SCHOOL DISCIPLINE THAT WORKS

ROBBYN PETERS BENNETT, LPC
GEORGE E DAVIS, MD
UNDERSTANDING THE MECHANISM OF ACES

HOW AND WHY IT DOES WHAT IT DOES
How do the ACEs really work?

1. Activation of the stress response system
2. Under and over activation of sensitive neurodevelopmental processes
3. Sensitive and critical periods
How do the ACEs really work?

Chronic stress results in altered function and development — e.g. changes in arousal, attachment, reward

Leads to maladaptive coping mechanisms

Leads to disease, pathological behaviors, and early death
THE ACE MECHANISM—a closer look

• Adverse experience happens in childhood
• It happens to the brain and through the brain, because the traumatic nature of the adverse experience is psychological
• The meaning of the event is more important than the event itself…
• So anything that threatens the security or integrity of the caretaker relationship threatens the survival of the child—and that’s an ACE
THE ACE MECHANISM AND RESILIENCE

- Attachment, Regulation and Resilience
- The nature and definition of resilience
  - Intelligence
  - Adaptability and coping
  - Temperament
  - Early attachments, current attachments, and attachability itself
RESILIENCE

- Early childhood experiences can also confer resilience for the later life course.
- Certain children are resilient even in the face of bullying which might induce later conduct problems in their peers.
- Resilience was conferred by (you guessed it) “warm family relationships and positive home environments”

(Bowes & Maughan, 2010)
REGULATION, CO-REGULATION & DYSREGULATION
WHO ARE THE MOST PROBLEMATIC KIDS IN THE CLASSROOM?

- Inattentive
- Distractible
- Physically hyperactive and restless
- Poor task persistence
- Loud and disruptive
- Rebellious and disrespectful
- In a word… **DYSREGULATED**
HOW DOES REGULATION GO OFF TRACK?

- **BASIC REGULATORY FUNCTIONS are NORMALLY ESTABLISHED in INFANCY and EARLY CHILDHOOD**
  - Through the protection of the infant from environmental and interactional stressors
  - By the external regulation of the infant who is not initially capable of self-regulation
WHAT IS CO-REGULATION?

• The maintenance of optimal and rewarding emotional states through mutual interactions between two individuals

• Involving multisensory interactions
  - Hearing
  - Vision
  - Taste
  - Touch
  - Smell
Co-regulation is a right brain event

- It is an implicit, non-verbal, bottom up communication schema that relies on affect recognition, facial matching, attunement and accurate contingent communications
- It communicates the most basic elements of safety and security and mutual affect coordination
THE SOCIAL BRAIN

THE RIGHT HEMISPHERE

- Dominant for Social and Emotional Functioning
- Growth Spurt during the 1st eighteen months
- Motor Development—crawling and walking
- Safety and Danger Recognition
- Autonomic and Physiologic Regulation
- Regulation of Emotion

(Shapiro, Jamner & Spence, 1997)
• How does co-regulation keep this from becoming this?
THE PROCESS OF CO-REGULATION

MIRRÖRING: Affect Matching and Synchrony

MIRROR SYSTEMS: Mirror neurons in the brain are activated during observation, imagination, empathy and execution of motor movements.
ATTUNEMENT:
Parents and teachers must be attuned not so much to the child’s overt behavior as to the reflections of the rhythms of his or her internal state. To regulate a child’s arousal, a parent or teacher must be able to regulate their own arousal state.
CONTINGENT COMMUNICATION: Transaction that involves:

- Perception of the child’s signals
- Making sense of the signals in terms of what they mean for the child
- A timely and effective response
REPAIR:
When there is the inevitable rupture in the ideal communication, repair is an acknowledgement of the disconnection and the attempt to reconnect.
ATTACHMENT AND REGULATION

- The attachment operation becomes the fundamental means for establishing the positive emotional states required for healthy neurodevelopment.
- The infant seeks out an attachment figure who helps her maintain positive affect stability expressly for the purpose of cultivating a developmental environment.
• Reciprocal interaction and proximity to the caretaker has a high reward value
• The infant works toward that reward using strategies developed in previous interactions with the primary caretaker
• In this fashion the infant is developing itself with the use of the parent.
The need for high emotional value relationships is a requirement that never goes away.

It’s not like you can fill up the reservoir and just run forever on a full tank.

It continues to be true in the school setting.
In a meta-analysis of 99 published studies, investigators found that, relative to older students, kids in primary school suffered more setbacks when student-teacher relationships were negative.

But positive relationships were particularly beneficial to older students, and overall, "stronger effects were found in higher grades" (Roorda et al 2011)
Indeed, in one large study of American teens, the single most important school-based predictor of academic growth in mathematics—from the 8th to the 12th grades—was a student’s perception of “connectedness” with his or her teachers (Gregory and Weinstein, 2004)
PHYSICAL DISCIPLINE IN THE SCHOOL

- So if a sense of connectedness with teachers is a strong predictor of academic performance...

- Then what kind of physical punishment works best—board or belt?
PHYSICAL DISCIPLINE IN THE SCHOOL

THE OFFICIAL DEFINITION: The infliction of pain or discomfort with the intention of changing behavior

DOES IT WORK?
WHAT DOES THE LITERATURE SAY?
- Decreased academic performance
- Decreased IQ
- Impaired relation with caretaker
- More rebellion and defiance
- Increased delinquency and behavior problems
- Greater rates of mental health problems like depression and anxiety
Physically punished children are more rebellious, have trouble internalizing limits, have more behavior problems and lower receptive vocabulary scores.

