

# Model Case: Trauma and Tigers



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# Outline

- Model Case- background, Step 1
- Break (about 10:30)
- Model Case- Step 2 and 3
- Lunch
- Applying the NRF to your case
- Break
- Vignette NRF practice
- Putting the NRF into practice
- POST test!



# Integrating Cultural Competence with the NRF



I would like to know:

What are your Critical Questions that you need to know in order to proceed with your learning process through the day?

Lingering thoughts?

Things to be clarified?

# Questions #1-3



1. Stress responses are a clinical tool that are only useful for professionals not parents. TRUE

**100% to 96%, -6%**

2. Top down strategies are good to start with in treatment because they teach much needed skills. FALSE

**86% to 100%, +14%**

3. Traumatic experiences only impact the relevance system because that's the system involved with memories and emotions. FALSE

**97% to 100%, +3%**

## Question #4 & 5



4. The regulation system includes the capacity for deep sleep, green zone and stress responses. TRUE

**97% to 100%, +3%**

5. All of the following are examples of bottom up strategies except:

A. Bouncing on an exercise ball

B. Deep breathing

**C. Identifying and labeling affect**

D. Deep pressure/massage

E. Dimming the lights and turning off extraneous sound

**86% to 96%, + 10%**

## Question #6



6. All of the following are examples of sensory system symptoms except:

A. Trouble integrating information from the visual world into motor output

**B. Chronic constipation**

C. Low tolerance for loud sounds

D. Avoidance of movement

E. Refusal to eat crunchy or hard foods

**from 52% to 86%, + 36%**

# 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 baby in the Blue Zone and the toddler in the Red Zone” to keep a collegial conversation alive

# 3 key concepts, 3 key steps



## 3 Key Concepts

- Toxic stress disrupts early brain networks
- Relational “serve and return” process builds strong circuits
- Brain architecture is built upon lived experiences

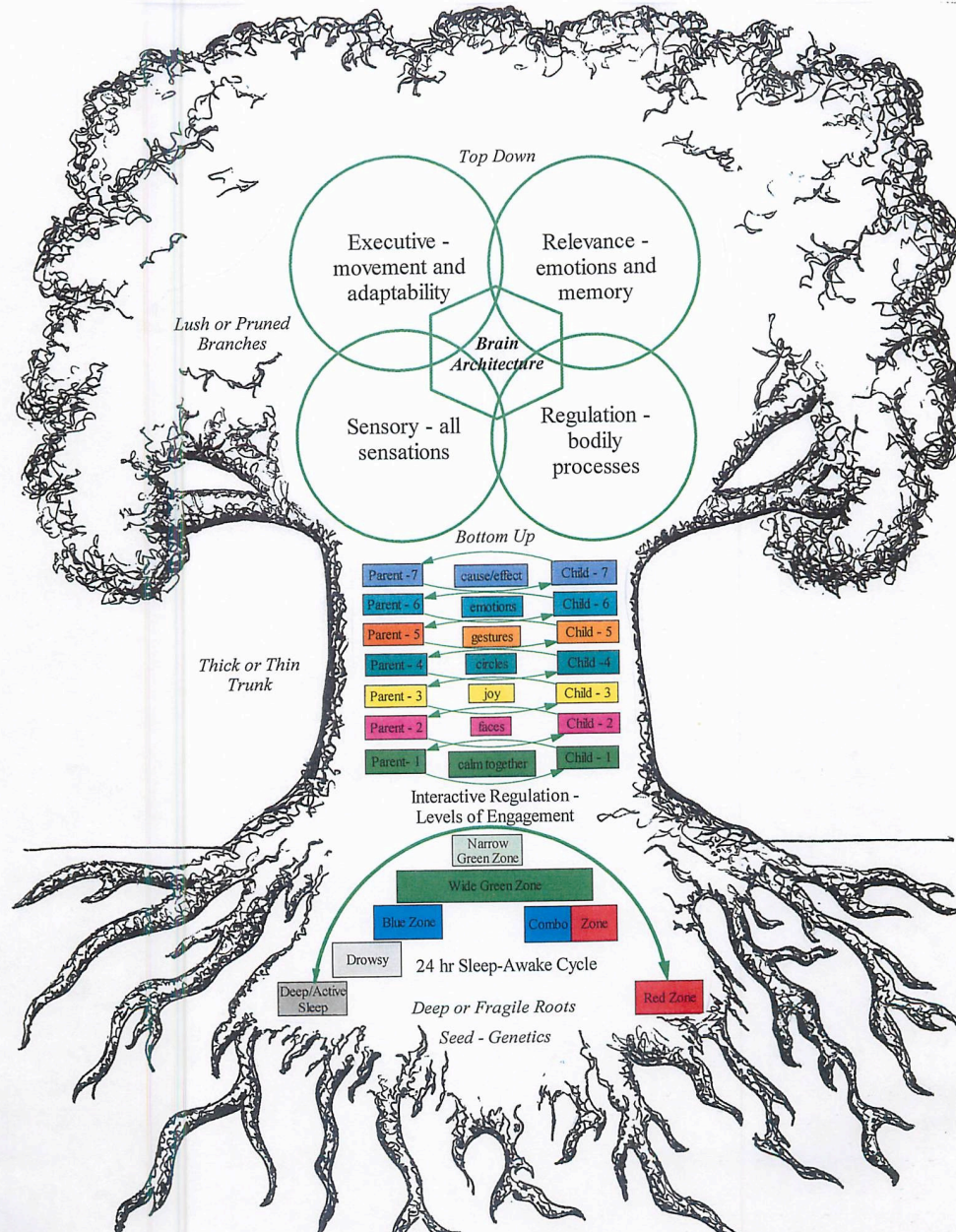
## 3 Key Steps

- #1 Reduce/eliminate toxic stress in relationships (roots)
- #2 Improve the quality of engagement (trunk)
- #3 Support individual differences & remediation of brain networks (branches)



# The Neurorelational Framework's Three Clinical Steps

C Lillas PhD (adapted from Lillas & Turnbull, 2009) with CA Hapehyn MD  
 Supported by Nathaniel Osgood PhD, University of Saskatchewan and the Interdisciplinary Training Institute



