





#### Why Care About Trauma?

- Maybe you're asking this or maybe this is something you speak with other staff about
- Because
  - The rates of children who have experienced trauma are increasing
  - You want to be effective
  - You don't want to burn out



#### The Trauma Informed School

- What is "Trauma Informed Care"?
  - Care that recognizes that trauma changes the brain and that these neurological changes affect every area of the student's life
    - Sensory issues, relationships, emotional regulation, executive functioning, memory, behaviors....and learning
  - Creating environments that support a sense of safety
  - Understanding what lies behind the negative behaviors



#### The Trauma Informed School

- How is a Trauma Informed School different?
  - It recognizes that the techniques that are widely used in schools are not likely to be consistently effective when a child has a history of trauma
  - It understands that for a student to learn, the trauma must be kept in mind, always as a priority for that student
  - It gets that a student may need to learn many things before they can learn their academics

(cont.)



#### The Trauma Informed School

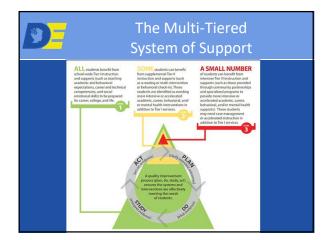
- How is a Trauma Informed School different?
  - It focuses on relationships and not just behaviors
  - It understands that managing behavior is not enough



### The Trauma Informed School

- Trauma-informed work should be the responsibility of everyone that may interact with a child
  - One person can unknowingly undo the work being accomplished
  - One person can intentionally make a difference

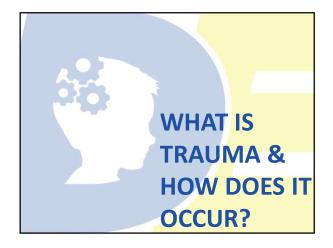
is not as much about using different strategies as it is about understanding & accepting the student's story & the student's needs & meeting them where they are at in ways we already know how.





# The "Typical" Child

- Most of what we are taught about children is based on the "typical" child
  - This child is securely attached
  - This child has learned to trust and that the world is basically safe
  - This child has typical neurological function
- Most strategies are developed for this child
- This is not the child we are talking about today





#### What is Trauma?

- Trauma is anything that is deeply distressing to an individual
  - May be physical (an injury)
  - May be psychological
  - With children it is often both



# Trauma Doesn't Always Create Traumatization

- Often, relationships help to buffer the effects of trauma
  - Children may not need counseling after a death or natural disaster
  - Can depend on the severity and duration of the stressor AND on whether the stressor also affected the caregivers
  - Can also depend on genetics



# Trauma Doesn't Always Create Traumatization

- Stressors (traumas) that happen repeatedly will affect us more negatively
- The earlier in life these stressors occur, the greater the impact
  - Particularly true in infancy
- The greater our "buffer" the less likely we will experience traumatization
  - Can be due to genetics
  - Can be due to past experiences



# Trauma Doesn't Always Create Traumatization

- A Trauma Informed School really focuses on students who have developed "trauma brain"
  - Due to early trauma or repeated trauma or "unbuffered" trauma
  - Not generally due to a single traumatic event
    - Principles can be used, but may not be needed



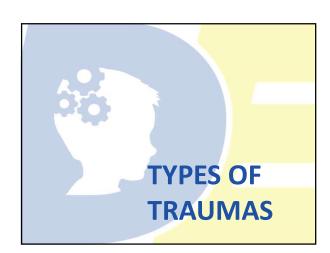
### Neurodevelopmental Trauma

- Often early trauma and/or repeated traumatic events, frequently that occur within the context of a child-caregiver relationship, that change how brains function and are structured
  - Not a one time event
- Related to the ACE Research
  - Adverse Childhood Experiences
- This type of trauma will not get better with time



# Trauma Informed Practices for Everyone

- A Trauma Informed School is a supportive educational setting for almost every student
- There is no need to identify which students have experienced "Trauma" and which haven't
  - Remember that the original ACE study was conducted on a middle class population
  - One out of every 4 children attending school has been exposed to a traumatic event that can affect learning and/or behavior





#### **ACEs**

- Adverse Childhood Experience Examples
  - Emotional abuse
  - Physical abuse
  - Sexual abuse
  - Lack of love/support/affection
  - Neglect
  - Parental drug use
  - Loss of parent (abandonment, foster care, death, jail)
  - Domestic violence
  - Parental mental illness