(Makenzie, 2013)
THE RELATION OF CORPORAL PUNISHMENT TO ABUSE

- Studies have consistently indicated that child physical abuse begins with an attempt to correct children’s behavior or to “teach them a lesson.” (Coontz and Martin, 1988; Gil, 1973; Kadushin, 1981; Margolin, 1990)
- A Canadian study confirmed that three quarters of substantiated child abuse started with physical discipline. (Durrant, 2004)
- Another study found that children who were physically punished were 7 times more likely to be physically abused. (Clement and Bouchard, 2000)
“Put those scissors on the shelf”
Kids accustomed to indirect commands may have interpreted imperative language as harsh or angry.

OR

“Is that where those scissors belong?”
Kids who’d been raised to respond to explicit directives may not have recognized a teacher’s question for what it really was – a veiled command.
CONGRUENT COMMUNICATION

• Why do we hate telemarketers?
• Why do we dread door to door salespersons?
• Why do we loathe the technical assistants for billing problems, cell phone issues and internet access?
The ability to regulate arousal level is a core-competency for the developing infant and child, and the foundation of cognitive development. It is the key task of early development. (Schore, 2001)

Co-regulation is not only a step toward autonomous regulation, it is a life long necessity and an ongoing support for self-regulation itself.
Co-regulation, as the name implies is a two way street. Just as the *regulation* of one individual affects the other, so does the *dysregulation*. This works between parents and children, teaches and students, and supervisors and employees. (Porges, 2017)
Co-dysregulation: Distressed child and anxious, reactive parent

Time

Child

Parent

Terror

Fear

Alarm

Alert

Calm

Hear  See  Grab  Plead  Jiggle  Shake  Yell  Disengage “Self-sooth

Disengage

All rights reserved © 2007-2017 Bruce D. Perry

childtrauma.org
Co-regulation creates a “buffer” for the child which makes an otherwise toxic stress tolerable (Shonkoff, Boyce, & McEwen, 2009)

The presence and active engagement of the caretaker to both shield the child and interpret experience helps to digest stressful events
THE MEASUREMENT OF ATTACHMENT
The most fundamental behavioral definition of attachment is “proximity seeking by a child when she/he senses discomfort or danger.”

Individual responses to stress are variable, based upon temperament and prior experience, but if there is a secure attachment they always involve proximity seeking toward an attachment figure.

If there is not a secure attachment the proximity seeking differs in kind and quality.
The Strange Situation procedure measures types of attachments—Secure and Insecure (the latter called either Avoidant or Ambivalent).

An additional category was later added called *Disorganized Attachment*—inconsistent, approach-avoidant, freeze and isolate.
Maltreated children represent as much as 82% in the Disorganized Attachment category (Carlson & Cicchetti, 1989).

Compared to 19% in the non-abused group.

The intrusion of fear into the attachment-comfort equation. The source of security is also the source of danger.

The unresolvable “approach-avoidance “dilemma
SEQUENTIAL BRAIN DEVELOPMENT
THE DEVELOPMENT OF REGULATION

BASIC REGULATORY FUNCTIONS are NORMALLY ESTABLISHED in INFANCY and EARLY CHILDHOOD

- Through the protection of the infant from environmental and interactional stressors
- By the external regulation of the infant who is not initially capable of self-regulation
Abstract thought
Concrete Thought
Affiliation/reward
"Attachment"
Sexual Behavior
Emotional Reactivity
Motor Regulation
"Arousal"
Appetite/Satiety
Sleep
Blood Pressure
Heart Rate
Temperature

To the rest of body via neuroendocrine & neuroimmune systems

To body via ANS (parasympathetic & sympathetic nervous systems)
THE DEVELOPMENT OF REGULATION

USE DEPENDENT DEVELOPMENT

- The brain develops through repetitive stimulation
- Repetitive stimulation of the brainstem during infancy and early childhood establishes baseline thresholds for arousal and reactivity
THE SIGNS OF DYSREGULATION

• The PERSISTENT FEAR RESPONSE and the SIGNS of HYPERAROUSAL:
  - Impulsivity
  - Reactivity
  - Hyperactivity
  - Aggression

• (MIS)DIAGNOSED AS:
  - ADHD
  - Bipolar Affective Disorder
  - Learning Disability
  - Conduct Disorder
CORTICAL MODULATION—you have it so why don’t they?

- The top part of the brain exercises control over the bottom part
- It’s the very thing that you do not see in a two year old, and it’s the thing you hope to see more of as they mature
- The frontal lobes are primarily inhibitory and modifying
THE DEVELOPMENTAL ORIGINS OF DELINQUENCY

• THE FUNDAMENTAL EFFECTS OF ABUSE AND NEGLECT
  - Disturbance of arousal
  - Disturbance of attachment
  - Dysregulation of reward

• THESE ARE ALL INTERRELATED AND THEY ALL HAPPEN EARLY
THE DEVELOPMENTAL ORIGINS OF DELINQUENCY

- Attachment and Development
  - Critical, early and encompassing
- Early Templates for Relations
- The Management of Aggression through Empathy
The brain takes associations from a single or specific event and generalizes to other situations.

Generalization can literally alter the way future experiences are sensed, perceived and processed.
REWARD
Emotional Neglect & Substance Use

- Lack of early life attachment leads to underdevelopment of ‘reward’ systems
- Therefore, reinforcing effects of relationships or intimacy is insufficient to motivate
- External stimulation of these reward systems using dopamine-stimulating (e.g., cocaine) or opioid-like drugs becomes an alternative route to reward
NEUROTRANSMITTERS OF REWARD—*dopamine*

- Drives the central reward system, including but not limited to social interactions and attachment
- Rewarding certain actions and responses, dopamine directs the learning of attachment
- Repeatedly separating rat pups from caregivers decreases dopamine production and increases reactivity to stress. It also increases sensitivity to cocaine as a reward.  
  
  *(Meany, Brake and Gratton, 2002)*
END