



Working From Bottom-up to Top-down



Connie Lillas, July 15, 2016
Session #12, Central Valley


The Neurorelational Framework (NRF)
“translates” what matters in early brain development into three clinical steps:



Three Core Concepts:	Assess & Intervene:
<ul style="list-style-type: none">• Stress Resilience versus Toxic Stress• “Serve & return” levels of high quality engagement• Development of brain networks and circuits	<ul style="list-style-type: none">• <i>Step 1:</i> Adaptive vs. toxic stress (<i>roots to a tree</i>)• <i>Step 2:</i> Age appropriate vs. low levels of relational engagement (<i>trunk of a tree</i>)• <i>Step 3:</i> Improve individual differences in sources of vulnerabilities (triggers) & resilience (toolkits) in brain networks (<i>branches of a tree</i>)

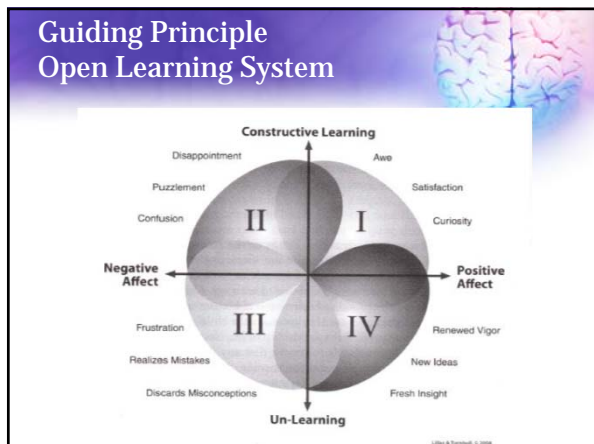
Harvard Child Development:
<http://developingchild.harvard.edu/resources/three-core-concepts-in-early-development/>

Two Guiding Principles:



- **Stability with Flexibility**
 - We have an agenda for the day and we will do our best to follow it!
 - If something comes up with didn't expect we will do our best to adjust to the changes!
- **Open Learning System**
 - Cycling through our excitement and discouragement in learning together
 - Scribe for taking notes and feedback!

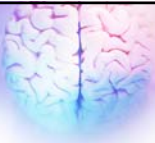
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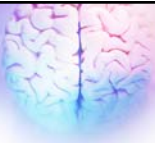


Professional Culture



- Who is your client?
- Professional and parenting culture of behavioral approach to challenging behaviors


**Interdisciplinary Dilemma:
Who is our Client?**



Who do you "scoop" up?

- What baby/child traditions do we have?
 - Mental health: "child psychotherapy"
 - Behavioral health – child's problematic behaviors
 - Early intervention – child's disabilities
- What parent traditions do we have?
 - Early intervention & mental health, the "strength-based" & "family focused" approaches
- What relational traditions do we have?
 - Infant Mental Health practices

**Step #1:
How do we identify stress &
stress recovery ?**



A. Recognize what stress recovery looks like

B. Recognize three primary stress responses

C. Recognize four toxic stress patterns

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Stress & Stress Recovery
Individual Differences



Who We Are At Our Best!

<i>Heart Under Coordination</i>	<i>Hand Under Coordination</i>	<i>Head Under Coordination</i>
Responsive Engagers/Feelers	Directive Doers	Reflective Thinkers
Body: Calm, alert, relaxed	Body: Calm, alert, relaxed	Body: Calm, alert, relaxed

Adapted from Lillas & Turnbull, © 2009

Who We Are At Our Best!



HEART



RESPONDS

We build trust

HAND



DIRECTS

We guide

HEAD



REFLECTS

We collaborate

Who We Are At Our Worst!



