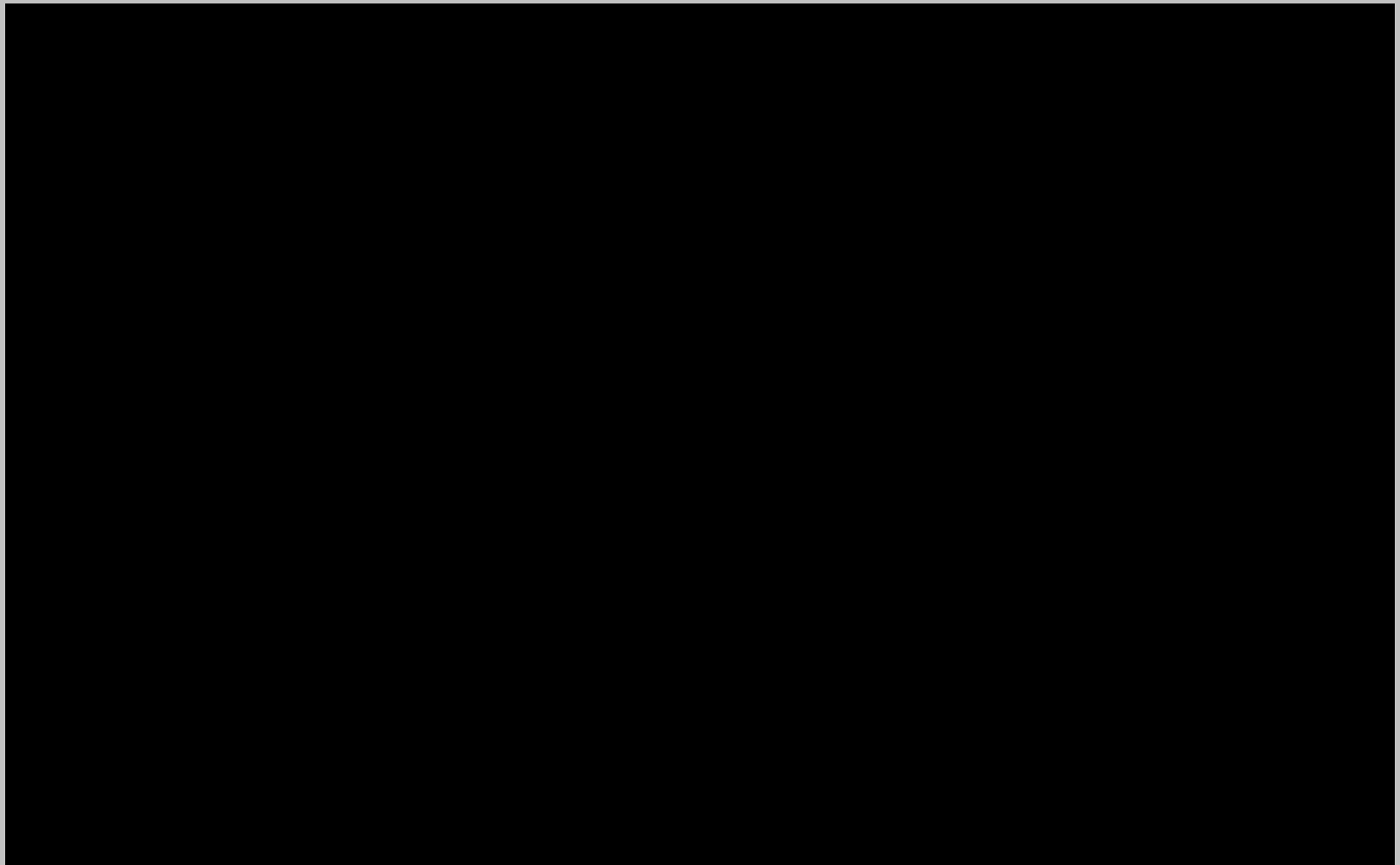


Mental Health Training Curriculum: Juvenile Justice

Understanding Adolescent Development and Child Trauma



ModelsforChange

Systems Reform in Juvenile Justice

An Initiative supported by the John D. and Catherine T. MacArthur Foundation

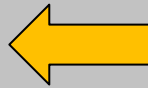
Brain Basics - Development

- The brain is an amazing organ that controls most of the things we do. As the brain develops, it focuses on different areas of functioning:
 - First – **Physical** life functions (breathing, heart rate, blood pressure)
 - Next – **Emotional** (happiness, anger, attachment)
 - Last – **Thinking** (planning, impulse control)

Brain Development (Back to Front & Inside to Outside)

