Trauma-Informed Care

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First things first: What do we mean by TRAUMA?

According to the DSM-5, events considered TRAUMATIC include:

- Exposure to actual or threatened death, serious injury, or sexual violence
- This means DIRECTLY experiencing a traumatic event (that is, the individual IS the victim)

OR

Witnessing-- in person- a traumatizing event as it occurs to others

DSM-5 on TRAUMA (continued):

OR Learning that a traumatic event occurred to a close family member or close friend.

- In a case of actual or threatened death of a family member/friend, trauma refers to VIOLENT or ACCIDENTAL (i.e., sudden and unexpected) death
- Or Experiencing repeated or extreme exposure to aversive details of traumatic event(s)

E.g., first responders collecting human remains, police officers repeatedly exposed

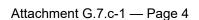






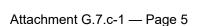
Another take on trauma from SAMHSA:

Trauma results from an event, or set of circumstances, that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning— and mental, physical, social, emotional, or spiritual well-being.



Can real **TRAUMA** be associated with emotional or behavioral problems and/or impaired functioning?

- ➤ Yes! The literature tells us that individuals who experience trauma often experience:
 - Depression
 - Anxiety
 - Post-traumatic stress disorder
 - Attention Deficit Hyperactivity Disorder
 - Oppositional Defiant Disorder
 - Substance abuse disorders
 - Risky sexual activity



- Sleep Disturbance
- Chronic heightened stress response
- Aggression
- Eating Disorders
- Higher risk of future victimization



So can we assume that anyone exposed to trauma will invariably develop mental health problems and behavioral problems without specialized treatment?

No! First, trauma's impacts appear to vary by many factors including:

- ▶ Gender
- Age at the time of the trauma
- Relationship with a perpetrator
- ► The number of traumas a person experiences
- Social supports



- ► More factors to consider:
- ► Family functioning—both then and now
- Cognitive abilities
- Socioeconomic status
- ► Mother's mental health
- ► Genetic factors



There are many, many research studies showing that many individuals exposed to multiple stresses and traumas DO NOT experience problems later in life.

In other words, trauma or adversity doesn't always lead to impaired functioning.

THERE IS NO SUPPORT FOR THE BELIEF THAT EVERY PERSON WHO EXPERIENCES BAD STUFF AS A KID WILL STRUGGLE UNLESS THEY GET MENTAL HEALTH TREATMENT!!



Emerging view in trauma research:

- Trauma doesn't always lead to a damaged and dysfunctional life.
- ► Moderate post-traumatic stress seems to be associated with post-traumatic growth.



Three areas of improved functioning seen after trauma

- Enhanced relationships
 - Value friends/family more
 - Increased compassion/empathy
 - Greater desire for close relationships

Improved view of oneself

- Personal strength
- Gratitude



Improved functioning post- trauma

- Changed view of life
 - Renewed appreciation of life
 - New understanding of what's important
 - Becoming less materialistic
 - More able to live in the present

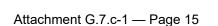


Factors in the Literature Associated with Resilience

- ➤ Genetic factors (brain development and neurotransmitter differences)
- Positive emotions
- Optimism
- Supportive caregivers/strong social supports
- Strong role models
- History of mastering challenges

More Protective Factors

- Cognitive flexibility—the ability to reframe adversity in a more positive light
- Good emotion regulation skills
- Social skills
- Altruism
- Commitment to a valued cause or purpose
- Disciplined focus on skill development



And even more protective factors

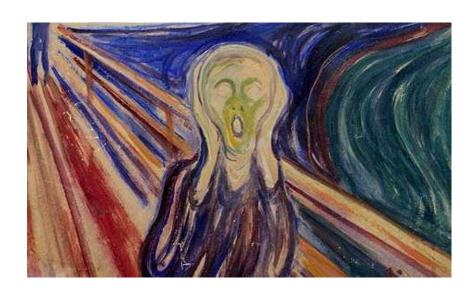
- ▶ Past experience of mild to moderate challenges (stress inoculation)
- ► High coping self-efficacy
- ► Religious/ spiritual involvement
- Capacity to extract meaning from adversity
- Sense of humor
- Internal locus of control

It's complicated.

- ► Each individual has RISK FACTORS and PROTECTIVE FACTORS that interact with stressful experiences to influence how effectively they can adapt
- ➤ You will be wrong if you assume an individual's treatment needs based solely on knowing their history.



We do recognize that trauma CAN lead to PTSD and other disorders that would benefit from treatment.



Well, what IS TRAUMA-INFORMED CARE, anyhow?

According to SAMHSA (a big proponent of this approach): "A program, organization, or system that is trauma-informed:

- Realizes the widespread impact of trauma and understands potential paths for recovery;
- Recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system;
- Responds by fully integrating knowledge about trauma into policies, procedures, and practices; and
- Seeks to actively resist re-traumatization."

What TRAUMA-INFORMED CARE isn't

- Not a specific treatment program or intervention
- Not an evidence-based treatment
- Not a intended for any specific mental health diagnosis or symptom

Trauma-informed care is more an agency-wide philosophy than a specific intervention.

- ➤ Can be implemented in any type of service setting or organization
- Is not designed specifically to address the consequences of trauma, but to facilitate a healing environment

Six Key Principles of Trauma-Informed Care (SAMHSA)

- Safety
- Trustworthiness and Transparency
- Peer support
- Collaboration and mutuality
- Empowerment, voice and choice
- ► Cultural, Historical, and Gender Issues

Agencies offering TRAUMA-INFORMED CARE recognize:

- ➤ The survivor's need to be respected, informed, connected, and hopeful regarding their own recovery
- ➤ The interrelation between trauma and symptoms of trauma such as substance abuse, eating disorders, depression, and anxiety
- The need to work in a collaborative way with survivors, family and friends of the survivor, and other human services agencies in a manner that will empower survivors and consumers

Issues to keep in mind when advocating for our clients

- NOT EVERYONE WHO HAS HAD BAD (EVEN VERY BAD)
 EXPERIENCES IS SUFFERING
 TRAUMA-RELATED PROBLEMS.
- SOMETIMES BAD BEHAVIOR IS JUST BAD BEHAVIOR.

Issues to keep in mind when advocating for our clients

- ► TREATMENT MUST BE EVIDENCE-BASED.
- Treatment must be **individualized**—tailored to the person's demonstrated needs (i.e., CURRENT symptoms)
 - ▶ NOT DETERMINED BY HER/HIS PAST, OR THE TEAM'S GUESS ABOUT HOW THE PAST MUST BE AFFECTING THE INDIVIDUAL

More considerations for well-meaning teams:

- ► Key elements of Trauma-Informed Care include
 - **▶** Collaboration
 - ► Client Empowerment (internal LOC, mastery)
 - ▶ Voice and
 - ▶ Choice.
 - Mandating individual treatment
 VIOLATES the core principles of trauma-informed care!

And more considerations for well-meaning teams:

If the individual's moods or behavior are maladaptive, the most respectful, client-centered intervention is to provide evidence-based treatment.

There is NO evidence-based treatment called "trauma treatment."

So what should we be doing in treatment for clients with trauma in their history?

- ➤ Evidence-based treatments tied to the specific problems in thinking, mood, or behavior that the client is struggling with NOW.
- Treatment must be aimed at reducing the maladaptive behaviors or psychological symptoms that this particular individual actually has.

So what should we be doing in treatment for clients with trauma in their history?

- Select evidence-based treatments that work to address problematic behaviors or moods—
 - Social history should NEVER dictate your choice of treatment.

Do we have to explore where a symptom or disorder comes from in order to effectively treat it?

Clients with trauma histories don't require specialized treatments because of their history.

- ▶ For a depressed client the EBP is ??
- For an anxious client, the EBP is ??
- ► For a client with disruptive behavior??
- For a client with disruptive mood dysregulation disorder??

Is it ever appropriate for a trauma to be a focus of treatment?

- ➤ YES. If the client is actively struggling with symptoms of <u>PTSD.</u>
 - ► That means, the client has had the kind of "LIFE AND LIMB" TRAUMA that we talked about way back at the beginning—the DSM5 definition.
 - ► (Exposure to actual or threatened death or serious injury or sexual violence)

AND

Recurrent, involuntary, intrusive, and distressing memories, flashbacks, nightmares

OR

Intense Distress at exposure to internal or external reminders of the traumatic event

AND

Negative changes in cognitions and mood associated in time with the event

AND

Marked changes in arousal.

