Regulate to Educate: Developmental Trauma

PBIS and MTSS-B

Kym Asam, LICSW
Objectives

• Differentiate between PTSD and developmental trauma
• Understand the impact of trauma on multiple domains of functioning
• Understand the students’ states of arousal and how it impacts their functioning in school
• Key skills in working with children who have experienced developmental trauma
• Increase understanding of alignment between trauma informed schools and PBIS
Polling Question #1

• How many participants have had some training on developmental or complex trauma?
Grounding Principles

Trauma-Sensitive Schools benefit all children – those whose trauma history is known, those whose trauma will never be clearly identified and those who may be impacted by their traumatized classmates.

Schools are the Central Community for most children.

Source: Helping Traumatized Children Learn
Multi-tiered System of Support

VT MTSS is a coherent continuum of evidence based, system-wide practices that support:

― proactive preventative core instruction for all;

― a rapid response to academic and behavioral challenges;

― frequent data-based monitoring; and

― instructional decision-making

so that each Vermont student achieves high standards.
The triangle – Academic and social/emotional interventions

Classroom/school wide instruction

Targeted academic instruction

Intensive academic intervention

Coaching

Matching Instruction to Need for Improved Student Outcomes

ALL
80 to 90% of Students Meet Performance Indicators
All Staff Preventative and Proactive

SOME
5 to 10% of Students Require Supplemental Targeted Intervention

FEW
1-8% of Students Require Intensive Intervention

Intensive mental health intervention

Targeted social skill and emotional regulation

Universal regulating
What is trauma?

Trauma is not just the event itself, but rather a response to a stressful experience in which a person’s ability to cope is dramatically undermined.
What is Developmental Trauma?

• A psychological and neurobiological injury that results from protracted exposure to stressful events
• Derails typical development across all domains (attachment, affect, biology, behavior, cognitive, dissociation, self-concept)
• Experiences often occur in the caregiving system.
• Impact is immediate and long term
• Effects will require all tiers of intervention
“Trauma is not a story of what happened to you a long time ago, it is what is in your body.”

Bessel van der Kolk
Toxic Stress Pyramid

ACE study, Felitti, 2014
Pervasiveness in children

- 1,892,000 substantiated abuse (Vermont = 3,919)
- 26% of children experience trauma before 4 (Vermont 59.3%)
- 11.3% increase in reports in Vermont
- 77.2% neglect (Vermont = 4%)
- 17% physical abuse (Vermont = 46%)
- Sexual Abuse = 8% (54% in Vermont)
Sources of Trauma

- Sexual abuse
- Physical abuse
- Emotional abuse
- Neglect
- Domestic Violence
  - Neighborhood violence
- Torture
- Bullying
- Prolonged exposure to traumatic stress
- Intrauterine stress
- Epigenetics
Epigenetics

https://www.youtube.com/watch?v=AvB0q3mg4sQ
Impact Areas:

- Acts without thinking, interrupts
- Overreacts to small issues
- Upset by changes/ transitions
- Overwhelmed, easily frustrated
- Resists change or tasks that are not interesting
- Does not notice the impact of their behavior
- Does not see their part in problems
- Easily over-stimulated, difficulty calming down
- Forgetful, loses things, disorganized
- Loses steam quickly, cannot sustain on challenging tasks

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7 domains of impairment

- Biology and the brain
- Attachment and relationship
- Emotional Regulation
- Cognition and Learning
- Behavior
- Dissociation
- Self-concept
The brain develops from the bottom up and the inside out.
Neocortex

Limbic

Diencephalon

Brainstem

Abstract thought
Concrete Thought
Affiliation
"Attachment"
Sexual Behavior
Emotional Reactivity
Motor Regulation
"Arousal"
Appetite/Satiety
Sleep
Blood Pressure
Heart Rate
Body Temperature
Impact of Neglect on the Brain
Bottom up, Inside out

Cortex
Limbic
Diencephalon
Brain Stem
Stages of Sleep
Effects of Trauma on Brain Functioning

- Prefrontal Cortex (Integration and Planning)
- Thalamus: Visual, auditory, olfactory, kinesthetic, gustatory
- Hippocampus (cognitive map)
- Amygdala (Intensity/significance)
What can we do about Developmental Trauma in our kids?

