

SELF – STUDY COURSE

Early Childhood Development
“Implications for Court”

Elizabeth Kohlstaedt, Ph.D.

This self-study course for 2.5 credit hours is based on the following sources:

- DVD Elizabeth Kohlstaedt's presentation at the 2006 Prevent Child Abuse and Neglect Conference in April 2006, 1 hour 25 minutes in length
- Handouts from Elizabeth Kohlstaedt, 35 pages
- Post test which requires some personal reflection on how to implement the concepts in this course

The questionnaire/post test on page two of this course is a way to check your understanding and a means for your Family Resource Specialist to assess that you have processed and understood the majority of the information provided. In order to obtain credit for this course, please review the DVD (available online) and give your completed questionnaire/post test (available online or directly from your FRS) to your Family Resource Specialist at your Child and Family Services office. Your FRS will Score the post test and may credit your training record with 2.5 hours.

The Montana Department of Public Health and Human Services
Child and Family Services Division Training Unit

**Thank you to our valuable resource parents who are
dedicated to the care and protection of children.**

**Post test for Early Childhood Development “Implications for Court”
Self Study Course
2.5 Hours**

Questions for the Resource Parent Training Module

Early Childhood Development “Implications for Court”

Provide the appropriate answer to the following questions. First try to answer from your understanding of the material before referring back to the DVD and the handouts.

- 1. Will trauma and neglect in the first three years effect brain development?**

- 2. How does the brain develop in the first 3 years?**
- 3. What does Elizabeth Kohlstaedt refer to the brainstem as, what is its function and when does it develop?**
- 4. What does she refer to the Limbic System as and what is it’s function and when does it develop?**
- 5. What does she refer to the cortex as and what is its function and when does it develop?**

- 6. What are the two elements of trauma and how do they impact people?**
- 7. What are the types of trauma?**
- 8. What effect does trauma have on brain development?**
- 9. What effect does extreme neglect have on a brain?**

EARLY CHILD DEVELOPMENT: Implications for the court

Elizabeth Kohlstaedt, Ph.D.



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Overview

- Brain development in first 3 years is the basis for all subsequent functioning.
- Chronic trauma and neglect in the first three years can permanently alter brain functioning.
- The earlier trauma or neglect, the more pervasive the disturbance.
- The longer, the worse the disturbance.
- The later removal, the less recovery.
- Implications for relinquishment, custodial, permanency and visitation decisions.

The Problem

- 3 million children are reported for abuse and neglect.
- 1 million cases are substantiated.
- 80% of those responsible for maltreatment are the child's own parents (vanderKolk, 2005).

The Result

- Almost all of the juvenile criminal justice population have childhood histories of abuse, neglect and trauma (Teplin et al., 2002).
- 75% of perpetrators of child sexual abuse were sexually abused as children (Romano & DeLuca, 1997).

The Impact of Trauma

- “ If 20 million people were infected by a virus that caused anxiety, impulsivity, aggression, sleep problems, depression, respiratory and heart problems, vulnerability to substance abuse, antisocial and criminal behavior, retardation and school functioning, we would consider it an urgent public health crisis.”

5

THE IMPACT OF TRAUMA

- “Yet in the United States alone, there are more than 20 million abused, neglected and traumatized children vulnerable to these problems. Our society has yet to recognize this epidemic, let alone develop an immunization strategy.”

B.D. Perry

6

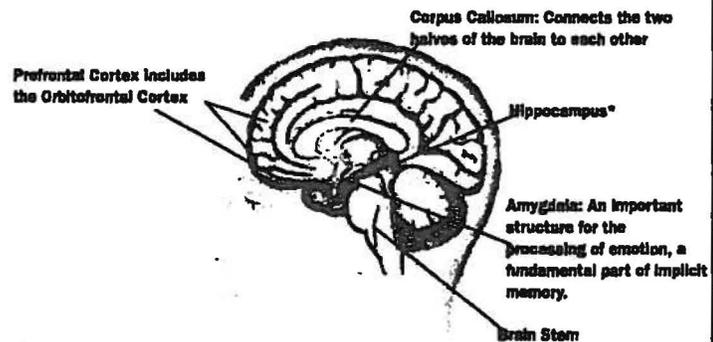
Brain develops in waves

- First three years, waves of synaptic overproduction followed by pruning of unused synapses (Chugani, 1998; Teicher et al., 2002)..
- Type of experience determines what synapses grow and which get pruned.
- “Experience dependent” phases “hardwire” response to what life will be like.
- “Wiring” depends on patterned, repetitive stimulation.

