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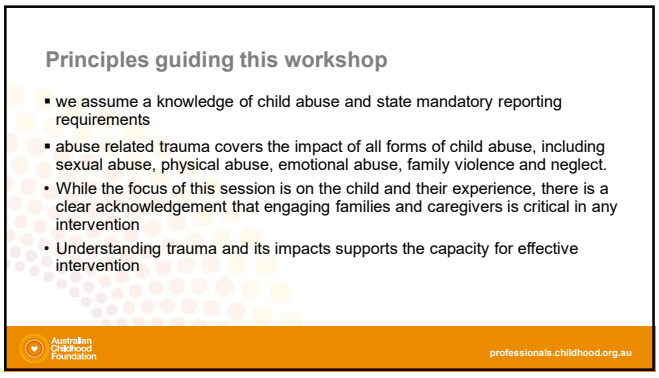

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Day 1 Key learning outcomes

01
Learn in detail the neurobiology of trauma, including consideration of theoretical perspectives of trans-generational trauma and epigenetics, its impact on family functioning and the developing child with a focus on what this means for allied health interventions

02
Understand the ways that trauma shapes children and young people's states, needs, and experiences,

03
Understand trauma-informed models of practice

04
Explore manifestations of trauma on child's relational patterns and behaviors recovery

5

Day 2 Key learning outcomes

01
Identify evidence based practice strategies for working with children and young people who have experienced trauma

02
Explore in detail reparative strategies that support health intervention with traumatised children and young people, and their parents, using a trauma informed lens

03
Build approaches that resource change across all environments in which children and young people live, learn and relate

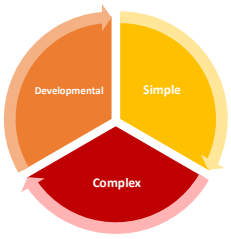
6

Defining trauma

Any single, ongoing or cumulative experience which:

- is a response to a perceived threat, usually to the level required for survival
- overwhelms our typical capacity to cope
- feels/is outside our control
- often evokes a physiological and psychological set of responses based on fear or avoidance

- What is an example of each?



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Collective trauma

- It is also important to understand the impacts of collective trauma as opposed to individual trauma.
- Research demonstrates that significant events that impact whole communities can lead to community breakdown.
- Disconnection from country, culture, family and community have had a devastating impact on Aboriginal and Torres Strait Islander health and wellbeing.
- As a result many communities prefer to engage in collective healing responses rather than individual treatment interventions.

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Collective regulation and safety

Given that communities often experience distress collectively, community healing initiatives are critical to creating real change. A failure to tailor healing efforts at the community level will see families continue to live in vulnerability without the strength of a healthy community to assist them.

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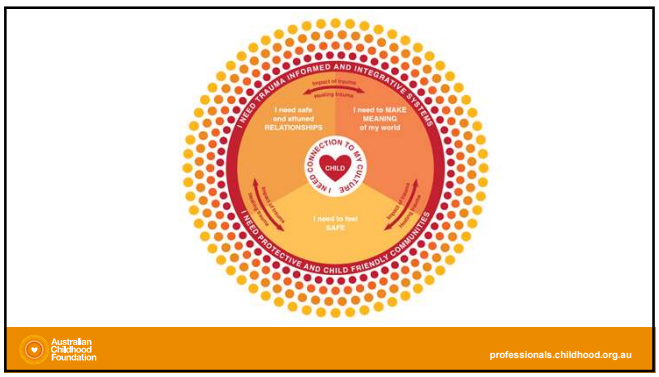

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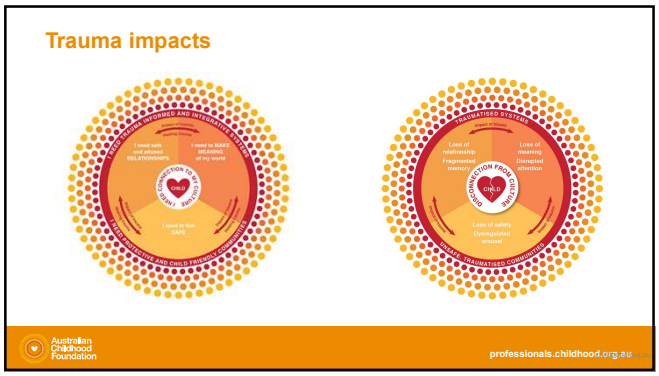

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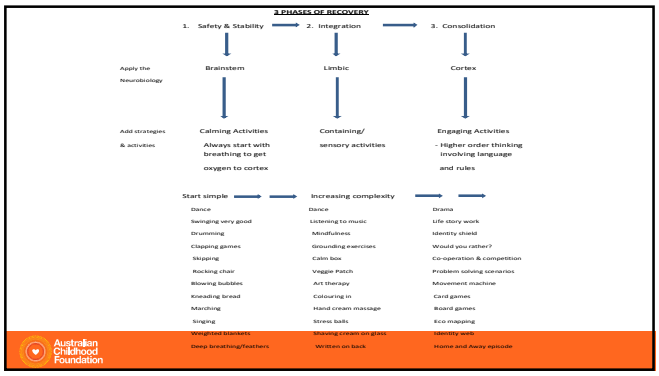

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Culture heals- neurodecolonisation

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What is Culture?

- As a table group discuss:
  - What is culture?
  - What does culture mean to you?

