The Problem of Treating Complex Trauma

- Need for intervention that:
  - Can address continuum of exposures (layers of chronic and acute), including ongoing exposure
  - Is embedded in a social/contextual framework
  - Is sensitive to individual developmental competencies and vulnerabilities, and flexible in its approach
  - Addresses individual, familial, and systemic needs and strengths
**CORE Components**

**Diagram 1:**
Six Core Components of Complex Trauma Intervention

1. **Safety:** The installation and enhancement of internal and environmental safety.
2. **Self-regulation:** Enhancement of the capacity to modulate arousal and restore equilibrium following dysregulation across domains of affect, behavior, physiology, cognition (including redefinition of dissociative states of consciousness), interpersonal relatedness, and self-attrition.
3. **Self-reflective information processing:** Development of the ability to effectively engage attentional processes and executive functioning in the service of construction of self-narratives, reflection on past and present experience, anticipation and planning, and decision making.
4. **Traumatic experiences integration:** The transformation, incorporation, or resolution of traumatic memories, images and associated psychiatric sequelae into a neutralizing, productive, and fulfilling existence through such therapeutic strategies as meaning-making, traumatic memory containment or processing, reminiscence and remapping of the traumatic tax, symptom management, and development of coping skills, and cultivation of positive internal thinking and behavior.
5. **Relational engagement:** The repair, restoration or creation of effective working models of attachment, and the application of these models to current interpersonal relationships, including therapeutic alliance, with emphasis on development of such critical interpersonal skills as awareness, cooperation, perspective-taking, boundaries, and interpersonal negotiation, empathy, and the capacity for physical and emotional intimacy.
6. **Positive affect enhancement:** The enhancement of self-esteem,learn and positive self appraisals through the cultivation of personal creativity, imagination, future orientation, achievement, competence, mastery seeking, community building, and the capacity to experience pleasure.

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**What are Evidenced Based Treatments?**

- Treatments that have strong research support
- Clinical trials & Randomized Controlled Clinical Trials
- Typically involve a manual, series of training and consultation to learn the treatment model
EBT’s for Complex Trauma

- Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)
- Child-Parent Psychotherapy (CPP)
- Attachment, Self-Regulation and Competency (ARC)
- Parent-Child Interaction Therapy (PCIT)
- Seeking Safety
- Trauma Systems Therapy
- And many more….

EBT Training

Trauma EBT developers and experts believe in order for a clinician to be considered trained the following criteria are needed:

- Two-day basic training, monthly consultation for 12 months by a certified EBT trainer
- Weekly supervision by an agency EBT trained supervisor who monitors clinician fidelity to the model
- Implementation of the model with a minimum of 3 families per year.
Trauma Focused Cognitive Behavioral Therapy (TF-CBT)

- Model Developed by Cohen, Mannarino, & Deblinger
- An Evidence-Based Practice
- A SAMHSA Model Program
- One of Kaufman Best Practices
TF-CBT: A hybrid treatment model that integrates:
- Trauma sensitive interventions
- Cognitive-behavioral principles
- Attachment theory
- Developmental Neurobiology
- Family Therapy
- Empowerment Therapy
- Humanistic Therapy

TF-CBT: The Evidence

- Model initially tested:
- Randomized controlled trials:
TF-CBT

TF-CBT maintains the following treatment focus:

- Psychoeducation and Parenting Skills
- Relaxation
- Affective Expression and Regulation
- Cognitive Coping
- Trauma Narrative Development and Processing
- In Vivo Gradual Exposure
- Conjoint Parent-Child Sessions
- Enhancing Safety and Future Development

TF-CBT: Affect Expression
TF-CBT: SUDS

TF-CBT: Processing (8 yo)
Child Parent Psychotherapy (CPP)

CPP

- Targets children (ages 0-5 years) and caregivers.
- Heavy emphasis on dyadic work.
- Developed by Alicia Lieberman, Ph.D., Patricia Van Horn, J.D., Ph.D., Chandra Ghosh-Ippen, Ph.D.
- UCSF Child Trauma Research Project
- An Evidence-Based Practice
- A SAMHSA Model Program
CPP: The Evidence

