



Brain-Based Strategies for Children with Stress & Trauma: Building Resilience and Coping Skills in Students




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Dr. Feifer's Journey




- Nationally certified school psychologist **30+** years
- Diplomate in **pediatric** and **school** neuropsychology
- **Awards:** *Maryland School Psychologist of the Year
*National School Psychologist of the Year
*Legends in School Psychology Award
*Outstanding Educator in School Psychology
- Author: **8 books** on learning and emotional disorders
- Test Author: **FAR-FAM-FAW-FACT**
- Currently in private practice at *Monocacy Neurodevelopmental Center* in Frederick, MD.




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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
- Building resilience through EQ
- Trauma Informed Assessments

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WORLD HEALTH ORGANIZATION 2020

GLOBAL STATUS REPORT PREVENTING VIOLENCE AGAINST CHILDREN

MAGNITUDE

1 out of 2 children or 1 billion children suffer some form of violence each year ⁽⁷⁾

Nearly 3 in 4 children or 500 million children aged 2–4 years regularly suffer physical punishment and/or psychological violence at the hands of parents and caregivers ⁽¹⁰⁾

1 in 4 children aged under 5 years live with a mother who is a victim of intimate partner violence ⁽¹⁰⁾

1 in 3 students aged 11–15 years suffered bullying in the past month ⁽⁸⁾


Boys 35%
Girls 30%

1 in 3 students aged 13–15 years were in a physical fight in the past year ⁽⁸⁾

Boys 45%
Girls 25%


120 million girls and young women under 20 years of age have suffered some form of forced sexual contact ⁽⁷⁾

8 Global status report on preventing violence against children 2020

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PREVALENCE OF TRAUMA

- 26% of children will have experienced or witnessed a traumatic event by their 4th birthday, and 2/3rds of children report one traumatic event by age 16 (SAMHSA, 2020).
- * A traumatic event is defined by APA as a direct or **perceived** 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 24th, 2018



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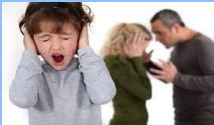

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SUBTYPES OF TRAUMA


(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, verbal, social, and/or 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 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, 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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WHAT IS CHILDHOOD TRAUMA?



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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SYMPTOMS OF TRAUMA

- Anger
- Persistent feelings of sadness and despair
- Flashbacks
- Unpredictable emotions
- Physical symptoms, such as nausea and headaches
- Intense feelings of guilt, as if they are somehow responsible for the event
- An altered sense of shame
- Feelings of isolation and hopelessness
- Academic failure/ Absenteeism





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SYMPTOMS OF TRAUMA

Physiological Symptoms (anxiety disorder?)	Behavioral Symptoms (withdrawal/depression?)	Psychological/Cognitive 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



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DSMV TRAUMA DEFINITIONS

Posttraumatic Stress Disorder- directly experiencing or witnessing a traumatic event leading to prolonged psychological distress, hyperarousal, avoidance, intrusive memories, and negative cognitive beliefs (*i.e.* "I am bad") after event occurred. Diagnosis goes below age 6.

Acute Stress Disorder – distinguished from PTSD because symptom pattern occurs within **1 month** of traumatic event and resolves within a **1 month** period.


Adjustment Disorder – psychological symptoms occur within **3 months** of the stressor and lasts no more than **6 months** after the stressor has ceased.

* **There is no "Developmental Trauma Disorder"** to capture the mental health impact on kids.




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PRESENTATION OUTLINE

DEVELOPING TRAUMA-INFORMED SCHOOLS


- Defining Trauma
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ADVERSE CHILDHOOD EXPERIENCES

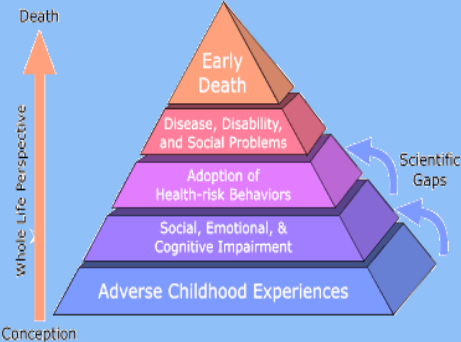


➤ The *Adverse Childhood Experiences Study* (ACE Study) conducted by both Kaiser Permanente and the Centers for Disease Control and Prevention, examined the long term impact of childhood trauma from participants recruited more than 20 years ago from 1995-1997.

Whole Life Perspective

Death

Conception




- **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.
- **Conclusion 3:** The cumulative impact of adverse childhood experiences leads health, social, 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.



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Figure 1 Cumulative ACES and Mental Health

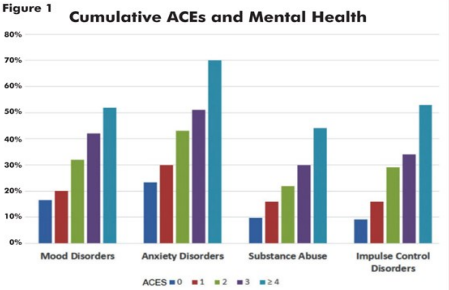
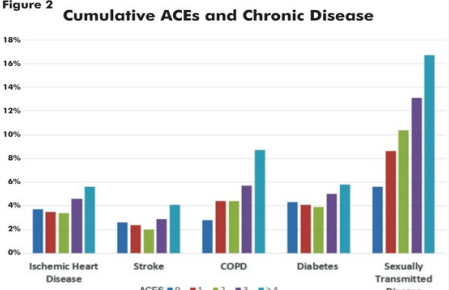



Figure 2 Cumulative ACES and Chronic Disease



Figures reprinted from Putnam, Harris, Lieberman, Putnam, & Amato-Jackson, 2015

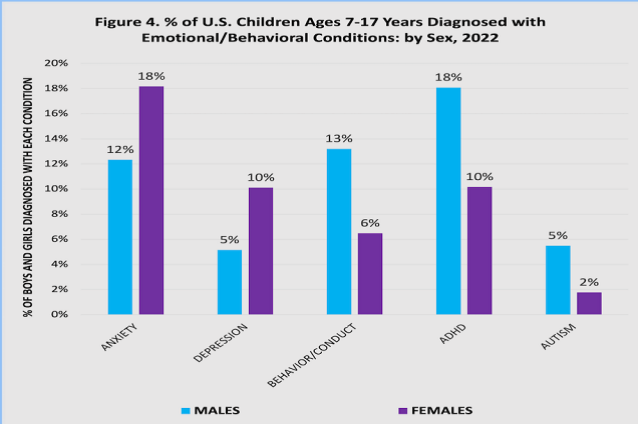
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FAST FACTS ABOUT MENTAL HEALTH DISORDERS


Figure 4. % of U.S. Children Ages 7-17 Years Diagnosed with Emotional/Behavioral Conditions: by Sex, 2022




Condition	Males (%)	Females (%)
ANXIETY	12%	18%
DEPRESSION	5%	10%
BEHAVIOR/CONDUCT	13%	6%
ADHD	18%	10%
AUTISM	5%	2%

Source: Author's analysis of public use data file for 2022 National Survey of Children's Health. Family Studies

- Childhood trauma often leads to emotional dysregulation and the precursor for many emotional conditions (Herringa, 2017).
- Among **children in poverty**, more than **1 in 5 (22%)** have a mental, behavioral, or developmental disorder.

