Believe and Become
OCCUPATIONAL THERAPY
COUNSELLING AND PLAY THERAPY

REACH UP
Resource · Empower · Advocate · Connect · Human rights · Upskill · Peer support
Macarthur Southern Highlands

Understanding your nervous system and the stress response

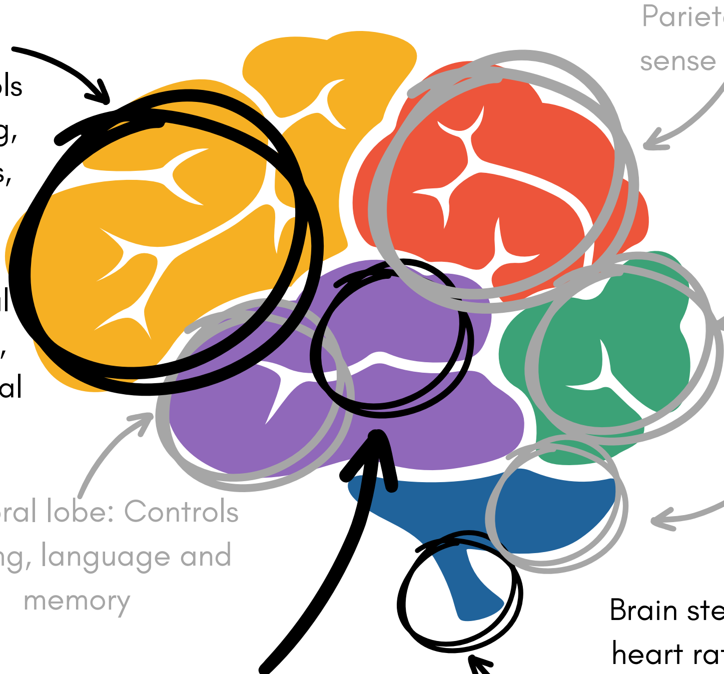
The nervous system is like the body's communication network, sending messages between the brain, spinal cord, and the rest of the body. It includes:

- Brain: The control centre—it helps you think, feel, and move.
- Spinal Cord: A thick bundle of nerves that carries messages between the brain and body.
- Nerves: These spread all over your body, like tiny electrical wires, sending signals to and from the brain.

Your brain sends messages through the spinal cord to the nerves, telling your muscles to move. Your nerves also send information back to your brain, like when you are in pain. Your nervous system also controls things you don't even have to think about, like breathing and digesting food. Part of the job of our nervous system is to react to stress or danger, which also happens automatically, without us thinking about it.

There are many different parts of our brain, all with different important jobs. Several work together to respond to danger or stress. These include those parts circled in black:

Prefrontal cortex: The "thinking brain" – controls behaviours like planning, attention, setting goals, making decisions and emotional regulation. Imagine your prefrontal cortex is an owl – wise, thoughtful and intentional



Parietal lobe: Controls our sense of touch and spatial awareness

Occipital lobe: Controls sight and understanding of visual information

Cerebellum: Controls balance and movement

Temporal lobe: Controls hearing, language and memory

Limbic system: The "emotion headquarters" of your brain, which includes the amygdala, hippocampus, hypothalamus and thalamus. Imagine the limbic system is an eagle – watchful, a fierce guard, and defensive

Brain stem: Controls breathing, heart rate, temperature, sleep, digestion etc. Imagine your brain stem is a crocodile – instinctual and focused on survival

Believe and Become, through the REACH UP initiative, is proudly delivering projects for the Peer Support and Capacity Building (PSCB) grant for the NDIS, including this resource.

What happens when we encounter danger or stress?

Our limbic system helps us to control emotions, memories and our reactions to things like fear or excitement. It helps us to feel emotions, connect them with memories and decide how to react to situations. For example:

- It might make us jump when surprised
- It might remind you of a happy memory when you smell a particular smell
- It might make your heart beat faster when feeling nervous about a test

When we are very overwhelmed, scared or in danger, our body's **automatic control system** takes over – this is called the autonomic nervous system. It includes the **sympathetic nervous system (sometimes called the fight or flight response)** which helps us react fast to perceived danger or stress, and **parasympathetic nervous system**, which helps us to calm down once the threat has passed.

