Treating Traumatized Individuals: Neurobiological & Psychological Effects of Trauma

Module created by Glenn Saxe, MD - 2002

This presentation is about the neurobiological and psychological effects of trauma. The module was created by Dr. Glenn Saxe from the Boston University Medical Center who has done significant work in this area. Dr. Saxe believes that when we are serving people who have been traumatized, we have to treat them right, ethically, and be true to Hippocrates's dictum to "first, do no harm."

People with trauma histories may have any number of problems resulting from their traumatic experience, including having difficulty controlling their emotions and their behavior. One of the important tasks of trauma treatment is to avoid interventions that could be retraumatizing and do more harm, as opposed to "doing no harm."

Any work used from this document should be referenced as follows:

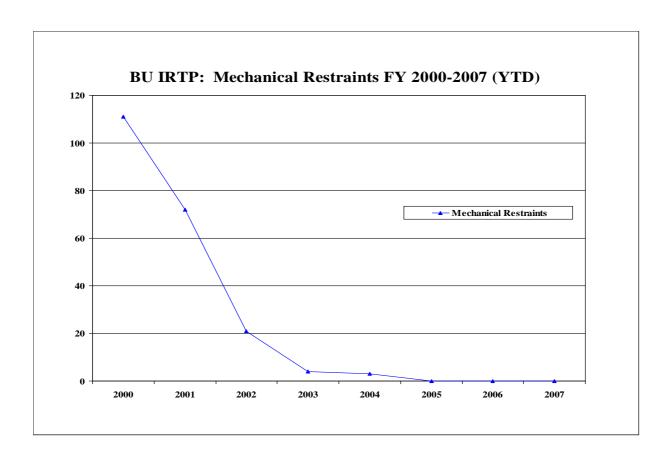
"National Executive Training Institute (NETI). (2005). Training curriculum for reduction of seclusion and restraint. Draft curriculum manual. Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD), National Technical Assistance Center for State Mental Health Planning (NTAC)"

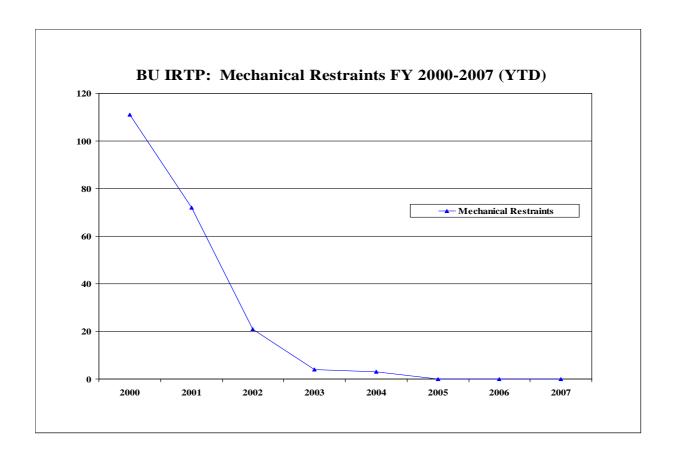
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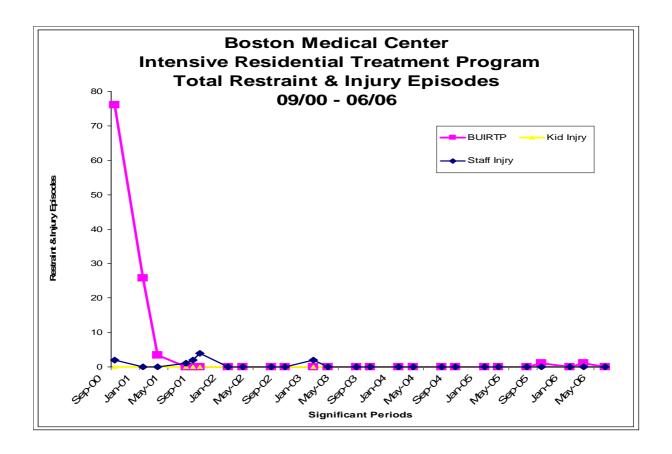
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It is important to acknowledge the National Child Traumatic Stress Network, which is funded by SAMHSA. This is an important, major, national initiative that started in 2001. Currently there are 54 trauma centers around the country devoted to the issue of child and adolescent trauma. Many of the ideas included in this presentation come from this initiative.



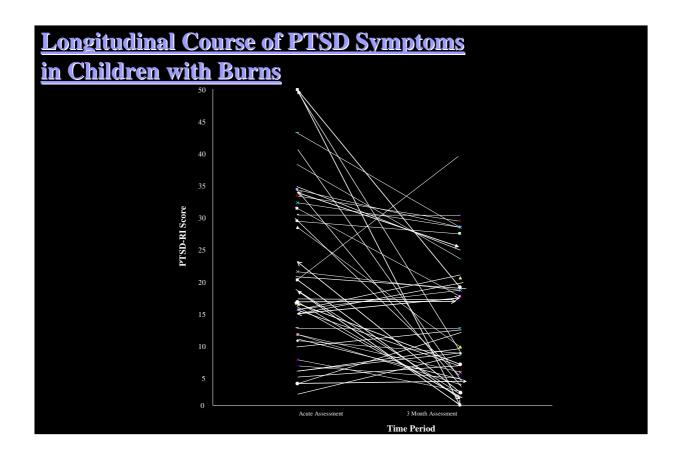






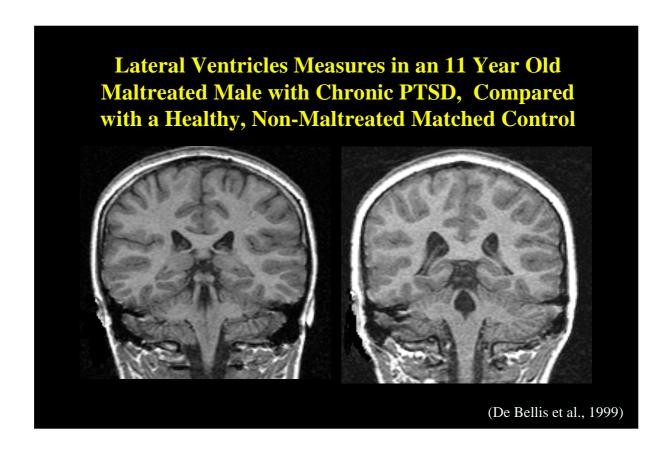
Children walk to their futures on pathways cleared by the adults who are part of their lives. Just like the people we serve in our programs who walk to their futures on paths that are cleared by our staff.

