



#### PRESENTATION OUTLINE



### Defining Trauma

- Trauma and Mental Health
- ■Trauma and the Brain
- Trauma and Academic Functioning
- Strategies to Address School Anxiety
- •5 Pillars of a Trauma Informed School



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#### **PREVALENCE OF TRAUMA**

- 26% of children will have experienced or witnessed a traumatic event by their 4<sup>th</sup> birthday, and 2/3<sup>rd</sup>'s of children report one traumatic event by age 16 (SAMHSA, 2020).
- \* A traumatic event is defined by APA as a direct or <u>perceived</u> threat rendering a child feeling overwhelmed and fearful of their safety.
- \* Traumatic stress reactions in children often lead to difficulty self-regulating emotions, heightened aggression, lack of trust, and poor school performance (Diamanduros et al, 2018).



Washington DC: " March for our lives" March 24<sup>th</sup>, 2018

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#### SUBTYPES OF TRAUMA

(NCTSN, 2021)

**Bullying (peer victimization)** - a deliberate attempt to inflict social, emotional, physical, and/or psychological harm to someone perceived as being less powerful. Bullying can be physical (hitting, tripping, kicking, etc.), verbal (teasing, taunting, threatening, sexual comments), social (spreading rumors, embarrassing someone in public) or include cyberbullying through social media.

**Community Trauma** - exposure to intentional acts of interpersonal violence committed in public areas including homicides, sexual assaults, robberies, shootings, gang related violence and weapons attacks.

Complex trauma - exposure to multiple traumatic events often of an invasive and interpersonal nature, such as abuse, sexual abuse, or profound neglect. The trauma often occurs early and often in life, and can disrupt the ability to form secure attachments.

**Early childhood trauma** - traumatic experiences that occur in children aged 0-6. Examples include physical or sexual abuse, natural disasters, accidents, or war. Young children also may experience trauma in response to painful medical procedures or the sudden loss of a parent/caregiver



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#### SUBTYPES OF TRAUMA

(NCTSN, 2021)

**Intimate Partner Violence (IPV)** - occurs when an individual purposely causes harm to a partner or spouse. Tactics used in IPV can be physical, sexual, financial, verbal, or emotional in nature and can also include stalking, terrorizing, humiliation, and intentional isolation from social supports and family.

**Pediatric medical trauma -** refers to a set of psychological and physiological responses of children and their families to pain, injury, serious illness, medical procedures, and invasive or frightening treatment experiences.

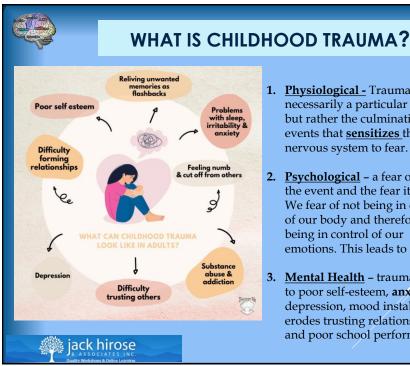
**Physical abuse** - one of the most common forms of child maltreatment that results in physical injury to a child such as red marks, cuts, welts, bruises, muscle sprains, or broken bones, even if the injury was unintentional

**Sexual abuse** -any interaction between a child and an adult in which the child is used for the sexual stimulation of the perpetrator or an observer.



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- 1. Physiological Trauma is not necessarily a particular event but rather the culmination of events that sensitizes the nervous system to fear.
- 2. Psychological a fear of both the event and the fear itself. We fear of not being in control of our body and therefore not being in control of our emotions. This leads to stress.
- 3. Mental Health trauma leads to poor self-esteem, anxiety, depression, mood instability erodes trusting relationships, and poor school performance.



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## ADVERSE CHILDHOOD EXPERIENCES

➤ The Adverse Childhood Experiences Study (ACE Study) conducted by both Kaiser Permanente and the Centers for Disease Control and Prevention, examined the long term impact of childhood trauma from participants recruited more than 20 years ago from 1995-1997.

