# A NEURODEVELOPMENTAL APPROACH TO RESIDENTIAL TRANSFORMATION

# HELLO!

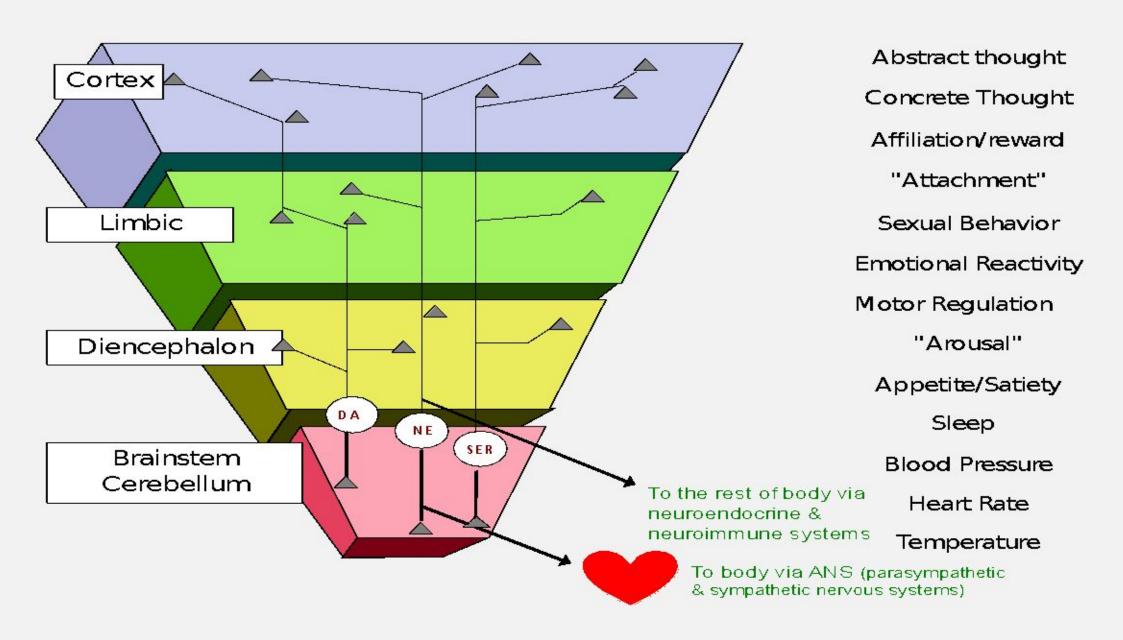
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