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Culture

- Culture is a set of beliefs, values and rules for living that are distinctive for that group.
- Culture is passed down across generations and bound together through:
  - Relationships
  - Knowledge
  - Language
  - Social organisation
  - Life experiences

Michael Yellowbird
Childhood Trauma Conference 2016

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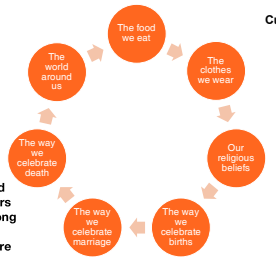
The brain in culture

Changing the cultural environment shapes the brains of the next generation

The cultural context of our experiences with other people influence the brain's development



Culture organises interpersonal relationships and promotes neuronal connections that support a child's adaptability to the physical and emotional environment

Cultures are a means for sharing knowledge and skills of a community or population

Sensory data is interpreted according to the parameters of the surrounding culture long before cognitive understanding of that culture

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Impact of disconnection from culture

- Disconnection from culture through the global and specific impacts of colonisation is a specific trauma that has specific impact on the neurobiology of the brain. Dr Michael Yellowbird calls healing from this trauma 'neuro-decolonisation'.
- Neuro-decolonisation requires access to cultural resources such as ritual, sacred meditation, dance, song and other cultural embodied practices are healing resources for people who have experienced harm through colonisation practices and/ or disconnection from culture.

Michael Yellowbird
Childhood Trauma Conference 2016

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Linking traditional healing rituals to the neurobiology of trauma

- Aboriginal healing practices are:
  - Repetitive
  - Rhythmic
  - Relevant
  - Relational
  - Respectful
  - Rewarding

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Healing rituals from diverse Aboriginal cultures

- Core elements of traditional healing following trauma
  - Rationale (cortex)
  - Retelling/re-enactment (limbic)
  - Set of somato-sensory experiences (diencephlalic)
  - Touch, patterned, repetitive movement (brainstem)

- Bruce Perry

All provided in intensely relational experience with family and clan participating in the ritual

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Healing Principles

- Retell the story
- Hold each other
- Massage, dance, sing
- Create images of the battle
- Fill literature, sculpture and drama with retelling
- Reconnect to loved ones and to community
- Celebrate, eat and share

- Bruce Perry

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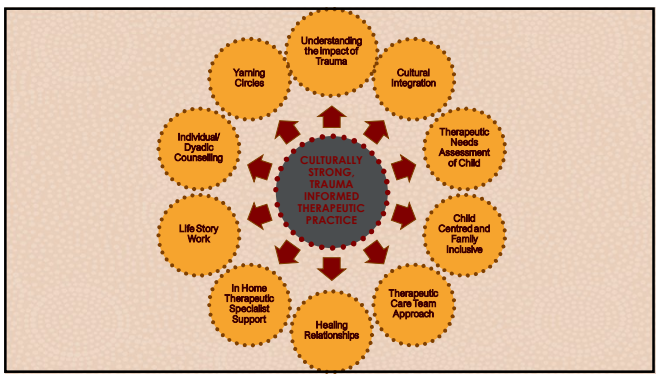

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Holding the child at the centre…

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Collective trauma

Collective or historical trauma is trauma that happens to large groups of people. It can result from colonialism, war, genocide, slavery, incarceration, terrorism, displacement, poverty, and natural or human-made disasters, among others.

Research indicates, however, that responses to deliberate perpetration of mass trauma differ from those caused by accident or forces of nature, with trauma from deliberate intent creating a deeper sense of dismay and alienation (Sotero, 2006).

According to Sotero (2006), "intentional violence threatens basic assumptions about an orderly, just world and the intrinsic invulnerability and worthiness of the individual."

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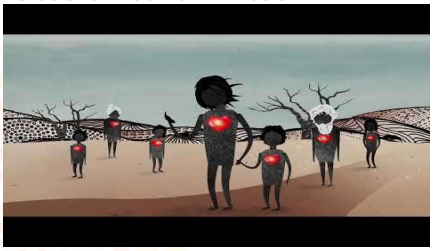
Intergenerational Trauma Animation



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Epigenetics

Epigenetics is defined by the Journal of Science as:

"the study of heritable changes in gene function that occur without a change in the DNA sequence"

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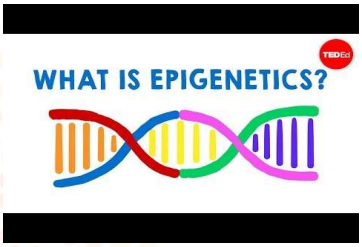
Epigenetics



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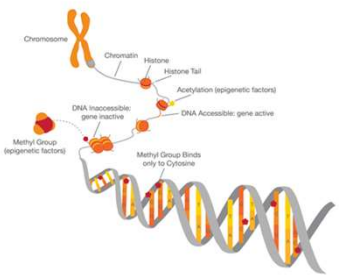
Epigenetics

"The study of inheritable changes in gene function without the change in the DNA sequence"

Journal of Science



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Epigenetics and stress

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Neurobiology & Child Development

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Child development

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Child development

- We become who we are as a result of a mix of genetics and experience
- Each developmental stage has particular things that we expect to see - physically, how we think, what we can do and how we are in relationships with other people and ourselves
- At each developmental stage we face developmental tasks that require the support of our parents and/or carers
- Delays in one area can affect our ability to consolidate skills and progress to the next developmental stage

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Child development

Child development and trauma guide

- Victorian government initiative- Every child, every chance
- 7 developmental stages
- Each stage describes key developmental trends and tasks
- Includes emotional, social, physical, cognitive areas from school age onwards

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Child development

Using the child development and trauma guide:

- Discuss the allocated developmental stage in your group
- Provide an overview of normal development for the allocated stage
- What might you notice in the allocated stage that you see in the children and young people in youth justice?
- Was there any new learning or anything that surprised you?
- Did you notice any mismatch between the tasks of the allocated stage and the expectations placed on children of that age?