(Hypervigilance, disturbed sleep, concentration, anger outbursts, etc.)

Only IF an individual actually has PTSD, EBTs include:

- ► Trauma-focused CBT
- Cognitive-processing therapy (cognitive reframing of false beliefs + exposure)
- ➤ Prolonged exposure therapy (gradual desensitization to trauma details)
- ➤ Stress inoculation training (CBT + stress management—teaching emotion regulation)

NB:

- NONE of these evidence based approaches is aimed at "uncovering" a *forgotten or repressed trauma.
- NONE would be effective or appropriate for an individual who is not reporting intrusive memories of past horrible experiences.
- ► If the individual is not reporting that they are struggling with terrible memories, THEY PROBABLY AREN'T.

Final Take-Aways:

- There is NO EVIDENCE-BASED
 TREATMENT APPROACH called
 TRAUMA TREATMENT!
- ▶ PTSD is a real disorder, that responds to evidence-based treatments.



Final Take-Aways:

NOT every individual who experiences bad things develops PTSD. MOST don't. Most people cope effectively with traumas, and may even thrive after traumas—even without therapy.



Final Take-Aways:

The most respectful, collaborative, non-triggering way to help any individual is to offer services that are evidence-based, and that address their actual problems—not ones that anyone just imagines that they must have.

INBRIEF | THE IMPACT OF EARLY ADVERSITY ON CHILDREN'S DEVELOPMENT

A series of brief summaries of the scientific presentations at the National Symposium on Early Childhood Science and Policy.

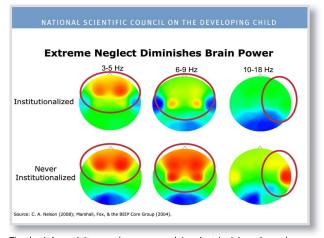
What happens in early childhood can matter for a lifetime. To successfully manage our society's future, we must recognize problems and address them before they get worse. In early childhood, research on the biology of stress shows how major adversity, such as extreme poverty, abuse, or neglect can weaken developing brain architecture and permanently set the body's stress response system on high alert. Science also shows that providing stable, responsive, nurturing relationships in the earliest years of life can prevent or even reverse the damaging effects of early life stress, with lifelong benefits for learning, behavior, and health.

Larly experiences influence the developing brain. From the prenatal period through the first years of life, the brain undergoes its most rapid development, and early experiences determine whether its architecture is sturdy or fragile. During early sensitive periods of development, the brain's circuitry is most open to the influence of external experiences, for better or for worse. During

these sensitive periods, healthy emotional and cognitive development is shaped by responsive, dependable interaction with adults, while chronic or extreme adversity can interrupt normal brain development. For example, children who were placed shortly after birth into orphanages with conditions of severe neglect show dramatically decreased brain activity compared to children who were never institutionalized.

Chronic stress can be toxic to developing brains. Learning how to cope with adversity is an important part of healthy child development. When we are threatened, our bodies activate a variety of physiological responses, including increases in heart rate, blood pressure, and stress hormones such as cortisol. When a young child is protected by supportive relationships

with adults, he learns to cope with everyday challenges and his stress response system returns to baseline. Scientists call this *positive stress*. *Tolerable stress* occurs when more serious difficulties, such as the loss of a loved one, a natural disaster, or a frightening injury, are buffered by caring adults who help the child adapt, which mitigates the potentially damaging effects of



The brain's activity can be measured in electrical impulses—here, "hot" colors like red or orange indicate more activity, and each column shows a different kind of brain activity. Young children institutionalized in poor conditions show much less than the expected activity.

POLICY IMPLICATIONS

- The basic principles of neuroscience indicate that providing supportive and positive conditions for early childhood development is more effective and less costly than attempting to address the consequences of early adversity later. Policies and programs that identify and support children and families who are most at risk for experiencing toxic stress as early as possible will reduce or avoid the need for more costly and less effective remediation and support programs down the road.
- From pregnancy through early childhood, all of the environments in which children live and learn, and the quality of their relationships with adults and caregivers, have a significant impact on their cognitive, emotional, and social development. A wide range of policies, including those directed toward early care and education, child protective services, adult mental health, family economic supports, and many other areas, can promote the safe, supportive environments and stable, caring relationships that children need.

abnormal levels of stress hormones. When strong, frequent, or prolonged adverse experiences such as extreme poverty or repeated abuse are experienced without adult support, stress becomes *toxic*, as excessive cortisol disrupts developing brain circuits.

Significant early adversity can lead to lifelong problems. Toxic stress experienced early in life and common precipitants of toxic stress—such as poverty, abuse or neglect, parental substance abuse or mental illness, and exposure to violence—can have a cumulative toll on an individual's physical

and mental health. The more adverse experiences in childhood, the greater the likelihood of developmental delays and other problems. Adults with more adverse experiences in early childhood are also more likely to have health problems, including alcoholism, depression, heart disease, and diabetes.

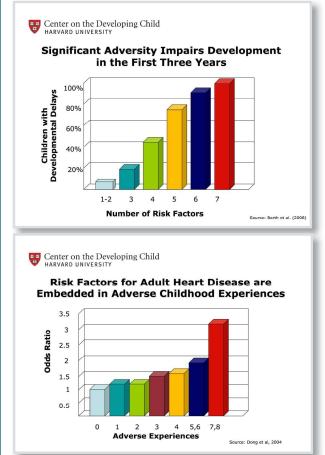
Early intervention can prevent the consequences of early adversity. Research shows that later interventions are likely to be less successful—and in some cases are ineffective. For example, when the same children who experienced extreme ne-

glect were placed in responsive foster care families before age two, their IQs increased more substantially and their brain activity and attachment relationships were more likely to become normal than if they were placed after the age of two. While there is no "magic age" for intervention, it is clear that, in most cases, intervening as early as possible is significantly more effective than waiting.

E Stable, caring relationships are essential for healthy development. Children develop in an environment of relationships that begin in the home and include extended family members, early care and education providers, and members of the community. Studies show that toddlers who have secure, trusting relationships with parents or non-parent caregivers experience minimal stress hormone activation when frightened by a strange event, and those who have insecure relationships experience a significant activation of the stress response system. Numerous scientific studies support these conclusions: providing supportive, responsive relationships as early in life as possible can prevent or reverse the damaging effects of toxic stress.

For more information, see "The Science of Early Childhood Development" and the Working Paper series from the National Scientific Council on the Developing Child.

www.developingchild.harvard.edu/library/



As the number of adverse early childhood experiences mounts, so does the risk of developmental delays (top). Similarly, adult reports of cumulative, adverse experiences in early childhood correlate to a range of lifelong problems in physical and mental health—in this case,



heart disease (bottom).





THE INBRIEF SERIES:

 $\label{local_equation} \textbf{IN} \textbf{BRIEF} : \textbf{The Science of Early Childhood Development}$

IN**BRIEF**: The Impact of Early Adversity on Children's Development

INBRIEF: Early Childhood Program Effectiveness **INBRIEF:** The Foundations of Lifelong Health

www.developingchild.harvard.edu

Trauma-Informed Care 101

Anthony Salerno, PhD





Agenda

- What is Psychological Trauma?
- Why is it important?
- What is trauma informed care?
- How does working with traumatized individuals affect the caregivers?





What is Psychological Trauma?





What is Psychological Trauma?

Meets all 3 criteria:

- 1. Adversity (external events, conditions, circumstances that involves the direct experience and/or witnessing of overwhelming harm, loss and/or threats to a persons safety and wellbeing)
- 2. Experienced as overwhelming one's coping resources: Overactivates the fight, flight or freeze response. Creates a sense of helplessness.
- 3. Results in profound and long lasting negative effects: emotional, physical, social and/or mental health difficulties





Examples of Adverse Life Events

- Physical abuse
- Sexual abuse/assault
- Emotional abuse
- Physical neglect
- Emotional neglect
- Intimate partner violence
- Witnessing violence/crime
- Substance misuse within household
- Household mental illness
- Parental separation or divorce
- Household member who has been incarcerated





Examples of Adverse Life Events

- Combat related trauma
- Refugee/torture/civil unrest
- Witnessing or experiencing violence
- Sexual and physical assault
- Incarceration
- Job loss/financial distress
- Poverty/homelessness
- Loss of loved ones





Consequences of Trauma

How does adversity that overwhelms the human stress response affect people?