#### **Overall Notes**

- Especially if the trauma was a result of the caregiver's actions (or failure to act), the child is often put into a "impossible psychological dilemma" (Lieberman & Van Horn, 2011)
  - The person they want to turn to for protection is the same person causing them harm
  - The brain will send conflicting messages of running to and away from the threat



#### **Overall Notes**

- In general, traumas that happen to infants and young children in particular are processed by the child as if they are at fault
  - They somehow caused it or deserved it
  - A sense of worthlessness or overall "badness" often develops
    - They will often try to "prove" they are bad



## **Physical Abuse**

- Effects of Physical Abuse
  - Will often use aggression to solve conflicts
  - Substance abuse
  - A sense of worthlessness
  - Risky behaviors
  - Manipulative strategies



### Neglect

- While often downplayed, neglect can be more damaging than any type of abuse
  - Particularly true for infants
- Neglect is the most prevalent form of child maltreatment (almost 80%)
  - Untreated maternal depression is a major source of neglect
- The absence of serve and return
- Neglect is not occasional inattention, it is chronic understimulation
  - (e.g., Levitt, 2012)



## Neglect

- Effects of Neglect
  - Language delays
  - Learning deficits
  - Lower IQs
  - Anxiety
  - Mental health diagnoses
  - Lack of ability to cope with stress



#### Sexual Abuse

- Effects of Sexual Abuse
  - Lack of personal boundaries
  - Initiating and accepting inappropriate forms of physical contact
  - Provocative behaviors
  - Increased risk for sexual predators and human trafficking
  - Difficulty developing and maintaining healthy relationships



#### **Emotional Abuse**

- Very unreported & under recognized
- Effects of Emotional Abuse
  - Profound sense of shame
  - Feelings of humiliation
  - Low self worth



# Exposure to Domestic Violence

- Estimates are that 30% of children have lived in a home where they were exposed to domestic violence
  - 2009 survey by the National Child Traumatic Stress Network (NCTSN)
- Effects of Exposure to Domestic Violence
  - Will often address conflict with aggression
  - View themselves as the source of the violence
  - For infants and toddlers, it is often more traumatizing than direct physical abuse



# Exposure to Domestic Violence

- Exposure to domestic violence can be very harmful and confusing to an infant
  - The caregiver they want to reach out to for comfort is hurt herself and often unable to attend to the infant's needs
  - Often also includes neglect as a component



### **Prenatal Substance Exposure**

- If the infant is exposed to drugs or alcohol prenatally, the brain will already be different when he is born
  - If he has to go through withdrawal, he may experience pain that cannot be comforted
    - This can disrupt attachment
- Most drugs will increase the risk of executive functioning difficulties



#### Postpartum Depression

- Postpartum depression is one of the two primary sources of trauma in "safe" families
- It will act as a source of neglect
- Treatment of PPD early is key to preventing later difficulties
- Will look similar to infants who have experienced other sources of neglect



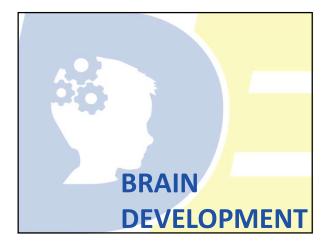
#### **Medical Procedures**

- The other primary source of trauma in "safe" families
  - Can also happen in unsafe families
- Really is specific to infants and very young children
- Painful medical procedures are processed to the brain the same way physical abuse is
- Medical conditions that limit the infant's ability to bond will be processed the way neglect is
  - NICU stays, changes of caregiver, lack of stimulation and routine



#### **Prenatal Stress**

- Yes, it is possible to be traumatized prenatally
- When a mother experiences high stress during pregnancy, the placenta can be compromised
  - Excessive cortisol will pass through the placenta, which puts the baby at increased risk physically
  - This will often stress out the baby more, so the baby will start releasing his own cortisol
  - So baby is now getting cortisol from mom's blood stream, from what crosses the placenta, and from what he produces himself





## **Dually Driven**

- From 0 to about 3 years of age, the infant is influenced by both normal biological developments and the environment
  - Such biological developments are largely canalized
  - The environment centers around the primary caregiver
  - (e.g., Frigerio et al., 2009)



