The Impact of Trauma on Children and Youth

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Trauma in Children and Teens: Expanding the Definition

The American Psychiatric Association’s Diagnostic and Statistical Manual defines a traumatic event as one in which a person experiences, witnesses, or is confronted with actual or threatened death or serious injury, or threat to the physical integrity of oneself or other.

Trauma is defined by the American Psychological Association as an emotional response to a terrible event such as an accident, rape or natural disaster.
The National Child Traumatic Stress Network lists events linked to child trauma. These events can involve actual or threatened exposure of the child to death, severe injury, sexual abuse, and may include exposure to domestic violence, community violence, assault, severe bullying or harassment, natural or man-made disasters, such as fires, floods, and explosions, severe accidents, serious or terminal illness, or sudden homelessness.
The Child Witness to Violence Project at Boston University School of Medicine defines child trauma as events that activate high levels of fear for one's life or someone closely connected.

According to Victor Carrion at Stamford University, young children have a distorted and non-permanent sense of life and death and porous boundaries between themselves and parent. Therefore, the absence or unavailability of a parent or primary attachment figure is emotionally equivalent to life threatening.
The Impact of Trauma

Trauma or perceived danger causes the excretion of adrenalin and cortisol in amounts that cause brain damage and death in laboratory animals.

(Perry 2004)
Cortisol & the Prefrontal Cortex

- Assesses risk
- Modulates fear
- Allows “executive control” – or at least guidance – over more primitive brain structures
- Is critical to relational functioning, empathy, connecting
- Helps children and adults with
  - Focus
  - Memory and reason
  - Self-awareness, reflection, emotions, impulses
Trauma:
Impact on brain development related to Cortisol regulation

- Impulse Control - inability to stop oneself
- Cause and Effect - limited capacity to anticipate consequences
- Predictability - lack of social “cueing”
- Emotional Regulation – extreme difficulty delaying gratification
- Reciprocal Engagement - inability to tolerate conflict with or in others
The Typically Developing Adolescent Brain

- Cortex still developing until mid-20’s
- Not able to execute cause and effect thinking consistently – even without trauma
- Dopamine is helpful to increase judgment and impulse control; trauma disrupts dopamine
- Brain hemisphere integration is effected – rational thought vs. overwhelming emotion
Rooted in Earlier Stages of Development

- Wooing Other Back
  Trust in Other → Attachment

- Testing the Strength of the Attachment
  Trust in Self → Autonomy
Developmental Tasks For Children and Youth

- Examining Relationships
  - Meaning/Morality

- Challenging the Attachments with Risk Taking and Identity Formation
  - Self Awareness and Competence
Missed Signals
Behavioral Reactions in Children in Response to Trauma

- attachment needs disrupted
- increased separation anxiety
- disrupted sleep
- regressive behaviors
- changes in eating patterns
- insomnia, sleep disturbances
- excessive crying
- psychosomatic complaints (headaches, stomach aches)
- changes in toileting patterns
Missed Signals

- emotional and behavioral disturbances (withdrawal; low self-esteem; nightmares; aggression against peers, family members; distraction of property)
- changes in ability to learn (difficulty focusing, concentrating, easily distracted)
- difficulty establishing good peer relationships
Missed Signals

- overreaction to loud noises, sudden movements
- decreased attention span
- mistrust of adults
- fear of being hurt
- mood swings, acting out
- increase in aggressive behaviors toward others

*Source: Child Witness to Violence Project; National Coalition for Child Protection Reform*
Triggers of old loss

Any loss can re-traumatize a child or adult as can situations characterized by additional threats, triggers of old trauma or simple uncertainty.
AHGGGGG or AHHHHHH
The Need for Dopamine
Seeking Equilibrium

The presence of parents or other adult attachment figures raises dopamine levels and lowers the dangerous levels of cortisol.

(Dozier, 2005)
Seeking Equilibrium

- **Dopamine seeking:** Drugs like cocaine, opium, heroin, and alcohol increase the levels of dopamine, as does nicotine.

- **Relationship seeking:** Any warm body will do?
Big T/Little t
Stress as Trauma

Persistent Fear and Anxiety Can Affect Young Children’s Learning and Development and change brain architecture.

Scientists now know that chronic, unrelenting stress in early childhood, caused by abrupt separation from caregivers, extreme poverty, or parental depression, for example, can be toxic to the developing brain in the same way as repeated abuse and witnessing violence changes brain architecture.

Toxic Stress

Strong & prolonged activation of stress response systems in the absence of buffering protection of adult support

Activated by:

- Recurrent abuse, neglect, care-giver depression, substance abuse, family violence OR triggers for tolerable stress that are prolonged and without supports
- Increased susceptibility to cardiovascular disease, hypertension, obesity, diabetes and mental health problems
Carrion also found that guilt over behaviors the child performed or failed to perform during the event or to prevent it, was highly associated with PTSD symptom severity.

His findings also suggest that changes in attachment behaviors were also significantly related to PTSD symptoms in children.
The Positive Cycle

- Trauma
- Cortisol
- Attachment
- Dopamine
- Recovery
- Reinforcement
- Resilience
The Negative Cycle

- Trauma
- Cortisol
- Stress
- Seeking dopamine
- Abandonment
- Toxic stress
- Change Brain Architecture
- Behavioral reactions
Long Term Reactions to Traumatic Stress

Behaviors that were protective during or in the immediate aftermath of stress, attachment disturbance and trauma can be maladaptive over time.
Long Term Reactions

ACE Study: Adverse Childhood Experiences Study

The ACE Study is an ongoing collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente. Led by Co-principal Investigators Robert F. Anda, MD, and Vincent J. Felitti, MD. The ACE Study is perhaps the largest scientific research study of its kind, analyzing the relationship between multiple categories of childhood trauma (ACEs), and health and behavioral outcomes later in life.
Adverse Childhood Experiences

Growing up experiencing any of the following conditions in the household prior to age 18:

- Recurrent physical or emotional abuse or neglect
- Sexual abuse
- An alcohol and/or drug abuser in the household
- An incarcerated household member
- Someone who is chronically depressed, mentally ill, institutionalized, or suicidal
- Mother is treated violently
- One or no parents
“Risk factors are not predictive factors because of protective factors.”

David Satcher, M.D.
Former U.S. Surgeon General
Protective Factors/Healing

- Primary Attachments
- Other adult bonds
- Skills
- Faith/meaning
- Empowerment
SAMHSA’s 4 R’s

Trauma Informed Approach for Systems and Services

- **Realize** the widespread impact of trauma and understand potential paths for recovery;
- ** Recognize** the signs and symptoms of trauma in clients, families, staff, and others involved with the system;
- **Respond** by fully integrating knowledge about trauma into policies, procedures, and practices; and
- **Resist Re-traumatization**.
SAMHSA’s Six Key Principles of a Trauma-Informed Approach

1. Safe & secure environment
2. Trustworthiness and transparency of attachments
3. Peer support
4. Collaboration and mutuality
5. Empowerment, voice and choice
6. Attention to cultural, historical, and gender contexts
Sometimes….

“Hurt people hurt people.”

*Burning Down the House:*

*The End of Juvenile Prison*

Nell Bernstein

What can we do to interfere with this cycle?
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