The Human Stress Response

Fight

- Irritability
- Loss of Temper
- Defensiveness

Flight

- Avoidance
- Anxiety
- Fear

Freeze

- Numbing
- Detachment
- Giving Up Easily

Normal Defensive Responses to High Threat

Retrieved from www.slideshare.net

HOW STRESS AFFECTS THE BODY

BRAIN

Difficulty concentrating, anxiety, depression, irritability, mood, mind fog

CARDIOVASCULAR

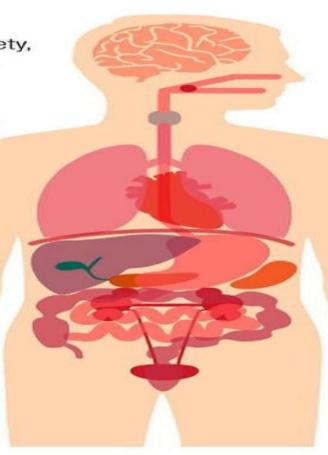
higher cholesterol, high blood pressure, increased risk of heart attack and stroke

JOINTS AND MUSCLES

increased inflammation, tension, aches and pains, muscle tightness

IMMUNE SYSTEM

decreased immune function, lowered immune defenses, increased risk of becoming ill, increase in recovery time



SKIN

hair loss, dull/brittle hair, brittle nails, dry skin, acne, delayed tissue repair

GUT

nutrient absorption, diarrhea, constipation, indigestion, bloating, pain and discomfort

REPRODUCTIVE SYSTEM

decreased hormone production, decrease in libido, increase in PMS symptoms

Symptoms most closely associated with a history of significant trauma: Post Traumatic Stress Disorder

Reliving: Sometimes a person who has experienced abuse or trauma relives the experience. This may be in the form of flashbacks or nightmares.

Avoidance: Sometimes a person may avoid people, places, and things that reminds them or is associated with the trauma. Fear and avoidance may also lead a person to become suspicious and on guard much of the time.

Emotional shutting down: A person may feel physically and emotionally numb to both positive and negative events.

Thinking problems: a person may find it difficult to concentrate on day-to-day activities and responsibilities.

Dissociation: a person may feel disconnected from his or her own body or mind. A person may space out or lose a sense of time, one's surroundings and physical body





What we learned about the impact of adverse life events on health and wellbeing

Adverse Childhood Experiences (ACE) Study (1998)

- Examined the correlation between childhood adverse life events and emotional, social and physical health
- Surveyed over 17,000 people in the general population
- Found that the more adverse life events a person experienced the greater the risk for negative consequences.





Summary of ACE's and Study Findings

Adverse Childhood Experience Categories (Birth to 18)

ABUSE OF CHILD

- Emotional abuse
- Physical abuse
- Contact Sexual abuse

TRAUMA IN CHILD'S HOUSEHOLD ENVIRONMENT

- Alcohol and/or Drug User
- Chronically depressed, emotionally disturbed or suicidal household member
- Mother treated violently
- Imprisoned household member
- Not raised by both biological parents

(Loss of parent – best by death unless suicide, - Worst by abandonment)

NEGLECT OF CHILD

- Physical neglect
- Emotional neglect

FOR POVERTY POLICY AND RESEARCH

Impact of Cumulative Adverse life events in childhood

NEURO-BIOLOGIC EFFECTS OF TRAUMA

- Disrupted neuro-development
- Difficulty controlling anger-rage
- Hallucinations
- Depression other MH Disorders
- Panic reactions
- Anxiety
- Multiple (6+) somatic problems
- Sleep problems
- Impaired memory
- Flashbacks
- Dissociation

HEALTH RISK BEHAVIORS

- Smoking
- Severe obesity
- Physical inactivity
- Suicide attempts
- Alcoholism
- Drug abuse
- 50+ sex partners
- Repetition of original trauma
- Self Injury
- Eating disorders
- Perpetrate interpersonal violence

Long-Term Consequences of Unaddressed Trauma (ACEs) DISEASE AND DISABILITY

- Ischemic heart disease
- Cancer
- Chronic lung disease
- Chronic emphysema
- Asthma
- Liver disease
- Skeletal fractures
- Poor self rated health
- Sexually transmitted disease
- HIV/AIDS

SERIOUS SOCIAL PROBLEMS

- Homelessness
- Prostitution
- Delinquency, violence, criminal
- Inability to sustain employment
- Re-victimization: rape, DV, bullying
- Compromised ability to parent
- Negative alterations in self-perceptions and relationships with others
- Altered systems of meaning
- Intergenerational trauma
- Long-term use of multiple human service systems

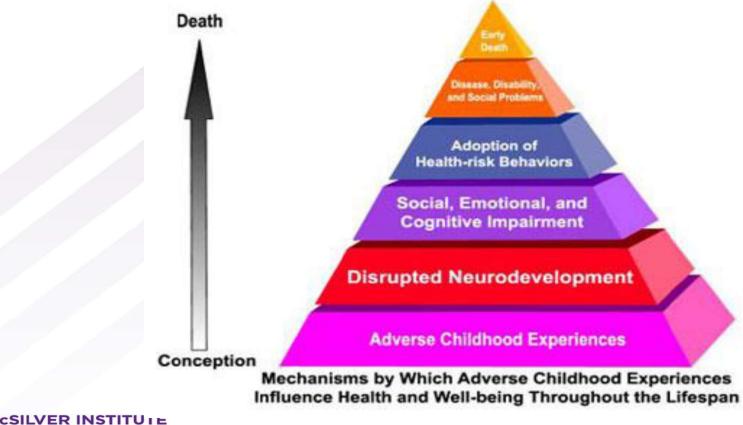


By what mechanism does adversity result in serious consequences for a persons wellbeing?





How do adverse life events raise the risk for mental health, substance use and physical health problems?





Bottom line

The experience of trauma in childhood and adulthood matters!

A *quality* healthcare, human services and/or social safety net organization is designed to address the impact of trauma for every single person in that organization.





Why is understanding trauma important?

High prevalence of adverse life events in populations receiving behavioral health services (some examples)

- 80% of people in psychiatric hospitals have experienced physical or sexual abuse
- 66% of people in substance abuse treatment report childhood abuse or neglect
- 90% of women with alcoholism were sexually abused or suffered severe violence from parents
- Childhood adverse experiences are attributed to 64% of adult suicide attempts and 80% of child/adolescent suicide attempts





Why is understanding trauma important to behavioral health organizations?

- Many health care and human service systems do not routinely and comprehensively explore the role that adverse life events may play in a persons current difficulties.
- Behavioral health (BH) providers are more likely to make mistakes when we don't fully understand the role that trauma may be playing in the problems and disappointments of our clients.
- BH practitioners are not immune to having experienced significant adversity at both a personal as well as professional level.
- At the organizational level, we might unintentionally cause harm by designing environments and implementing practices, policies, procedures and activities that are insensitive to the needs of traumatized individuals and may result in activating trauma related responses. Unintentionally causing harm is a real possibility.
 - Consequently, trauma needs to be addressed at the organizational level beyond the interaction between a practitioner and clients.





Trauma Informed Care (TIC): The Organizational Level

TIC Organizations strive to promote the following:

- The clients feedback, experience and voice is valued in a way that directly influences decisions
- That every client has the opportunity to explore and discuss adverse events, their impact and how to address.
- The entire workforce has basic knowledge about trauma and how they help to create a trauma informed organization.
- The organization has trained practitioners who can competently provide evidence based trauma specific treatment.
- Creates a physical and emotional environment that is comfortable, safe, trusting, offers choices, is highly respectful, and responsive to client needs and concerns.
- Recognizes and addresses the real possibility that BH work may place stressful demands on the workforce in a way that raises the risk for compassion fatigue, vicarious trauma and burnout.





What helps and what hurts: What can unintentionally activate a persons trauma related response in BH settings?

- People
- Places
- Things

Environments





Common Post-Traumatic Activating Experiences: For highly traumatized individuals

- Being asked highy personal questions
- Pressure to self-disclose
- Lack of privacy
- Being put on the spot
- Being center of attention
- Sensory overload (noises, hi-lo temperature, congestion, visual distractions)
- Harshly being told "no"
- Unfamiliar people, places and things
- Persistent eye contact
- Physical closeness
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- Reminders of traumatic event
- Anniversaries associated with adverse life events
- Not being allowed to speak
- Being ignored
- Intense emotions (high arousal level)
- Performance demands that exceeds capability
- Darkness- Night time
- Confrontation/criticism
- Intimacy
- Rejection
- Encouncouters experienced as humiliating



What can we do to create a trauma informed care organization?