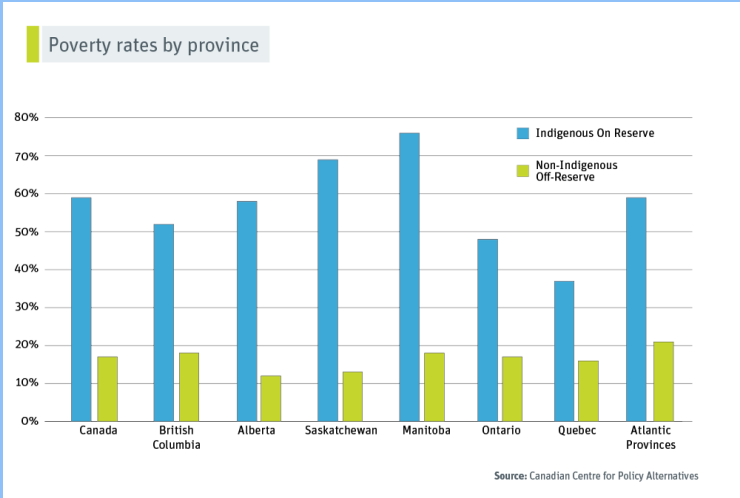

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CANADIAN POVERTY RATES → Stress


Poverty rates by province




Province	Indigenous On Reserve (%)	Non-Indigenous Off-Reserve (%)
Canada	~58%	~18%
British Columbia	~52%	~18%
Alberta	~58%	~12%
Saskatchewan	~68%	~13%
Manitoba	~75%	~18%
Ontario	~48%	~17%
Quebec	~38%	~16%
Atlantic Provinces	~58%	~20%

Source: Canadian Centre for Policy Alternatives

* **53%** of **First Nation** youth live in poverty and represent the highest risk for stress and anxiety.


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FAST FACTS ABOUT ANXIETY DISORDERS

- Pediatric anxiety disorders are the most prevalent mental health disorder in youth, with prevalence rates estimated at 11% of children ages 3-17 (Gotlib & Lee, 2026).
- Since 2016, adolescent anxiety has risen more than 60%, with 16% prevalence rate for youth ages 12-17 (Gotlib & Lee, 2026).
- **Social anxiety** is the most common pediatric anxiety disorder, followed by *generalized anxiety disorder*. It involves fear of embarrassment in a **social** or **performance** situation, and includes **worrying** and **catastrophic thinking** (Leigh & Clark, 2018).
- **Social anxiety** impacts girls more than boys, and correlated with inhibited childhood temperaments (Essex et al., 2010).

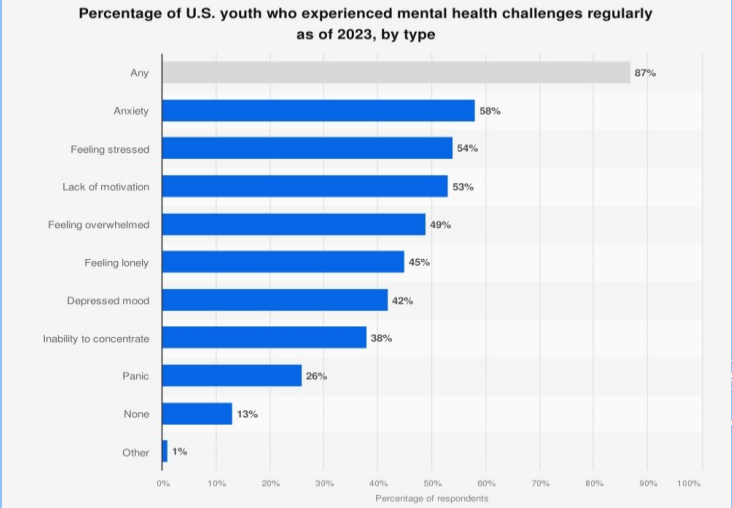

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FAST FACTS ABOUT ANXIETY DISORDERS

Percentage of U.S. youth who experienced mental health challenges regularly as of 2023, by type




Mental Health Challenge	Percentage of Respondents
Any	87%
Anxiety	58%
Feeling stressed	54%
Lack of motivation	53%
Feeling overwhelmed	49%
Feeling lonely	45%
Depressed mood	42%
Inability to concentrate	38%
Panic	26%
None	13%
Other	1%

Sources: BCBS (Blue Shield of California); Harris Poll © Statista 2024
Additional Information: United States; BCBS (Blue Shield of California); Harris Poll, May 31 to June 13, 2023; 1,369 respondents; 14 to 25 years; Online survey



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FAST FACTS ABOUT ANXIETY DISORDERS

1. **Social Media** – the social media ecosystem, inclusive of the “selfie” emerged in 2012. This time frame coincides with:
 - a) 134% increase in anxiety on college campuses.
 - b) Rate of adolescent self-harm among girls has tripled (Haidt, 2024).
2. **Sociogenic Spread**- the spread of a condition by social forces. Social media platforms such as TikTok and Instagram can result in users conforming to their **influencers**.
3. **Political Chaos** – We live in a time of unprecedented political tension and polarization that impacts adults with a downstream effect on children as well.
4. **Pandemic Aftermath**– social distancing had led to isolation among peers and feelings of loneliness and withdrawal.


