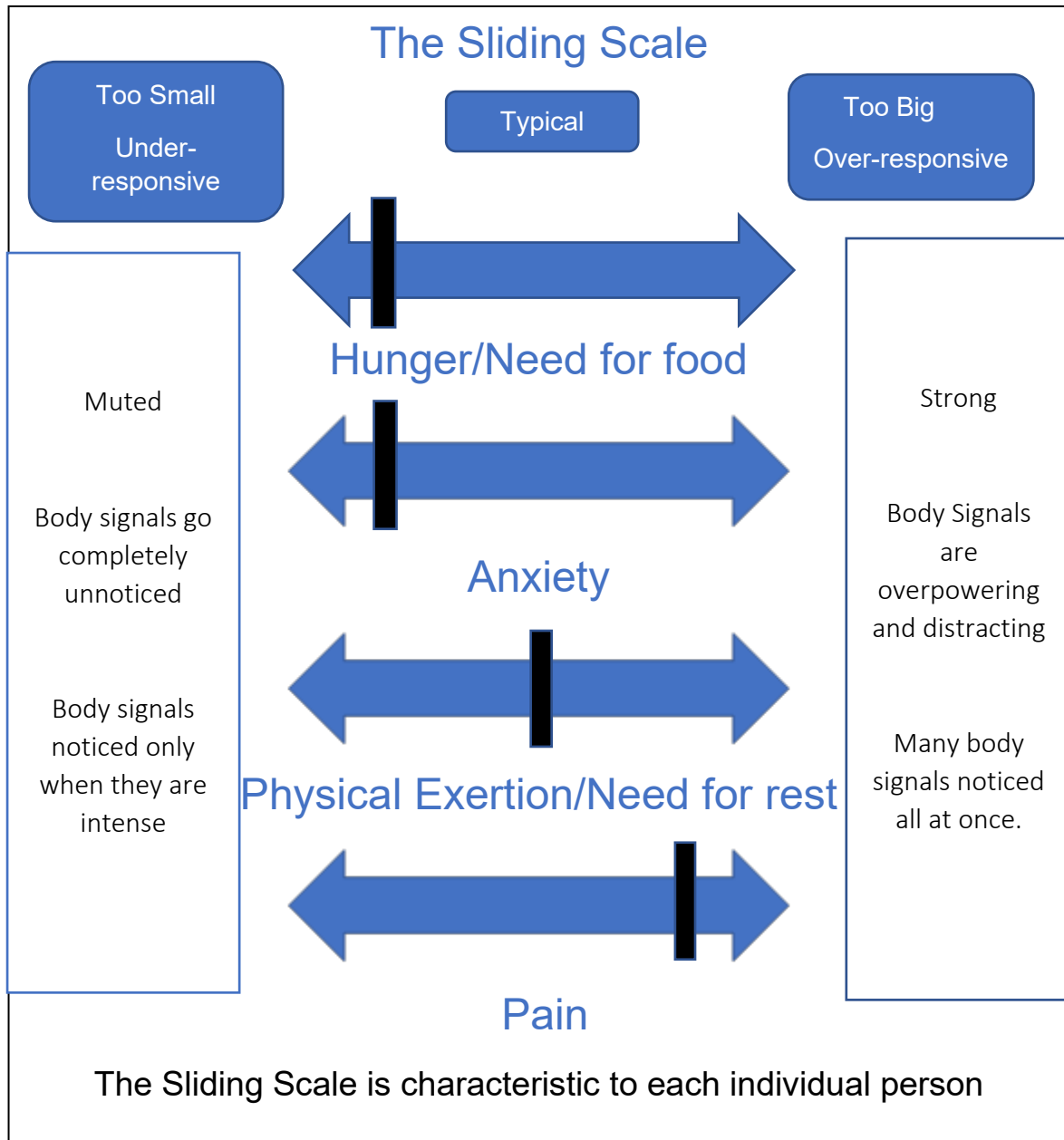
REMEMBER – A CYP will not fit neatly into one category of Interoception difficulties. They could be under-responsive in some areas, over in others and have discrimination difficulties too. They are all individuals and how their Interoception impacts will also be individual. They can result in a CYP becoming overwhelmed by emotions and reacting in inappropriate ways – physical aggression, emotional shut down, or inappropriate laughing or smiling are common.

