

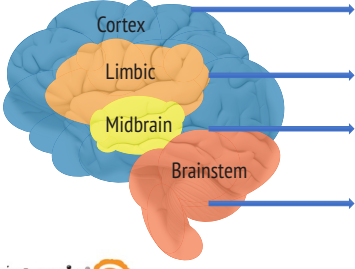


Regulation: Practical Implications for Life and Work

Kathy Van Horn, LP, MEd

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- Abstract thought
- Concrete thought
- Affiliation
- Attachment
- Sexual behavior
- Emotional reactivity
- Motor regulation
- States of arousal
- Appetite Sleep
- Blood pressure
- Heart rate
- Body temperature

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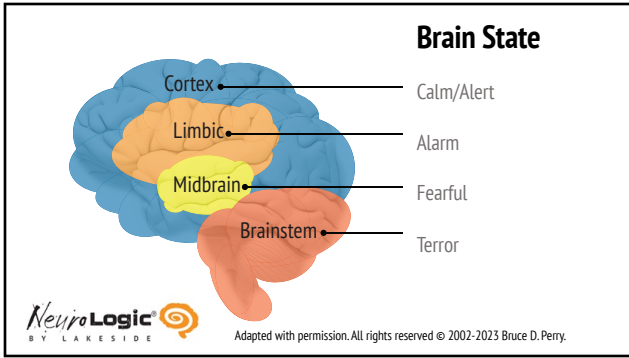
Impact of Trauma and/or Neglect on the Brain

There can be:

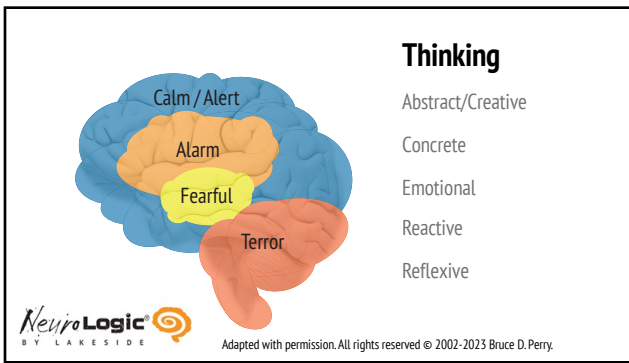
- A greater density in the lower regions of the brain.
- An over-reactive stress response.
- A smaller cortical area.
- Less ability to control impulses.
- Gaps of underdevelopment.

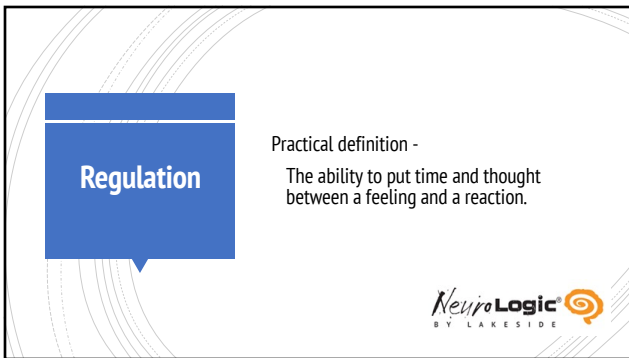
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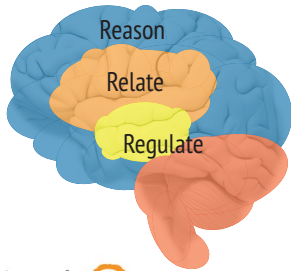
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Role of Regulation in Life

- When dysregulated we have limited access to their cortex' the "smarter" part of the brain.
- This limited access greatly inhibits access to both long-term and short-term memory, both sending and receiving information.
- This impacts our thinking, decision making, problem solving, behavior, and ability to relate to others.
- "Think before you act" – is not always an option



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Regulation works best from a bottom-up brain perspective.

1. Regulate
2. Relate
3. Reason



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Somatosensory Regulation

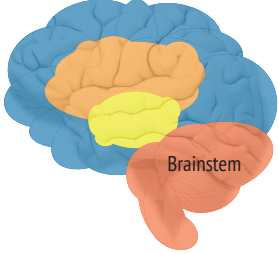
- Your body and your senses send information directly to your brainstem and up through your midbrain.
- Using your senses, your body, and movement is a great way to get and stay regulated.
- All regulation starts with the brainstem and midbrain.




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Brainstem Interventions


- Primary somatosensory
- Rocking/swinging
- Healing touch/massage
- Weighted blankets/Lycra
- Balance/stretching
- Martial arts
- Yoga
- Chewing/sucking
- Music/drumming
- Deep breathing
- Animal-assisted activities



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Breathing Exercises

Deep breathing biologically regulates the mind and body. It improves the flow of oxygen to the brain, improving the brain's ability to take in information.

