NeuroRelational Framework (NRF) Manual:
Reducing Toxic Stress and Growing Relationships in Families & Communities

Connie Lillas, PhD, MFT, RN
NeuroRelational Framework (NRF) Manual:
Reducing Toxic Stress and Growing Relationships in Families & Communities

(Version 1.0)

By

Connie Lillas, PhD, MFT, RN


© 2018 Lillas / NRF Global Communities
# Table of Contents

## INTRODUCTION & OVERVIEW

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1: Critical Public Health Problems</td>
<td>1</td>
</tr>
<tr>
<td>Chapter 2: Big Picture Concepts in Using the NRF’s Three Steps</td>
<td>17</td>
</tr>
<tr>
<td>Chapter 3: The Clinical Use of the Self and Our Professional Roots</td>
<td>37</td>
</tr>
</tbody>
</table>

## NRF STEP 1

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 4: Step One, the Foundation to Resilience, the Roots to the Tree</td>
<td>59</td>
</tr>
<tr>
<td>Chapter 5: Orientation to Interview and Use of the Cultural Self</td>
<td>79</td>
</tr>
<tr>
<td>Chapter 6: Using our Hearts, Hands, and Heads in Understanding Parallel Process and Dyadic Patterns</td>
<td>99</td>
</tr>
</tbody>
</table>

## NRF STEP 2

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 7: Step 2, Levels of Engagement, the Use of the Pyramid</td>
<td>109</td>
</tr>
<tr>
<td>Chapter 8: Levels of Engagement Rating Scale in Step 2</td>
<td>129</td>
</tr>
</tbody>
</table>

## NRF STEP 3

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 9: Macro and Micro Approach to the Four Brain Systems, the Four Stories and the Use of the History Worksheet and Needs Assessment</td>
<td>141</td>
</tr>
<tr>
<td>Chapter 10: Regulation Brain System</td>
<td>169</td>
</tr>
<tr>
<td>Chapter 11: Relevance Brain System</td>
<td>195</td>
</tr>
<tr>
<td>Chapter 12: Sensory Brain System</td>
<td>235</td>
</tr>
<tr>
<td>Chapter 13: Executive Brain System</td>
<td>257</td>
</tr>
</tbody>
</table>
Chapter Eleven
Relevance Brain System
(Step 3, Intermediate & Advanced Learning Phase)

For Supplemental Material Please Read Chapters 8 and 9 in the NRF Textbook on the Relevance System

FLEXIBILITY WITH STABILITY. As mentioned, capacities within each brain system are built to reflect flexibility with stability. For the relevance system, there is a parallel process with the regulation system. Flexibility reflects the ability to shift into stress responses, referred to as “negative valences” in the emotion research literature. Stability refers to getting back to the green zone with an emotional range from neutral to happy to joyful emotions. These are all meant to be expressed according to the context. Now the NRF speaks about a balance of the positivity and negativity valences. The balance is very important and yet, with the green zone’s priority we are always looking to come back to, and to be weighted towards the green zone’s capacity for positive affect.

LINKS BETWEEN REGULATION AND RELEVANCE SYSTEM. As mentioned in Chapter 10, there are natural and organic links between the Regulation and Relevance System. Arousal itself, while organized and weighted in the regulation system, is actually distributed across all of our four brain systems. The link between arousal and relevance is that a large part of “arousal” is one’s emotional reactivity. As we mature into using words for feelings, which begins around 2 years old, we often use feeling words to describe behavior. The first functional capacity, which is about having a full range of positively to negatively valenced emotions, has an obvious link with our states of arousal. Our four awake states with accompanying colors are the background physiology to our emotional reactivity. In a simplified way,
each color contains a primary emotional feeling state. Green houses a “happy” continuum; red houses a “silly” and “angry” continuum; blue houses a “sadness, disappointment, and loss” continuum; and combo houses an “anxiety” continuum. Now, just by mapping out the colors, one immediately gets a sense of whether the infant/child/youth/parent has a full range or not. This explains why there is one functional capacity dedicated to whether all three stress responses are at play or not in the Regulation System (capacity #3). For example, if you have a child that is primarily red zoned with anger, with little green zone and none of the other colors, you know immediately that all emotions are being funneled through anger. Being stuck in the red zone becomes a one-size-fits-all approach to emotions, with the range of emotions obviously very narrow. All the other feelings are “split off” and out of range without access to them.

This slide/picture below is skewed towards the stress zones, yet is meant to show you the range of feelings that reside within the basic four-color scheme.

During the mapping of the colors, one was asked to gather information as to the duration, intensity, and frequency of the zones. The duration of the colors with their percentages as a guide, you have an immediate picture as to the range of emotions, and how much is weighted towards positive valences and how much is weighted towards negative valences. This gives you a very quick snap shot into the first functional Relevance capacity. Finding out about intensity gives one an immediate understanding if modulation is occurring. With high intensity zones, one has unmodulated affect! The frequency question gives you information if the zone matches the context or not. If the stress zone is occurring too frequently, it often indicates that a slight perturbation can trigger a stress response. This often means that the stress response is not matching the context! So, hopefully, one can see how mapping the colors not only gives you most of the information you need for Regulation’s functional capacities, but also gives you a great deal of information about the foundation to the Relevance System.
A cascade effect begins to now occur. If there is a full range of colors, there is more likely a full range of feelings. If there is a full range of feelings, there is a higher chance these feelings can deepen and mature as relationships mature. Healthy levels of engagement - levels six and seven - deepen the emotional range, with the cause/effect links being made between feelings and the meaning of the feelings. These are organic links being made between the relevance and executive systems. The full range of colors and feelings is directly linked with one’s memory system. A full range of colors and feelings (capacity #1) will likely give one access to a full range of emotional memories (capacity #2) and a range of experiencing oneself and others with both positive and negatively valenced experiences (capacity #3). This is critical to the ability to later hold a “both/and” perspective of oneself. One is both aware of strengths and challenges within oneself and others.

These memories are also essential to our learning from experiences. Positive experiences tend to be those we want to repeat; negative experiences tend to be those we want to avoid. These give us impetus to learn from experiences. As the Executive System matures, problem-solving can occur to experiment with new ways to have more positive outcomes occur, learning how to adjust. In some cases, as with my premature and IUGR twin boy A, the child’s nervous system has had insults to it and there is a propensity to go to one stress color. In his case, he was both anxious with combo zone, yet what stood out were his red zone states. His sources of threat were from the environment which quickly overloaded his arousal and sensory systems. So, some children, youth, and adults will show a “stuck” color from constitutional factors. However, there are cases where safety and threat are reversed on a pervasive basis from relational sources. It is more “safe” to live under threat and more dangerous to accept or live with the “positive” expectation that the relationship will comfort, nurture, and protect. The negative relational experiences are so pervasive the person becomes overwhelmed, yet acclimated to expecting this. In other instances, negative experiences are linked to high risk situations which also provide an element of excitement – this could be a positive red zone state. If this is accompanied with a weak executive system – with poor planning, sequencing, and impulsivity, typical learning does not take place. Instead, learning shifts towards expecting the negative to occur or searching for the high excitement matched with high risk to continue. Cause and effect links are not made. In these states, negative outcomes are more likely to continue to occur in this person’s life.

If there is a constricted range of colors, there is more likely a constricted range of feelings, with a higher chance that one’s emotional memories will also be skewed. It is problematic to be skewed at either end of the positive or negative valences. Tipping towards too much positive implies low stress tolerance, with one unprepared for experiences that naturally induce grief, loss, anger, or fear. Emotional researchers refer to type of phenomenon as “naïve optimism” (ref). Tipping towards too much negative implies one is in a toxic stress pattern, accumulating negative appraisals of oneself and others, without enough stress recovery into the green zone which supports calm, joyful, peaceful, or competent feelings. The green zone, again, does not guarantee comfort and joy, but it’s a prerequisite to get there.

As one’s emotional range sets the stage for one’s range of memories, an overly positive or negative range will affect one’s appraisal of oneself and others. This now affects one’s meaning-making system (capacity #3).

NOTE: the use of the term “negative appraisals” has been understood by some to connote that the NRF holds a negative, judgmental attitude towards parents and children. The terms “positive and negative” refers to the “valance” of the emotion, taken from the negative charge of the electron in balance with the positive charge of the nucleus of the atom itself. “Negative” is not pejorative but simply descriptive. We observe these dynamics without judgment. These concepts were borrowed by the psychologists of
the 20th century from their contemporaries in nuclear physics. Without the balance of the negative charge of the electron and the positive charge of the nucleus of the atom, the universe would fly apart. “Negative” emotions are simply one end of the emotional spectrum. Suspicion, anger, and fear are constitutional parts of the fight-flight/fright/flat/freeze of the appraisal system and are not pejorative but survival responses. The problem arises when parents have their own trauma histories and their appraisals of their children’s behaviors are skewed due to their own unresolved traumatic experiences. This is a process of assessing the needs of the parents as well as the children in observing the entire family system in regard to unresolved trauma experiences for both.