HEART



DEFERS

HAND



DEMANDS

HEAD



DETACHES

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At Our Best & Our Worst

Heart Under Coordination	Hand Under Coordination	Head Under Coordination
Responsive Engagers	Directive Doers	Reflective Thinkers
Heart Under Stress	Hand Under Stress	Head Under Stress
Defers too much Over accommodates	Demands too much Dominates and controls	Detaches too much Dismisses and ignores
Body Under Stress	Body Under Stress	Body Under Stress
Hypervigilance Fear, Anxiety	Crying, Anger, Rage Hyperactivity, Mania	Shut Down, Glazed Depression, Dissociation

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Heart, Hand, and Head Patterns

	Under Coordination		Under Stress	
Heart 1s	Warm Empathic Connect Repair	Functional helper Share info. Make contact Cross-sector communication	Overly accommodating Overly controlling Anxious to fix things	Dysfunctional rescuing
Hand 2s	Assertive Directive, action oriented	Take the lead Confront Stand up Notice and share differences	Overly demanding Hostile attack	Blaming the victim Blaming the system
Head 3s	Neutral Reflective Problem-solve <small>Dr. Connie Lillas</small>	Take responsibility Learn, ask, & notice the impact <small>Dr. Valerie Batts</small>	Overly detached Overly dismissive Passive-aggressive anger Denial <small>Dr. Connie Lillas</small>	Passive avoidance Antagonistic avoidance Denial of differences across domains <small>Dr. Valerie Batts</small>

Commonly Used Words for "Oppositional Behavior"


• Aggressive	• Manipulative
• Attention-Seeking	• Non-compliant
• Defiant	• Resistant
• Distracting	• Willful
• Lacking Motivation	• Withdrawn

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In our culture, we are taught...

- That children are doing these behaviors “on purpose” and that ...
- Rewards and punishments/consequences are how to help these behaviors...
- And, if these are not working, then parents are to blame!



Parents are not...

- Setting firm enough limits
- If you do have limits, then...
- You do not have enough consequences
- If you do have consequences, then..
- You are not consistent enough with following through with consequences

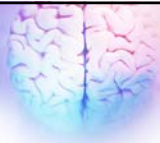
OR

- You are not sensitive enough to reading the child’s cues
- Not empathic enough

Three Versions of Challenging Behaviors!


HEART	HAND	HEAD
		
DEFERS	DEMANDS	DETACHES
Giving-in too much!	Expecting too much!	Ignoring too much!

Continuum of Behavioral Approaches




- See handout
- Eight methods
- Five to eight more recommended

Confidentiality Pledge



- We are honored to share a family's struggles
- We respect the journey
- We commit to keeping privacy to this day, in this room, for these families
- We use the descriptive terms such as "the toddler in the Red Zone" to keep a collegial conversation alive

Step #1C: How do we identify toxic stress patterns?



Recognize stress responses that are *too frequent, too quick / intense, too long*

4 Toxic Stress Patterns

1. *Over reactivity*: Stress responses that occur too frequently and too quickly
2. *Repeated reactivity*: Inability to adapt to "normal" challenges and transitions
3. *Extended reactivity*: Prolonged stress responses that take too long to recover (more than 10 to 20 mins)
4. *Dampened reactivity*: Inability to recover from stress response back to baseline health (healthy sleep cycle, healthy awake state)

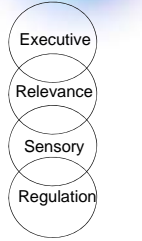
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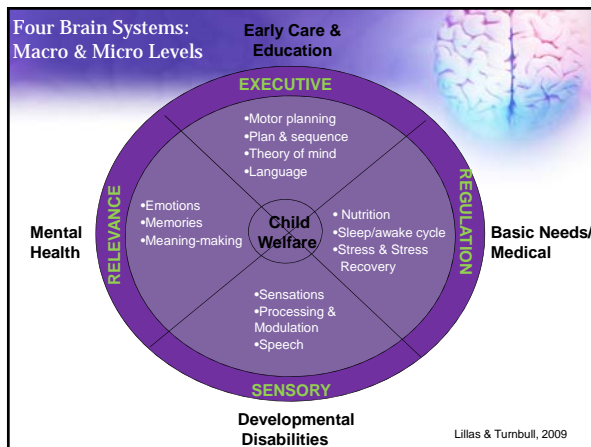
Step #3:
Assess for Sources of Vulnerability and Resilience Across Four Brain Systems

