

Understanding the Impact of Trauma

Marilyn G. Stein

MGS Consulting, LLC

marilynstein@aol.com

Healthy People

- People whose integrity has not been damaged in childhood, who were protected, respected, and treated with honesty by their parents, will be - both in their youth and in adulthood - intelligent, responsive, empathic, and highly sensitive. They will take pleasure in life and will not feel any need to kill or even hurt others or themselves. They will use their power to defend themselves, not to attack others.
 - Alice Miller

To Bear Reality

- *"Sometimes we encounter experiences that so violate our sense of safety, order, predictability and right, that we feel utterly overwhelmed. Unable to bear reality. We have come to call these shattering experiences trauma."*

- Bessel A. van der Kolk, MD

Defining Trauma

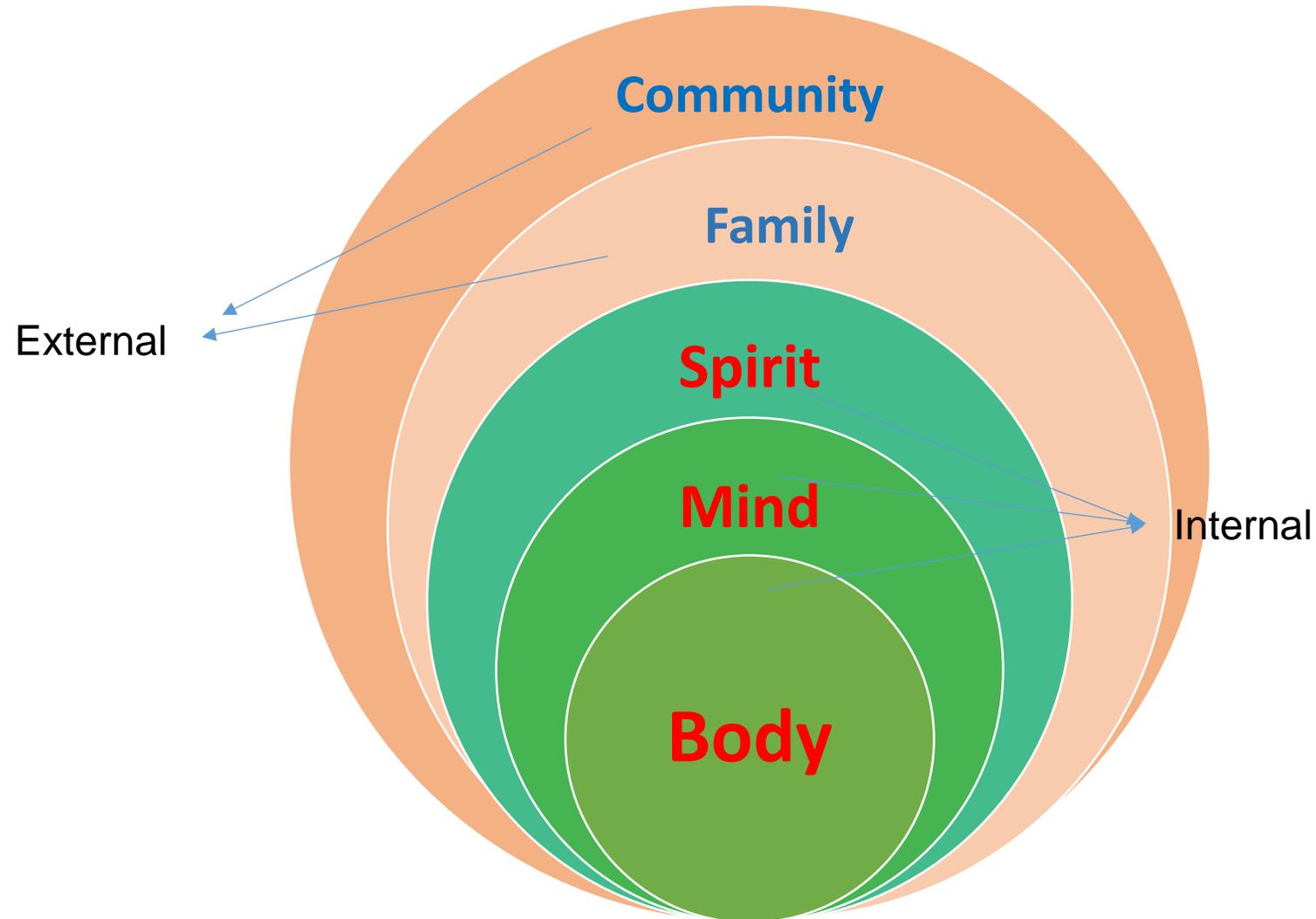
Individual trauma results from an event, series of events or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social emotional or spiritual well being. (SAMHSA 2012)