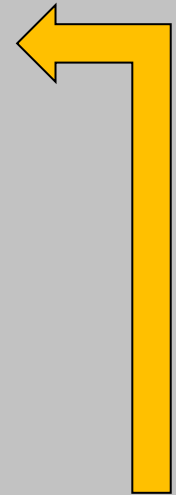
Cerebral Cortex

Reason and Morals



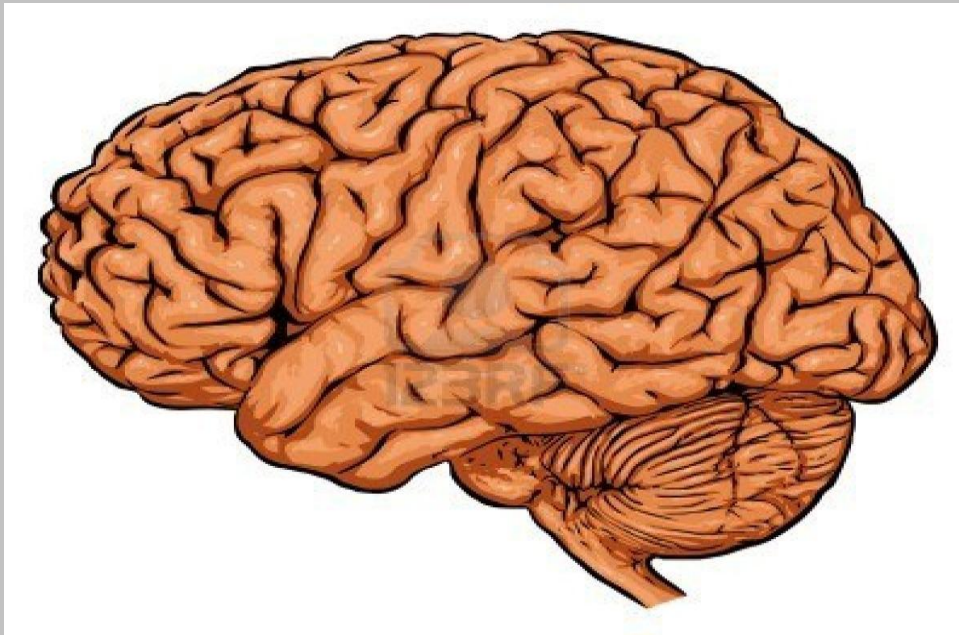
Limbic System

Emotions and Memory



Brain Stem

Physical Body Regulation



Brain Basics – Plasticity

- **Critical Periods** – for some aspects of brain development, timing is critical. Important abilities will be lost or diminished if they don't develop at the right time.
- Childhood experiences impact how the brain develops.
- Negative early childhood experiences can result in developmental delays.
 - Don't confuse a youth's age with his or her developmental level.

Brain Basics – Plasticity

Activity-dependent changes

- Experiences cause changes in the brain, for better or worse.
 - This is why we practice behaviors – the more we repeat things, the stronger the brain connections.
 - A single, powerful experience can affect our brain for life.
 - Repeated smaller experiences can also change our brain.
- This is why there is always hope that youth can improve with new, positive experiences.

Teenage Brain Development

- Adolescent changes begin around ages 10-13.
 - Physical appearance (puberty)
 - Emotions (feelings and identity)
 - Thinking (planning and impulse control)
- We usually identify adolescence as starting when we see physical changes. **Though less obvious, these physical changes will be followed by changes in emotional expression and thinking.**
- But, the changes in thinking aren't in place until the early 20s.

Explaining “What it means”.

Increased Emotions/Arousal

+

**Lack of Moral Reasoning &
Poor Judgment**

=

Vulnerability

Emotion Before Reason



Teenage Brain Development

Adolescence is like giving a teenager a car with:

- a new body with a lot of horsepower (physical);
- a sensitive gas pedal that can go from 0-60 mph in a few seconds (emotional); and
- a brake system that won't work completely for several years (thinking).



What Science Tells Us About the Brain

- Functioning of the frontal lobes is not at adult levels.



- Why is that important?

(Steinberg, 2008)

Cognitive Development

- Science has taught us that the part of the brain that develops most during adolescence is the prefrontal lobe, which controls:
 - complicated decision-making.
 - thinking ahead.
 - planning.
 - comparing risks and rewards.

Cognitive Development

- This new science has also taught us that the prefrontal lobe is still developing and maturing through adolescence and into the early 20s.