The more one is tipped towards too much positive, there is often an appraisal that one has to always be the winner or else one is automatically the loser. To constantly stay on the positive side of the coin, the use of denial is the key to sustaining an overly positive view. Denial of distress, without taking any responsibility towards co-creating a rupture, while regularly blaming and shaming others, is common with this view towards others (externalizing, ref). From a mental health standpoint, these persons would be seen as esteem-sensitive (circle of security, ref). Mental health jargon might consider this dynamic leaning towards a narcissistic range. Another sign of “too much green” can emerge from a Heart personality under stress that is constantly accommodating to others, again, hiding their distress or anger underneath their compliance. When one reports predominantly being in the green zone, the therapeutic guide or practitioner must at least consider if this is an overlay of green zone with hidden zones and underlying feelings undisclosed or undiscovered. Just as there was the warning that the report of a “good, easy baby” needs to be verified through observation because this might be a missed blue or combo zone baby, the same principle applies to older children, youth, or parents.

The more one is tipped towards too much negative, there is often an appraisal that one is always the loser and there is no use trying. Everything always goes badly, one is worthless anyway, and nothings ever going to get better. There is more constant criticism towards shaming and blaming oneself (internalizing, ref). Often, this can become a viscous self-fulfilling prophecy. From a mental health standpoint, these persons are often anxious and/or depressed, stuck in the combo or blue zone. One version leans towards withdrawal, living from one’s internal world with a schizoid preference. The detached Head under toxic stress leans towards being passive-aggressive with his or her anger, often quietly lost in their internal appraisals of themselves and others. Another version with a tip towards too much negative valence leans towards projecting one’s internal hatred into rage towards others (ref). The angry Hand under toxic stress can be within this catchment area, often angry at others for not meeting or matching their demands.

The criteria for determining the term “overly” positive of negative valences occurs during the assessment process in gathering information during the mapping of the colors (step #1), the observations of the interaction between the parent and the child when assessing levels of engagement (step #2), along with the parent interview during the four stories (step #3). In the medical domain, any time temperature or blood pressure goes outside of this range, it is universally accepted that a fever that is too high causes brain swelling and damage and blood pressure that is too high will cause a stroke. It is no different with stress responses in assessing what is healthy and what is damaging in the how the overly positive and overly negative appraisals match with stress responses. For example, all stress states have a normal range that is considered healthy, adaptive stress. However, when they occur too frequently, with too much intensity, or last too long, we have a toxic stress patterns. These parameters would parallel assessing the frequency, intensity, and duration of overly positive and negative appraisals that are most often accompanied with the red (positive & negative), blue, combo zone stress zones.
Either way, one can see that the imbalance of too much positive or too much negative valence leaves one ill equipped in one’s social-emotional development, stunts one’s capacities for intimacy, and can contribute towards dimensions of mental illness. The NRF values balancing positive and negative energies, holding the tension between these two poles and valences (as a necessary polarity!), while weighting oneself towards the positive with stress recovery back to green from mild to moderate stress. This is the goal for ourselves and the families we work with. When there is a tragedy or toxic stress, we expect there to be negative appraisals, also expecting these appraisals to shift as we help restore a family back to healthy patterns of stress with stress recovery over time.

**BIVARIATE EVALUATIVE SPACE.** The term “bivariate” refers to the relationship between two related variables. The two variables of positive and negative valences now can show up in different patterns, much like the red (sympathetic) and blue (parasympathetic) tone of the ANS. The all or nothing of positive and negative valences is a common phenomenon. All infants and young children start off with this polarity. Similarly, with states of arousal, early on, infants are either green or not. One goal of emotional maturity is to grow the capacity for emotional blends. Blends build more capacity to modulate arousal with stress tolerance. In the visual chart below, we see several patterns:

1. *Uncoupled*: the “all or nothing” aspect of all negative or all positive valences
2. *Reciprocal*: Where there are both positive and negative valences, yet one may be higher than the other – one going up while the other is going down or staying the same
3. *Coactive*: Both the positive and negative valences are low, or both the positive and negative valences are high

![Bivariate Evaluative Space Diagram](image)

Again, the background to these emotional patterns, are the arousal patterns in parallel fashion, where the red and blue are the polar opposites (gas/red zone and brake/blue zone). There are reciprocal variations of these both (anxiety continuum/combo zone), where the gas may be going up as the brake
is going down or vice versa, as well as both the gas and brake pedal being accelerated (freeze/combo with blue zone).

![Diagram](image)

*Figure 1. Two-dimensional representation of autonomic space. Axes units are expressed as a proportional activation of the sympathetic and parasympathetic branches. On the diagonal of reciprocity, increased activity in one autonomic division is associated with decreases in the other. On the diagonal of coactivity, activities in the autonomic branches concurrently increase (coactivation) or decrease (coinhibition). The arrows along the axes depict uncoupled changes in the single ANS divisions. These arrows, and vectors parallel to them, illustrate the major modes of autonomic control.*


With this complexity of variables, it is important to understand and appreciate the importance of the negative valences, which are built into our survival system to support a response to threat. Making distinctions between healthy stress and toxic stress responses is crucial, as we have seen, since stress responses build resilience. Positively and negatively valenced blends also build the capacity for modulation to stay in the green zone with mild to moderate distress. Bittersweet feeling states that hold both joy and sadness are an example of this. Most parents have these experiences at graduations and weddings. One can also be happy and mad at the same time (e.g., observing a sibling doing well at an event and happy for them yet also mad at oneself for not doing better). Another variation is being both happy and anxious at the same time (e.g., happy to be honored at an event being given an award yet anxious delivering an acceptance speech).
We now summarize the three functional capacities of the Relevance System and offer some prompts on the right side of this table for you to see how you might already have access to that information or where you can find it and follow it.

<table>
<thead>
<tr>
<th>Table 11.1. Three Functional Capacities of the Relevance System</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Capacity for a full range of positively and negatively valenced emotions, modulated according to the context</strong></td>
</tr>
<tr>
<td>Once you know the colors from mapping out adaptive vs. toxic stress, you know how where the emotional range is weighted, either in balance or out of balance. Use the colors as your guide to the feelings that are vibrant and present and those that are split off or submerged. You also will have information from the Emotional Story Interview process here to add to the complexity of the relevance system. You also will know from the Levels of Engagement Assessment, if age appropriate, where things are in terms of early levels of comfort and joy (levels 2 and 3) and later levels re: the full range of feelings with cause and effect links (levels 6 and 7).</td>
</tr>
<tr>
<td><strong>2. Capacity for a full range of positively and negatively valenced memories, with access to them according to the context for learning</strong></td>
</tr>
<tr>
<td>Once you know the colors and the emotional range you know whether one’s memories are distributed across the colors or whether they are skewed towards an overly positive or overly negative valence. We learn from both our positive and negative experiences. As we can access our memories, we can make better estimates as to what might occur next time and ultimately, better choices for future outcomes. Again, the interview process and the ongoing nature of learning about the Emotional Story will add layers of knowledge as trust is built. One’s trauma history and memories will slowly be revealed over time.</td>
</tr>
<tr>
<td><strong>3. Capacity for an accurate appraisal of oneself and others, holding both positive and negative</strong></td>
</tr>
<tr>
<td>Finally, the trickle-down effect from feelings and memories is how one appraises oneself and others. Meaning-making is now being formed. This capacity is all building towards the use of the term “theory of mind” and how one holds oneself and others in mind. With too much positive appraisal one is in danger of using denial to cover up uncomfortable feelings; with too much negative</td>
</tr>
<tr>
<td>valences, weighted towards a positive bias</td>
</tr>
</tbody>
</table>
INTRODUCING THIS TO PARENTS: A simple way to talk about the three functional capacities with less technical language is listed on this slide:

Feeling Triggers

Micro

- Can you/partner/child modulate a full range of both happy and upsetting emotions?
- Can you/partner/child access a full range of both happy and unhappy memories that you learn from?
- Can you/partner/child accurately portray your cues and read others' intentions?

The Macro level triggers are always part of the ongoing Emotional Story that often gets revealed over time as trust is built.

Relevance Triggers

Macro

- Any relationship difficulties
- Any trauma history
- Any mental health concerns
- 4 or More Adverse Childhood Experience Scale Score
Go to Early Phase Assessment Form, pages 18 to 20 or Early Phase Assessment Relevance Form, pages 1 to 3. Now you can fill in the functional capacities on the designated case that you have been following.