### Neurodevelopment

- Brain skills are built over time from the bottom up (skill begets skill)
  - The brain has a blueprint, but uses experience to drive development over time in a way that is most adaptive
    - (e.g., Levitt, 2012)
- Survival pieces are put in place first
  - Brainstem
    - Develops prenatally
    - Only part of the brain fully developed at birth
    - Hardest part of the brain to change
  - Limbic system (emotion centers)
  - Only partially functional at birth
  - Cortex (thinking centers)
    - Largely undeveloped at birth



### **Neurological Developments**

- To the brain, input is input
  - If the information coming to the brain is distorted, the development will be distorted
  - The brain will set up to expect those early experiences as being a part of the long term environment
  - (e.g., Levitt, 2012)



## **Neurological Developments**

- Rapid neurological development in infancy
  - It is experience driven
  - Allows our brains to be shaped for our environments
  - The brain is mostly developed by the age of 3 years
  - (e.g., Levitt, 2012)
- We're born with the number of neurons we'll have & we use experiences to eliminate synaptic connections through pruning
  - 1 million new synapses a second are formed during the first 3 years based on early experience



#### **Toxic Stress**

- · Stress significantly affects brain development
- Toxic Stress
  - Different from positive stress or tolerable stress
  - It is a prolonged activation of stress response systems in the absence of protective relationships
    - "A confident, well-regulated adult can take a child out of a fire and have less trauma than an anxious dysregulated adult conveying fear to a child who falls off his bike" (Perry, 2012)
  - Changes the development of the brain
    - Cortisol in high levels can act as a poison
  - (e.g., Breidenstine et al., 2011; Shonkoff, & Levitt, 2010)



#### **Toxic Stress**

- Trauma brain = Survival brain
- A "better safe than sorry" approach
- It's not about hurting you, it's about protecting me
- This is not "bad", it's adaptive



# Things Aren't Always as they Appear

- Note that the actual physiological stress response of the infant may not "match" her visible stress response (Gunnar & Donzella, 2002; Gunnar & Quevedo, 2007; Middlemiss, Granger, Goldberg, & Nathans, 2012)
  - Students can look calm but be very stressed out or be hypermotoric and not show physiological stress



### Trauma Reality

- Once neurodevelopment has shifted to survival mode – especially in a brain that may already not be as strong due to drugs, alcohol, stress, malnutrition, prematurity – it is difficult to get to shift to thrive mode
  - "Overcare" is often needed
  - It is faster to do things differently

to try and survive against the odds
in an unsafe world.

They are not neurologically prepared to thrive in a safe environment.

The developments that would have helped them survive if they had stayed in their original environment are now maladaptive.





# A Brain Programed by Stress

- The stress response system is stuck in the "on" position
  - They struggle to remain calm
  - Once escalated, the struggle to calm again
- They're like a car with hot acceleration and bad brakes

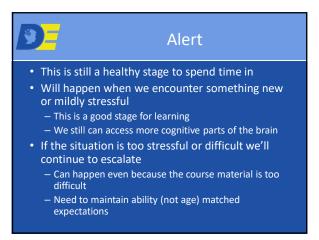




Calm
Many children can spend a lot of their time in a state of calm
When you're calm, you can learn, play, explore, create, and relate

You have access to all areas of the brain
Thinking, reflective, and creative centers

Kids who have a Trauma Brain have difficulty finding and remaining in this state





#### **Alert Continued**

- Escalation will also often happen if the newness or stressor doesn't let up
  - Why you'll see greater escalation throughout the day
- Can also happen as a result of the emotions of others
  - Peer or teachers that increase in stress throughout the day
  - Manage your own emotions



#### Alarm

- Not a good state to be in for learning to occur
  - Operating now out of the limbic system
  - Less likely to think or empathize
- The child will often be anxious, distracted, or preoccupied
  - When they're spending their resources on managing stress, they can't use them to learn

Just because a student makes it through the day does not mean the student was successful.

"Getting through" does not mean anything was learned or accomplished.