When our sympathetic nervous system is activated, it takes control and our thinking brain gets locked up and we can't access it

Our sympathetic nervous system is very helpful when our lives are in danger. It can be less helpful when our brain perceives a threat that is less harmful as being very harmful. This can happen because of our past experiences, and high levels of anxiety and stress, leading to an overactive nervous system.

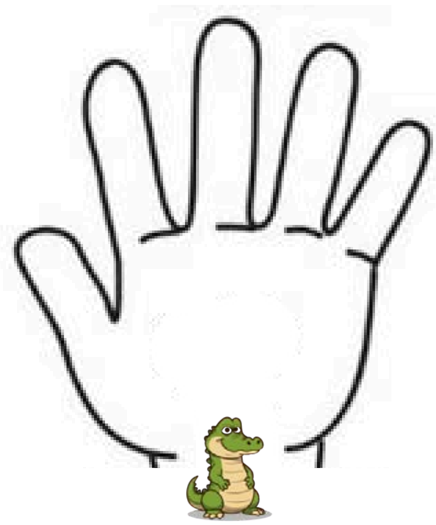
Neurodivergent brains tend to experience more frequent nervous-system activation due to differences in how the body and brain detect threat and process sensory input. Emotional dysregulation can happen faster, be stronger, and more difficult to recover from.

Dr Siegal's Hand Model of the Brain

Dr. Dan Siegel created a quick, visual way to understand how our brain works—especially why we sometimes lose control of our emotions. You might find the hand model helpful to understand, and explain to others, how our brain responds to stress.

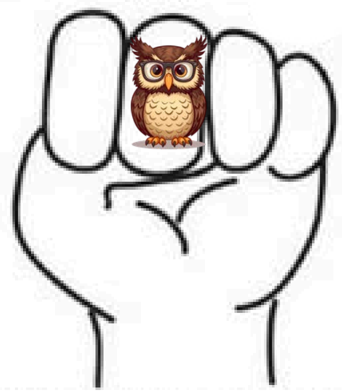
Imagine your hand is your brain:

1. The Wrist = Brainstem
(the survival system)
Your wrist represents the brainstem, the part that keeps you alive—breathing, heart rate, and basic "fight, flight, freeze" reactions. It's your body's alarm system.



2. The Thumb Tucked In = Limbic System
(the emotional brain)
Fold your thumb across your palm. This is the limbic system, where emotions and memories live. It includes the amygdala, which reacts to danger and big feelings.

3. The Fingers Folded Over = Cortex
(the thinking brain)
Now fold your fingers over your thumb. Your fingers represent the cortex, especially the prefrontal cortex—the part that helps you think clearly, stay calm, make decisions, and problem-solve.
When your "fist" is closed like this, all parts of the brain work well together and you can stay regulated.



"Flipping Your Lid"

If you lift your fingers up, they no longer cover the thumb. This represents what happens when you get really upset, scared, overwhelmed, or stressed:

- Your thinking brain (fingers) goes offline.

- Your emotional brain (thumb/amygdala) takes over.
- You react from emotion and instinct instead of logic.