# Dandelion or Orchid?

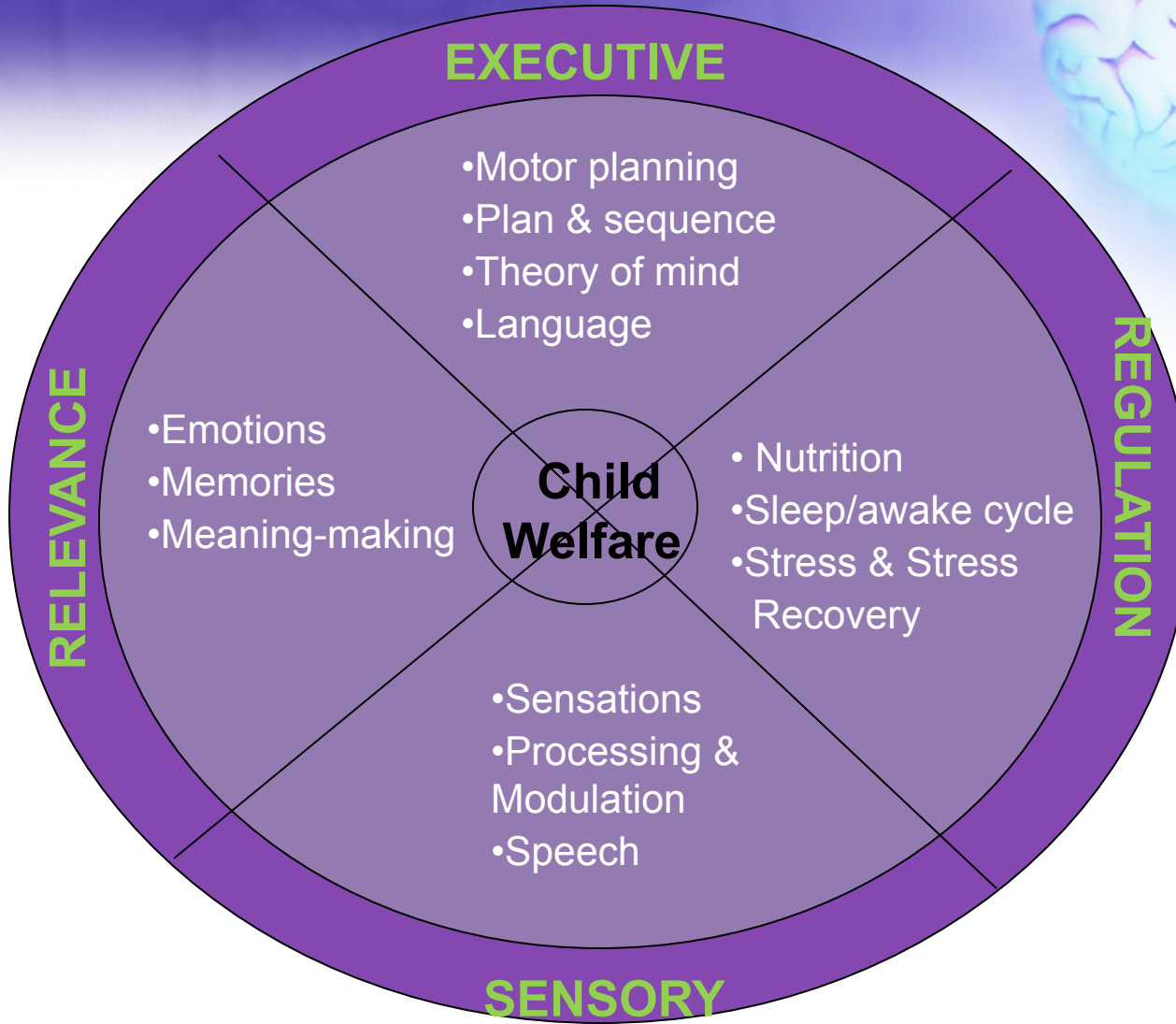


# Four Brain Systems: Macro & Micro Levels

## Early Care & Education



**Mental  
Health**



**Basic Needs/  
Medical**

**Developmental  
Disabilities**

# Adverse Childhood Experiences Scale



## What we knew at the start...

1. Recurrent physical abuse
2. Recurrent emotional abuse
3. Contact sexual abuse
4. An alcohol and/or drug abuser in the household
5. An incarcerated household member
6. Someone who is chronically depressed, mentally ill, institutionalized, or suicidal
7. Violence between adults in the home
8. Parental separation or divorce
9. Emotional or physical neglect

# Four Brain Systems: Macro

**Early Care &  
Education**



**EXECUTIVE**

Head Start  
IEP  
Physical therapy

**REGULATION**

Hospitalization  
for acute injuries

**Basic Needs/  
Medical**

**RELEVANCE**

Dyadic  
Collateral

**Mental  
Health**

**Child  
Welfare**

No formal services

**SENSORY**

**Developmental  
Disabilities**

# Step 1: Sleep & Stress Patterns



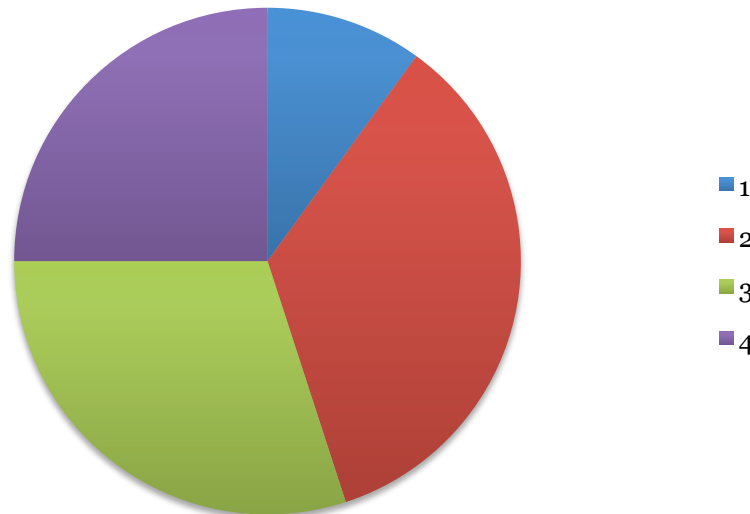
## Sleep Cycles:

Good sleeper

Total sleep about 10 hours

## Stress Patterns:

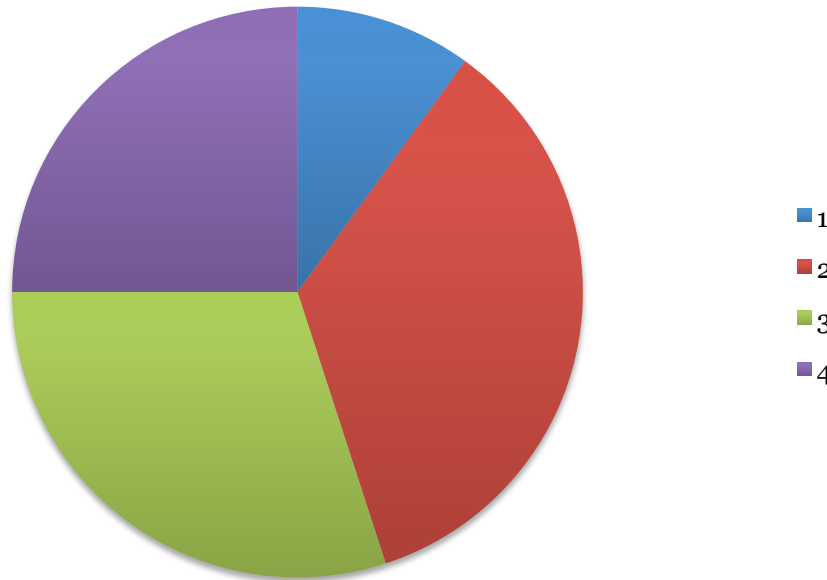
Clt 5% red, 50% combo, 30% blue, 15% green



# Step 1: Sleep cycle and Stress Responses



- Foster mom sleeps 6-8 hours
- Foster Mom 40% combo, 40% green, 10% red 10% blue