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Sequential brain development – disrupted by trauma

The Thinking brain
3-5 Years

The Emotions and Memory Brain - Birth to 4 years

The Movement Brain
Birth – 2 years

The survival brain
Pre birth to 8 months

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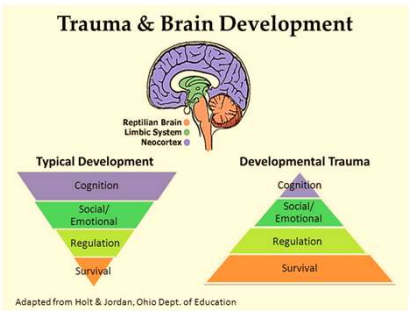

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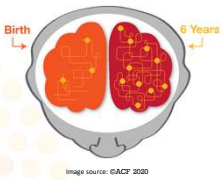
Development of the left and right hemispheres

Left Hemisphere

- Evaluates language content
- The optimistic hemisphere
- Understands beginning, middle and end
- Learns from the past and expects the future
- Looks for patterns



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Right Hemisphere

- Orientated in the present moment
- Eye Contact
- Facial Expression
- Tone of Voice
- Posture
- Gesture
- Intensity
- Grasps the whole

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Integration

- A source of strength – Dr Dan Siegel
- The linkage of differentiated parts – when a system becomes integrated becomes flexiable and adabptable, sense of harmony, receptive to new things.

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Brainstem

- Increased baseline heart rate
- Dys-regulation
- Sleep problems
- Shallow breathing

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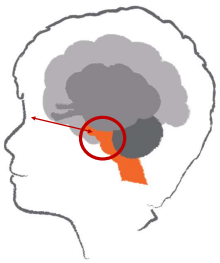
Superior Colliculus

- Involved in detecting threat – visual detection and recognition of threat stimuli – usually overactive in children who have experienced trauma.
- Activates approach and avoidance mechanisms.
- This may present as hypervigilant behaviours including excessive eye darting, flinching when someone approaches, attention focussed on perceived threat.



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Cerebellum

Children who experience trauma around the time the cerebellum is developing can present with an array of developmental delays:

- poor motor control and coordination
- clumsiness,
- poor language development
- delayed in achieving gross and fine motor milestones.

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Diencephalon: Thalamus and Hypothalamus

The thalamus has 2 possible routes:

- **The high road**: When there is no fear or harm detected, information gets sent on up to the common sense part of our brain, the cortex.
- **The low road**: If there is harm detected, the information gets sent in a flash to our amygdala and a survival response kicks in activating the hypothalamus.
- Hypothalamus initiates cortisol and adrenaline which activates the fight fight, run or freeze
- **Children who have trauma often take the *low road as* a default nervous system response**

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Limbic Lobe

Children who experience trauma usually experience dysregulation and interrupted attachment relationships.
This impacts their ability to:

- engage in relationships with others
- Self regulation
- Social learning – understand social cues, develop empathy for others

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Hippocampus – Brain's historian

- Cortisol is toxic to the hippocampus
- Hippocampus can be up to 25% smaller
- This impacts ability to store memories, thus explicit memories are often fragmented or difficult to retrieve as working memory.
- Traumatic memories are held implicitly so not processed and stored by the hippocampus or stored as fragments of memories.
- This impacts on learning and development of a coherent narrative of the child's life experience and story.

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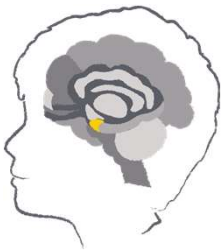
Amygdala – smoke alarm

- Smoke detector - amygdala in trauma remains switched on or underactive
- Amygdala learns by association – trauma is usually produces sensory based implicit memory.
- Amygdala will attach meaning to sensory input that's associated with the traumatic experience.



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Cortex – higher order thinking

- Cortical function is diminished or goes 'offline' as the brain directs its energy to survival processes.
- This impacts on various cognitive functions from memory recall, top down regulation and delayed speech and language processing.
- Impacting on children's capacity to form a narrative of their experiences.

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The prefrontal cortex- executive function

- Diminished executive function – ability to problem solve and think abstractly
- Forward planning and comprehension of consequences diminished
- Higher risk taking with poor impulse control

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Medial prefrontal cortex

- Poor sense of self
- Attachment relationships impaired
- Executive functioning diminished
- Reduction in emotional literacy

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Corpus collosum

- Smaller in children with trauma
- Poor neuronal connection between hemispheres
- Diminishes capacity for integration of emotional experiences – language to emotion
- Poor coordination of midline processes

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Examples of Common Developmental Reactions
Infants & Toddlers (Birth to Age 2)

Physical	Emotional	Behavioural
• Exaggerated startle reflex • Glazed look • Limited facial expressions • Stiff bodies	• Separation fears • Wailing • Withdrawn • Detached • Minimal affect • Extreme affect	• Fussiness/ tantrums/outburst • Feeding and sleeping problems • Flailing about and gasping • Can not communicate adequality with words

(Levine & Kline, 2007; Brymer et al., 2006)

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Examples of Common Developmental Reactions
Toddlers to Preschool Aged (Ages 2-5)

Physical	Emotional	Behavioural

• Confusion
• Sensitive to noise
• Somatic complaints
  • Sore tummies
  • Impaired digestive system
	• Fear of separation
	• Increased fearfulness
	• Anxiety
	• Helplessness
	• Withdrawn
	• Excessive worrying
	• Irritable
		• Regressive behaviours
		  • Bed wetting
		  • Thumb sucking
		• Excessive clinginess
		• Eating/ sleeping problems
		• Crying
		• Not talking
		• no gender difference
		• Tantrum/outburst
		• aggression
		• Asks a lot of questions
		• Repetitive play
		• Magical thinking

(Levine & Kline, 2007; Brymer et al., 2006)

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Examples of Common Developmental Reactions
School-Aged (Ages 5-12)