Step 2 Interoception

Interoception gives us information about how our body feels and what it needs for comfort and regulation.

WE ALL HAVE UNIQUE INTEROCEPTIVE EXPERIENCES

Sometimes these may be too small and sometimes they may be too big.



Step 2 Interoception

Understanding your inner sensations provides you with essential information about what our body needs to feel for:

- Comfort
- Regulation
- Health
- Well-being
- Positive social connection

Each person's response to this is unique.

Interoception based support work **SHOULD** seek to:

- Invite curiosity about body sensations in a playful manner (*how the body feels*)
- Increase self-understanding of the personal sensations (*what does this feeling mean for me?*)
- Help the CYP to connect to strategies that promote comfort (*what does my body need to feel safe and regulated?*)
- Help to notice the way your body feels in the present moment.

Interoception based support work **SHOULD NOT** seek to:

- Fix 'deficits'
- Make a CYP more 'typical'
- Modify a CYPs' behaviour
- Teach a CYP to 'feel the right way.'
- Force compliance – or demand that the CYP participates in the work in order to receive a reinforcer.
- Interoceptive Activities should take place at least 2 to 3 times per week for maximum benefit and support to the child or young person. Activities are short, fun, and purposeful. The information presented in this document support and derives from *The Interoceptive Curriculum by Kelly Mahler*.

Observation of needs

The chart below has two useful functions:

- 1) To observe and consider the CYPs current interoceptive skills before a programme of support commences
- 2) To record and monitor the progress towards developing interoceptive awareness while engaging in an interoception curriculum.

Always ensure that the CYP can identify, describe, and respond to the internal signals for both current and new skills.

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| Interoception Awareness | | | | |
|--|---------------|---------------|----------------------------------|--|
| Body Awareness | Date observed | Date achieved | My internal signals tell me..... | How can I respond to this in a helpful way.... |
| I can feel..... | | | | |
| my muscles tense and relax | | | | |
| when I am hot | | | | |
| when I am cold | | | | |
| I know when I | | | | |
| need to go to the toilet | | | | |
| am in pain | | | | |
| am in pain and know where it hurts | | | | |
| feel unwell | | | | |
| feel unwell and know what the problem is | | | | |
| I know when..... | | | | |
| I am breathing fast | | | | |
| I know when my heart is beating fast | | | | |
| I know when I am..... | | | | |
| hungry | | | | |
| thirsty | | | | |
| tired | | | | |
| happy | | | | |
| calm | | | | |
| I know when I am..... | | | | |
| starting to get upset | | | | |
| starting to get anxious | | | | |
| starting to get bored | | | | |
| starting to get frustrated | | | | |
| starting to get angry | | | | |
| getting overexcited | | | | |
| getting overwhelmed | | | | |

Steps to Improving Interoceptive Awareness

There are three steps to improving interoceptive awareness:



Body

Notice the sensation such as wet hands, or dry mouth.

Emotion

Connect these sensations to emotions and feelings such as thirst, hunger, the need to use the bathroom, overwhelm, anxiety.

Action

Regulate with an action. What the CYP needs to do, for example, get a drink, have a snack, use the bathroom, or take a break.

Each person's experience will be unique to that individual and should be heard, respected, and valued.

Benefits of Teaching Interoception

- To help the CYP to connect to and learn to understand their own bodies and emotions
- To support the development and understanding of emotional and self-regulation
- To develop an understanding and experience of meaningful interactions without others
- To be able to recognise their emotional response to a situation, and act on this therefore reducing the fight, flight or freeze response to a range of scenarios.