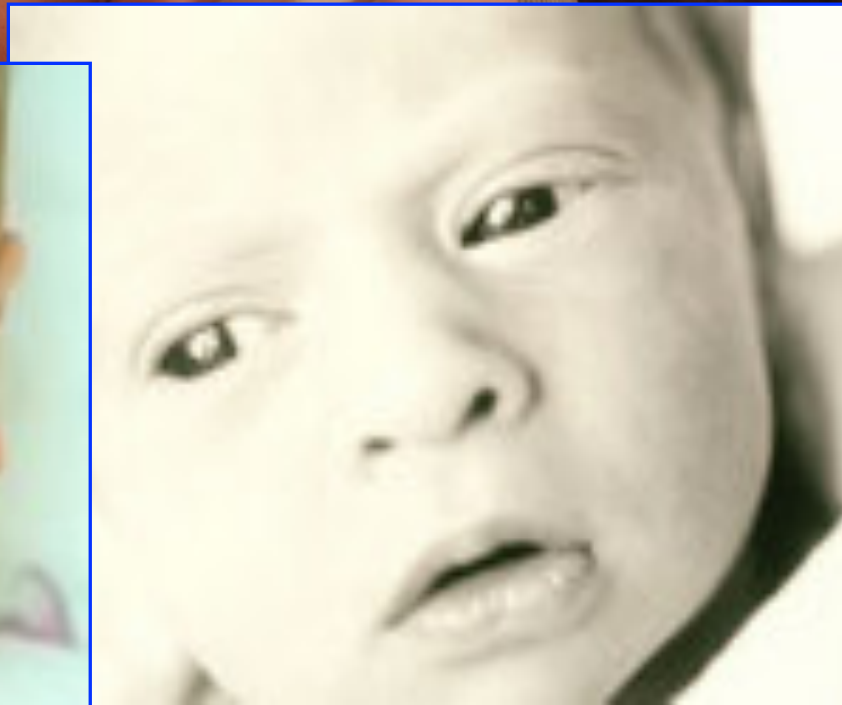
## Possible Regulation and Stress Response Correlates of Interpersonal Modes Across the Lifecycle

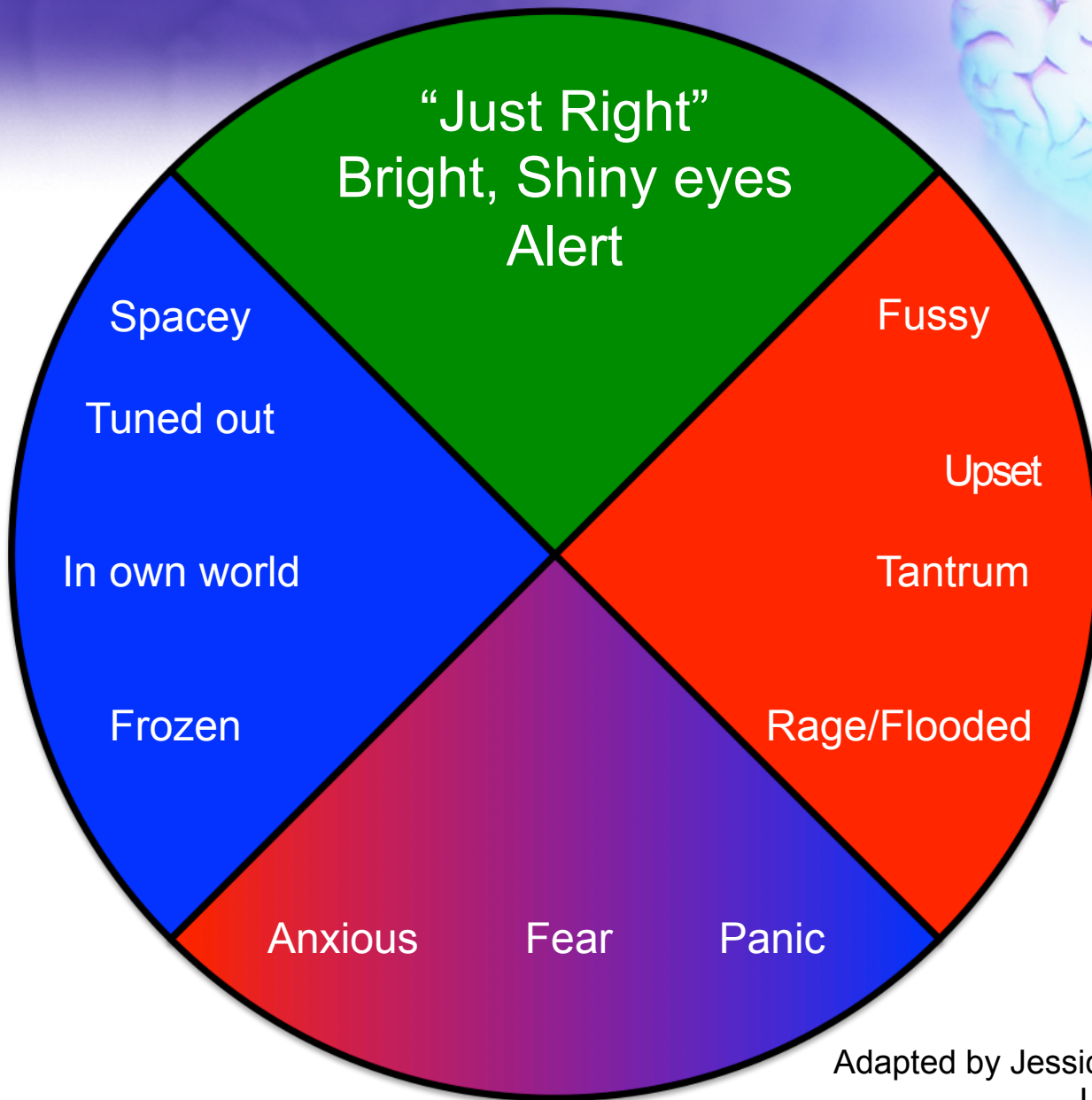
Arousal State and Interpersonal Mode	Just Right/ Alert Processing Stability with Flexibility	Too Fast/Flooded High Demand	Too Slow/Hypoaert High Detach	Too Vigilant/Hyperalert High Compliance or Control
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# Quick review





Adapted by Jessica Richards based on  
Lillas & Turnbull, 2009

# Using States of Arousal with families



- When is the child in the red, blue or combo zone (tendency?)
- When is the child in the green zone
- The goal is to expand the amount of time the child is in the green zone – this is where learning and social emotional growth occur
- What is the stress response tendency in the parent (triggers)?
- When is the parent in the green zone?
- When are you in the green?

# Colored Zones are the background to Emotional Regulation



Possible Regulation and Stress Response Correlates of Interpersonal Modes Across the Lifecycle