- Randomized controlled trials:

CPP

- A hybrid treatment model that identifies the following goals:
  - To support and strengthen the caregiver-child’s relationship as a vehicle for restoring and protecting the child’s mental health.
  - Improve the caregivers’ and children’s maladaptive representations of themselves and each other and interactions and behaviors that interfere with the child’s mental health.
CPP

- Child-parent interactions are the focus of six intervention modalities:
  - Promoting developmental progress through play, physical contact and language.
  - Offering developmental guidance.
  - Modeling appropriate protective behavior.
  - Interpreting feelings and actions.
  - Providing emotional support/empathetic communication.
  - Offering crisis intervention, case management and concrete assistance with problems of living.

Attachment, Self-regulation and Competency (ARC)
Where does ARC come from?

- Translation of clinical principles across settings (out-patient, residential, school, home-based)
  - Or...what is it that we actually do?

- “Evidence-based practice”?
  - Or...how to fit real kids into scientific boxes

- Staying true to the inner clinician
  - Or...keeping the art in treatment

Protocol vs. Component based Interventions

- Clinical Objectives Focused
- Developmentally Tailored
- Context Specific
- Individual Targets
- Menu-Driven
ARC: A Framework for Intervention with Complexly Traumatized Youth

Core principles of understanding:
- Trauma derails healthy development
- Trauma does not occur in a vacuum, nor should service provision
- Good “intervention” goes beyond individual therapy

Blaustein & Kinniburgh, 2010; Kinniburgh & Blaustein, 2005
Who does ARC target?

- Designed to target the needs of children, families, and systems impacted by complex trauma
- Core domains translate across children/families/systems; applications and goals will vary
- Crucial importance of:
  - Keep an eye on the clinical objective, rather than the technique
  - Pay attention to relative goals and relative successes
  - Have a plan, but catch the moments
Programs Applying ARC Principles

- Anchorage CMHC (Out-patient)
- Beth Israel NY (Out-patient, school-based)
- B.C. Children’s Hospital (In-patient)
- Bethany Christian Services (Out-patient)
- Butler Center (DYS residential)
- Calgary Public Schools (Classroom / whole-school)
- Children’s Hospital L.A. (High-risk youth programs)
- The Children’s Guild (Therapeutic foster care)
- CohoAcademy (DMH IRTF)
- Crittenton Children’s Services (Multiple programs – out-patient, Head Start, Group Home)
- DV Crisis Center (DV Shelter and Advocacy)
- Gateway-Longview (Child Welfare Agency)
- Glenhaven Academy (Residential School)
- Harmony Hill (Residential treatment)
- Hertfordshire County Council (Adolescent programs)
- House of Mercy (Domestic Violence shelter program)
- Kennedy Krieger (Therapeutic Foster Care Program)
- La Rabeleda Children’s Hospital (Out-patient)
- Lower Naugatuck Valley PCRC (DV Resource Center)
- Mosaic Children’s Services (Group Home)
- MGH Chelsea (Group/Out-patient)
- New England Counseling & Trauma Center (Out-patient)
- Safe from the Start (Community-based agencies)
- Southern Trust (Residential / group homes)
- Sutter-Yuba Mental Health (Out-patient)
- The Trauma Center at JRI (Out-patient)
- UCSF/CASARC (Out-patient)
- Vermont Department of Mental Health (Outpatient programs)
- Youth on Fire (Adolescent drop-in center)

Treatments Utilized in the NCTSN

- TF-CBT
- ARC
- CPP
- PGT
- SPARCS
- Other / Unknown

NCTSN FY 2010 Annual Progress Report – Executive Summary

Total n=966
Restraint Reduction

Average Percent Reduction in Restraint Per Bed Capacity
FY 06 - FY 07

Percent Reduction in Restraints Per Bed Capacity

-40%
-20%
0%
20%
40%
60%
80%
100%
54%
Glenhaven, Cohannet, Butler
Other JRI Residential Treatment Programs