What Helps? What Hurts?

- Relationships
- Physical Environment
- Policies and Procedures
- Attitudes and Beliefs





How we may unintentionally cause our clients to relive their trauma: The importance of <u>relationships</u>

WHAT HURTS

- Interactions that are humiliating, harsh, impersonal, disrespectful critical, demanding, judgmental
- Private communication shed with others (lack of respect for privacy)
- Not following through with agreements



WHAT HELPS

- Interactions that express kindness, patience, reassurance, calm and acceptance and listening
- Respecting Confidentiality
- Following through with agreements

Frequent use of words like PLEASE and THANKYOU



How we may unintentionally cause our clients to relive their trauma: The importance of the *physical environment*

What hurts

- Congested areas that are noisy
- Poor signage that is confusing
- Uncomfortable furniture
- Separate bathrooms
- Cold non-inviting colors and paintings/posters on the wall

What helps

- Treatment and waiting rooms that are comfortable, calming and offers privacy
- Furniture is clean and comfortable
- No wrong door philosophy: we are all here to help
- Integrated bathrooms (clients and staff)
- Wall coverings, posters/pictures are pleasant and coveys a hopeful positive message





How we may unintentionally cause our clients to relive their trauma: Our policies and procedures

What hurts

- Rules that always seem to be broken (time to take a second look at these rules)
- Policies and Procedures that focus on organizational needs rather than on client needs
- Documentation with minimal involvement of clients
- Many hoops to go through before a client's needs are met
- Language barriers

What helps

- Sensible and fair rules that are clearly explained (focus more on what you CAN DO rather than what you CAN'T DO)
- Transparency in documentation and service planning
- Materials and communication in the person's language
- Continually seeking feedback from clients about their experience in the program
- Offering options and choices (more control over decisions)





How we may unintentionally cause our clients to relive their trauma: *Our attitudes and beliefs*

What hurts

- Asking questions that convey the idea that "there is something wrong with the person"
- Regarding a persons difficulties **only** as **symptoms** of a mental health, substance use or medical problem
 - Failing to explore the potential role of adverse life events as factors contributing to current difficulties
- Labeling behavior as passive, unmotivated, resistant, defiant, non-compliant



What helps

- Asking questions for the purpose of understanding what harmful events may contribute to current problems
- Recognizing that *symptoms* may be a person's best way of coping with adversity in light of one's circumstances and available options.
- Focusing on strengths: What's strong vs what's wrong
- Interpreting behavior as a possible response to adversity (being overwhelmed, coping with a fight, flight or freeze response, feeling unsafe, mistrustful, or cautious.



Why everyone in our organization matters!

Every contact with a client and with each other will affect us in one of two ways:

1. Contribute to a safe and trusting healing environment

OR

- 2. Detract from a safe and trusting environment
- No one working for our organization is unimportant
- We all play a role in assisting our clients to make progress in their lives
- We all matter when it comes to creating a safe, trusting and healing environment





Let's Not Forget the Caregivers

- No one is immune from experiences that place excessive demands on the human stress response system.
- Being in a helping role with individuals who may be suffering, struggling with serious mental illness and/or addictions, encounter numerous social barriers and obstacles associated with poverty, discrimination and lack of resources in not easy.





The Spectrum of the Helpers' Experience

Compassion Satisfaction

Compassion Fatigue

Vicarious Trauma / Secondary Traumatic Stress

Burnout

The personal experiences and life circumstances of clients may directly affect faculty and staff.





Compassion Fatigue

Deep physical, emotional and spiritual exhaustion

- Give themselves fully to their students, finding it difficult to maintain a healthy balance of empathy and objectivity as well as professional boundaries.
- Shift in hope and optimism about the value of the work
- Often a response to work overload





Vicarious Trauma

The risk of experiencing trauma related responses that parallel those of the people being served. Emotional, psychological and physical health risks associated with listening to, empathizing with and observing the behavior of individuals who have experienced serious trauma.





Burnout

The result of prolonged stress or frustration with organizational practices, work conditions, lack of resources and demands resulting in

- emotional exhaustion
- lack of meaning and accomplishment
- depersonalization (loss of empathy and patience with students-students viewed as the source of stress rather than the purpose of the work)





Understanding Resilience: The Other side of the trauma story





Defining Resilience? Not so easy!

- "Adapting well in the face of adversity, trauma, tragedy, threats, or even significant sources of stress" The American Psychological Association
- Resilience. A dynamic <u>process</u> reflecting <u>positive adjustment</u> despite significant <u>risk or adversity</u> (Luthar & Zigler, 1991; Garmezy, 1971; Rutter, 1987)
- "Resilience refers to the capacity of a dynamic system to adapt successfully to disturbances that threaten the viability, the function, or the development of that system" (Master 2014)
- "An on-going process of positively responding to one's changing environment" (Dr. Travis Wright, Deputy Chief of the Office of Early Childhood, DCPS)





Resilience Varies Among People

- Some people react to a traumatic event with an overwhelming flood of negative feelings of fear, dread, loss, and confusion that lasts a long time and affects day-to-day living.
- Some people may be triggered by common daily challenges and experience unusually strong feelings of worry, anxiety, anger, and/or frustration.
- Some people may be more confident, react more calmly and bounce back from difficult experiences with less harmful outcomes. This personal resilience protects the person from serious emotional harm.





Developing a Bi-Focal Lens







Beyond Trauma Treatment: How We Strengthen Resilience





The PROACTIVE VS REACTIVE PERSPECTIVE: RESILIENCY PRACTICES

- WELLNESS PLANNING AND HEALTH SELF MANAGEMENT
- WELLNESS FOCUSED ACTIVITIES
- STRENGTHS APPROACH: (What's strong vs what's wrong)
- CREATING COMPETENCY STRENGTHENING OPPORTUNITIES
- FACILITATING SOCIAL CONNECTIONS
- FACILITATING COMMUNITY CONNECTIONS
- EMPOWERING EDUCATION
- EMOTIONAL AND PHYSIOLOGICAL REGULATION
- EXPLORING MEANING IN ADVERSITY
- ENVIRONMENTAL CONDITIONS THAT ACTIVATE RESILIENCY





Bottom line

Understanding the principles and practices of trauma informed and resiliency building approaches has the potential to dramatically improve outcomes for clients and practitioners.





Resources

• [to be added]







GUIDE FOR PROVIDER SUPPORT IN ADOPTING TRAUMA INFORMED CARE

Overview

The Provider Relations Liaison will collaborate with PCPs and specialist providers working with children in child welfare to educate, develop and incorporate trauma-informed care (TIC) principles into their practice. Provider Relations Liaison will use an Anthem-provided PowerPoint series to work with the provider to assess TIC goals, discuss the special circumstances around children in child welfare and how best to implement and support the practice through the American Association of Pediatrics (AAP) Trauma Toolkit for PCPs. Following implementation, the Provider Relations Liaison will follow-up with the practice to complete follow-up assessments to ensure continued optimal integration. Additional materials are included in the guide to offer to the practice following the AAP toolkit implementation.

Goals of the Strategy Guide

- Give Provider Relations Liaison detailed direction on how to work with providers to implement TIC including step-by-step guide, the Powerpoint series, and links to the AAP documents.
- Provide PPTs and documents on how to educate providers on the importance of adverse childhood events (ACES) assessing trauma for children in child welfare, and referrals and education for families
- Offer only evidence-based assessments, learning modules, and models to ensure the best outcomes.
- Give guidance for best monitoring tools of implementation performance to understand continued training needs and barriers.

Provider Relations Liaison Strategy Guide

Provider Relations Liaisons will access all AAP-related trauma documents from the AAP webpage linked below. While the guide is geared towards PCPs, the guide can assist any type of practice in moving towards TIC care. AAP-referenced documents are *highlighted as follows throughout the document*.

https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/healthy-foster-care-america/Pages/Trauma-Guide.aspx#trauma

- 1. Provider Relations Liaison meets with practice staff
 - Uses Anthem-provided PPT slides to introduce the provider practice to the AAP Trauma Toolkit for PCPs.
 - The PPT will focus on education and strategy for TIC implementation by referencing the following AAP trauma materials

- Adverse Childhood Experiences and the Lifelong Consequences of Trauma
- Helping Foster and Adoptive Families Cope With Trauma: A Guide for Pediatricians
- Addressing Adverse Childhood Experiences and Other Types of Trauma in the Primary Care Setting
- Uses Anthem provided "TIC implementation practice goals" worksheet
- o Discuss timeline of kick-off event and implementation
- Provides the AAP document "Protecting Physician Wellness: Working with Children Affected by Traumatic Events" to distribute to provider staff.