“Ontogeny recapitulates phylogeny”

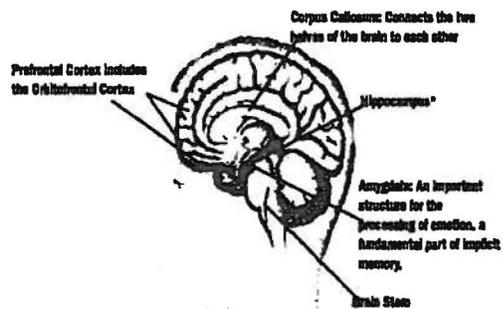
(MacLean, 1958)

- Development
Bottom – up
- Processing
Bottom-up
- Higher systems
build on lower ones



“Reptilian Brain”

Brainstem – breathing,
temperature
regulation, bodily
sensations, basic
orientation, primitive
tension arousal



“Four F’s”

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9

“Reptilian Brain”

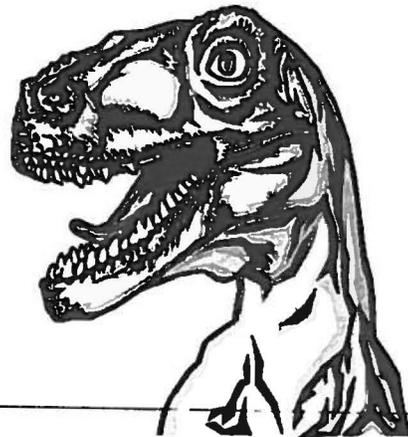
Developmental period in utero and first few months of life.

Requires stable, controlled environment.

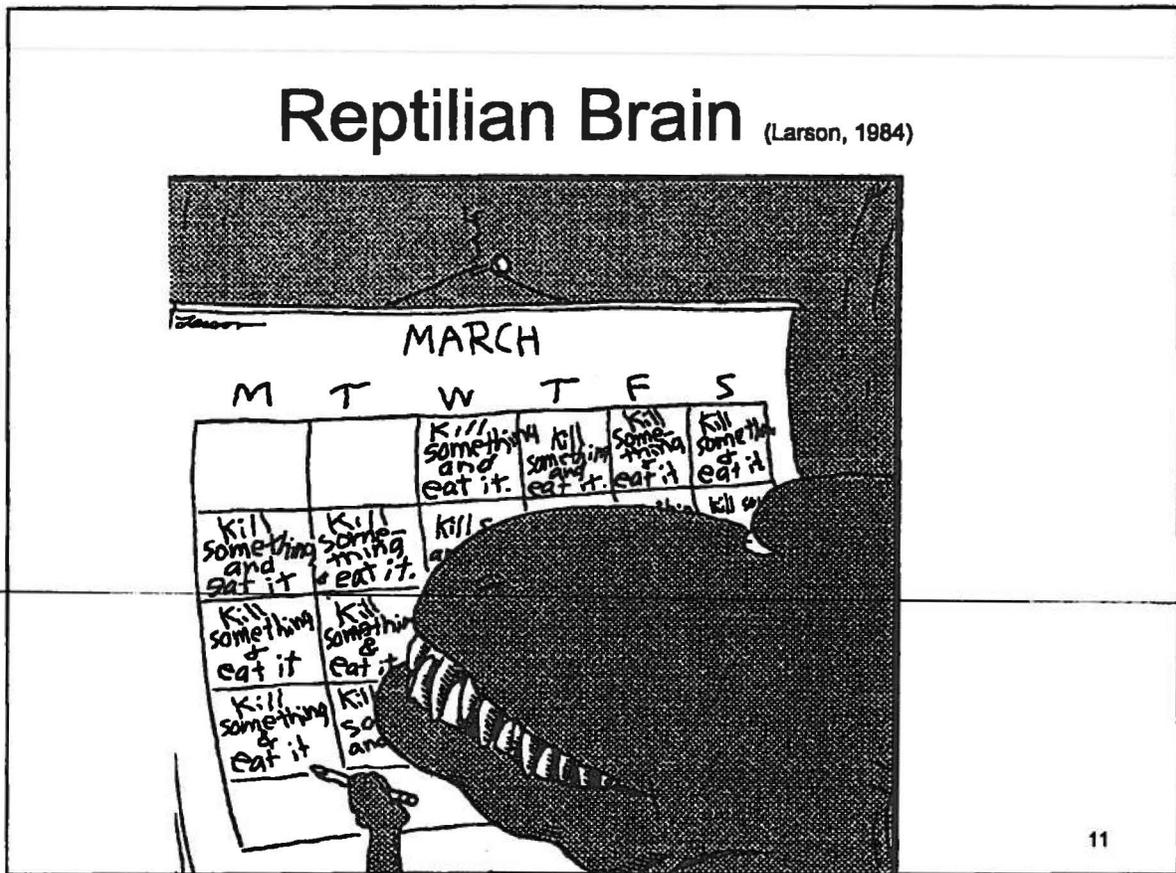
Adult modifies temperature, sound, stimuli, hunger, thirst, arousal.