Physical	Emotional	Behavioural

• Somatic complaints
  • Aches & pains
  • Sore tummies
  • Head aches
• Poor concentration
• Inattention
• Hyperactivity
	• Withdrawal
	• Fearfulness
	• Sadness
	• Irritability
	• Feels responsible
	• Worst-case scenarios combined with magical thinking
	• Emerging feelings of resentment and revenge (complicate)
		• Appetite & sleep changes
		• Competition for attention
		• Repetitive play
		• Regressive behaviours
		• School avoidance
		• Aggression
		• Stuck on event
		• Preoccupation with others safety
		• Peer problems
		• Impaired learning
		• Possible Gender differences:
		  • Girls: internalize
		  • Boys externalize

(Levine & Kline, 2007; Brymer et al., 2006)

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Examples of Common Developmental Reactions
Teens (Ages 13-18)

Physical	Emotional	Behavioural
• Aches & pains • Poor concentration • Hyperactivity	• Withdrawal • Fearfulness • Sadness • Irritability • Hopelessness • Detached • Shame/guilt • Change in attitude • aggression	• Sleep & appetite changes • Acting out • Substance abuse • Avoidance • Isolation • Abrupt social change • Risk taking • Self harm • AOD issues • Suicidality • Bullying • Denial of emotions • Resentment • Rumination about the disaster

(Levine & Kline, 2007; Brymer et al., 2006)

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Integration

- Abuse is an insult/assault to integration
- Impairments to integration lead to Chaos and/or Rigidity

- Integration creates harmony
- Greater integration results in children being more adaptive and flexible
- Integration is the key to - Wellbeing

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Pathways to safety and integration

- Integration is always present when you have regulation
- Integration in relationships involves attuned communication among people who are honored for their differences and then linked together to become 'we'
- "If you name it, you contain it" – because this integrates two systems
- "If it's sharable, it's bearable"
- "Mention and manage your emotions" - Siegel
- Integration is health

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Holding the child at the centre…

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The neuroscience of safety and cultural anchors

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I need to feel SAFE...

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Strong in Culture

Deep Listening

Dadirri

Quiet still awareness
Waiting

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Dadirri

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Strong in Culture

Listening
Kaadaniny
Learning

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Deep Listening

- With listening comes responsibility, it forces us to to listen to ourselves. We need to enter our own deep listening. Judy Atikinson

- Creating safety is ongoing, safety is never stable
- Insert dadirri

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Important domains of Safety

- **Environmental safety:** consider the sensory environment for your child. How does the care environment help them to feel safe?
- **Physiological safety:** the arousal levels of your child will be different under different circumstances. How do you understand when your child is in the downstairs brain and what do you do to help them move into their window of tolerance? Think about predictability, routine, consistency,
- **Relational safety:** trauma heals in relationship. Remember the quote: ***"neurons that fire together, wire together".*** Considering how you engage with the child, help them to regulate, use your eye contact, facial expressions, proximity and body language to connect your right hemisphere with the child's right hemisphere.

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Safety is the Treatment

- We are constantly signalling to each other messages of safety or lack of safety.
- Below the conscious awareness
- If we have a neuroception of safety we are able to connect and co-regulate.
- Open, nonjugemental, recptive state – invites neuroception of safety.
- Are you with me?

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We have to reframe the question and ask not about the (traumatic) event, but focus on the individual reaction or response.

- *Stephen Porges, founder of Polvyvagal theory*

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Safety is a unique experience

Our bodies work hard to keep us safe

Responses to trauma are out of our control

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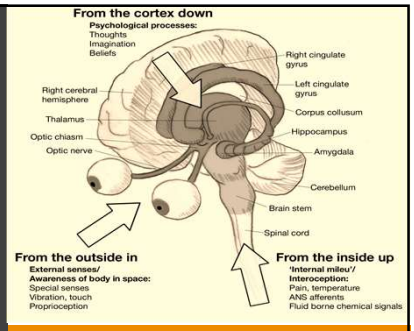
Neuroception – 'detection without awareness'

- Familiarity
- Finding that which is dangerous to be safe
- Finding that which is safe to be dangerous



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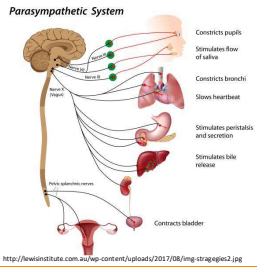
The Vagus Nerve

Cues of risk and safety are continually monitored by our nervous system.

"Before we can engage in social behaviour and learning we must first feel safe."

(Porges, 2015, p.115).



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A hierarchical nervous system response

Safety

S= social engagement

S= mobilised play

S= immobolised for sexual intimacy

Danger

D= social engagement

D= mobilised fear responses to threat

D= immobolised responses to threat

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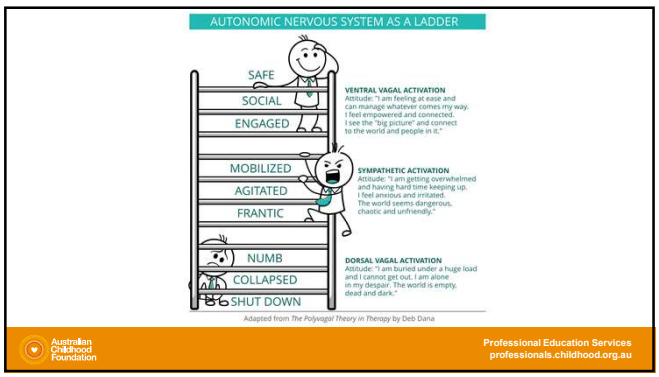