2. Kick-off Event run by Provider Relations Liaison

- As many provider staff as possible attend this event
- Uses Anthem-provided PPT to
 - Discuss staff findings from the "Protecting Physician Wellness: Working With Children Affected by Traumatic Events"
 - o Provide overview of ACES and their importance through AAP documents
 - Adverse Childhood Experiences and the Lifelong Consequences of Trauma
 - Helping Foster and Adoptive Families Cope With Trauma: A Guide for Pediatricians
 - o Walks through each section of the toolkit using AAP provided documents
 - Addressing Adverse Childhood Experiences and Other Types of Trauma in the Primary Care Setting
 - Diagnosis/Coding Tips and Screening Tools
 - Outlines AAP developed documents providers can give to parents with children in the child welfare system for information
 - Adverse Childhood Experiences and the Lifelong Consequences of Trauma
 - Bring Out the Best in Your Children
 - When Things Aren't Perfect: Caring for Yourself and Your Children
 - Visit Discharge and Referral Summary for Family
 - Parenting After Trauma: Understanding Your Child's Needs
- Reviews provider practice implementation goals
- Decides on timelines, staff involvement, and outcomes to measure
- 3. Provider Relations Liaison writes out plan of implementation for practice
 - Uses Anthem-provided Strategy Guide and tailors to each practice based on their goals and timelines
 - o Includes the goals, timelines and changes needed
 - o Includes follow-up assessment tools for review
 - o Includes any trauma assessments needed
- 4. Practice incorporates TIC into their practice
 - Practice puts their model into action
 - Conducts regular meetings to discuss successes and barriers to implementation (meetings may or may not include Child Welfare Provider Partner)

- 5. Provider Relations Liaison conducts on-going performance and monitoring
 - Conducts regular meetings to discuss successes and barriers to implementation
 - If necessary, uses additional monitoring tool assessments (Appendix A)
- 6. Provider Relations Liaison offers additional training modules to practice, as needed
 - Based on follow-up assessments and resources available, the Child Welfare Provider Partner will suggest additional tools for continued education (Appendix B).

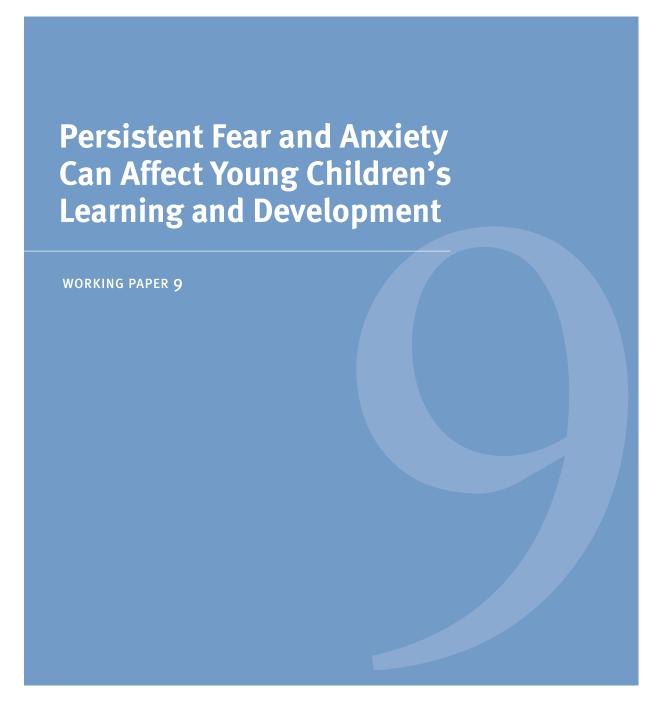
Appendix A. Performance Monitoring Tools

	Overview	Time Commitment	Goals of program
Trauma-Informed Care Performance Monitoring Tool	Self-assessment to understand	1 hour	Ensure accurate and
	success and barriers to TIC		continued implementation
	implementation		of TIC changes
TICOMETER	A brief assessment tool that can	30 minutes	Guide in implementation
	measure TIC in organizations or		barriers, successes and
	repeatedly		current training needs

Appendix B. Additional tools for continued TIC education

Risking Connections training program	Overview Offers multiple training modules, assessments and integration practices	Time Commitment Extensive	Goals of program Train staff and physicians, develop integration plan, learn about TIC
The Sanctuary Model	Multiple books, training modules and individualized services to ready staff and develop comprehensive TIC implementation plan	Extensive	Education, support and framework for implementing TIC in practice
Trauma-Informed Organizational Capacity Scale	Offers a process and curriculum for adopting organizational traumainformed care.	1 hour for self-assessment + time for discussion and implementation	Develop policies for implementing TIC in multiple settings.

Self-Assessment tools			
Sell Assessment tools	Overview	Time Commitment	Goals of program
The Agency Self- Assessment for Trauma-Informed Care	Self-assessment designed to gauge an organization's readiness to implement TIC	1 hour for self-assessment	Compile responses from variety of staff to assess readiness to change
Trauma Informed Care – Organizational Self- Assessment Tool	Self-assessment designed to measure trauma informed practices in all staff		Understand the current state of staff attitudes around TIC care
Scale Attitudes Related to Trauma-Informed Care	Multiple scales available to measure and demonstrate progress towards incorporating TIC into practice	30 minutes – 2 hours	Understand current attitudes for TIC and ways to make changes
Training Modules			
The National Child Traumatic Stress Network (NCTSN)	Overview Comprehensive training modules for a variety of practice types and specialties.	Time Commitment Each training module about 1 hour	Goals of program Learn about incorporating TIC in a variety of practice types
Specialized Training/As	sessment Modules		
	Overview	Time Commitment	Goals of program
The Secondary Traumatic Stress (STS) Informed Organization Assessment	The STSI-OA is an assessment tool to respond to the impact of secondary traumatic stress in the workplace.	1 hour for assessment + time for discussion	Determine the impact of STS in Organization, support strategic planning in specific areas of need.
Professional Quality of Life Measure	Assessment to examine the burn-out and fatigue of front line staff in the face of trauma	10 minutes/staff member	Understand the attitudes and concerns of front line staff
National Center on Family Homelessness	Trauma-Informed Organizational Toolkit for Homeless Services	1 hour for self-assessment + time for discussion and implementation	Assess current practices in TIC related to homelessness and how to incorporate changes



Center on the Developing Child B HARVARD UNIVERSITY



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The National Scientific Council on the Developing Child, housed at the Center on the Developing Child at Harvard University, is a multi-disciplinary collaboration designed to bring the science of early childhood and early brain development to bear on public decision-making. Established in 2003, the Council is committed to an evidence-based approach to building broad-based public will that transcends political partisanship and recognizes the complementary responsibilities of family, community, workplace, and government to promote the well-being of all young children. For more information, go to www.developingchild.net.

Please note: The content of this paper is the sole responsibility of the Council and does not necessarily represent the opinions of the funders or partners.

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The Issue

ENSURING THAT YOUNG CHILDREN HAVE SAFE, SECURE ENVIRONMENTS IN WHICH TO GROW, LEARN, and develop healthy brains and bodies is not only good for the children themselves but also builds a strong foundation for a thriving, prosperous society. Science shows that early exposure to circumstances that produce persistent fear and chronic anxiety can have lifelong consequences by disrupting the developing architecture of the brain. Unfortunately, many young children are exposed to such circumstances. While some of these experiences are one-time events and others may reoccur or persist over time, all of them have the potential to affect how children learn, solve problems, and relate to others.

All children experience fears during childhood, including fear of the dark, monsters, and strangers. These fears are normal aspects of development and are temporary in nature. In contrast, threatening circumstances that persistently elicit fear and anxiety predict significant risk for adverse long-term outcomes from which children do not recover easily. Physical, sexual, or emotional abuse; significant maltreatment of one parent by the other; and the persistent threat of violence in the community are examples of such threatening circumstances in a child's environment.