Responds to threat with thrashing, distress, primitive alertness.

Determines general resting state of organism.

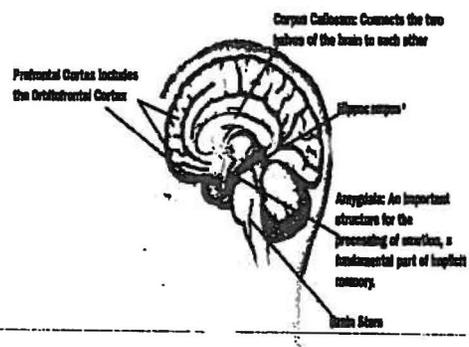


Reptilian Brain (Larson, 1984)

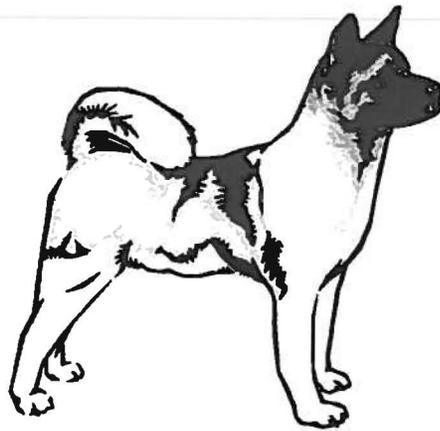


“Mammalian Brain”

Limbic system –
Amygdala,
hippocampus,
hypothalamus:
Primary affects
(meaning attribution),
implicit memory,
general sustainable
mood or tone,
integration of sensory
input.



“Mammalian Brain”



-4 mos – 9 mos

-Fight or flight to meaningful stimuli.

-Mother regulates affective arousal
(frustration tolerance, anger).

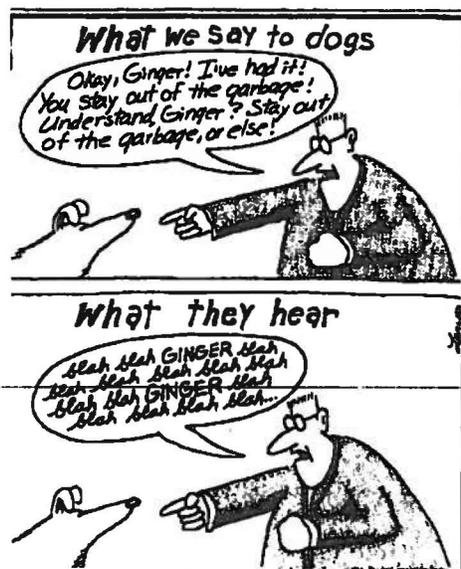
-Mother mirrors affect, responds with
joy or distress.