## **Alarm Continued**

- In this stage the child is much more likely to act out of emotion to any perceived threat, change, or unexpected event
- This is where most children with Trauma Brain spend the majority of their time
  - This is why they feel so easily triggered
  - They're already escalated



#### Fear

- In this state there is very little capability for thinking or reasoning
  - Language centers are also largely shut down
    - Talking to and reasoning with will be ineffective
- To deescalate, know that it is more about who you are than it is about what you do
  - Be calm, deliberate, slow, gentle



#### Terror

- There is no thinking here, only survival reflex
  - Language, reasoning, thinking are all shut down
  - They are in pure survival mode
- In this state children can become very violent and aggressive



# What to Do with a Terrified Child?

- The school should have a plan for how to keep children safe in these situations
  - Expect this to happen
- Never restrain unless properly trained
- Better to remove the other students in the room than to remove the terrified student
- Never leave a child in this state alone
- Stay close where he can see and hear you
- Offer something to eat or drink



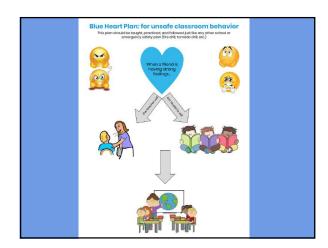
# What to Do with a Terrified Child?

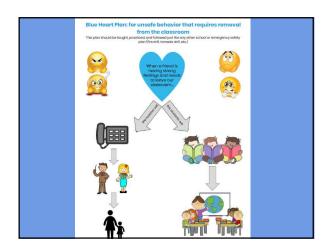
- Let all students know what the plan is should such a situation arise
  - "We all have bad days...sometimes our feelings get extra big"
  - Talk them through what will happen for the one student and what will happen for everyone else

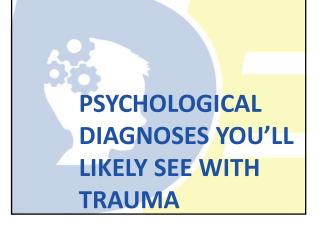


# Safety Plan Basics

- Have a task for the other students to do
  - "When I say, 'Guys, we need to follow our safety plan,' you will all..."
- Have a plan for how the adults will maintain safety
  - In or out of classroom?
  - Teacher or other staff assisting?
- Finish by resuming learning
  - "It's time to go back to learning."









### AD/HD

- When children's brains develop to be hypervigilant & in a chronic alarm state, they often look as if they have AD/HD
  - They pay attention to everything and cannot screen out unimportant details
  - They're scanning for threats
  - Often moving to observe their surroundings
- · Different techniques are needed



#### ODD

- Some researchers hypothesize that children with ODD are children who live in "Freeze" mode
  - They're overwhelmed with fear & their memory shuts down so they can't process or respond to instruction
    - It will look like rebellion or defiance
      - Especially because they'll smile
    - They may cover this difficulty with extra movement



## **Autism Spectrum Disorders**

- There are features of trauma that mimic ASD
- Sometimes this is a misdiagnosis
  - Especially if the child has spent time in foster care
- They resemble each other in:
  - Sensory difficulties
  - Perspective taking problems
  - Developmental delays
  - Verbal delays
  - Fine/Gross motor skill difficulties



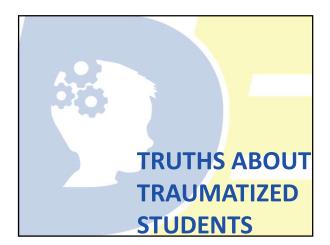
### **Anxiety & Depression**

- A lot of students with trauma histories will develop anxiety or depression
- Be aware of these issues
- They still need treatment, but the treatment is likely to be more complex



#### Posttraumatic Stress Disorder

- PTSD in a child with a trauma brain is almost a given at some point
  - May not best capture what's going on
- About half of the students who have been in foster care will meet criteria for PTSD
- Twice as many foster children will develop PTSD as veterans





#### It's Fear - Not Defiance

- These children live in a state of stress
  - They are driven by fear, not defiance
- They are not bad kids
  - They are good kids who have had bad things happen to them
- · Learn to read their behavior
  - It will always tell you something



# What's Really There?

#### **What You See**

- Need to control
- Manipulation
- Anxiety
- Impulsivity
- Inattentiveness
- Hyperarousal
- Hyperactivity
- Aggression

#### **What is Really There**

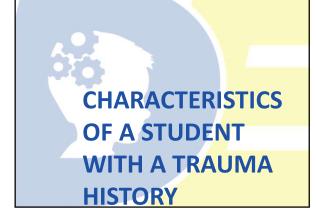
- Need to rely on themselves
- A way to get needs met
- · Fear and terror
- Poor executive functioning
- Focus on threatening details
- Need to be aware of danger
- Always ready to face threats
- · Ready to survive



# What's Really There?

- Early trauma results in differences in:
  - Reponses to stress
  - Regulation abilities
  - Focus abilities
  - Perspectives of threat
  - Beliefs about the world
  - Feelings about themselves
  - Impulse control
  - Metabolism

The reason working with a student with a trauma brain is so difficult is because to change the behavior, you have to change the brain.