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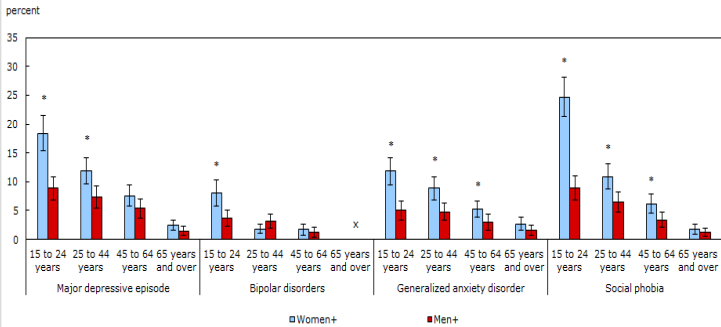
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Fast Facts about Canadian Mental Health

12-month prevalence of selected mood and anxiety disorders, by age and gender, 2022


percent




■ Women+ ■ Men+

x suppressed to meet the confidentiality requirements of the Statistics Act
 * significant difference ($p < 0.05$) between men and women in the same age group
 Notes: Error bars represent the 95% confidence interval of the prevalence estimates. The category "women+" includes women (and/or girls), as well as some non-binary persons. The category "men+" includes men (and/or boys), as well as some non-binary persons.
 Source: Statistics Canada, Mental Health and Access to Care Survey, 2022.

➤ Findings from the Mental Health and Access to Care Survey suggest in 2022, there were more than **5 million** people in Canada who were experiencing significant symptoms of mental illness.



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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 **38%** 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.



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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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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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REFLECTION QUESTIONS

1. What do you attribute the increase in mental health disorders among Canadian youth?
2. What are some of the main obstacles hindering treatment among youth in Canada?


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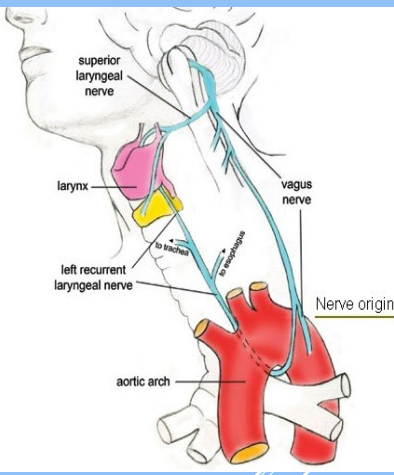



POLYVAGAL THEORY: HOW THE NERVOUS SYSTEM BECOMES SENSITIZED TO FEAR?

Vagus Nerve – 10th 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)

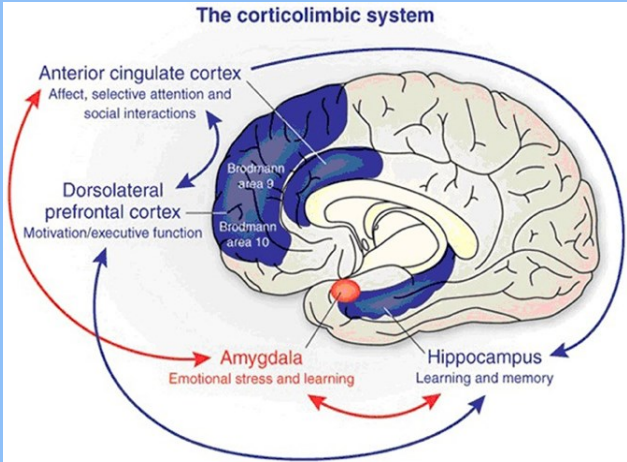
- **Dorsal Vagus** – older pathway that triggers “freeze” response, immobilization, numbness, or dissociation (parasympathetic)
- **Fight-Flight** – dominated by physiological responses of sympathetic nervous system. Takes body 15-20 min to self-calm (sympathetic)
- **Ventral Vagus** – newer pathway that inhibits older pathways and triggers calming influence of parasympathetic nervous system through **social engagement and trust**.

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CORTICOLIMBIC SYSTEM AND TRAUMA



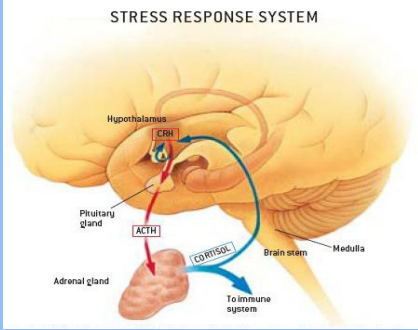
1. Amygdala – responds to **unfamiliar** and **unexpected** events (Kagan, 2007). ... Trauma alters our **threat perceptions**, and interprets benign situations as dangerous.

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STRESS RESPONSE SYSTEM

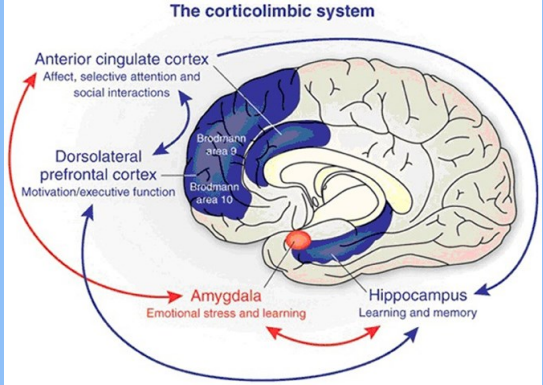
Cortisol – a glucocorticoid that regulates the metabolism of glucose in the brain. A homeostasis of cortisol is needed for optimal brain functioning and efficient mobilization. Too much (*Cushing's Syndrome*)...too little (*Addison's Disease*).



- Stress impacts body by lowering **immune system**, and also by reducing sleep.
- Stress alters amygdala to PFC connections leading to impairments in **executive functioning** (Berens et al., 2017).
- Anxiety impacts cognition and learning by way of **working memory** (Dowker et al., 2015).

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CORTICOLIMBIC SYSTEM AND TRAUMA

The corticolimbic system

Anterior cingulate cortex
Affect, selective attention and social interactions

Dorsolateral prefrontal cortex
Motivation/executive function

Brodmann area 9
Brodmann area 10

Amygdala
Emotional stress and learning

Hippocampus
Learning and memory

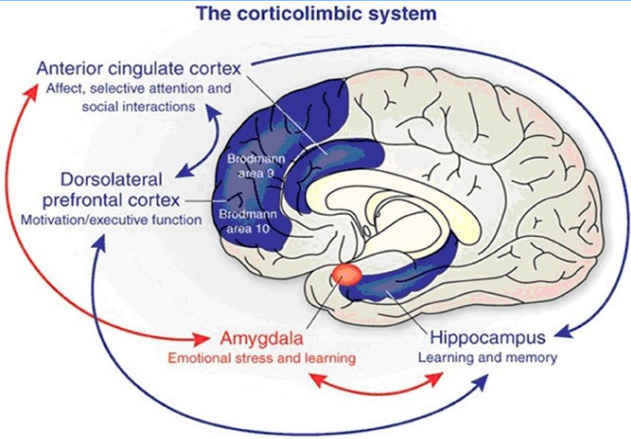
2. **Hippocampus** - A key **memory center** and more sensitive to cognitive than emotional memories. Inhibits the amygdala.