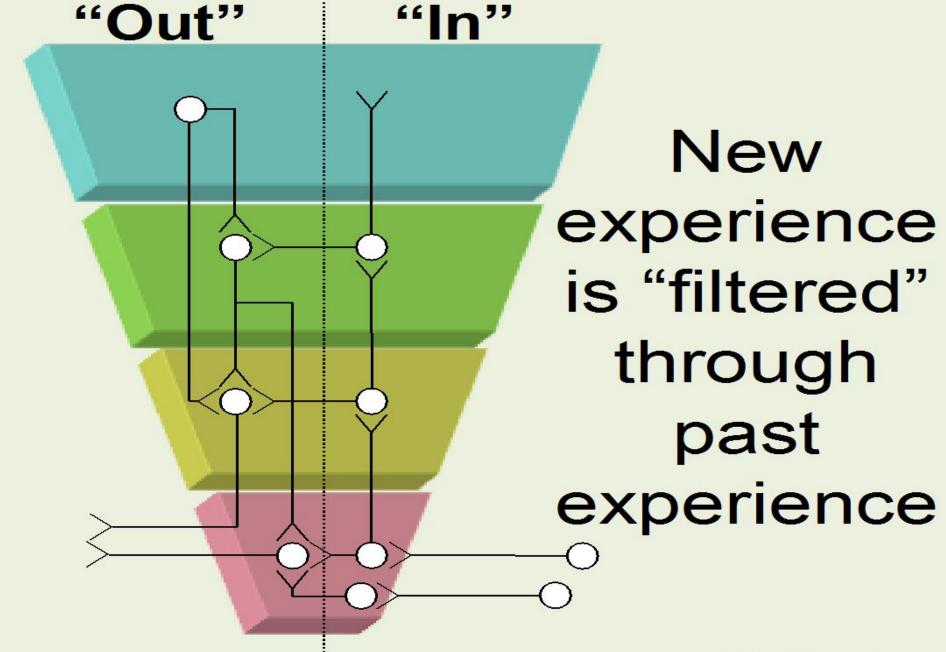
Association of Children's Residential Centers
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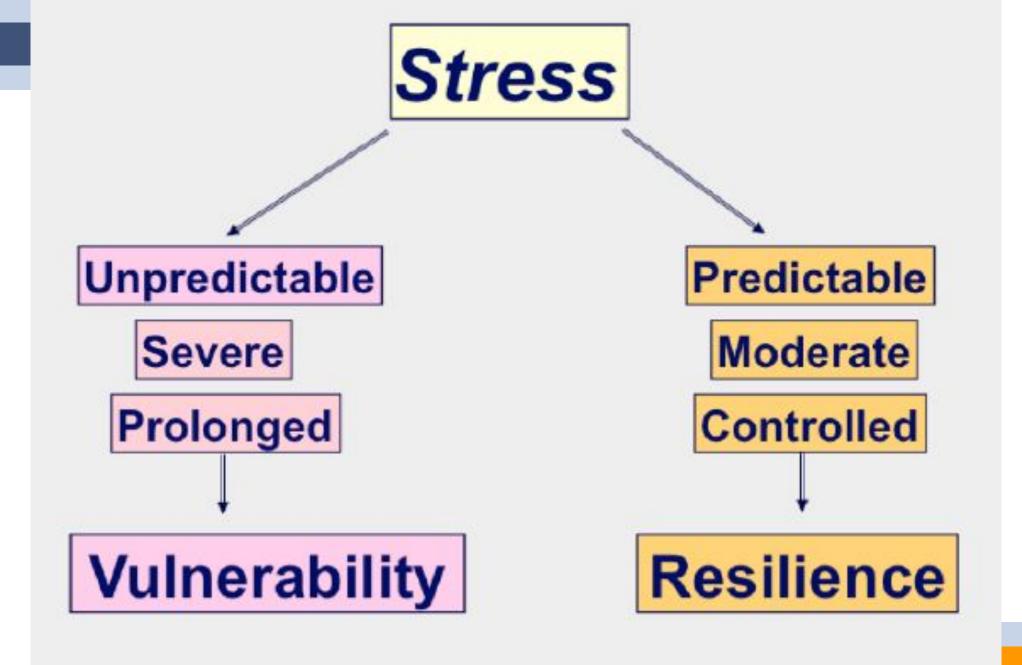