### **Developmental Delays**

- Significant adversity impairs development in the first 3
  - 6 or more adverse childhood experiences gives a 90-100% probability of developmental delays
- · Effects on mental health, physical health, cognitive performance, etc.
  - (e.g., Perry & Pollard, 1998; Sroufe, 2012; Szalvitz & Perry, 2010)
- Appropriate to assume the child or teen is functioning at about half of their chronological age
  - You need to treat and teach to that age to be consistently effective



## **Toileting Difficulties**

- Don't expect toileting behaviors to be mastered before entering preschool
  - Developmentally typical children aren't often ready to begin potty training until 3 years of age
- Toileting difficulties will be more pronounced due to:
  - Developmental delays
  - Sensory issues
  - Regulation
  - Stress response



#### Language Delays

- Infants have a sensitive period for language development
- We learn to communicate out of a desire to connect with the people in our world
  - Infants who have experienced pathogenic care or high levels of stress often have little to no opportunity for this
    - No singing, nursery rhymes, reading, baby-talk



# Play Differences

- The amount of activity and bouncing from one activity to another is more than what would be seen in a typical toddler
  - Often lacks purpose or intent
  - Can appear random
- As they age, it can become noticeable they don't know how to play
  - Language delays may make pretend play difficult



## **Memory Difficulties**

- Toxic stress damages parts of the brain associated with memory
  - Hippocampus in particular
  - Short-term memory is particularly impaired
    - May result in the student not remembering directions, assignments, explanations, etc.
    - Teachers will often see this noncompliance since the student will often appear to be functioning fine in other



### **Memory Difficulties**

- Working memory is the ability to process and retain information so you can use it
- Students with trauma histories often have difficulty holding and organizing everything in their brain
- Use external supports
  - Charts, picture cards, signs, and other visual cues
- · Watch for aimless wandering



#### Difficulties with Time

- To understand time, you have to have had a predictable and somewhat stable environment
- Students in survival mode only focus on "now"
- They will likely require more visual and external aids



#### A Child's Need to Control

- When you come from chaos, you try to control what you can
  - Yes, even dumb things
- Not just a child being helpful
  - We need children to be able to relax and be kids
- May be rigid & inflexible with routines



# Poor Self-Regulation

- Self-regulation addresses how well someone can face a stressor and recover
  - Not the same thing as obedience
- · Can look like:
  - Disproportionate emotional reactions & emotional extremes
  - Attention difficulties
  - Tantrums/outbursts that feel random
  - Low frustration tolerance
  - Low ability to self-sooth



# Poor Self-Regulation

- Self-regulation only develops in the context of a relationship
  - You may need to become the "external brain"
- Critical period for this is between 18 and 36 months of age
- Students with trauma histories tend to have smaller "stress windows"
  - You can't increase the amount of stress he can tolerate if you continue to break the glass
  - Many students' windows decrease due to school





#### Low Frustration Tolerance

- The reactions will look immature
  - Like a toddler if a child or a child if a teen
- The emotions are often expressed through their bodies
- When a threat is perceived, the amygdala can trigger a defensive reaction and stress response in less than 50 milliseconds
  - Sometimes called the "self-defense system"



#### Meltdowns

- Tantrums are goal driven, meltdowns aren't
   When in doubt, assume it's a meltdown
- Trauma meltdowns will often resemble that of a typically developing 2 year old, despite the age of the student
- Be the Tupperware container for the student



## Aggression

- Often a stress response (fight)
  - Triggered by something that makes them feel unsafe
    - Vulnerability
- · Often feels random, but it's not
- Aggression and anxiety are often one and the same
  - "Aggression is the language of fear" (Sorrels, 2015, p. 62)



# Dropping Out of School for Adolescents

- Trauma responses don't just go away on their own
- If you have a trauma history and are left alone for years in a school environment, expected to do better on your own, you won't be progressing academically
  - You'll fall further and further behind
  - It creates a downward spiral
  - Dropping out seems like the obvious choice





### The Overall Environment

- The environment a student is in can play a key role in whether he is able to stay calm or will become escalated
- Examining the environment for possible triggers should be a first step in effecting change
- The class should meet the needs of the students
  - Shift from the student meeting the needs of the class