Treatment implications in the Relevance System: Working Both Bottom-up and Top-down

KNOWING YOURSELF: Just as it was emphasized for you to know your own colors, it’s now time to layer on to that the feelings within the colors you are comfortable and uncomfortable with. Being involved in family’s lives, regardless of your role or discipline will push you to deal with the full range of feelings. Take a look at the slide below and circle feeling words that you are comfortable with a pencil or green ink pen and circle the feelings you avoid or are frightened of with blank ink or red ink pen. Notice that the feeling words are matched with the color of the arousal zones. Consider the ones circled in black or red part of your own trigger menu!

Which feelings you are comfortable or uncomfortable with...?

<table>
<thead>
<tr>
<th>Positive feelings (green zone)</th>
<th>Negative feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>•Interest</td>
<td>•Anger, hostility, hate (red zone)</td>
</tr>
<tr>
<td>•Enthusiasm</td>
<td>•Blame</td>
</tr>
<tr>
<td>•Laughter</td>
<td>•Resentment</td>
</tr>
<tr>
<td>•Empathy</td>
<td>•Jealousy</td>
</tr>
<tr>
<td>•Calmness</td>
<td>•Sorrow, sadness, grief (blue zone)</td>
</tr>
<tr>
<td>•Trust</td>
<td>•Depression</td>
</tr>
<tr>
<td>•Hope</td>
<td>•Regret</td>
</tr>
<tr>
<td>•Confidence</td>
<td>•Worry, fear, panic (combo zone)</td>
</tr>
<tr>
<td>•Affection</td>
<td>•Anxiety</td>
</tr>
<tr>
<td>•Gratitude</td>
<td>•Insecurity</td>
</tr>
<tr>
<td>•Love</td>
<td>•Shame, embarrassment</td>
</tr>
</tbody>
</table>

As mentioned, each brain system has both bottom-up and top-down aspects to it. The Relevance System is no exception. Simply put, the bottom-up aspects of feelings are all of the non-verbal cues that emanate from our bodies with our emotions and the top-down aspects of feelings are all of the verbal words we use to talk about our feelings.

GO TO THE TRIGGERS AND TOOLKITS MENU FOR PROVIDERS UNDER FEELINGS (RELEVANCE). As we walk through these triggers and toolkits in this chapter, please review and check off your understanding of both the triggers and toolkits as they unfold. The Trigger and Toolkit Menu is organized by the primary feelings within each stress zone color. This chapter is organized by bottom-up, then top-down principles. The top-down section has Tools for your Toolkit organized according to Heart, Hand, and Head approaches. If you are confused about the use of any of the Triggers or Toolkits as you cross-reference the Menu while you read this chapter, please let your NRF Trainer or Consultant know so you can get the help you need.
Bottom-Up Triggers. Greenspan spoke of the “dual coding” of how sensations and emotions are connected and linked (ref); LeDoux refers to this as the “Low Road” (ref).

So, the sensory system, poised right between our arousal (regulation) and our affect (relevance) holds all of our motor output that turns into sensations for our partners. I find it particularly important to always talk about the relevance system, first, through the language of sensations. Notice that the clusters of non-verbal cues that organize our states of arousal are all a part of how our emotions are also expressed. So, the first way to organize our Relevance Triggers can be by understanding how fast or slow our motor output is and if that is a sensory/emotional trigger to one’s partner or child. Triggers from the relational level, will all be items from this list. Notice that any time that the intensity or type of sensory input replicates the trauma trigger there then will be an automatic stress response.

Picking up on what the sensory trigger is from the relevance (emotional/relational) system can sometimes be easy to find and other times be a real challenge. For example, in one child welfare case, every time the father walked into a room, and, without seeing her father but only hearing the sound his voice, she stiffened her body tone and literally clung like an octopus to the caregiver. She would not allow her body to relax in order to be lifted off of the caregiver’s body in order to be placed in his arms. This was a real red flag clue that this baby had experienced trauma with this father.

In another scenario, a toddler who had been physically abused while strapped in a stroller, suffering from head injuries, would scream, with a loud red zone scream every time she saw a stroller on the
street. She refused to sit in one. Again, this was a fairly easy link to make between the sensory events linking up with the actual abuse. A couple of scenarios at the end of this chapter will be harder to immediately discern what the trauma trigger is. Context and trauma history can be very helpful in figuring some of these conundrums out. Even when one does not know what the event was or is, being a curious listener is pivotal to eventually finding out or figuring it out!

Note that the sensory triggers we are emphasizing in the Relevance System are mostly relational ones. In the Sensory System will also explore how sensations are linked with memories and are often the source of an automatic stress response to the source of threat.

**Bottom-up Toolkits:** Whenever possible, first think about your own regulatory and emotional needs. The same rule applies to parents – whenever possible, help them put on their own oxygen mask first, so they can then help their child.

The Relevance System is weighted towards relational triggers and relational toolkits for co-regulation. Self-regulation strategies will be more explored in the Sensory System.

So, the bottom-up side to Arousal/Regulation and Relevance Toolkits (this applies to both arousal and affect) is all about the use of our non-verbal cues. Recall that matching or countering is one of our guiding clinical principles. The same applies here. What do you need in terms of faces, vocal tones and rhythms, gestures, posture, and movement?

**Feeling Toolkit: non-verbal help?**

What do you need from others?

- Do I need a calm, softer voice?
- Do I need to see more warmth in faces and voices?
- What vocal rhythm helps me?
- Do I need gentle looks?
- What type of body posture conveys comfort and safety to me?
- What actions or movement feels uncomfortable?
- What kind of touch do I need?

What does your partner/child/parent need from you? What effect does low intensity and slow rhythms have on his or her for arousal and affect regulation? Does your partner/child/parent need high intensity and fast rhythms for arousal and affect regulation? Do you need to match or counter their emotional states? How can you support the parents to find what their partner and child needs from them?
Last but not least, there are times that pulling back the use of non-verbal cues, no matter how gentle or melodic, may also be what is needed. Just like language may need to be stopped (below) and some quiet space may need to be offered, at times, a very quiet presence can also be what is optimal.

Top-Down Triggers. We now are switching over to an array of verbal triggers and toolkits that are commonly occur within the relevance system. I have organized the origin of many of the mismatches in the relevance system come from mismatches between developmental ages and what is expected at chronological ages.

Top-Down Triggers Fueled by Expectation Gaps: Behind many patterns of co-escalating stress responses between parents and infants/toddlers are adult expectations for infants and young children that do not match developmental ages. A Zero To Three National Parent Survey found an age expectancy gap exists within typical parents.

For example, parents often expect their child to have impulse control when told a “no” to something desirable for the child. Often portrayed in the form of parental boundaries, parents expect immediate compliance with the verbal directive of a “no”. Adults and parents alike in young children’s lives often expect compliance when told by an adult authority figure whether it is what to do or what not to do. These boundaries, while sometimes essential for safety reasons, often can trigger sadness, anxiety, or rage, or a blend of all three stress responses in the child. Many young children are expected to inhibit their emotional responses when inhibiting is not actually age appropriate or even possible to do! When expected however, this further frustrates parents, increasing the parental red zone status and their experience that his or her child is being intentionally defiant. What often follows, are more commands because parents see their child’s distress as non-compliance. This then increases the intensity of the stress color and emotional response in the child. We now have a viscous cycle at play, often on automatic pilot, between all parties.

It was found that 24% of all parents believe that infants as young as one year of age should be able to control their emotions, including managing to not have a red zone/angry emotional response to something upsetting. Alongside this, 42% of all parents believe that children by two years old should have emotional control over their red zone/angry feelings. In regard to having self-control and compliance with not acting on something forbidden, 56% of all parents believed that a child should have this type of impulse-control before age 3. A subset within this group, 36% of these parents believed a child should have this self-control under 2 years old. https://www.zerotothree.org/resources/1601-
Similarly, 43% of all parents surveyed believed that the capacity for sharing with others (peers) should be on-line before 2 years old. [https://www.zerototethree.org/resources/1600-tuning-in-sharing-and-taking-turns](https://www.zerototethree.org/resources/1600-tuning-in-sharing-and-taking-turns)

**Developmental age versus chronological age.** The NRF believes that these types of mismatches are a very common source of toxic stress patterns. In reality, the science behind the ability to have the skill for sharing is between 3.5 and 4 years old. The ability to inhibit emotions and to have self-control is emerging between 3.5 to 4 years of age. In terms of self-control and top-down inhibition, this is a long maturational process. [https://www.zerototethree.org/resources/1601-tuning-in-self-control](https://www.zerototethree.org/resources/1601-tuning-in-self-control)

Full-blown executive control is now expected to mature around 25 to 30 years of age (ref). With children who have inherent vulnerabilities in their nervous systems – for whatever reason – add 5 years to this process of maturation!

