

A Journey Interrupted: The Impact of Trauma on Adolescent Development

1

Kathleen Brown-Rice, PhD, LPC, LMHP, CAC, NCC, ACS, QMHP, LCAS
University of South Dakota
Restoration Counseling and Consulting, LLC

Luanna Olthoff, MA, LPC-MH, LAC, QMHP
Restoration Counseling and Consulting, LLC

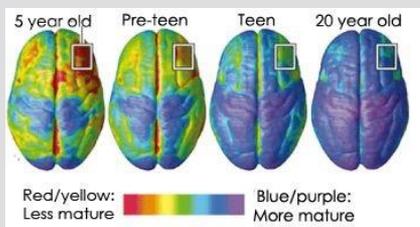
Objectives

2

- × Effects of trauma on the developing adolescent brain and the impact on cognitive functioning
- × Understanding environmental, social, and cultural conditions that impact adolescents' behavior
- × Strategies to use with adolescents with trauma concerns

The Adolescent Brain

3



(NIH, 2009)

Effect on Cognitive Functioning

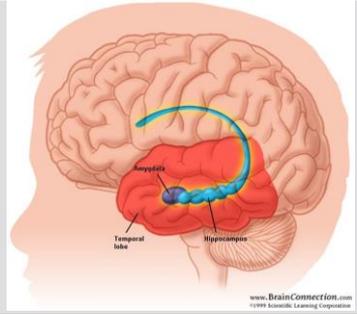
4

- ✗ Due to lack of brain development, adolescents have a tendency to:
 - ✗ act impulsively
 - ✗ misinterpret social cues
 - ✗ misconstrue emotions
- ✗ And less likely to:
 - ✗ think before they act
 - ✗ consider the consequences of their behaviors
 - ✗ modify inappropriate or dangerous behaviors

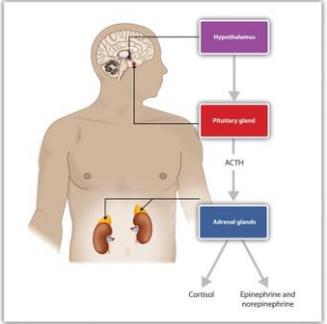
(Lupien et al, 2009)

Trauma and Amygdala

5



Hypothalamic-pituitary-adrenal (HPA) Axis



(<http://opentextbc.ca/introductiontopsychology/wp-content/uploads/sites/9/2013/11/601e8da76d4368c3d50dca3ba8764e.jpg>)

Hormonal Responses to Trauma

7

- × Catecholamines (natural adrenaline)
- × Corticosteroids (energy)
- × Opioids (natural morphine)
- × Oxytocin (euphoria)

(Campbell, 2015)

Environmental, Social, and Cultural Conditions

8

GENDER
POVERTY
PERCEIVED DISCRIMINATION
CROSS-GENERATIONAL TRAUMA
EPIGENETICS
HISTORICAL TRAUMA

Implications of Gender

9

- × Females tend to develop internalizing symptoms and become passive.
- × Males tend to externalize and turn to risk-taking activity and aggression.
- × Both genders feel more anxious and “on guard.”
- × Both may experience physical symptoms including headaches, stomach aches, asthma, stuttering, and poor grooming.

(Lenroot, 2010)



Implications of Poverty

10

- × Neuroimaging studies on the relationship between poverty and brain development found participants whose primary caregivers had received less education had larger amygdala volumes, while lower family income was associated with smaller hippocampal volume.
- × Lower family income was associated with less cortical surface area (support language, emotional functioning and impulse control).

(Saxby, 2016)



Implications of Perceived Discrimination

11

- × Perceived gender discrimination was linked to academic adjustment and psychological well-being. Perceived racial discrimination was negatively associated with student-teacher relationship quality (Thompson, 2016).
- × Male adolescents reported higher levels of perceived discrimination tended to show greater declines in GPA over time than those who reported lower levels of perceived discrimination (Umana-Taylor, Wong, Gonzales, 2012).
- × Adolescents who experience greater levels of discrimination become increasingly distracted from their school work and have difficulties concentrating, which causes them to suffer academically (Umana-Taylor et al., 2012; Vega et al., 1995).

Implications of Cross-Generational Transmission

12

- × Past traumatic events creates a pathway to current generation putting them at increased risk of mental and physical distress (Big Foot & Funderburk, 2011).
- × Three environmental ways trauma is transferred from primary caregiver:
 - × Identifying with their parents' suffering,
 - × Style of communication parents use to describe the trauma, and
 - × Parenting styles (Doucet & Rovers, 2010).

Cross-Generational Transmission
Parental Identification

13

- × Child identifies with trauma and takes on the trauma symptoms (Doucet & Rovers, 2010).
- × DSM-5 Includes a PTSD stressor criterion for adults, adolescents, and children older than six years related to learning that a close relative or close friend was exposed to trauma (APA, 2013).
- × PTSD diagnosis for a child 6 years or younger. One of the triggering events is a child learning that a traumatic event has occurred to a parent or caregiving figure (APA, 2013).