Interoception underlies many important skills including:

- 1) Decision making
- 2) Intuition
- 3) Social awareness
- 4) Empathy Perspective taking
- 5) Flexibility of thought
- 6) Self-awareness
- 7) Problem solving
- 8) Self-regulation
- 9) Using coping skills in the moment

Body

The first step in improving and developing interoceptive awareness is to build a knowledge, understanding and vocabulary around the body. Developing an understanding of the body parts, both external and internal and exploring how each of these feels.

Why is this important?

The goals are to:

- Increase the ability to NOTICE body signals during daily activities
- Increase interoception language by matching descriptor words to each of the body signals noticed.

Increasing the use of interoception language gives concept to our body signals and emotions.

Body Check

This is a great introductory activity, and it is recommended that all CYPs create and use a body check chart. Either create a life size body check chart or use a small body outline as shown below.

Focus on **one** body part each session.

Outside

1. Hands & Finger
2. Feet & toes
3. Mouth
4. Eyes
5. Ears
6. Nose
7. Voice
8. Cheeks
9. Skin

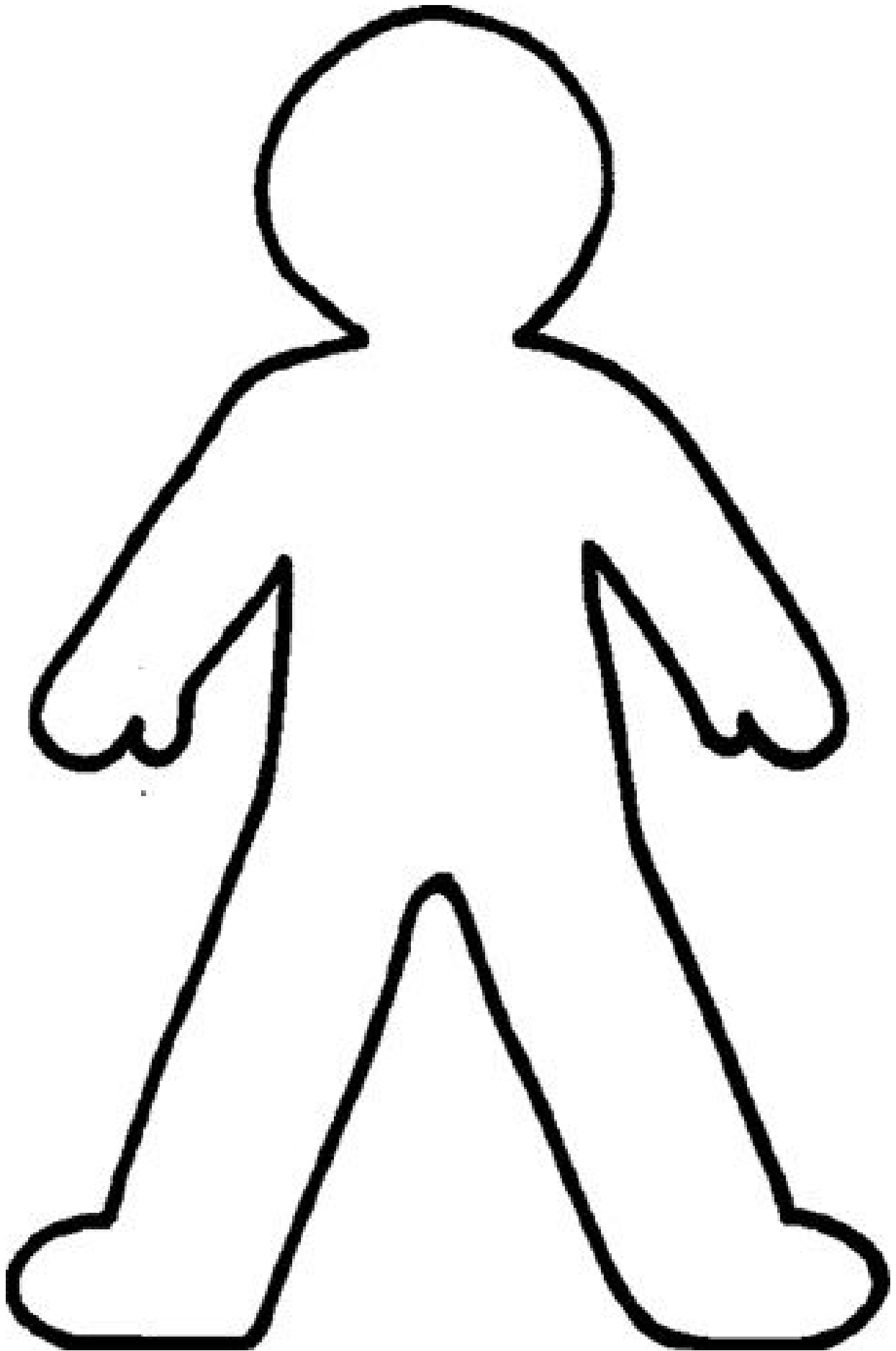
Inside

10. Muscles
11. Lung
12. Heart
13. Brain & heart
14. Stomach
15. Bladder

Begin with the outside of the body as the CYP can see these and they are more concrete. The CYP needs to be able to process and practice the experiences presented. There is no need to cover all 15 body parts listed. Prioritise these for the CYP and consider their needs and goals. The programme should be tailor-made to the needs of the individual.

The body check session will consist of:

1. The focus area word bank
2. Focus area experiments
3. Body check chart
4. Practice on a regular basis.



An example Body Check Activity: Hands and Fingers

Introduce the body part of focus. Use a real or imagined magnifying glass (with younger CYPs) to identify which the focus body part will be. This can be on the individual CYP or on the body check chart.

Then consider the vocabulary linked with the body part. Brainstorm a range of words with the CYP and highlight them on your vocabulary checklist. Add any words the CYP uses to describe their hands to the list and share any not covered in the brainstorm. Acknowledge all answers, question to gain more information and accept action words if they are offered.

The vocabulary list should be reflective of the CYP’s individual needs. A symbolised list may be needed or fewer suggestions. The vocabulary list may have as few as two words if this is what the CYP needs. Choose 2-4 priority words to build a range of interoceptive activities linked to these words.

