

Curiosity, Connection, and Committed Action: A Catalyst for Change in the Adolescent Brain

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Alice Cennamo, LCSW, LCAS



K. “Alice” Cennamo, LCSW LCAS, is a wilderness therapist at SUWS of the Carolinas, working with adolescent females as they move through problematic substance use, trauma, family conflict, and co-occurring disorders. She utilizes a strengths-based approach in her work with adolescents and emphasizes empowerment as an agent for creating change.

Kevin Waller, LCMHCS, LCAS, CCS



Kevin Waller, MA, NCC, LCMHCS, LCAS, CCS works as the Family Program Manager at SUWS of the Carolinas which is located outside of Asheville North Carolina. He has spent the past 16+ years working with adolescents and their families in wilderness settings while navigating challenges such as problematic substance use, anxiety, trauma, learning differences etc.. His clinical focus consists of ACT, RFT, MI, and Systemic Family Therapy.

Cameron Allen



With 13 years of experience in the study of neuroimaging and the practice of brain based interventions, Cameron Allen has published several studies evaluating brain-based interventions for addictions. Currently, Cameron works with SUWS of the Carolinas in Old Fort, NC providing neuroimaging and neuro-cognitive interventions for adolescents in the substance abuse population.

Cameron is passionate about integrating his interest in neuropsychology with brain based interventions and mindfulness to help individuals better understand their motivations, behavior, and capacity for self efficacy.



Agenda

- Working with adolescents
- What it means to be “stuck”
- Tools to spark change
 - Curiosity
 - Connection
 - Committed Action
- Questions and discussion

Case Study


“Sam” is a 16 year old male presenting to treatment with depression, social anxiety secondary to a history of being bullied, and problematic substance use. At home, Sam exhibits anger, defiance, and verbal aggression towards parents. Outside the home, he is often quiet, isolated and withdrawn from peers. When asked why he’s in treatment, he reports “because my parents are forcing me.”

Parent’s goals: decrease disruptive behavior in the home, decrease substance use, have friends

Sam’s goal: to get parents off his back

Our goal: increase awareness and flexibility





Autobiography in Five Short Chapters

By Portia Nelson

I

I walk down the street.
There is a deep hole in the sidewalk
I fall in.
I am lost ... I am helpless.
It isn't my fault.
It takes me forever to find a way out.

II

I walk down the same street.
There is a deep hole in the sidewalk.
I pretend I don't see it.
I fall in again.
I can't believe I am in the same place
but, it isn't my fault.
It still takes a long time to get out.

III

I walk down the same street.
There is a deep hole in the sidewalk.
I see it is there.
I still fall in ... it's a habit.
my eyes are open
I know where I am.
It is my fault.
I get out immediately.

IV

I walk down the same street.
There is a deep hole in the sidewalk.
I walk around it.

V

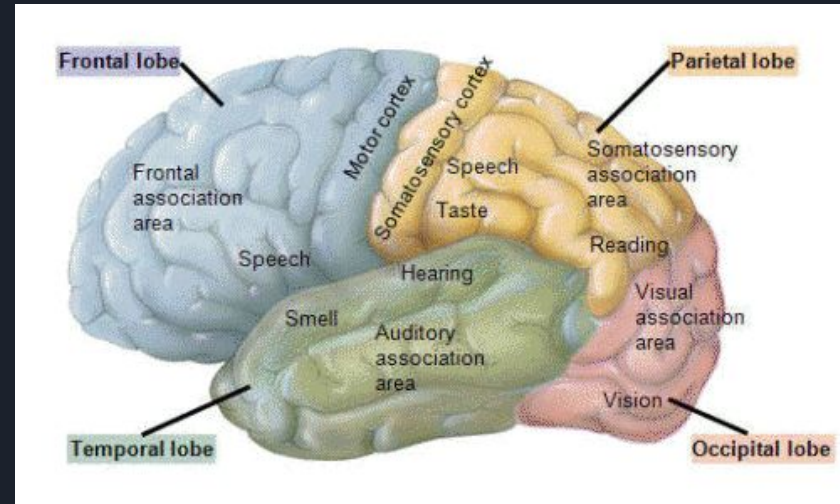
I walk down another street.