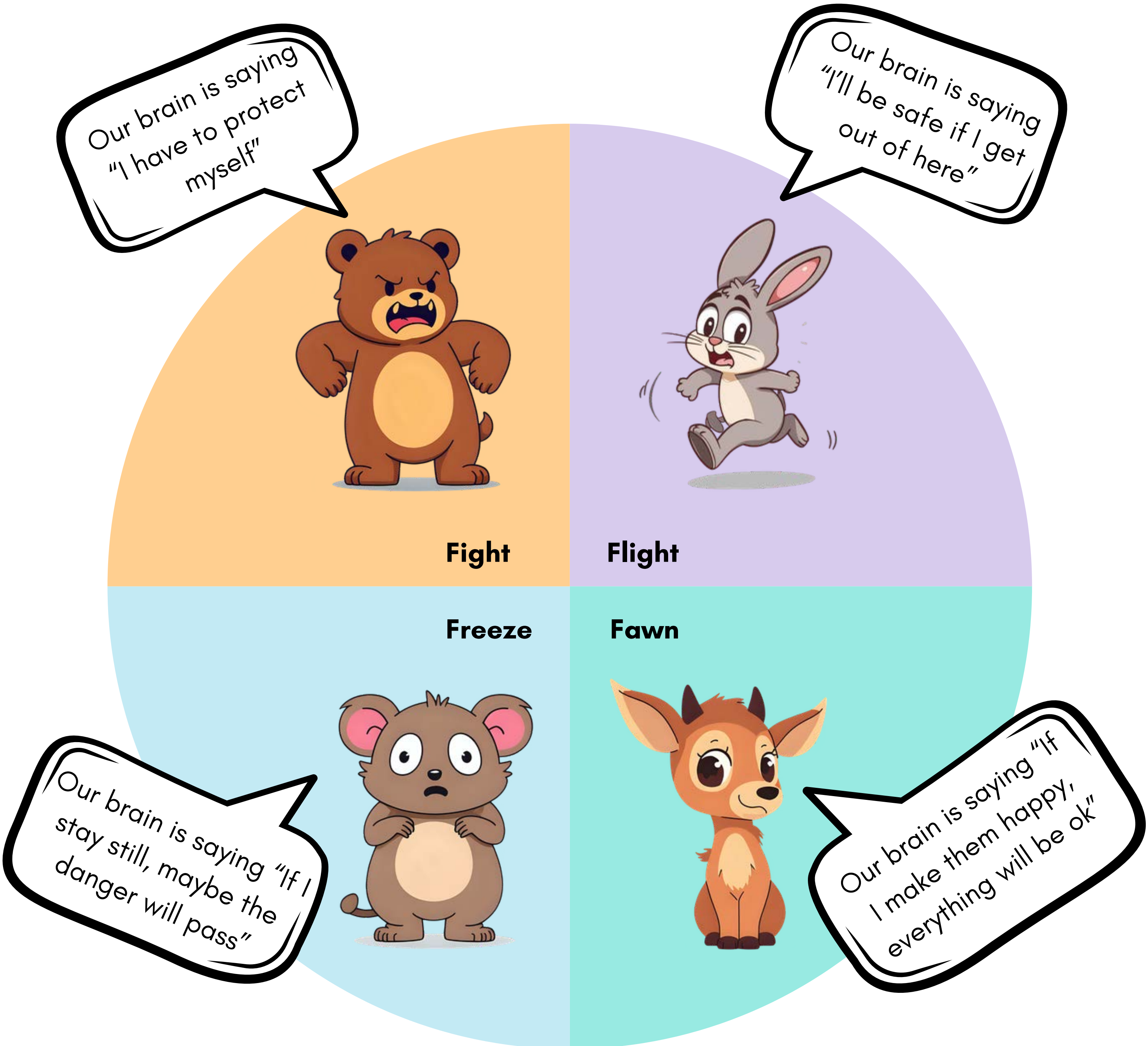
This is what Dr. Siegel calls "flipping your lid."

This simple model can help both children and adults:

- Understand why big feelings can take over
- Recognise that emotional reactions are normal brain responses
- Learn ways to "close their lid" through calming strategies, connection, and co-regulation

Nervous system responses: Fight, Flight, Freeze, Fawn

People respond to stress in different ways. Their response can be impacted by past experiences or trauma, personality and coping styles. Some people are more likely to try to fight to protect themselves, some may try to run away, while others may have learned to freeze or fawn as a survival strategy. Each response is introduced on the following pages.



Fight: “I have to protect myself”

Your body thinks there’s a threat, so it gets ready to stand your ground. You might feel tense, loud, or want to argue, shout, or physically push back.

Emotions you might be feeling:

- Frustrated or irritated
- Annoyed or impatient
- Angry
- Defensive or threatened
- Overwhelmed or stressed
- Scared
- Out of control

Body cues you might feel (or others might notice):

- Tight or tense muscles (especially jaw, shoulders, hands)
- Fast heartbeat
- Clenched fists or jaw
- Shallow or fast breathing
- Feeling hot or flushed
- Raised voice tone and volume
- Restlessness, pacing or quick movements
- Frown or eyes wide and focused

Actions you might take:

- Yelling, arguing
- Insisting on being right
- Talking over others
- Using strong words or a harsh tone
- Slamming doors or objects
- Stomping
- Stepping forward or getting closer
- Grabbing, pushing, hitting or kicking

Ideas of things that might help:

- Take a break
- Move away from the trigger
- Try to use “I feel” statements instead of reacting
- Deep pressure, weighted items
- Slow breathing
- Shake out hands and arms to release tension
- Squeeze or punch a cushion or pillow
- Splash face with cold water
- Draw your feelings
- Take a walk
- Listen to music

Flight: “I’ll be safe if I get out of here”

Your body wants to get away from the situation. You might try to leave, hide, avoid eye contact, or run off.