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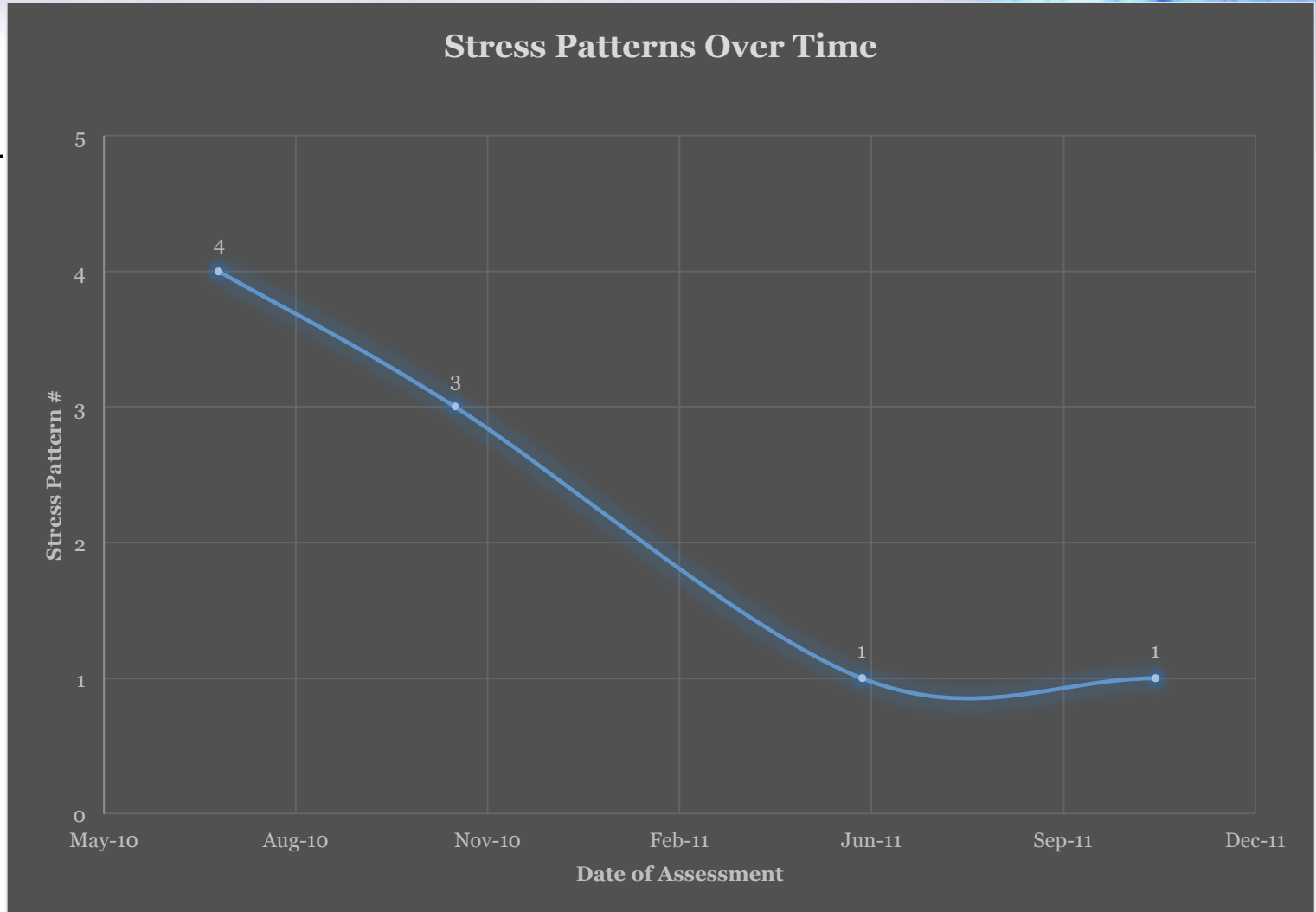
Emotions Color Wheel



# Toxic Load Pattern



Started at  
pattern #4  
Then  
pattern 1,  
2, and 3  
Then 1



# Parallel Process



- Important information about how this family impacts my stress levels (step #1)
- How does this child/parent impact my relational style?
  - Brings out my Heart/Hand/Head at my best
  - Can stimulate my Heart/Hand/Head at my worst

# Parallel Process



- My tendency Combo zone
- Mostly green with foster mom
- Intensity of clt's trauma combo zone trigger
- Family brings out my warm, empathic heart
- System challenges and intensity of case pulled me toward overaccomodating/rescuing
- Needed supervision!!

# NRF Guiding Principles



- ***During assessment in Step #1, map out the Duration, Intensity, and Rhythm (DIR) of the stress zones during the awake cycle.*** This establishes your baseline so that you know if you are making any progress or not. Revisit your baseline parameters at least every three months.
- ***Always start at the earliest point in the breakdown.*** If sleep is disrupted, begin with addressing this aspect. If green zone is disrupted, begin with this goal as well. This principle applies to all three steps. Step #1 is the First Level of Engagement and the First Brain System, Regulation.



# NRF Guiding Principles



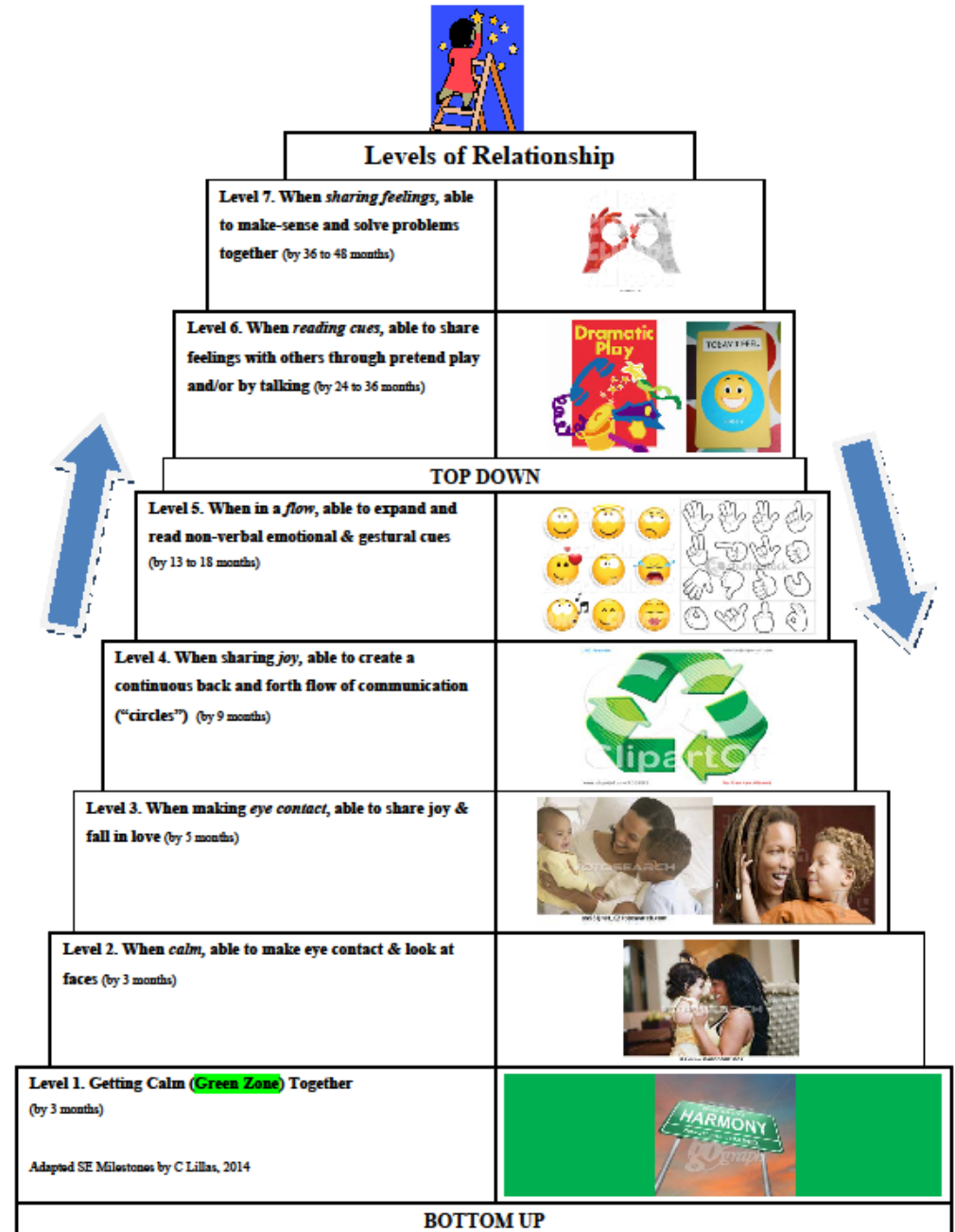
- ***In the regulation system guiding priorities are intervention for sleep, feeding, and other physical health issues that must be addressed while moving forward.***