Sam's Brain

(The Adolescent Brain)

Adolescent Neurodevelopment

- Increased reward signaling
- Increased precuneus activation
- Right Brain dominant
- 50% neuronal sheering
- Prefrontal reengagement





Challenges for the Practitioner

- Navigating differing agendas, values, and goals:
 - Client
 - Family
 - Therapist
- Special consideration towards confidentiality, aligning on issues, and transparency in the therapeutic relationship.



What Does “Stuck” Look Like?

- “Stuck” = behavior that serves the function of avoidance or control.
- Overt behaviors:
 - raised voice, defiance, clenched fist, walking away, substance use, deflecting through humor, blaming others, sarcasm
- Covert behaviors:
 - getting caught up in the “I’m not good enough”, “what’s the point”, “no one gets me” stories, feelings of hurt, sadness, anxiety, resentment



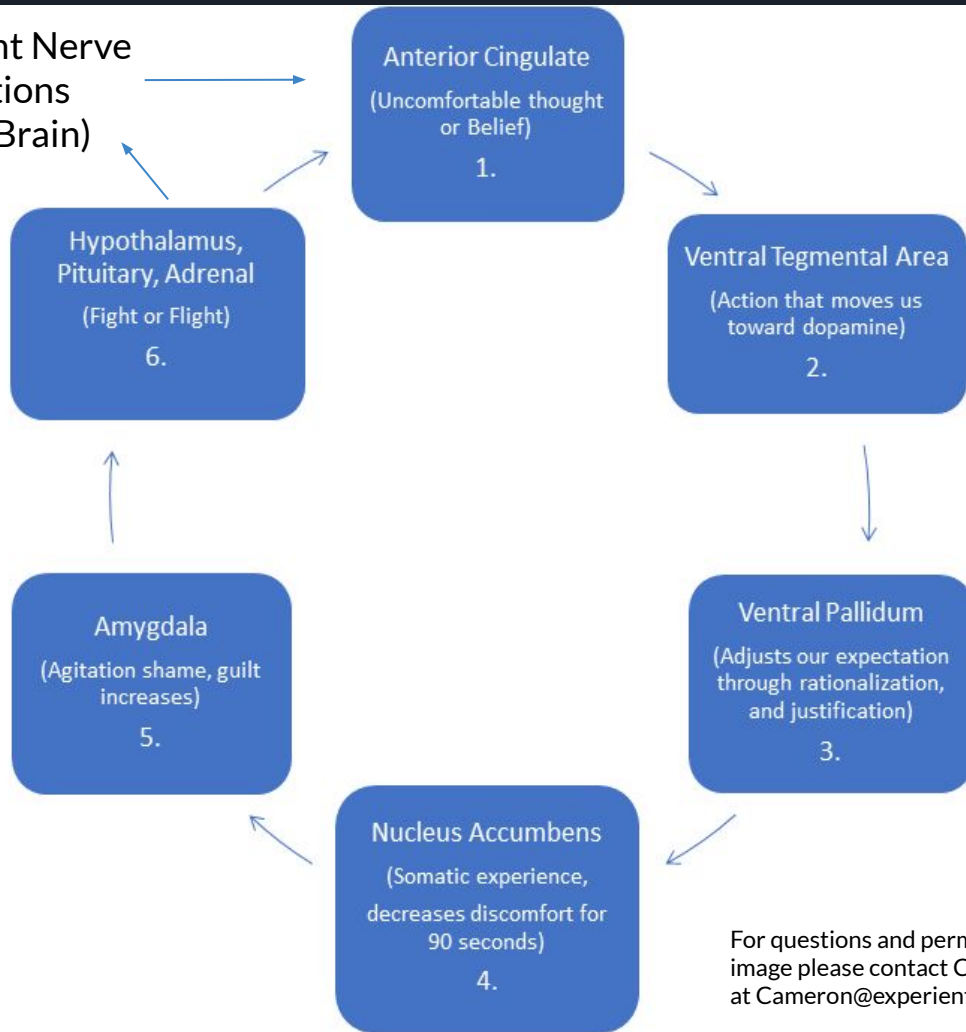
“Stuck” in the Brain

“Stuck” in the adolescent brain may be due to:

- Trauma
- Sensory integration issues
- Attachment
- Cognitive and developmental delays

Understanding “why are they stuck” is crucial to help the clinician know how to activate the neurophysiology so that there becomes awareness of the stuckness, then the tools from there are the same.