- **Chronic stress** from abuse or neglect releases cortisol which can reduce hippocampal volume (Johnston & Olson, 2015).

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CORTICOLIMBIC SYSTEM AND TRAUMA

The corticolimbic system

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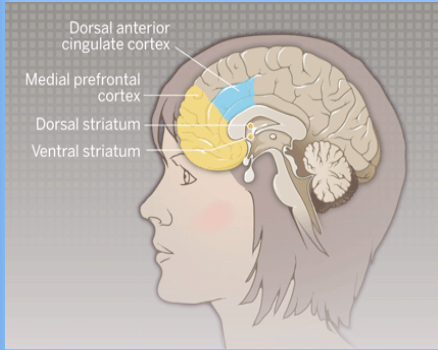
3. **Anterior Cingulate Cortex** - Directs our attention **inward** toward becoming overly aware of nervous system fluctuations and visceral responses (*i.e. heart rate increases, breathing rate, perspiration, etc.*). ***Trauma is felt in the body!**

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FRONTAL LOBE AND TRAUMA: DORSAL ANTERIOR CINGULATE



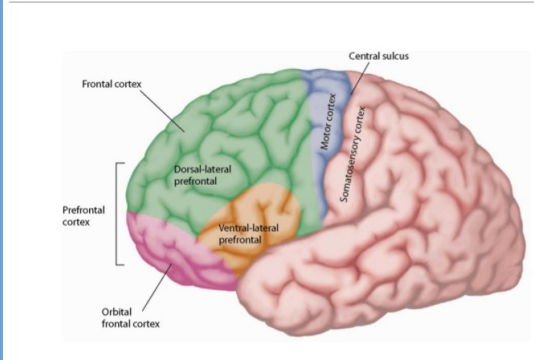
- Dorsal anterior cingulate helps regulate emotional functioning and supervises fear-based system.
- Helps interpret and regulate our emotional experiences with **language**.
- **Alexithymia** - emotional intensity of an experience impacts the ability to identify, label, and verbally communicate one's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

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ORBITAL FRONTAL CORTEX AND TRAUMA: SELF REGULATION SKILLS




* **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.


4. Orbital-frontal Cortex - accurately identifies and interprets emotions in ourselves the emotional states of others. **Emotional EF**

- **Social Dyslexia** - misread social cues and highly reactive to misperceived slights and inability to comprehend how behavior may disrupt the learning environment. **Emotionally egocentric**.

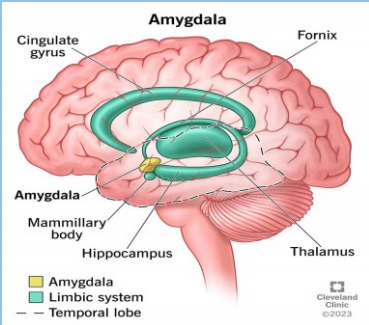
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BOTTOM UP: VISCERAL STRESS



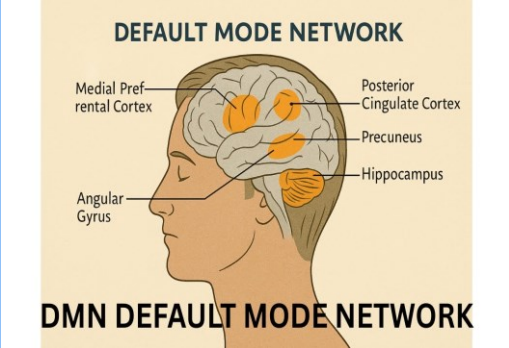
1. **Amygdala** – threat perception that triggers the **sympathetic nervous system** via the hypothalamus.
2. **Hippocampus** – memory formation can generalize anxiety based on past experiences.
3. **Fornix** – white matter circuit for **memory consolidation**. Damage leads to anterograde amnesia.
4. **Cingulate Gyrus** – regulates flow of attention.


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TOP DOWN ANXIETY: THE DEFAULT MODE NETWORK



- In typical **cognition**, the DMN is **suppressed** when engaged in a goal-directed task such as academics. Anxious students do the opposite and activate DMN when problem solving.
- The DMN should be active in a **resting state** only with no external stimulus, and the mind is self-reflecting or wandering.



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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 concentration in the classroom.
 - 3) Trauma leads to **working memory** and **executive functioning** deficits directly impacting:
 - a) Reading comprehension
 - b) Written language production
 - c) Timed math problems
- ❖ Trauma impacts **frontal lobe functioning!**



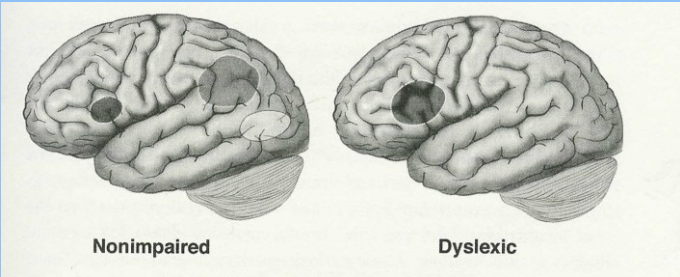
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Trauma and Reading Comprehension




Nonimpaired Dyslexic

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



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Reading Comprehension Interventions

1. **Stop & Start Technique** - student reads a passage out loud and every 30 seconds “stop” to ask questions.
2. **Directional Questions** - ask questions at the beginning of the text instead of the end.
3. **Read Aloud** - reading out loud allows student to hear their own voices and facilitates working memory.
4. **Story Maps** - pre-reading activity where graphic organizers are used to outline and organize the information.
5. **Active Engagement** - encourage active, not passive reading, by having children take notes or putting an asterisk next to important information.