The NRF views the expectation gap as part of the simple approach to the meaning of behavior that our culture promotes at large. Changing this cultural phenomenon will take all of our concerted efforts to re-educate our parents and providers.

Trauma, which is a huge source of stress triggers in the Relevance System, also creates expectation gaps. Whether the trauma comes from developmental insults or disabilities that may be inherent in the child’s constitution, or from parents’ relational challenges due to their own trauma history, or both ends of the nature and nurture dialectic, there most often will be a gap between the developmental and chronological age of the child or parent. The misattribution, then, of a behavior as noncompliance that often is actually a stress response creates further mismatches between parents, treatment providers, and sometimes both, keeping the stress response system activated. This also carries great potential to create mismatches in how EBTs are applied to young children and youth with trauma. Some of the current mismatches in the Relevance System EBT’s will be addressed at the end of this Chapter.

**Top-Down Toolkits.** The list of Relevance Toolkits follows a type of progression that begins with ways of explaining emotional regulation to parents with heart skills, includes some hands-on ways that support slowly gaining impulse control and emotional control, and includes some reflective processes with head skills. Gaining emotional control is a process that needs heart validation, hands-on guidance, and head reflective and executive skills. Thus, these toolkits will follow a Heart, Hand, and Head progression of skills! Again, whenever there are developmental delays, for whatever reason, these children will not be able to match the chronological ages that science promotes. Thus, these all need to be individualized to match the level for each parent/child dyad.

**HEART TOOLS**

Heart skills are oriented towards “feelings” and using empathy to connect. The core of the heart skills is the ability to validate emotional states. Even with the pre-verbal, bottom-up side of things the meaning of feelings is important to communicate to parents and to older children. With the non-verbal communication emphasized as a bottom-up skill, it is important to show empathy and validation of feelings. So, we start with making sure that the theme that behavior is communication holds true for all ages.
Feelings as messengers. As one moves up the developmental ladder towards expressing feeling words, it is important to identify what feeling exists, and to then link the feelings with meaning, making cause and effect links between feelings and emotional needs. Dr. Batts, from her VISIONS, INC curriculum lays out how feelings carry messages, with subsequent relational needs. Her use of “feeling families” is identical to the NRF’s four colors and the range of feelings within each zone. The Visions “feeling wheel” shows a wide range of feelings within the different core feelings, found in the middle of the circle. For example, the green zone (yellow, green, blue) range holds core feelings of joy, peace, and competence. The blue zone (pink below) shows a range of sad core feelings; the red zone shows a range emanating from mad; and the combo (orange below) shows a range of scared core feelings.

Go to the Feeling Wheel in Chapter 11’s web page

The importance of linking up meaning and emotional needs with feelings is paramount. Each zone and accompanying core feeling has a message that points to an emotional need (Visions). In the slide below we see the core messages and needs of each zone with each primary emotion.
NOTE: There are other programs that refer to arousal or feeling states that are useful to know about. For example, there is one program that uses metaphors to communicate about body reactivity that are very user friendly with states of arousal. For example, How Does Your Engine Run? from the Alert program organized by two OT’s (Williams & Shellenberger, ref) uses the metaphor of a motor. The “just right” state is akin to the green zone. One’s motor going too fast links up with the red zone and one’s motor going too slow links up with the blue zone. The red zone links up with an over-response nervous system and the blue zone links up with an under-responsive nervous system. These concepts are expanded upon in the Sensory System, Chapter 12. The motor is a lovely metaphor for one’s connection to one’s body and young children can easily identify with it.

There are other programs that make use of colors to communicate feelings and different events. Zones of Regulation organized by another OT (Kuypers, 2011) uses colors in this way: red for activated behavior like the NRF’s red zone; yellow as a warning sign that there is escalation brewing; green is for the calm, alert state; and blue is for being slowed down or sluggish. This is being used in many school settings. RULER is another school-based program that uses for basic colors for emotions to support emotional. In their color system: red is for angry; blue is for sad; green is for calm and yellow is for happy. http://ei.yale.edu/ruler/

When a family has connected with any of these aforementioned programs, the NRF practitioner uses them and when appropriate, helps parents make distinctions between the programs. For the NRF practitioner it is very important to know what the differences in the use of these colors are. The NRF’s colors are linked with the physiology of the Autonomic Nervous System’s (ANS) gas pedal – the sympathetic side of the ANS (red), brake pedal – the parasympathetic side of the ANS (blue) and variations on the two – the combination (combo).
So, while there are feelings within these zones, as we’ve been discussing, the primary use of the colors is the effect of the ANS on our bodily states of arousal linked with stress and stress recovery. These incorporate feelings, but the NRF is not based upon “feeling” color charts. The states of arousal are the larger container within which feelings reside. I use the analogy of a can of soup. It often comes in a condensed chunk and you have to add water to it. As you do, you can see all these alphabet letters floating around. So, the NRF’s colored zones are the chunks of condensed soup; when you take a closer look, you can identify feelings within them. Please keep that in mind as you encounter these, and other color-based programs designed to help with self-regulation and self-control.

Validation and listening skills. Once one can identify feelings and acknowledge that they are meaningful and powerful communicators, we often validate them as a way to calm down the feeling triggers. Now validation does not work with every young child or adult. Sometimes, even when the validation is quite accurate, the validation itself becomes a trigger. So, even validation, while most important, is not a 100% full-proof. Sometimes, the validation is inaccurate and that can trigger more distress. Learning how to validate feelings is an important parent and practitioner skill.

Note: A particular subset of children with some Autistic Spectrum traits yet not others, have been identified in England as children who exhibit what is referred to as “pathological demand avoidance”. These children resist any adult demands and are also prone to reject validation. http://www.autism.org.uk/about/what-is/pda.aspx Extreme anxiety is attributed to this phenomenon and is being researched.

Who do you have in your life that validates and listens to your emotional experiences? We all need this type of co-regulation throughout our lives. This is not just for young children, this is for all ages!
When learning different layers to validation skills, we always start with the non-verbal portion of listening, just like we did with the “bottom-up” side of how to communicate non-verbally one’s presence. When able, practicing this skill when listening to someone verbalize their emotional experience can be quite a challenge. This exercise has you only using non-verbal cues when listening to a partner. If you can do it for 30 seconds, try it on for 60 seconds. How does it feel to only acknowledge one’s conversation through non-verbal cues?

One of the most common communication problems is when both parties are talking, and no one is listening! So, if there are communication breakdowns between any two people, this may be one reason for them! One must actually take turns between listening and talking. Most often folks stop listening before the talker feels “finished.” This becomes a problem because the talker often undoes his or her listening gains by jumping in too quickly before the current talker feels understood. The role switch from listener to talker does not happen until the person talking feels understood. It’s best to ask if he or she feels understood before there is a shift to the listener talking about his or her feelings.
Now, we shift to using verbal cues when listening. Try to narrow things down to one feeling word it may be that the person conversing with you is sharing with you.

One of the key factors in listening is that the person you are listening to may have feelings you do not understand or agree with! The key to listening is to have an empathic link to what s/he is feeling, not how you would feel in a similar context. If you as the practitioner or parent are triggered by the child or youth’s subjectivity, and it’s not what one wants to hear, then this becomes a focus for the parent work.
This may need to be referred to a mental health therapist or may be processed with other therapists on the team if the practitioner is comfortable and has the skill to deal with the territory of one’s relevance system. These triggers often lead to past traumas that have to be digested.

The three yes-es. One way that emotional attunement can help bring down high arousal and red zone distress or bring up low arousal with blue zone distress in all ages, is to ask three questions that can be answered with a YES. An example would be a child who has been told they cannot have a cookie when they go inside the house (right before dinner) and they now are refusing to get out of the car in a red zone rage or a blue zone sulk. Three statements or questions that might get a Yes answer are:

1. (Are you) It seems that you are really, really mad at mom for saying “no” to your idea of eating a cookie right now.
2. (Does it) It feels unfair that your sister got a treat at school and you missed out on yours.
3. (Do you) You feel mommy is being mean by not letting you have a special treat right now.

Often, if the validation is spot on, and the parent/practitioner gets to the core feeling of loss or unfairness, the child or adult can agree, and high arousal often comes down or low arousal brightens up with agreement.
Again, this only works with young children, youth or adults who can tolerate the sounds of words via a conversation when in a stressed state. Words are often overloading one’s auditory system and can make things worse. So, if this doesn’t work, this may be that the timing was off or it may be that this can only help when the person is back in the green zone.

