What is attachment?

What does it have to do with brain development?

How does this impact resilience?

Strategies to enhance emotion competence, neuroplasticity and resilience.

Why is this useful for ECE teachers to know?
ATTACHMENT

Regulatory system – social/biological
DEFINITIONS

Essential

Reciprocal

Enduring

Adaptive

Template
PATTERNS

Secure

Insecure – avoidant

- ambivalent
- disorganised

http://www.youtube.com/watch?v=zovtRq4e2E8
Resonance Circuit

Resonance: Vibe, emotional contagion
Attunement: felt sense, explicit, non-verbal
Empathy: verbal, cognitive, coherent narrative
Compassion: concern, caring, help
Acceptance: pre-requisite for resilience and lasting change

(Graham, 2015)

Main predictor of a secure attachment: self reflection
GROUP EXERCISE

https://www.youtube.com/watch?v=apzXGEbZht0
Right brain develops before left brain. Right brain: visual cues, sensory data, emotions, non-verbal communication. Left brain: language, matures 18-24mths. Attachment regulate right brain and maturing the limbic system. (emotional brain)
ATTACHMENT AND BRAIN DEVELOPMENT

**Direct link** between **secure attachment**, development of **efficient right brain regulatory functions** (ANS) and adaptive **mental health**. (autonomic nervous system)

Stress response: Fight, Flight (mobilization), or Freeze (Immobilisation)

SURVIVAL

Recommended reading:
CORTICAL AND SUBCORTICAL COMMUNICATION

- **Left Hemisphere**
  - Language
- **Right Hemisphere**
  - Imagery

**Limbic System**
- Motivation & emotion

**Brainstem**
- Regulation of autonomic function, arousal & pain systems
LIMBIC SYSTEM
THREE BRAINS

**Frontal lobes:** Thinking brain (reasoning, problem solving, verbal expression, memories of events and facts)

**Limbic system:** Mammalian brain, non-verbal, emotional and relational, feelings, gut (implicit) memories

**Brainstem:** Reptilian brain, instinctive responses, heart, brain and breathing. See Polyvagal theory > Stephen Porges.

**Relational trauma psychobiological immunological reactions:** comprised of two separate response patterns, hyperarousal and dissociation.

https://www.youtube.com/watch?v=apzXGEBZht0
NEUROPLASTICITY

“The brain is shaped by experience. And because we have a choice about what experience we want to use to shape our brain, we have a responsibility to choose the experiences that will shape the brain toward the wise and wholesome”.

- Richard J. Davidson, PhD
NEUROPLASTICITY

Evolutionary legacy
Genetic template
Family of origin conditioning
(shaped by culture)

Who we are and how we cope........
........is not our fault
NEUROPLASTICITY

Given neuroplasticity
Choices of self- directive neuroplasticity

Who we are and how we cope......
......is our responsibility.
MECHANISMS OF BRAIN CHANGE

**New conditioning:** experiences that are going to create new learning and new memories in the brain

**Reconditioning:** seen in the neuroscientists’ scans only recently. Use a new positive experiences to rewire old traumatizing memories

**Deconditioning:** How we use practices of mindfulness to open up into more spacious awareness. Making associations (connecting dots).

Hand on heart exercise.
EMOTION COACHING

Be aware of own emotions.

Feel felt by the other

The attunement: where two people mutually influence the internal state of the other.

Enable to feel joined.

Hold a positive view of emotions, see emotions as a resource, provides information and action.

Recognise these moments offer opportunities for intimacy, learning and contact.
For learning to occur neuroplasticity is needed. You can’t change without changes in the brain.
To produce change you need to have:
Emotional regulation/interpersonal connection (Support growing of new neurons)
Proper learning environment (context/ experiences)
Co-created narratives
Relational trauma inhibits learning
THE SIX CS OF COPING

Calm: manage our reactivity and comeback to our physiological equilibrium (our birth right)

Compassion (and self compassion): response to distress, disappointment and disaster with care and concern for ourselves and others.

Clarity: be able to see clearly what is happening and the reactions of what is happening so begin to have a choice. “Catch the moment and make a choice”.

Connecting with resources: clarity about places, people that allow us to regroup and being able to cope.

Competence: sense of mastering, empowerment, sense of “I can do this”

Courage: to face the new or the unknown with a definite momentum of action and do what needs to be done.
It is possible to recover the strength of the brain, specially the prefrontal cortex (executive functions are inhibit during high states of arousal) and become resilient.

Mindfulness and resonant relationships with resilient others help our brains become flexible.

Mindfulness, empathy and compassion are the most powerful agencies of brain change known to science. Prefrontal cortex = CEO of resilience.

Middle prefrontal functions: Body regulation, attuned communication, emotional balance, response flexibility, fear modulation, insight, empathy, morality, intuition.
The roots of resilience can be found in the sense of being held in the mind and heart of an emphatic and attuned other. (Diana Fosha, PhD)

Having true others to our true self.

To see and being seen; that is the question, and that is the answer. (Ken Benau, PhD)

The brain changes in interaction to other brains. This is how we mature the brain and become more resilient.

To move from being automatic to be responsive, aware, and consequently more resilient.
A HEALTHY BRAIN TO HANG OUT WITH