### **WORKSHOP OUTLINE**

- Overview
- Key Neurodevelopmental Principles
- Somatosensory Strategies
- Implications- Attuned Relational Environments
- Residential Transformational Opportunities
- The voice of lived experience







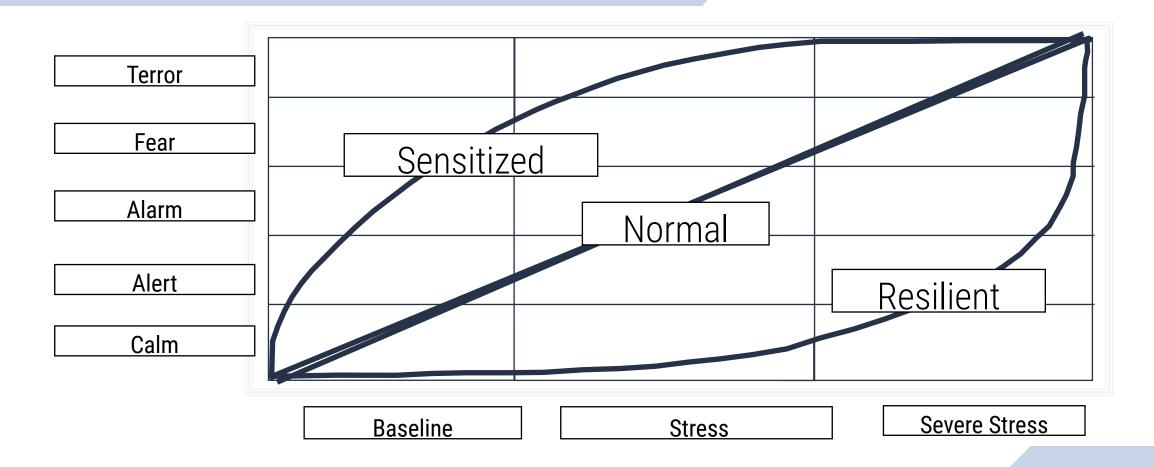


### THE AROUSAL CONTINUUM



Hyperarousal Continuum	Rest (M > F: A>C)	Vigilance	Resistance	Defiance	Aggression
Dissociative Continuum	Rest (F > M: C>A)	Avoidance	Compliance	Dissociation	Fainting
Primary secondary Brain Areas	NEOCORTEX Subcortex	SUBCORTEX Limbic	LIMBIC Midbrain	MIDBRAIN Brainstem	BRAINSTEM Autonomic
Cognition	Abstract	Concrete	Emotional	Reactive	Reflexive
Mental State	CALM	ALERT	ALARM	FEAR	TERROR

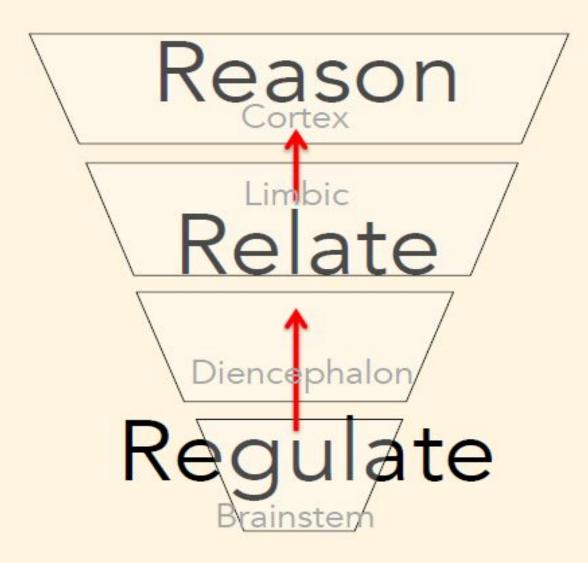
### DIFFERENTIAL "STATE" REACTIVITY



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### Sequence of Engagement





### **SENSORY INTEGRATION & PROCESSING**

The ability to take in information through the senses, and from within and outside of the body, organize and interpret that information and make a meaningful, functional response.

(Ayers, 1979)



### **SENSORY MODULATION**



"...the capacity to regulate and organize the degree, intensity, and nature of responses to sensory input in a graded and adaptive manner. This allows the individual to achieve and maintain an optimal range of performance and to adapt to challenges in daily life."

(Miller, Reisman, McIntosh & Simon, 2001, p. 57)



- Regulatory Component of Sensory Processing
- Sensory Modulation Skills: support the ability to pay attention to sensory input that is important and screen out what is not.
- Neurological thresholds & Behavioral Response Continuum:
  - Low threshold: Sensory Overresponsivity & Sensation Avoiding
  - High threshold: Sensory Underresponsivity & Sensory Seeking

(Dunn, xxxx)



### **SENSORY MODULATION**

- A daily routine that is intentionally:
  - Individualized (meaningful, purposeful, targets sensory preferences and needs, takes into consideration trauma and other mental health-related needs and goals)
    - Includes specific strategies that the youth finds helpful for <u>prevention and crisis</u> <u>de-escalation</u> purposes
      - Compliments and uses information from the person's safety (de-escalation)
         tool
- Predictability
- Must be relatively easy to implement (functional)
- Client and caregivers must have the supports needed to implement



