

The Impact of Trauma in Children

Understanding the impact of violence, abuse and neglect on children

TRAUMA

- A person has experienced, witnessed or was confronted with an event that involved actual or threatened death, serious injury, or threat to the integrity of the self
- The response involves intense fear, helplessness or horror
- The event is re-experienced when recollected or triggered

Traumatic memories

- they are primarily imprinted in sensory and emotional modes, although a semantic representation of the memory may co-exist with sensory flashbacks (van der Kolk and Finkelhor, 1995);
- these sensory experiences often remain stable over time and unaltered by other life experiences (Janet, 1893; van der Kolk and van der Hart 1991);

Traumatic memories (cont.)

- they may return, triggered by reminders, at any time during a person's life, with a vividness as if the subject is having the experience all over again (DSM IV);
- these sensory imprints tend to occur in a mental state in which victims may be unable to precisely articulate what they are feeling and thinking (Rivers, 1918; Blank, 1985).

Traumatic memories (cont.)

- Traumatic memories are experienced as vague, over general, fragmented, incomplete, and disorganized narratives.
- Memories change as people recover from their PTSD (Hopper and van der Kolk, 2000, 2004) .

Biology and Trauma

- The brain is a detecting, amplifying, and analyzing device for maintaining us in our internal and external environment.
 - the visceral regulation of oxygen intake and temperature balance
 - categorization of incoming information necessary for making complex, long-term decisions about themselves and their primary relationships.

Biology and Trauma (cont.)

- In the course of evolution, the human brain has developed three interdependent subanalyzers
 - the brain stem and hypothalamus, which are primarily associated with the regulation of internal homeostasis,
 - the limbic system, which is charged with maintaining the balance between the internal world and external reality, and
 - the neocortex, which is responsible for analyzing and interacting with the external world.

Biology and Trauma (cont.)

- It is generally thought that the circuitry of the brain stem and hypothalamus is most innate and stable
- the limbic system contains both innate circuitry and circuitry modifiable by experience
- the structure of the neocortex is most affected by environmental input (Damasio, 1995).

Biology and Trauma (cont.)

- Hypothesis—trauma is a top down process
- Not quite true: Stress is a top down process—has most profound changes on neocortical functions, and least affect basic regulatory functions.
- Trauma – stress that overwhelms the organism seems to affect people over a wide range of biological functioning, involving a large variety of brain structures and neurotransmitter systems.—all over at anytime (van der Kolk, 2004)

Trauma in early childhood

- The massive autonomic dysregulation of both hyperarousal and dissociation induce severe disturbances in the young child's psychophysiological systems, especially the cardiovascular system.
- Sympathetic hyperarousal is accompanied by significant increases in heart rate
- Dissociation involves severe alterations of parasympathetic dorsal vagal tone that dramatically decrease heart rate and blood pressure

Trauma in early childhood (cont.)

- Basic research showed that simultaneous stimulation of both autonomic components produces an even greater cardiac output and aortic blood flow (Koizumi, Terui, Kollai, and Brooks, 1982).
- Behavioral this is like “riding the gas and the brake at the same time,” and the simultaneous activation of hyperexcitation and hyperinhibition results in the ‘freeze response” (Schore, 2001b, 2001g, 2002b).

Trauma in early childhood (cont.)

- Disrupted early attachments and early trauma and abuse are found in the histories of children and adults diagnosed as borderline personality disorder (Lyons-Ruth and Jacobvitz, 1999).
- Zanarini and colleagues (1997) reported that 91% of borderline patients report childhood abuse.
- the weight of the research evidence supports the hypothesis that abuse during childhood is an important risk factor for borderline personality disorder” (Paris 1995, p. 15).

Effects of Trauma (Davies)

- Children traumatized have smaller brains and other brain abnormalities
- Have a higher concentration of stress hormone, especially cortisol
 - the longer the exposure to stress, the higher the levels.
- The stress response system is hyper alert and can be activated when no stress is present

Effects of Trauma (Davies)

- A child who has witnessed violence spends a great deal of energy scanning the behavior of others for signs of threats.
- She becomes attuned to the nonverbal cues that signal the potential for violence.
- High arousal overshadows and interferes with other brain activities.

Effects of Trauma (Perry)

- Early neglect or trauma cause overdevelopment of functions in the lower and midbrain areas
- Underdevelopment of the limbic and cortical structure
- The more threat related systems are activated during development, the more they become built in.

Effects of Trauma (Perry)

- Trauma can produce dissociation
- In animal studies, defeat responses involve the brain secreting dopamine and endogenous opioids which blunt pain and dull consciousness of external reality
- The early trauma or emotional neglect interferes with the development of **explicit memory** as well the capacity for empathy and modulation of impulses.

Effects of Trauma (Cozolino)

- The earlier, more severe, and more prolonged the trauma, the more negative and far reaching the effects.
- Physical and sexual abuse at the hands of caretakers, not only traumatizes children, but also deprives them of healing interaction
- Adaptation to trauma in early life becomes a state of mind, brain, and body around which all subsequent experience organizes.

Effects of Trauma

Right Brain and Violence

- contains a circuit of emotion regulation that is involved in “intense emotional-homeostatic processes” (Porges, Doussard-Roosevelt, and Maiti, 1994)
- The regulation of biologically primitive positive emotions
 - excitement and joy
 - negative emotions of terror, disgust, shame, hopeless despair, and rage.
- The dysregulation of rage states is of course, central to the expression of violence.

Effects of Neglect (Fields)

- Infants whose mothers were depressed during the infants first year of life demonstrate biochemical, physiological, and behavioral dysregulation
- Showed more neurophysiological and behavioral signs of stress and depression including greater activation in their right frontal lobes,

Effects of Neglect (Fields)

- Higher levels of norepinephrine, lower vagal tone, higher heart rates and higher cortisol levels
- The young children tend to develop behaviors and biological processes that mirror their depressed mothers.

Effects of Neglect (Fields)

- Early bonding failures lead to lower levels of serotonin, resulting in greater risk of depression, irritability and decreased positive reinforcement from interpersonal interactions
- Rats born to stressed mothers show more clinging to the mother, less locomotion, and decreased environmental exploration.

Effect of Neglect (Pennington)

- Children have less ability to escape social stress have higher rates of depression
- Neglected children are at an increased risk for other psychiatric disorders.
- Neglected children show chronic cortisol release
 - harmful effects: immune suppression, digestive disorders, loss of certain brain neurons, memory impairment.

Effect of Neglect (Pennington)

- Early loss produces higher levels of cortisol
- Creates a lasting vulnerability in parts of the neuro-endocrine system (stress response system)
- These vulnerabilities has lasting changes in cortisol levels and greater emotional sensitivity as adults
- It appears to make the adults more vulnerable to stress

Effect of Neglect (Pennington)

- The children of alcoholics exhibited different alterations in the startle response, namely impairments in both habituation and prepulse inhibition—alterations in the stress response system.

Effect of Neglect (Pennington)

- One of the important foundations of human moral behavior-empathy, is notably reduced in children who have had abusive or neglectful caregivers, because they lack the reciprocal initiative exchanges of attention, intention and affect.

Effect of Neglect

Maternal Neglect

- The behavioral manifestation of maternal deprivation
- Alone or in combination with paternal physical abuse is devastating to developing limbic subsystems (Shore, 2003)

Effect of Harsh Parenting (Pennington)

- Harsh parenting increase the risk for conduct disorders in children. Early physical abuse predicts later aggressive behavior at school—even when controlled for temperament and other family variables.