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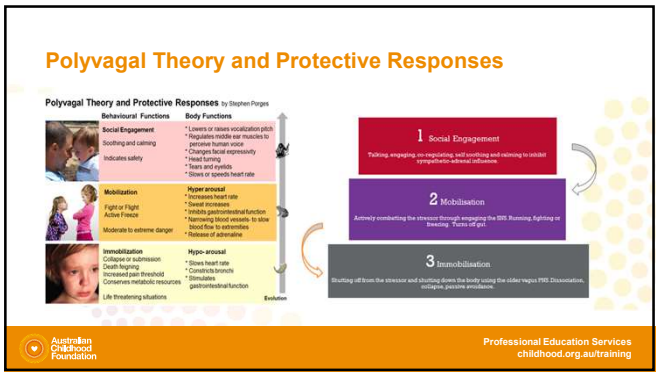

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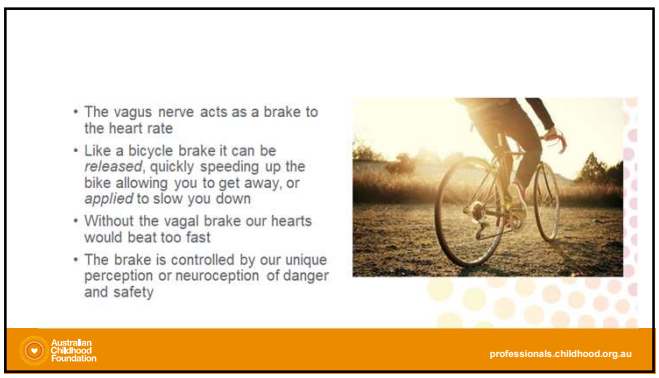

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Vagal tone

- Low vagal tone = Highly activated sympathetic nervous system
- High vagal tone = balanced activation between sympathetic and dorsal states, known as ventral activation

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Social Engagement
Soothing and calming
Indicates safety

- Lowers or raises vocalisation pitch
- Regulates middle ear muscles to perceive human voice
- Changes facial expressivity
- Head turning
- Tears and eyelids
- Slows or speeds heart rate

Ventral Vagal Activation

- We see the big picture. Being organised, following through with plans, taking care of myself, taking time to play, doing things with others, feeling productive at work, having a general feeling of regulation and self-management.

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Mobilisation
Fight or Flight
Active Freeze
Moderate or extreme danger

Hyper arousal
- Increases heart rate
- Sweat increases
- Inhibits gastrointestinal function
- Narrowing blood vessels – to slowblood flow to extremities
- Release of adrenaline

Sympathetic Activation

- We feel a stirring or unease. We are "on the move". We hope our action taking here will give us enough space to take a breath and climb back up the ladder. Anxiety, panic attack, anger, inability to focus or follow through and distress in relationships

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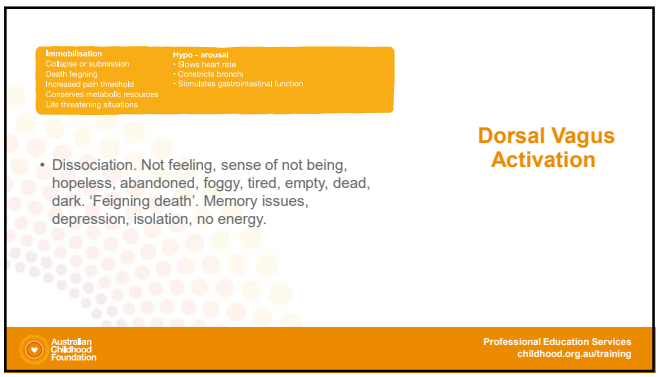

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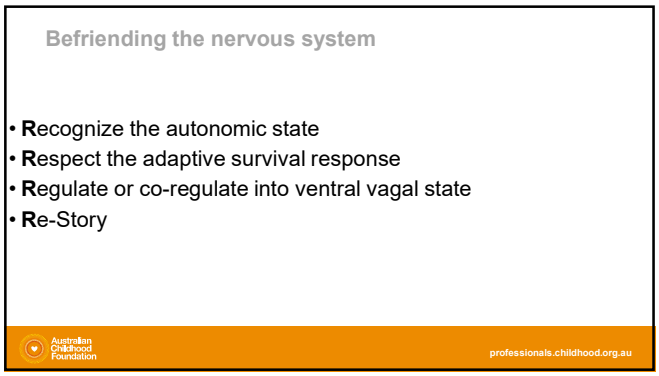

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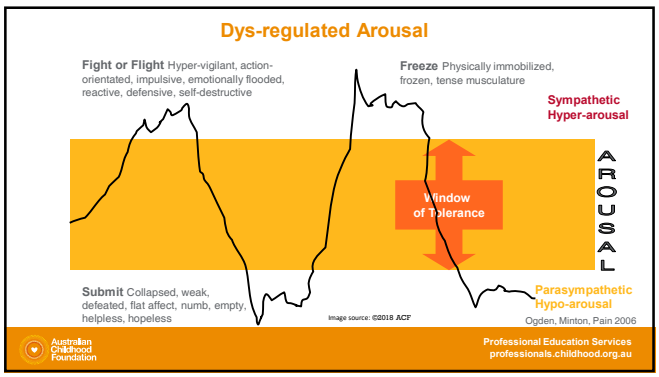

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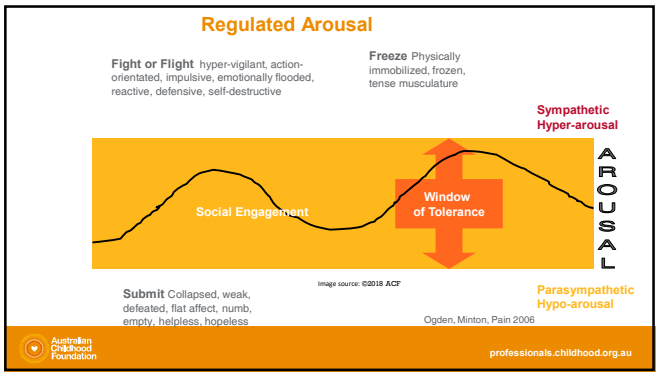