- Mother's mood creates general
affective “tone.”

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13

Mammalian Brain (Larson, 1984)

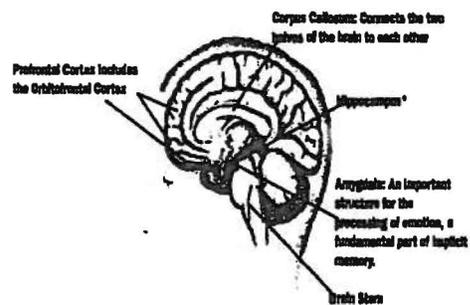


14

“Human Brain”

Cortex:

- self-awareness
- planning
- explicit memory
- inhibition
- verbal mediation



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15

Right orbitofrontal region:

(Schoro, 1994)

The “Mother Center”



Plastic throughout life, but critical development is 10-18 months

-Regulates attachment

-Alteration of heart rate and aggression based on maternal response.

-Adjustment and correction of emotional responses based on relational security.

- Gut reactions

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16

Human Brain (Larson, 1984)



Trauma

■ Trauma – Life-threatening event that overwhelms the adaptive capacity of the individual.

- Life threatening: depends on the age and circumstance of the individual.

- Adaptive capacity: depends on the pre-existing capacity, psychologically and physically

Types of Trauma

- Type of trauma determines response (Terr, 1991)
 - Acute: An event that happens in an otherwise predictable life. Basal functioning can return to pre-trauma condition.
 - Chronic Trauma: Repeated life-threatening events that change the individual's homeostasis (patterned, repetitive stimulation).

Trauma and Brain Development

- The earlier the trauma, the lower level at which experience is registered, more basic is the response for survival., i.e., experience becomes “hard-wired” (Teicher et al., 2002).
- Early traumas are experienced as bodily sensations (reptilian, mammalian), or primary affects (mammalian).
“Anxiety without a story-line.”

Trauma and Brain Development

- **Early traumas are *inaccessible to explicit memory or conscious prohibitions* (human brain) (Siegel 2003)**
- **Early, chronic traumas change the basic functioning of the organism at its resting state, i.e. homeostasis from chronic trauma includes hyperalertness, rapid breathing, shallow sleep, restlessness or primary agitation, fight or flight (Perry & Pollard, 1998)**

“Developmental Trauma Disorder”

(vanderKolk, 2005)

- Depression, anxiety, dissociation, hypervigilance, oppositionality, disorganized attachment, hyperstartle, ADHD-like symptoms are more common in children abused and neglected as infants (Teicher et al., 2002; Perry & Pollard, 1998)

Effects of trauma - physiological

Long Term Effects

- increased irritability of amygdala (aggression, anger, registration of negative faces)
- Increased tendency to seizure-like brain-wave activity (two-fold increase in irregular EEG's in children removed from abusive parents (Teicher et al., 2002))
- decreased inhibition of amygdala by descending GABA fibers from ROF (no "soothing by internal mother.")
- decreased corpus callosum (connects two hemispheres) (Chugani, 1998)