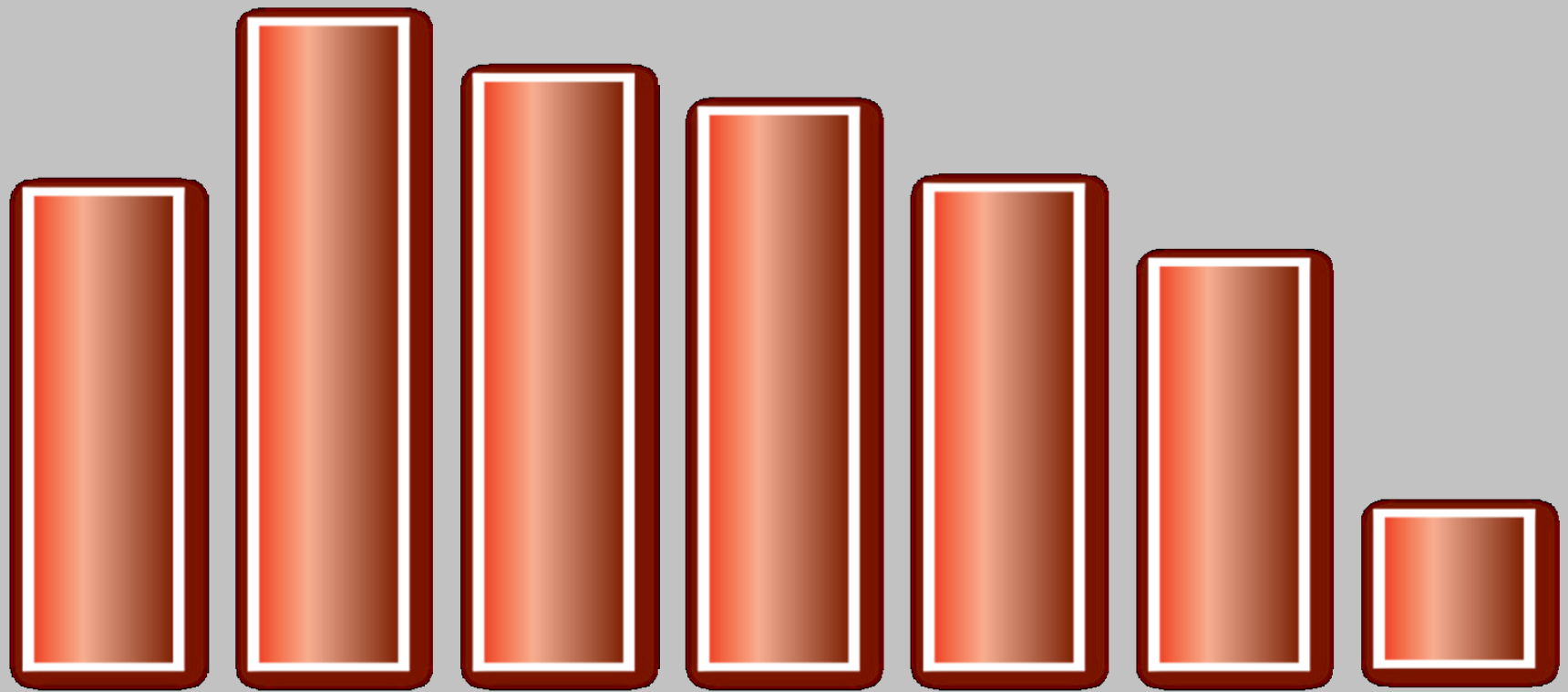
Cognitive Development

- Because the brains of teenagers are not yet fully developed, some of their behaviors may result from immaturity.
- Recall your teenage behavior: did you do anything that could have gotten you stopped by police?
- Would you deal with that same situation differently now as an adult?

Cognitive Development

- Even though teenagers start to look like adults, they are still limited by their cognitive development.
- Don't confuse physical development with emotional or cognitive development.