### The Building

- · Neutral wall color
- Subtle/no patterned floor covering
- Natural materials
- No more than 2/3 filled walls
  - Including common areas
  - Create & value white space
- Be mindful of traffic patterns and furniture
- Have a designated quiet space
- Organization
- Visuals





### **Change Your Question**

- Acknowledge that these are not best thought of as "behavioral problems"
  - These are neurological difficulties
- If you see the child as having (being?) behavioral problems, you'll respond differently to him than if you see him as struggling to feel safe and calm
- These behaviors are signs they need help
  - Not attempts to make you crazy or cause trouble



#### It's Often Not a Choice

- Most children aren't "choosing" to "be bad"
  - They do something because it meets a need
    - Curiosity, sensory, hunger, attention
  - They do something because they're feeling unsafe and stressed out
    - This part of the brain can't reason or think, it's only reactive
  - These behaviors are their attempt to manage what they are experiencing and feel they need to problem solve on their own



## The Right Question

- NOT
  - What consequence do I give?
  - How do I punish?
- Instead
  - What do I need to TEACH this student right now?



#### You Can Make a Difference

- A lot of the healing a child experiences will happen in nonclinical settings
  - This makes every adult in a school that interacts with the child a key player in the child's healing process
    - These day to day, regular interactions are what bring about healing





# What Likely WON'T Work (At Least Consistently)

- Logic
- Punishment
- Reinforcement
- Time outs
- Grounding
- Taking away privileges or objects
- Yelling
- Shame



# Why Don't They Work?

- Even if these techniques work at times, the effects will likely be more short term and inconsistent
- The problem?
  - These are the majority of our tools
- The caveat:
  - That doesn't always mean you don't use these techniques, especially when a student is in a calmer arousal state



## Why Don't They Work?

- Why don't these things work?
  - These techniques operate on assumptions of trust, safety, and a "thinking" brain
    - Our children are operating on assumptions of danger, threat, and a "surviving" brain
  - These techniques assume the child is functioning at his chronological age
    - Students with trauma histories tend to function well below that emotionally – often as infants or toddlers



# Why Don't They Work?

- The limbic system is often in charge
  - It is reactive
  - It can react in only 50 milliseconds
  - That's not enough time to "think" or "reason"



# **Stages of Stress**

Where traditional strategies tend to be effective 2. Alert 3. Alarm 4. Fear 5. Terror

Where kids with neurodevelopmental trauma tend to be

(Perry & Szalavitz, 2017)



#### Goals Then Become

- 1. If the limbic system reacts, to work to calm it as quickly as possible
  - Often have to start with this as the goal
- 2. If the limbic system is in charge, to keep it from perceiving threat
- 3. To keep stress levels low enough that the thinking brain remains in charge
  - Primary goal but often the end outcome



#### Strategies Then Become

- 1. Create safety
- 2. Create predictability and consistency
- 3. Connect to the student
- 4. Regulate the student
- 5. Be prepared to deescalate if needed

### Be willing to step in and help.

A stressed out student will learn more effectively if you push in and provide support for their behaviors or learning instead of standing back and attempting to coach or remind them how to do it independently.



# Pause Before Using Behavioral Techniques

- Behavioral techniques can be helpful if you truly understand the behavior
  - Too often the techniques we use are focused only on the surface
- If you want changes in behavior, you have to understand the student
  - Change will only happen within a relationship
  - The behavioral issues aren't simply "Behavior Issues", they're manifestations of trauma



# Pause Before Using Behavioral Techniques

- Trauma-Informed Practices ARE behavioral strategies (i.e. learning theory)
  - They're focused on teaching a non-cognitive part of the brain
- The expected practices align well with being trauma-informed
  - The PBIS model involves being consistent, predictable, positive, and safe
  - FBAs & BIPs are a great practice for learning your student and implementing a consistent plan



# When You Use More Behavioral Strategies

- Identify the behavior that's causing the problem
- Step back and ask what the behavior is telling you
  - What purpose is it serving?
  - Why is it there?
  - Remember, behavior is communication
- Formulate a script or plan for THAT, rather than for the behavior itself



#### So What WILL Work?

- The best efforts will be directed at the most basic needs
  - Basic needs like food and shelter
  - Touch
  - Physical sensations
  - Safety
- They will also meet the child at her emotional age at that moment



## **Create Safety**

- Safety is more the concrete absence of danger or stress
- We need to establish safety before a student with a trauma history is likely to feel secure with us