Staff have the responsibility of helping to clear the paths for the people we serve, so that they can heal, recover and find, believe in and capitalize on their own resiliencies.



(A laser pointer may be helpful here.) This slide is another way of looking at pathways.

This slide summarizes research of children who were hospitalized for severe burns. The first point on the graph represents the degree of traumatic stress the children were experiencing at admission. The second point depicts traumatic stress three months after admission. Why is this important? It clearly exemplifies that every person; children and adults alike, walks a different path in response to their traumatic experience. There is no one way that people respond to trauma. Some children come in severely burned and have no symptoms of traumatic stress at admission and they never develop symptoms. Other children have many symptoms of trauma at admission and then slowly recover. It is very important to know that the impact of traumatic events is highly individualized. Each person responds differently to trauma.



This slide demonstrates the physical impact of trauma on the brain. This work comes from an important study by Dr. Michael DeBellis (*pronounced: Bayless with a long 'a'*) and his colleagues that was published in *Biological Psychiatry* in 1999. Dr. DeBellis studied the brains of children who were abused and compared them to the brains of children who were not abused.

Dr. DeBellis found that the brains of children who had been abused were different. (Again, it might be helpful to use a laser pointer here.) If you look on the left side, the healthy child's brain, you see a thin external layer covering the brain (white area arching over brain image). If you look at the image on the right, you see a thicker white band. This shows atrophy or shrinkage of the cerebral cortex. Besides the cortex, other structures of the brain change, like the hippocampus and the amygdala. These structures also decrease in size. But the lateral ventricles, on the other hand, increase in size in people who are traumatized. See this black triangle shapes on left image and how much larger they are in the MRI image of the child with trauma on the right? Trauma physically effects the brain and how it functions.

Karestan Koenen, a researcher from Boston, published a groundbreaking twin study in 2003. She looked at twins who were discordant for trauma, meaning one had a history of trauma and one did not. What she found was that the twin who had a trauma history, had on average, an 8-point reduction in IQ scores – the only distinguishing variable was the trauma. Lowered IQ is a significant risk factor for other negative outcomes, like school failure and juvenile delinquency. What this means is that people with trauma histories, can also have brains that have been adversely effected by that experience. So, trauma can directly effect learning and day-to-day functioning of the people we serve, for the rest of their lives.

From Neurons to Neighborhoods:

The Science of Early Child Development

Report from the Institute of Medicine/National Academies

National Research Council

Much of the information in this presentation comes from the Institute of Medicine's report, entitled *From Neurons* to Neighborhoods; The Science of Early Child Development.

This is an important report that describes: the science of how children develop, how their brains develop, how early environments can help or hurt, the impact of trauma, and the importance of nurturing relationships.

Although the report does not focus on adults, the findings are absolutely relevant for how we treat both children and adult trauma-survivors.

Trauma in U.S.A.

- 3 million children were suspected of being victims of abuse and/or neglect (Mazelis, 1999)
- 3.9 million adolescents have been victims of serious physical assault, and almost 9 million have witnessed an act of serious violence (Kilpatrick et al., 2001)
- In 1998, 92% of incarcerated girls reported sexual, physical or severe emotional abuse in childhood

 (Acoca & Dedel, 1998)

Here is some fundamental information about the prevalence of trauma and PTSD. These slides provide trauma prevalence rates for the children and adults we serve, but remember that some of our staff also have symptoms of trauma.

A study was done in Massachusetts of mental health workers who worked on the units and found that 25% of the staff actually had symptoms of trauma.

Look at these numbers for children - between 3 ½ and 10 million children witness the abuse of their mother annually and 92% of incarcerated girls report severe abuse.

PTSD in U.S.A.

- Over 50% of U.S. women & 60% of men report experiencing at least 1 traumatic event at some point in their lives. But, only a minority (10% of women & 5% of men) report developing posttraumatic stress disorder, the most prominent psychiatric disorder associated with traumatic events.

 (Koenen, 2005; Kessler et al., 1995).
- More than 80% of those diagnosed with PTSD will suffer from other psychiatric disorders. (Solomon & Davidson, 1997)
- For more than 1/3 with PTSD, it will be a persistent condition and experienced for several years

(Solomon & Davidson, 1997)

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Trauma & PTSD in Australia

Findings of the 1997 National Survey of Mental Health & Wellbeing indicate:

- 57% of the population report a lifetime experience of a specified trauma
- Men were more likely to experience most & multiple traumas (except sexual assaults)
- The prevalence of PTSD
 - Overall in the adult population = 1.5%
 - PTSD prevalence in women = 3.8%
 - 2.8% of those exposed to trauma develop PTSD

(Rosenman, 2002)

Effective Treatment Must Account For:

- 1) A dysregulated nervous system
- 2) A social-environment that cannot contain this dysregulation

Up to 14% of the general population has PTSD. With our adult population, the prevalence of PTSD is much higher. For homeless mentally ill women the statistics are as high as 98%.

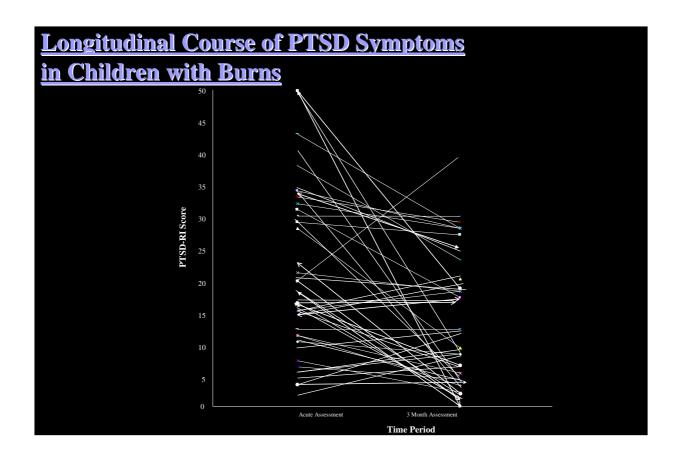
Many, if not most of the people we serve, have experienced trauma. And, on top of the traumatic experiences, they have experienced tremendous loss and grief. The people we serve are hurting.