**TIP OF THE ICEBERG SOMETIMES LINKED WITH REVERSALS OF SAFETY AND THREAT.**

Validation of feelings can be quite a challenge when an underlying core feeling is one of mis-trust. With trauma, reactive attachment disorders, and in some cases of autism the young child or youth does not trust adults. So, the underlying feeling is one of not feeling safe. If one bypasses this core feeling, other attempts at validation may fall on deaf ears. This is important to hold in mind when one’s organization of safety is to be in a stress response. Too quickly working to relax or soothe one’s nervous system may trigger an even more intense stress response (abreaction).

At the same time, what’s often on the surface or what quickly comes up as a feeling state may not be the only one present. Deep listening involves getting to underlying feelings and not just the tip of the iceberg, so to speak.
In these cases, there is often a reversal of what we would term safety and threat. Threat, to become managed, becomes a primary preoccupation; being safe is organized by being in charge, often with red zone “defiant” behavior. The red zone predominates, and the blue zone dissociation can be missed as well as the chronic hypervigilance underlying the red zone behavior. With one family with a child who demonstrated RAD behaviors, they were so overwhelmed with the red zone defiance, they were not linking up her trichotillomania, dermatitis, and sleeping disorder her chronic hypervigilance. For many such children, we see diagnostic categories of Oppositional Defiant Disorder (ODD) given at age 3 by school district teams or Part C evaluators. Due to the red zone being a primary way to organize “safety” this label is given and programs for compliance are offered. The NRF views this perspective as a misunderstanding of the ANS’s attempts to achieve safety and advises against this more simplistic approach to complex behavior.

[A RAD resource that addresses this can be found here: http://www.attachmentdisordermaryland.com/internalworkingmodel.htm]

If there is a predominant stress zone, regardless whether that is red, blue, or combo (or the cause) one knows that the other emotions within the other zones are being eclipsed by an overuse of one stress response system. Inherent comfort and joy is also glaringly missing. The first goal becomes how to gain green zone, with genuine comfort and joy emerging. Over time, another goal becomes to tolerate and use other stress responses while exploring the tolerance of the other feeling states within them. For example, while the red zone example given here is a common one, there can be the use of a one-size fits all in each zone. An adult analysand of mine only could feel anxiety and she was constantly in a combo zone state. This had become her safety valve. As treatment progressed, she became familiar with the blue zone and got depressed. Within that zone were many losses and grief that she slowly allowed herself to feel. The hardest zone for her was the red zone. Due to being frightened by other’s anger, she had vowed never to be that type of person. Her emotional and sexual abuse history had also organized her “safety” around combo zone anxiety, with an over-accommodating heart, working desperately to please others, keeping their anger/rage at bay as much as possible. However, we can see that the red zone is powerful messenger. One of its strong messages is that it allows us to know when we’ve been violated. Despite her having experienced sexual abuse earlier in her life, she preferred staying in either a dissociative or hypervigilant state of arousal. This made her vulnerable to being sexually violated now as
an adult, which did occur. Eventually, she was able to access her red zone rage, and this helped her to experience herself as more sturdy and someone with boundaries that could better protect herself as an adult.

**Shame Sensitivity.** There are a young children, youth, and adults that suffer from shame sensitivity. This vulnerability can be torturous where one is hypervigilantly scanning for negative connotations that often are coming from one’s internal shame center. This, then, makes it difficult to know if the negative energy is really coming from the outside “other” or the inside self-attacks. A negative, shaming result is expected from others and if there is any real disappointment the “other” has, this is experienced in such a viscous way, that then the internal shame is heightened. One ends up operating being locked into a catch 22 – both the victim of shame sensitivity and those close to him or her. Having a “both/and” heart and hand approach is important here. Holding the empathy while also clearly setting boundaries and bringing clarity as to what is coming from the outside (from the “other”) and what is coming from the inside is very important. As one can realize that much of the shame is coming from the inside, this begins to give some leverage to stand up (using one’s hand) to the shaming part of the self.

Other times things are more complex because the shame is also coming from the “other”. It is real, and it is destructive. Now, the shame is in stereo, coming from the outside and the inside, both reverberating with each other and exacerbating each other. Being able to develop a sturdy self that can stand up to the internal “shamer” and the external “shamer” can be daunting. Relational supports that are kind and empathic are useful, especially when these folks are also sturdy - speaking up and stopping the shame/blame cycle when it shows up externally through actions or words that are self-deprecating.

**HAND TOOLS**

Hand skills are more oriented towards “doing” things with others. There are a couple of activities that one can do to help young children, youth, and parents gain arousal and emotional regulation by tracking one’s capacity to modulate. Of course, please keep in mind the discussion about expectations. If you are trying this out with a child under 3.5 years old, please know that you will only frustrate the child and parent more and possibly prolong the toxic stress pattern. Furthermore, if they are within the chronological age group of 3.5 to 4 years old, but their developmental age is younger, the same guideline applies. This is a part of a top-down toolkit!

**INTENSITY METER**

One of our arousal/emotional dimensions we keep track of is intensity. The use of an “intensity meter” - as I call it, or a thermometer or a Subjective Units of Distress Scale (SUDS; [http://at-ease.dva.gov.au/professionals/files/2012/12/SUDS.pdf](http://at-ease.dva.gov.au/professionals/files/2012/12/SUDS.pdf)) are all a part of tracking the intensity. The SUDS scale uses a 0 to 10 number system. This gives one more latitude and freedom to work intensity levels. I typically use a 1 to 5 intensity scale.
Safety vs. danger

Regardless of whichever number scale one uses, I first set up the idea of a safety zone vs. a danger zone. I talk about how intensity of any color or any feeling that is too high (3 to 5 or 7 to 10) becomes frightening for oneself as well as others.

For younger children, pictures of angry animals in an escalated state, such as the one below, can be useful for them to see and to identify the danger.

The advantage of the 0-10 scale is that there is more latitude to describe external behaviors and feelings. The advantage of the 1 to 5 scale, especially for younger children, is that it is a small scale to contend with. (More about the danger zone of the intensity meter shortly).

The next concept to get, however, is for youth and parents alike to understand how there are feeling words that can be matched to an intensity meter. The 1 to 5 scale becomes a simple way for young children to identify five words that match this number scale.

This first picture is meant to show that there colored zones we are used to using, that correlate with another emotion color wheel. The colors are not completely in sync with the NRF’s colors for the ANS.
The combo zone is represented here as Yellow; the others are a direct match with the NRF’s colors for arousal zones.

This larger picture of the emotions color wheel shows how each colored area has a primary feeling word located in the middle of the wheel. I point out that the green zone has happy in the middle section, the blue zone has sad in the middle section, the red zone has angry in the middle section, and the yellow zone has afraid in the middle section. The importance of this emotions color wheel is that the outer layer is meant to connote less intense emotions and as one moves towards the epicenter, the more intense the emotions within this state become!

**GO TO THE EMOTIONS COLOR WHEEL.**

**Making one’s own intensity meter.** Now, taking the numbers 1 to 5, I use a paint chip color card, which has a gradation of color on it, built into it, and place the numbers on the left-hand side of the paint chip. These paint chips can be found at most hardware or paint stores. Usually, I write in the core feeling as the number three intensity feeling word. Then, the child/youth/adult needs to choose two lower intensity feeling words and two higher intensity feeling words to complete the intensity meter chart. This verbal matching can take time. One can use different words than one this emotions color wheel, and I don’t always agree with this wheel’s placement of words, but it is an example and a way to get started with the conversation!
Here is an example of someone’s Intensity Meter on colored paint chips.
Having the intensity meter in hand does not immediately create the capacity to modulate arousal and affect! As the NRF has emphasized, learning is all about procedurally practicing something and using it! So, the intensity meter needs to be used. I often place a single paper punch in upper left-hand corner of the colored cards and the children choose a charm of their choice to contain the four paint chips. Now, motivated parents and teachers will use them. Once one knows what event(s) typically calls out an automatic intensity level 5 stress response co-regulation prep work is done before the event. Prep work can include having sensory support such as a plush toy to help with a transition, or to give oneself a body squeeze before entering a classroom or to listen to favorite music in the car on the way to a stressful event. Individual’s sensory tools are used to support that the young child will do his or her best to go to level 3 instead of a level 5, then bringing the intensity down the level to a 2, eventually only reaching a level 2 with the ability to use words. (more on modulatory sensory options in the Sensory System Chapter, 12).