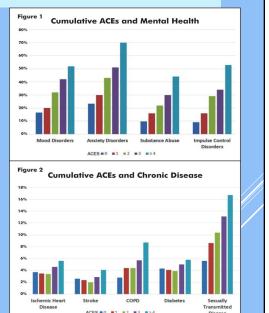


- Conclusion 1: Adverse childhood experiences are common. For example,
   28% participants reported physical abuse and 21% reported sexual abuse.
- Conclusion 2: Adverse childhood experiences often occur together. Almost 40% of the original sample of 17,000 participants reported two or more ACEs and 12.5% experienced four or more.
- <u>Conclusion 3:</u> The <u>cumulative</u> impact of adverse childhood experiences leads health, <u>social</u>, and behavioral problems throughout the lifespan.

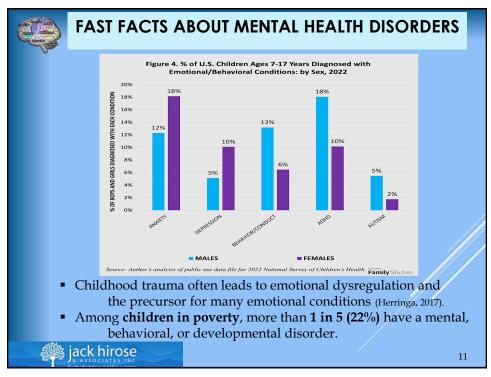
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### TRAUMA AND MENTAL HEALTH-ACES

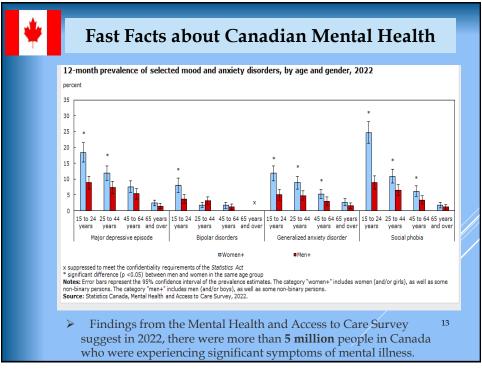
- Study revealed the number of cumulative ACES was associated with a greater likelihood of having a mental health and physical health disorder.
- Anxiety disorders were the most prevalent condition for children with the highest cumulative number of ACES.







SYMPTOMS OF TRAUMA		
Physiological Symptoms	Behavioral Symptoms	Psychological/Cognitive
(anxiety disorder?)	(withdrawal/depression?)	Symptoms (ADHD)
Shallow Breathing	Work Refusal	Inconsistent attention
Facial Flushing	School Refusal	Irritability
Excessive Sweating	Avoiding unstructured areas	Mind goes blank during tests
Hand Tremors	Sensitivity to loud sounds	Loses train of thought
Dizziness	Rarely volunteers in class	Poor organization
Dilated Pupils	Speaks in a hushed voice	Easily angered
Fatigue	Does not initiate peers	Poor emotional self-regulation
Muscle Tension	Avoids cafeteria	Distrusts authority figures
Chest pains	Often visits school nurse	Irrational fears



# State of Mental Health in Canada, 2024

- •Provinces are only spending an average of 6.3% of their overall health budgets on mental health. They should be spending closer to 12%.
- •2.5 million people with mental health needs in Canada reported that they weren't getting adequate care.
- •Canadians report having "poor" or "fair" mental health three times more often than before the pandemic (26% in 2021 vs. 8.9% in 2019).
- •Approximately <u>38%</u> of Indigenous Peoples reported their mental health was "poor" or "fair".
- •Fifty-seven percent (57%) of young people (aged 18-24) who had early signs of a mental illness said that cost was an obstacle to getting mental health services.





#### **SUMMARY: Canadian Mental Health**

Statistics Canada, 2024

- ➤ The percentage of Canadians aged 15 years and older who met the diagnostic criteria for a mental health condition (i.e. major depressive episode, bipolar disorder, and generalized anxiety disorder, etc..) has increased in the past 10 years, whereas the prevalence of alcohol use disorders has decreased.
- Youth (ages 15-24), especially women, were most likely to have met diagnostic criteria for a mood or anxiety disorder based on their symptoms.
- Only half of the people who met diagnostic criteria for a mood, anxiety, or substance use disorder talked to a health professional about their mental health in the past 12 months before the survey.
- Unmet needs for counseling or psychotherapy were higher than unmet needs for medication or information about mental health.