-20%
6-Month Change in CBCL Scores

*Significant decreases on CBCL scores; no significant differences across interventions

6-Month Change in UCLA PTSD-RI Scores

*Significant decreases on CBCL scores; no significant differences across interventions
ARC Treatment Outcomes to Date

- PTSD Symptom Reduction (Outpatient, Residential)
- Child Behavior Improvement (CBCL) (Outpt/Resi)
  - Outpatient (85% percentile to 50% percentile)
  - Residential (sig reduction Externalizing Problems; positive trend Internalizing)
- Significant Restraint Reduction (JRI)
- Significant increase in Placement Permanency (92% vs. under 50%) (ACMHS)
- Increased staff perceived competence, reduced staff burnout and turnover (VT-DMH)

ARC Intervention Components

- Integration into clinical work (structured and unstructured); individual and/or dyadic application
- Caregiver support
- Caregiver training workshops
- Group treatment
- Milieu training, consultation, and staff support
- Milieu interventions and initiatives
- Community-based applications
- Importance of building an internal team to support integration goals
Attachment: The Big Picture

- **Overarching:** Develop safety and positive capacities within the child’s caregiving system
- **How?**
  - Supporting caregivers
  - Increasing knowledge and skills
  - Creating positive relationships
  - Increasing predictability

Self-Regulation: The Big Picture

- **Overarching:** Increase child/adolescent capacity to manage emotional and physiological experience
- **How?**
  - Build a language for emotions, energy, and body states
  - Build capacity to recognize these states in self and other
  - Explore and support use of tools (individual as well as external and systemic) to better manage experience
  - Increase communication resources, and capacities to use those resources effectively
Competency: The Big Picture

- **Overarching:** Support key reflective capacities, including ability to make active choices and sense of self
- **How?**
  - Notice choices, assist with problem-solving, link actions and outcomes, and reflect on cause-and-effect
  - Tune in (and support child in tuning in) to attributes, experiences, values, goals, opinions, etc.
  - Pay attention to the range of areas in which a child may build developmental mastery

Trauma Experience Integration: The Big Picture

- **Overarching:** Support self-reflective capacities, and ability to understand the self and act in the present, while taking into account the context of the past.
- **How?**
  - Doing all of those things we’ve just talked about.....the integration of many different skills to manage, tolerate, explore, and understand personal experience, relationships, and systems of meaning
Main / Overarching Domain Concept:
Build safe / trauma-informed caregiving systems and safe relationships that support children / adolescents

Attunement: Core Target / Goal
Help caregivers to better understand children / adolescents

Key Sub-skills/Clinical Objectives:
- Build active curiosity
- Build reflective listening skills
- Use attunement skills in support of youth regulation
- Build pleasure / positive engagement

Techniques:
i.e., Dyadic check-ins, feeling charades, etc.
ATTACHMENT

Caregiver Affect Management

- **The Main Idea:** Support the child’s caregiving system – whether parents or professionals – in understanding, managing, and coping with their own emotional responses, so that they are better able to support the children in their care.
The Trauma Cycle

The Breakfast Club: Eat my Shorts
An example of poor caregiver affect management.

<table>
<thead>
<tr>
<th>Youth</th>
<th>Caregiver / Staff</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>I am bad, unlovable, damaged. People are dangerous. I can’t trust anyone.</td>
<td>I am ineffective. This kid is causing trouble. He’s making things chaotic for everyone.</td>
</tr>
<tr>
<td>Emotional</td>
<td>Shame, Anger, Fear, Hopelessness</td>
<td>Frustration, Anxiety, Helplessness</td>
</tr>
<tr>
<td>Behavior (Coping Strategy)</td>
<td>Avoidance, aggression, pre-emptive rejection and self-protection.</td>
<td>Over-reacting, Controlling, Shutting down / Disconnecting emotionally.</td>
</tr>
<tr>
<td>The Cycle</td>
<td>“I’m being controlled; I have to fight harder.”</td>
<td>“He keeps fighting me; I better dig my heels in.” “This provider doesn’t get it – I’m not going to bother.”</td>
</tr>
</tbody>
</table>
A1 – How do we increase our ability to regulate? Primary Targets