Sensation-seeking Declines with Age



10-11

12-13

14-15

16-17

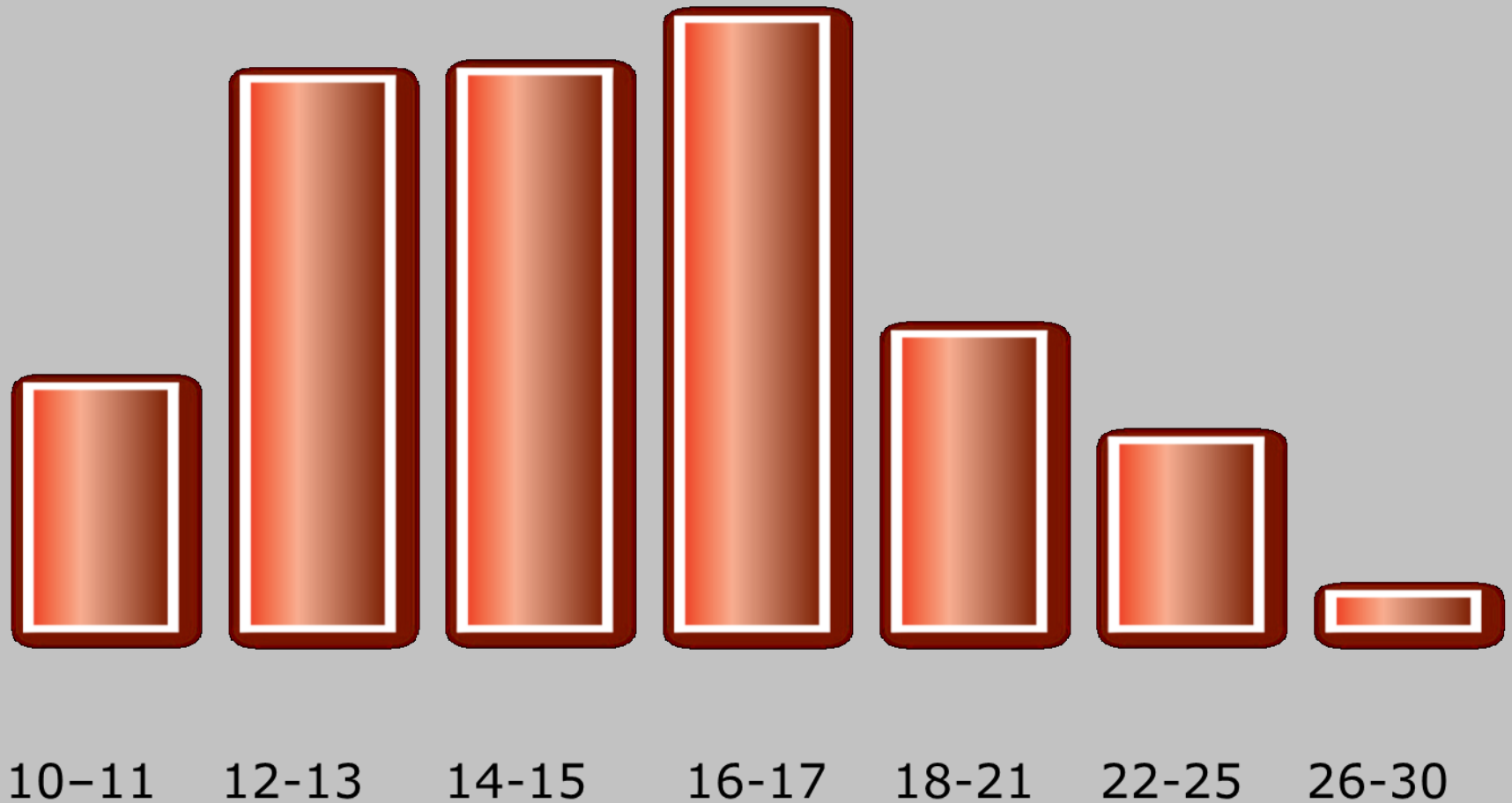
18-21

22-25

26-30

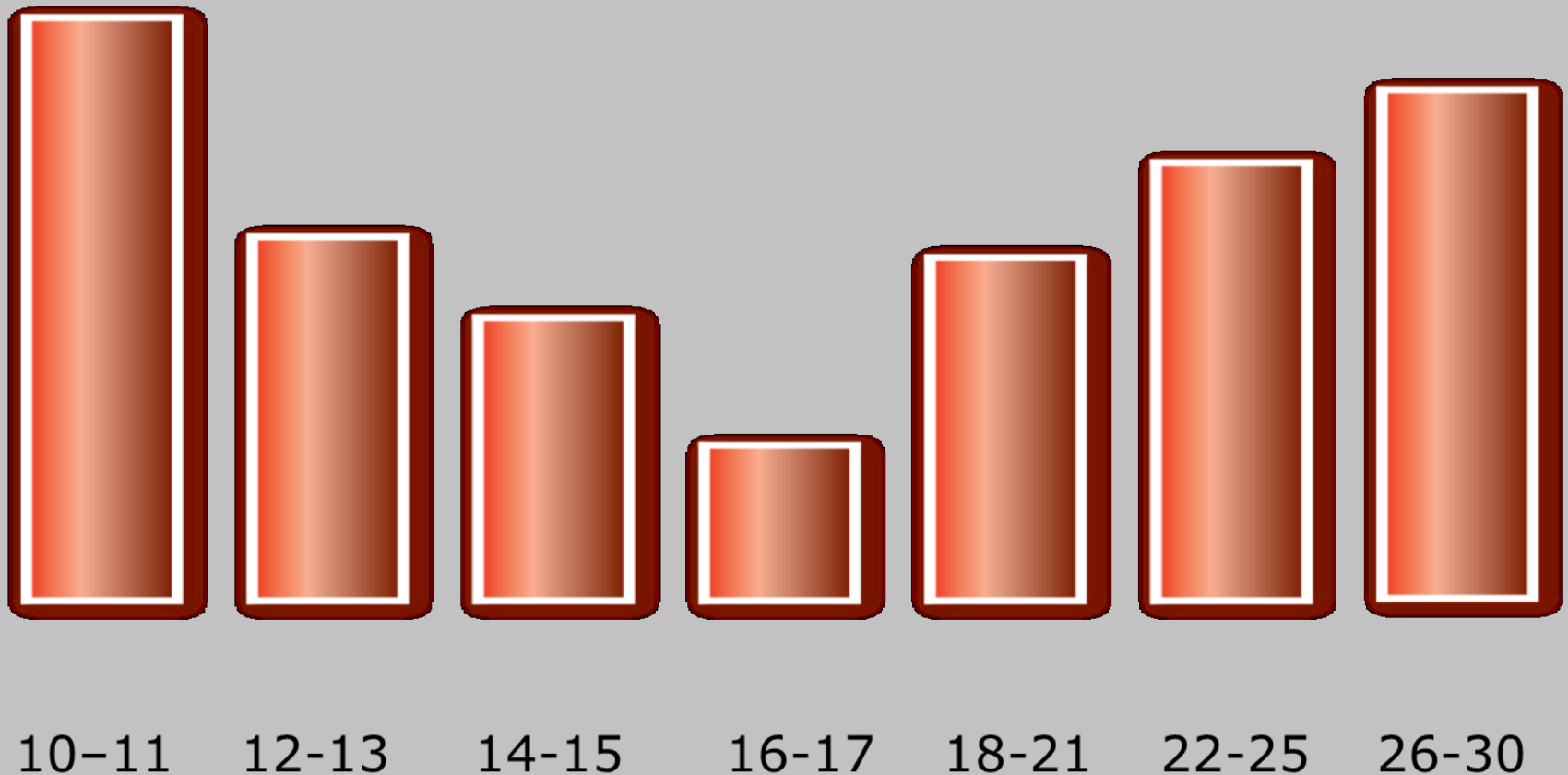
(Steinberg, et.al., 2008)

Preferences for Risk Peaks in Mid-Adolescence



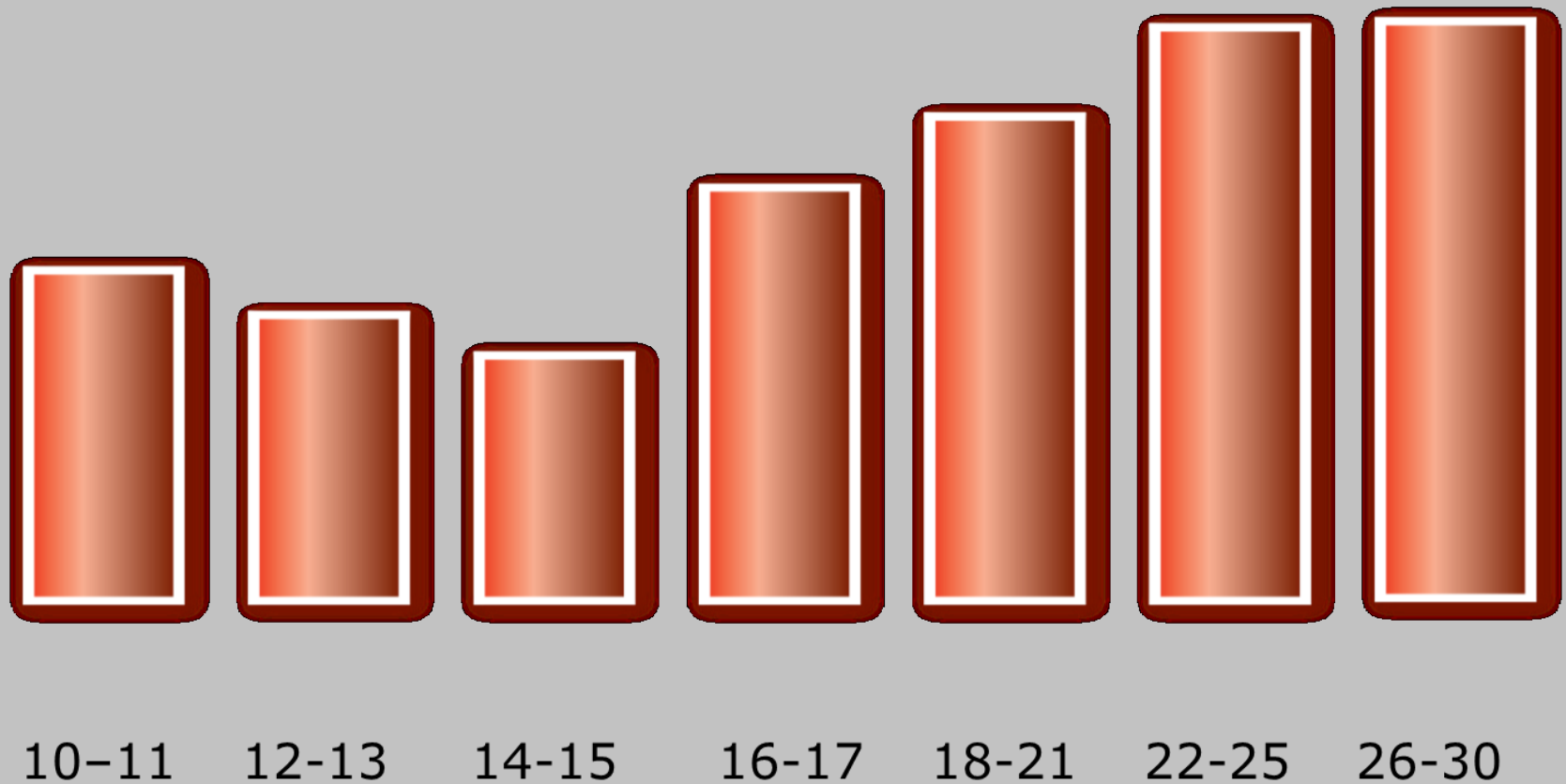
(Steinberg, et al., 2009)