Emotions you might be feeling:

- Worried or anxious
- Scared
- Insecure
- Unsettled
- Overwhelmed
- Trapped
- Nervous
- Panicked

Body cues you might feel (or others might notice):

- Fast heartbeat
- Tight chest or trouble catching your breath
- Restless legs or tapping feet
- Feeling shaky or jumpy
- Wanting to look away or avoid eye contact
- Sweaty palms
- Crying
- A sudden urge to move or get out

Actions you might take:

- Leaving or backing away
- Hiding
- Avoiding tasks
- Avoiding eye contact
- Avoiding physical closeness
- Running away
- Withdrawing from conversations or activities
- Changing the topic
- Not being able to speak

Ideas of things that might help:

- Use a grounding technique
- Slow breathing
- Weighted items
- A warm drink
- Use a calm corner or safe space
- Listen to music or white noise
- Gentle movement or stretching

Freeze: "If I stay still, maybe the danger will pass"

Your body feels stuck and doesn't know what to do. You might go quiet, feel numb, or feel like you can't move or speak.

Emotions you might be feeling:

- Overwhelmed
- Shocked
- Confused
- Helpless
- Numb or flat
- Stuck
- Exhausted

Body cues you might feel (or others might notice):

- Body goes still or stiff
- Slow or shallow breathing
- Blank stare
- "Zoning out"
- Hard to talk
- Hard to move
- Feeling disconnected from your body
- Mind goes blank
- Slumping or collapse

Actions you might take:

- Not responding when spoken to
- Staying still or frozen in place
- Not making decisions or taking action
- Avoiding movement or conversation
- Being very quiet or withdrawn
- Lying down/sleeping
- Low motivation to act

Ideas of things that might help:

- Connect with a trusted person
- Ask for co-regulation
- Warm drink or blanket
- Walking or stretching
- Deep belly breaths to reconnect with your body
- Start with one simple action

Fawn: “If I make them happy, everything will be ok”

Your body tries to keep the peace to stay safe. You might agree with someone, try to please them, or do whatever you can to avoid conflict.

Emotions you might be feeling:

- Anxious
- Worried about upsetting others
- Guilty or responsible for keeping the peace
- Scared of conflict
- Scared of rejection
- Overly focused on what others want
- Fearful of disappointing someone
- Insecure

Body cues you might feel (or others might notice):

- Tight jaw
- Dry mouth
- Nausea
- Tense smiling
- Nodding quickly
- Soft, quiet voice
- Avoiding expressing your own needs or opinions
- Trying to “fix” the situation
- Restless hands or fidgeting
- Apologising or being overly compliant
- Disconnected from your body

Actions you might take:

- Agreeing even when you don’t want to
- Compliance
- Apologising a lot
- Trying to make others happy
- Avoiding conflict
- Changing your behaviour to keep someone calm
- Doing what others want to avoid tension
- Giving in
- Saying “it’s fine” when it’s not
- Disregarding own needs
- Poor boundaries
- Burnout

Ideas of things that might help:

- Pause before saying ‘yes’
- Practice phrases like ‘let me think about it’
- Journal or take time to reflect before making decisions
- Visualise a boundary (e.g. bubble or shield)
- Slow, steady movements (e.g. yoga)
- Practice saying ‘no’ in low-stakes situations
- Reach out to a supportive person
- Keep a list of your needs and check in with it
- Start with setting one small boundary

Exploring your stress responses

Can you think of an example of when you have experienced each stress response?

	Fight 	Flight 	Freeze 	Fawn 
Situation				
What emotions were you feeling at the time?				
What body cues did you feel?				
What were your actions?				
How did you recover?				

Which stress response do you think you experience the most?

Which tools help you the most when overwhelmed?