In order to help youth heal from Developmental Trauma, we must provide opportunities, every day, for patterned, repetitive experiences that counteract established functioning.
Potential Interventions: Think about brain regions

- Touch
- Rhythmic
- Patterned
- Eye Contact
- Drumming
- Body-based

- Music and Movement
- Yoga
- Somatosensory
- Parallel play/learning
Polling Question #2

• How many participants use movement when working with students?
7 domains of impairment

Biology and the brain
Attachment and relationship
Emotional Regulation
Cognition and Learning
behavior
dissociation
Self-concept
4 Key Principles of Attachment

• Build school staff capacity to *manage affect*
• Build school staff-child *attunement*
• Build *consistency* in school staff *response* to child behavior
• Build *routines* and *rituals* into classroom and school
Healthy Attachment Sequence

Physical or psychological need

Relaxation (parasympathetic ANS)

Security, trust, attachment, self-regulation, object constancy

State of high arousal

Attunement/satisfaction of need
Disrupt and Connect: The still face experiment

http://www.youtube.com/watch?v=apzXGEbZht0
Unhealthy Attachment Sequence

Physical or psychological need

Anxiety, rage, numbing

Shame, mistrust, dysregulation, disturbed mental blueprint

Needs are disregarded/attunement disrupted

State of high arousal
Affect Management

When caregivers modulate their own affect and emotional responses, they can create an emotionally safe environment in which children can learn.
ATTUNEMENT

- Reading and responding to the cues of another
- Synchronous and interactive
- Helps prevent mismatch between need and provision
- Reading the non-verbal, social-emotional “language” of another
Tantrums

• What did you notice?
• What worked well?
• What did not work well

https://www.youtube.com/watch?v=oa6znlKBFA
CONSISTENCY

– EVERY DAY
– EVERY GRADE
– EVERY BODY
– EVERY ENVIRONMENT
Routines and Rituals

Routines increases predictability and the child’s ability to anticipate next steps. Establishing classroom and school-wide routines helps reduce trouble spots (transitions, substitute teachers, unstructured activities/days).
Interventions

1. Dowel
2. Silent Simon says
3. Rope circle of safety
4. Choo Choo Train game: games that enhance body control
5. Say “no” with your body, say “yes” with your body
6. Jumping rope
7. Drumming
8. Mirroring or attunement activities
9. Feelings games
Targeting the Tiers, PBiS approaches

- Intensive
- Targeted
- Universal

Matching Instruction to Need for Improved Student Outcomes

FEW
1-8% of Students
Require Intensive Intervention

SOME
5 to 10% of Students
Require Supplemental
Targeted Intervention

ALL
80 to 90% of Students
Meet Performance
Indicators
All Staff Preventative and Proactive

Brain stem/diencephalon

limbic
cortex
7 domains of impairment

- Biology and the brain
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- Cognition and Learning
- Behavior
- Dissociation
- Self-concept
Normative Danger Responses
Autonomic Nervous Response System

- Fight
- Flight
- Freeze
- Flock
Recognizing Affect – Emotional Identification
Facial Expression Recognition

Emotion Identification

Scared
Sad
Happy
Surprised
Angry

Pollak et al., 2009
Sequence of Engagement

Regulate

Relate

Reason
<table>
<thead>
<tr>
<th>Sense of Time</th>
<th>Extended Future</th>
<th>Days Hours</th>
<th>Hours Minutes</th>
<th>Minutes Seconds</th>
<th>Loss of Sense of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Brain Areas</td>
<td>Secondary Subcortex</td>
<td>Subcortex Limbic</td>
<td>Limbic Midbrain</td>
<td>Midbrain Brainstem</td>
<td>Brainstem Autonomic</td>
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<tr>
<td>Cognition</td>
<td>Abstract</td>
<td>Concrete</td>
<td>“Emotional”</td>
<td>Reactive</td>
<td>Reflexive</td>
</tr>
<tr>
<td>Mental State</td>
<td>CALM</td>
<td>ALERT</td>
<td>ALARM</td>
<td>FEAR</td>
<td>TERROR</td>
</tr>
</tbody>
</table>
Impact Areas

It is often not the task or request that leads the child to misbehave...