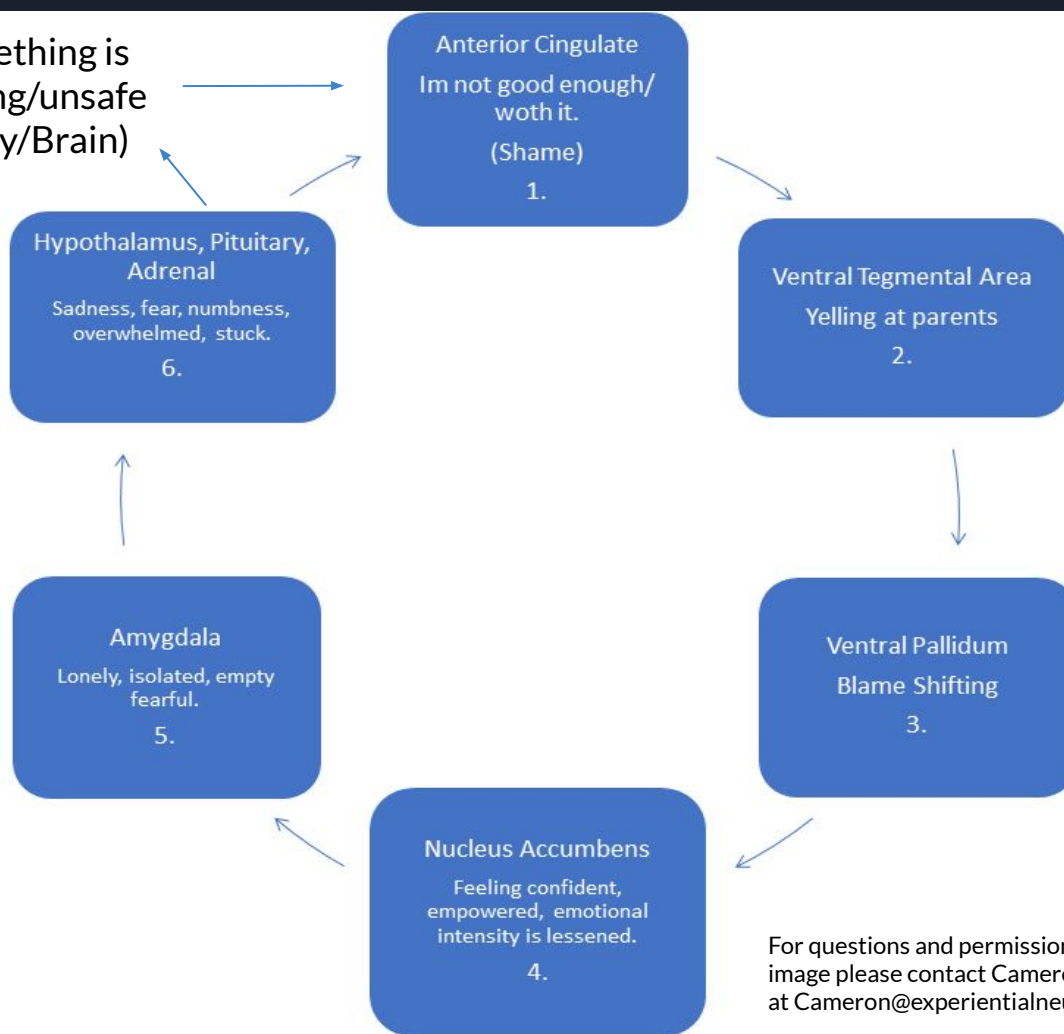
Afferent Nerve Projections (Body/Brain)



Limbic Loop™

For questions and permission to use image please contact Cameron Allen at Cameron@experientialneuro.com

Something is
wrong/unsafe
(Body/Brain)



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Limbic Loop™



A Catalyst for Change

- Curiosity, Connection, and Committed Action
 - Hexa & Triflex
 - Values exploration
 - Matrix
 - Somatic experiences
- Keep in mind, the goal isn't to get rid of the behavior, but to get to "Chapter 3"



Curiosity vs. Judgement

- **Curiosity is asking the question**
 - Activates logical and emotional memory
- **Judgement is answering the question**
 - Activates fear and self-protection networks when wrong, and dopamine reward when proven correct
- Can be seen in: hexaflex/triflex, values, somatic work, etc...