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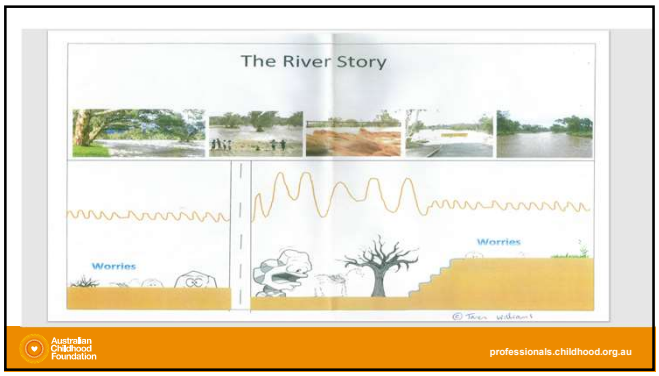

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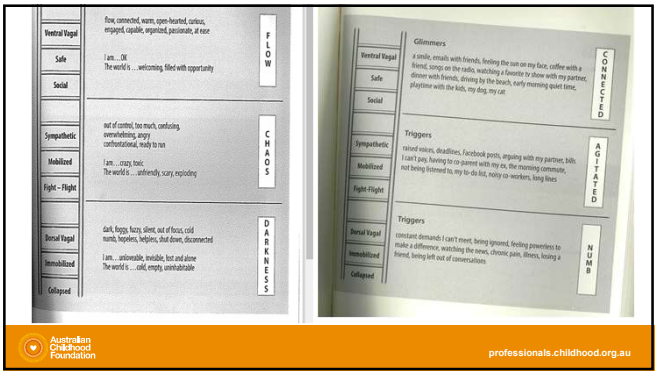

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Working with the window of tolerance & autonomic ladder

In groups:

How might you explain the window of tolerance OR the autonomic ladder to a child, young person or parent/caregiver you work with?

Have a go at developing a developmentally appropriate tool that explains the arousal response

When would you use the tool?

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Holding the child at the centre…

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I need safe and attuned RELATIONSHIPS

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Relationship

- Physical /sensory : awareness of tone, prosody, body language, proximity
- Human/relational : attuned, predictable, responsive, calm and engaging approach;
- System/organisational : consistency of staff; boundaries around relationship

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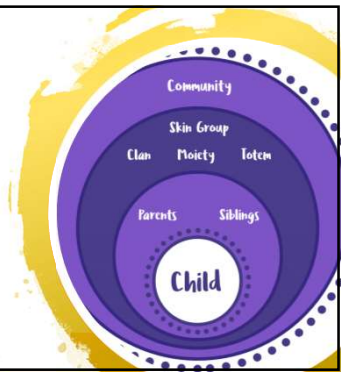
Collective view of relationship



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Ways of being

- Aboriginal people view individuals within a community holistically. Aboriginal understanding of the individual is in relation to the family, the community, the tribe, the land and the spiritual beings of the lore and dreaming. A person's physical, emotional, social, spiritual and cultural needs and well-being are intrinsically linked—they cannot be isolated. The person is not seen as separate, but in relationship to and with others. An Aboriginal perspective views:

the person's relationship to their whole family—not just to their parents and siblings

the person's relationship to their community—not just their family

the person's relationship to the land and the spirit beings which determine lore and meaning.

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The right hemisphere in relationship

These primary relationships contribute to:

- stored internal working models of primary relationships stored in the right hemisphere
- The perception of emotion in self and others, enabling empathy and humour.

These functions depend on the use of something called 'Mirror Neurons' in the brain

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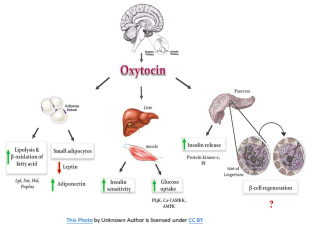
Oxytocin

Role in regulating maternal care behaviours:

- Critical for maternal behaviour – motivates the parent to care for his/her infant
- In several mammalian species, facilitates physical proximity and nurturant care



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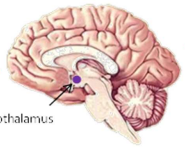
The Parental Approach System: the role of hormones

oestrogen
prolactin
oxytocin



self-defence system calmed

reward system sensitised

Dan Hughes

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Dopamine

- A neurotransmitter - plays a big part in **motivation and reward**
- **'Feel good'** hormone – nearly all pleasurable experiences come from a release of dopamine – eating, sex, etc

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The role of Dopamine in mother-infant bonding

'A study group investigated the role of dopamine in mother-infant bonding and found that both mother-infant vocalization synchrony and maternal attunement were associated with higher dopamine concentration in brain structures connected to bonding'.

https://www.medicalnewsbulletin.com/role-dopamine-mother-infant-bonding/

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The role of father-infant bonding in internalisation of self

The ACG lights up in infant-mother face recognition. Role in calming of fear and social reward.

The mPFC lights up in infant-father face recognition. Role in internalisation of sense of self and identity.