Studies show that experiences like abuse and exposure to violence can cause fear and chronic anxiety in children and that these states trigger extreme, prolonged activation of the body's stress response system. In studies with animals, this type of chronic activation of the stress system has been shown to disrupt the efficiency of brain circuitry and lead to both immediate and long-term physical and psychological problems. This is especially true when stress-system overload occurs during sensitive periods of brain development. While much of the evidence for the effects of stress on the development of brain architecture comes from animal studies, strong similarities in the processes of brain development across species indicate that experiences of persistent fear and chronic anxiety likely exert similarly adverse impacts on the developing brain in humans. Thus, stress-system overload can significantly diminish a child's ability to learn and engage in typical social interactions across the lifespan.

Many policymakers, educators, and even medical professionals are unaware of the potentially significant, long-term risks of exposure to fear-provoking circumstances in children and lack information about the prevalence of these situations in their communities. Critically, 1 in every 7 children, and nearly 1 out of every 40 infants, in the United States experience some form of maltreatment, including chronic neglect or physical, emotional, or sexual abuse. Leglect or physical, emotional, or sexual abuse. Schild maltreatment has been shown to occur most often in families that face excessive levels of stress, such as that associated with community violence, parental drug abuse, or significant social isolation. Research also tells us that nearly half of children living in poverty witness violence, or are indirectly victims of violence. Clearly, for children in these circumstances, the frequent and repetitive threats around them

Science shows that exposure to circumstances that produce persistent fear and chronic anxiety can have lifelong consequences by disrupting the developing architecture of the brain.

create the potential for heightened fear and chronic anxiety.

Behavioral neuroscience research in animals tells us that serious, fear-triggering experiences elicit physiological responses that affect the architecture of the brain as it is developing. These experiences cause changes in brain activity and have been shown to have long-term, adverse consequences for learning, behavior, and health. Studies show that solutions for children are available through programs that effectively prevent specific types of fear-eliciting events, such as physical or sexual abuse. The timely

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Persistent Fear and Anxiety Can Affect Young Children's Learning and Development 1

implementation of such interventions can prevent and treat the harmful effects of exposure to extreme, fear-eliciting circumstances. In addition to these preventive measures, there also are effective treatments for children experiencing high levels of anxiety or chronic fear that

result from serious emotional trauma. Despite this rapidly increasing knowledge base, however, significant gaps continue to exist in how society responds to the developmental needs of children who regularly experience serious, fearinducing events.

What Science Tells Us

SOME TYPES OF FEAR ARE NORMAL ASPECTS OF development. Infants begin to experience feelings of fear and differentiate them from other emotions between 6 and 12 months of age.^{4,5} Over the course of the early childhood period, toddlers and preschoolers typically express fear of a wide variety of events or individuals. For example, it is not unusual for a young child to react with wariness or distress when greeted by an unfamiliar adult. Such responses are often called "stranger anxiety" and typically first emerge at around 9 or 10 months of age. This hesitancy toward unfamiliar people generally continues throughout childhood, but diminishes over time, as children's social worlds expand and they interact with increasing numbers of caregivers, relatives, neighbors, and other familiar adults.

Later in early childhood, it is common for children to express fear of both imagined and real circumstances. The emergence and development of imagination, for example, may lead to fear of monsters or the dark. These reactions are

The emergence and course of typical childhood fears are different from the fears and anxiety elicited by traumatic situations such as physical or sexual abuse or exposure to violence.

typical and usually peak between 4 and 5 years of age. Generally speaking, normal preschool fears do not disrupt a child's life, and they dissipate by age 7 or 8. That is, while children may express these fears at certain times (e.g., bedtime) or in response to certain events (e.g., being surprised by a clown at a birthday party), their overall behavior does not otherwise suggest that they are generally fearful or distressed.

Scientific research provides an explanation

for why children outgrow these normative fears. Many fears are a result of the difficulty young children have in distinguishing between the real and the imaginary. As they get older, children get better at understanding what is real and what it means for something to be "make believe." At the same time, they develop a growing sense of control and predictability over their immediate environment, so that even very young children are less frightened by events if they have some control over them. For example, a toy that scares 12-month-olds because it is loud and unpredictable will elicit less fear if the children are shown how to turn it on and off and are allowed to do so.6 As they get older, children develop the cognitive and social skills needed to better understand predictability in their environment and, therefore, gain a greater sense of control. As these developmental capacities are mastered, many of the normal fears of childhood begin to disappear. Thus, the emergence and course of typical childhood fears are different from the fears and anxiety elicited by traumatic situations such as physical or sexual abuse or exposure to violence: While typical fears disappear with age, the fear and anxiety elicited by maltreatment and other threatening circumstances do not.

Early exposure to extremely fearful events affects the developing brain, particularly in those areas involved in emotions and learning. A large and growing body of research, including animal studies as well as recent neuroimaging studies of human adults, has revealed groundbreaking insights into the brain circuitry that underlies how we learn to be afraid ^{7,8} and how we come to associate a specific event or experience with negative outcomes. ^{9,10} Two extensively studied structures located deep in the brain—the amygdala and the hippocampus—are involved in fear conditioning. ^{9,10} The amygdala detects whether a stimulus, person, or event is threatening ^{9,10} and the hippocampus links the fear

2 Persistent Fear and Anxiety Can Affect Young Children's Learning and Development

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WHAT SCIENCE TELLS US

response to the context in which the aversive stimulus or threatening event occurred.¹¹ Studies also show that both the amygdala and the hippocampus play an important role in how the body then responds to this threat. Elevated stress hormones such as cortisol have been shown to affect the growth and performance of the hippocampus and the activity of the amygdala in rodents and nonhuman primates, and early and persistent activation of the stress response system adversely affects brain architecture in these critical regions.

Beyond its impact on these two brain structures, heightened stress has also been shown in animals to impair the development of the prefrontal cortex, the brain region that, in humans, is critical for the emergence of executive functions—a cluster of abilities such as making, following, and altering plans; controlling and focusing attention; inhibiting impulsive behaviors; and developing the ability to hold and incorporate new information in decisionmaking. These skills become increasingly important throughout the school years and into adulthood. Behavioral neuroscience research in animals tells us that the prefrontal cortex is highly sensitive to the detrimental effects of excessive stress exposure and that its developing architecture is vulnerable to the negative effects of chronic fear.¹²

When young children experience serious feartriggering events, they learn to associate that fear with the context and conditions that accompanied it. Very young children can actually *learn* to be fearful through a process called "fear conditioning," which is strongly connected to the development of later anxiety disorders. 13,14,15,16 In the typical circumstances of early childhood, fear responses are activated quickly and then dissipate. However, when young children are chronically exposed to perceived or real threat, fear-system activation can be prolonged. In research studies, fear conditioning involves the pairing of a neutral stimulus (e.g., a tone or a light) that normally does not elicit a negative emotional response with an aversive stimulus (e.g., pain) that produces fear. As this conditioning evolves, it solidifies the relation between the two stimuli and then generalizes the fear response to other neutral stimuli that may share similar characteristics with the aversive stimulus. Conditioned fear is apparent when individuals come to experience and express fear within the context in which the learning occurred. For example, a child who is physically abused by an adult may become anxious in response to both the person and the place where the fear

For young children who perceive the world as a threatening place, a wide range of conditions can trigger anxious behaviors that then impair their ability to learn and to interact socially with others.

learning occurred. Over time, the fear elicited and the consequent anxiety can become generalized, and subsequent fear responses may be elicited by other people and places that bear sometimes only small resemblances to the original conditions of trauma. Consequently, for young children who perceive the world as a threatening place, a wide range of conditions can trigger anxious behaviors that then impair their ability to learn and to interact socially with others. The extent to which these problems affect physical and mental health is influenced by the frequency of the stressful exposure and/or the emotional intensity of the fear-eliciting event.

Science tells us that unlearning fear is a fundamentally different process from fear learning.

The process of unlearning conditioned fear is called "extinction" and actually involves physically separate and distinct areas of the brain's architecture from those into which fear responses are first incorporated. Generally speaking, the unlearning process involves activity in the prefrontal cortex, which decreases the fear response by regulating the activity of the amygdala. 17,18,19,20 Research tells us that fears are not just passively forgotten over time, but they must be actively unlearned. Studies show that fear learning can occur relatively early in life,21,22,23 whereas fear unlearning is only achieved later, when certain structures in the brain have matured. 24,25 Consequently, early fear learning can have a significant impact on the physical and mental health of a young child that can take years to remediate.