Guiding Principles

- There is no one-size fits all
- Assess on a "Macro" level the links with systems of care
- Assess on a "Micro" level functional needs that help guide the triage
- Distinguish between developmental age and chronological age
- Begin treatment at the earliest point in the breakdown



Bottom-Up Progression




Functional behaviors representing brain systems

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- Regulation
 - States of Arousal
- Sensory
 - Reactions to all sources of sensory information (including vestibular, proprioception, pain, temperature)
- Relevance
 - Emotions, memories, & meanings
- Executive
 - Ability to *initiate* and *shift* as well as *inhibit* and *sustain* motor (includes attention) activity and behavior according to the context

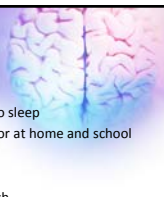
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List of Symptoms & Dx




<p>Symptoms</p> <ul style="list-style-type: none"> • Impulsive; inattentive at times • First year of life could only be soothed by being carried in a sling • Allergies • Aggressive towards infant brother since birth • Not learning from consequences • Time-out's have increased over 1 year • About ready to be kicked out of pre-school for choking a playmate • Red zone behavior at home and school • Precocious speech • Difficulty going to sleep • Unaware of where his body is in space 	<p>Diagnostic Categories</p> <ul style="list-style-type: none"> • ADHD • Trauma Symptoms • Sensory Modulation Disorder • Autism • Anxiety Disorder • Allergies
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"Micro" Level Overview, Toddler in the Red Zone History & Early Symptoms



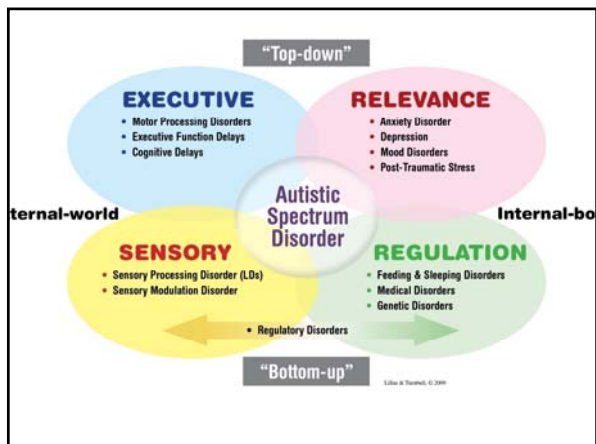
<ul style="list-style-type: none"> • Regulation: Balance of 24-hour Sleep/Awake Arousal • Sensory: Balance of Processing & Modulation of Sensations • Relevance: Balance of pos/neg Emotions, Memories, & Meanings • Executive: Balance of initiating and sustaining thoughts, behaviors, & actions 	<ul style="list-style-type: none"> • Difficulty going to sleep • Red zone behavior at home and school • Precocious speech • First year of life could only be soothed by being carried in a sling • Aggressive towards infant brother since birth • About ready to be kicked out of pre-school for choking a playmate • Time-out's have increased over 1 year • Impulsive; inattentive at times • Not learning from consequences
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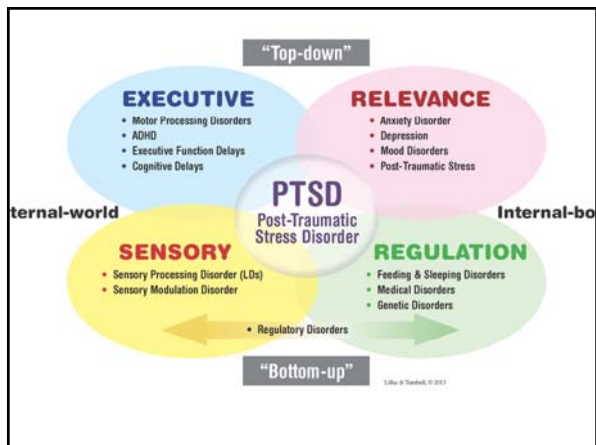
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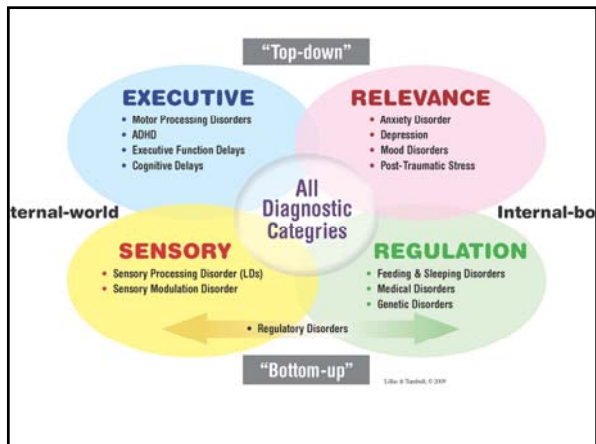