Trauma ...

... Ignites Fight, flight or freeze response

... Re organizes the brain

Traumatization occurs when both internal and external resources are inadequate to cope with the external threat. (van der Kolk)



Stress

- Learning to cope with stress is an important part of child development.
- When a young child's stress response systems are activated within an environment of supportive adult relationships, these physiological effects are buffered and brought back down to baseline.
- Extensive research on the biology of stress shows that healthy development can be derailed by excessive or prolonged activation of the body's stress response systems, with damaging effects on learning, behavior and health.

Toxic stress

- Occurs when a child experiences strong, frequent and/or prolonged adversity—physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence and/or the accumulated burdens of family economic hardship—without adequate adult support.
- The prolonged activation of stress response systems disrupts the development of brain architecture and other organs and increases the risk for stress-related disease and cognitive impairment.

from the Harvard Center for the Developing Child, <http://developingchild.harvard.edu>

Toxic stress hijack's the brain

**Stressed children:
cannot learn
cannot feel
cannot calm down
cannot get along**

The development of the human brain is use-dependent. The brain develops its structure in the first four years of life, depending on the experiences the environment offers the child. The brain of a child who has mostly loving experiences will develop differently from the brain of a child who has been treated cruelly. Alice Miller

The results of Prolonged Stress

Adaptive changes in *cognition*

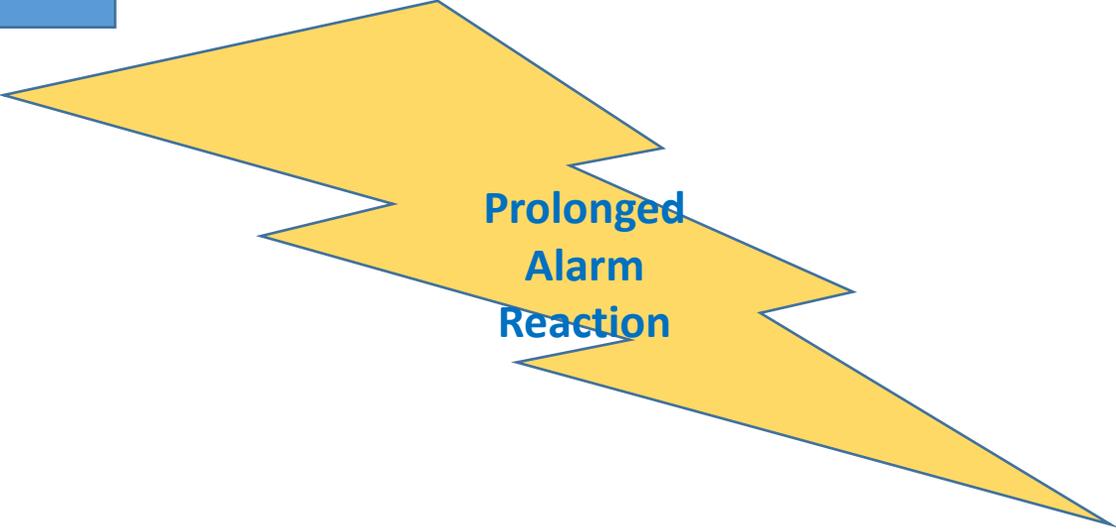
Adaptive changes in *affects*

Adaptive changes in *behavior*

Adaptive changes in *neurophysiology*

Adaptive changes in *physiology*

Traumatic event



Prolonged
Alarm
Reaction

Altered
Neural
Systems

The first 1000 days (includes 9 months prior to birth)

- There are critical periods in the developing brain when it is open to development. Then it closes and an opportunity may be missed.
- The developing brain is constantly responding to its environment.
- The brain's priority is survival in its environment.
- Enriched environments provide for optimal development. (ie: higher iq's)
- The first 1000 days of life are a critical period.