# Step #2 Levels of Engagement

“Serve and Return” on All Levels



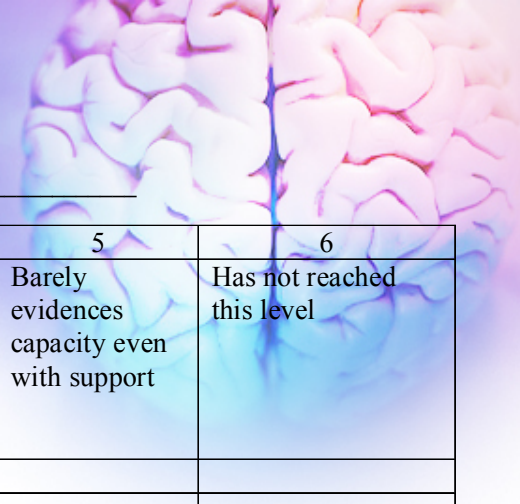
# Step 2: Levels of Engagement



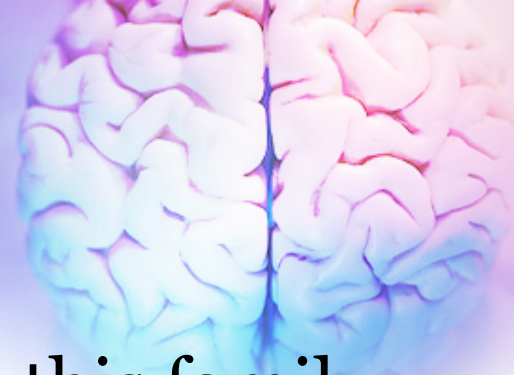
**PARENT-CHILD RELATIONSHIP MILESTONES**

Child: \_\_\_\_\_ Caregiver: \_\_\_\_\_ Examiner: \_\_\_\_\_ Date: \_\_\_\_\_ Diagnosis: \_\_\_\_\_

	1	2	3	4	5	6
<b>Place an X in the box that describes the milestone and development levels</b>	Age appropriate under all conditions, including stress, with a full range of emotions	Age appropriate but vulnerable to stress and/or constricted range of emotions	Has capacity but not at age appropriate level	Inconsistent/needs sensorimotor support and structure to function at this capacity	Barely evidences capacity even with support	Has not reached this level
<b>Functional Capacities</b>						
<b>BOTTOM-UP</b>						
<b>11. Getting Calm (Green) Together</b> (by 3 months)						
<b>These functions are built upon the capacity to be calm together</b>						
<b>12. When calm, able to make eye contact &amp; look at</b> <small>(by 3 months)</small>						
<b>13. When making eye contact, able to share joy &amp; affection</b> (by 5 months)						
<b>14. When sharing joy, to create a continuous and forth flow of communication (“circles”)</b> <small>(by 6 months)</small>						
<b>15. When in a flow, able to expand and read non-verbal emotional &amp; gestural</b> <small>(by 13 to 18 months)</small>						
<b>TOP-DOWN</b>						
<b>16. When reading cues, to share feelings with others through pretend play or by talking</b> (by 24 to 36 months)						
<b>17. When sharing thoughts, able to make-sense solve problems together</b> <small>(by 48 months)</small>						

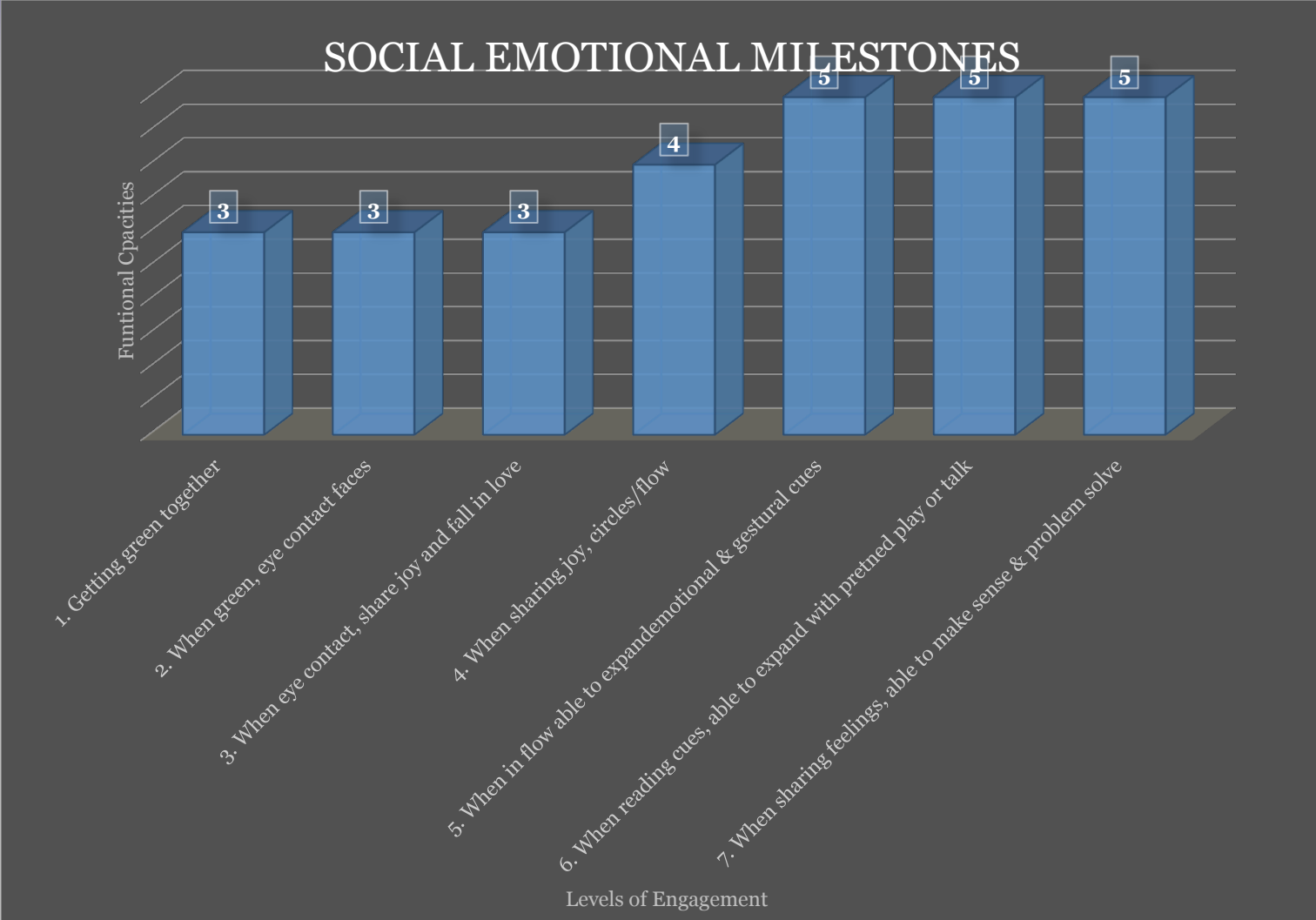
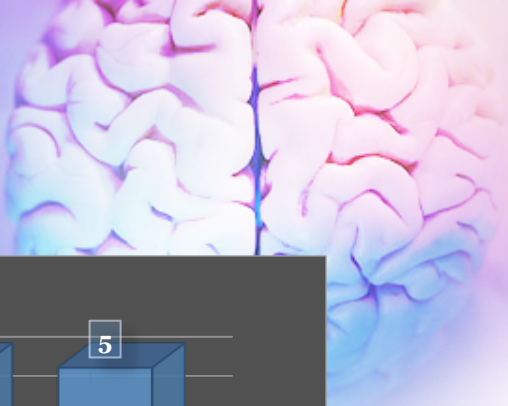


# Parallel Process



- Important information about how this family impacts my levels of engagement (step #2)
  - **During collateral sessions, up to level 6**
- **How far up the levels of engagement ladder can you get with the parent? The child?**
  - With clt, up to level 5 initially with support