### **Create Safety**

- Keeping boundaries for safety is extremely important
  - Doing so may not be helpful to getting the acting student to calm down in that moment, but it WILL be helpful to creating safety for everyone else and to yourself
  - It is also helpful to the acting student to know later that you were willing to keep a firm boundary
    - Allowing students to become unsafe and failing to issue a consequence when they cross that boundary will not allow a student to feel they can trust you





### **Creating Consistency**

- Consistency is about routines and predictable expectations
- Students with trauma histories will often need more practice and exposure to these routines and more clearly broken down and laid out expectations for them to see them as predictable
  - Break it down, lay it out, practice it



## Be Dependable

- And be okay being "Depended on"
  - It's okay to be needed and to be a support
    - Scaffolding for emotional growth
  - Allowing a student to need you encourages healing and growth
    - Balance the need for responsibility with the opportunity for vulnerability



#### Connect with Your Student

- Healing trauma comes from relationship
  - It's all the little interactions and not so much the big events
  - It's what you do over and over and over again
- While it is not the role of school personnel to build attachments, helping the child build healthy relationships is
- Having one or two identified people for each child is important



#### Connect with Your Student

- Respond quickly
- · Respond don't react
  - Be intentional
- Demonstrate you understand them
  - Connect before you correct
    - "You are having really big feelings right now"
    - "I wonder if you're stressed out about something else?"
  - Label what's going on rather than asking
    - If that's too much, try vague words
      - Yucky, Icky, Gross, etc.

Healing is about recovering what was lost or broken.

Target your interventions to that.

Sometimes you just need to do the same thing over an over for a period of time.

Start at the most basic and work your way up until you get to the place where you can be effective.

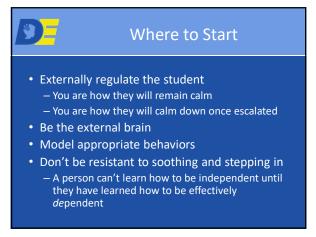
Realize the primary lessons the child needs to learn at that moment are that they are safe and that they are loved.

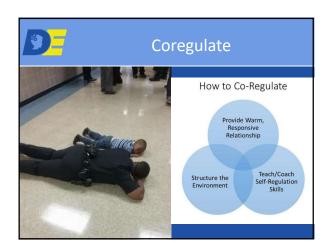
The other lessons can wait.







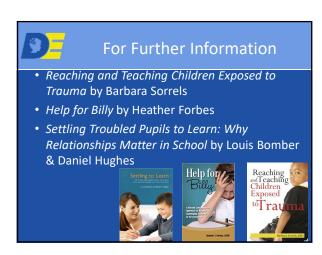






Every failure will deepen the trauma and strengthen the neural pathways contributing to the negative behaviors.

Limit the chance for failures.









#### **Contact Information**

#### Dr. Stephanie Grant

(616) 594-0554
sgrant@debh.org
facebook.com/stephaniegrantphd





#### References

- Breidenstine, A. S., Bailey, L. O., Zeanah, C. H., & Larrieu, J. A. (2011). Attachment and trauma in early childhood: A review. Journal of Child & Adolescent Trauma, 4, 274-290. doi: 10.1080/19361521.2011.609155
- Dawson, G., Ashman, S. B., & Carver, L. J. (2000). The role of early experience in shaping behavioral and brain development and its implications for social policy. Development and Psychopathology, 12, 695-712.
- Frigerio, A., Ceppi, E., Rusconi, M., Giorda, R., Raggi, M. E., & Fearon, P. (2009). The role played by the interaction between genetic factors and attachment in the stress response in infancy. *Journal of Child Psychology and Psychiatry*, 50, 1513-1522. doi:10.1111/j.1469-7610.2009.02126.x



#### References

- Gunnar, M. R. (1998). Quality of early care and buffering of neuroendocrine stress reactions: Potential effects on the developing human brain. *Preventive Medicine*, 27, 208-211. doi:10.1006/pmed.1998.0276
- Gunnar, M. R., Brodersen, L., Nachmias, M., Buss, K., & Rigatuso, J. (1996). Stress reactivity and attachment security. *Developmental Psychobiology*, 29, 191-204. doi:10.1002/(sici)1098-2302(199604)29:3<191::aid-dev1>3.0.co;2-m
- Gunnar, M. R. & Donzella, B. (2002). Social regulation of the cortisol levels in early human development. Psychoneuroendocrinology, 27, 199-220.