| <p style="color: blue;">Hands and Fingers</p> <p>Hands and fingers can feel lots of different things. Here are a few words that describe how I might feel. I could also use these words or choose my own.</p> | | | |
|---|------------------------------------|----------|---------|
| Body Part | My hands and fingers can feel..... | | |
| <p>Hands and Fingers</p>  | Still | Wiggly | Fidgety |
| | Tight | Clenched | Loose |
| | Warm | Hot | Sweaty |
| | Cold | Flappy | Fisted |
| | Sore | Messy | Clean |
| | Dry | Wet | Squeezy |
| | Fast | Slow | Shaky |
| | Want to hit/throw | | |
| | | | |

Provide concrete meaningful activities to explore the focus words further. Respect the sensory sensitivities of each CYP. DO NOT FORCE anyone to do something or engage in an activity they do not want to participate in.

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Each activity should be designed to evoke an intense feeling in that body part. Practice noticing the sensation and naming the sensation using the vocabulary list for guidance. Write down the answer provided. All answers are accepted and valid. Ensure the experiment matches the word. Make sure the activities are fun and engaging. Repeat to make connections and allow the CYP to create their own experiment. Sessions should be fun and engaging. The table below shows a list of suggested activities for hand and fingers.

| FOCUS AREA EXPERIMENTS | |
|--|---------------------------------|
| Hands and Fingers | |
| Experiment | Makes My Hands and Fingers Feel |
| Put your hands in warm water for 15 seconds | |
| Put your hands in cold water for 15 seconds | |
| Shake your hands fast for 15 seconds | |
| Put cream on your hands for 10 second but do not fully rub it into your hand | |
| Wash or wipe cream off your skin. Try a range of items to wipe off | |
| Blow on the back of your hand for 10 seconds | |
| Hold an ice cube or ice pack on your hand for 10 seconds | |
| Make a fist and hold it in a tight squeeze for 15 seconds | |
| Clap your hands firmly 10 times | |
| Clap your hands together really quickly for 10 seconds | |
| Keep your hands as still as you can for 30 seconds | |

Use the body check chart to support the CYP to make connections between the body and sensation. Match the name of the body part with the sensation described from the vocabulary list and record on the body check chart. This strategy will help the CYP to complete a body scan and self-check as they become familiar with their interoceptive awareness. New body parts are added as they are explored through the interoceptive journey.