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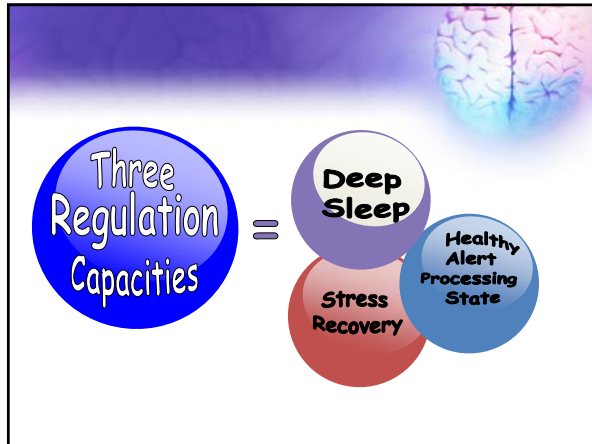
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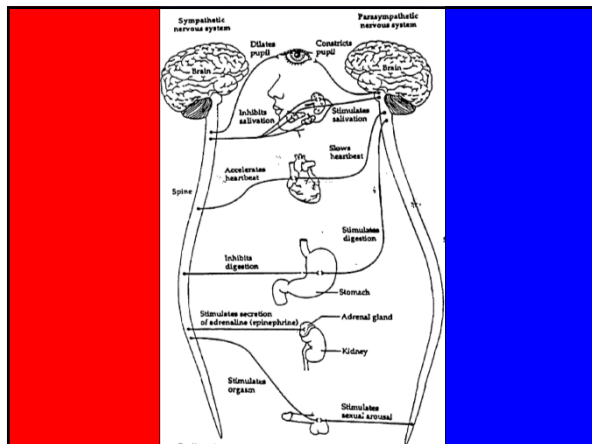


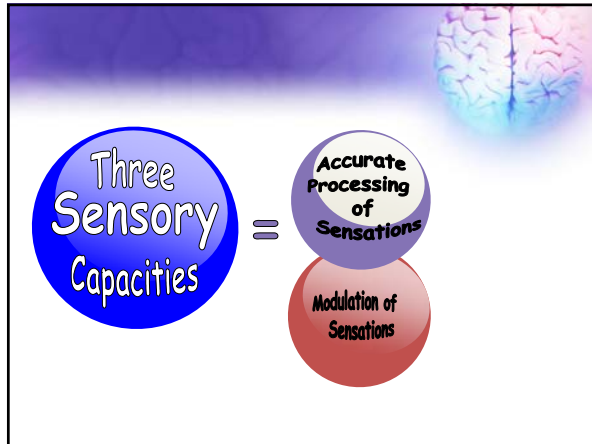


Working Bottom-Up and Top-Down



- ### Functional Capacities of the Regulation System
1. The capacity for deep sleep cycling
 2. The capacity for alert processing
 3. The capacity for the adaptive expression of all stress responses
 4. The capacity for distinct states of arousal and smooth transitions between them
 5. The capacity for connection to visceral cues
 6. The capacity for efficient stress recovery