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Executive Dysfunction & Written Language

<u>Classification</u>	<u>Writing Dysfunction</u>
(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 Dysfunction & Written Language

<u>Classification</u>	<u>Writing Dysfunction</u>
(5) Poor Organization	* Frequent erasers * Forget main idea * Disjointed content
(6) Poor Planning	* Poor flow of ideas * Lack of cohesive ties
(7) Poor Word Retrieval	* Limited word choice * Simplistic sentences
(8) Poor Self Monitor	* Careless miscues * Sloppy work

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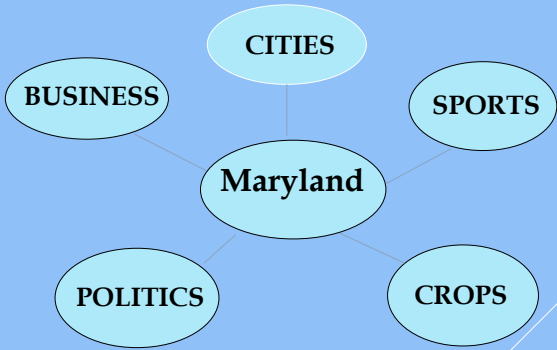
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Graphic Organizers


Graphic Organizers - this involves a pre-writing activity whereby the student simply lists a word or phrase pertaining to the topic. An example may include a brainstorming a web:



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Self Monitoring Strategies

COPS strategy - a directional proof-reading strategy where the student re-reads a passage four times prior to completion.




- 1) Capitalize the first word of each sentence.
- 2) Organize the information by reviewing topic sentences and double check paragraph breaks.
- 3) Punctuation miscues must be reviewed.
- 4) Spelling miscues must be reviewed.


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Executive Functioning and Mathematics

<u>EXECUTIVE DYSFUNCTION</u>	<u>BRAIN REGION</u>	<u>MATH SKILL</u>
<ul style="list-style-type: none"> • <i>Selective Attention</i> 	<ul style="list-style-type: none"> • <i>Anterior Cingulate/ Subcortical structures</i> 	<ul style="list-style-type: none"> • Poor attention to math operational signs • Place value mis-aligned
 <ul style="list-style-type: none"> • <i>Planning Skills</i> 	<ul style="list-style-type: none"> • <i>Dorsal-lateral PFC</i> 	<ul style="list-style-type: none"> • Selection of math process impaired • Difficulty determining salient information in word problems


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Executive Functioning and Mathematics

<u>EXECUTIVE DYSFUNCTION</u>	<u>BRAIN REGION</u>	<u>MATH SKILL</u>
<ul style="list-style-type: none"> • <i>Organization Skills</i> 	<ul style="list-style-type: none"> • <i>Dorsal-lateral PFC</i> 	<ul style="list-style-type: none"> • Inconsistent lining up math equations • Frequent erasers • Difficulty setting up problems
<ul style="list-style-type: none"> • <i>Self-Monitoring</i> 	<ul style="list-style-type: none"> • <i>Dorsal-lateral PFC</i> 	<ul style="list-style-type: none"> • Limited double-checking of work • Unaware of plausibility to a response.
 <ul style="list-style-type: none"> • <i>Cues Pattern Recognition</i> 	<ul style="list-style-type: none"> • <i>Dorsal-lateral PFC</i> 	<ul style="list-style-type: none"> • Symbolic reasoning • Timed subtests compromised

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PRESENTATION OUTLINE

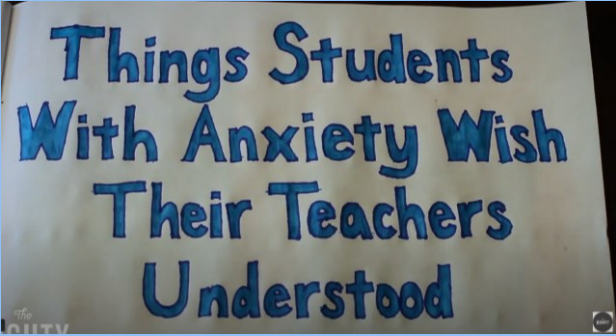
- Defining Trauma
- Trauma and Mental Health
- Trauma and the Brain
- Trauma and Academic Functioning
- ➔ **▪ Strategies to Address School Anxiety**
- 5 Pillars of a Trauma Informed School
- Building resilience through EQ
- Trauma Informed Assessments


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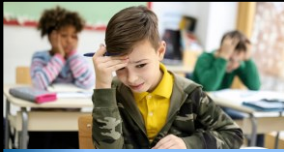
ANXIETY FROM A STUDENTS' PERSPECTIVE



https://www.youtube.com/watch?v=jf404_H0r8Q


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What Makes Students Anxious in School?

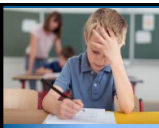
- Grades
- Timed tests
- Unexpected tests and quizzes
- Being called upon in class without raising hand
- Reading out loud in front of the class
- Physical appearance
- Changing in gym class
- Bullying behaviors by others
- Social pressures to be accepted by peers
- Intimidating teachers

❖ Anxiety impacts student participation, learning, and academic performance!

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SCHOOL ACCOMMODATIONS

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

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SCHOOL ACCOMMODATIONS

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

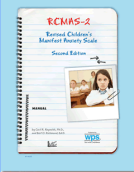


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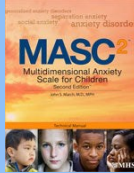
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Anxiety Measures




Revised Children's Manifest Anxiety Scale-2nd Edition – examines 5 areas of anxiety including physiological, defensiveness, worry, inconsistent responding, and social anxiety.



Multidimensional Anxiety Scale for Children - 2nd Edition – includes both a self-report and parent report scale. There are 50 items in total.




Behavior Assessment Scale for Children-3rd Edition – includes teacher, parent, and self-report scales to measure behavior and social emotional functioning.




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REFLECTION QUESTIONS


1. What additional accommodations would you recommend to put less **stress** on students in school (*i.e. school schedule, changes to the curriculum, extra-curricular activities, etc.*) ?



