

# TRAUMA~ Chemical Use & Addiction

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## A lot is Known About Trauma

- “Challenges” neuro-biological system
- Unattended Trauma can lead to self-defeating, self-destructive behavior.
- Trauma often masks itself in behaviors and symptoms that look like ADHD, Anxiety, Impulse Control Disorders (Conduct Disorders, Oppositional Defiant) etc.
- Trauma exposure can impact all aspects of functioning including decision making, ability to learn, social interaction, health, etc.
- Most will need external support to move beyond trauma.

(Van der Kolk 2008; Steele, 1992; Terr, 1991; Pynoos, 1988)

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## Relationships~ Trauma and...

- **Substance Abuse**
- Self Harm
- Eating Disorders
- Delinquent/Criminal Behavior
- Mental Illness
- Homelessness
- Health Issues~ Asthma, Stroke, Diabetes, Obesity

(Fellitti & Anda et.al. ~ ACES Study)

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## Substance Use and Trauma

- 30-60% of those in Substance Abuse Treatment meet the criteria for PTSD diagnosis
  - ~50% inpatient with SA-PTSD
- Women (with substance abuse disorders) are 2-3 times more likely than men to have a history of trauma
- Increased numbers of childhood adverse experiences increases the likelihood for teen and adult substance use

(Dube, et. al., 2002; Krejci, et.al, 2008; Souza & Spates, 2008)

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## Relationship: Substance Use/Trauma

- Initial escape from trauma memory/symptoms may be accomplished through drug use:
  - Drugs/alcohol can decrease anxiety and arousal state
  - Feelings of powerlessness, fear, etc. brought about by trauma can be masked with substances
- Drug culture can expose/increase likelihood for victimization
- Trauma emotions and symptoms can trigger use/relapse

(Najavits, 1998; Krejci, 2008; Souza & Spate, 2008)

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## Common Drug Associations

- Drug most commonly associated with PTSD: alcohol and cocaine.
  - Alcohol has an immediate impact on physical symptoms of trauma. Stress response is 'managed'.
  - Cocaine and methamphetamines produce feelings of euphoria, elation, internal self-control and interpersonal effectiveness.

(Najavits, 1998; Krejci, 2008; Souza & Spate, 2008)

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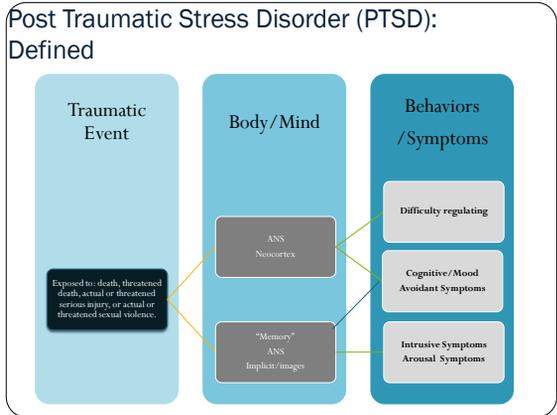
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- ### Traumatic Situations
- War
  - Sexual Assault/Sex work
  - Murder
  - Beatings/Physical Assaults
  - Emotional Abuse
  - IP/Domestic Violence
  - Neglect
  - Unsafe/unpredictable environment (homelessness)
  - Suicides/ Drowning
  - Car Accidents/Plane Crashes
  - Disasters - earthquake, floods, fires, etc.
  - Injuries or life threatening illness
  - Etc.

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- ### Exposure to Trauma~
- Surviving Victim/Survivor
  - Witness to the Event (could include being the perpetrator of the event)
  - Related or Connected to the Victim
  - Hearing the Details

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## Symptoms of PTSD in Adults (DSM5)

- Recurrent recollection
- Dreams with content related
- Distress at symbolic events
- Dissociative reaction

Intrusive

- Hypervigilance
- Startle Response
- Sleep difficulty
- Concentration /memory problems
- Mood problems: irritable, anger.
- Cognitive Struggles

Arousal

- Avoiding thoughts feelings, activities or situations
- Avoiding external reminders
- Diminished interest
- Inability to connect with future

Avoidant

- Inability to remember aspects of event
- Negative belief about oneself
- Distorted cognitions
- Negative Emotional State
- Relationship issues

Cognitive /Mood

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## Important Characteristics of Trauma

- **Terror** is often the underlying emotion.
- Creates distress and impairment in social, vocational or other aspects of living.
- Reactions often unknown, held within.
- Can't or don't want to talk about event(s).
- Pain triggers terror, powerlessness, loss of safety.
- Can attack/distort self image.

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## Component of Brain Response

- Reaction – How the brain receives trauma
- Memory –how trauma memory is stored
- Brain Impact – Long term impact



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## How the Brain Receives Trauma

- **Development:**
  - The brain develops sequentially, with “lower” systems developing first and “higher” systems developing later.
  - The brain developed and functions to keep us alive.
  - Messages received by Amygdala (a part of the limbic system) activates fight/flight.