# Levels of Engagement



*Information gathered from the "Parent-Child Relationship Milestones".*

# NRF Guiding Principles



- *When working “bottom-up” for zone (arousal) regulation begin with finding the child’s individual sensory preferences and triggers.*
- *For treatment, match the sensory preference with the Duration, Intensity, and Rhythm (DIR) for the child’s nervous system that promotes sleep, the green zone, and stress recovery.*

# NRF Guiding Principles



- ***Sensory thresholds vary with each child and with each context.*** Matching or countering the child's zones of arousal are guided over time, with experimentation, and by watching the effect on the child's ability to regulate to sleep and to the green zone.
- The child's arousal patterns and procedural history are your guide, not the particular "treatment" or EBT you are using. ***Individual neurodevelopment that is trauma informed trumps the EBT. Practice flexibility with stability.***
- ***Change does not occur in a straight line. Always leave the door open for a family to return to you.***



# Matching or Countering the Sensory Modality



## **Low Intensity, Slow Rhythm**

### *Match*

Lower lights and sounds  
Lower tone of voice  
Slow down vocal rhythm  
Slow down facial expression  
Slow movement

### *Counter*

Increase lights and sounds  
High pitched tone of voice  
Rapid vocal rhythms  
Bright facial expressions  
Fast movement

## **High Intensity, Fast Rhythm**

### *Match*

Increase lights and sounds  
High pitched tone of voice  
Rapid vocal rhythms  
Bright facial expressions  
Fast movement

### *Counter*

Lower lights and sounds  
Lower tone of voice  
Slow down vocal rhythm  
Slow down facial expression  
Slow movement

# Four Brain Systems: Macro

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Education**



**EXECUTIVE**

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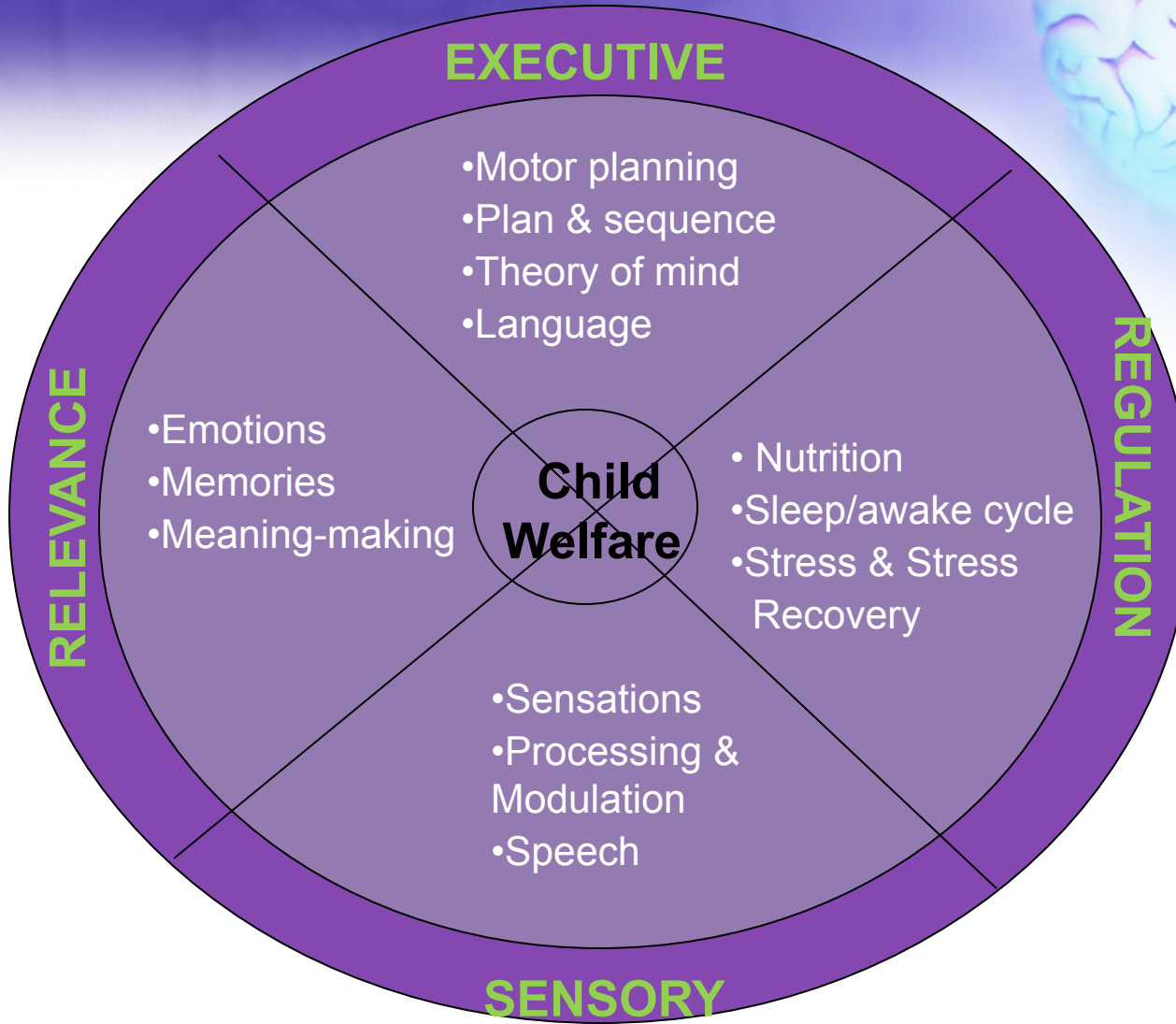
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# Four Brain Systems: Macro & Micro Levels