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PRESENTATION OUTLINE

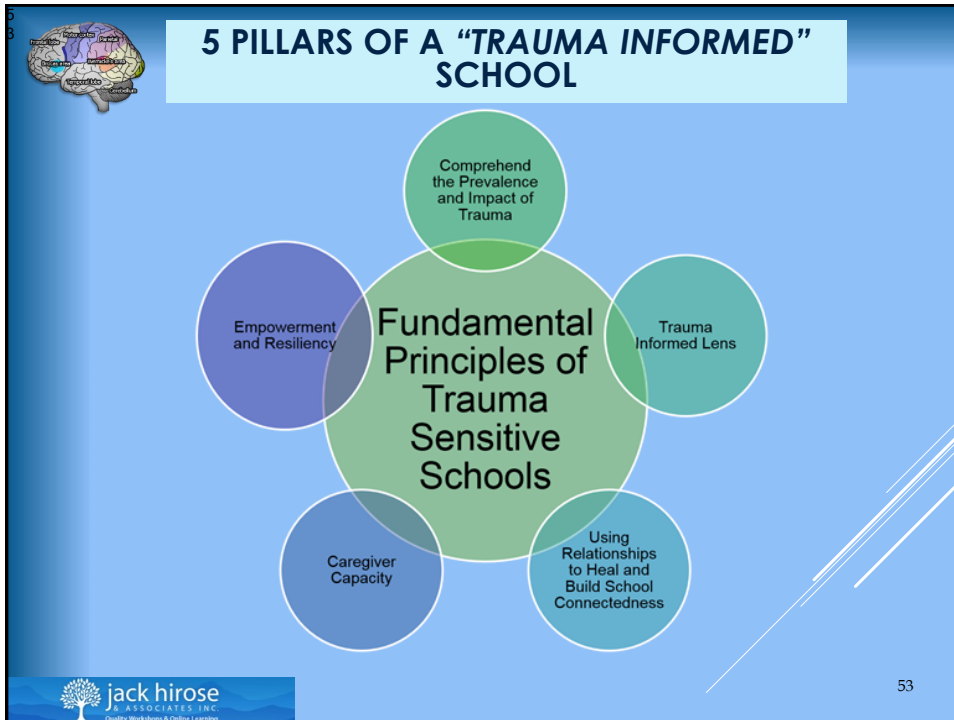
DEVELOPING TRAUMA-INFORMED SCHOOLS

- 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**
- Building resilience through EQ
- Trauma Informed Assessments

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

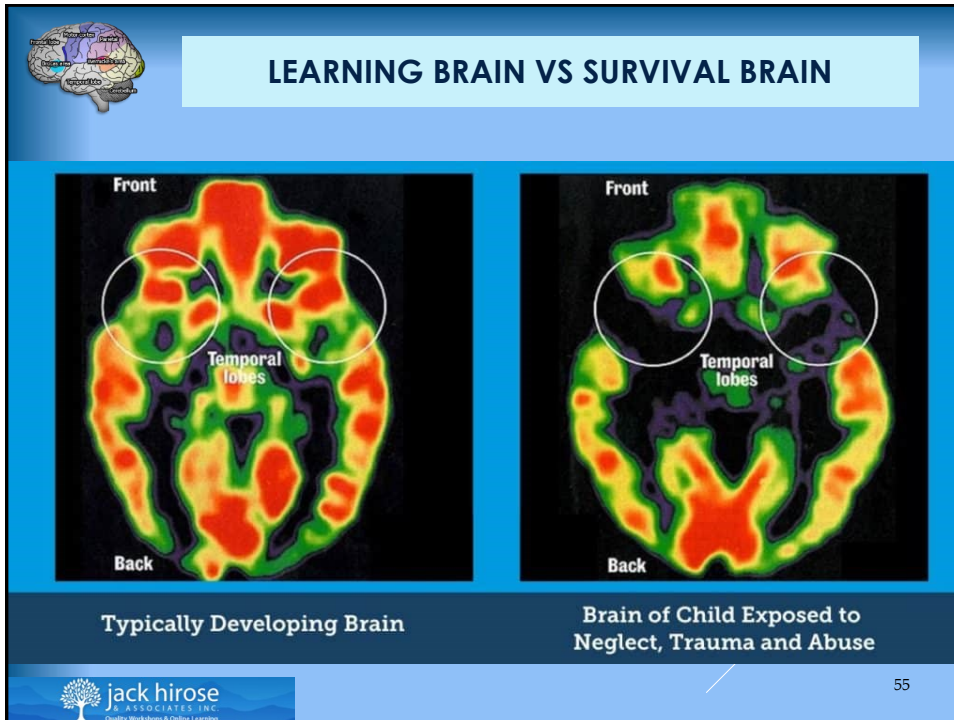


1. Traumatic experiences are inherently complex: *(There is no signature emotional reaction that all children exhibit.)*
2. Danger and safety are core concerns in the lives of traumatized children.
3. Trauma underlies many emotional disorders seen in children including **anxiety**, which impacts many aspects of academic and social-emotional functioning.
4. Children exposed to trauma 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™ | teacher form

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)
- Dozens of **504** recommendations





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Feifer assessment of childhood
TRAUMA™ | teacher form

QUICK FACTS ABOUT THE FACT


- **FACT #1:** 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 social-emotional context to interpret a student’s cognitive profile.





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3. CAREGIVER CAPACITY AND RESILIENCY


(TRAUB AND BOYNTON-JARRETT, 2017)

1. Positive appraisal style impacts executive functioning skills and facilitates cognitive restructuring.
2. Following trauma exposure, caregivers play a critical role influencing a child's overall social-emotional response and adaptation (McLeod et al., 2007).
 - a) Neglectful
 - b) Democratic
 - c) Authoritative
 - d) Authoritarian
3. Maternal mental health most influences coping
(*16 million children live with a depressed parent)
4. Family routines foster resilience.


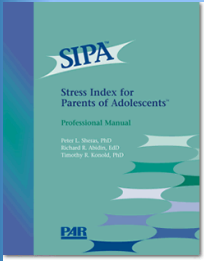

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3. MEASURING CAREGIVER CAPACITY AND RESILIENCY

- **Parenting Stress Index: 4th Edition**
 - * Ages 1-12
 - * 120 item inventory focusing on child characteristics, parent characteristics, and situational life stressors.
 - * 20 minutes
 - * On-line administration and scoring
- **Stress Index for Parents of Adolescents**
 - * 11-19 years old
 - * 112 items identifying parent-adolescent interactions.
 - * On-line administration and scoring

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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 problem-solving instead of punishment
- Allow for **test re-takes** to demonstrate subject mastery.
- 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. DEVELOPING RESILIENCE IN CHILDREN

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=JJVGATBGJXM](https://www.youtube.com/watch?v=JJVGATBGJXM)



5 PILLARS OF RESILIENCE




Copyright The Wellbeing Project

1. Foster hope
2. Establish a relationship
3. Environmental Warmth
4. Movement activities
5. Sleep + Diet + Exercise = Energy


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5. TEACHING RESILIENCE: MINDFULNESS




Mindfulness – 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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5. TEACHING RESILIENCE: YOGA



Yoga – assumes the footprint of trauma is in the body and tissues.