(1) Validation, psychoeducation and depersonalization
   - Normalizing caregiver responses and depersonalizing youth behaviors / reactions

(2) Identifying difficult situations
   - Building awareness of challenging situations

(3) Self-monitoring skills
   - Increasing capacity to “tune in” to our own reactions

(4) Self-care and support
   - Building coping strategies and support systems that facilitate caregiver self-care

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Attunement

➤ The Main Idea: Support the child’s caregiving system – whether parents or professionals – in learning to accurately and empathically understand and respond to children’s actions, communications, needs, and feelings.
A2 - Attunement: Key Concepts

- Children often communicate emotions and internal experience via behavior, rather than words; traumatized children, in particular, may lack the capacity to communicate their needs or even to know what those needs are.

- Difficult behaviors are often fronts for unmet needs or unregulated affect; a key attunement challenge is therefore to identify the function of youth behavior.

- Attunement is an ongoing process, and involves perception as well as response.

- Accurate attunement in the caregiving system provides the foundation for youth self-regulation; link these explicitly. The more the system is ACTIVE in its attunement efforts, the more reflective this process will be (and the less reactive!)

Consistent Response

- The Main Idea: Support the caregiving system, whether familial or programmatic, in building predictable, safe, and appropriate responses to children’s behaviors, in a manner that acknowledges and is sensitive to the role of past experiences in current behaviors.
An alternative approach: Two primary goals

- Incorporate the system’s understanding of youth behavior into their response to the behavior (i.e., incorporate attunement into youth management strategies, ideally reducing the need for limits)
- Build responses to behavior that are consistent, appropriate, and sensitive to trauma influences on youth responses (i.e., building consistent responses that increase, rather than decrease, felt safety)

Building Consistent Response

- Support caregivers in understanding their own emotional / physiological / cognitive / behavioral responses in the face of child behaviors
- Support attunement efforts: what is the function of the child’s behavior? Is this a regulation moment, or a limit-setting moment? (Or both?)
- Provide support, education, and coaching in parenting strategies, as needed. Build slowly. Explore the caregiver’s personal / cultural beliefs about appropriate parenting and their own historical parenting experiences.
Building Consistent Response

- Actively engage youth in setting / defining / understanding household / milieu / contextual rules, as appropriate
- Explore values underlying rules, and find common ground
- Solicit youth input on ways adults can support them in following established structures; anticipate / collaborate on building success

Routines and Rituals

- The Main Idea: Build predictability through use of individual, familial, and systemic routines and rituals.
A4 – The role of routines: Key Concepts

- Trauma is often associated with chaos and loss of control; predictability helps build feelings of safety in traumatized children.
- When children feel safe, they are able to shift their energy from survival to healthy development.
- Repetition is an important way that children gain skill; children often notice routines more in their absence than in their presence.
- Routines should be part of the daily fabric, as well as targeting areas of vulnerability or difficulty.

A4 – The role of ritual: Key Concepts

- Rituals (traditions, celebrations, patterns of experience) offer felt coherence among members of a family, culture, or community, and may repeat across generations.
- Shared rituals may provide a sense of belonging; feeling disconnected from dominant culture rituals may highlight a feeling of difference.
- Exploration and celebration of ritual may include both establishment and celebration of whole-system rituals, as well as exploration, sharing, and celebration of many individual rituals.
Domain 2: SELF-REGULATION

Affect Identification: Modulation Affect Expression

The Main Idea: Work with children to build an awareness of internal experience, the ability to discriminate and name emotional states, and an understanding of where these states come from.
Considerations

- **Pair attunement with affect identification**: Caregiver attunement skills can be used to support the child in affect identification. Consider doing the work simultaneously.