This understanding of how fear unlearning occurs can be helpful in designing interventions for anxious and fearful children. For example, research has shown that unlearning negative fear responses to specific stimuli such as

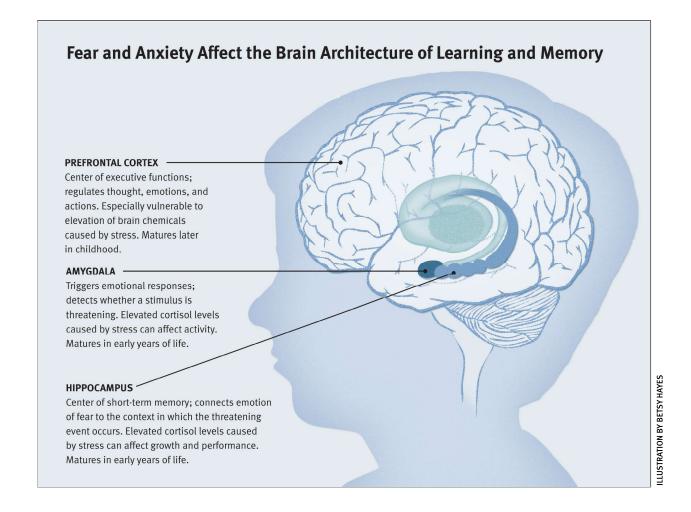
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Persistent Fear and Anxiety Can Affect Young Children's Learning and Development 3

animals, insects, heights, or social situations can be accomplished successfully by presenting the aversive stimulus or circumstance at a low level of intensity while the fearful individual is in a safe context. This therapeutic approach is called cognitive behavioral therapy. Providing additional explanations for anxious behavior during these controlled exposures has proven to be particularly successful for reducing anxiety in older children with excessive fears, as their ability to understand these explanations develops. Such interventions work well with specific phobias, as well as social or generalized anxiety, but are not effective in remediating the effects of abuse or neglect.

Chronic and intense fear early in life affects the development of the stress response system and influences the processing of emotional memories. 26,27 When an individual is confronted with

a threat, stress systems are activated and elevate the levels of several different stress chemicals that are circulating throughout the body.^{28,29} An increase in one of those chemicals, cortisol, can have a dramatic impact on how memories are processed and stored.^{29,30} The production of cortisol and adrenalin (as well as noradrenaline in the brain) in a normal stress response leads to memory formation for events and places that generate danger. More specifically, elevated cortisol levels can strengthen the formation of memories of emotional events,31,32 block the ability to unlearn fear memories,33 and enhance the formation of memories of the surrounding context in which the fearful event occurred.34 Interestingly, too much cortisol can also have the opposite effect and actually impair memory and learning in non-threatening contexts.35 Thus, the biological response to stress is intimately involved in both fear learning and unlearning.



4 Persistent Fear and Anxiety Can Affect Young Children's Learning and Development

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WHAT SCIENCE TELLS US

Fear learning can form emotional memories that are extremely powerful and long lasting. These memories are relived by individuals who experienced a traumatic event when cues in the environment activate those memories. This repeated recall or retrieval of the memory makes emotional memories both more easily activated and more resistant to being forgotten.29,30 The repeated recall of a traumatic event can lead to additional release of cortisol, even in the absence of the actual event. Behavioral neuroscience research with animals has shown that chronic elevation of cortisol can have a number of detrimental effects, including increased damage to brain cells in areas that support learning, thereby leading to increased impairment in subsequent memory formation.30,31

Persistent fear can distort how a child perceives and responds to threat. Fear learning typically takes place in specific contexts and results in those fears becoming associated with the places where the learning occurred. Children may also express fear in response to situations that are similar (not identical) to those initially learned or to situations that are similar to the contexts in which the original learning occurred. These are called "generalized" fear responses, and they are thought to underlie the expression of later anxiety disorders, including post-traumatic stress disorder (PTSD). 15,36,37 Thus, although all individuals display a heightened fear response when faced with threatening contexts, 36,38 individuals with anxiety disorders show this same increased fear response when faced with similar contexts that are known to be safe. 36,38,39 Indeed, children who have had chronic and intense fearful experiences often lose the capacity to differentiate between threat and safety. This impairs their ability to learn and interact with others, because they frequently perceive threat in familiar social circumstances, such as on the playground or in school. These responses inhibit their ability to learn and often lead to serious anxiety disorders. 40,41

Young children who have been exposed to traumatic circumstances also have difficulty identifying and responding to different expressions of emotions, and, therefore, have trouble forming healthy relationships. 42,43,44,45,46 These deficits lead to general problems with social interaction, such as understanding others' facial expressions and emotions. For example, children raised in physically abusive households show heightened sensitivity (compared with

non-abused children) to angry faces, which negatively affects their brain function and behavior. 47,48,49,50 Learning to identify anger—quickly and successfully—in order to avoid being harmed is a highly adaptive and appropriate response to an abusive environment. However, an increased tendency to assume someone is angry when his or her facial expression is ambiguous can be inappropriate and maladaptive

Children who have had chronic and intense fearful experiences often lose the capacity to differentiate between threat and safety.

in a typical, non-threatening social setting and even dangerous in unfamiliar social settings.⁵¹ This "attention bias" to threat is associated with interpreting ambiguous information in a negative fashion, and it is linked to greater vulnerability to stress and anxious behaviors as well as to a greater likelihood to respond aggressively as a form of self-defense in neutral circumstances that are erroneously viewed as threatening. Thus, the extent to which children with a heightened attention bias to threat view the world as a hostile and threatening place can be viewed as both a logical adaptation to an abusive environment and a potent risk factor for behavior problems in later childhood, adolescence, and adult life.

Early exposure to intense or persistent fear-triggering events affects children's ability to learn. There is extensive and growing scientific evidence that prolonged and/or excessive exposure to fear and states of anxiety can cause levels of stress that can impair early learning and adversely affect later performance in school, the workplace, and the community. Multiple studies in humans have documented problems in cognitive control and learning as a result of toxic stress. ^{52,53} These findings have been strengthened by research evidence from non-human primates and rodents that is expanding our understanding of the brain mechanisms underlying these difficulties.

The brain region in animals that appears highly vulnerable to adversity in this regard is the prefrontal cortex, which is the critical area for regulating thought, emotions, and actions as well as for keeping information readily

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Persistent Fear and Anxiety Can Affect Young Children's Learning and Development 5

accessible during the process of active learning. For example, researchers have found that elevations in brain chemicals like noradrenline, an important neurotransmitter, can impair functions that are controlled by the prefrontal region by altering the activity of neurons in that area of the brain. In a related fashion, humans

experiencing chronic stress have been shown to perform poorly on tasks related to prefrontal cortex functioning (such as working memory or shifting attention), and their ability to control their emotions is typically impaired.¹²

Correcting Popular Misrepresentations of Science

THERE ARE A NUMBER OF WIDESPREAD MISCONceptions about how children experience, respond to, and learn fear. Many of these assumptions derive from overgeneralizations of what fears are typical at specific developmental stages as well as misunderstandings about what children can simply "outgrow" as they mature. Being afraid of strangers and monsters are common examples of typical fears. In contrast, research has demonstrated convincingly that excessive fear and anxiety caused by experiences such as abuse and neglect can affect the developing child in very different ways from the fear experiences that characterize a typical childhood.

Contrary to popular belief, serious fear-triggering events can have significant and long-lasting impacts on the developing child, beginning in infan**cy.** Science tells us that young children *can* perceive threat in their environment but, unlike adults, they do not have the cognitive or physical capacities to regulate their psychological response, reduce the threat, or remove themselves from the threatening situation. Research also shows that very young infants can learn to fear certain places, events, or people. These learned fear responses may disrupt the physiology of the stress response system, making it more difficult for the body to respond appropriately to typical, mild stress in everyday contexts later in life. Furthermore, when fear is learned, normal situations and circumstances can elicit responses that are harmful to a child's development.

Children do not naturally outgrow early learned fear responses over time. Fear learning early in life can often be adaptive—think about how a young child learns to stay away from hot surfaces. Thus, fear learning and associated

memories that occur early in life get built into our brain architecture and do not dissipate with age. During typical development, children learn to regulate their responses to mild threats and stresses. However, if young children are exposed to persistent fear and excessive threat during particularly sensitive periods in the developmental process, they may not develop healthy patterns of threat/stress regulation. When they occur, these disruptions do not naturally disappear.