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The Body Check Chart will build over time to include a range of information and is used in conjunction with the body outline. This is not an exhaustive list. The list is taken from *Interoception: The Eighth Sensory System* by Kelly Mahler.

The body check chart is individual and will consist of those areas covered within the session and does not have to cover all areas. Some CYPs will benefit from less information, others will benefit from visual information such as symbols or pictures.

| BODY CHECK CHART | |
|-------------------|---|
| My Body Part | What I feel (word bank/vocabulary) |
| Brain | Focused, distracted, dizzy, light-headed, tense, fast, swirly, heavy, blank, stuck, scattered |
| Eyes | Heavy, blurry, watery, stinging, itchy, squinty, teary |
| Nose | Runny, stuffy, tickly, itchy, burning |
| Cheeks | Warm, neutral, red, hot, tight, loose |
| Mouth/Jaw | Dry mouth, tight jaw, soft jaw, sore throat |
| Voice | Shut-off, loud, fast, yelling, content |
| Ears | Focused, sensitive, bothered, shut-off, itchy, sore, distracted |
| Skin | Sweaty, itchy, goose bumps, bothered, tight, dry, content, OK |
| Breathing | Fast, slow, normal, tight, short, panting |
| Heart | Fast, slow, warm, swelling, full, pounding |
| Stomach | Content, hungry, full, fluttery, tingly, nauseous, heavy, gurgling |
| Muscles | Tense, tight, relaxed, normal, loose, heavy, sore, wiggly, antsy, bursting, hot, burning |
| Hands and Fingers | Still, squeezing, moving, twisting, clenched, sweating, flapping, fidgeting |
| Feet and Toes | Curling, wiggling, fidgeting, shaking, pacing, clenching, tapping, loose |

Finally, begin to include and notice interoceptive awareness within everyday life. Try to include several examples of this each day.

- 1) Include statements that provide observations and bring attention of the focus area. For example, I can see your hands are wet. Look at your hands. I can see them wet.
- 2) Then build to include questions that call attention to the specific body parts and provide choices for responses. For example, Are your hands wet or dry? Are your hands warm or cold?
- 3) Add details as the CYPs interoceptive awareness has increased. How do your hands feel right now?

Interoception sessions should happen two to three times per week with daily comments as suggested above to reinforce learning and understanding further.

Emotions

The work on **BODY** has focussed on learning to notice body signals and developing a language to describe these. Next, we focus on **EMOTION**. This phase will guide the CYP to connect body signals to emotion. The aim is to guide the CYP to begin to use body signals as clues to emotions therefore developing firm body-emotion connections. Interoception information helps the brain to gather and translate information into emotions. Interoception helps us to feel a wide range of emotions such as those listed below.

| Emotions | | | | | |
|------------------------|----------|------------------|-------------|-------------|----------------|
| Hunger | Fullness | Thirst | Heartrate | Illness | Pain |
| Need to use the toilet | Nausea | Body Temperature | Sleepiness | Distraction | Sexual Arousal |
| Fear | Joy | Safety | Frustration | Calmness | Anxiety |

The programme of work to support the development of the body-emotion connection builds on from the work related to the body. It builds on the routine and structure of the previous sessions providing a process which is predictable, a space to learn and reduced anxiety. It focuses on the same 4 areas:

1. The focus area word bank including simple emotion words
2. Focus area experiments
3. Body check chart adding the emotion word bank
4. Practice on a regular basis.

Directly Teach that Body Signals are Clues to Emotions: For example, “You said your muscles are feeling tense, your voice sounds loud, what emotion could that mean?” “You said your eyes are feeling gritty, your muscles are floppy, and your brain is worn out. They could be clues to what emotion?”