Core Concepts of Development

1) The development of children unfolds along individual pathways whose trajectories are characterized by continuities and discontinuities, as well as by a series of significant transitions.

(Shonkoff & Phillips, 2000)

So we are going to look at and talk about six general principles from the *Neurons to Neighborhoods* report. The first one is basically that children develop along individual pathways whose trajectories are characterized by continuities and discontinuities, as well as a series of significant transitions. Actually, what this means is when trauma, any kind of trauma, occurs in a person's life the trajectory of their life path <u>changes</u>. Their life changes.



309.81 PTSD Definition

The development of characteristic symptoms, following exposure to a traumatic stressor involving direct personal experience or witnessing another persons' experience of:

- Actual or threatened death
- Actual or threatened serious injury
- Threat to physical integrity

Let's review the definition of Post Traumatic Stress Disorder or PTSD.

Most may know what Post Traumatic Stress Disorder is, but this slide provides a definition: the development of characteristic symptoms following exposure to a traumatic stressor. The traumatic event could have been actual or threatened death or serious injury or a threat to their own psychical integrity.

Post Traumatic Stress Disorder

- Characterized by:
 - Re-experiencing the event
 - Intrusive thoughts, nightmares, or flashbacks that recollect traumatic images and memories
 - Avoidance and emotional numbing
 - Flattening of affect, detachment from others, loss of interest, lack of motivation, and constant avoidance of any activity, place, person, or event associated with the traumatic experience

PTSD is often characterized by <u>re-experiencing</u>, which could mean flashbacks or nightmares.

PTSD is also characterized by <u>avoidance and numbing</u>, which means the shutting down of emotional responses or staying away from people, places, or things that remind the person of that trauma.

What is important to know is that re-experiencing can lead to out of control behavior. When someone with a trauma history begins to escalate, it may be because he/she is remembering or re-experiencing a traumatic event. They may be reminded of the trauma and be flooded or overwhelmed with memories of that earlier traumatic event.

Core Concepts of Development

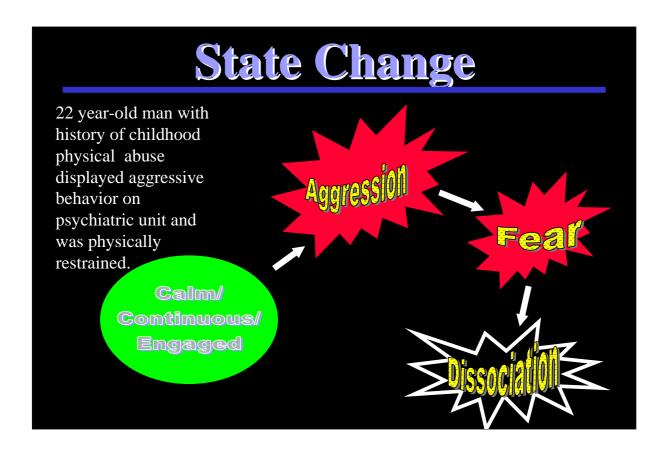
2) The growth of self regulation is a cornerstone of early development that cuts across all behavioral domains.

(Shonkoff & Phillips, 2000)

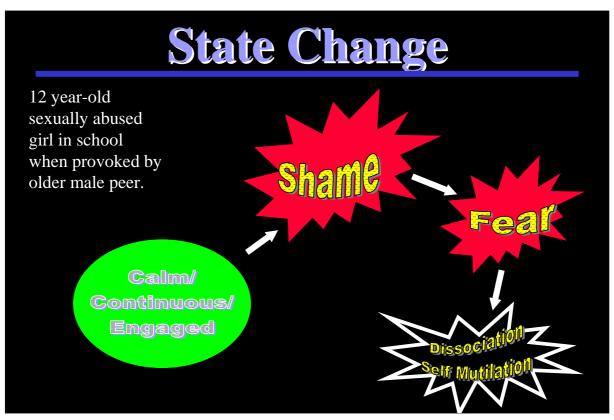
Again, from the *Neurons to Neighborhoods* report, the second basic core concept stresses the importance of self-regulation.

Our focus has to include helping people learn how to control their emotional and behavioral states.

With respect to trauma, one of the most important concepts to understand is what happens when that experience is triggered and there is a transition from "calm and continuous states" to "discrete states of emergency."



Here is an example of this transition. This is a slide that depicts what happened with a young man named Robert. Robert was severely physically abused by his stepfather on a regular basis. He was on a psychiatric unit and he was actually having a good day; everything was going great for Robert. Then he perceived that a male staff member said something demeaning to him. What happened? He immediately went from a calm, continuous state to a state of aggression. He lunged at the staff member. What happens when you lunge at a staff member? You get restrained. Robert was restrained and then he started to re-experience the physical abuse he suffered as a child. He began to dissociate and lose all sense of reality. What was discovered afterwards, through meticulous debriefing, was that when he overheard the staff person say something, he heard it in his stepfather's tone of voice. Robert perceived it as demeaning. So, he went from a calm, continuous state to three extreme states of emergency. The transition between calm and continuous states and discrete states of emergency are fundamental for understanding trauma and how the brain responds to perceived threat and stress.



Here's another example; this involves a 12 year old girl named Talia.

She had a history of sexual abuse, but she was living at home and going to school in the community. Talia was in school that day and having a good day. She was sitting in math class and the boy next to her made a demeaning comment about her breasts. So, here was Talia in a calm and continuous state; a male peer made a demeaning comment about her breasts and she immediately began to feel this intense sense of shame. She got up from her desk and walked out of the classroom. After Talia walked out of the classroom she felt even more shame and she began to feel like she was being raped again – actually, in her mind, reexperiencing the rape. She walked out of the school and began to walk home, since she lived close by. This sequence of events was determined through meticulous interviewing/debriefing after the event. Talia walked home; opened the front door and went into the bathroom. She took out a knife that she hid in the medicine cabinet and began to cut herself and dissociate. Luckily Talia's Mother was home and immediately took her to the hospital for treatment.

But, this is another example where self-regulation did not occur – self-regulation is the second cornerstone. She went from a calm, continuous state, to the boy saying something demeaning, to feeling shame, fear, then dissociation – with no capacity to control her behavior and feelings.