- **Be mindful of cultural influences**: Culture and context impact our language for emotion, as well as our experience of it. Be cautious of making assumptions.

- **Use your own imagination and creativity** to create feelings-relevant activities.

- **Work with all caregivers** to incorporate basic feelings identification into their own interactions with the child.

- **Choose your moments**: Much of this work happens in the moment, and in conversation. Tune into opportunities to explore affect in the material children are already bringing in.

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**Affect Identification - Basic**

![Affect Identification - Basic](image_url)
Affect Identification - Basic

The Main Idea: Work with children to develop safe and effective strategies to manage and regulate physiological and emotional experience, in service of maintaining a comfortable state of arousal.
Modulation

R2 - Modulation

Modulation Involves Multiple Skills:

- Ability to identify initial emotional/physiological state
- Ability to identify and connect to subtle changes in state. A note about connection: This is the ability to tune into, tolerate, and sustain connection to emotional/physiological states.
- Ability to identify what it feels like in the body to experience subtle changes in state
- Ability to identify and use strategies to manage those state changes
R2 - Modulation

Specific Targets / Skills:

- Build understanding of comfortable and effective states
- Build an understanding of degrees of feelings and energy
- Support children in exploring arousal states, and in developing a sense of agency over tools that allow them to manage emotions and energy (build a “feelings toolbox”).
- Support and facilitate strategies which effectively and comfortably lead to state changes

Modulation: Safe Place

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Affect Expression:

- **The Main Idea:** Help children build the skills and tolerance for effectively sharing emotional experience with others

**Key Skills and Targets**

- Exploration of the goals of expression; build comfort and safety in relationship
- Identifying resources for safe expression
- Effectively using resources
  - Initiating communication
  - Effective nonverbal communication skills
  - Effective verbal communication skills
- Building and supporting forums for self-expression
Domain 3: Competency

- Each developmental stage builds on the learning and experience of the previous stage.
- Competency and mastery of tasks at each stage lead to construction of an internal sense of efficacy and achievement; in turn, this increases confidence in approaching new tasks.
- When children are exposed to chronic trauma, energy that is normally invested into development of competencies is instead invested in survival.

Developmental Competencies
Executive Functions

- **The Main Idea:** Work with children to act, instead of react, by using higher-order cognitive processes to solve problems and make active choices in service of reaching identified goals.

Self and Identity

- **The Main Idea:** Support children in exploring and building an understanding of self and personal identity, including identification of unique positive qualities, building of coherence across time and experience, and support in the capacity to imagine and work toward a range of future possibilities.
Considerations

Consider group as well as individual identity goals for all domains; i.e.:

- **Unique self:**
  - What characteristics does each child contribute?
  - What makes this setting unique? (Group values, goals, etc.)

- **Positive self:**
  - Support and reinforce child successes
  - Establish community pride; set collaborative group goals

- **Coherent self:**
  - Notice and normalize differences in child presentation and experience across moments and setting
  - Notice coherence and fragmentation among group members

- **Future self:**
  - Support individual youth in setting and working toward future goals
  - Set programmatic / community goals, and support members of the system in working toward these

Trauma Experience Integration

*The Main Idea:* Work with children to actively explore, process, and integrate historical experiences into a coherent and comprehensive understanding of self in order to enhance children’s capacity to effectively engage in present life.
Children are not simply a composite of their deficits, but are whole beings, with strengths, vulnerabilities, challenges, and resources.

ARC provides a framework that seeks to recognize factors that derail normative development, and to work with children, families, and systems to build or re-build healthy developmental pathways.