### **CALMING & ALERTING SENSORY STRATEGIES**

Calming Strategies	Alerting Strategies
<ul> <li>Warm/hot drink</li> <li>Swinging on a swing</li> <li>Rocking slowly in a rocker</li> <li>Humming or singing softly</li> <li>Blowing bubbles</li> <li>Deep pressure touch/massage</li> <li>Using a weighted vest or blanket</li> <li>Soothing scents</li> <li>Chewing gum</li> <li>Soft/low lighting</li> <li>Coloring or drawing</li> <li>Playing with legos</li> <li>Listening to music</li> <li>Being in a calm and quiet place/space</li> <li>Having a consistent routine</li> <li>Gardening</li> <li>Petting or taking care of a cat, dog or horse (pet)</li> </ul>	<ul> <li>Cool/cold drink</li> <li>Spinning on a swing</li> <li>Rocking vigorously in a rocking chair</li> <li>Clapping or bouncing to music</li> <li>Riding a horse</li> <li>Singing intensely or loudly</li> <li>Light touch</li> <li>Intense scents (eucalyptus)</li> <li>Jogging, bouncing or running</li> <li>Playing ball toss</li> <li>Eating spicy foods</li> <li>Bright/colorful lighting</li> <li>Aerobic exercise</li> <li>Differing food textures</li> <li>Being in a busy, loud, or chaotic environment</li> <li>Inconsistent routines</li> <li>Playing sports</li> <li>Doing/focusing on chores, school work or working</li> </ul>

### **KYLE'S SAFETY TOOL STRATEGIES**

#### When Upset, I feel: "UNSAFE"

- Body: I get hot, feels like I will explode, I feel "unsafe"
- Mind: I can't think, my mind goes blank
- Triggers: Certain words "no" or telling me I am getting a consequence (time out), when things feel too hard, or when I feel frustrated
- Warning signs: I don't talk, I stop doing what I am supposed to, I pace, stop moving, or start to stare

Things That Might Help Me "Feel Safe"	Things Other People Can Do:	Please, Do Not:	
<ul> <li>A cold cloth or my soft gel/ice pack</li> <li>Squeeze or fidget with something (stress ball, my stuffed animal)</li> <li>Jump and crash into a big bean bag</li> <li>Swing</li> <li>Playground use</li> <li>Ride my bike around the yard</li> <li>Jump on mini-trampoline or pogo stick</li> <li>Play basketball</li> <li>Swim at the YMCA</li> <li>Go on a walk or hike</li> <li>Watch the Boston Red Sox</li> <li>Watch funny shows/movies</li> <li>Going fishing</li> </ul>	<ul> <li>Use words safe/unsafe when asking about or talking about how I feel with me or to others</li> <li>Give me space but stay nearby</li> <li>Stay calm</li> <li>Help distract me by offering a "safe" strategy from my list</li> <li>Offer hugs, back rubs, massage, or joint compressions</li> <li>If I get even more upset get other people away from me</li> </ul>	<ul> <li>Leave me alone</li> <li>Use words like "time out" or "consequence"</li> <li>Put me in places with lots of loud noise</li> <li>Give me warnings or reminders that are upsetting to me</li> <li>Use too much deep touch pressure</li> <li>Tickle me</li> <li>Bring me to a room with breakable stuff</li> </ul>	

#### **JENNY'S SENSORY DIET: BEDTIME ROUTINE**

#### Bed-time Routine: Start to prepare for bed two-three hours before bedtime

- Makes Tea Mint "Magic" tea and honey she makes the tea, she likes staff to put in the honey, she stirs
- Has a phone call with her foster mom while drinking her tea
- Bedlime preparation activities

**NOTE:** When feeling calm/happy, Jenny does much of the following with her roommate and staff support (except activities requiring privacy). When Jenny is not calm/happy staff support her individually.