The concept of discussing ‘body signals are clues to emotions’ can be introduced through the use of a Social Story, always emphasising there are no right or wrong answers. Every emotion is valid, and every person’s experience is unique. Continue to make the sessions fun, stimulating and interesting.

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Different types of emotion

Emotions are either homeostatic or affective. We self-regulate a range of emotions all day every day, connecting the body signals to the emotion and regulating with the appropriate action which has a positive outcome. This is interoceptive awareness. Body-Emotion-Action connections are highly unique and personal to each individual.

Homeostatic Emotions

Homeostatic emotions are feelings such as hunger, thirst, the need for the bathroom, sensory overwhelm, pain, illness, body temperature or sexual arousal. At this stage we are teaching the CYP to use body signals to identify their internal emotions.

Why is it important?

Recognising the connection between body signals and emotions helps us to make sense of our needs and to self-regulate. It helps the CYP to consider how they know they are hungry or thirsty, ill or need the bathroom by being able to identify what that signal means to them individually. For example, a dry mouth may mean I am thirsty. Interoception may help someone to know when they have that feeling of fullness so that they know when to stop eating, or to know how it feels to be ill, to identify this emotion and act on it accordingly.

The goal is to be able to recognise, describe and identify the emotion. EVERY emotion is valid, and EVERY response is listened to acknowledged, respected and recorded. The focus emotion will depend on the CYP and their needs.

Interoception and certainty.

Interoception is critical for ensuring stability in a changing environment, in a way that other systems are not. It alerts us to changes in homeostasis and how to go about getting back in balance (allostasis.) Uncertainty and anxiety are a fundamental problem for humans and one that we're seeing increase, particularly so in the pandemic.

"We are not cognitive couch potatoes idly awaiting the next 'input', so much as proactive predictavores – nature's own guessing machines forever trying to stay one step ahead by surfing the incoming waves of sensory stimulation. (Clark, 205 p 52)

The brain's primary purpose is to keep us safe. This requires us to learn about the structure of our environment.

From the point of view of our brain this is not easy, because the brain only has access to sensory input and not the causes of those feelings.

In order to keep us safe our brain tries to predict what might happen and proactively act rather than react – the brain does not like surprises! This is achieved through the building of a series of predictive models, however in order to build effective models we need to learn about and understand our environment.

We see the world by guessing the world. That guess is based on the model of the world we've built using sensory information that came into our system the last time we came across something the same or similar.

For example:

If you are sitting alone at night and you hear a sound, your brain will remember a situation when you heard a similar sound and make a prediction based on that sound. Now, if the last time you heard it was when you were next to the window and you saw that the wind was making the window creak,

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your brain will predict that the sound is a creaking window. However, if you heard a similar sound in a film about zombies, your brain would predict that it is a zombie at the window.

For CYP, this is particularly important as their brain and body will react very quickly to a sound without them being able to think rationally about it, so they will go straight to being scared. They think 'I am feeling afraid, so therefore, there must be something to be afraid of'

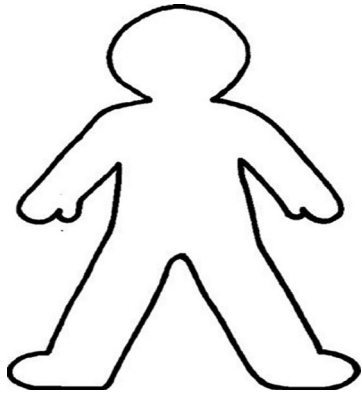
We need to model and teach them what is happening in their body – your pulse is fast, your palms are sweaty, you have butterflies in your tummy, etc.