However, often, especially with younger children or those with strong attractor basin pulls him or her into stress responses, despite the executive prep and sensory support, one is not able to modulate to a level 3 (or 5/6) and the intensity level signals danger to self and others. In this case, we need to consider coping strategies to reduce danger and increase safety that can include “exit” strategies (Hixson). Three types of exit strategies exist that need to be rehearsed and practiced when one is in the green zone. The first one entails the physical removal of oneself from the context. For a young child, that might mean that s/he knows that they will be picked up and have a “time-in” with mom or dad in a pup tent or special space that is a cooling down place that is safe. That safe space is a sensory space with such things as pillows, blankets, foam topper, or sleeping bags where the child that is out of control with his or her motor system (e.g., hitting, biting, kicking) can roll and thrash around without being physically restrained. While some children can benefit from the proprioceptive “holding” that restraint provides, most children get further activated by it and many are traumatized by it. Any child who is old enough to understand gestures and receptive language can participate in creating his or her safe space with ones most soothing objects ahead of time (e.g., soft plush toys). If the parent is getting physically harmed, the parent needs to opt out of being in the same space, but the parents voice can be offered if that is useful to the child’s arousal system. Saying from the hallway, “I’m right here and will be with you as soon as it’s safe” can be reassuring. For other children, any vocal tone from the parent when in this intense state of arousal only escalates the nervous system.

For older children/youth/adults the physical exit strategy may include walking away, taking a walk, or going to the bathroom, without talking to anyone. Again, the practice of such strategies when calm is essential otherwise they will not be in one’s procedural system to enact under stress.

Not all exit strategies need to be physical. Other “exit” strategies are mental ones. Texting a friend, reading a book, coloring, drawing, and/or listening to music can be mental ways to disengage and calm down. Again, these usually work best when talking is neither expected nor involved.

One teenager I work with, recently got into a high intensity altercation with someone when he was a passenger in a car by rolling down his window, screaming and yelling at a homeless person on the street who had touched their car when walking by. When we discussed the option of the physical exit strategy he reflected that if he got out of the car, he would be apt to turn that energy into physical aggression, with the high likelihood that he would harm this person. In planning ahead, his first choice was to have
his mother turn up the volume on her favorite music station - without talking to him, while he himself put on his music headset, listening to his Screamo music, while beginning to count. He told me that he had used this internal strategy successfully before, at one point counting to 999. So, now, this mother and son are practicing using these strategies when he’s mildly perturbed, to build automaticity with these mental exit strategies.

The third exit strategy refers to chronic toxic stress relationships where leaving a relationship is a necessary option. With older youth and adults that are in deep attractor states with high intensity and toxic stress responses that are repetitive patterns in relationships, one has to consider whether there needs to be a permanent exit. Such contexts can include abusive family relationships, mismatches with schools and educational programs, toxic work environments, and unhealthy friendships. This strategy takes lots of conversations and supports in place when leaving any significant relationship. However, as we also know, these exit strategies can occur swiftly and suddenly for children when they are in an abusive or neglectful environment.

**Building an emotional muscle**

Once one can manage the intensity levels by staying within the safety zones, then using words to describe the intensity level can be part of “calming and modulating” strategies which include the use of surrounding the child/youth/adult with other sensory tools that help modulate arousal and affect (more to be found in the Sensory System). The child/youth/adult knows ahead of time that he or she is working on bringing down the intensity level. It is a huge developmental shift when one can shift from using one’s body language to convey distress to being able to use one’s language system to communicate what one needs! Once it is age appropriate to expect such capacity to inhibit stress responses, s/he can be part of the exploration of what can help him/her with problem solving conversations. What can be tried next time? What has worked with success? When has something not worked and why? At this level of communication, we are in levels of engagement 5 and 6, where cause and effect thinking is occurring, reflective problem solving is happening, and plans for next time can be made that can be practiced for success the next time there is a stress trigger. This means one has successfully traversed into the use of Head Tools!

**HEAD TOOLS**

Head skills are oriented towards using words for reflection that focus on planning and sequencing events, along with problem solving.

**ORGANIZING STRUCTURES**

Emotional triggers can occur when parents have misaligned values as to what is important and worth disciplining and what isn’t. One way of organizing this concept is to talk about family values that represent non-negotiable items, negotiable items, and the child or youth’s choice. Often parents disagree on these items or just have never thought them through enough to get on the same page. Yet, these items are crucial to get clear on as a way to gain more emotional regulation within the family system.

In general, I recommend that “non-negotiables” represent core safety and health issues. These are always individualized, but can include items such as holding a parent’s hand when crossing the street,
brushing teeth, taking baths or showers, wearing shoes/boots in the rain, etc. “Negotiable” items include preferences the parent or child have, but are not mandatory, and can be compromised with. These items can include the parent’s preference to have homework done right after school that may be negotiated to be done after a 30-minute snack and break. “Your choice” means that the child can completely choose what s/he wants to do in this regard. This might include items such as wearing sandals or going barefoot at the beach, watching a Disney or Nickelodeon show – your choice.

Again, these numbers are arbitrary, but I usually use 1s for non-negotiable items, 2s for negotiable items, and 3s for your choice. It’s interesting to link up the tendency to use 1s, 2s, or 3s, with parenting styles. Parents with strong Heart skills may be more lenient and accommodating to the child having his or her own choices (3s). Parents with strong Hand skills may be more strict and prone towards setting up non-negotiable rules that are expected to be followed (1s). Parents with strong Head skills may be more prone towards proposing ideas and then negotiating the outcome (2s).

So, as one works with this toolkit, one asks - how does your Heart, Hand or Head parenting style play out with setting up the 1s, 2s, and 3s? Is this creating more synchronicity or is this contributing to parental conflict? Often Heart and Hands become polarized in a family system where there are a lot of stress responses in the children or parents for that matter. Then, the heart becomes even more permissive to compensate for what is experienced as the stern hand, and then the hand becomes even more structured with boundaries and consequences to compensate for what is experienced as the permissive heart parent.

Balancing 1s, 2s, & 3s

Of course, the 1s, 2s, and 3s have to be developmentally appropriate and a good match. This is where earlier in this chapter I highlighted the Expectation Gap as to what young children are able to manage. So, if you already have a red zone prone child and your expectations are mismatched with his or her chronological or developmental age to inhibit distress, and you tend to be a strong Hand as a parent setting up many non-negotiables, some of the ensuing red zone patterns have to be detangled from these mismatches and a lack of balance between Heart, Hand, and Head parenting styles. Recall that the NRF is big with holding a balance between HHH (Chapter 3). This is another example as to why the balance is so important!
While non-negotiables for safety and health need to be honored, often rules are offered in place of toddler proofing one’s house. Not touching the electrical plug now can be replaced with a safety plug. Not going down the stairs can be contained with a safety gate. Not getting into drawers with knives and medicines can be safety locked. You get the picture. What you can do, to eliminate a NO command, do it!

In general, as the child becomes more verbal, the NRF is prone towards supporting a bell-shaped curve with 2s in the middle. Why? The NRF leans towards negotiations because they include the use of more verbal skills, an increase in circles of communication, and having to hold two subjectivities in mind. When we look at the Executive Tools for one’s toolkit, you will see a problem-solving sequence offered that includes having empathy for both the child AND the parent. This is how a two-person relationship matures and any opportunity for real-word, real-time practice of these skills is valuable.

_Spheres of Control._ Another reason why all three of the 1s, 2s, and 3s is valuable is that they match what real life is like. The three spheres of control are true for all of us. The non-negotiables mirror what we cannot change in our lives. Regardless of what one’s future jobs are like, all of us have mandatory and institutional laws we must abide by. We don’t have to like it, but there are limits and boundaries that constrain us! The negotiables are what we can influence. The Your Choices are what we can control.

_Imbalances and Flips._ It’s not uncommon for a parent to flip from a heart (permissive) to a hand (sudden announcement of big consequences) to a head (detached and walking away). Working to help parents being able to get on the same page is a place to start. With any polarized couple, I make a point to state
at the front-end, that they are “both right and both wrong.” They actually need each other to make a complimentary team and the polarizations are keeping them from using their “both being right” energy to work as a team.

**Balancing the No’s with Yes’s.** One way to balance things out for the child is to pair up the No’s with Yes’s and vice versa. Helping children modulate their emotional reactivity is to give them a head’s up notice about what 1s, 2s, and 3s are in their family. Knowing ahead of time what is non-negotiable, negotiable, and one’s own choice are very helpful for building stable expectations. Secondly, pairing up every No with at least one or more Yes-es can help the modulation of the distress. Even with a Yes, there is often some limit or constraint that comes along with the Yes, whether it’s a time constraint, limits on the amount of preferred sweets, or the need to transition to another activity. Building in what the constraints are at the front-end helps in the long run so there are no abrupt surprises.