Risk Perception Declines and then Increases After Mid-Adolescence



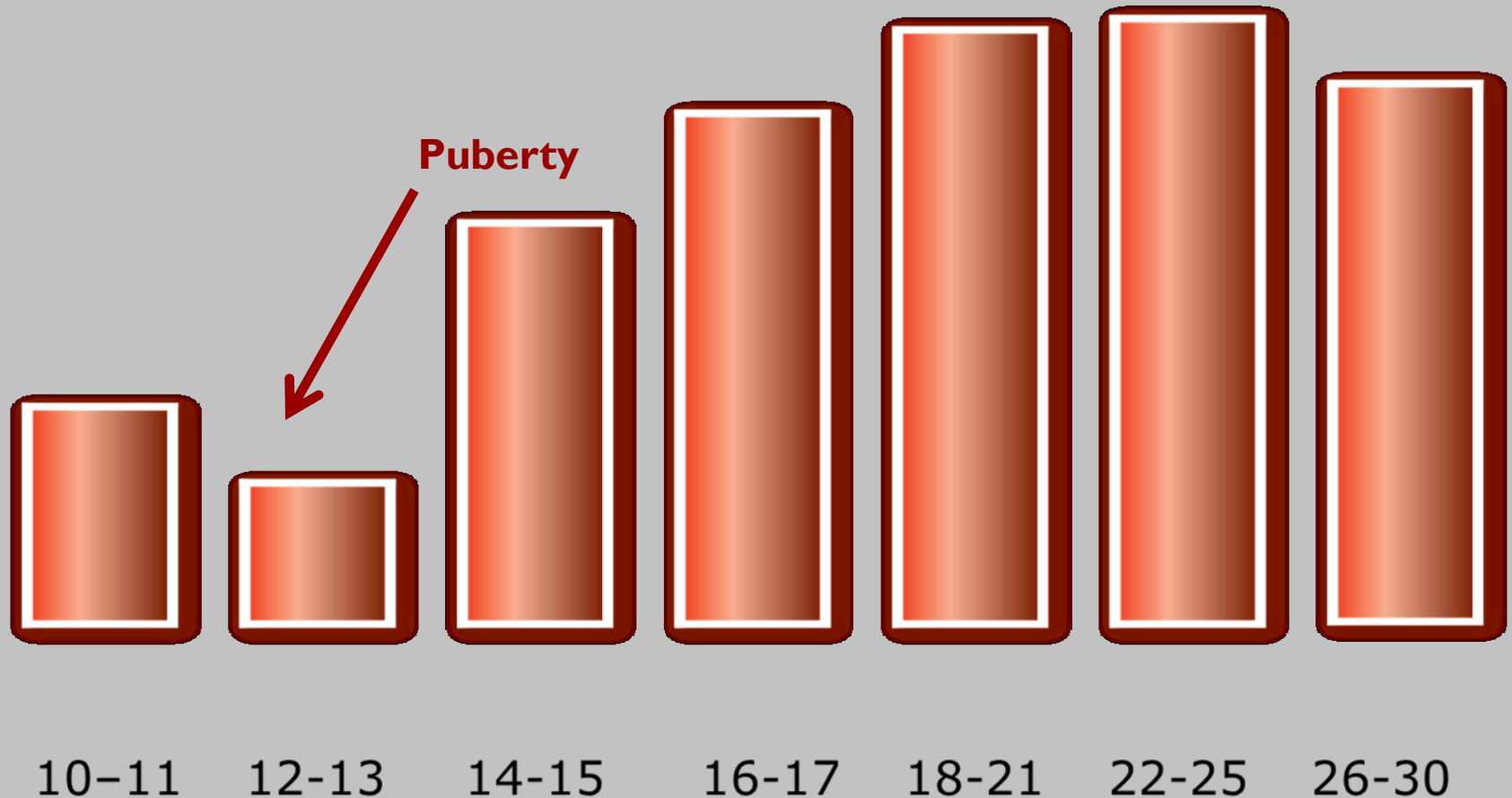
(Steinberg, et al., 2009)