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Quality Workshops & 0

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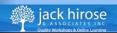


#### Fast Facts about Canadian Mental Health

Statistics Canada, 2024

#### **Barriers to Counseling and Therapy:**

- > Shortage of mental health workers
- Long wait times for community mental health workers
- > Affordability
- > Desire for a quicker fix to problems
- > Stigma of admitting help
- The residue of young people lacking the social confidence to attempt counseling and therapy??



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## POLYVAGAL THEORY: HOW THE NERVOUS SYSTEM BECOMES SENSITIZED TO FEAR?

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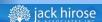
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<u>Vagus Nerve</u> – 10<sup>th</sup> cranial nerve and longest in body. Literally "wanders" from brain to the digestive system. Arranged in a hierarchical fashion and functions to calm the body through homeostasis

#### Polyvagal Theory - Stephen Porges (2009)

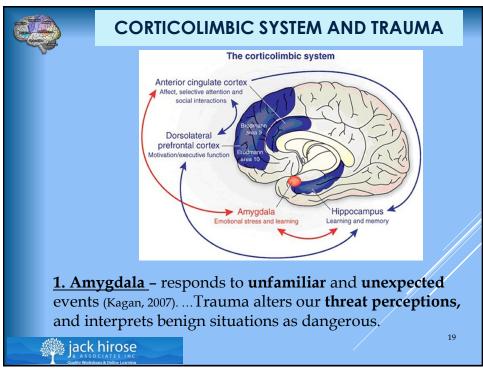
- <u>Dorsal Vagus</u> older pathway that triggers "freeze" response, immobilization, numbness, or dissociation (parasympathetic)
- Fight-Flight dominated by physiological responses of sympathetic nervous system.

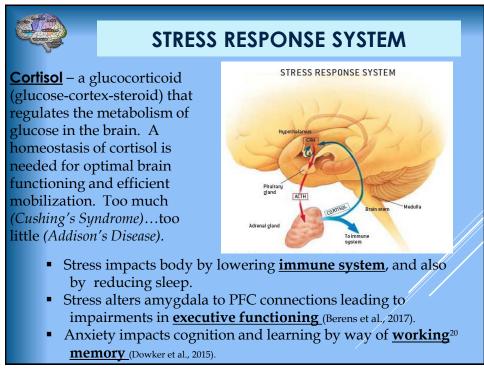
  Takes body 15-20 min to self-calm (sympathetic)
- Ventral Vagus newer pathway that inhibits older pathways and triggers calming influence of parasympathetic nervous system through social engagement and trust. Provides brakes to

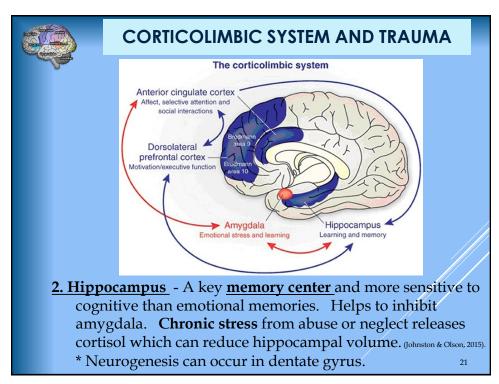


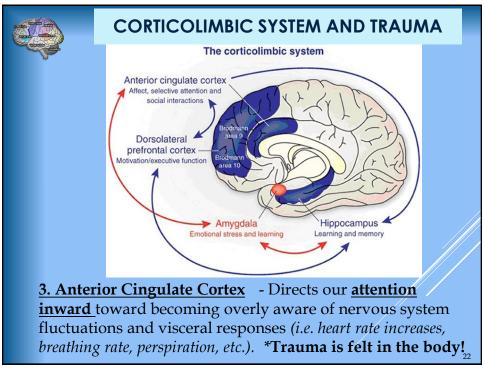
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Nerve origin

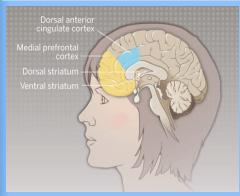








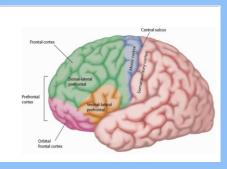
## FRONTAL LOBE AND TRAUMA: DORSAL ANTERIOR CINGULATE