Fetuses are busy

“All of our senses are fully installed and are test driven pre-birth.”

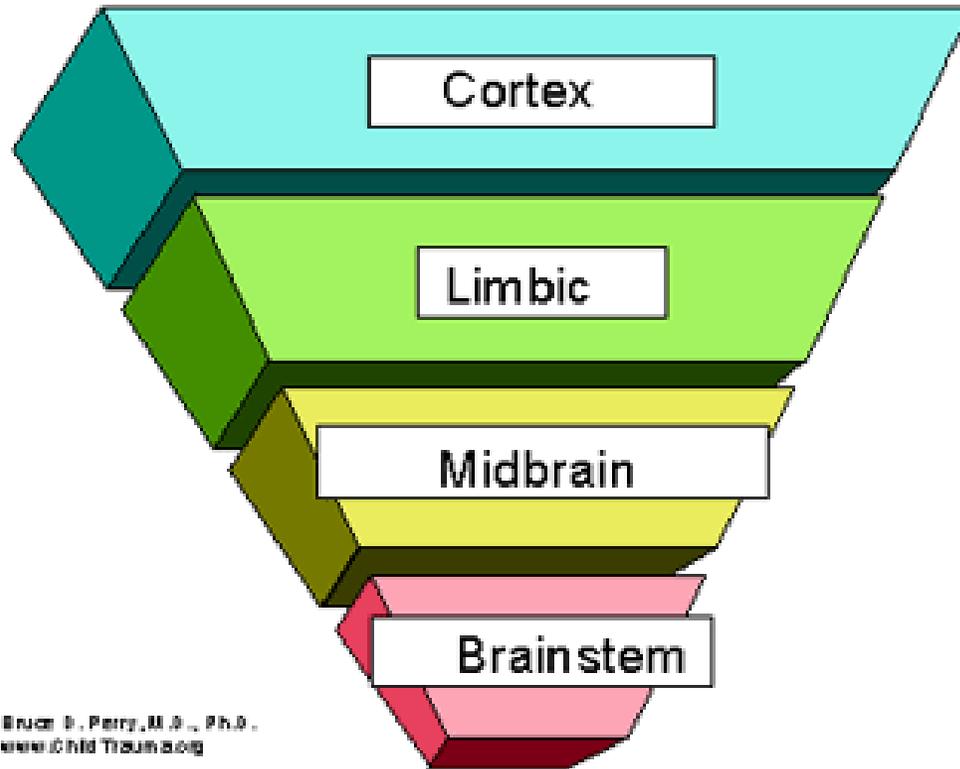
(Ghosts In the Nursery. pg 55)

- Touch: active at 17 weeks
- Taste: 15 weeks
- Hearing: 24 week
- Vision: 16 weeks (light sensitivity)

The expectant mom's stress, drug use, malnourishment, mental health and experience of trauma strongly impact emotional development which hampers healthy emotional regulation throughout life.

Bottom to Top Development

Exhibit 1



Abstract thought
Concrete Thought
Affiliation
"Attachment"
Sexual Behavior
Emotional Reactivity
Motor Regulation
"Arousal"
Appetite/Satiety
Sleep
Blood Pressure
Heart Rate
Body Temperature

The Autonomic Nervous System

Sympathetic

- It is a nice, sunny day...you are taking a nice walk in the park. Suddenly, an angry bear appears in your path. Do you stay and fight OR do you turn and run away?
- These are "Fight or Flight" responses. In these types of situations, your sympathetic nervous system is called into action - it uses energy - your blood pressure increases, your heart beats faster, and digestion slows down.