Parameters that change between state

- Affect
- Thought
- Behavior
- •Sense-of-self
- Consciousness

If you think about either of these examples – there was a triggering event that lead to a dramatic change in behavior.

Think of Robert on the unit - he was feeling good just beforehand, and afterwards, he was rageful. He was thinking about himself before as "*I'm fine, I'm doing well*" and after that triggering statement by the staff he was dramatically different. His behavior was obviously different; as was his sense of himself. He lost control of himself.

There were dramatic shifts in all of these areas as well.

Emotional States and Child Development

- Discrete behavioral states are a central organizing experience of infancy
- Infants experiential world is divided into separate and definable emotional/behavioral states
- Critical task of early child development is to build smooth transitions/bridges between states
- Regulation of emotion is initially contingent on caregivers facilitating these transitions.

(Wolff, 1987)

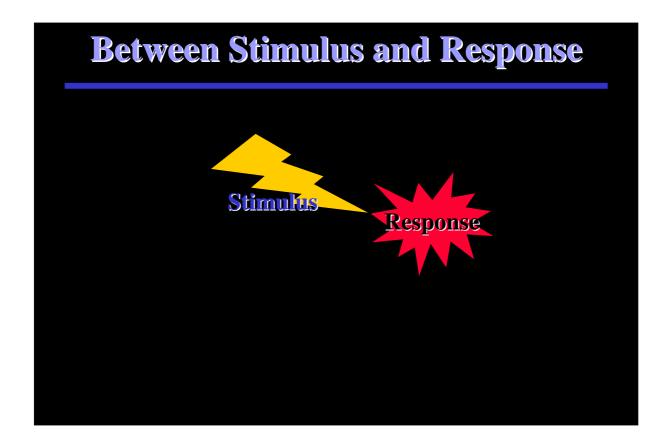
All of this is built on principles of normal development. How many of you have children of your own? Do you remember when you first brought that infant home from the hospital? He or she was a brand new bundle of joy, and then started screaming. What did you do? You picked the baby up. You picked him up and you begin to rock him or you held him. Then what happened? He or she stopped crying.

Dr. Peter Wolff wrote a book called *The Development of Behavioral States and Expressions of Emotions in Early Infancy*. He studied infants and found that the world of infants is divided into separate and definable behavioral and emotional states. Dr. Wolff believes, from his studies, that a critical task of early development is the building of smooth bridges between these states. When that infant cries and we pick him up, and this happens hundred and hundreds and hundreds of times, then the baby eventually learns to go from distress to calmness on his own. As he gets older, the young child develops his own capacity to self-regulate and calm themselves. When someone has a early history of trauma, they do not learn how to make that transition from calm to distress and back to calm again. What they learn is how to go from calm, continuous states to discrete states of emergency – *quickly*.

Goal of Treatment

- Maintain Calm/Continuous/ Engaged State
- Prevent Discontinuous States
- Build Cognitive Structures that allow Choices

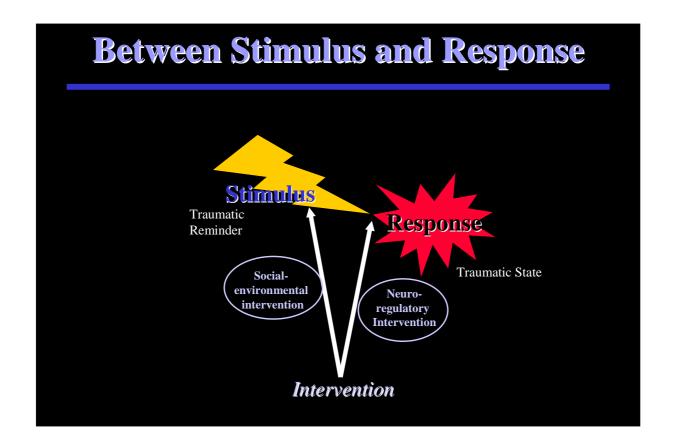
So, the goal of treatment is to help people to maintain calm and continuous engaged states; to prevent discontinuous states; and to build cognitive structures that allow choices. This is important – this is how we want to set up our treatment environments – to help the people we serve learn how to maintain calm states, prevent discontinuous states, and build cognitive structures.



The following slides actually illustrate this transition process.

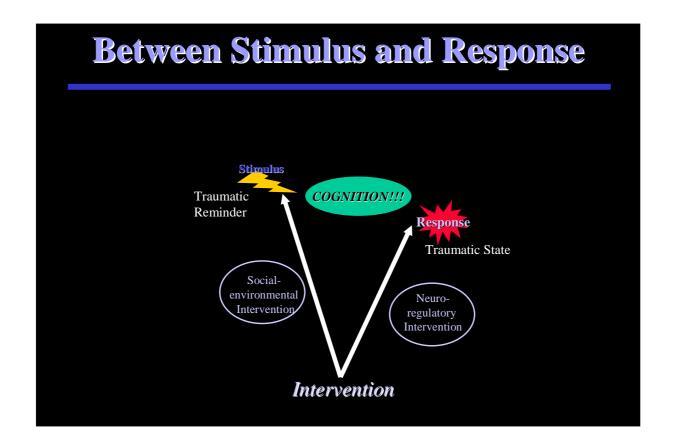
In this case, you have a stimulus, it could be any stimulus. It could be Robert on the unit who hears his stepfather's voice; it could be Talia at school who hears the negative comment about her breast.

In both cases, they go from stimulus to response without thinking.



We divide potentially successful interventions into two types: the first are neuroregulatory interventions. These are the interventions that help the individual to have the capacity to soothe themselves, to calm themselves, to regulate their emotions between emotional and behavioral states. Remember, people who are traumatized have deficits - sometimes big deficits - in their ability to regulate their emotions.

The second intervention is the social environment. This is just as important. On our units, we do have some control over how we set up the social environment. What Dr. Glenn Saxe did in his unit was ask each of the adolescents he served, in careful detail, about what was trigged or stimulated them so that staff could adjust the unit environment and reduce the source or sense of threat.



We need to help staff view themselves as crafts persons, not factory workers - so that they can skillfully create or shape the environments for the people we serve. When we work in an outpatient world, we do this. We actually ask people what is triggering for them and we try to build what we call a "wedge of cognition;" the ability to think when they're feeling distressed.