Impact of Harsh Parenting

- Parents who use harsh discipline tend to see their children negatively, often from infancy. They also unrealistically attribute abilities of self control, understanding of intentionality, and awareness of right and wrong, when children are too young to have attained these abilities

Impact of Harsh Parenting

- Parents who attribute negative qualities to their children and use corporal punishment often have histories of having been treated harshly or abused as children
- Have internalized a view that children must be controlled through coercive, physical means
- patterns of conflict beginning in the second year and third years lead to long term behavior problems

Impact of Harsh Parenting

- Families of antisocial children are characterized by harsh and inconsistent discipline, little positive parental involvement with the child and poor monitoring and supervision of the child's activities
- Demanding, negative behaviors is reinforced because parents pay much more attention to it than to prosocial behavior
- children with disruptive behavior tend to internalize negative views of self based on how they are viewed by their parents.

Maltreatment and Attachment

- The majority of neglected and physically abused children develop insecure attachments—70-100% depending on the study
- Sexually abused children often develop insecure attachments but the reasoning is not clear—maybe because the trauma from the exploitation required a shift in the child's working model of attachment figures.
- When maltreated, the child's ability to appraise reality accurately and to regulate arousal are compromised.

Developmental Trauma Disorder

- Thalamus,
Amygdala,
Hippocampus-
- smoke alarm of brain

Thalamus



Thalamus

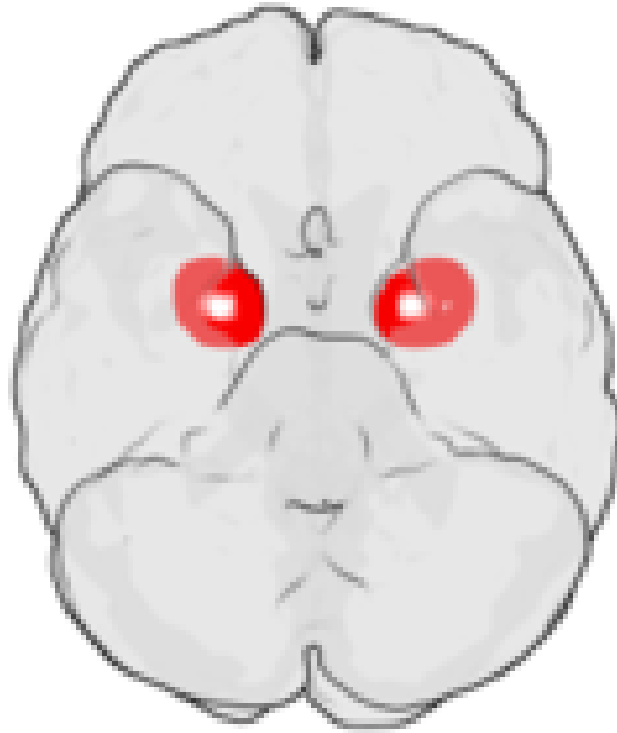
- multiple functions
 - act as a translator for which inputs are processed into a form readable by the cortex
 - relay information selectively to various parts of the cortex, as one thalamic point may reach one or several regions in the cortex.
 - plays an important role in regulating states of sleep and wakefulness.
 - Thalamic nuclei are believed to be involved with consciousness.
 - The thalamus plays a major role in regulating arousal, the level of awareness and activity

Thalamus

- Relay Station – create auto biographic soup- all sensations:sensory systems (which excepts the olfactory function) auditory, somatic, visceral, gustatory, and visual systems
- during trauma – Thalamus doesn't work as well – doesn't filter nor assimilate
- limit effective responding

Amygdala

- almond-shaped groups of neurons



Amygdala

- The amygdala sends impulses to the hypothalamus for important activation of the Sympathetic Nervous System
- Helps express fear by innervating the facial nerves
- Activates the release of dopamine, norepinephrine and epinephrine through out the brain.

Amygdala

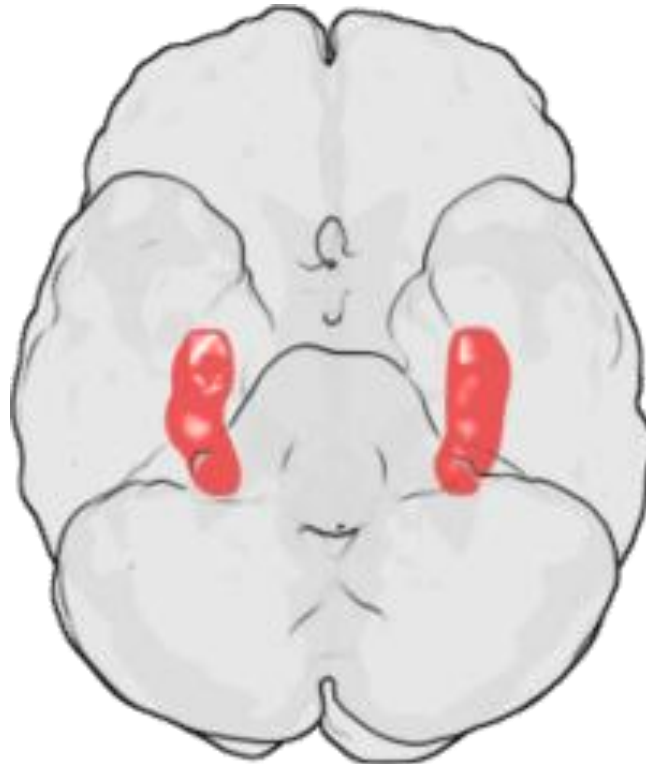
- subjects with Borderline Personality Disorder showed significantly greater left amygdala activity than normal control subjects.
- Some borderline patients even had difficulties classifying neutral faces or saw them as threatening
- depressed patients showed exaggerated left amygdala activity when interpreting emotions for all faces, and especially for fearful faces

Amygdala

- release stress hormone for fight/ flight
- 3 micro second alert to the Hypothalamus– preconscious
- Then to the Hippocampus for categorizing
- then to the Cingulate Gyrus – and to the prefrontal cortex for conscious elaboration

Hippocampus

- It forms a part of the limbic system and plays a part in memory and spatial navigation

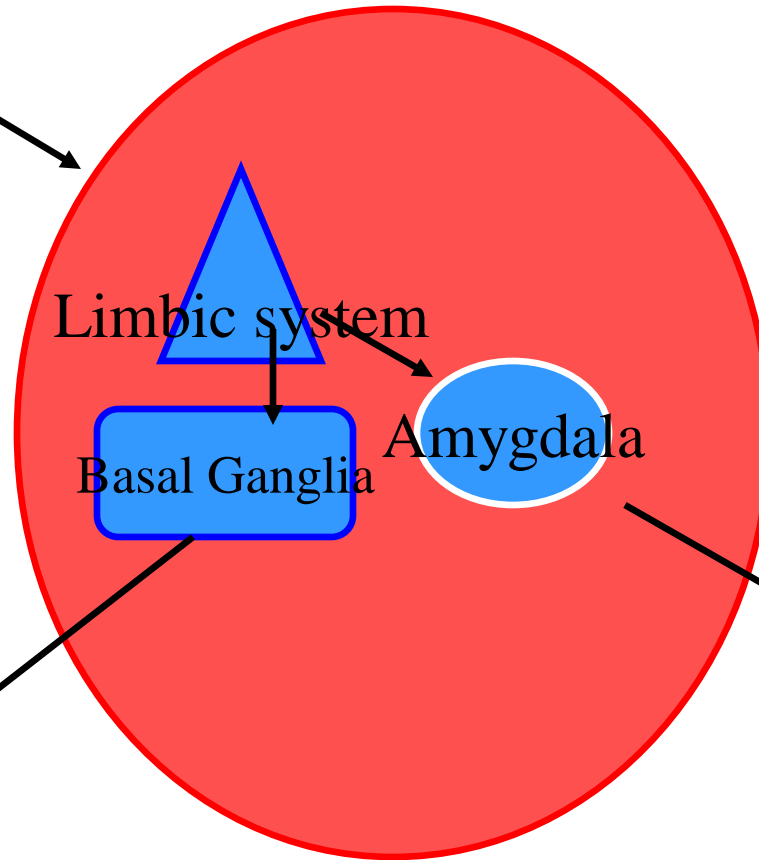


Hippocampus

- has an essential role in the formation of new memories about experienced events
- memories that can be explicitly verbalized
- High arousal permits higher learning implementation