Parasympathetic

- It is a nice, sunny day...you are taking a nice walk in the park.
- This time, however, you decide to relax in comfortable chair that you have brought along. This calls for "Rest and Digest" responses. Now is the time for the parasympathetic nervous to work to save energy - your blood pressure decreases, your heart beats slower, and digestion can start.

The Alarm State

- A frightened child doesn't focus on the words
- They attend to the threat related signals in their environment
 - the nonverbal signs of alarm
 - eye contact
 - facial expression
 - body posture

- Trauma results in an alienation from the body and a reduced capacity to be present in the here and now.
- Although exact prevalence estimates vary, there is a consensus in the field that most consumers of mental health services are trauma survivors and that their trauma experiences help shape their responses.

Adverse Childhood Experiences (ACE)

- Adverse childhood experiences, or ACEs, are broadly defined as incidents during childhood that harm social, cognitive and emotional functioning.
- Adverse childhood experiences (ACEs) include abuse, neglect and a range of household dysfunction such as witnessing domestic violence, or growing up with substance abuse, mental illness, parental discord, or crime in the home.
- ACEs are strongly related to development and prevalence of a wide range of health problems, including substance abuse, throughout the lifespan.
- Over time, and often during adolescence, the child adopts coping mechanisms, such as substance use. Eventually, this contributes to disease, disability and social problems, as well as premature mortality.

Higher cumulative ACE scores have been shown to ...

- Increase the odds of smoking, heavy drinking, incarceration, and morbid obesity.
- Increase the risk for poor educational and employment outcomes and recent involvement in violence (Bellis, Lowey, Leckenby, Hughes, & Harrison, 2013).
- Significantly increase the odds of developing some of the leading causes of death in adulthood, such as heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease.
- Prior studies have shown that for children who have experienced four or more ACEs, the odds of having one of the above-mentioned negative health outcomes in adulthood are up to 12 times greater than those of children who have not had such exposure (Felitti et al., 1998).

ACE Study categories

1. recurrent and severe physical abuse
2. recurrent and severe emotional abuse
3. contact sexual abuse

Growing up in a household with:

4. an alcoholic or drug-user
5. a member being imprisoned
6. a mentally ill, chronically depressed, or institutionalized member
7. the mother being treated violently
8. both biological parents *not* being present

Death



Conception

**Early
Death**

**Disease,
Disability, and
Social Problems**

**Adoption of
Health-risk Behaviors**

**Social, Emotional, and
Cognitive Impairment**

Disrupted Neurodevelopment

Adverse Childhood Experiences

**Mechanisms by Which Adverse Childhood Experiences
Influence Health and Well-being Throughout the Lifespan**

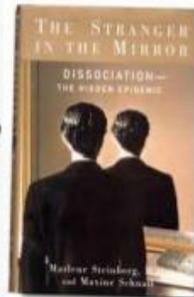
Trauma and Substance Use Disorders

- Many with substance use disorders have experienced trauma as children.
- Substance abuse predisposes people to higher rates of trauma due to high risk behaviors.
- Substance abusers who have experienced trauma have worse treatment outcomes than those without trauma histories.
- More than half of the women seeking treatment have histories of trauma.

Dissociation

1. Defining dissociation

“It’s as if your mind is not in your body; as if you are looking at yourself from a distance; like looking at a stranger”