So what happens - if Talia is at school and hears someone say something demeaning about her breasts, she thinks, "Wait a minute; he says that to all the girls; nothing happens to them; nothings going to happen to me; I'm okay, he's a jerk and my clinician told me to just take a deep breath and ignore it." So, she is building a wedge of cognition and that is what we want to do for the people we serve. We want them to know that they have alternatives besides those discrete states of emergency.

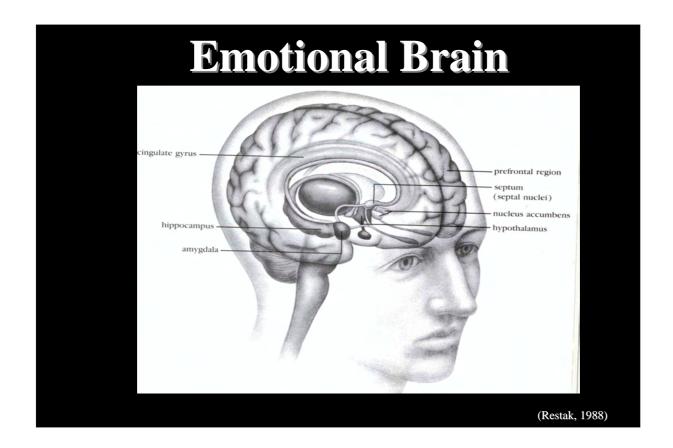
Core Concepts of Development

3) Human development is shaped by a dynamic and continuous interplay between biology and experience.

(Shonkoff & Phillips, 2000)

The third developmental principle is that human development is shaped by a dynamic and continuous interplay between biology and experience. All of this is talked about in detail in the *Neurons to Neighborhoods* report.

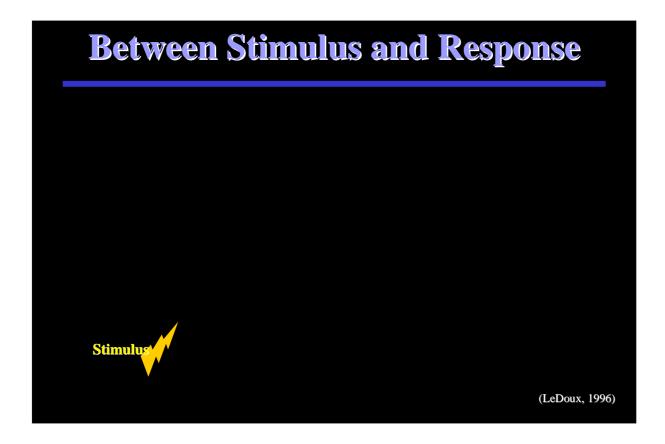
What this concept tells us is that the whole notion of nature versus nurture is a false dichotomy. Experience sculpts the brain; and people are all different and choose different environments. These different experiences, choices and environments further sculpt the brain.



To further highlight this point, let's consider two important structures in the brain.

(Use a laser pointer or just point to the area of the brain here)

This part is called the amygdala. It is responsible for fight or flight, we all have an amygdala. Another part of the brain is the hippocampus, which is here - above the amygdala. The hippocampus applies context to the situation and helps to regulate the amygdala and other functions in the brain.

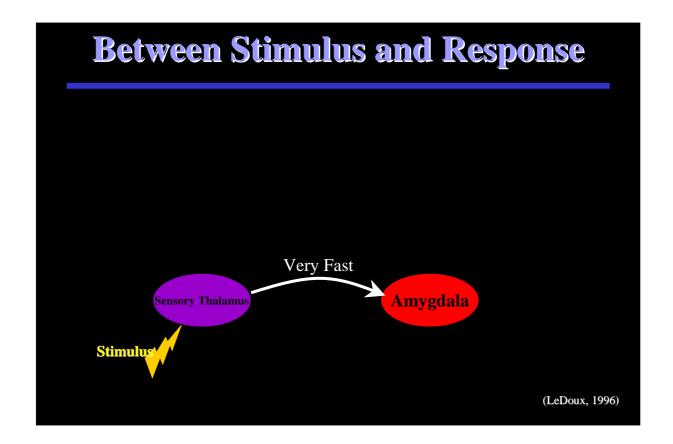


Let's walk through how the brain operates. A stimulus occurs; it could be any stimulus. It could be the young man, Robert, who hears his stepfather saying something demeaning.

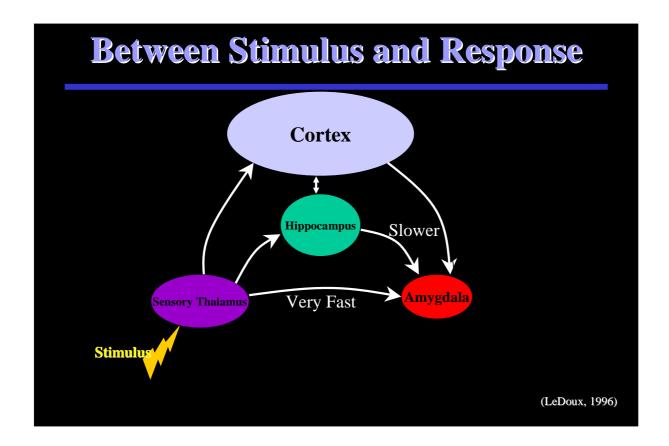
Between Stimulus and Response



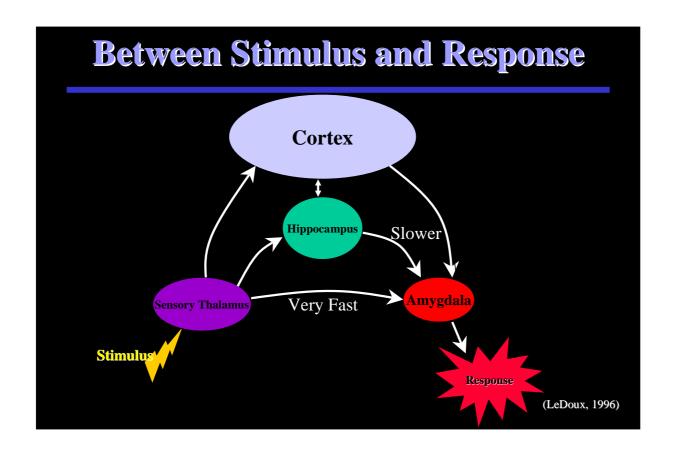
(LeDoux, 1996)