Cross-Generational Transmission
Parental Communication Style

14

- × How parents relayed information to children impacted children developing a fear (Lichenstein & Annas, 2000).
- × Relationship has been found between a parent having a fear and children developing the same fear (Lichenstein & Annas, 2000).



Cross-Generational Transmission
Parenting Style

15

- × Parenting can be impacted as a result of the parental exposure to trauma (Walker, 1999).
 - × Difficulty with trust and intimacy.
 - × Challenge to develop healthy attachment.
- × Relationship between a parent's diagnosis of PTSD and abuse and neglect of children (Yehuda, Bierer, Schmeidler, Aferiat, Breslau, & Dolan, 2000).

Cross-Generational Transmission
Epigenetics

16

- Children of Holocaust survivors have significantly lower cortisol secretion when compared with control groups; and
- Children of holocaust-surviving parents with PTSD had lower cortisol levels than children of survivors who did not have PTSD (Yehuda et al., 2000).
- 9-month old infants born to mothers who developed PTSD after 9/11 had lower salivary cortisol than infants born to unexposed mothers (Yehuda et al., 2005).

Human Social Genomics

17

- Social-environmental conditions (i.e., low socioeconomic status, social isolation, social threat, and low or unstable social status) have been found to associated with altered expression of hundreds of genes related to diseased tissues (e.g., metastatic cancers).
- Social adversity relates to common **conserved transcriptional response to adversity** (CTRA) characterized by increased expression of pro-inflammatory genes and decreased expression of genes involved in innate antiviral- and antibody-related genes responses.

(Cole, 2014; Cole et al., 2015)

Signs and Symptoms Trauma

18

TRAUMA SIGNS AND SYMPTOMS
SELF-REGULATION

Trauma Signs and Symptoms

19

- × Unmodulated aggression
- × Difficulty negotiating relationships with peers
- × Difficulty negotiating relationships with teachers
- × Sexual acting-out
- × Coming to class under the influence
- × Coming to class “hungover” from drug or alcohol use
- × Academic inactivity
- × Physical inactivity/obesity
- × Dress is an effort to cover/hide or protect
- × Evidence of self-harm

Difficulties with Self-Regulation

20

- × Poor sleep hygiene
- × Poor nutrition
- × Innocent classroom triggers
- × Maladaptive attempts at self-soothing
 - × Pacing
 - × Headphones
 - × Doodling/drawing
 - × Sleeping in class

Strategies to Use with Adolescents with Trauma Concerns

21

ATTUNEMENT
SAFE SPACE
THE “MAGIC”
PROTECTION
CONTROL
CREATIVITY
MINDFULNESS

Attunement

22

× The practice of one person focusing attention on the internal world of another

“This focus on the mind of another person harnesses neural circuitry that enables two people to feel felt by each other. This state is crucial for people in relationships to feel vibrant and alive, to feel understood and to feel at peace. Research has shown that such attuned relationships promote resilience and longevity.” (Siegel, 2007, p. 1).

(Atkinson & Atkinson, 2013)

Attunement, continued

23

× How do we work toward attunement?

- + Self-awareness
- + Self-regulation
- + Authentic interest
- + Clear feedback
- + Consistent mood



(Atkinson & Atkinson, 2013)

Calm Space

24

× Safe physical and emotional spaces

- × Allow students opportunities for self-imposed “time-outs”
- × Consistent and predictable patterns for each day
- × Clear expectations of student behavior, and clear and consistent consequences for breaking rules
- × Creativity in methods used to help students regulate while remaining in the classroom

(Atkinson & Atkinson, 2013)

The Magic

25

× Relationships

- × Establishing safe, authentic, and positive relationships can be corrective and restorative to survivors of trauma
- × Meeting students where they are: being present at that moment without expectations of doing or being. What happens is **magical!**



(Atkinson & Atkinson, 2013)

Protection

26

× Protection

- × Be on the look-out for a student who may be triggered. They don't always recognize this themselves.
- × Feeling reflections
- × Content reflections
- × Immediacy
- × Create an emotional container



(Atkinson & Atkinson, 2013)

Control

27

× Provide a sense of control for students

- × When a traumatized child feels they have lost control of a situation, they predictably get more symptomatic. Create choices!
- × Create discrete signals/code words
- × Developing rituals
- × Anchoring points

(Atkinson & Atkinson, 2013)

Creativity

28

- × Incorporate artistic modalities
 - × Music
 - × Movement
 - × Dance
 - × Storytelling



(Atkinson & Atkinson, 2013)

Mindfulness

29

- Paying attention to your life, here and now, with kindness and curiosity
- Being fully present with what is happening right here, right now
- Decreases stress, depression, anxiety, and hostility
- Enhances executive function, compassion, and empathy

Mindfulness Techniques

30

- Breathing exercises
- Guided Imagery
- 5-4-3-2-1
- Tactile objects
- Quiet time before tests and/or lessons
- Metaphors



Remember . . .

31

- × If we do not release or acknowledge feelings, they get stored and become part of our physical and emotional make-up.
- × Adolescents' feelings that are stored and "stuffed" become activators for negative behaviors. And so, what we must teach them is how their emotional reactions affect their behavior.
- × We want to help them become aware of situations that cause stress, frustration, or emotional upset and to develop strategies for reducing that stress.

Questions

32