This matches the NRF’s goal of balancing the positive and negatively valenced emotional states. Modulating the disappointment levels and titrating the stress responses to each child is part of the individualized work with the NRF practitioner.
*Making real-world decisions in real-time.* Figuring out what the parental 1s, 2s, and 3s are ahead of time is great and provides structure and stability to a family system. However, not all can be decided ahead of time. When to use the 1s, 2s, and 3s in real-time can be confusing. Knowing the child’s stress response patterns, knowing that being told No is always a trigger, and knowing you are running late for an appointment, has to be taken into account. Are you able to take the time to manage a red zone stress response now? Is there a way you can turn the context into a Your Choice or at least Negotiate it? Usually these are less triggering items with a child who does not respond well to abrupt 1s. If there is an explosion, learn from it! Use the explosion as an opportunity to process the scenario and to figure out whether 1s, 2s, or 3s can better be used and adapted the next time the parent is in a crunch.

As we will see in the Executive System, planning on the parent’s side is critical to many of these situations working well. Planning ahead and helping the child know what to expect can help stave off a stress response at the *front end.*

### All the things that go into YES—NO—MAYBE

- What’s the history of your child’s stress response?
- What’s the context? Big picture?
- How much time do you have?
- Have you set things up for success or are you making an abrupt decision?

**Trying this on.**

**Scenario One:** a young child is refusing to put her coat on to get out the door; the parent is running late and is annoyed with the lack of cooperation. She finally places her child in a time out which only increases the child’s shut-down distress.

On the surface this looks like a refusal that deserves a punishment, like a time-out. What could be a relevance system trigger other than “defiance”? Looking deeper, this young child was adopted. The day she was taken from her host family, people were putting on their coats and rushing. Her adoptive mom grabbing their coats and rushing was a sensory/relevance trigger for her. Her refusal was more like a “freeze” - she couldn’t move out of fear. Later on, the mother realized what had been going on. She realized the time out was really off point and only made things worse. Historical context matters!
**Scenario Two:** a teenager is lying about having practiced his musical instrument. His father is angry about the lying and wants him to have a severe punishment because he’s too old to be lying.

On the surface this looks like a simple cause and effect. He lied, he should be punished. What could be a relevance system trigger other than a manipulative lie? Looking deeper, this young teenager had lost his mother to suicide within the last year. The last time he saw her, was the night before she died, at a music lesson where she had gotten angry at him for not being better prepared. His not having practiced was an automatic trauma trigger that he had not practiced “as much as she would have liked him to practice.” He was struggling with the shame and terror that his last memory of her held for him. Trauma history matters!

---

**RUPTURES AND REPAIRS**

These accidents in misunderstanding the meaning of behavior occurs. We cannot always catch or prevent a stress response from the relevance system at the front-end. We refer to these as ruptures and the good news is that relationships can repair at the back-end. As we listen, validate feelings, and understand the meaning of behavior, deeper levels of understanding can be had. The green zone is necessary within the parent or practitioner to get to this deeper truth. When there are ruptures, coming back to the conversation with a curious attitude while staying green is important for the participant. It is so hard to stay curious when an adult feels violated or undermined! These are not easy situations, and yet, they can make the relationship much “thicker” when there is repair. We will discuss more about bi-directional repair in the Executive System. After a stressful rupture and repair has occurred, we focus back on our first three levels of engagement – getting green, finding comfort, and sharing joy. Genuine joy with laughter or humor helps the relationship recognize being back on track.
Contextual consequences with sensory support vs. Punishments. There is a huge difference between providing consequences that are logical and sensitive to one’s arousal and sensory profile that are there to support one’s return to the green zone, instead of the use of punishments. Our culture, in general, supports punishments rather than finding ways to help children and parents return to green. In one case, where a child was given a headset with his favorite music on it to listen to when dysregulated, one of the team members complained, asking, “Why should he be rewarded by getting to listen to music?” My response was, “Why shouldn’t he have access to the best possible way for him to personally return back to green most efficiently?” This discussion really requires having a complete sensory profile done on the child and parent, so more to be revealed in the Sensory System, with a couple of more thoughts here.

Contextual consequences refer to organic consequences which match a disruptive event. For example, a child gets dysregulated and throws his puzzle pieces onto the floor. When he’s calmed down, and back to green, he picks them up and puts them away. So, notice, this is not something he does when he is in the red zone with a command from a parent, it is a way to “repair” the impulsive act he did when he was angry. This is NOT how to help a child get back to green, this would be an organic consequence to having created a disruptive moment. For children with poor executive systems, the parent may support the child and help him or her clean up the mess, alongside them. Prioritizing doing things together, procedurally, is always recommended as a way for a child to encode learning something to do on his or her own.

Another example might be that when a boy hits his sister, he starts being wild with his nerf gun as well. An organic consequence is that the nerf gun gets put away. This not only is informed by the fact that he’s too dysregulated to really play with it now, it also comes from experience that using the nerf gun can get him hyperexcited, having difficulty to modulate his arousal and emotions, with that much excitement. So, “knowing” each child is how decisions get made. These are team decisions made with the parents and the NRF therapist, together, as they think about each child and how to best help them learn from their actions. As the learning together to individualize consequences with sensory support takes place, it gets built into the fabric of the 1s, 2s, and 3s. Each child deserves to know what are his or her limitations, what the consequences will be for certain actions, as well as to know they are loved in the process. The polarities of love with limitations become part of the Heart and Hand dialectic in parenting.
SUMMARY

We look at the process of catching feelings at the “front-end” and working to help children, youth, and parents modulate their emotions by validating feelings through non-verbal and verbal means with Heart Skills. We help our children and youth modulate their intensity levels by helping them link up feeling words with an intensity meter. We help them practice this with Hand Skills. We better prevent what triggers are likely to upset our children, which are abrupt No’s and issues of unfairness by organizing our 1s, 2s, & 3s and balancing our No’s with Yes’s with executive Head Skills. We take turns listening and talking and we listen to the point that our partner acknowledges feeling understood before switching roles to talking. We use these same skills at the front-end when working to prevent a stress response as well as at the back-end when working to repair a rupture.

REFERRALS & MACRO LEVEL PERSPECTIVE

The macro level relates to the content of the Emotional Story, where one’s trauma history is revealed. This at times can occur with a skilled practitioner at the front-end of an interview process; most often the trauma stories are revealed in bits and pieces as trust is built over time. The degree of emotional dysregulation and lack of integration can point to the need for medical support through psychiatry and a mental health provider. When early interventionists or educational personnel feel that the mental health issues are overwhelming to them, a warm handoff referral can be made. At times, families do not want to change providers. Some teams co-treat with a mental health provider and when a provider does not have this opportunity, he or she needs to have a professional mental health provider available to them for, whether via paid or volunteer consultation. Sometimes professionals exchange consultation services; other times practitioners get into Reflective Practice with a discipline they have less expertise with as another way to cross-fertilize themselves.
Evidence-based treatments – Matches and Mismatches. As you know, the NRF is in the process of becoming its own evidence-based assessment and treatment framework. As a framework, it serves as a “meta-psychology” that can map out treatments and match where they are weighted neurodevelopmentally. Other Relevance System EBT’s that are developmental, relationship-based therapies simpatico with the NRF and behaviorally based programs that are not as much in-sync with the NRF are the listed below.

Matches: Developmental, Relationship-Based treatments: The reason why developmental and relationship-based treatments tend to be more in sync with the NRF is that they are first of all, developmental which matches the neurodevelopmental principle of honoring one’s developmental age over the chronological age. Secondly, they are relationship-based which honors that both resilience and healing of trauma occurs through relationships. Relationships are viewed as the core to nurturing brain development as well as socio-emotional maturity.

Circle of Security parent groups: The Circle of Security model is definitely located in the Relevance System! You were introduced to the “circle” in Chapter 4 where we looked at the both/and of connection (attachment) and exploration (separateness). The Circle of Security curriculum looks at the parents’ triggers from the Relevance System and how one’s trauma history may make it difficult to tolerate either side of this dialectic. “Shark music” is the term used for describing procedural and automatic stress responses that can be triggered from the child that relate to unresolved relational,
traumatic experiences that most often come from sources other than the child. This distinction in meaning-making helps give the parent more psychic space to attend to the “real” child instead of the “ghost in the nursery” from the parents’ past that is alarming him or her. The classes are intended to build reflective function in the parents through reflective questions, emotional regulation of their children’s needs, and an increase in empathy for their children.  http://circleofsecurity.net/for-professionals

Child-Parent Psychotherapy (CPP): CPP carries similar assumptions as the Circle of Security, yet the form of its delivery is within the unit of the parent-child relationship. The work is done through the relationship in real-time. The goal is to repair the relationship’s capacity in offering safety, attachment, and emotional regulation. The parent’s reflective function is improved by helping the parent to make connections between the trauma their child has endured, with his or her developmental and emotional needs. Older children are followed in their symbolic play and the trauma history is worked through the play as well as the relationship.  http://www.cebc4cw.org/program/child-parent-psychotherapy/detailed

**Matches & Mismatches: Behaviorally based treatments:** The behavioral programs listed below aim to improve parent-child relationships. The front-end of both of these trainings and treatments are to shift from negatively based parenting behaviors to positively based parenting behaviors with one’s child. This aspect, of improving nurturance and positive behaviors is very much in-line with improving the relational capacity for green zone, comfort, and joy in the NRF. In PCIT this type of interaction is called Child Directed Interaction (CDI) where following the child’s lead is important.