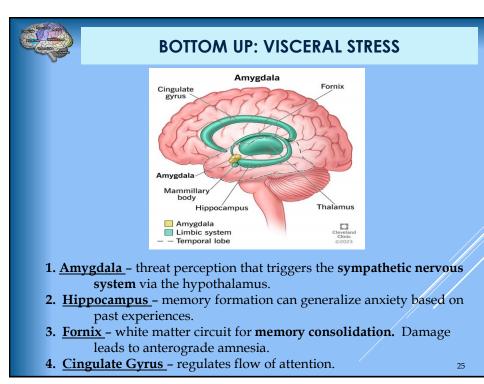
- Dorsal anterior cingulate helps regulate emotional functioning and supervises fearbased system.
- Helps interpret and regulate our emotional experiences with language.
- <u>85%</u> of PTSD patients experience <u>alexithymia</u>... brain imaging studies showing greater cortical thickness in dorsal anterior cingulate (Demers et al., 2015).
- Alexithymia emotional intensity of an experience impacts the ability to identify, label, and verbally communicate one's emotional state.

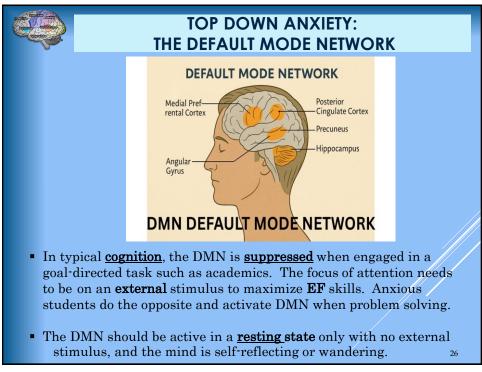
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#### ORBITAL FRONTAL CORTEX



- \* Self-regulation of social skills functioning children who have been abused or neglected often experience tremendous challenges developing trust with others and establishing stable interpersonal relationships.
- <u>4. Orbital-frontal Cortex</u> children with trauma have difficulty accurately identifying their own emotions, and the emotional states of others.
- Social Dyslexia misread social cues, highly reactive to misperceived slights, and inability to comprehend how behavior may disrupt the learning environment.
- Reward Sensitivity—neuro-imaging studies show deficits in reward sensitivity as trauma blunts positive rewards and leads to oversensitivity to negative rewards (Herzberg & Gunnar, 2019).

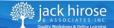






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#### Trauma and Academic Functioning

\* Trauma and anxiety impacts academic functioning in 3 primary ways:



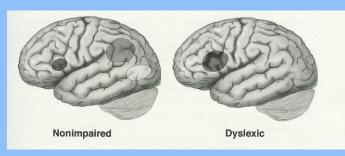
- 1) Trusting authority figures.
- 2) Attention and engagement in the classroom.
- 3) Trauma leads to **working memory** and **executive functioning** deficits directly impacting:
  - a) Listening and reading comprehension
  - b) Written language production
  - c) Mathematical computation
- \* Trauma impacts frontal lobe functioning!

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### Trauma and Reading Comprehension

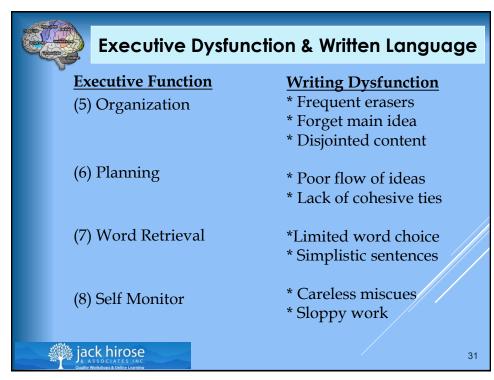


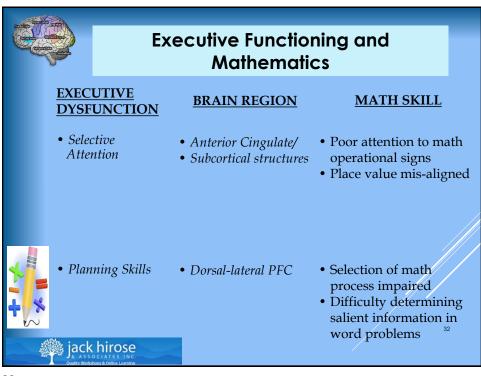
- ➤ Dyslexic students have difficulty with automatic word recognition....leading to comprehension difficulties.
- Anxiety, stress, and trauma impact reading comprehension skills though automatic word recognition remains in-tact.