Future Orientation Increases with Age



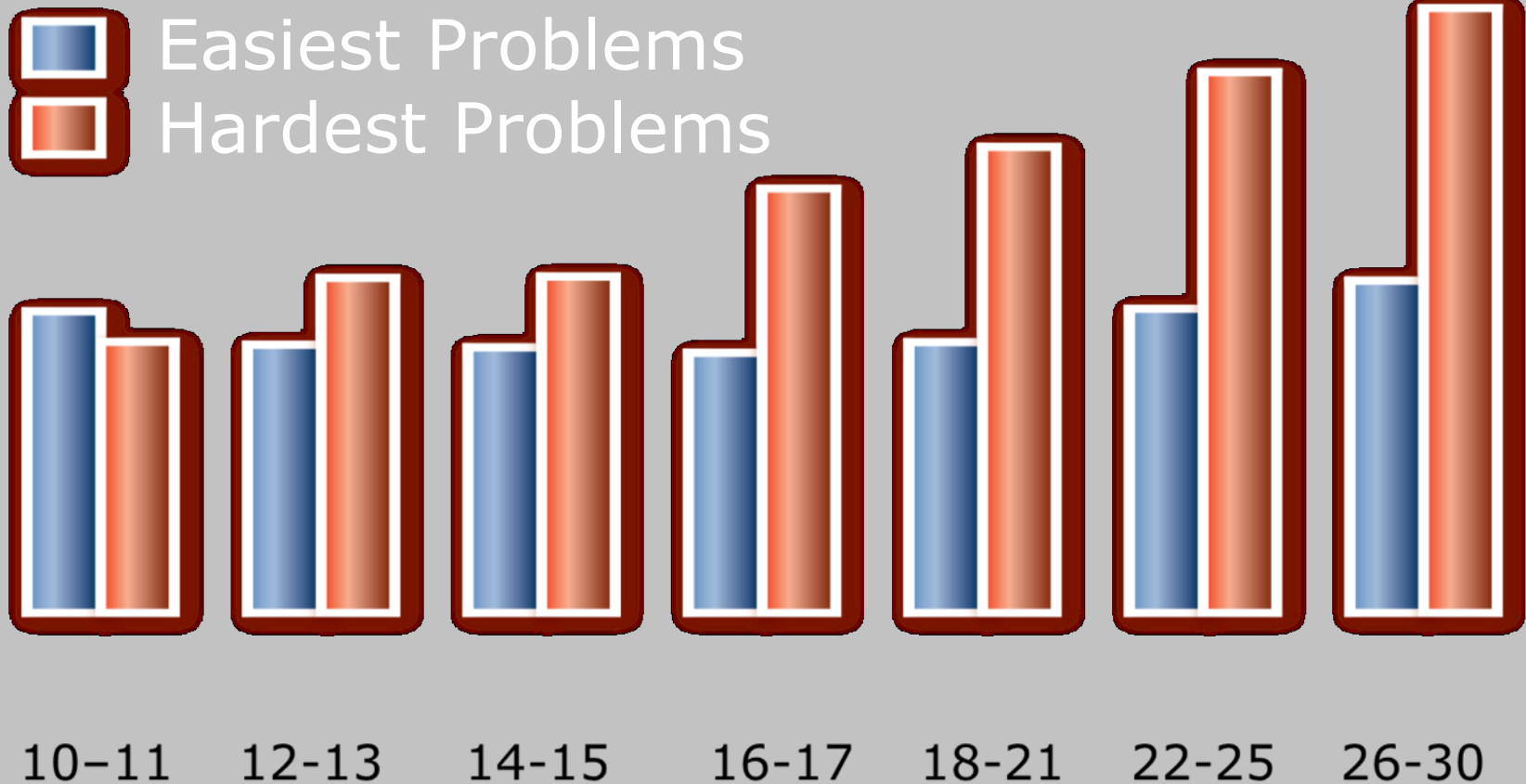
(Steinberg, et al., 2009)