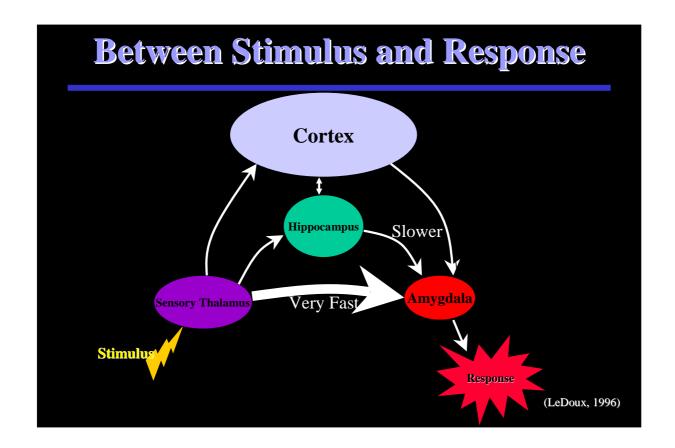
The stimulus is transmitted very quickly to the amygdala. The amygdala is built for survival. It is an immediate response; you do not even think about it; it just happens.



Then, split seconds later, the same stimulus is relayed to the cortex and the hippocampus. This is where memory and context come into play.



So, let's say for example, all of a sudden the door in the back of this auditorium slams shut. What do you do? You jump. Maybe; you get sweaty for a minute, you might begin to slightly move your body as if you were going to get up and run out. That is your amygdala reacting to the sound stimulus. But immediately afterwards, your cortex and your hippocampus translate the stimulus and you say, "Wait a minute; I'm sitting in this room; I haven't been hurt by sitting in an auditorium and a door slamming." So, you relax and get back to the training. Your response is to relax again.

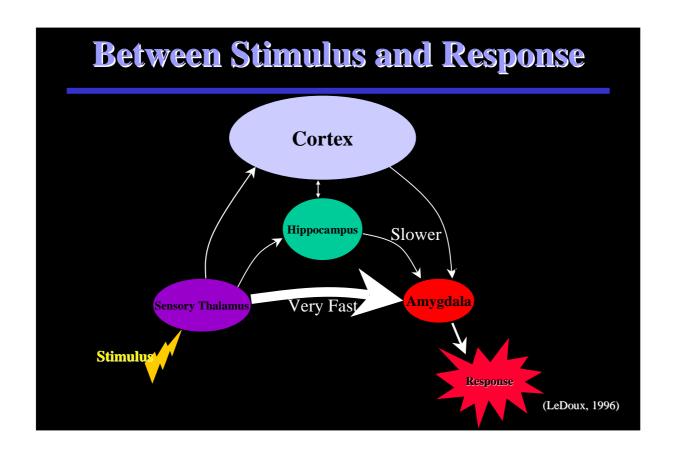


But let's say we're at the Empire State Building in New York City and we're sitting on the 80th floor in this same training and we hear this very loud bang. What happens to

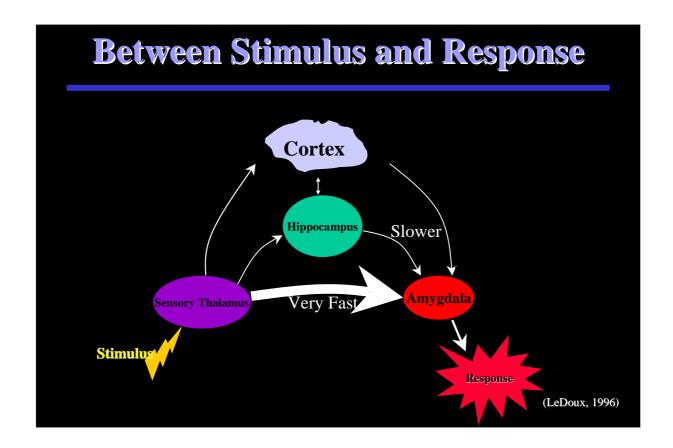
those people in New York on the 80th floor now ... after 9/11? They might just run out of the room not only because

their amygdala is activated but because the context created

by hippocampus has changed since the 9/11 tragedy.

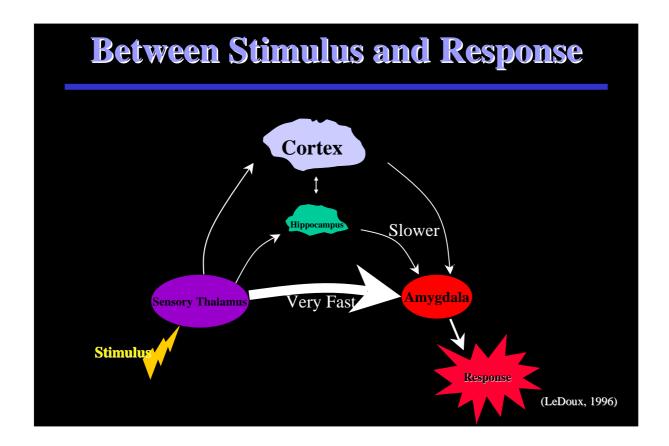


So what happens is that we have an IMMEDIATE response. This is what happens to people with traumatic stress. Their amygdala is activated, their capacity to wait for the "context" is diminished and they respond rapidly to a perceived threat or emergency and shift into an 'emergency state of behavior'.



What else happens? The structures of the brain can be altered by trauma. The cortex can shrink. The amygdala can decrease in volume and the hippocampus can atrophy.

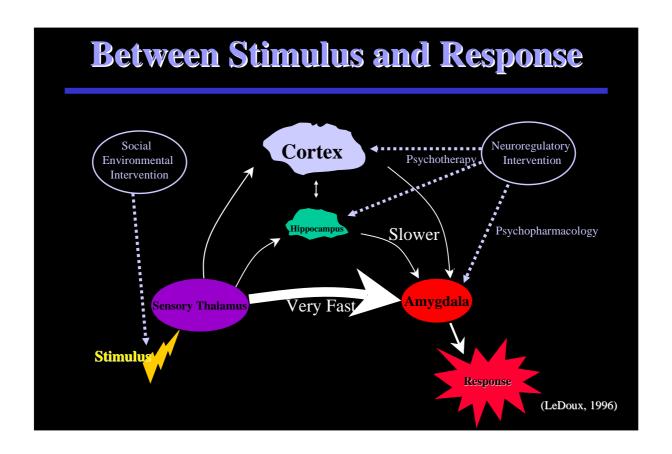
The structures and function of the brain is changed.