Sensory Motor Arousal Regulation Therapy (SMART)
The Modulation Model

High Activation
- Hyperarousal
- Hyper-defensive
- Emotional reactivity

Low Activation
- Hypoarousal
- Disabled defensives responses
- Numbing

Optimal Arousal Zone
“inside our Window of Tolerance” (D. Siegel 1999)

Window of Containment

Extreme Stress: Triggered to fight / flee, out of control fear or rage / “Panicky”…..
Going to “jump out of my skin” / Coping resources really hard to engage, alone / Enraged and out of control / “I’ve got to get out of here”

Increased Stress: More “Reactively ACTIVE”, agitated, anxious, angry but able to control self and “be present”

CONTAINED, CALM, ALERT,
FEELS PRESENT / FEELS SAFE

Increased Stress: More “Reactively INACTIVE”, depressed, spacey, but able to control self and “be present”

Extreme Stress: Triggered to engage automatic survival responses of freezing, numbing / Not feeling “here”, not feeling “me” / Coping resources are really hard to engage alone / Really low energy, doesn’t seem really present.

Adapted from Candace Saunders, LICSW and based on Pat Ogden’s “Windows of Tolerance”, Trauma and the Body
Sensory Motor Arousal Regulation Training (SMART)

Self-Regulation through 3 types of input:

- **Vestibular input:** the kid who lies on the couch upside down.

- **Proprioceptive input:** the kid who is roughhousing with others, or jumping around.

- **Tactile input:** the kid who seems to seek restraints, or needs lots of stuff on him to sleep.
Why SMART for trauma?

A treatment aimed at subcortical as well as cortical systems:

- Begins with movement and sensation, exploration and curiosity as routes to better regulation.
- Does not rely on language as entry point.
- Allows integration of affect through engagement of the whole body.
- Cognitive understanding or a coherent narrative emerges as the consequence of full engagement of the subcortical systems (sensory, motor, limbic/emotional, and autonomic arousal).
- Uses present moment new experience to expand and create new capacity for attachment through co- and self-regulation.

Neurofeedback (NFB)
State of Arousal and EEG Wave Patterns

- Excited
- Relaxed
- Drowsy
- Asleep
- Deep sleep

Neurofeedback (NFB)

- EGG biofeedback.
- Brain activity measured and interpreted by the computer.
- Visual and auditory feedback in form of simple computer games.
- Uses operant conditioning to "train the brain" to perform at an optimal level.
- "Top down" approach to quiet the brain and body.
- Shown to improve attention, concentration, self-regulation and depression, as well as reduce irritability and anger.
NFB Trauma Protocol

- T4-P4 placement.
- Training focused on inhibiting slow wave (Delta and Theta) and high wave (High Beta) activity, while rewarding Alpha activity.
- Protocol designed to increase self-regulation and reduce hypersensitivity to stimuli.

Case Example
Case Example: “Katie”

- 16 year old adopted, African American female.
- Treatment at VDK for 8 months.
- Incoming Diagnoses: Reactive Attachment Disorder, Bipolar, PTSD, ADHD, ODD, R/O Borderline IQ.
- Presentation at intake:
  - High levels of dysregulation and reactivity.
  - Regressive, “primitive” and self-harm behaviors when dysregulated.
  - Easily overwhelmed, leading to becoming shut down.
  - Needed almost constant attention from adults.
  - Developmentally immature (i.e. childish) interpersonal interactions.
  - Active PTSD symptoms.
  - Angered easily, often perceived hostile intent from others.
  - Negative self concept.
  - Limited ability to engage in school.
  - Difficulty making friends.

Individual Context

Severe and chronic neglect by parents.
Physical and sexual abuse by father.
Sexual exploitation by father.

Severe emotional and behavioral difficulties (sleep difficulties, aggression, hyperactivity, oppositional & sexualized behaviors).
Supervised visit with father where she “went limp and blank.”

Symptoms – impulsivity, aggression, defiance, nightmares, flashbacks, avoidance, etc., etc.
Severe attachment difficulties.
Dissociative response – “space out or go to sleep when stressed.”

Multiple instances of running away.
Sexual assault by unknown male in the community.
Reemergence of memories of early sexual and physical abuse by father.
Self harm behaviors increase in frequency and severity.
Serious suicide attempt.

Environmental Context

Bio mom: severe and persistent mental illness.
Exposure to domestic violence.
Father leaves family.

Non-compliance with mental health services for Katie.
Removed from mother’s care.
8 placements, including first psychiatric hospitalization.