Dissociation

- Detached
- Numb
- Compliant
- Suspension of time
- De-realization
- Fainting

Hyper Arousal

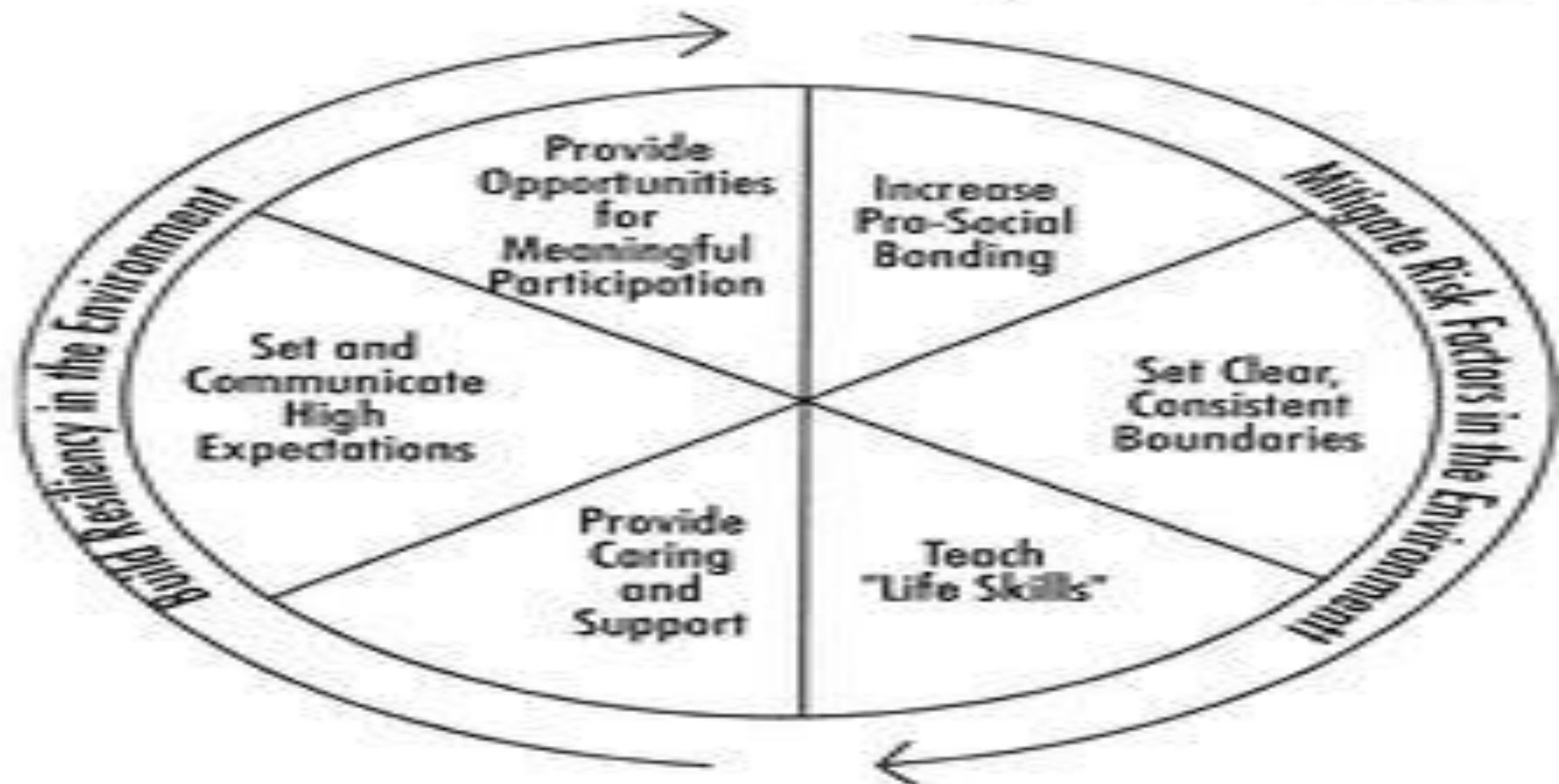
Hyper-arousal

- Hypervigilance
- Irritability
- Depression
- Prone to anger
- Exaggerated startle response
- Sleep disturbance
- Dissociation
- Problems of concentration
- Vulnerability to medical illness

Resilience

Trusting in one's ability
to manage the moment

The Resiliency Wheel



References

- The Prevalence of Adverse Childhood Experiences (ACE) in the Lives of Juvenile Offenders; **Michael T. Baglivio and Nathan Epps** Florida Department of Juvenile Justice, Tallahassee, Florida, **Kimberly Swartz** University of Florida College of Medicine/Levin College of Law, Gainesville, Florida, **Mona Sayedul Huq** University of Florida College of Health and Human Performance, Gainesville, Florida, **Amy Sheer and Nancy S. Hardt** University of Florida College of Medicine, Gainesville, Florida
- Ghosts in the Nursery
- The Body Keeps Score