Connection vs. Isolation

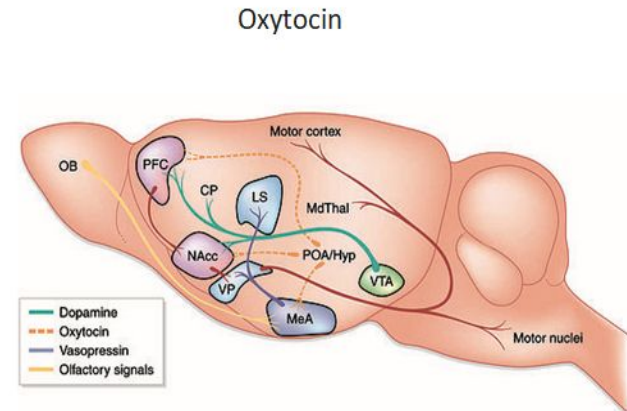
- Dopamine, stimulus seeking, movement away from discomfort, defense network, etc.
- Oxytocin reduces dopamine signalling, and increases a sense of groundedness and a sense of belonging, Social engagement network.
- Continuum or Dopamine to Oxytocin
 - Oxytocin- Co-dependent over reliance, loss of sense of self and self-efficacy
 - Dopamine- reactive, impulsive, stimulus seeking, reward seeking.

Balance is needed, either end of the continuum is unsustainable long term.

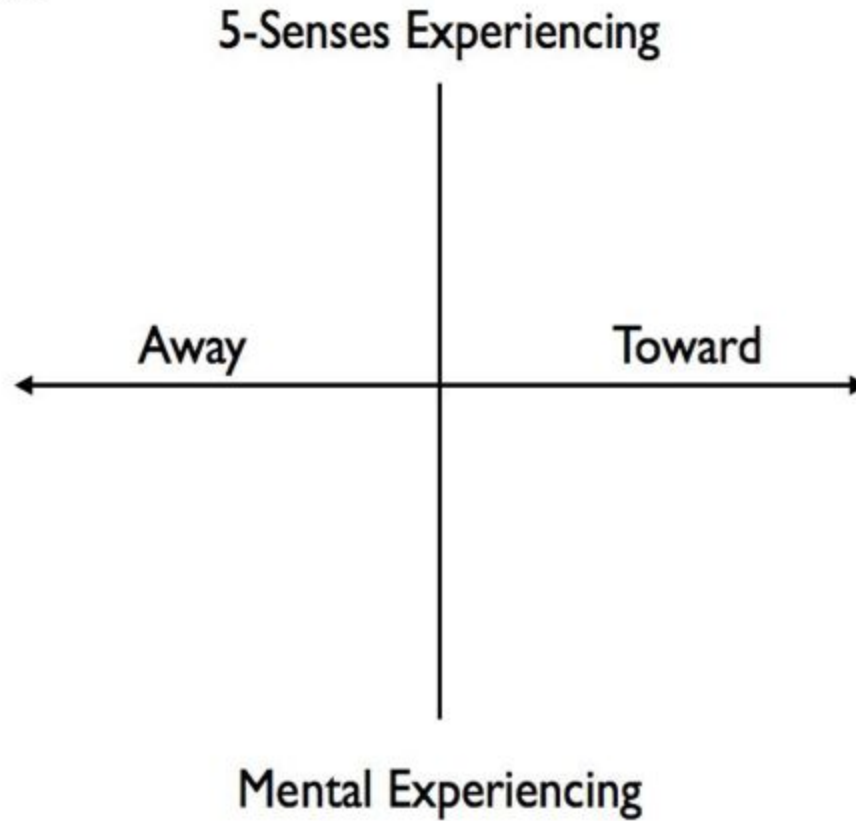
Committed Action vs. Reaction, Inaction, “Stuck” ...