Then put in place the calming strategies that will help them. ([activities that balance the sensory systems.](#))

Emotion Words

We are going to begin by introducing the emotion vocabulary just as we did with the focus area for the body. Keep the routine of the sessions the same. The example will focus on the homeostatic emotion of hunger. Before eating a meal, especially if it is a while since having eaten, ask the CYP to consider how the various body parts feel. Brainstorm a range of words used to describe the body part and make a note of all of these. Accept all words provided, question and be curious to find out more information. Use your word bank to support this. Record your answers on a chart, such as the one below.

| BODY CHECK CHART - Hunger | |
|---------------------------|---|
| My Body Part (BODY) | What I feel (word bank/vocabulary) Sensations felt |
| Stomach | |
| Muscles | |
| Energy | |
| Brain | |
| | |
| | |
| | |



Ask the same questions once the CYP has eaten. Are there any new or different sensations? Record these on a chart. Use the body chart (outline as shown) to support the CYP to think about what hungry feels like. Add the sensation words into the relevant body parts on the body outline. Build in regular opportunities to talk about, notice and action the hunger emotion throughout the day. Building regular reminders and guidance before snack time or lunch time during the school day. Questions to direct the CYP to think about and notice the body sensations at this time. How does your stomach feel now? How does your brain feel? Do you notice anything different about your energy? Continue to build interoceptive language into everyday life.

The same routine and structure can be used to explore other homeostatic emotions such as thirst, temperature control, feeling ill and needing to use the toilet.

Affective Emotions

Once a young person is able to interpret different body signals in relation to homeostatic emotions, we can begin to introduce more complex emotions. Some CYPs may only work on a couple of different affective emotions, e.g., happy and sad. Others may need a more nuanced approach, for example, to understand the difference between excited and anxious or to look at different degrees of emotion, such as nervous, afraid, terrified.

Why is it important?

In the same way that the body signals the homeostatic emotions, it also communicates messages about affective emotions. If an individual is not able to link a feeling in the body to an emotion, there is the potential for them to become frequently overwhelmed by emotion and unable to communicate effectively their experiences to others. This will impact on their well-being and responses to others and to the environment.

Remember, the goal is not to change the emotion but to be able to identify it and describe it. All emotions are equal: there are no good or bad emotions.

Which emotions to focus on?

Be led by the CYP. Your previous work on understanding the body and on homeostatic emotions may have already given you some ideas about emotions that will be most relevant to the individual.

An example Body Check Activity: Happy

Introduce the emotion to be discussed. Beginning with a positive emotion will set a positive tone for the sessions and support the CYP to engage. It might be helpful to introduce this with a stimulus, for example, a story, video, pictures from magazines or the internet.

Create a body check chart to brainstorm how this emotion feels in the body. Acknowledge all answers, question to gain more information and accept action words if they are offered.

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For example, 'So what is happening in your hands when you are happy? What about your tummy? Is anything happening with your feet?'

Refer to the body check chart vocabulary collected previously, for example, offer a word bank or related images.

| BODY CHECK CHART - HAPPY | |
|--------------------------|------------------------------------|
| My Body Part (BODY) | What I feel (word bank/vocabulary) |
| Brain | Fast, |
| Eyes | Hot, moving around |
| Nose | Nothing |
| Cheeks | Warm, smiling |
| Mouth/Jaw | Smiling |
| Voice | Loud or Quiet, Humming, Singing |
| Ears | Nothing |
| Skin | Warm |
| Breathing | Middle speed |
| Heart | Nothing |
| Stomach | Soft, contented |
| Muscles | Loose, relaxed |
| Hands and Fingers | Open hands, relaxed fingers |
| Feet and Toes | Jumping |

The vocabulary list should be reflective of the CYP's individual needs. A symbolised list may be needed or fewer suggestions. The vocabulary list may not introduce all of the different parts of the body: focus on those parts covered in the earlier sessions.

Begin to include and notice interoceptive awareness within everyday life. Try to include several examples of this each day.

- 1) Carry out the same activity in relation to everyday situations as well as specific sessions. For example, during Wake and Shake, talk about what the children are doing with their bodies, what their faces look like, what their voices sound like and what emotions they might be feeling.

As before, ensure any new vocabulary is added to the body check chart.

