





Learning objectives Neurobiology of trauma

- Safety in the context of understanding and working with children in a trauma informed framework
- Creating safe environments
- Understanding self regulation
- The role of self care













Brain development

 The brain develops through a mix of genetics and environmental factors.



• The brain develops sequentially from the bottom up



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Brainstem - basic life functions

- Basic life functions
- First part of our brain to develop
- · This is the most developed brain part at birth
- Responsible for our heart beat, breathing, sucking, temperature control, blood pressure





- · Processes visual threats looming objects identified by cells in the retina of the eye
- · Retinal neuronal input received by Superior Colliculus which engages the body in Avoidance and defensive behaviours

Cerebellum- movement and balance

- Helps us to know where our body is in space
- Helps us with our posture and balanceHelps us not to fall over and to control our
- Has its own connective pathways between
- the 2 halves- cerebellar vermis



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Diencephalon - sorting & sending centre

- This area of the brain develops mainly after birth
- It sorts out messages coming into the brain and sends them
- It uses hormones to send signals to body
 Hormonal signals tell your body what it
- Hormonal signals tell your body what it needs, eg. food, water, love



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Limbic lobe- emotional gateway

- The part of the brain that helps us attach an emotion to an experience or memory
- This part of the brain is particularly involved with the emotions of fear and anger
- Also heavily involved in attachment processes
- This area develops mainly after birth

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Hippocampus – Brain's historian Explicit memory system Develops approximately 2-3 years of age Provides context to memory and embeds long term memory

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Amygdala – smoke alarm

- · Detects threat
- Develops from birth
- · Learns by association
- Involved in implicit memory processes



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Cerebral cortex- complex thinking

- The largest part of the brain
- Associated with higher brain function such as thought and action
- Examples of functions:
 - Reasoning
 - Logic
 - Judgement
 - Voluntary movement



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Medial prefrontal cortex

- · Associated with perceptions of self and similar others
- · Known as centre for mindfulness
- Involved in maternal bonding the parent child dyad and inter-subjectivity



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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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Transgenerational trauma

- Sometimes they can be connected
 with unjust events
- They are often passed down from generation-to-generation without being thought about or assimilated, sometimes through parenting styles, parental mental health, culturally, spiritually



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Understanding developmental trauma-safety

Developmental Trauma



An understanding of child development is pivotal in recognising and distinguishing the impact of trauma

Children & young people who experience chronic traumatisation frequently experience delays across their developmental spectrum including: > Cognitive skills > Language skills > Social skills

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Summary of the impact of developmental trauma

- Fear: Sensitized to danger leading to distrust of others.
- Fear: Sensitized to danger leading to distrust of others.
 Hyper-vigilance: External scan for danger, anticipate abandonment or attack. Internal -lam bad, wrong. No spare energy for anything else. See danger where it doesn't exist.
 React to imagined dangers in ways that bring about staudions that are feared.
 Identify develops around shame. Distorts experience of self and others. Feel flawed as a human being. Experience of badness can be kept out of consciousness because too painful to live with. Create barriers to relationships or others can't see what we see in set. Increase feelings of bandens. Can ad horeliness. .

- set: indicases recently to share, isolation and breakers.
 Security of attachment is compromised.
 Safety is destroyed and developmental attachment patterns become disorganized.
 Intersubjective explorations are reduced and avoided. They don't have the experiences that enable them to develop core beliefs or an internal working model that they are depliful, isolate and have a positive impact on the people around them.
- Traumatic events are not explored and experienced in an integrative, coherent, intersubjective manner. They are not assimilated into the autobiographical narrative. Traumatic events can create dissociation, as can subsequent memories or triggers such events, thus causing rigid avoidance or "re-traumatization".



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ŀ	lemisphe	ric functioning during fear event
	Monitoring	monitoring the intensity of our movements, primed to look for signs of threat
	Acting	acting in the moment and won't have a strong grasp of future or past, therefore will not likely be able to grasp the potential consequences of their actions at the time
	Processing	processing our postures and gestures, attuned for signs of danger
	Registering	registering the way we try to use eye contact (e.g. demanding a young person look at us may escalate the situation)
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Regulated Arousal Fight or Flight hyper-vigilant, action-orientated, impulsive, emotionally flooded, reactive, defensive, self-destructive Freeze Physically immobilized, frozen, tense musculature Sympathetic Hyper-arousa A R O U 4 Window Social of Tolerance S Engagement A L Submit Collapsed, weak, defeated, flat affect, numb, empty, helpless, hopeless Parasympathetic Hypo-arousal (Ogden & Fisher, 2015) Australian Childhood Foundatio











































What is needed

	Choose three words that describe what you believe is essential for a safety and choose three words that are not helpful in your role and creating safety. Add your own words as they come to mind.										
	safe auth	entic ory	flexib noisy	le	serio retrea	us It	detai	led pa confi	tterns dential	priva freed	lom
20	calmness	soft	colours	bright	t colou	irs	usua	lly noi	sy	disor	der
	messy outside	spac	e vement	fun		windo	ows	artwo	ork	view	S
	concealed special	seci real	uded m	legro soft	om	breat	hing s	pace	playfu	ul s	hapes
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Safety and listening the child

- Model attunement
- Ensure that the child is seen and kept in focus throughout the assessment and that account is always taken of the child's perspective
- Are they ready-how long can you sit and wait
- Validate what the child is feeling
- Check meaning
- Make sense of what is happening for the child
- What will have meaning



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	Regulation Developmental continuum							
	Stage	Child	Caregiver/Educator					
	Behavioural	I need to show you	Sensory motor					
	Language	I need to/can tell you	Narrative/emotional literacy building					
	Metacognition	I can start to figure it out with support	Guiding/role modelling					
			Heckhausen & Dweck (1998), Life Skills 4 Kie	ds				
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Key considerations

- · There is no magic wand!
- It takes time and patience: persistence and repetition is a must
- You matter in this work!
- · Your relationship with the child is key
- · Each child is individual which adds to the complexity
- Trial and error is common
- A titrated approach is important

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Environment

- Children relate to space in a manner which articulates their own sense of safety and their psychological states.
- The manipulation of non-fixed physical features can be used to communicate safety, messages and psychological issues or states, which can be used to derive safety, empowerment and sense of agency.
- A natural mind-space, a natural, physical space which is accessed visually and occupied only by the mind.
- "I've never been asked if I would like to rearrange stuff. That would be so empowering and especially if their arrangement is how I would feel the most uncomfortable."



Stephanie Liddiacoat 2018

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Expectations

- Children, young people and parents need to have a greater sense of confidence about your capacity to protect them
- Staff require increased knowledge, confidence and skills to implement child safe practices in their work.
- Clear understanding of personal behavioural expectations are established in effectively guiding interactions with children
- Have tools in place to capture and reflect the child's voice.

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- Compared to case conferences, one-on-one supervision better supports the critical reasoning required for child safety (Munro 1999)
- Reflective regular supervision promotes staff well-being
- Reduces staff turnover
- Identify specific and ongoing training
- Formal and informal supervision provide space and permission for workers for workers to reflect on emotional responses to the work
- Peer supervision and support enable the reduction of isolation, promotes
 safety and develops greater transparency to identify risk and opportunity
- Models of supervision

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Prevention: Personal level

 Maintaining self care and prioritising healthy lifestyle/personal wellbeing

- Life outside of work incorporates: social, relaxing, spiritual, fun aspects
- Supportive and healthy relationships
- Work-life balance : maintaining healthy boundariesPersonal & professional values align with the work
- Personal wellbeing plans are well-integrated & effective



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