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Internal working models

	Positive internal working model	Negative internal working model
View of self	I am lovable I am worthy	I am unlovable I am unworthy
View of the world and relationships	Others are responsive Others are loving Others are interested in me Others are available to me The world is relatively safe	Others are unavailable Others are neglectful Others are rejecting Others are unresponsive The world is unsafe

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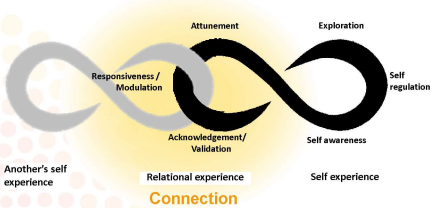
Relational experiences



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Blocked care

- Blocked care is a way of describing the **suppression of carers' potential to nurture a child**, especially if the child is slow to reciprocate warmth and love.
- **Unmanageable stress associated with the experience of parenting**, and often related to the parent's own attachment history, is the primary source of interference with caregiving.

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Blocked trust

- Blocked trust is a way of describing the **suppression of childs' potential to trust a nurturing adult**, even if the adult can demonstrate relational safety.
- **Unmanageable stress associated with the experience of abuse**, is the primary source of interference with carereceiving.

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Systemic Blocked Trust- The impact of Intergenerational, transgenerational trauma and epigenetics on the capacity of parents holding trauma to safely engage

- Collective trauma experiences such as genocide can be communicated on a cellular level and change the way DNA is expressed down generational lines
- **This may mean fear of institutions can be transmitted through direct and indirect experiences of trauma, including parenting styles and intergenerational avoidance of institutions such as schools, hospitals and government.**

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Brain systems that support parenting

Parental Approach System

- Get close to the child without becoming defensive.

Parental Reward System

- Enjoy interacting with the child.

Parental Child Reading System

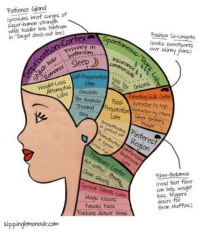
- Understand the mind of the child.

Parental Meaning Making System

- Make sense of our experiences with the child and our social life.

Parental Executive System

- Regulate interpersonal conflicts between approach and avoidance, pro-social and defensive reactions.



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I need to MAKE MEANING of my world

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Narrative – Our story

- Most of us would see a narrative as a story
- We all carry stories of understanding of ourselves with us throughout life. These stories become the lens through which we view the world.
- The manifestation of these narratives are the behaviours we see.
- How do we look beyond the behaviour to see the narrative beneath it?

Stories.
Connect.
People.

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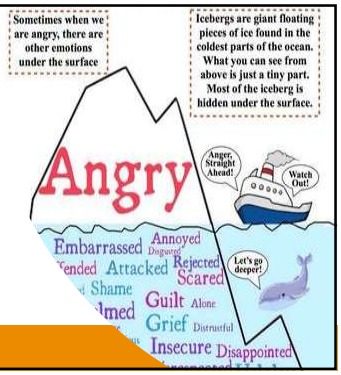
Behavioural – narratives of trauma

- **Behaviour tells a story!**
- Traumatised children's behaviour can be difficult and complex for parents, teachers and carers to understand, manage and shape
- However, it is functional and almost always makes sense given their specific experiences of trauma
- Children's behaviour is the manifestation of the impacts of trauma outlined in the previous sections



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Common themes

- "manipulative" inability to trust
- "Inattentive" worried and preoccupied
- "attention seeking" needing/ seeking connection
- "disruptive" difficulty asking for help

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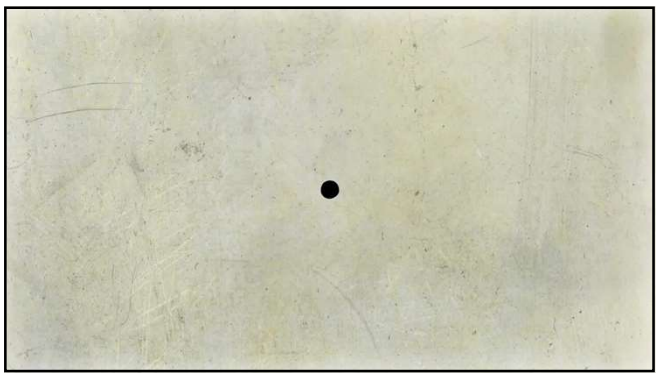

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Help families to explore their history

- Taking time to reflect on the generations before you (both those living and deceased) including their hardships and accomplishments.
- Making a family tree and researching your roots.
- Framing and making visible photos of your ancestors.
- Taking a moment of gratitude for those that provide the foundations of your life today.

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Family Tree

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Maybe we can help children and their families grow a Family Tree of Hope…..

A coherent self-narrative enables them to have the capacity to understand the internal experience of the self and of the child, and to communicate this understanding with verbal and non-verbal communication

"Becoming the author of one's own life story is the ongoing goal of the making-sense process" (Siegel 2006)

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Strategies

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Communicating safety using the social synapse

- **Creating safety** – safety in relationships, the environment and interactions.
- **Co regulate** Regulating your own emotions and staying within your window of tolerance can be beneficial for you and the children you care for. *Think about the healthy approaches you use to regulate your emotions and try to exhibit those behaviors in your environment.*
- **Attuned**: Be attuned to body language and nonverbal behaviors. These nonverbal indicators can help you determine how a child may be feeling or how they may be affected by the current activities or overall environment.