Adopted by current family.
Multiple transitions between schools.
Good motivation and ability in school if highly structured.

Estimated 15-20 psychiatric hospitalizations.
3 stays in residential treatment.
“Medical Model/Diagnostic Lens”

Assumptions

- Bipolar: Chemical imbalance in the brain.
- ADHD: Dysfunctional frontal lobe leading to poor inhibition.
- RAD:
  - Unable to love or feel empathy for others.
  - Behavior driven by need to control and manipulate.
- Borderline IQ: Cognitively impaired, limited ability to learn.
- Conduct/Oppositional Behaviors: aggression, defiance, and inability to follow directives.

“Trauma Lens”

Complex PTSD/Developmental Trauma Disorder Framework:

- Self-regulation is impaired:
  - Highly dysregulated and impulsive.
  - Frequent and severe self harm and regressive behaviors.
- Dissociative coping response:
  - “State dependent” presentation shown by vacillation between periods of stability and extreme instability.
- Low Self-Esteem:
  - Persistent negative sense of self.
  - Feelings of depression and hopelessness.
- Disorganized attachment style.
  - Push/pull in interpersonal relationships.
  - Poor social skills.
- Limbic system highjacks the neocortex:
  - Executive functioning deficits.
  - Poor attention and concentration.
- Worldview shaped by early environment:
  - Hostile attribution bias.
  - Preoccupation with threat (i.e., hypervigilence).
CORE Battery Measures

- **UCLA PTSD Reaction Index** (Steinberg, Brymer, Decker, Pynoos, 2004):
  - Exposure to traumatic events (baseline only).
  - PTSD Symptoms:
    - Intrusive: flashbacks, nightmares, intrusive thoughts.
    - Avoidance: cognitive and/or behavioral avoidance.
    - Arousal: hyperarousal, sleep difficulties.

- **Novaco Anger Scale and Provocation Inventory** (NAS-PI; Novaco, 2003):
  - Cognitive: anger justification, rumination, hostility, and suspicion.
  - Arousal: Anger intensity, duration, somatic tension, and irritability.
  - Behavior: Impulsive reaction, verbal aggression, physical confrontation, and indirect expression.
  - Anger regulation.
  - Provocation: sensitivity to disrespectful treatment, unfairness, frustration, annoying traits of others, and irritations

- **Child Behavior Checklist** (CBCL; Achenbach & Rescorla, 2001):
  - Internalizing symptoms.
  - Externalizing symptoms.

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CBCL at Intake

![CBCL T-Score Graph](Image)
**ARC Approach**

- **Self-Regulation:**
  - Neurofeedback (NFB): “Top down” regulation.
  - Sensory Motor Arousal Regulation Therapy (SMART): “Bottom up” regulation.
  - Integration of sensory motor tools in the milieu and school contexts.
  - Individualized planning in milieu to encourage translation of self-regulation skills (ex. settling plan) in day to day.

- **Attachment:**
  - SMART: Build attachment with individual therapist.
  - Milieu interventions focused on building positive relationships (Ed and Res advocates) and getting needs for nurturance and affection met in a positive way (ex. hug plan).
  - Focus on routines, rituals, consistent responding and caregiver affect management across the board.
SMART Session

Restraint Data

![Graph showing restraint data over months](image.png)
PTSD Symptom Change

PTSD-RI Score

- Intake
- 3 Months
- Discharge

CBCL Symptom Change

* Indicates clinically significant improvement.
Treatment Summary

- Treatment approach was individualized and integrated across contexts.
- Initial focus on building self-regulation skills through both “top down” and “bottom up” approaches (SMART, NFB).
- Attachments across the program and with family played an integral role.
- Underlying capacity was revealed once extreme dysregulation had stabilized.
- Significant clinical improvement in PTSD, somatic, and externalizing symptoms over 8 months.
- Competency piece of ARC has continued beyond residential treatment – such as returning to her parent’s home to live, getting her driver’s license, etc.