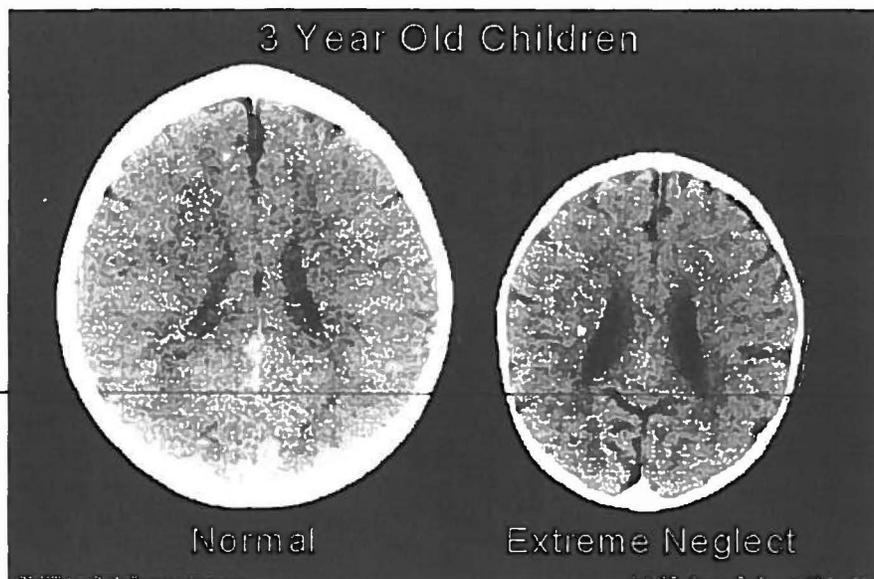
Effects of Trauma – psychological

- If trauma is created by attachment figure, the trauma network can be re-engaged by thoughts, memories, sounds, sights of original attachment or by experience of *new attachment*.
- Repeatedly traumatized child generalizes traumatic experience to all environments. *The resting state is one of anxiety and child cannot experience “non-trauma” or safety.*

Neglect

- The absence of critical organizing experiences *at key times* or the *disorganization* of experiences
- The earlier the neglect, the more pervasive (lower disorganizes higher)
- The longer the neglect, the less recovery