How the brain “gets on with life” (LeDoux, 2003)

Threat



Active coping

- Planning
- Action

Passive coping

- Freezing
- Despondency

Trauma

- The Visual Center of the brain lights up
- visual center- Flash of memory
- everything is distortion – recording is impossible, yet in PTSD – may appear Trauma recalled very accurately (quite controversial)
- 60% of Adult schizophrenics have history of childhood traumatic abuse

Trauma

- During flashback – Broca's area shuts down- as people move into a trance they suffer from speechless trauma.
- feeling but people cannot talk about it.
- Details are missing during trauma
- Speechless memory – can talk about it but not it.
- All trauma is fundamentally pre-verbal
- not a linguistic issue
- Speech is a social process – socialized
- self description is very challenging

Trauma

- Activation of Brain is entirely right side—
actually hyperactive
- - left brain is deactivated
- Trauma is a right brain activation
 - need right brain activity for treating trauma
 - Yet the Limbic System is less lateralized

Trauma

- Loss of left brain
 - organizing memory and problem solving
 - symbolic representation – words-
 - filtering system doesn't work-
 - Can't analyze current information
 - cant be here/ now
- trauma state becomes steady state of brain
 - the reset button is lost
- -talk therapy focused on trauma may not be most helpful until ready and process/ to move something.

Trauma

- numbing – brain completely deactivated
- goal – contain physiological arousal
 - breathing, movement , tone of voice
 - what you say is less important

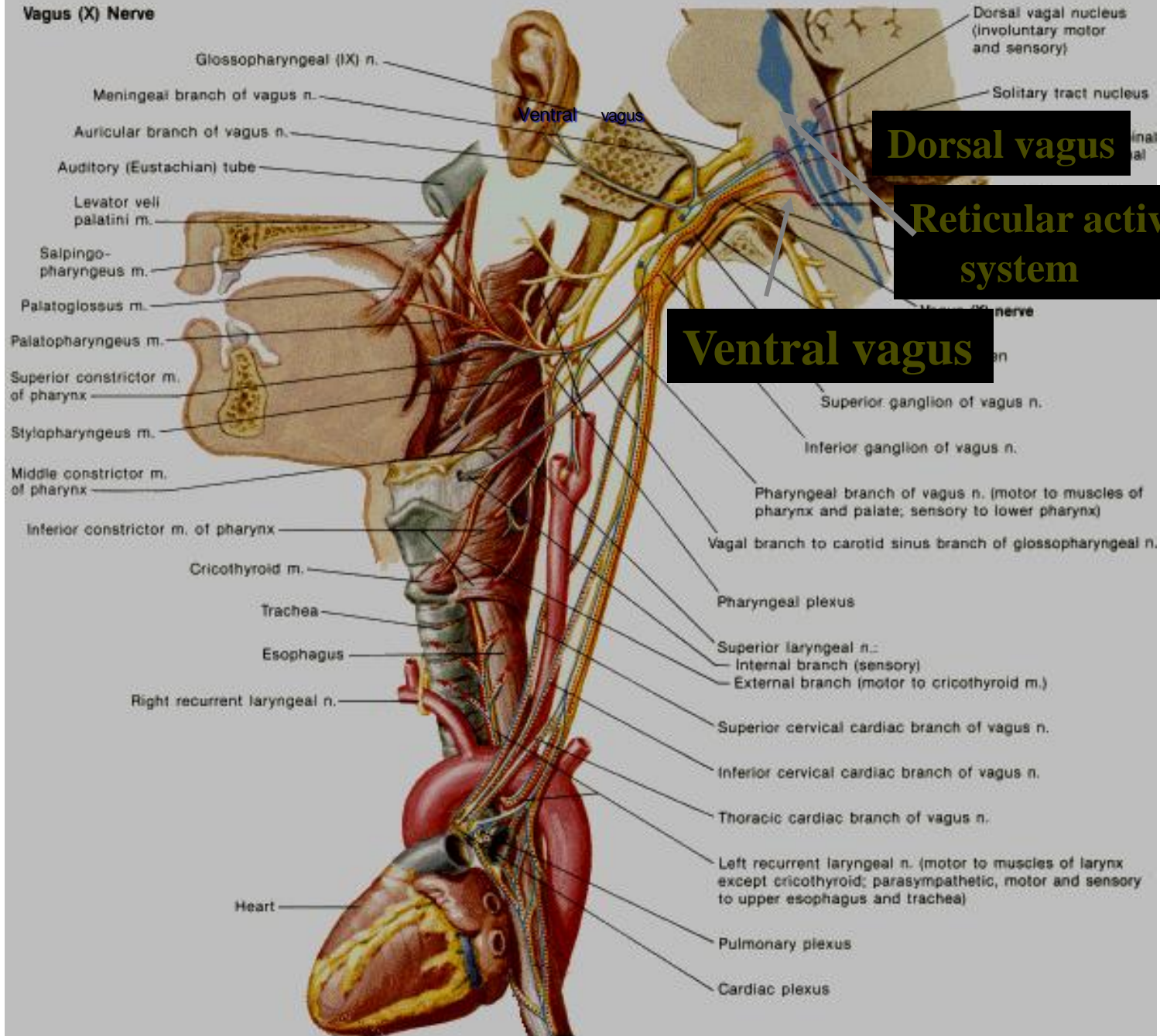
Attachment trauma

- Poor attachment – freezing/ numbing response
- - Dorsal lateral prefrontal cortex
- Sense of time, creative, problem solving-
- Goal in therapy – fill this in-
 - Make the Dorsal lateral prefrontal cortex
 - Activated and processing
 - Low level of physical arousal
 - keep the brain quiet

Vagus Nerve



Vagus (X) Nerve



Glossopharyngeal (IX) n.

Meningeal branch of vagus n.

Auricular branch of vagus n.

Auditory (Eustachian) tube

Levator veli palatini m.

Salpingo-pharyngeus m.

Palatoglossus m.

Palatopharyngeus m.

Superior constrictor m. of pharynx

Stylopharyngeus m.

Middle constrictor m. of pharynx

Inferior constrictor m. of pharynx

Cricothyroid m.

Trachea

Esophagus

Right recurrent laryngeal n.

Heart

Ventral vagus

Dorsal vagal nucleus (involuntary motor and sensory)

Solitary tract nucleus

Dorsal vagus

Reticular activating system

Ventral vagus

Superior ganglion of vagus n.

Inferior ganglion of vagus n.

Pharyngeal branch of vagus n. (motor to muscles of pharynx and palate; sensory to lower pharynx)

Vagal branch to carotid sinus branch of glossopharyngeal n.

Pharyngeal plexus

Superior laryngeal n.:

Internal branch (sensory)

External branch (motor to cricothyroid m.)

Superior cervical cardiac branch of vagus n.

Inferior cervical cardiac branch of vagus n.

Thoracic cardiac branch of vagus n.