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- Autonomic Nervous System (ANS) becomes activated.
  - Specifically the Sympathetic Nervous System
  - <http://www.youtube.com/watch?v=m2GywoS77qc>
- Cortex (reasoning, problem solving, cognitive memory, planning, recognition) quiets so the body can do the job of survival.
- Memory is stored in limbic system: Hippocampus (safety awareness & memory), Amygdala (fear response, impulse control, regulation).

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## Left Brain and Memory ~~Explicit Brain

- Left brain has a Language (Broca’s area)
- Can process information, problem solve, find logical connections.
- Ability to re-order thoughts when change is present.
- Hormones stimulating the flight/fight/ free response can “change” the actions of the left brain - in fact silence their ability to “process”.
- Attending, focusing, retaining information.

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## Right Brain and Memory --Implicit Brain

- Right brain has no language - no words to describe experience.
- Captures in visual images, emotions, internal state of regulation.
- Amygdala stores emotion with memory.
- This is the part of the brain where trauma is remembered/stored.



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## Post Trauma

- The brain recovers~~~
  - Hormones will balance
  - Cortex will process
  - Supports and environment will help “make safe”
- The brain get’s stuck~~ PTSD~
  - Continual exposure
  - Lack of ‘safety’
  - No reset button – **brain function as if danger continues to exist.**

(Perry, 2006; Malchiodi, 2001; Levine & Kline, 2007)

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“Trauma is an exceptional experience in which powerful and dangerous events overwhelm a person’s capacity to cope.”

- Rice & Groves, 2005



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**ACE Study** - <http://www.cdc.gov/ace/>

- The Adverse Childhood Experiences (ACE) Study is one of the largest investigations ever conducted to assess associations between childhood maltreatment and later-life health and well-being.
- More than 17,000 participants
- Findings suggest that certain experiences are major risk factors for the leading causes of illness and death as well as poor quality of life in the United States.

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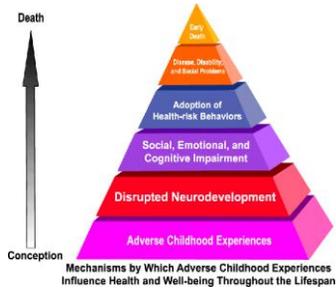
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**ACE STUDY**




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**~ACES~**

Anda and Felitti

No report of ACES (33%)	1-3 Aces (51%)	4-10 Aces (16%)
1 in 16 smoke	1 in 9 smoke	1 in 6 smoke
1 in 69 are alcoholics	1 in 9 are alcoholics	1 in 6 are alcoholics
1 in 480 use IV drugs	1 in 43 use IV drugs	1 in 30 use IV drugs
1 in 14 heart disease	1 in 7 heart disease	1 in 6 heart disease
1 in 96 attempts suicide	1 in 10 attempts suicide	1 in 5 attempts suicide

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## COMPLEX TRAUMA ~ OUTCOMES

- Capacity for learning, verbal processing (cortex), secure attachment, and the regulation of emotions (limbic) are compromised
- Impaired functioning in aspects of living~social, recreational, health, learning, relationships
- Lacks insight about the relationship between life experiences and behaviors
- Impacts view of world & self:
  - Belief that the world lacks predictability and safety
  - Question their worth
  - Vulnerability: ability to function in the world and meet needs is challenged

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## Indicators you are likely to see when CNS is responding~ SNS is dominant

- **NORMAL RESPONSES!**
  - Low or no self awareness.
  - Low or no capacity to self evaluate.
  - Low or no ability to self regulate.
  - Low or no ability to identify goals and work consistently to achieve them.
  - May have poor self image as a result of those previous bullets.

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## Working through Trauma & Recovery

- MUST have a co-occurring treatment process:
  - Educate about reactions and brain response
    - Gives meaning/Normalizes
  - Safety:
    - Physical and Relationship Safety
    - Internal Safety – regulation of stress response
      - Seeking Safety
      - TREM
      - DBT
  - Develop Healthy Coping Skills: **Self regulating skill** development, body awareness
    - Relapse prevention with a *focus on trauma triggers*

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• Connect with Details – Nonverbal into expression: multiple methods, talk therapy is only one option!

• **Must feel confident in knowing and being able to respond to internal cues of stress!**

- EMDR (Eye Movement Desensitization & Reprocessing)
- Connection of cognition with behavior (TF-CBT)
- Journaling

\*\*Research indicates that the effectiveness of 'exposure' rests on the strength of healthy coping

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## Promises of Healing

❖ Reduced frequency of symptoms

❖ Reduced fear of the symptoms

❖ Reduced likelihood of relapse

❖ Validate the magnitude of the personal experience

❖ Improve quality of relationships and life!

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Questions???



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