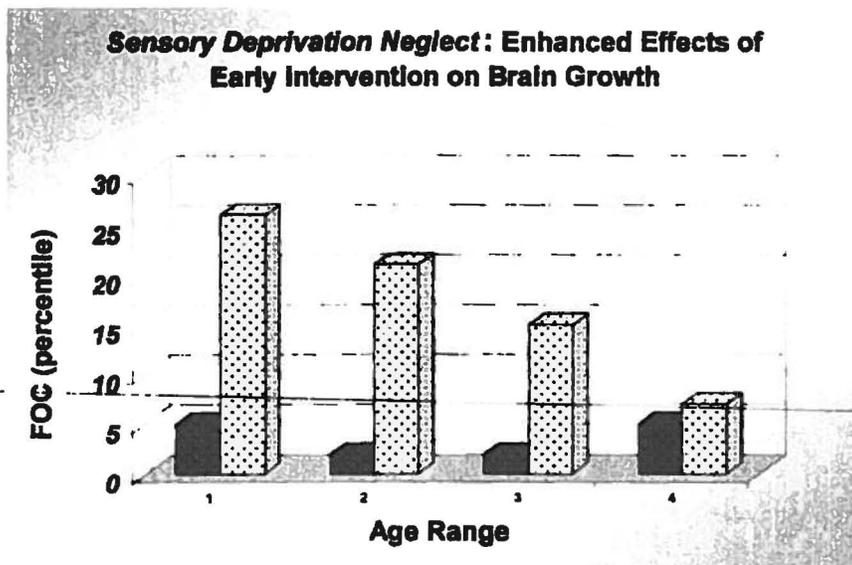
Neglect Effect on Brain



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26

Brain recovery after removal from neglectful environment



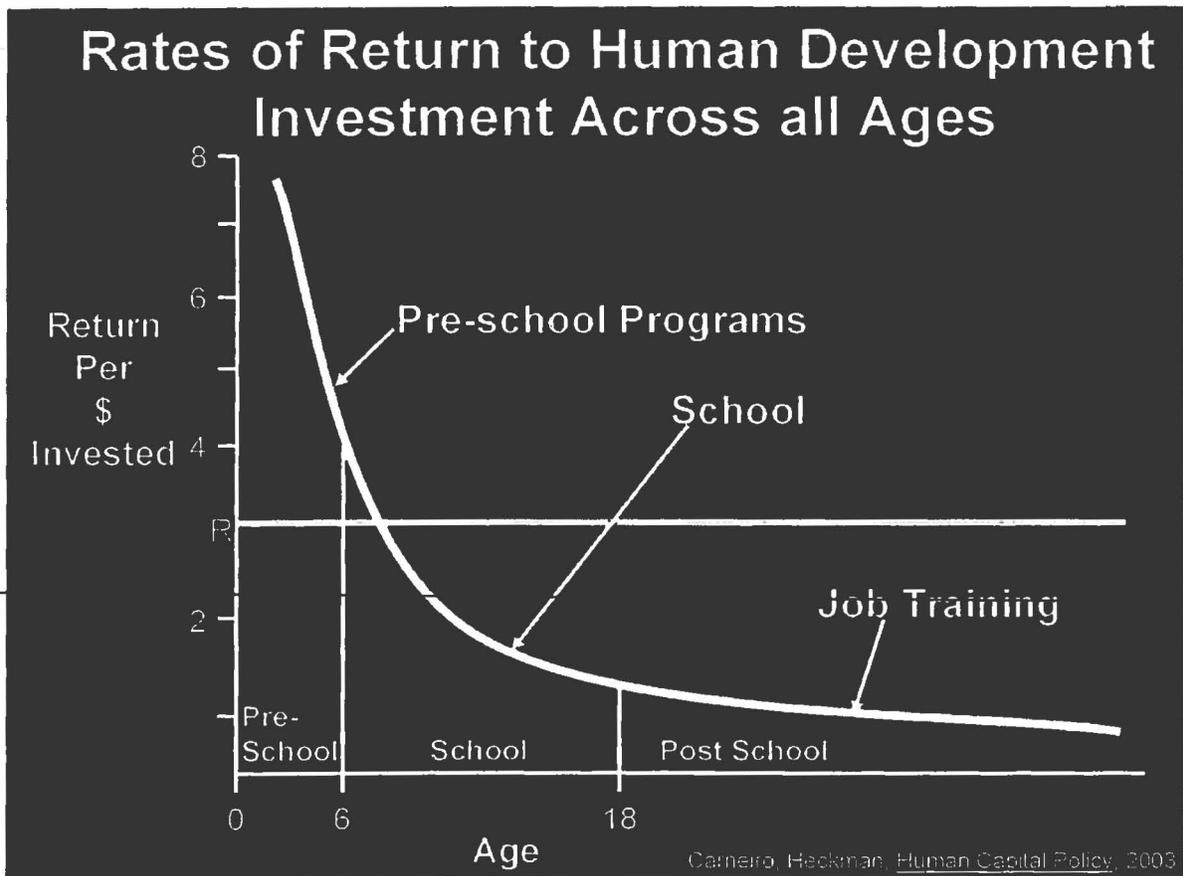
www.ChildTrauma.org

(Perry, 2002)

27

Implications of trauma and neglect for later life

- Sensory information enters at the lowest level (brainstem).
- If that system has organized around neglect, chaos or trauma, the child will respond with reptilian brain.
- That will affect the emotional reaction to the event as well (mammalian brain) and become a meaningful emotional event for the child.
- Development is bottom up, processing is also bottom up.



Implications for the court

- In a severe neglect case (malnourished, failure to thrive, chronic medical issues, drug abuse, etc), the earlier the removal, the more chances of recovery
- Children need stability of placement – all recovery is dependent on patterned, repetitive meeting of needs.
- Children need one stable environment as opposed to several.

Implications for the court

- Visits with the parent may be good for the parent, but may create chaos for the child.
- The best predictor of future behavior is past behavior. How many chances does a parent get/ how many chances does the child get?
- Children will repeat attachment pattern in a new family – this can look bad. Provide enough community supports.

Custodial decisions

- Children need a stable, predictable environment
- In first two years, need a primary caretaker who can be devoted to the infant's needs
- Is the substitute caregiver aware of the needs of a 1 year old, two year old? (timing is important)
- The more permanent the caregiver the better.
- Does the caregiver have familial/community support?

Visitation decisions

- Going back and forth many times during a week is extremely disorienting for a child, especially within the first 3 years.
- The maternal attachment is more formative for affective control in the first 3 years than paternal one.
- If the parents are in active conflict, the child will pick up on the affect, and may be more difficult to soothe. Consider a neutral party to transport.

Permanency decisions

- Make the decision as soon as possible, and stick with it.
- Know that a child going into a new family will attach in the same way he did in his original family.
- Give the child and family time to attach before requiring adoption.

EARLY CHILD DEVELOPMENT: Implications for the court

Questions?



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