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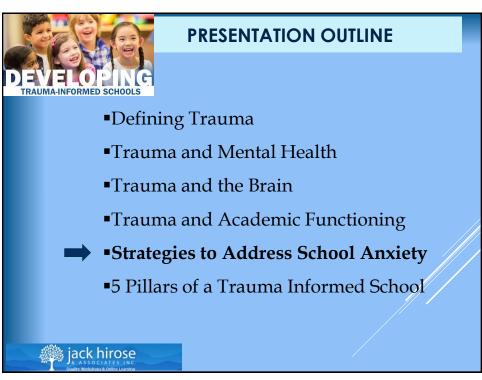
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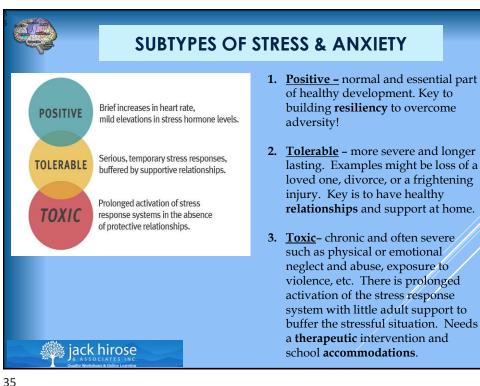
Executive Dysfunction & Written Language		
<b>Executive Function</b>	Writing Dysfunction	
(1) Initiating	* Poor idea generation	
	* Poor independence	
(2) Sustaining	* Lose track of thoughts	
	* Difficulty finishing	
	* Sentences disjointed	
(3) Inhibiting	* Impulsive/Distractible	
(4) Shifting	* Perseverations	
	* "Stuck" on topic	
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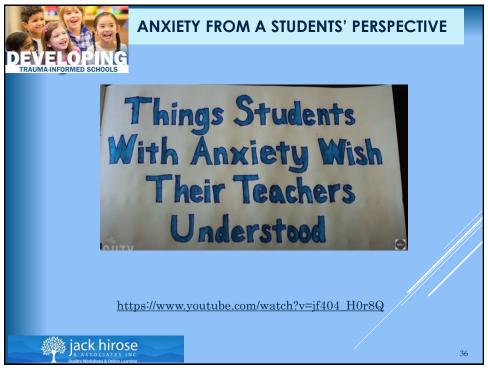




	Executive Functioning and Mathematics		
и	EXECUTIVE DYSFUNCTION	BRAIN REGION	MATH SKILL
ı	Organization Skills	• Dorsal-lateral PFC	<ul><li>Inconsistent lining up math equations</li><li>Frequent erasers</li><li>Difficulty setting up problems</li></ul>
<b>+</b>	• Self-Monitoring	• Dorsal-lateral PFC	<ul> <li>Limited double-checking of work</li> <li>Unaware of plausibility to a response.</li> </ul>
	• Cues Pattern Recognition  Jack hirose Jack hirose Jack hirose	• Dorsal-lateral PFC	<ul> <li>Symbolic reasoning</li> <li>Timed subtests <sup>33</sup> compromised</li> </ul>









#### SCHOOL ACCOMMODATIONS FOR ANXIETY

- 1. Allow extra time on tests, quizzes, and assignments.
- 2. Refrain from calling on a student unless hand is raised.
- 3. Provide alternative ways to demonstrate subject mastery so school is not just the memory Olympics (e.g., projects, papers, independent study).
- 4. Provide preferential seating in class.
- Allow the student to use a crisis pass when feeling stressed or overwhelmed in class.
- 6. Create a "calm corner" in the classroom that students can use to self-calm as needed.
- 7. **Structure and Routine:** picture schedules for younger children and write class routine on board for older children.