Older Individuals Are More Willing to Delay Gratification



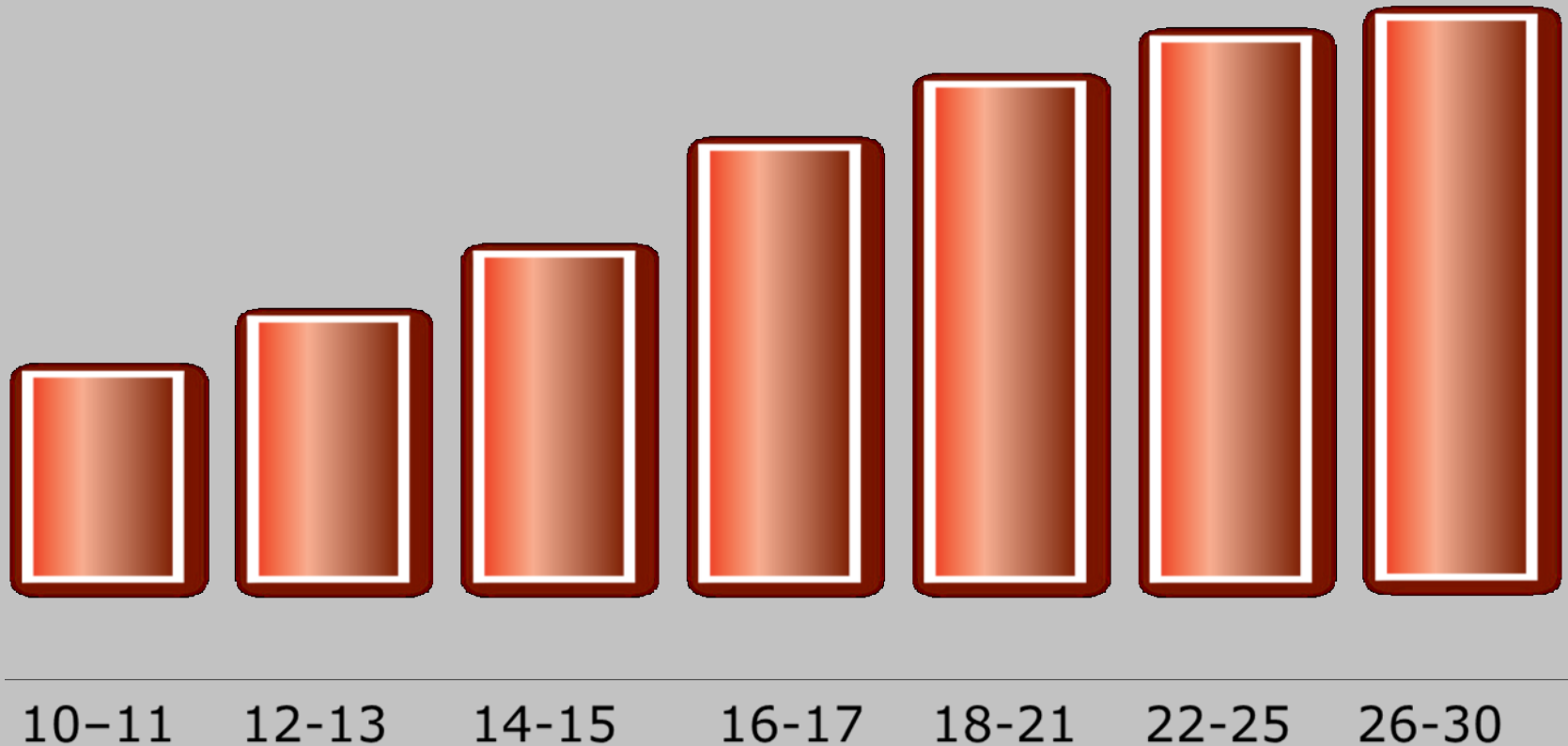
(Steinberg, et al., 2009)

With Age, Longer Time Spent Thinking Before Acting



(Steinberg & Monahan, 2007)

With Age, Individuals Become More Resistant to Peer Influence



(Steinberg & Monahan, 2007)

Summing Up Cognitive Development

- Adolescents are less able to control impulses and more driven by the thrill of rewards.
- Adolescents are more short-sighted and oriented to immediate gratification.
- Adolescents are less able to resist pressure from peers.

What can adults do to help adolescents?

- Understand that youth brains develop based on what they experience.
- Adults can help teenagers develop strengths.
 - Calming and self-regulation skills
 - Assertiveness rather than aggression
 - Problem-solving skills

Trauma Definition

- The experience of an event by a person that is emotionally painful or distressful and which often results in lasting mental and physical effects

Traumatic events can include:

- Abuse: physical, emotional, sexual
- Neglect
- Victimization
- Domestic / community violence
- Accident / illness
- Natural disaster
- War / terrorism

Trauma experiences can:

- be life threatening.
- be overwhelming.
- be a subjective, internal state.
- vary between people.
- vary over time with the same person, per developmental level.
- be a single incident or chronic incidents.

Symptoms of Trauma Effects

- Nightmares
- Flashbacks
- “Fight or Flight”
- Dissociation
- Cutting
- Hyper-arousal
- Misinterpretation of cues
- Overreaction

Prevalence Studies of Youth

- In a longitudinal general population study of 9- to 16-year-old youth, 25% had experienced at least one traumatic event, with 6% having experienced a traumatic event in the past three months

Prevalence of Traumatic Experiences for Youth in Juvenile Justice

- At least 75% of children in the juvenile justice system have experienced traumatic victimization. **(Events)**
- As many as 50% of these youth may have symptoms of trauma. **(Effects)**

(National Child Traumatic Stress Network, 2009)

Prevalence of Traumatic Experiences for Youth in Juvenile Detention

- **93% of children in detention report exposure to adverse events.** These adverse and potentially traumatic events include accidents and serious illnesses, physical abuse, sexual abuse, neglect, traumatic loss, and domestic and community violence.
- The majority of youth were exposed to **six or more** events.
- **Girls reported greater exposure** to all adverse events, except physical abuse and traumatic loss.

(Abram, et al., 2004; Ford, et al., 2007)

Trauma – Long-term Impact (Examples of Long Term Problems)