## Early Care & Education



**Mental  
Health**



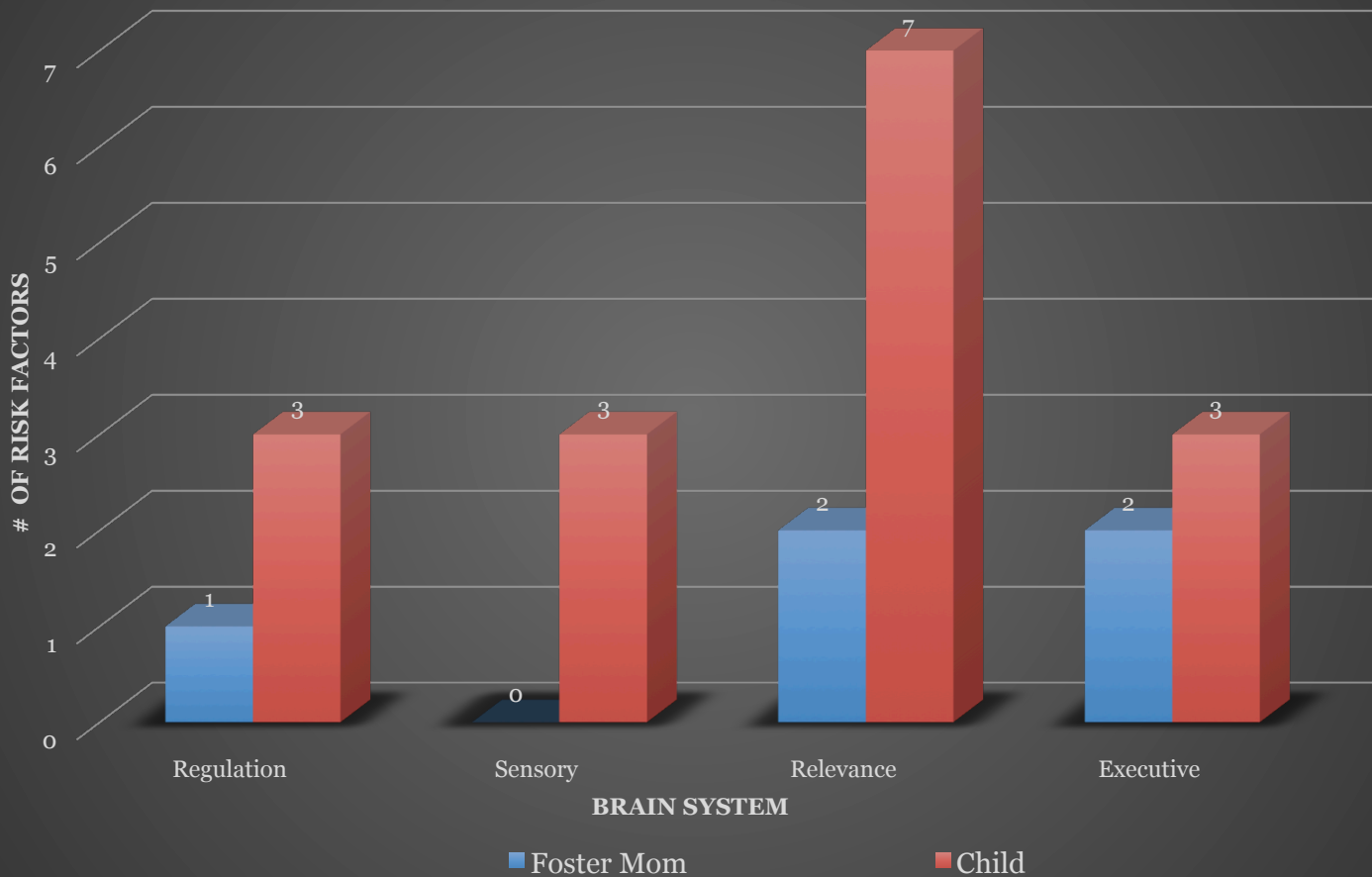
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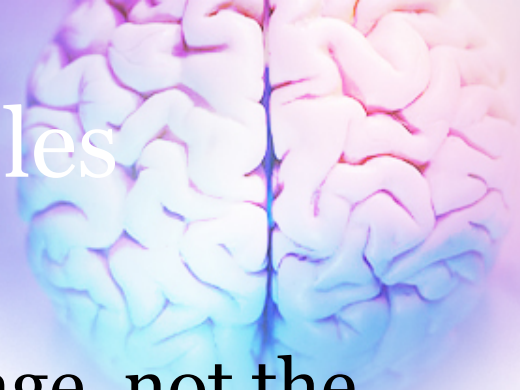
# Four Brain Systems



## Vulnerability of 4 Brain Systems



# NRF Guiding Play Principles



- Always work with developmental age, not the chronological age
- When moving up the developmental ladder, consider procedural enactments as part of the emergence of emotional memories that are not always symbolized through symbolic play or with a verbal narrative
- “Pretend” play can hold procedural memories that are not yet verbalized into a “verbal narrative” yet embody a “body narrative”

# NRF Guiding Play Principles



- Procedural memories that are not yet verbalized can help us understand traumatic memories that are lodged in the body
- These are now “sensory fragments” (this is what memories are) lodged in the “relevance” system that shape our meaning-making experiences
- While useful, one does not always have to “know” the history of the child to work with the child. *“The brain is a historical organ.”* (B Perry)

# NRF Guiding Play Principles

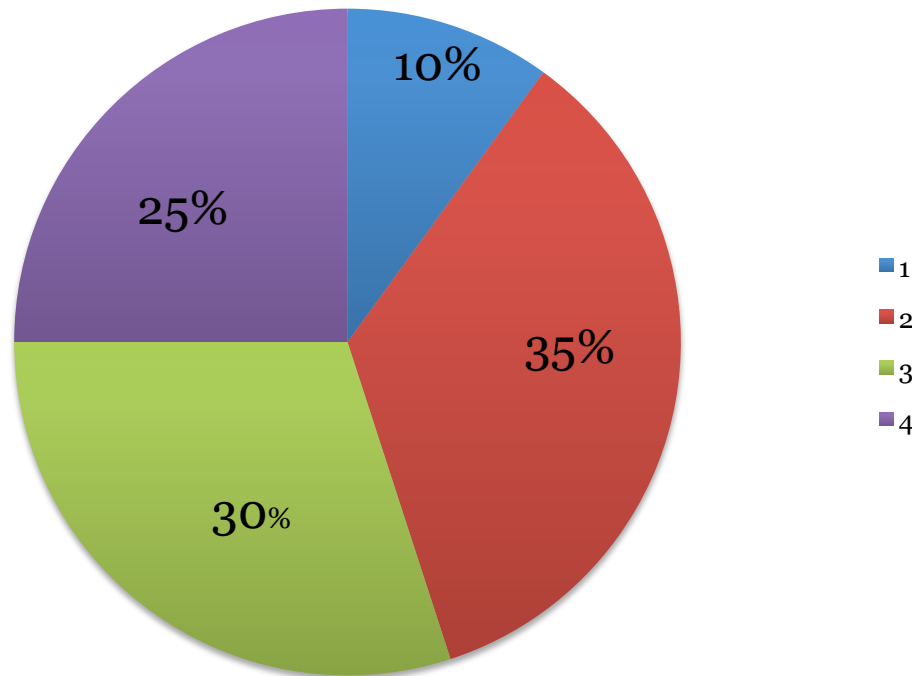


- While following the child’s lead and their interests, in general, work with expanding their emotional range from the constrictions they have
- Use the color wheel to see how expansive or how constricted their emotional range is, linked with colored zones
- With trauma link the aggressor with the victim (old) with a protector (new)
- Many times young children take on the role of the aggressor (red zone) as a “one size fits all”