Left recurrent laryngeal n. (motor to muscles of larynx except cricothyroid; parasympathetic, motor and sensory to upper esophagus and trachea)

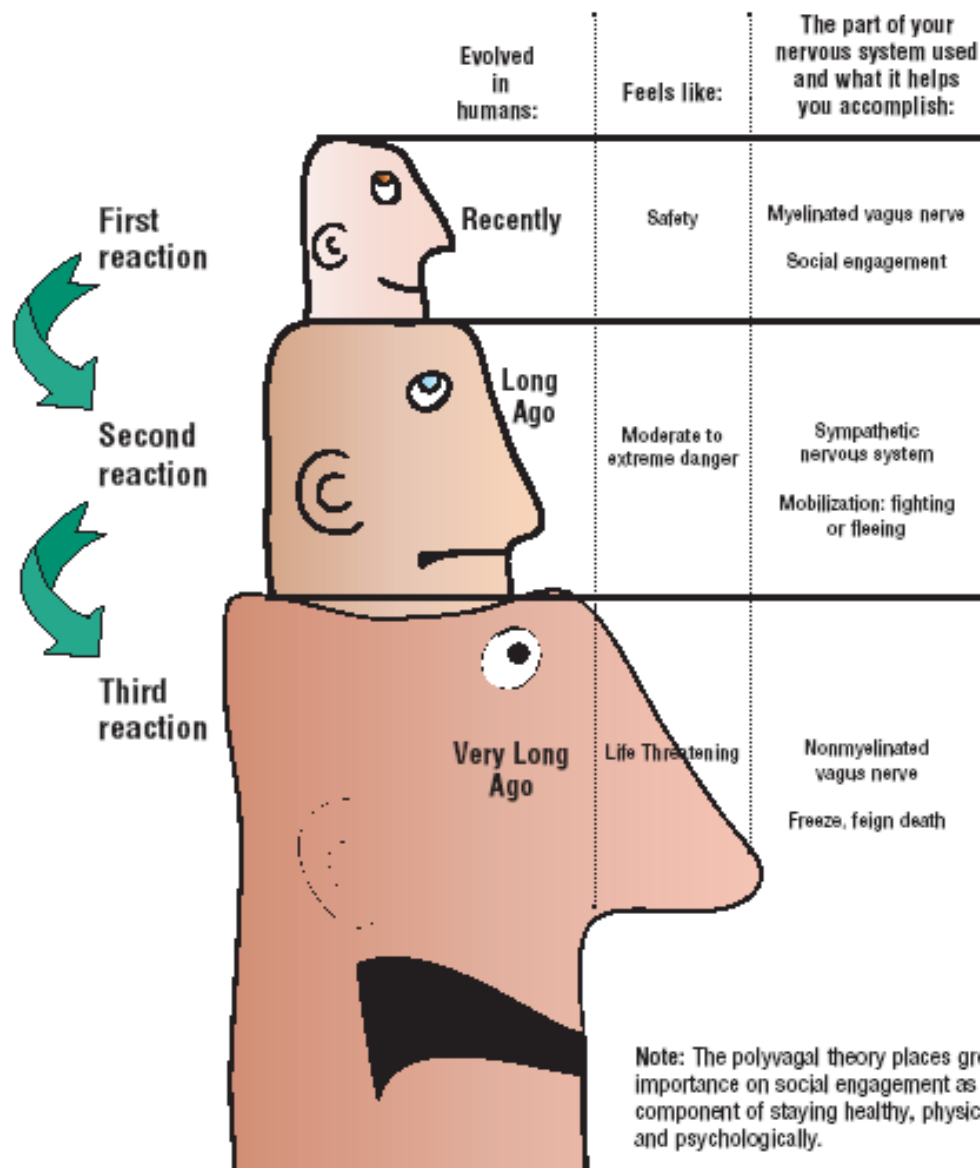
Pulmonary plexus

Cardiac plexus

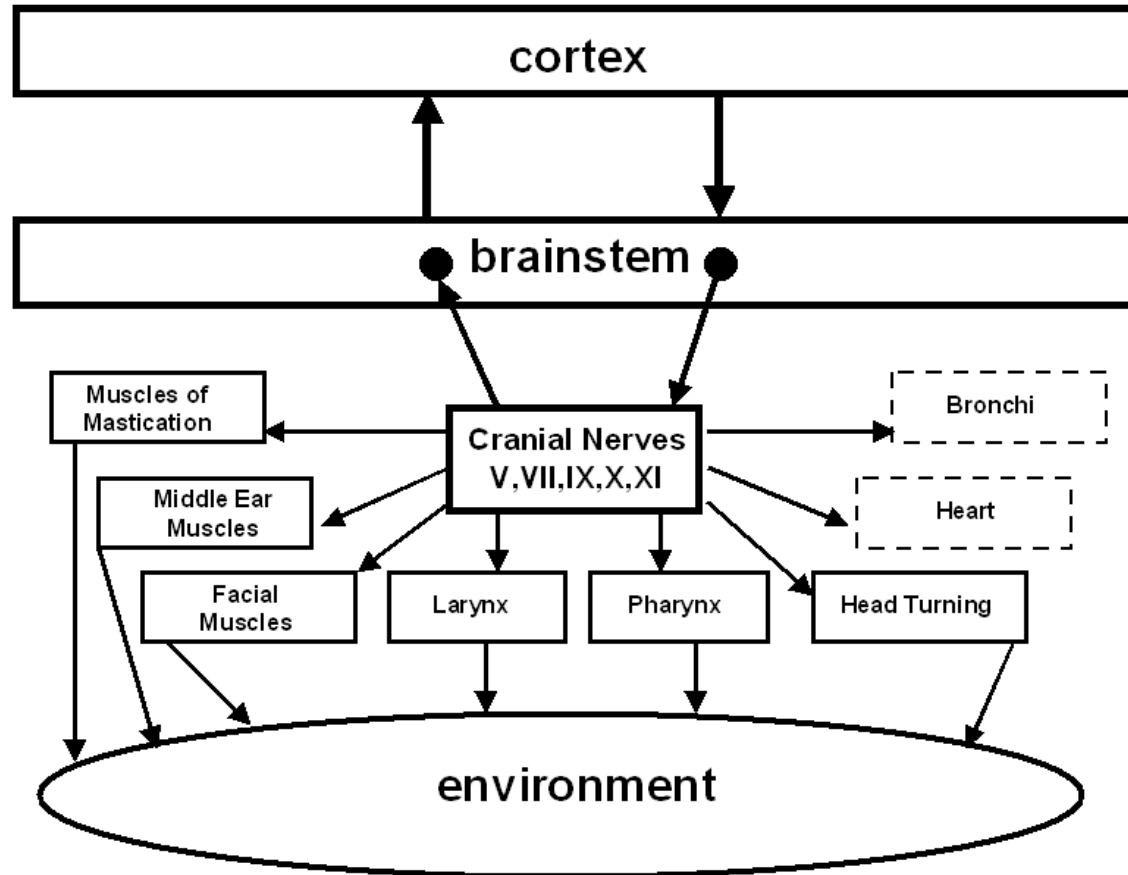
Vagus Nerve

- Innervation
- Activation
- Deactivation
- Regulation

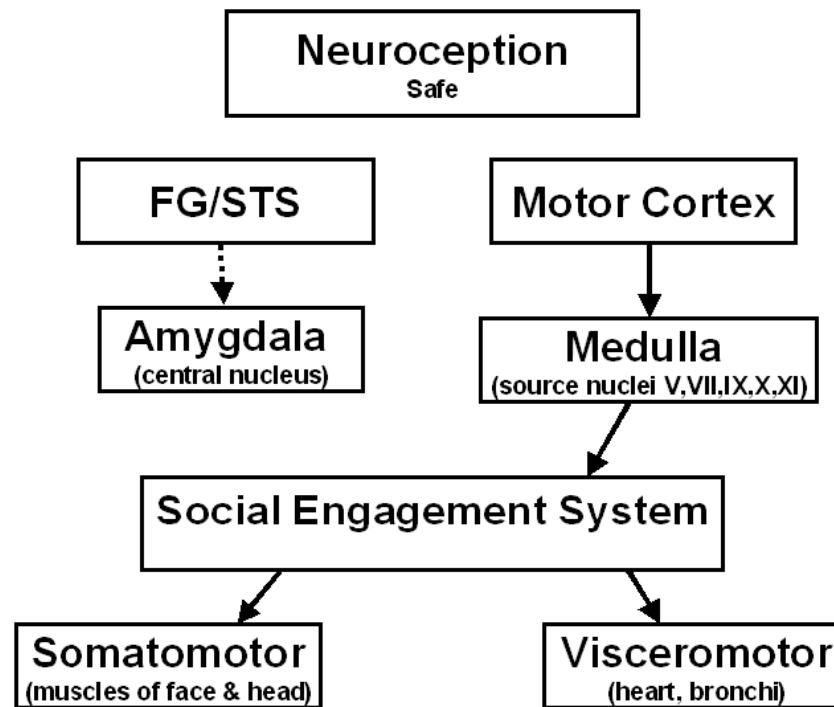
Events trigger you to react. If your first reaction doesn't make you feel safe, you revert to the second, then the third:



The Social Engagement System:

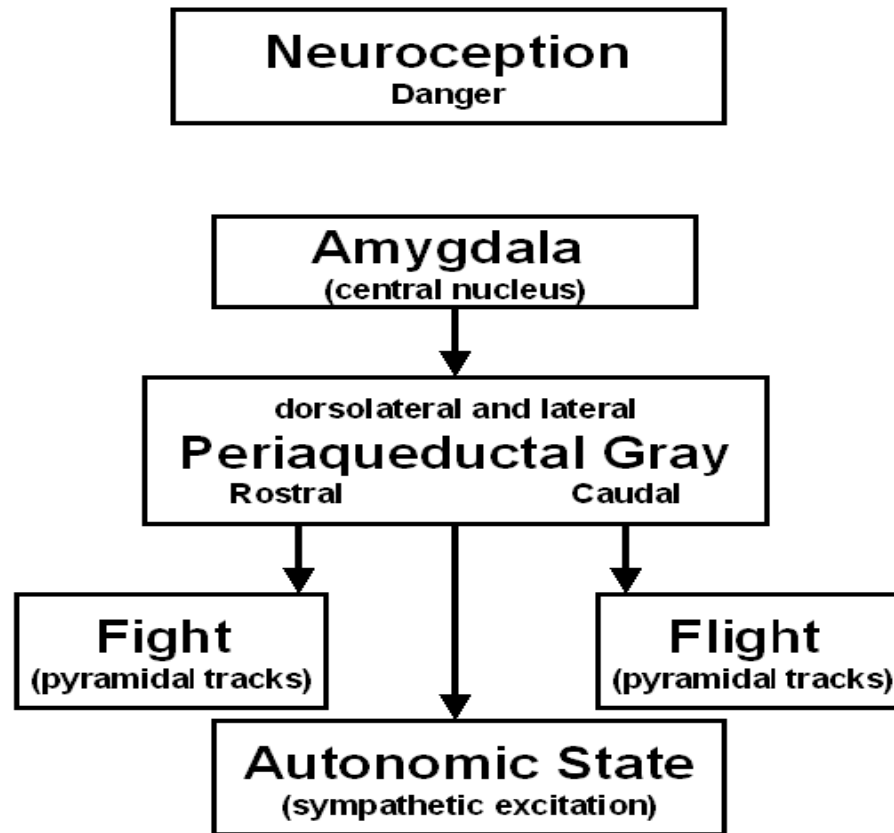


Neural structures and pathways involved in a neuroception of safety.



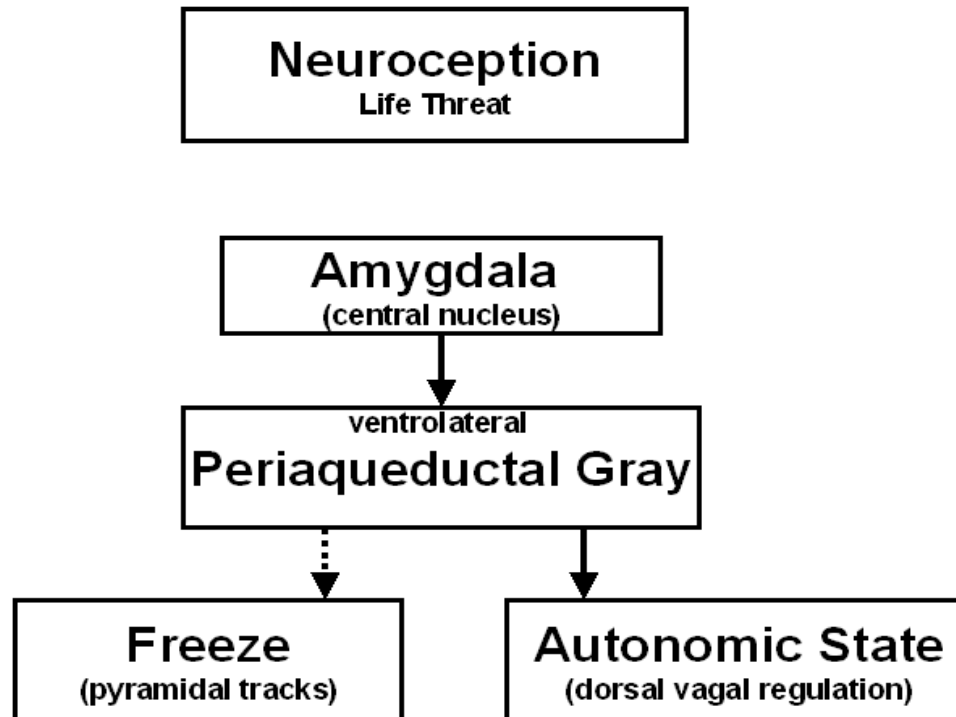
Inhibitory pathways
Excitatory pathways ———

Neural structures and pathways involved in a neuroception of danger.



Inhibitory pathways
Excitatory pathways ———

Neural structures and pathways involved in a neuroception of life threat



Inhibitory pathways
Excitatory pathways ———

Trauma and Culture

- Cultural shapes behavior
 - Brain is a cultural organ.
 - Cultural expressions of stress – different