- Read a book with staff
- Picks out clothes for the next day and staff helps her get her backpack ready for school
- Arranging stuffed animals and puppets (gets them ready for bed, tucks them in)
- "Safety check" with aromatherapy spray (lavender): 1-2 sprays under the bed, in closet, and on a cotton ball she puts under her pillow (process helps her to feel safe)

- Music Jenny likes to listen to Frozen/Disney soundtracks while getting ready for bed
  - Brushes teeth with a vibrating toothbrush and gel toothpaste (self-preferred)
  - Washes/dries face with a soft face cloth
  - Puts on soft pajamas (no seams or tags)
  - Lowers dimmer switch on the light in the room
  - Gets tucked in by staff
  - Staff provide reassurance that they check on her throughout the night



### IMPLICATIONS: ATTUNED RELATIONAL ENVIRONMENTS

#### **Environments**

Environments in which there is structure, predictability, and some sense of controllability for the youth and families align with the sequence of engagement and arousal continuum and help reduce stress arousal responses.

#### Relationships

A relationally rich environment focused on building youth and family capacity for regulation within existing home and community relationships fosters connectedness and neurocognitive skill development.



### **FOSTERING RELATIONAL ENVIRONMENTS**

- Teach staff basic principles and applications of neurodevelopment.
- Avoid or minimize operant approaches
- Train staff to use regulating interventions- empathy, reflective listening, appreciative inquiry, collaborative.
- Implement programming and interventions that incorporate sensory and body based strategies into daily routines.



### **FOSTERING RELATIONAL ENVIRONMENTS**

- Help staff and families recognize the neurophysiological signals that indicate whether going too fast or too slow
- Ensure expectations are predictable, developmentally matched
- Support youth in maintaining and developing pro-social relationships with friends and family
- Invite youth and family voice in identifying what helps individually and with the group
- Attend closely to the physical environment



# TRANSFORMATIONAL OPPORTUNITIES: YOUTH GUIDED CARE

- Engaging and empowering youth in decision making regarding their own care and group/agency matters:
  - creates patterned predictable co-regulating opportunities to collaborate with adults, develop relationships.
  - engages the thinking part of the brain in immediate, real life situations, which builds neurocognitive skills.
- Youth peer support specialists help reduce the power differential and stress arousal responses



# TRANSFORMATIONAL OPPORTUNITIES: FAMILY DRIVEN CARE

- When family members are supported in articulating thoughts, perspectives, and decisions:
  - their brain is supported in developing new ways of coping, relating and thinking.
  - power differentials and stress arousal responses are reduced.
- Family Support Specialists help mitigate stress responses through empathy and shared lived experience.



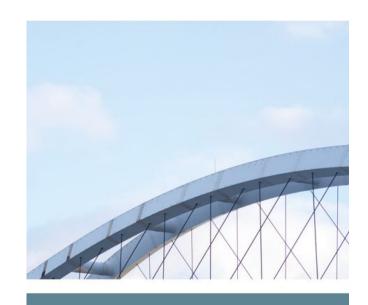
# TRANSFORMATIONAL OPPORTUNITIES: CULTURAL AND LINGUISTIC COMPETENCE

- Attunement in interpersonal interactions, treatment planning and programming to each individual's and family's cultural background reduces the stress generated by practices that are not culturally responsive, and that generate implicit and explicit power differentials.
- Developing the competence for equity, diversity, and inclusion promotes empathy and co-regulation skills.



### TRANSFORMATIONAL OPPORTUNITIES: LINKAGE WITH COMMUNITY

- Involving youth in community supports relational, self-regulation, and social skill development in real-life situations, honoring the neurodevelopmental principle of specificity.
- The community offers a relational web as part of the residential intervention that supports change and growth for youth and families, linked with the therapeutic efforts happening in the program.



# TRANSFORMING RESIDENTIAL INTERVENTIONS

PRACTICAL STRATEGIES AND FUTURE DIRECTIONS

Edited by BETH CALDWELL, ROBERT E. LIEBERMAN, JANICE LEBEL, AND GARY M. BLAU



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RESIDENTIAL INTERVENTIONS: PRACTICAL STRATEGIES AND FUTURE DIRECTIONS

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