# Reunified with Mom

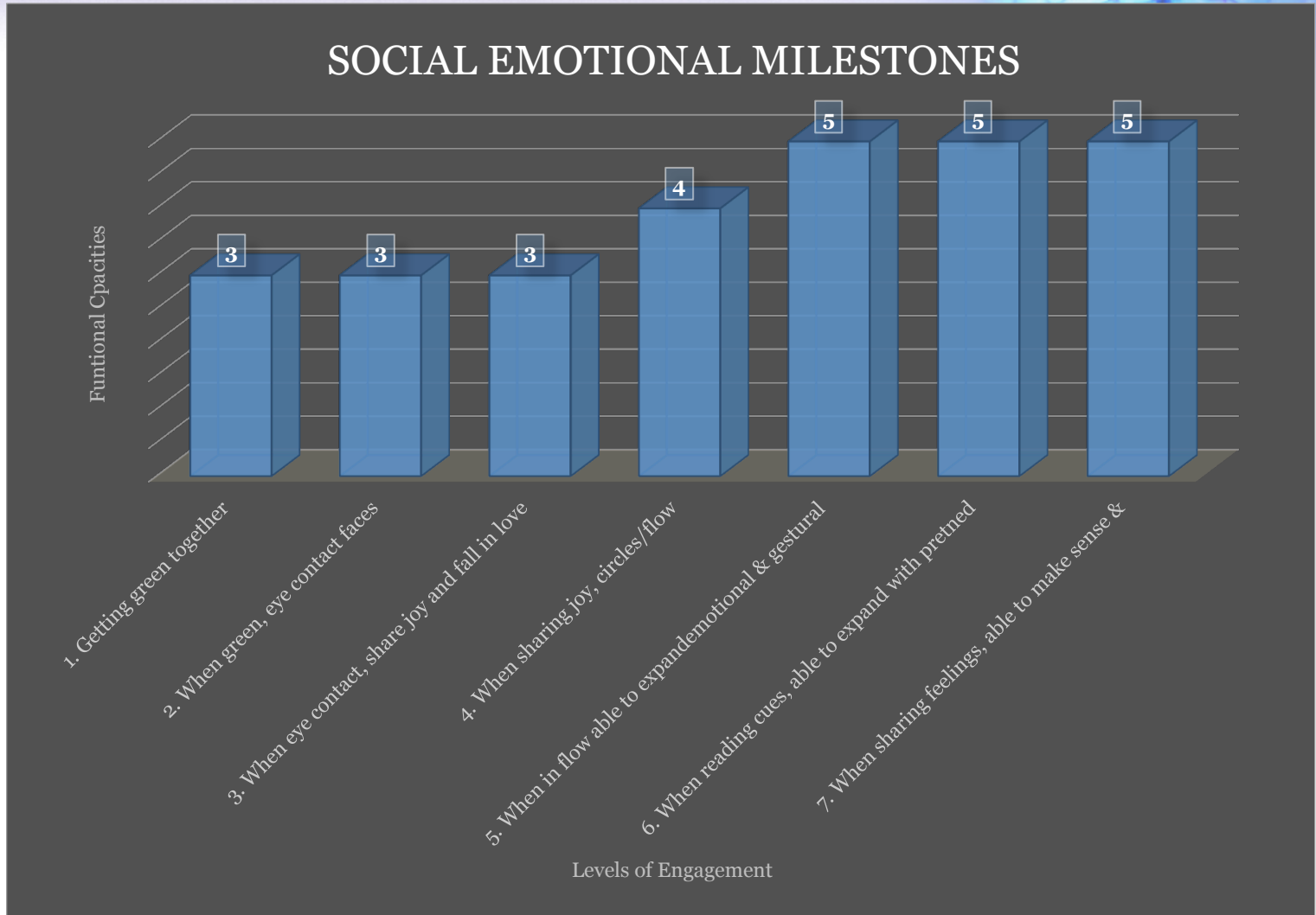


- After 12 months with foster mom and 10 months in treatment, client reunified with Mom





# Building Milestones



# Vignette



# Top-Down Interventions used



- “Scooping”
- Translating perspectives
- Linking theme to past trauma
- Restoring the protective shield
- Encouraging flexibility of aggressor, victim or protector roles
- Promoting mastery
- Symbolic justice

# Multiple Dimensions of Trauma

## Play Themes of the Relevance System



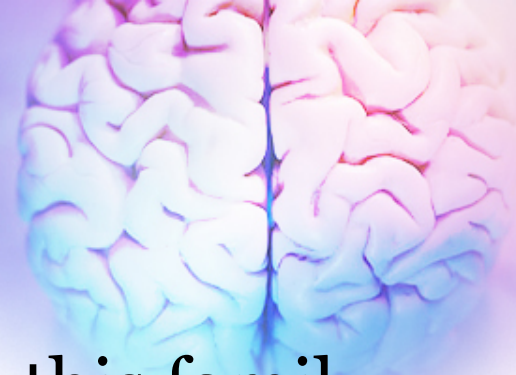
### **Constricted Play Themes**

- No affect
- Only brief positive affect
- Predominance of negative range, with no positive affect
- Predominance of positive range, with no negative affect

### **Extreme Play Themes**

- Repeated aggression
- Destructive actions to vulnerable other(s)
- Repeated victimization scenarios
- Destructive behaviors (e.g., head-banging, self-biting, biting others)
- Repeated themes of suspicion and fear

# Parallel Process



- Important information about how this family impacts my brain systems (step #3)
  - **Relevance system (pregnant during second year of treatment)**
- What brain systems are you using easily (automatically) when working with this dyad?
  - **Relevance, sensory**
- What brain systems are you using by exerting conscious control (deliberately) when working with this dyad?
  - **Executive**



“Top-down”

## EXECUTIVE

- Motor Processing Disorders
- Executive Function Delays
- Cognitive Delays

## RELEVANCE

- Anxiety Disorder
- Depression
- Mood Disorders
- Post-Traumatic Stress

## Autistic Spectrum Disorder

## SENSORY

- Sensory Processing Disorder (LDs)
- Sensory Modulation Disorder

## REGULATION

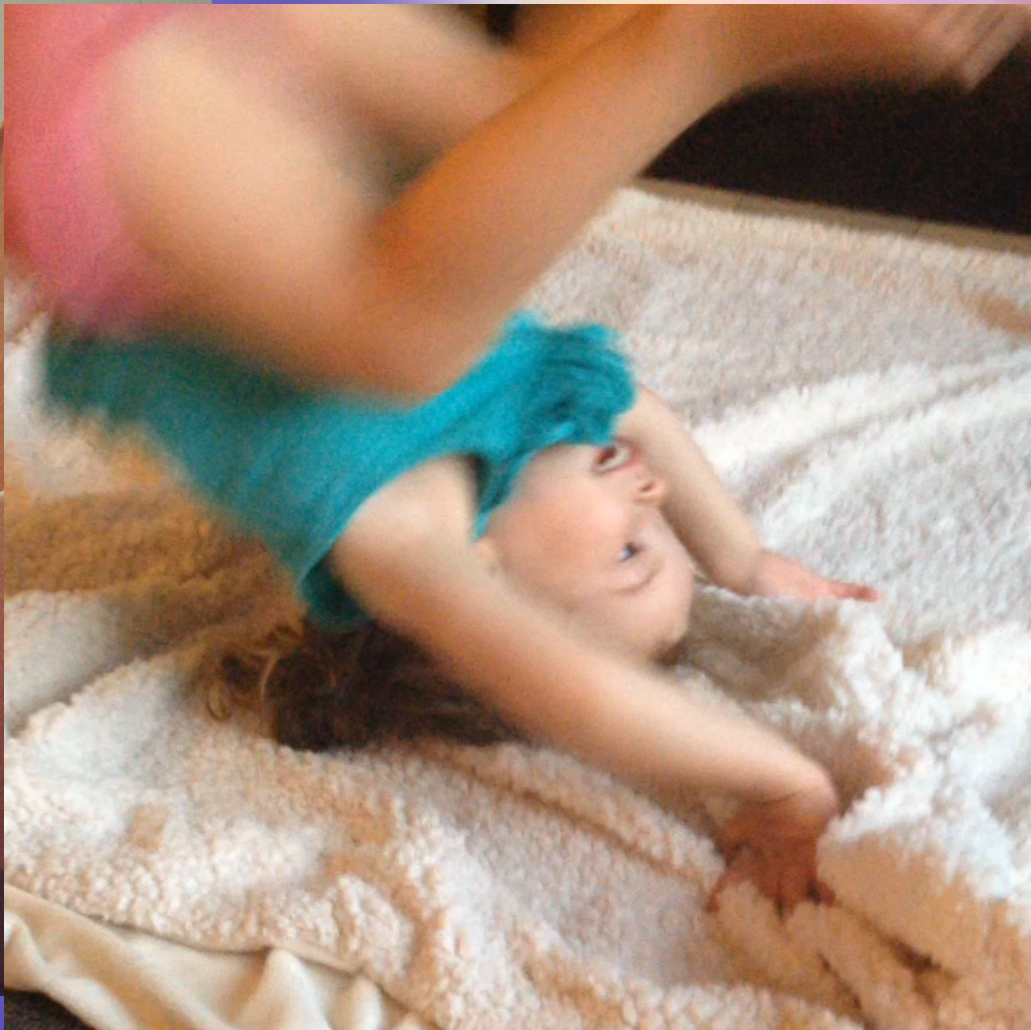
- Feeding & Sleeping Disorders
- Medical Disorders
- Genetic Disorders

- Regulatory Disorders

“Bottom-up”

External-world

Internal-bo



**Thank You!**

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