- We cannot talk it out, and fear our own bodily sensations (Van Der Kolk, 2012).
- Pain, headaches, muscle tension, tics, panic attacks
- Yoga can reduce anxiety and heart rate variability following a stressor (Albracht-Schulte & Robert-McComb, 2018).

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5. TAKE TARGETED APP BREAKS



Stop, Breathe & Think
Meditation turned to your needs
Stop, Breathe & Think
★★★★☆ 4.5 (10k Ratings)
Free - Offers In-App Purchases



Take a Chill



THE ZONES OF REGULATION
Created by Leah Kuypers, MA, Ed., OTB/L




Breathe



Calm



Square Breathing :
<https://www.youtube.com/watch?v=YFdZXwE6fRE>



Breathing Bubbles



HEADSPACE
Headspace

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5. CANINE ASSISTED THERAPY





THE DOGS OF NEWTOWN
Guy A. Bacon

- 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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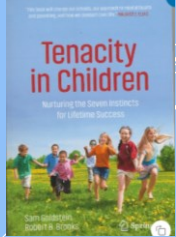


BUILDING RESILIENT CHILDREN


SAM GOLDSTEIN & ROBERT BROOKS

KEYS TO SUCCESS


1. Focus and build upon a child's **island of competence**.
2. Surround the child with caring adults to build **internal motivation**, not over-rely on behavior plans and external rewards.
3. Model **empathy** & compassion
4. Create a **purpose** for success
5. Create **hope** and an **optimistic** not pessimistic view of the future.
6. Foster resilience by **teaching** emotional problem-solving and not restraining!!




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5. BUILDING RESILIENCE THROUGH SEAL




Question: Is this the future of school psychology?
Answer: It's called **Emotional Intelligence**

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PRESENTATION OUTLINE


- Defining Trauma
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- Trauma Informed Assessments

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WHAT IS EMOTIONAL INTELLIGENCE (EQ)?




- Recognizing emotional states in ourselves.
- Recognizing emotional states in others.
- Accurately identifying and labeling emotions in both ourselves and others.
- Knowledge of using art, stories, music, and play to express emotive sentiments.
- Using emotions to communicate our wants and needs.
- Using emotions to guide and facilitate thinking.

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WHAT IS EMOTIONAL INTELLIGENCE (EQ)?




- Express relational emotive feelings (empathy).
- Self management of emotions.
- Use of emotions to progress through relationships.
- An openness to feelings of emotions to promote personal growth and understanding.

❖ **Side note:** Psychologists disagree on whether EQ is an ability or trait.

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IS EQ A PERSONALITY TRAIT?

Personality Trait	Behavior	Brain Region
Low Neuroticism	Emotional stability and less reactive to stress and anxiety (self-management).	Sensitivity of Amygdala
High Conscientiousness	Good persistence and self-determination toward goals (self determination).	Dorsolateral Prefrontal Cortex
High Extraversion	Open to social engagement and positive emotions (social awareness)	Default Mode Network Ventral striatum and positive reward circuits
High Openness	Cognitive and Emotional flexibility allows us to adapt to change (self openness)	Dorsolateral/Orbitofrontal Prefrontal Cortex
Agreeableness	Cooperative and empathetic	Orbitofrontal cortex Superior Temporal Sulcus (social cognition)

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#1 BESTSELLER
DANIEL GOLEMAN

The groundbreaking book that redefines what it means to be smart

Emotional Intelligence
Why It Can Matter More Than IQ


WITH A NEW INTRODUCTION BY THE AUTHOR

4 DOMAINS OF EQ: DANIEL GOLEMAN



Daniel Goleman
Co-Author, "Optimal"

[Daniel Goleman: The 4 domains of emotional intelligence](#)
[Daniel Goleman for Big Think+ - YouTube](#)


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4 PILLARS OF EMOTIONAL INTELLIGENCE



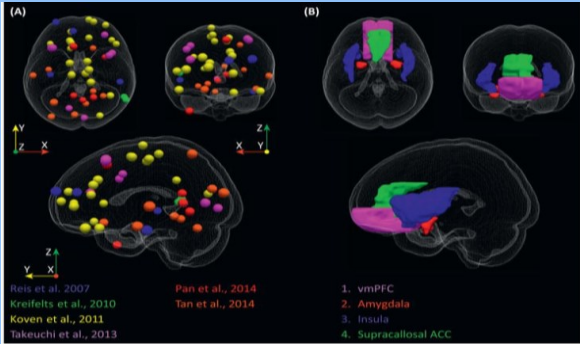
1. **Self-management** - Control impulsive feelings and manage your emotions in healthy ways by adapting to changing circumstances
2. **Self-awareness** - Awareness of how emotions impact your own thoughts and feelings.
3. **Social awareness** - empathy for others and the ability to pick up on emotional cues.
4. **Relationship management**- ability to maintain good relationships, communicate clearly, manage conflict, and work well as a team.


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4 BRAIN REGIONS INVOLVED WITH EQ




Reis et al., 2007
Kreifelts et al., 2010
Koven et al., 2011
Takeuchi et al., 2013
Pan et al., 2014
Tan et al., 2014

1. vmPFC
2. Amygdala
3. Insula
4. Supracallosal ACC


ACC – self awareness of emotions
Amygdala – self management of emotional impulsivity
Insula – self awareness of bodily cues and subjective feeling of emotion
vmPFC- uses emotions and past experiences to guide thinking

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* Hogeveen et al., Trends Neurosci. 2016 Sep 17;39(10):694–705.
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CLASSROOM STRATEGIES TO ENHANCE EQ



- Teach “*emotional*” vocabulary words.
- **Model** emotional thinking strategies (*i.e. I’m feeling frustrated so going to pause before responding*”).
- **Role play** perspective taking.
- Have classroom debates and then “*switch sides.*”
- Practice *breathing* exercises prior to test taking.
- Have teachers cognizant of the number of **positive** comments made vs negative ones.
- Peer mediation groups.
- Use student discontent and behavior “*blow ups*” as a teachable moment to model grace.


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REFLECTION QUESTIONS

1. Do you feel that EQ should be measured in most psychological reports similar to IQ?
2. What are additional strategies that parents and educators can do to improve EQ?