The mismatch with the NRF’s neurodevelopmental focus comes along later in these curriculums when it comes to limit setting with the use of time outs for “noncompliant” behavior. In PCIT, this phase of treatment is called Parent-Directed Interaction (PDI). Non-complaint behavior is automatically viewed as “acting-out” behavior that comes from not enough positive reinforcement for complaint behaviors and not enough negative reinforcement for non-complaint behavior. During the limit setting phase, “parents are taught to issue clear, developmentally appropriate, direct commands and to provide consistent consequences for both their child’s compliance and noncompliance. Parents are instructed to provide labeled praise for compliance and to initiate a time-out procedure following child noncompliance. Parents are coached in the use of these skills during a play situation with their child in which they must issue commands and follow through with the appropriate consequence (i.e., praise or time-out)” (Herschell, Caldaza, Eyberg, McNeil, 2002, p. 10 in Cognitive and Behavioral Practice, 9, 9-16). The “command” given during this play situation is that the child is asked to give up a prized toy and if they are not immediately complaint they are placed in a time-out. PCIT is a promoted EBP for 2 to 6-year old’s. So, first of all, the stress response from asking a child to comply without stress in giving up a prized possession is labeled as noncompliance. We’ve established in this chapter that this would be developmentally inappropriate to expect. Secondly, the NRF considers interpreting a stress response as noncompliant behavior an inappropriate interpretation of the meaning of the child’s behavior. Thirdly, placing a child in a time-out carte blanche, regardless of the age, is also applying a simple understanding to potentially complex behavior. PCIT and IY are marked as appropriate for child welfare populations. This is especially concerning in that there are no contextual markers given in either of these behavioral programs for the child’s trauma history, for mapping stress responses, and for contextualizing time outs. For example, a child with a neglect history, whose developmental age is 2, with a chronological age of 5, given a time out for not being able to inhibit his or her stress response to the abrupt removal of a prized possession replicates not only the act of neglect (being left alone), it misunderstands behavior as
noncompliance, and it punishes a child for his or her developmental age not matching his or her chronological age.

A case study that occurred with one of the NRF court teams had a child with two years of neglect placed in a home with six other children, receiving PCIT treatment for a year. The parent’s concern was that the child was noncompliant because he was getting out of bed at night, coming to them in the middle of the night. The fost-adopt parents defined this as defiant behavior because he knew he was supposed to stay in bed during the night, thus, not following their commands. The PCIT team set up the treatment goal to be that he would stay in his bed for the night. After a year of treatment, he did. He was still “noncompliant” during the day, but he was “compliant” at night.

When the NRF provider mapped out his stress responses (step #1) she found him to be in toxic pattern number four, the most stressful of all of the patterns. Yes, he was compliantly staying in his bed, yet he was not sleeping during the night. He quietly lay there awake for most of the night. During the day, he had very little green zone and was in and out of all three red, blue, and combo zones. Now, this was considered to be a PCIT success. I was frankly, horrified. It took months for the NRF therapist to work with the parents to undo their staunch belief in his behavior organized through the lens of compliance and noncompliance to shift to having any understanding of trauma-informed care, and that he was in a very serious toxic stress pattern due to his neglect. It took the child himself, to finally say with his words that he stayed awake all night because he was lonely and scared. It couldn’t have been clearer, that his neglect included being left at night and he had no internalized comfort to get himself to sleep, hence showing up in his fost-adopt parent’s bedroom at night. This suspicion was likely, in that his mother was a sex worker, where it was plausible that he was left alone at night. Eventually, he was rocked at night by his fost-adopt parents, being held with a plush toy that had lavender scent to it when warmed in the microwave. He slept with this bear, along with his old tattered transitional object as well. He finally started to sleep and would wake up, toddling into his fost-adopt parent’s bedroom, bringing in his bear to be re-warmed around 4 am. The parents finally understood and were able to slowly make the necessary changes at night and during the day to help him get out of a toxic stress response.

This concern is not just a theoretical one. It is real and every day children in the child welfare system who are two years old both chronologically and developmentally are being treated with an EBT that is not trauma informed, despite its packaging and messaging. http://www.cebc4cw.org/program/parent-child-interaction-therapy/detailed Using the NRF as an assessment tool that is a “value-add” to any EBT would stop such profound misunderstandings and mistreatment of a 2-year-old. It is my passion to establish the NRF as an evidence-based assessment and treatment that can be used in conjunction so that all EBT’s can become truly trauma-informed from a neurodevelopmental perspective.

Incredible Years (IY): a compliance/non-compliance based intervention training program for parents.

http://incredibleyears.com/

Parent-Child Interaction Therapy (PCIT): a live coaching model through a two-way mirror. Promotes improving the joy and play between a parent and child; continues to use extinction or punishment when behaviors are deemed non-complaint.

http://www.pcit.org/
Some PCIT practitioners have been using it in conjunction with the NRF. When the child or parents are not “green” they have been taking the family to a sensory-motor play room. They support them having sensory-motor play until they are green. Only then, do they bring them into the family therapy room for coaching. This is honoring the neurodevelopmental guidelines of using bottom-up strategies for arousal regulation as the place to start when needed. We now will shift to the sensory system, which will aggregate our sensory-motor strategies for bottom-up work. Lastly, we will go the executive system which will aggregate more top-down strategies. When we can we work both bottom-up and top-down and when needed, we slow down and do bottom-up work first, then segue into top-down work.

Here we end with questions from this brain system as we reflect on our cultural awareness, parallel process and power differentials.

Relevance Brain System

Cultural Reflection

1. What range of feelings are valued by each parent? Ignored? Shamed? [Consider the Feeling Wheel – Peaceful, Powerful, Joyful – aspects of green? Sad – Blue; Mad – Red; Scared – Combo]
2. From a cultural perspective, how does this family feel about “approach” and “separation”?
3. Has there been an immigration history and/or familial separations?
4. From a cultural perspective, how does this family feel about attachment (connection-in) relationships? Note: Some cultural groups do not afford attachment relationships very much “power” as these relationships “come and go”.
5. Are there cultural value differences in how male versus female children are viewed and valued?
6. Are there family customs, traditions, or rituals that are soothing and/or triggering for this family’s members?
7. If there is mental health or substance abuse issues in this family – how is it viewed? Is it viewed as “normal/typical’? Or problematic/challenging?
8. Are you comfortable with families discussing or bringing up issues of mental health and/or mental illness?

Parallel Process

9. From your family of origin, were there value differences in how male versus female children were viewed? Are these simpatico or different from this family?
10. Are you similar or different from this family in terms of sharing a range of feelings?
11. Are you similar or different from this family in terms of sharing levels of engagement?
12. Are you similar or different from this family in terms of family customs, traditions, or rituals?
13. Do you feel “welcomed” in this home? How did your family welcome newcomers in your home?
14. If there are differences in your professional values around sharing emotions and feelings, what are they? Does this cause discomfort? Alarm?
15. Do you find yourself comfortable or uncomfortable around the emotional climate in this home (e.g., household of shame, rage, depression, intrusiveness)?
16. Do you have any professional concerns that the emotional climate is traumatic to this child/spouse?
17. Whom do you go to for reflective practice to process your concerns?
Power Differential Reflection

18. Are there experiences for this caregiver/family in which they have felt excluded, discriminated against or treated poorly?
19. From a cultural perspective, what makes this caregiver feel empowered/competent?
20. If there is a cultural difference between your value system and the parent’s value system regarding socio-emotional health and the quality of engagement in relationships? How comfortable are you with the differences?
21. Do you view these parent(s) as holding the dominant position in terms of SES, education, professional status? Is this a trigger for you?
22. If you are “triggered” by differences in socio-emotional capacities, SES, education, professional status, traditions, etc., what stress responses (red/blue/combo) do you have?
23. If you are triggered by these differences, how does this affect your capacity to use your heart, hand, and head skills?
24. If the family is “triggered” by these differences, what stress responses (red/blue/combo) do they have? How do you respond to their stress responses? With your heart/hand/ and/or head?
25. If there is a professional concern that is alarming or reportable (e.g., refusing to acknowledge abuse or neglect, domestic violence, refusal to get help), how will this be experienced by the family in terms of dominance and your use of power? Is there any way you can prepare them or modulate that for the parents?