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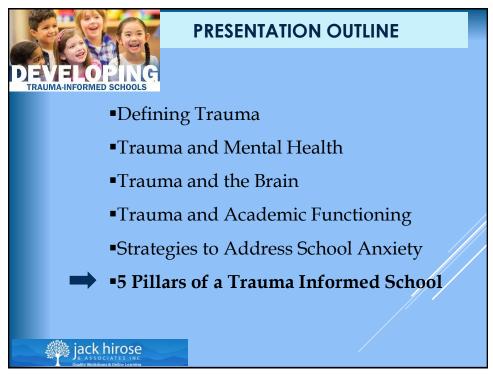
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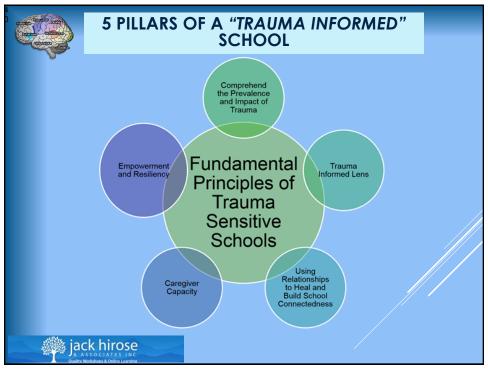
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#### SCHOOL ACCOMMODATIONS FOR ANXIETY

- 8. Notify the student in **advance** when there will be a substitute teacher or emergency drill.
- 9. Provide access to **lecture notes** and assignments online.
- 10. Structure more **challenging** classes in the morning rather than at the end of the day.
- 11. Allow students to **retake** one test each marking period to demonstrate mastery.
- 12. Teachers should try to **modulate** tone of voice, rate of speech, and positive comments made each date.
- 13. Incorporate more **humor** into class lessons!!
- 14. Assign **peer buddy** to accompany student so they are not alone.
- \*15. Build a **relationship** with the student outside of class!







#### 1. UNDERSTANDING CHILDREN'S TRAUMATIC STRESS RESPONSES (NCTSN, 2012)



- Traumatic experiences are inherently complex: (There is no signature emotional reaction that all children exhibit.)
- 2. Danger and safety are core concerns in the lives of traumatized children.
- Trauma underlies many emotional disorders seen in children including anxiety, which impacts many aspects of academic and social-emotional functioning.
- 4. Children exposed to trauma and chronic stress have actual changes in the brain.

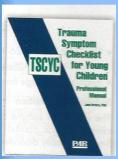
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#### 2. TRAUMA SCALES



- Trauma Symptom Checklist for Children
- 54 item self report checklist (15-20min)
- Ages 8-16
- Scoring software on PAR iconnect
- Anxiety, Depression, Anger, PTSD, Dissociation, and Sexual Concerns
- Gender appropriate norms



- Trauma Symptom Checklist for Young Children
- 3-12 years old
- Caretakers rate 90 symptoms on a 4 point scale (20 min)
- Eight clinical scales
- Focus on child abuse, peer assault, community violence.

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## FEIFER ASSESSMENT OF CHILDHOOD TRAUMA (FACT)

- Parent, Teacher and Self-Report forms students 4-18.
- Digitally administered and scored on PIC
- Approximately 10 minutes to complete (65 questions)
- Gender and age-based norms
- Total Trauma Index Score:
  - a) 4 Clinical Scale Scores (Physiological, Emotional, Behavioral, and Academic)
  - b) 4 Supplemental Cluster Scores (Resilience, Inattention, Depression, Anxiety)
- Over 100 **504 Recommendations** (PAR-Iconnect)