it is the feeling and negative thoughts that is evokes...
Potential strategies

- Movement
- Mindfulness
- Non-verbal communication
- Reflectively listen
- Validation
- Shhhhhh
- Attunement
  - Match affect without replication
More strategies

• Using a song, words or other cues to help prepare change in activity
• Patterned, repetitive proprioceptive OT activities such as isometric exercises (chair push-ups, wall-sits, bear hugs while child tries to pull the adults arms away, applying deep pressure),
• Weighted vests, blankets, ankle weights
7 domains of impairment

- Biology and the brain
- Attachment and relationship
- Emotional Regulation
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- Dissociation
- Self-concept
Bottom up, Inside out

Cortex
Limbic
Diencephalon
Brain Stem
“No matter how exciting and meaningful and supported the learning experience is designed to be, a child cannot reap the cognitive benefits of it unless she feels calm enough to be curious.”

(McMahon, 2011)
Polling question #3

- How many participants have a morning, coffee routine?
Sequential Thinking

A child’s successful completion of many academic tasks depends on the ability to bring a linear order to the chaos of daily experience. Traumatic experience can limit this ability to organize material sequentially, leading to difficulty in reading, writing and communicating verbally.

From Helping the Traumatized Child Learn
Competency
3 Key Principles

• Build student executive functioning skills
• Target self-development and identity
• Target additional key developmental tasks

The child develops an ability to evaluate situations, inhibit impulsive responses and actively make choices.
Competing Demands

Survival vs. learning

It is nearly impossible to dedicate your full attention and energy to survival and learning at the same time.
Potential interventions

General strategies
- Multi-modal learning
- Regulate to educate
- Build on competencies
- Multiple motor breaks
- Brain breaks
- Differentiated instruction/Differentiated Discipline

Facilitating sequential thinking
- To do lists
- Visual schedules
- Repeat directions (tone of voice)
- Give notes
7 domains of impairment

- Biology and the brain
- Attachment and relationship
- Emotional Regulation
- Cognition and Learning
- behavior
- dissociation
- Self-concept
Bottom up, Inside out
Polling question #4

- How many people have used some source of heat in their homes in the last week or so?
What do you see and why?
Key Triggers

- Lack of power or control
- Unexpected change
- Feeling threatened or attacked
- Feeling vulnerable or frightened
- Feeling shame

And...
- Relationships – even positive ones
- Intense feelings of any kind
But...what about consequences?

Relational and relevant

Restorative and reparative
Potential interventions/considerations

- Behavior is about survival
- Function AND feeling behind behavior
- Skill deficit
- Validation/attachment/comfort seeking vs. attention seeking or manipulative
- Focus on connection, not consequence
- Connect, rupture, repair
- Ritualize transitions (with movement)
- Evaluative process (even praise) can create defensiveness
  - Remember where they are likely in their brain
Helpful Reframes:

<table>
<thead>
<tr>
<th>Child Says:</th>
<th>Student Believes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“this is stupid”</td>
<td>“I am stupid”</td>
</tr>
<tr>
<td>“I can’t do this”</td>
<td>“I am powerless”</td>
</tr>
<tr>
<td>“You’re an ______”</td>
<td>“I am not safe”</td>
</tr>
<tr>
<td>“why do you always…”</td>
<td>“I am to blame”</td>
</tr>
<tr>
<td>“I’m outta here”</td>
<td>“I am overwhelmed”</td>
</tr>
<tr>
<td>“I won’t do this”</td>
<td>“I can’t do this”</td>
</tr>
<tr>
<td>“You can’t make me”</td>
<td>“I need to protect myself”</td>
</tr>
</tbody>
</table>
Possible Collision Points at School

• Schools focus on preparing children for and information related to the external world
  – Students with DT focus on the present and internally to stay safe.

• Much of school is motivated by connection and participation with others

• Schools often use delayed gratification
  – Students with DT are focused on the present to stay safe. Delaying gratification is dangerous and unpredictable.

• Teachers often set limits/goals for the common good
  – Youth with DT don’t operate with a template that understands the common good.
How to Intervene

Consistency

Predictability

Patterned and Repetitive

Attunement

Managing Affect

Routines and Rituals

ALIGNING PBIS PRINCIPLES
Questions?????