- Misery produces tribal unity
 - -makes connections
- Trauma – moves us to home-
 - What happens when home is source of trauma?
 - Interface between Trauma / Attachment System

After Trauma

- Treatment: engage in effective action
- Not recommended: but revenge does help—
body wants it
- Reconnect with the body: activate while
tolerating frustration
- Plan for future action from past events-activates
the full frontal orbital cortex—your relationship to
you
- Use language to describe body experiences

Secure Attachment

- Aware of self
- Aware of the needs of others
 - The above are balanced
- Self knowledge—a coherent story with a flowing narrative
- Self reflection

- What cannot be communicated to the mother cannot be communicated to the self--Bowlby

Trauma

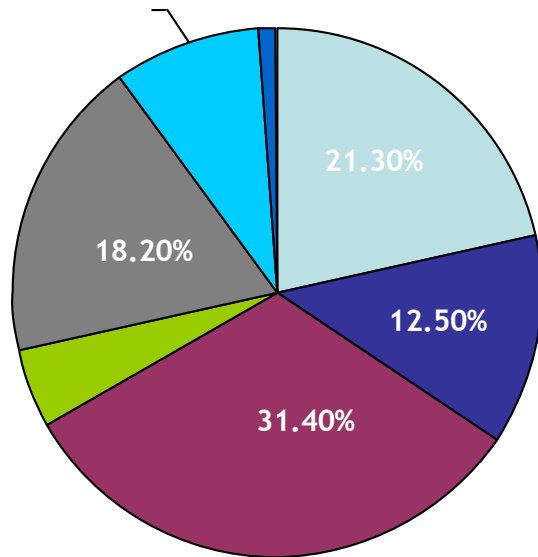
- Stressor requires action (if fails – Trauma)
- Biological emergency response to control or avoid stressor
- If trapped--activation of trauma system continues
 - Threat – frontal lobe shuts down. (cockroach response)
 - Limbic system takes over
 - Mediated by the Vagus Nerve.