What does this mean? The experience of trauma can compromise the individual's functioning. Processing of information in the "rational" parts of the brain is impaired and slower.

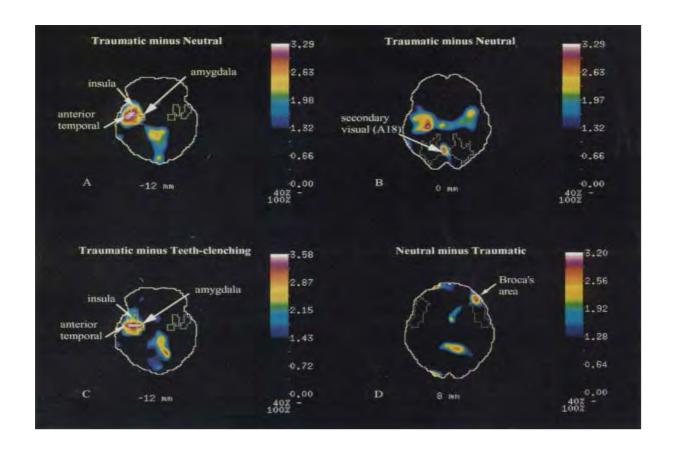
When a stimulus occurs, like Robert hearing a staff member say something that he perceived as demeaning but which actually wasn't, the amygdala is quickly activated but the hippocampus and cortex do not effectively translate the stimulus and decrease the arousal before his behavior escalates.

There are several studies that have repeatedly demonstrated the damage to the hippocampus and the cortex as a result of traumatic exposure. Impairment in neurological and cognitive functioning results. Context and understanding are sacrificed for speed and survival.



So, to help the traumatized people we serve, we need to build in structures to help them regulate their emotions and behavior. One way, is to create neuroregulatory interventions. Some researchers believe that the common pathway of many of the agents that we use is to diminish the amygdala from responding.

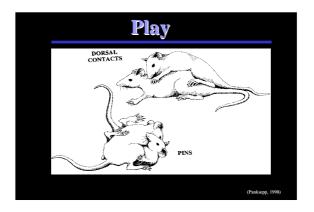
We can also help trauma survivors by creating social environmental interventions, and cognitive behavioral and social skill approaches. We can survey the environment to reduce factors that may contribute to distress and also work to enhance emotional processing interventions. We need to create environments where behavior is anticipated and not reacted to.



(It might help to use a laser pointer here also.)

This slide depicts a brain and the results of research by a leading neuroscientist named Scott Rauch. He studied the brains of people who had Post Traumatic Stress Disorder. He interviewed them after they had experienced trauma. What he found from this brain imaging study is that when trauma survivors are remembering their trauma, the amygdala was activated.

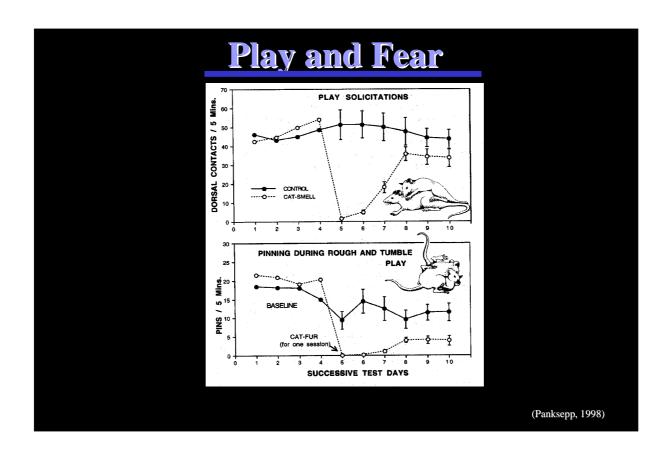
Dr. Rauch also discovered that the Broca's area of the brain, which is responsible for speech, was not activated when they were remembering their trauma. This would explain the term "speechless terror," when people are unable to speak in times of great stress. So, when we ask people in the midst of crisis and/or traumatic re-enactment, to "tell us about it," they really are not able to. The area of the brain that is responsible for speech has actually shut down.



Now, I want to talk to you about a rat study.

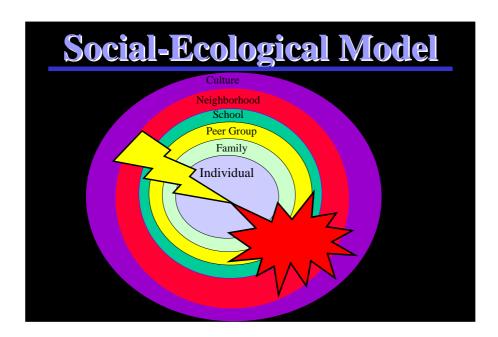
This is a good study to illustrate everything that we've been talking about - about how important it is for us to set up nurturing environments in our treatment programs. The information we will be discussing comes from research conducted by Dr. Jaak Panksepp. He is a neuroscientist and what he does is study 'play.'

Play is what children do. If a child is not playing, we know there is something wrong. Dr. Panksepp studied young rats at play. And this slide illustrates the two primary methods of rats at play. They have dorsal contacts and pins.



These are rats that live in a laboratory. They have never been out of the laboratory. Dr. Panksepp keeps track of how often they play. Basically, they play all of the time. They are born; they have this wonderful life; they live in a cage in a laboratory and they play, play, play. So what he did was put a "minimal fear stimulus," a single cat hair in their cage. Just one cat hair. Mind you, these are rats have never seen a cat. He put one cat hair inside their cage and what do you think happened? They stopped playing completely. The cat hair was in the cage for 24 hours; and they did not play for 24 hours. But what was even scarier, when he took the cat hair out, the rats never played the same amount of time again in their lives. So, one cat hair for 24 hours caused lifelong changes to playing behavior. When you think about the people we serve, some of them come from homes that are full of cat hair, some live with the cat. Some of them have lived in environments that are full of cat hair and what we want to make sure is that our units are not full of cat hair.