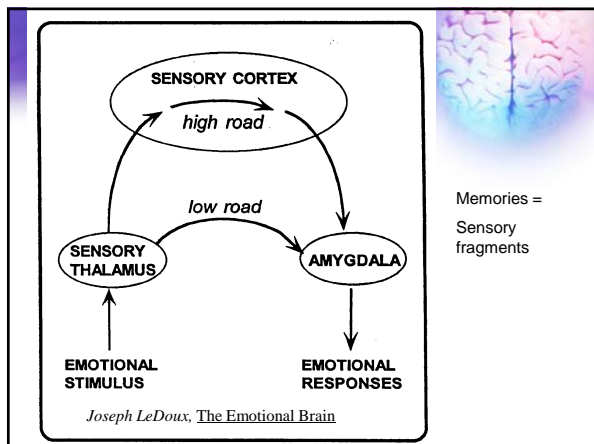
Functional Capacities of the Sensory System

1. The capacity to receive, translate, associate, and elaborate sensory signals within and across sensory modalities in a developmentally appropriate way (*sensory processing*)
2. The capacity to balance the flow of sensory signals in a way that is appropriate to context (*sensory modulation*)

Habituation & Sensitization

- **Habituation:** a decrease in responsiveness after repeated exposure, some lead to preferences
- **Preferences:** engage, alert, or calm
- **Triggers:** sensations that provoke a stress response, often lead to sensitization
- **Sensitization:** an increase in responsiveness after repeated exposure

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Modulation Variables

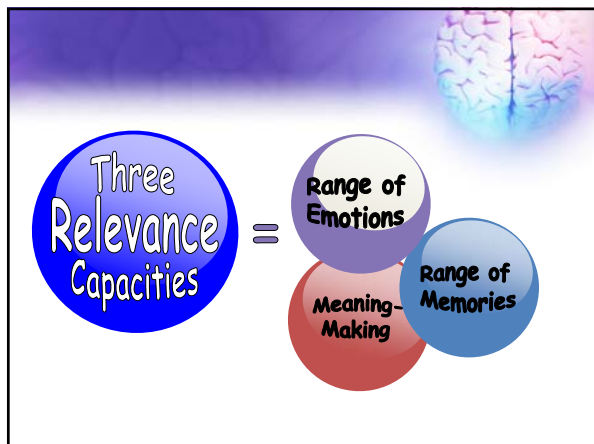
- Is the infant, child, or adult over or under-reactive to sensory information?
- Do mid-range intensities of sensations support optimal arousal or do extremes need to be used?
- Experiment with sensations: begin with low intensity, slow rhythms, and short durations to be safe

Lillas & Turnbull, © 2009

Modulation & Intervention Principle

- "By varying the intensity, duration, and rhythm (parameters) of the flow of sensory information (behavior) one can recover, maintain, and enhance the window of the alert processing state:
 - Duration: long/mid-range/short
 - Intensity: high/mid-range/low
 - Rhythm: fast/mid-range/slow"
- Match or counter to achieve optimal baseline health?