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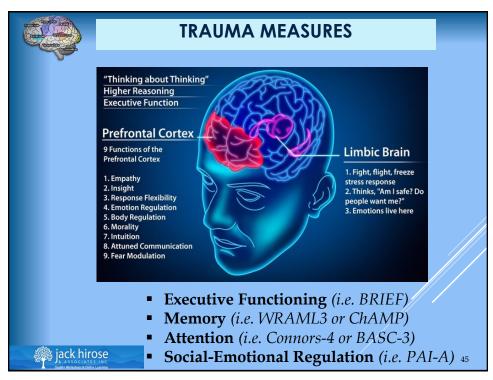
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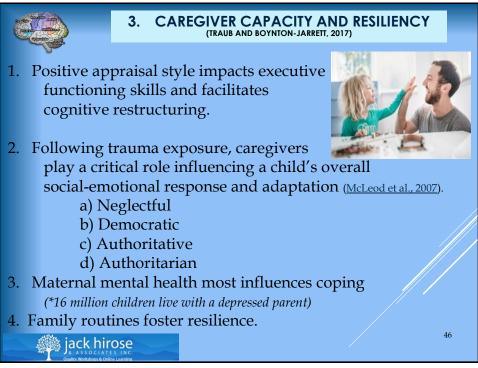


#### QUICK FACTS ABOUT THE FACT

- <u>FACT #1:</u> The scale is noninvasive and designed to measure the **implications** of trauma in a school based setting and **NOT** the direct source or type of trauma.
- **FACT #2:** The scale can be used to generate 504 recommendations and classroom accommodations for "at-risk" students.
- \* FACT #3: The most prudent use of the scale may be to include in the *Background Information* section of reports to provide a socialemotional context to interpret a student's cognitive profile.



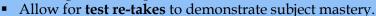






#### 4. CLASSROOM ACCOMMODATIONS

- Designated "check-in" with trusted school staff
- Structure and **routine** (i.e. schedules and emotive responses)
- NO CELL PHONES
- Use of noise cancellation headphones.
- Use restorative and collaborative problemsolving instead of punishment



- Provide alternative areas for lunch, restroom breaks, change of clothes for P.E.
- Scheduling more challenging subjects in morning.
- Allow the student to leave class a few minutes early when transitioning to next class.
- Use of a weighted backpack or vest.
- Provide access to **on-line** learning as needed.
- Access to school counselor as needed



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## 5. TEACHING RESILIENCY: MINDFULNESS

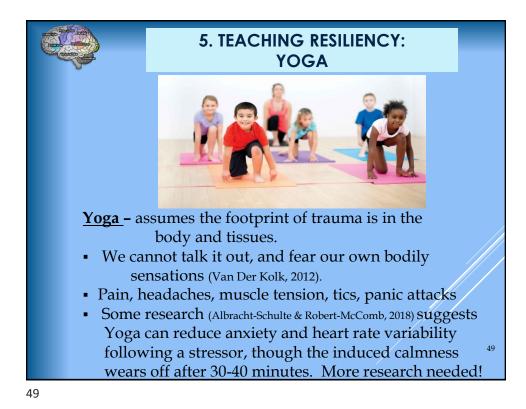


<u>Mindfulness</u> – focus on breathing from the diaphragm, not the chest, and exhaling on longer slower breaths.

- Strive for 6-8 breaths per minute.
- Practice breathing techniques when visualizing an anxiety provoking situation.
- Enhances parasympathetic nervous system.

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Stop, Breathe & Think (2)

Medician have for your best of the form of the form



#### 5. CANINE ASSISTED THERAPY

- Provide unconditional warmth and positive emotions.
- Animals do not try to give sage advice, but provide an emotional pathway to heal.
- Presence of a therapeutic animal promotes oxytocin secretion (bond), lower heart rate and blood pressure, and calmness (Beetz et al., 2012).
- Reduces social isolation and promotes sense of connectedness (O'Haire et al., 2015).

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#### LET'S STAY CONNECTED



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**Books:** www.schoolneuropsychpress.com

Trauma Links: \*https://www.nasponline.org/

\*https://www.parentcenterhub.org/national-child-traumatic-stress-network/

 $\underline{\text{*https://news.isst-d.org/animal-assisted-therapy-for-trauma/}}$ 

\*https://www.mindful.org/the-science-of-trauma-mindfulness-ptsd/

\*https://www.wiley.com/enus/Essentials+of+Trauma+Informed+Assessment+and+Intervention+in+School+and+Community+Settings-p-9781119274612

\*https://www.amazon.com/Trauma-Sensitive-Classroom-Building-Resilience-

Compassionate/dp/0393711862

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