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PRESENTATION OUTLINE

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- Building resilience through EQ
- ➔ ▪ **Trauma Informed Assessments**


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TRAUMA MEASURES

"Thinking about Thinking"
Higher Reasoning
Executive Function


Prefrontal Cortex
9 Functions of the Prefrontal Cortex

1. Empathy
2. Insight
3. Response Flexibility
4. Emotion Regulation
5. Body Regulation
6. Morality
7. Intuition
8. Attuned Communication
9. Fear Modulation

Limbic Brain


1. Fight, flight, freeze stress response
2. Thinks, "Am I safe? Do people want me?"
3. Emotions live here

- Executive Functioning
- Memory
- Attention
- Social-Emotional Regulation

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BEHAVIOR RATING INVENTORY OF EXECUTIVE FUNCTIONING (BRIEF2)


- **Behavior Regulation Index (BRI)**
 - Evaluates a child's ability to modulate behavior via appropriate inhibitory control. It is comprised of the **Inhibit** and **Self Monitor** scales.
- **Emotional Regulation Index (ERI)**
 - Evaluates a child's ability to regulate emotional responses and adjust to changes in the environment. It is comprised of the **Shift** and **Emotional Control** scales.
- **Cognitive Regulation Index (CRI)**
 - Evaluates a child's ability to manage cognitive processes and problem solve effectively. Includes **Initiate, Working Memory, Planning, Task-Monitor, and Organization** scales.




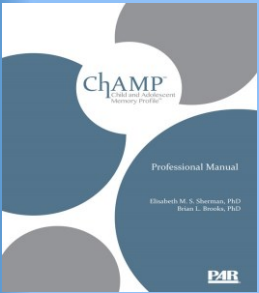
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MEMORY TESTS

WIDE RANGE ASSESSMENT OF MEMORY AND LEARNING : 3rd Edition (WRAML-3)


- Visual and Verbal Memory Tasks
- Memorize information in context and isolation.
- Attention-Concentration Index
- Immediate Memory
- Delayed Memory
- Recognition Memory
- Ages 5-90

CHILD AND ADOLESCENT MEMORY PROFILE (CHAMP)

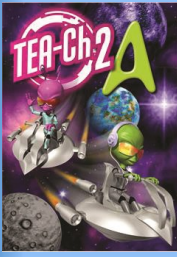

- 35 minutes
- Visual and Verbal Memory Tasks
- Immediate and Delayed Memory
- Memorize information in context and isolation.
- Ages 5-21
- Screening Index

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TEA-CH2 & AULA NESPLORA





- 5-7 years old. Normed on 394 children in UK.
- 8-16 years old. Normed on 621 children in UK.
- Measures the cognitive components of attention:
 - Selective attention**
 - Sustained attention**
 - Switching attention**
- **Aula Nesplora** is a virtual reality test (20 min) measuring sustained/selective attention and visual/auditory attention in a virtual class setting.

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SOCIAL-EMOTIONAL AND BEHAVIORAL ASSESSMENTS


TEST	AGE RANGE	AUTHORS
BASC-3 Teacher Rating Scale BASC-3 Parent Rating Scale BASC-3 Self-Report Scale BASC-3 Behavioral and Emotional Screen System	2-21 2-21 6-college 3-18	Randy Kamphouse & Cecil Reynolds
Conners Comprehensive Behavior Rating Scales	6-18	Keith Conners
Achenbach System of Empirically Based Assessment (ASEBA)	6-18	Thomas Achenbach & Leslie Rescorla
Devereux Behavior Rating Scale	5-18	Jack Naglieri, Paul LeBuffe, Steven Pfeiffer
Beck Youth Inventory II- (anxiety, depression, anger, disruptive behavior, self concept)	7-18	Judith & Aaron Beck
Children's Depression Inventory	7-17	Maria Kovacs
Revised Children's Manifest Anxiety Scale – 2 Multidimensional Anxiety Scale for Children-2	6-19 8-19	Cecil Reynolds & Bert Richmond John S. March
RCDS-2/RADS-2	7-13/11-20	William Reynolds
Personality Inventory for Children-2 nd Edition (caregiver observations)	5-19	David Lachar & Christian Gruber
*Millon Adolescent Clinical Inventory	13-19	Theodore Millon
*MMPI-A	14-18	Butcher et al.
*Personality Assessment Inventory	11-18	Lesley Morey

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PERSONALITY ASSESSMENT INVENTORY (PAI-A)

- PAI-A & PAI use the same scales and subscales
- Adolescent item set is a derivative of the adult, with fewer items
- Anxiety subtypes (i.e. cognitive, affective, physiological) **anxiety related-disorders (i.e. PTSD)**, depression, thought disorders, social detachment, borderline personality, antisocial behaviors, aggression, and substance abuse,
- 264 items on PAI-A
- 12-18 years
- Treatment recommendations included with computerized scoring system.

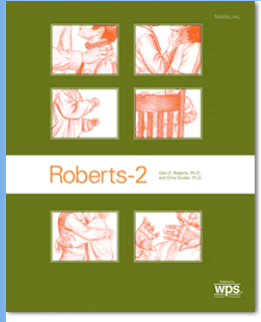


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ROBERTS APPERCEPTION TEST-2ND EDITION




- Projective measure assessing maladaptive or atypical social perception.
- Record student responses for scoring.
- 11 picture cards depicting common experiences.
- Scoring involves problem identification, resolution, emotion, outcome, atypical responses.
- Roberts 2 computer scoring program and clinical casebook.


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TRAUMA AND INTELLECTUAL DEVELOPMENT



- An 8 year longitudinal study by Enlow and colleagues (2012) found children with trauma scored one-half of a standard deviation (*i.e. 6-8 points*) lower on IQ tests even after controlling for maternal IQ, birth-weight, and the home environment.
- Earlier studies (Delaney-Black et al., 2002) also found trauma related distress and violence exposure lead to a **7.5 point** decrement in IQ, and approximately a 10 point drop in reading scores on standardized achievement tests.



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CONCLUDING THOUGHTS


- 1) All children **respond differently** to stress and trauma in their lives. Therefore, it is important for schools to have multi-tiered systems of emotional support for all children.
- 2) Schools should be at the forefront for teaching **social-emotional academic learning** and **adaptive responses** to stress and trauma (EQ).
- 3) Being a **“trauma-informed”** school recognizes the need for parent communication as well as community support.
- 4) Be a **change agent** for kids!
 - a. Be a role model
 - b. Cultivate resilience
 - c. Build a relationship 😊




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LET'S STAY CONNECTED




Steven G. Feifer, D.Ed., ABPdN
Licensed Psychologist

Workshops: feifer@comcast.net

Books: www.schoolneuropsychpress.com

Trauma Links: *<https://www.nasponline.org/>
 *<https://www.parentcenterhub.org/national-child-traumatic-stress-network/>
 *<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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