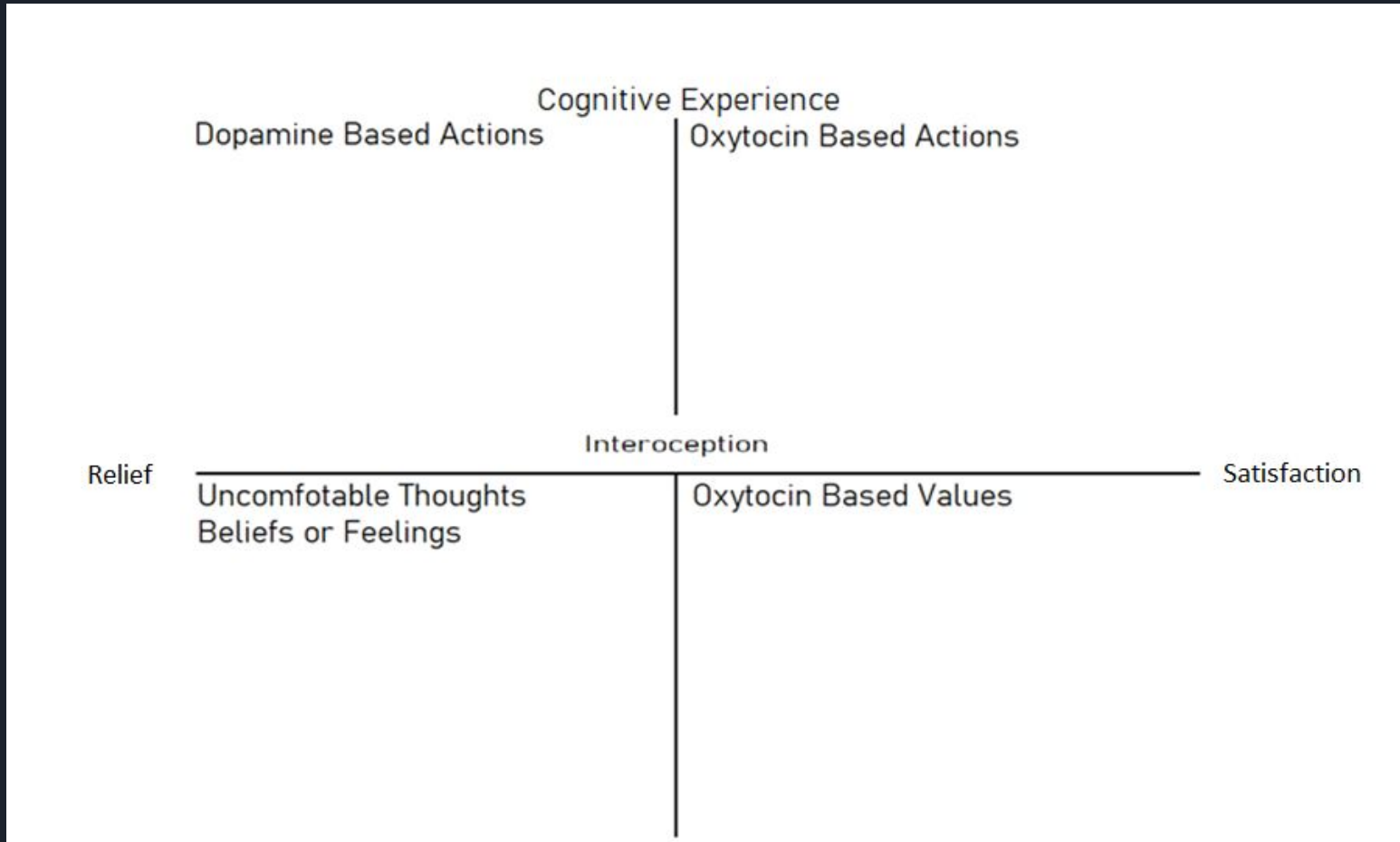
- Inaction= too much emotional noise
- Reaction= When something increases intensity to bring focus to an emotional state.
- Committed action= Values driven behavior

Breaking the Loop



The Matrix





Cognitive Experience

Dopamine Based Actions

- substance use
- yelling at parents (anger)
- defiance
- video games
- social media

Oxytocin Based Actions

- shared activities with family
- video games with friends
- taking a drawing class
- joining a sports league
- taking the dog for a walk

Interoception

Relief

Uncomfortable Thoughts Beliefs or Feelings

- “no one likes me”
- “it’s always going to be this way”
- “there’s no point”
- shame
- sadness & anger
- resentment
- self-loathing

Satisfaction

Oxytocin Based Values

- Connection
- Freedom
- Creativity
- Acceptance



Let's Practice: An Interoceptive Exercise

- Somatic noticing
 - Check in with your body
 - What do you notice?
 - With each of the following images notice what somatic sensations you experience and the story you tell yourself to make sense of your feelings.
 - Notice if you want to move towards or away from the feelings











Thank You!

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