2003 Survey of 2,200 children across NCTSN.

Gender

- Female 56.9%
- Male 43.1%

Family Status



- Intact Biological 21.3%
- Divorce/Stepparents(s) 12.5%
- Divorce/Single Parent 31.4%
- Adoptive Home 4.5%
- Foster Home 18.2%
- Relative(s) 8.9%
- Family Status Unknown 1.0%

2003 Survey of 2,200 children across NCTSN.

- Child Trauma Exposure: Age of Onset
- Mean Age of Onset: 5.0 (SD = 2.8)
- Median: 5.0
- Min, Max: 0, 13.0
- **Early Exposure:** Over 1/3 of the sample is adolescent and yet 98% of clinicians surveyed report average age of onset under 11

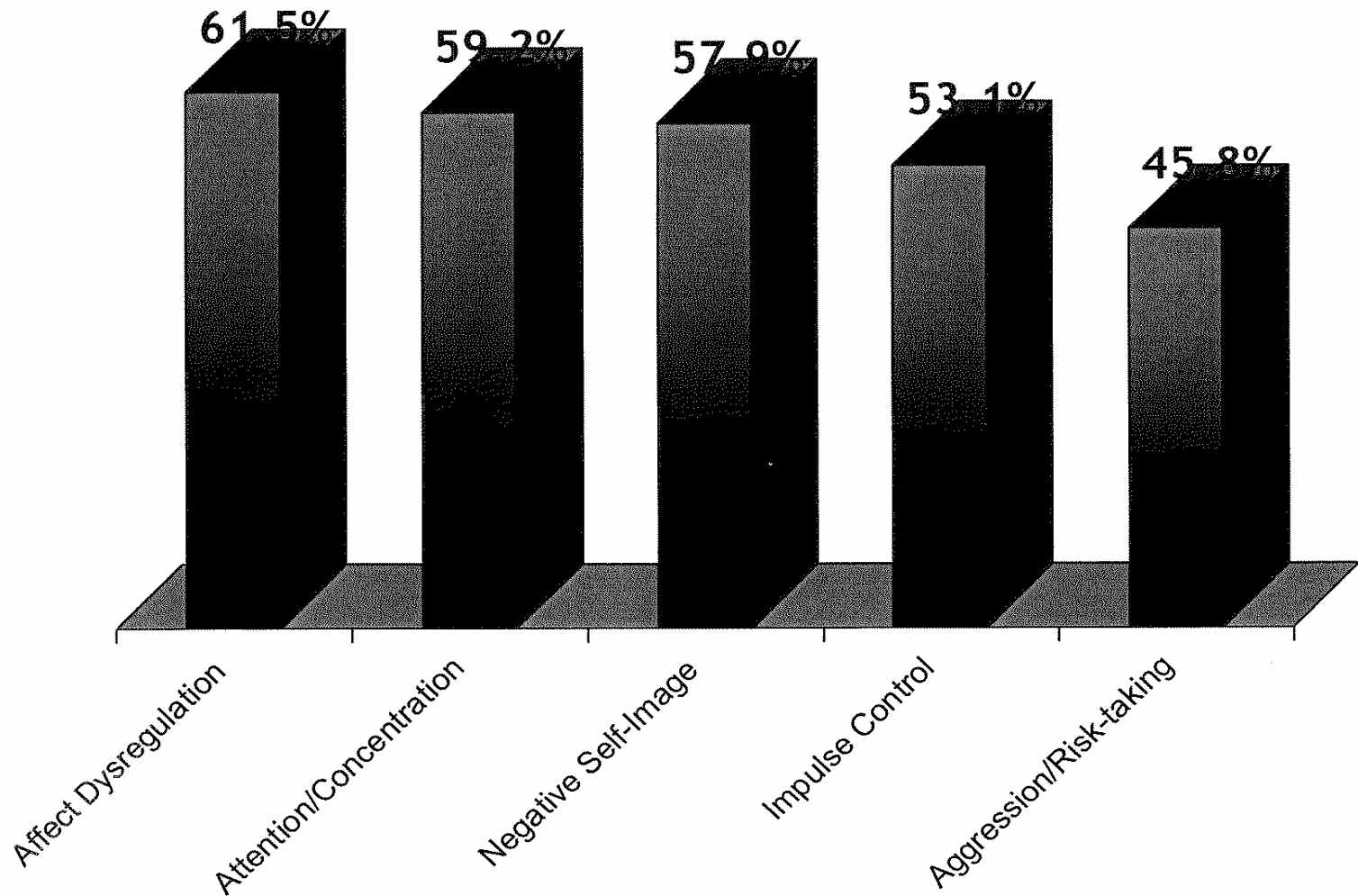
Number of Child Trauma Exposure Types

- Mean Number of Exposure Types: 2.9 (SD = 1.8)
 - Median: 3.0
 - Min, Max: 1, 11
- **History of Multiple Exposure Types:**
94% of clinicians surveyed report average child exposure to more than one type of trauma