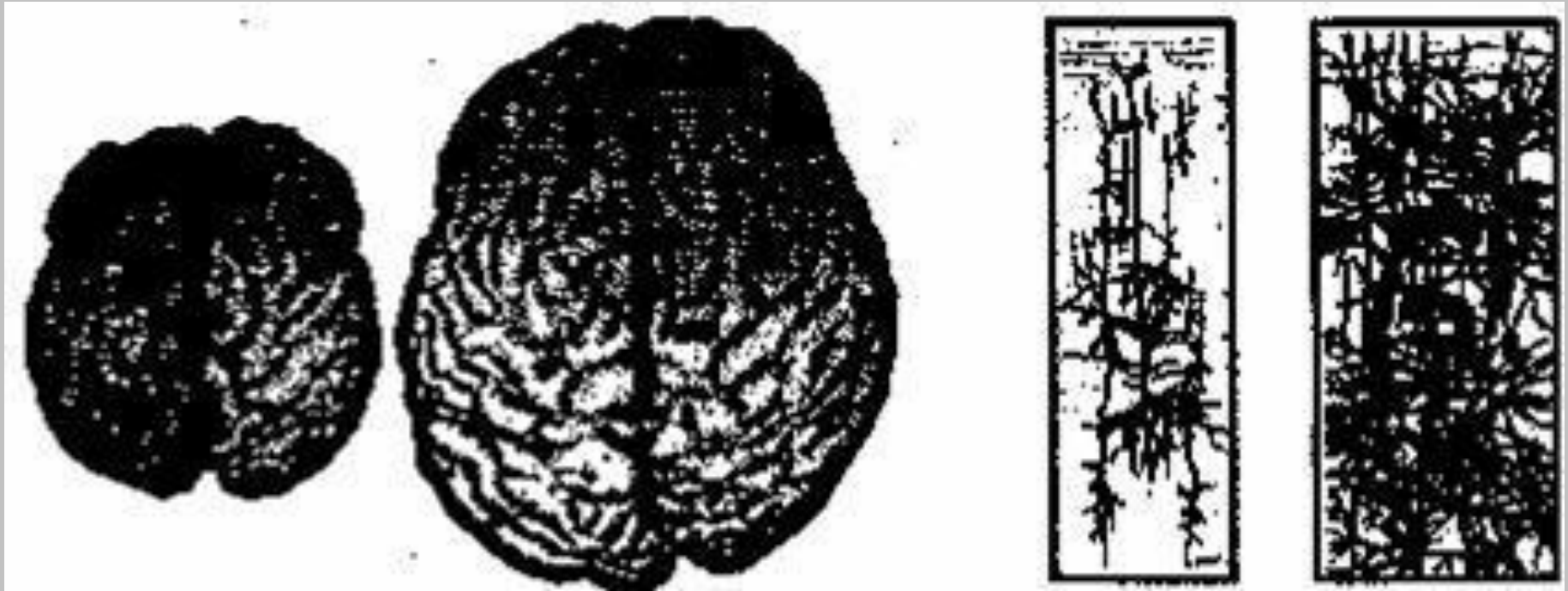
Exposure to these adverse experiences increases a youth's risk for:

- major mental illness
- substance abuse
- AIDS and sexually transmitted diseases
- impaired physical health
- academic difficulties
- early death.

Impact of Trauma on Academics

- Youth are less ready to start school.
- Youth don't perform as well in school.
- Youth who aren't performing well have more behavioral difficulties.
- Youth have an increased likelihood of dropping out of high school.

Normal Brain Development



Newborn

6-year-old

Newborn

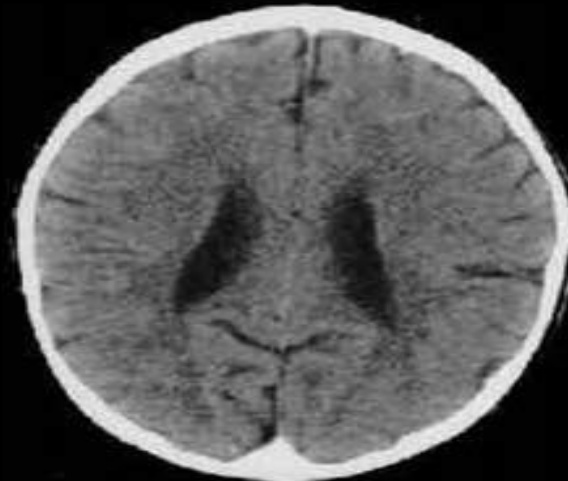
6-year-old

Disrupted Brain Development from Childhood Neglect

3 Year Old Children



Normal



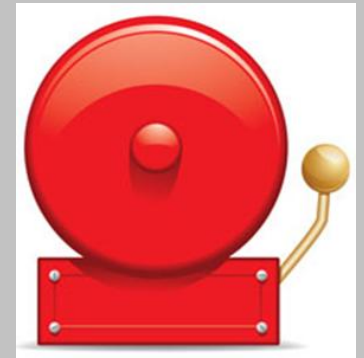
Extreme Neglect

www.childtrauma.org

Bruce D. Perry, M.D., Ph.D. ©2002

Trauma and Alarm

- Alarm system as a survival mechanism
- Extreme or frequent threats can damage the alarm system.
- With trauma, the alarm system is too easily triggered and too slow to shut down.



Danger

Traumatic Response Styles

- Fight
- Flight
- Dissociation
 - Nonresponsive
 - Self-mutilation

Trauma and Triggers

After trauma, youth:

- are on constant alert.
- may over-interpret signs of danger.
- may overreact to normal situations.



Recovery – What Adults Can Do

- Safety
- Supportive adult relationship
- Self-soothing
- Strengths

Recovery – Safety

- **Safety is essential.** From a trauma perspective, youth act out when they feel threatened. Therefore, helping youth feel safe should reduce the acting out and improve safety.
- **Structure and predictability** can help youth feel safe.
- **Set limits appropriately.**
 - No violence.
 - No yelling.
 - No retaliation.

Recovery – Support

- You don't have to be a therapist to be therapeutic.
- **Be consistent** during interactions with youth.
- **Model** appropriate coping, anger management, and problem-solving behavior.
- **Follow up** with youth after a crisis.
- Each interaction presents an opportunity . . .
 - to build skills.
 - to foster a helping relationship.

Recovery – Self-soothing

- **Teach calming skills.**
 - Recognizing physical signs of escalation
 - Relaxation techniques
- **Teach coping skills.**
 - Using verbal responses, rather than behavioral
 - Seeking adult support
- **Teach problem-solving skills**
 - Alternate responses
 - Practice, practice, practice

Recovery – Strengths

- Build strengths and resilience.
- Work with natural talents and interests.
- Strengths can include developing:
 - spiritual beliefs.
 - cultural identity.