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Resources from Marti Smith, OTR/L

www.creativetherapies.com

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Visual

Calming

- Blues, greens, browns, pastels
- Linear lineups
- Looking up
- Rhythmic side to side eye movement
- Low lighting or constant soft light
- Wearing a ball cap

Alerting

- Yellows, reds, oranges, bright colors
- Circular or chaotic lineups
- Peripheral stimulation
- Clutter, disorganization
- Bright lights
- Popping bubbles

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Tactile

(Can last up to 2 hours)

Calming

- Soft consistent textures
- Weighted blankets, heavy or tight clothing
- Firm touch/rubs
- Warmth
- Movement from base of the neck towards the base of the spinal cord
- Squishy fidgets

Alerting

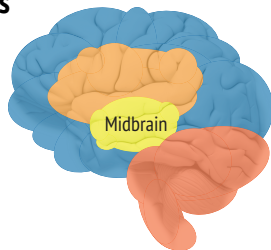
- Uneven inconsistent textures
- Feathers
- Light touch
- Cold or extreme temperatures
- Movement from the base of the spinal cord towards the head
- Sand paper, velcro

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Midbrain Interventions

- Walk/run/exercise
- Bilateral movement
- Large muscle movement
- Fine motor movement
- Creative arts
- Horticulture
- Music/drumming
- Dance
- Breathing exercises
- Animal-assisted activities
- Improving sleep rituals
- Transition rituals



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Proprioceptive (Can last up to 4 hours)

<p>Calming</p> <ul style="list-style-type: none"> • Flexion (midline) • Pushing, pulling, heavy work • Rubbing, deep pressure, bear hugs • Predictable touch 	<p>Alerting</p> <ul style="list-style-type: none"> • Extension • Hopping, jumping, running • Tickling (light touch) • Unexpected or sporadic touch
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Vestibular (Can last up to 6 hours)

<p>Calming</p> <ul style="list-style-type: none"> • Slow position changes • Rhythmic • Front to back and side to side swinging • Slow movement • Linear rocking 	<p>Alerting</p> <ul style="list-style-type: none"> • Fast position changes • Arrhythmic • Erratic swinging • Fast movement • Spinning
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Relational Regulation

- Mirror neurons allow you to feel what others are feeling. Emotions and regulation are contagious.
- Calm, safe people can help regulate you and keep you regulated.
- Relationships can also be a source of dysregulation.

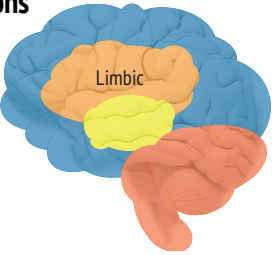


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Limbic System Interventions


- Parallel interactions (adult)
- Parallel interactions (peer)
- One-on-one attention
- Proximity to caring adult
- Mentoring
- Counseling
- Small group counseling or activities
- Team sports with individual performance
- Social and emotional skills training
- Animal-assisted activities



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Stress impacts relationships

- As you become stressed or threatened, you become
 - More self absorbed
 - Less concerned for others
 - Less able to take in information
 - Less able to accept positive things being offered
 - More easily manipulated
 - Less creative
 - Less able to form and maintain relationships

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Mirror neurons

- Neurons that respond the same way when either performing or viewing something someone else is doing.
- Neurons that allow us to feel empathy.
- Neurons that allow us to re-enact actions or qualities observed in others.



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Co-regulation and Mirror Neurons

- Students will mirror an adult’s level of calm.
- This is critical for helping to regulate your students.
- A dysregulated adult can not calm a dysregulated student.



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Practice Self Care

- Take care of yourself in order to take care of others
- Give yourself grace and model grace to your students – often mistakes that are made and repaired have more lasting impact on brain development than mistakes that are never made
- Emotions are contagious
- Don’t underestimate your ability to bring calm and don’t underestimate the impact of dysregulated people on you




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Cortical Regulation

- If other areas of the brain are regulated our cortex allows us to think clearly and access our problem-solving abilities
- Cortical modulation allows us to control the impulses from lower regions of our brain.
- Examples: Planning, problem solving, goal setting, challenging unhealthy thoughts, practicing gratitude, participating in counseling, journaling, focusing on faith, etc.



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Mindfulness

- Promotes integration of the brainstem, limbic system, and prefrontal cortex by creating new neural pathways.
- The integration of the brain causes a sense of well being.
- It has been found, over time, to change the structure and function of the brain.
- It is linked to positive emotions, improved self control and decreased anxiety

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Trauma-informed monthly newsletter


bit.ly/NeuroLogicNews




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