Lillas & Turnbull, Norton Press

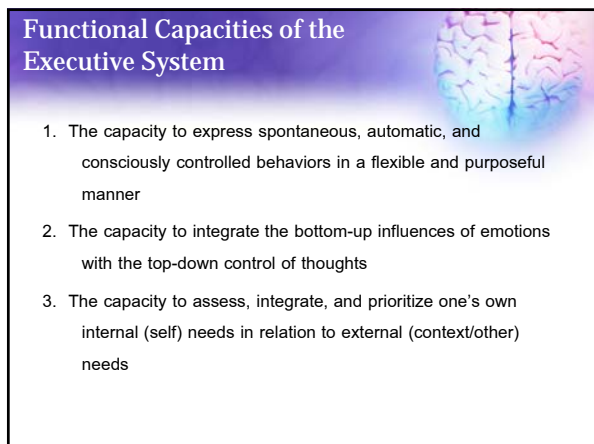


- ### Functional Capacities of the Relevance System
1. The capacity to flexibly experience, express, and modulate a full range of emotions in ways that are appropriate to context
 2. The capacity to learn from experience by scanning and accessing a full range of memories that are appropriate to the context
 3. The capacity to create meanings that accurately reflect self and others



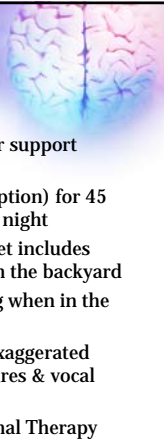






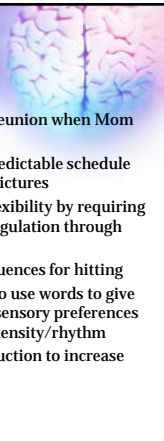
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Tools in Toolkits!



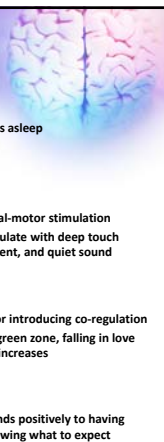
<p>Regulation</p> <ul style="list-style-type: none"> • Medical support for allergies • Requiring parents to shift to “time-ins” from “time-outs” • Snacks available in car for when hungry 	<p>Sensory</p> <ul style="list-style-type: none"> • Oral-motor support • Wrestling (proprioception) for 45 minutes at night • Sensory diet includes swinging in the backyard • Not talking when in the red zone • Showing exaggerated facial features & vocal tones • Occupational Therapy
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Tools in Toolkits!



<p>Relevance</p> <ul style="list-style-type: none"> • Routine for reunion provides immediate contact with Mom • Separating each boy, spending individual time with each • “Every other day” rule for who is “first” • Narrating and mirroring emotions with empathy • Allowing J control with his putting me in time outs • Requiring J to repair broken ceramic baby in my office • Expanding scripted play to include mom and my ideas • Playful obstruction to read cues 	<p>Executive</p> <ul style="list-style-type: none"> • Routine for reunion when Mom comes home • Setting up predictable schedule with Velcro pictures • Increasing flexibility by requiring J to use co-regulation through relationships • Clear consequences for hitting • Expecting J to use words to give feedback on sensory preferences (duration/intensity/rhythm) • Playful obstruction to increase flexibility
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“Micro” Level Overview- Vignette Summary
Toddler in the Red Zone



<p>Triggers and Vulnerabilities</p> <ul style="list-style-type: none"> • Regulation: <ul style="list-style-type: none"> – Hard to get to sleep – Red zone propensity • Sensory: <ul style="list-style-type: none"> – Sound sensitive – Unaware of his body in space • Relevance: <ul style="list-style-type: none"> – Procedural memory trauma from time-outs – Emotional rigidity • Executive: <ul style="list-style-type: none"> – Difficulty with abrupt transitions 	<p>Tools for Resilience</p> <ul style="list-style-type: none"> • Regulation: <ul style="list-style-type: none"> – Once asleep, stays asleep • Sensory: <ul style="list-style-type: none"> – Preference for oral-motor stimulation – Able to down-regulate with deep touch pressure, movement, and quiet sound • Relevance: <ul style="list-style-type: none"> – Time-ins useful for introducing co-regulation – With increase in green zone, falling in love occurs, empathy increases • Executive: <ul style="list-style-type: none"> – Over time, responds positively to having schedule and knowing what to expect
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