This will have a profound effect on learning, emotion, and behavior.



Human beings live in an environment that more sophisticated than a lab rat, but our need safety and security is not.

This is the well-known social, ecological model developed by Dr. Urie Bronfenbrenner at Cornell University. It illustrates how we as individuals are embedded in a social environment – an ecology with support structures that provide safety: like family; school; peer group or a neighborhood or a culture; or have a work community. All of these elements help to protect us, insulate us and provide to buffer inevitable challenges of life. And if you think of your own life - what happens when your mother gets really sick? What happens when your child breaks his leg? What happens when a dear friend goes through a divorce? We have to make substantial adjustments in our lives. It is not easy.

The people we serve have many issues to contend with in their lives. Our job is to ensure that the environments we create are strong social, ecological protective buffers for our consumers.

Core Concepts of Development

4) Human relationships, and the effects of relationships on relationships, are the building blocks of healthy development.

(Shonkoff & Phillips, 2000)

The fourth principle is that human relationships and the effects of relationships are the building blocks of healthy development. We could implement really cool models of treatment. We could manualize treatment protocols and implement sophisticated interventions, but what neuroscience tells us, is that the first step towards healing is human relationships. If we want to help traumatized people address their needs and they do not have strong cortexes and hippocampuses to help them, then we can model caring, empathetic relationships. It is how we work with people on an every day basis that is more important than any treatment model. What we want to do, when people start escalating or display inappropriate behaviors, is have our staff, our crafts people, be empathetic, be calm, show care and concern. We want to ask questions - but not what staff sometimes do, "Look at Henry, there he goes with his old tricks again." We want staff to ask: "What might we be doing that is triggering for him? What might we not be doing that could support him?"

Attachment

- Earliest relationships critical for capacity to regulate state
- Early traumatic relationships set up person to respond with state dysregulation to interpersonal cues in subsequent relationships

Attachment & Relational Deficits

- •Appear guarded & anxious
- •Difficult to re-direct, reject support
- •Highly emotionally reactive
- •Hold on to grievances
- •Do not take responsibility for behavior
- •Make the same mistakes over and over
- •Repetition compulsion / traumatic re-enactment

(Hodas, 2004)

Traumatic Relationships

- Emotions expressed in interpersonal relationships can be extremely painful and can be related to trauma experience
- These trauma-based emotions (e.g. anger, fear, hopelessness, sexual arousal) can be very hard for clinicians to tolerate
- Clinicians must be mindful about their experience of trauma-based emotion so that this emotion is not enacted in the clinical relationship

Core Concepts of Development

5) Children are active participants in their own development, reflecting the intrinsic human drive to explore and master one's environment.

(Shonkoff & Phillips, 2000)

The fifth developmental concept is that the people we serve need to be active participants in their own development, care and decision making.

Isn't this what the whole focus of empowerment and recovery is about? Isn't this what the President's New Freedom Commission Report is about?

It is about respecting people's ability to master their own environment and believe in recovery and resiliency.

Traumatic Mastery

- Many children have primarily experienced abusive and neglectful relationships
- Extreme behaviors within relationships can be seen as defensive or self-protective
- Traumatized children respond to their trauma history in the present. They are not able to discern that the context has changed
- This behavior must be seen as an attempt to master extremely difficult environments. In this way, traumatized children are "doing the best that they can"

We sometimes get angry at the people we serve. We say: "They're not working hard enough," that "They are trying to make our lives difficult," "They're not engaging," or "They're manipulative."

What is more likely the case is that some people, because of their history and the chaotic settings they come from, have developed challenging, maladaptive behaviors. These behaviors are important and have been helpful to surviving in these difficult environments. When they come to our units, we have to convince them that our programs are different. Our healing programs are probably not like the environment that they were in. We have to convince them that every staff member is soft and tender and a nurturer so they do not have to use those maladaptive behaviors on our units.

Core Concepts of Development

6) The course of development can be altered...by effective interventions that change the balance between risk and protection, thereby shifting the odds in favor of more adaptive outcomes.

(Shonkoff & Phillips, 2000)

And this leads us to the sixth and final principle: The course of development can be altered by effective interventions that change the balance between risk and protection, thereby shifting to more favorable odds. What we are really trying to do is understand risk and resilience - understand how we can build in more strength-oriented and resiliency based models. Our takehome actions can begin to make a difference – not just in creating a cognitive wedge and smooth bridges between emotional and behavioral states, but in truly helping those we serve learn new ways of successfully coping.

TAKE HOME IDEAS

- Set up calm and nurturing environments
- Teach staff to meticulously observe for 'triggers' when someone is beginning to move from a calm, continuous state to a discreet state of emergency
- Train to caring and compassion
- Meticulously interview for triggers
- Adjust the environment
- Adjust what we do (i.e., look at ourselves and our behaviors and actions as the key for success)
- We can work to build that *cognitive wedge*!

So, let's review what we've covered so far, related to take home ideas. We can set up calm and nurturing environments. We can teach our staff to meticulously observe, so they can see when maybe someone is being 'triggered' and when someone is beginning to move away from a calm, continuous state to a discrete state of emergency. We can train our staff to be caring and compassionate. We can meticulously interview the people we serve for triggers. We can adjust the environment; adjust what we do; look at ourselves and our behaviors and actions as the key for the success of those we serve. We can take responsibility and we can really work to build that cognitive wedge, to help our staff help people who have been traumatized understand that not all people are harmful and not all places are unsafe. We can help them learn to differentiate.



Our job is to ensure that we, and the staff we work with, are all working to clear the paths for the people with trauma that we serve.

By building in more strength-oriented models, and teaching to skills that create that wedge of cognition, then we can actually prevent the extreme behaviors that challenge people with trauma. We enhance their capacity to walk a new, cleared pathway towards health and recovery.



When we do this, what happens is that the people we serve start to believe, "Hey, I'm important; I'm successful; I'm No. 1". We look at the people we serve as if they are No. 1. Other people in their lives see us looking at and treating them with respect and they begin to look at them with respect and admiration also.

Teach your staff about the pathways of trauma. Teach your staff about their responsibility for clearing these paths - with sensitivity, with understanding, about what traumatic stress is, what it means, and how we must help those with trauma learn new ways to cope with challenges so they can recover and lead a life with meaning.