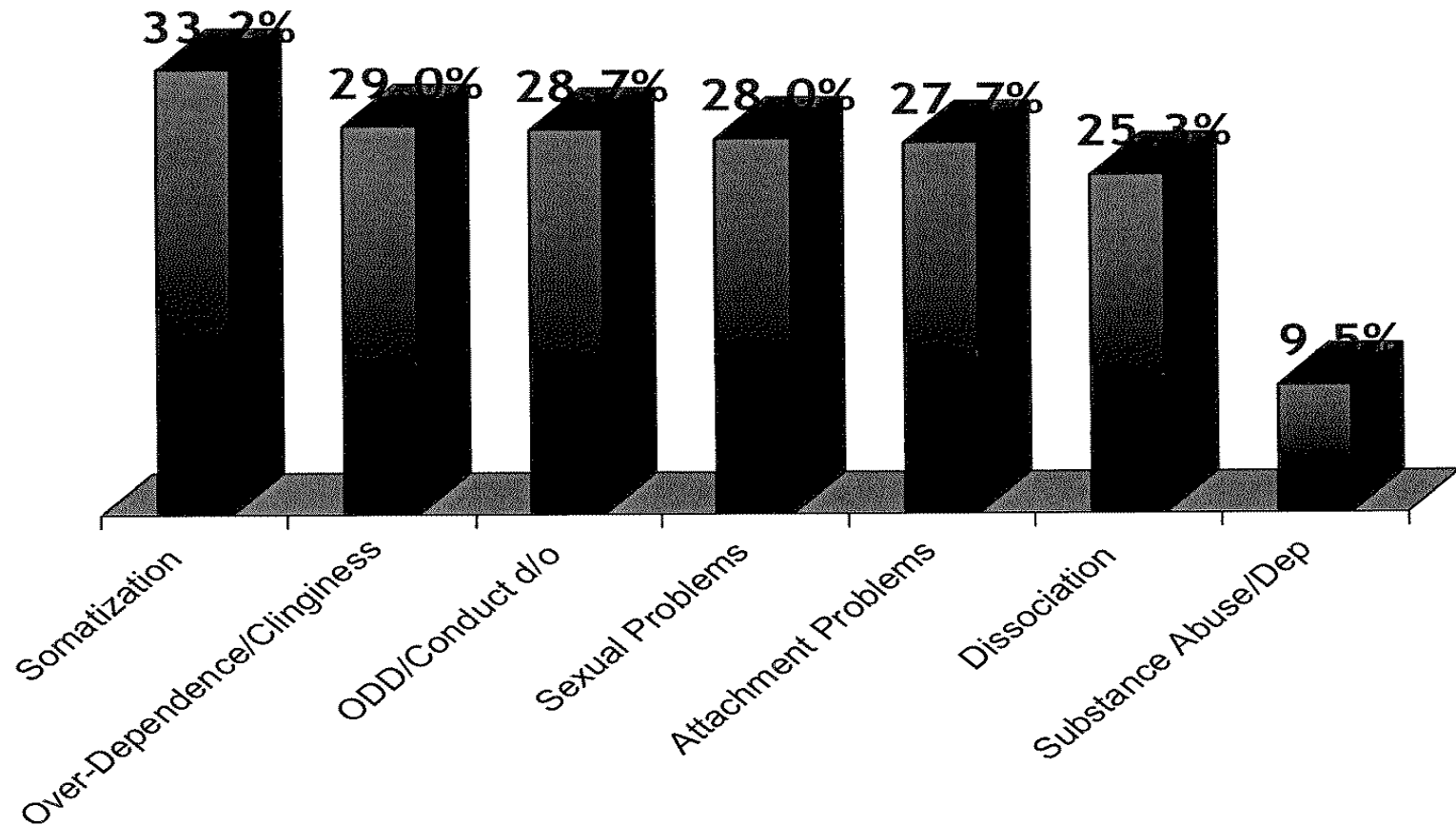
Child Trauma Exposure Duration

- Duration of Trauma
 - Multiple-event or chronic trauma: **77.6%**
 - Single Event or Acute Trauma: 19.2%
 - Unknown: 3.2%

Complex Posttraumatic Sequelae: Most Frequent Difficulties



Complex Posttraumatic Sequelae: Less Frequent Difficulties



- “Psychobiological Effects of Childhood Sexual Abuse”
- Frank W. Putnam, MD
- Penelope K. Trickett, PhD
- Jennie Noll, PhD

Significant Group Effects in Childhood (6 to 12 Years in Age)

- ↓social competence
- ↓academic performance
- ↑school avoidance
- ↑depression
- ↑dissociation
- ↑sexual behavior problems
- ↑cortisol dysregulation (free cortisol levels)
- ↑ Antinuclear antibody levels
- ↑ Urinary Catecholamines
- ↓family cohesion
- ↑depressed mothers

Significant Group Effects in Early to Middle Adolescence (12-15 years)

- ↓cognitive abilities (verbal IQ, problem solving)
- ↓age at first voluntary intercourse
- ↑depression
- ↑dissociation
- ↑PTSD symptoms
- ↑rate of pubic hair growth through puberty

Significant Group Effects in Late Adolescence and Early Adulthood (16- 23 Years)

- ↑pathological dissociation
- ↑depression
- ↑domestic violence (1.6X)
- ↑ lifetime traumas
- ↓overall physical health (including ↑GI problems)
- ↑healthcare utilization
- ↑sexual distortion
- ↑persisting PTSD Sx
- ↑rapes or sexual assaults (2X)
- ↑self-harm / suicidality (4X)
- ↑Body Mass Index (BMI)
- ↑sleep disturbances

Developmental Trauma Disorder

- **A. Exposure**

- **1. Multiple or chronic exposure to one or more forms of developmentally adverse interpersonal trauma** (abandonment, betrayal, physical sexual assaults, neglect, coercive practices, emotional abuse, witnessing).
- affects a developmental segment

- **B. Subjective Experience**

- (rage, betrayal, fear, resignation, shame).

B. Triggered pattern of repeated dysregulation in response to trauma cues

– 1. **Dysregulation Type** *Interference with core developmental competencies that have behavioral manifestations*

- **Affective**
- **Somatic** (physiological, motoric, medical)
- **Behavioral** (e.g. re-enactment, self mutilation)
- **Cognitive** (thinking that it is happening again, *confusion*, dissociation, depersonalization).
- **Relational** (attachment clinging, oppositional, distrustful).
- **Self-care**

B. Triggered pattern of repeated dysregulation in response to trauma cues

2. Regulation Strategy

- **Anticipatory** (e.g. avoiding, bullying, ingratiating)
- **Coping** (e.g. cutting, assaulting, dissociating)
- **Restorative** (e.g. compliance, avoidance,)
- **Disorganized**

Developmental Impact on other disorders

- Substance abuse,
- Bipolar
- Depression
- Somatization

C. Generalized expectancies

- **Negative self-attribution**
- **Loss of protective caretaker**
- **Loss of protection of others**
- **Loss of trust in social agencies to protect**
- **Expectation? of future victimization**

D. Functional Impairment

- **Scholastic**
- **Familial**
- **Peer**
- **Legal**
- **Vocational**

Complex PTSD Intervention Domains

Safety

- Clear rules, due process, privacy, confidentiality.
- Cause and effect, rule of law, not of people
- Tolerance, respect & acceptance.

Self Regulation (Body, Emotion, Behavior)

- Breathing,
- movement & action

Attention-- Executive Functions—anticipation

- Focus, sensory integration, yoga, karate etc.
- anticipation, planning, decision making.

Positive Affect Enhancement

- *Imagination, Creativity, Pleasure, Competence*

Relational Engagement & Attachment.

- *Peer groups, negotiation, getting a “voice”, rhythms,*
- *improv, team sports,*

Fragmented Traumatic Memory Integration.

- *EMDR, CBT*

Over-Coming Trauma

- Effective action
- Accessing the emotional brain
- Processing traumatic memories
- Regulating arousal
 - Physiological arousal, localized in brainstem and exemplified by HRV, drives continued dysregulation, intrusions and behavioral reenactment.
 - Training in affect regulation and retaining automatic motor attitudes are the key to regaining locus of control (rather than understanding or inhibiting with drugs).

Evidence Based Treatments

For Post Traumatic Stress Disorder

- Goals
 - To reduce intrusive symptoms
 - To reduce avoidance symptoms
 - To reduce numbing and withdrawal
 - To dampen hyperarousal
 - to reduce psychotic symptoms when present
 - To improve impulse control around anxiety avoidance

Evidence Based Treatments (cont.)

Secondary goals:

- 1. to develop the capacity to interpret events more realistically with respect to their threat content
- 2. to improve interpersonal work and leisure functioning
- 3. to promote self-esteem, trust, and feelings of safety
- 4. to explore and clarify meanings attributed to the event

Evidence Based Treatments (cont.)

Secondary goals:

- 5. to promote access to memories that have been dissociated or repressed when judged to be clinically appropriate
- 6. to strengthen social support systems
- 7. to move from identification as a victim to that of a survivor.

Evidence Based Treatments

For Post Traumatic Stress Disorder

- The primary effective treatment component: prolonged exposure to traumatic event
 - Very difficult when recall produces aggression or guilt.
 - Prolonged exposure depends on the fact that anxiety will be extinguished in the absence of real threat, given a sufficient duration of exposure *in vivo* or in imagination to traumatic stimuli.

Evidence Based Treatments

For Post Traumatic Stress Disorder

- In PTSD, the individual retells the traumatic experience as if it were happening again, until doing so becomes a pedestrian exercise and anxiety decreases. Between sessions, individuals perform exposure homework, including listening to tapes of the flooding sessions and limited exposure *in vivo*.
- Exposure tolerance supported by anxiety management techniques
- Limited EBT with children

Evidence Based Treatments

For Post Traumatic Stress Disorder

- However, not every individual may be a candidate for exposure.
 - Owing to the high anxiety and temporarily increased symptoms associated with prolonged exposure, there are individuals who will be reluctant to confront traumatic reminders. Individuals in whom guilt or anger are primary emotional responses to the traumatic event (as opposed to anxiety) may not profit from prolonged exposure (Foa et al. 1995, Pitman et al. 1991).