Simply removing a child from a dangerous environment will not by itself undo the serious consequences or reverse the negative impacts of early fear learning. There is no doubt that children in harm's way should be removed from a dangerous situation. However, simply moving a child out of immediate danger does not in itself reverse or eliminate the way that he or she has learned to be fearful. The child's memory retains those learned links, and such thoughts and memories are sufficient to elicit ongoing fear and make a child anxious. Science clearly shows that reducing fear responses requires active work and evidence-based treatment. Children who have been traumatized need to be in responsive and secure environments that restore their sense of safety, control, and predictability—and supportive interventions are needed to assure the provision of these environments. Thus, it is critical that communities be equipped to address the sources of fear in children's lives. Where indicated, children with anxiety can benefit from scientifically proven treatments, such as cognitive behavioral therapy, which have been shown to reduce anxiety and fear.

6 Persistent Fear and Anxiety Can Affect Young Children's Learning and Development

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THE SCIENCE-POLICY GAP

The Science-Policy Gap

Advances in the science of child development tell us that significant fear-eliciting experiences early in life can disrupt the typical development of stress regulation as well as learning, memory, and social behavior, yet there is still widespread resistance in the policy arena to fully addressing the needs of young children who have been trau**matized.** Building on decades of evidence from behavioral research, it is now abundantly clear that young children who are exposed to circumstances that produce persistent fear are at heightened risk for anxiety disorders and other mental health problems that persist into adulthood. Concurrently, a variety of prevention and early intervention programs have been developed to address the needs of young children who have been exposed to such fearful situations as physical abuse or family violence. The limited availability of these kinds of programs for very young children represents a striking failure to relieve immediate distress as well as prevent serious and costly long-term disability.

The lack of availability of adequate health insurance to cover the cost of therapeutic treatment for young children who are experiencing persistent fear and chronic anxiety represents a significant lost opportunity to ameliorate preventable impairments in physical and mental health that can have lifelong implications. The science of child development points the way toward effective approaches to the treatment of children with excessive anxiety and fear. These methods, if administered early, can reduce the incidence of anxiety disorders in children and prevent the kinds of elevated stress responses that lead to physical and mental health impairments later in life. Addressing the current gaps among what science knows about effective treatments, what is available in health care and early childhood settings, what is covered by health insurance, and the availability of coverage for all children needs to be an important policy priority.

Policy Implications

Programs and policies that are designed to address domestic violence, substance abuse, and mental health problems in adults who have (or are expecting) children would have considerably stronger impacts if their focus also included the children's developmental needs, beginning in the prenatal period. Extensive scientific evidence shows that significant mental health problems in parents can be a source of fear and stress in children and have negative effects on a child's development. Through reduced caregiving capacities, the co-occurrence of child neglect or abuse, and exposure to other sources of fear and stress, parental mental health conditions have direct consequences for the health and well-being of their children. The fear that abuse and neglect elicits in children can lead to serious dysregulation of their emotions and behavior control. That said, there are promising interventions that have been shown to be effective in preventing abuse and neglect. Prenatal home visiting for first-time mothers provided by trained nurses is one example of a program whose effectiveness has been documented by randomized controlled trials in multiple locations. 54,55 Other promising approaches include specific training for

Extensive scientific evidence shows that significant mental health problems in parents can be a source of fear and stress in children and have negative effects on a child's development.

professionals who work with families experiencing trauma and the incorporation of developmental interventions for young children in programs that address domestic violence.⁵⁶ When hard evidence of program effectiveness is available, the imperative of providing appropriate

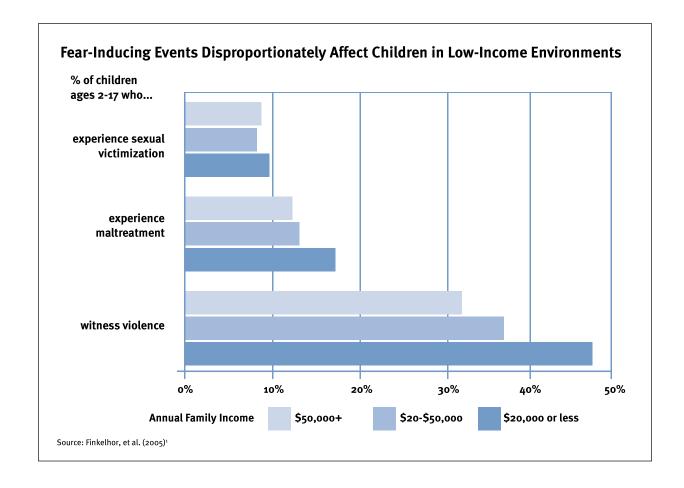
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Persistent Fear and Anxiety Can Affect Young Children's Learning and Development 7

preventive or intervention services is clear. When program evaluation data on successful prevention or interventions for specific threats to child well-being are limited or nonexistent, the compelling evidence of potential harm to children's development calls for serious investment in the design and testing of new strategies for prevention and treatment that are grounded in sound scientific principles, subjected to rigorous evaluation, and improved continuously over time.

Child welfare policies and programs that are mandated to assess and intervene in cases of suspected and/or confirmed abuse or neglect must address the full range of children's developmental needs, not just focus on their physical safety. All states have established systems that require the reporting of suspected child maltreatment and the provision of protective services for children whose health or well-being

is threatened. These services focus largely on issues related to physical safety, reduction of repeated injury, and child custody. Advances in neuroscience now indicate that evaluations of maltreated children that rely solely on physical examination and screening for broken bones are insufficient and must be augmented by comprehensive developmental assessments and appropriate intervention by skilled professionals as needed. To this end, it is important to note that early intervention programs for children with developmental delays or disabilities have the expertise to provide many of the services needed by maltreated children, and these programs are already available in all states under a federal entitlement specified in the Individuals With Disabilities Education Act (IDEA), Moreover, the most recent reauthorizations of the relevant federal legislation for both the child welfare and early intervention systems (the Keeping Children and Families Safe Act and IDEA,



8 Persistent Fear and Anxiety Can Affect Young Children's Learning and Development

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POLICY IMPLICATIONS

respectively) include requirements for regularized referrals of newly established child protective cases from the child welfare agency to the early intervention system for developmental screening. Notwithstanding its strong, sciencebased rationale, the implementation of this linkage has been limited to date and requires immediate attention. The evidence that significant "fear learning" with long-term consequences can occur as early as the first year of life—and that the capabilities for effective "fear unlearning" do not fully emerge until later—underscores the extent to which the limited child development expertise available within the nation's child welfare system can no longer be justified.

Early identification and treatment for anxiety and post-traumatic stress disorders in young children should be routinely available through existing services for families, as they can significantly affect the future mental and physical health of children. Advances in neuroscience, behavioral and developmental studies, and clinical research have all converged to contribute to a shared understanding of both the reality of early childhood mental health impairment and the parameters of successful preventive intervention and effective treatments. Early in infancy and childhood, intervention and treatment should focus on programs that provide families with necessary services, supports, and expertise, while later in development, supports should be focused more on children themselves.

The critical importance of intervening early in the lives of young children who experience excessive fear and anxiety is evident in two domains: the need to relieve current suffering and the opportunity to prevent enduring impairment that can lead to a lifetime of poor mental and physical health, diminished economic productivity, and antisocial behavior. With these high stakes in mind, all of society would benefit from a greater capacity to address the problem of excessive fear and anxiety in young children across a broad array of service systems, including health care, child welfare programs, school- and child care-based health services, and the foster care system, among others.

Policies with a broad mandate to reduce poverty and neighborhood violence would likely have greater long-term impacts if they also included explicit and focused attention on the prevention of fear and anxiety overload in young children. Children who live in violent communities have been shown to have more behavior problems, greater evidence of post-traumatic stress

All of society would benefit from a greater capacity to address the problem of excessive fear and anxiety in young children across a broad array of service systems.

disorder, and increased physical symptoms such as headaches and stomachaches, as well as lower capacity for empathy and diminished selfesteem.⁵⁷ Programs focused on the reduction of poverty, domestic violence, substance abuse, and neighborhood violence are examples of the kinds of community-based services whose impacts could be enhanced by incorporating targeted interventions to explicitly address the emotional needs of young children living under these conditions. When delivered effectively, such interventions could have a multiplier effect into the next generation by reducing both the individual and societal costs of the negative developmental effects of persistent fear, including mental health impairments, antisocial behavior, physical disease, and violent crime.

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