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Relationship based strategies

- Encouraging safe, enriching, positive relationships with others and the broader community (for both tutors and families)
- The importance of a charismatic other
- Be empathetic of trauma history, triggers, needs, desires
- Encourage parents to repair when there has been rupture– time in
- Understanding that all behavior has a meaning
- Interventions which enhance parental reflective functioning

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Responding to emotions – supporting stabilisation

VALIDATE

SOOTHE

SUPPORT TO MOVE

- ✗ Don't be silly – it's OK!" "You need to calm down!"
- ✓ "I know, that's so frustrating."
- ✓ "Oh dear, you're so sad about that."
- ✓ Reflect affect (using face and body)
- ✓ Invite connection – proximity, contact
- ✓ Respond to child's cues (need for closeness or space)
- ✗ Ask them to explain their feelings (try this later!)
- ✓ Shift body states – big sigh, stretch, shake
- ✓ Offer options for moving forward

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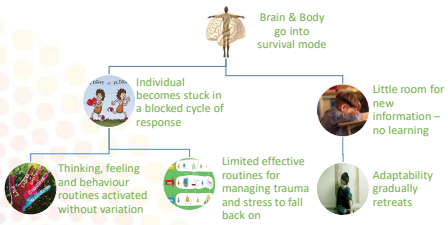
Trauma and the Body



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Interoception

Low levels of interoception means a reduced capacity to understand or connect with the body in ways that would enable them to self-regulate.

Interoceptive awareness may directly inform the capacity to regulate arousal states.

It is important to integrate the teaching of interoception activities into developing interoceptive awareness.

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Interoceptive strategies for kids

Move	Tense & Stretch	Find your pulse	Yoga	Map your feelings
Mindfulness	Relaxation	How hungry am I?	Breathing	When I get.....

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Sensory needs

Many children and young people with ADHD and Autism also suffer from sensory processing disorder (SPD) making it difficult to process and act on information received from the senses.

Most children with SPD display elements of extremes where they suffer from sensory overload sometimes and seek stimulation at other times.

It is important to understand their sensory needs and implement strategies to enable a positive experience in the education or care setting.

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Using interoceptive and sensory strategies

Research and clinical experience suggest the efficacy of individually combining interoceptive awareness, sensory processing, behavioral (Khalsa et al., 2018) and trauma-informed treatment (Warner et al., 2014).

The need to merge sensory integration with interoceptive awareness intervention is supported by emerging clinical evidence demonstrating the effectiveness of sensory integration interventions in PTSD (Warner et al., 2014) and its recent inclusion as an evidence-based treatment for Autism Spectrum Disorder.

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Reducing complex relational stimuli

- Use as few words as possible.
- Always clearly state what you want to happen—the desired behavior.
- Don't argue, debate, or negotiate.
- Being direct is good, but don't become too authoritarian, or doors will close quickly.
- Don't expect the person to be reasonable or to act their age.
- Go for a few "Yes" responses first. Use short questions you think the person will answer "Yes" to, just to get them out of being stuck in the "No" loop.
- Be nonjudgmental.

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8 senses to embody

1. **Visual**
2. **Auditory**
3. **Olfactory** (smell)
4. **Gustatory** (taste)
5. **Tactile System** (touch)
6. **Vestibular** (sense of head movement in space)
7. **Proprioceptive** (sensations from muscles and joints of body)
8. **Introception** (awareness of basic primary functions – hunger, toileting, breathing)

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Auditory - Ohm dad

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Movement to embody

With music in the background make the following opposite shapes with your body:

- Round - straight
- Sit - Stand
- Small - large
- Freeze - melt
- Push - pull
- Wide - narrow
- Left - right
- Hot - cold
- Fast - slow
- Light - strong
- Under - over
- Yes - no
- In - out
- Tall - short
- Loud - soft
- Up - down
- Happy - sad
- Near - far

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Using Play as Neural Exercise

3 Components this strategy must have:

1. Risk
2. Relational
3. Rupture and Repair

Allows the young person to practice oscillating between states:

- Immobilisation
- Mobilisation
- Social engagement

This is reparative in nature and avoids win/lose power struggles.

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In brainstorming accommodations, here are some key questions to ask yourself:

What is the task or expectation the child is expected to do (and failing at/"refusing" to do)?

What does the brain— anyone's brain— have to be able to do in order to successfully complete that task or meet that expectation?

What do you know about how your child's brain functions in those areas? Do they have those skills?

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In brainstorming accommodations, here are some key questions to ask yourself:

How old is your child developmentally (which might be different than their chronological age)?

What are the secondary behaviors you see in this environment or with this specific situation?

What are your child's strengths and interests?

Based on all the information gathered from the above questions, what accommodations need to be implemented to help this child be successful?

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External Brain Strategies

Assess the level of need by making an inventory of your child's needs: Your child may need all, some, or few of the following External Brain functions- time-keeper, friendchooser, money-manager, information-interpreter, hygienemonitor, and decision-maker.

Use tools: Schedules, agendas, behaviour charts, and whatever else works to give your child external cues about what he needs to do.

Educate others: Teach your child's siblings, teachers, principal, coach, etc. about FASD and the needs of your child so they can help support him.

Build a 'circle of support': Ask responsible and trusted people to act as External Brains for your child when you are not around.

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Caring for ourselves

- Working with traumatised children and families is hard work and can lead to us experiencing vicarious trauma
- This work can challenge our sense of self, beliefs about the world and our core values
- Neurobiologically, we cannot co-regulate others if we cannot regulate ourselves
- **Caring for ourselves is an essential part of our work**

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Hope

Image source: istock

What are your hopes for the children, young people and families you work with?

What are your hopes for your community?

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Useful resources:

- **Brain based parenting: The neuroscience of caregiving for healthy attachment**, Dan Hughes and Jon Baylin MD 2012
- **The whole brain child: 12 evolutionary strategies to nurture your child's developing mind**, Dan Siegel MD and Tina Bryson PhD 2012
- **Kids matter:** https://www.kidsmatter.edu.au/
- **Using PACE to create loving attachments** – An Interview with Kim S. Golding and Daniel A. Hughes, http://www.jkp.com/jkpblog/2012/03/interview-kim-golding-daniel-hughes-creating-loving-attachments/
- **Child development and trauma guide:** http://www.cpmanual.vic.gov.au/our-approach/best-interests-case-practice-model/child-development-and-trauma

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