## References

- Gunnar, M. R. & Quevedo, K. (2007). The neurobiology of stress and development. Annual Reviews of Psychology, 58, 145-73
- Hill-Soderlund, A. L., Mills-Koonce, W. R., Propper, C., Calkins, S. D., Granger, D. A., Moore, G. A., . . . Cox, M. J. (2008). Parasympathetic and sympathetic responses to the strange situation in infants and mothers from avoidant and securely attached dyads. *Developmental Psychobiology*, 50, 361-376. doi:10.1002/dev.20302
- Levitt, P. (2012, October). The ingredients for a healthy brain. Presentation given at the Annual Zero to Three: National Training Institute, Los Angeles, CA.



#### References

- Lieberman, A. F. & Van Horn, P. (2011). Psychotherapy with infants and young children. New York: The Guilford Press.
- Masten, Cutuli, Herbers, & Reed, (2009). Resilience in development, pp. 793–796 in C. R. Snyder & S. J. Lopez (Eds.), Handbook of positive psychology, 2nd ed., New York: Oxford University Press
- Middlemiss, W., Granger, D. A., Goldberg, W. A., & Nathans, L. (2012). Asynchrony of mother-infant hypothalamicpituitary-adrenal axis activity following extinction of infant crying responses induced during the transition to sleep. *Early Human Development*, 88, 227-32.



#### References

- O'Neil, Erica, "Developmental Timeline of Alcohol-Induced Birth Defects". Embryo Project Encyclopedia (2011-04-24). ISSN: 1940-5030
- Perry, B. D. (2012). The impact of trauma & neglect on child development. Coalition for the prevention of Child Abuse and Neglect Child Abuse Prevention Awareness 2012 Event. Colorado Springs, CO.
- Perry, B. D., & Pollard, R. (1998). Homeostasis, stress, trauma, and adaptation: A neurodevelopmental view of childhood trauma: Child and Adolescent Psychiatric Clinics of North America.



#### References

- Propper, C., & Moore, G. A. (2006). The influence of parenting on infant emotionality: A multi-level psychobiological perspective. *Developmental Review, 26,* 427-460. doi:10.1016/j.dr.2006.06.003
- Shonkoff, J. P. & Levitt P. (2010). Neuroscience and the future of early childhood policy: Moving from why to what and how. Neuron, 67, 689-691.
- Sroufe, A. (2012, October). The enduring legacy of early experience. Presentation given at the Annual Zero to Three: National Training Institute, Los Angeles, CA.
- Szalvitz, M., & Perry, B. D. (2010). Born for love: Why empathy is essential - and endangered. New York: William Morrow.



## **Suggested References**

- Bath, H. (2008). "The three pillars of trauma-informed care." Reclaiming Children and Youth. 17(3).
- Bilmes, J. (2004). Beyond behavioral management: The six life skills children need to thrive in today's world. St. Paul, MN: Redleaf.
- Booth, P. & Jerberg, A. (2001). Theraplay: Helping Parents and children build better relationships through attachmentbased play. San Fransisco: Jossey-Bass.
- Forbes, H. & Post, B. (2009). Beyond consequences, logical, and control: A love based approach to helping children with severe behaviors. Boulder, CO: Beyond Consequences.



# Suggested References

- Gilkerson, L. & Klein, R., eds. (2008). Early development and the brain: Teaching resources for educators. Washington, DC: Zero to Three.
- Koplow, L. (2007). Creating schools that heal: Real life solutions. New York: Teachers College Press.
- Kranowitz, C. (1998). The out-of-sync child. New York: Penguin.
- Perry, B. (2006). "Applying principles of neurodevelopment to clinical work with maltreated and traumatized children: The neurosequential model of therapeutics." Working with traumatized youth in child welfare. New York: Guilford.



## **Suggested References**

- Porges, S. (2011). The polyvagal theory: Neurophysiological foundations of emotions, attachment, communication, and self-regulation. New York: W.W. Norton.
- Purvis, K. & Cross, D. (2007). The connected child: Bring hope and healing to your adoptive family. New York: McGraw-Hill.
- Siegel, D. & Hartzell, M. (2003). The whole-brain child: 12 revolutionary strategies to nurture your child's developing mind. New York: Random House.
- van der Kolk, B. (2011). The body keeps the score: Brain, mind and body in the healing of trauma. New York: Penguin Group.