Structured Interventions for Kids

- Ride Up and Down the Worry Hill, Lighthouse Press—www.Lighthouse-Press.com
- The Coping Cat or The C.A.T. Project (for teens) www.workbookpublishing.com
- Think Good-Feel Good; A cognitive-behavior therapy workbook for children and young people. Paul Stallard. John Wiley publisher.

Interventions for Adults

- Cognitive Therapy Techniques: a practitioner's guide. Robert Leahy. Guilford Publishing
- Overcoming Generalized Anxiety Disorder: A relaxation, cognitive restructuring and exposure-based protocol for the treatment of GAD. John White. New Harbinger Publications

Exposure-based treatments

- Exposure works better when sessions are closer together
- Prolonged exposure works better than short duration exposure
- Individuals should be discouraged from engaging in subtle avoidance techniques (distraction, or coping with safety persons)
- Real life exposure is more effective than exposure in imagination
- Clients may be more compliant with gradual exposure

Exposure-based treatments

- Systematic Desensitization—pairing frightening stimulus with relaxation—(response inhibition)
- Emotive Imaginary Technique—pairing frightening situations with an exciting story with a hero, instead of relaxation
- Flooding works for school refusal, after CBT and with an escort

EMDR

- Repeatedly proven effective for adults—
limited research with children
- Found to be effective in adults in as little
as 3-5 sessions, even for victims of rape

Evidence

- Both CBT and EMDR found superior to pharmaceuticals alone (Van Etten et. al. 1998)
- EMDR more efficient—fewer sessions(Van Etten et. al. 1998) (Jaberghaderi et. al. 2002)
- One study found greater gains at three month follow-up for EMDR than Behavioral therapy—without cognitive restructuring (Lee et. Al. 2002)

Comparison between CBT and Family Therapy (Kolko 1996)

- Both groups had significant improvements:
 - internalizing and externalizing symptoms
 - Child to parent aggression
 - Parental distress and abuse risk
- CBT-also had child improvement on socialization skills
- FT-reduction in parent to child aggression and family conflict
- **CONCLUSION:** if trauma impacting family, significantly include family in treatment

Trauma resolution in children

Dan Siegel-2004

1. *Contingent Communication:*

- Secure relationships are based on the ability of the parent to offer a collaborative form of transaction that involves:
 - (a) perception of the child's signals
 - (b) making sense of the signals in terms of what they mean for the child
 - (c) a timely and effective response

Trauma resolution in children

Dan Siegel-2004

1. *Contingent Communication:*

- When the parent's signal is sent as a response, the child can in turn respond with these three elements, and a circle of communication is established. The child may then experience the sensation of "feeling felt" by the parent, with the child feeling that his or her mind is inside that of the parent.

Trauma resolution in children

Dan Siegel-2004

1. *Contingent Communication:* .
 - Contingency is thus a form of joining, of communion, connecting child and parent.
 - Throughout life, but especially crucial during the early years, the signals being sent and received are often of the nonverbal sort and include:
 - eye contact,
 - facial expression
 - tone of voice
 - bodily gestures
 - Posture
 - timing and intensity of response.

Trauma resolution in children

Dan Siegel-2004 (cont.)

2. *Reflective Dialogue:*

- verbally based discussions on the contents of the mind itself.
- Going beyond just the discussion of outwardly visible “objective” events, parents can elaborate on the deeper layer of “subjective” human experience by focusing on the mental processes such as:
 - Thoughts -Feelings -Sensations -Perceptions
 - Memories -Attitudes -beliefs, -intentions.

Trauma resolution in children

Dan Siegel-2004 (cont.)

2. *Reflective Dialogue:*

- By so doing, a caregiver offers the child the opportunity to develop the capacity for “mindsight”
 - the ability to perceive the subjective experience of others, and of themselves.
- Such ability may be a cornerstone of compassion.

Trauma resolution in children

Dan Siegel-2004 (cont.)

3. *Repair:*

- Each form of emotionally involving social relationship involves the inevitable rupture in the attuned, contingent communication that is the “ideal” form of transaction. Contingency is not able to occur in all interaction.

Trauma resolution in children

Dan Siegel-2004 (cont.)

3. *Repair:*

- When we need connection to others and it does not occur, this is called “rupture”
 - distracted,
 - Tired
 - in other ways preoccupied
 - have missed the opportunity for connection with others
 - a caregiver may be setting limits on a child’s behavior and not be able to “go along” with the desires of a child.

Trauma resolution in children

Dan Siegel-2004 (cont.)

3. *Repair:*

- When correcting--
- a caregiver can still acknowledge the child's inner work, though not agreeing with the desire or expressed behavior.
- when we may become overwhelmed with anger that directly interferes with our ability to be in tune with our children
- At these times, children may become filled with a sense of shame and humiliation, being left with an urge to turn away and with a sense that the self is defective

Trauma resolution in children

Dan Siegel-2004 (cont.)

3. *Repair:*

- Repair is essential when there is a rupture
- Repair is an interactive process that involves an acknowledgment of the disconnection and an attempt to move forward and reconnect.

Trauma resolution in children

Dan Siegel-2004 (cont.)

4. *Emotional Communication*

- Involves
 - the sharing and amplification of positive emotions, such as joy and excitement
 - the sharing and soothing of negative emotions, such as fear, sadness, and anger.
 - This sharing of emotion allows a child to learn that emotions are tolerable internally, and can lead to a rewarding sense of closeness interpersonally.

Trauma resolution in children

Dan Siegel-2004 (cont.)

4. *Emotional Communication*

- Parents may often feel the urge to quickly “solve” a problem that has produced a negative emotion state
- it is important to reflect with a child on this state before rushing to eliminate it.

Trauma resolution in children

Dan Siegel-2004 (cont.)

4. *Emotional Communication*

- Negative emotions can be seen an opportunity to deepen a child's capacity for self-regulation and self-understanding
- The development of such internal processes may give rise to the interpersonal experiences of empathy and compassion.

Trauma resolution in children

Dan Siegel-2004 (cont.)

5. Coherent Narratives

- As children grow past their second birthdays, story-telling becomes a vital form of interpersonal communication and internal understanding.
- Narratives help us to “make sense” of our lives and of other people.

Trauma resolution in children

Dan Siegel-2004 (cont.)

5. Coherent Narratives

- Stories enable us to understand the complex social worlds in which we all live.
- Helping parent make sense of their own lives may provide a direct route to helping their children develop secure attachments.

Trauma resolution in children

Dan Siegel-2004 (cont.)

5. Coherent Narratives

- studies have demonstrated that parents who have come to make sense of their own early life relationships have the highest likelihood of having children who are securely attached to them

Trauma resolution in children

Dan Siegel-2004 (cont.)

5. Coherent Narratives

- It is not that the parents tell these coherent stories to their children – but rather that there is some way in which a parent who has achieved this form of coherent self-knowledge seems to offer children the contingent communication that is at the root of the interactions that enable secure attachments to develop

Conclusion

- We must move from late intervention to early prevention in order to address the problem of violence in children,
- In these tragic cases the seemingly invisible “ghosts from the nursery” reappear in horrifyingly sharp outline during the ensuing stages of childhood, where they not only haunt and destroy individual lives but negatively impact entire communities and societies.
- The “ghosts from the nursery” are the essence the enduring right brain imprints of the nonconscious intergenerational transmission of relational trauma (Shore, 2004)