- 2) Include statements that provide observations and bring attention of the focus area. For example, I can see you smiling. Your eyes are open wide. You look like you are having fun!
- 3) Then build to include questions that call attention to the specific body parts and provide choices for responses. For example, what are your eyebrows doing? Have a look in the mirror. Are your hands warm or cold? Can you feel what your heart is doing?
- 4) Add details as the CYPs interoceptive awareness has increased. How do your hands feel right now?

Step 2 Interoception

As before, ensure any new vocabulary is added to the body check chart.

As with the homeostatic emotions, it is important to accept all of the CYP's ideas and do not try to encourage them to change the point that they put forward.

Once a CYP has identified the main sensations linked to a number of different emotions, these can be collated into chart for each emotion being explored to be used alongside the body check chart: see example below:

| Sensation 1 | Sensation 2 | Sensation 3 | Sensation 4 | Emotion/ Body State |
|---------------|----------------|---------------|------------------|------------------------|
| Face hot | Hands clenched | Feet stamping | | Angry |
| Sensation 1 | Sensation 2 | Sensation 3 | Sensation 4 | Emotion/ Body State |
| Mouth smiling | Eyes wide open | Light feet | Fingers tingling | Happy |
| Sensation 1 | Sensation 2 | Sensation 3 | Sensation 4 | Emotion/ Body State |
| | | | | |

Action

The final step of developing interoceptive awareness is to be able to take action to regulate. The goal is not to fix emotions but to encourage the CYP to understand that they can choose to take actions that help them to feel good, and this will support their overall regulation. We want CYPs to be able to identify activities and experiences that will support their overall wellbeing and enable them to experience more of the emotions that feel good.

I CAN TAKE FEEL-GOOD ACTIONS TO CHANGE THE WAY THAT I FEEL

The first concept to teach is the idea that we can change the way that we feel. Start with basic body sensations covered in the earlier sessions, for example, hot and cold, and design a number of experiments to illustrate changing the way the body feels.

| FOCUS AREA EXPERIMENTS | |
|---|---|
| Hot and cold | |
| Experiment | How does this change the way my body feels? |
| Put your hands in warm water for 15 seconds | |
| Put your hands in cold water for 15 seconds | |
| Blow on the back of your hand for 10 seconds | |
| Hold an ice cube or ice pack on your hand for 10 seconds | |
| Put your hands on the back of your neck for a minute. | |
| Go outside without your coat/ sweater on (in winter) | |
| Put on layers of clothing (gloves, hats, sweaters, coats, etc.) | |
| Hug a hot water bottle | |

Begin to include and notice interoceptive awareness within everyday life. Try to include several examples of this each day.

1. Before lunch, talk about how the body feels when it is hungry, referring to the body map. After eating, talk about what feels different in the body.
2. In a PE session, encourage the CYP to feel their heartbeat and, if possible, count the number of beats in a given time. Then encourage them to run up and down on the spot, do star jumps, etc. Measure the pulse again and talk about what has changed.

Remember, for all of the above activities, add any new vocabulary or feelings to the body check chart.

Step 2 Interoception

IMPORTANT: Never coerce or force a CYP to take part in the experiments if they are unsure or anxious. Often allowing them to watch others take part will give them the confidence to try for themselves on another occasion.

Once you have spent a little time looking at changing body sensations and homeostatic emotions, you can then look at what feel good actions they might take. Refer back to the body check chart, for example, if a CYP has identified that they feel hot when they are worried, think about actions that might change how this feels.

| FEEL-GOOD ACTIONS | |
|---|---|
| Worried | |
| What I can do? | How does this change the way my body feels? |
| Ask my teacher for help | Brain less full. |
| Use my time out card | Brain less full. Ears quieter. |
| Have a cold drink | Feel less hot |
| Go for a walk around outside | Feel less hot |
| Cuddle my teddy | Muscles relax |
| Cuddle with my daddy | Muscles relax. Breathing slows down. |
| Pick a fiddle toy to keep my hands busy | Stops hands clenching. |

The ideas for this document were developed with inspiration from *The Interoception Curriculum* by Kelly Mahler.

References

Best practice and approaches to developing interoception Kelly Mahler

Lessons From Our Interoception Journey. Kelly Mahler