A photograph of a classroom with several students sitting at desks. In the foreground, a young boy in a blue jacket and jeans is smiling and raising his right hand. To his left, a woman in a yellow sweater is also raising her hand. In the background, another student is raising their hand. The classroom has white desks, red chairs, and a bulletin board with various papers on the wall.

ANXIETY, THE BRAIN, AND THE CLASSROOM: THE ABCS OF A TRAUMA- INFORMED APPROACH

INTERACTIVE RESOURCE GUIDE



SAFER
SCHOOLS
TOGETHER



International Center for
Digital Threat Assessment

AUTHOR:

OCEAN VAN SAMANG

CONTRIBUTING AUTHOR:

SHERRI MOHORUK



Copyright © 2024 Safer Schools Together. The reproduction of this material is strictly prohibited without the written permission of the copyright owners. All rights reserved.

Disclaimer: Please be advised that this document may contain contextual triggers for trauma. Given the rapidly evolving nature of technology and social media applications, this information (especially social media platform-related) is current as of the date of publication.

This is an interactive document. Click the underlined links to read more or navigate to the correlating section of the document.

TABLE OF CONTENTS

INTRODUCTION	1
THE ROLE OF MENTAL HEALTH	2
WHAT IS MENTAL HEALTH?	3
TRAUMA-INFORMED CLASSROOMS.....	4
THE MIGHTY AMYGDALA.....	7
FIGHT, FLIGHT, FREEZE, AND HYPERVIGILANCE SIGNS.....	9
EXECUTIVE FUNCTIONING	10
ADHD/TRAUMA	14
SUPPLEMENTAL RESOURCES & EVIDENCE-BASED ARTICLES	15

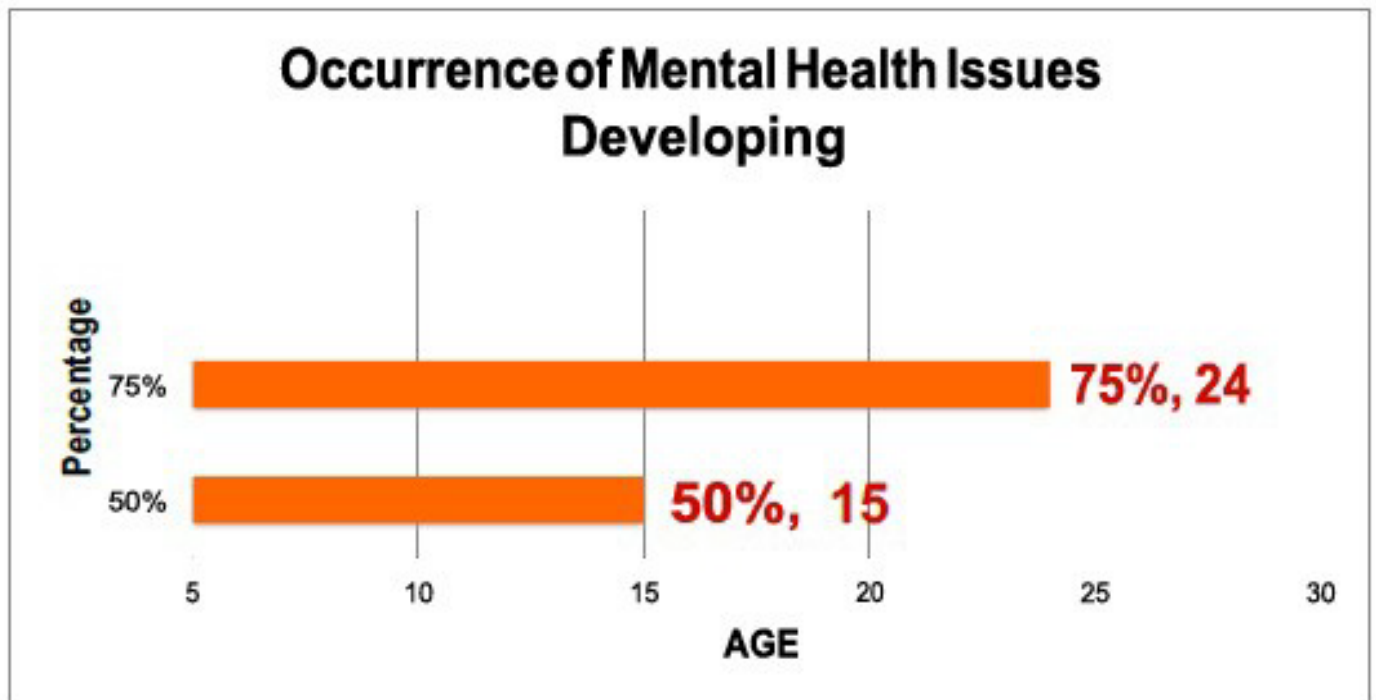
INTRODUCTION

What does it mean to have a trauma-informed classroom? Or to manage mental health concerns in school? It seems as though the roles of teachers have expanded significantly in the last few years. Is this adding another dimension to the workload? Yes. And no.

Managing mental health and trauma in the classroom allows teachers to help kids LEARN. As will be discussed throughout this training, the brain cannot take in and later recall information when it is in a state of hyperarousal. Children and youth experiencing certain mental health concerns or having histories of trauma may consistently be in this state. However, with some simple strategies, teachers, education assistants, counselors, and other school personnel can support students in creating environments where they can learn.

The mental health component of the new curriculum is not about a lesson plan. Mental wellness is achieved through regular conversations about mental health, emotional identification, self-care techniques, social skills, kindness, recognizing difficulties, and asking for help. Reducing stigma happens over time in classrooms that promotes mental health literacy and inclusion.

THE ROLE OF MENTAL HEALTH



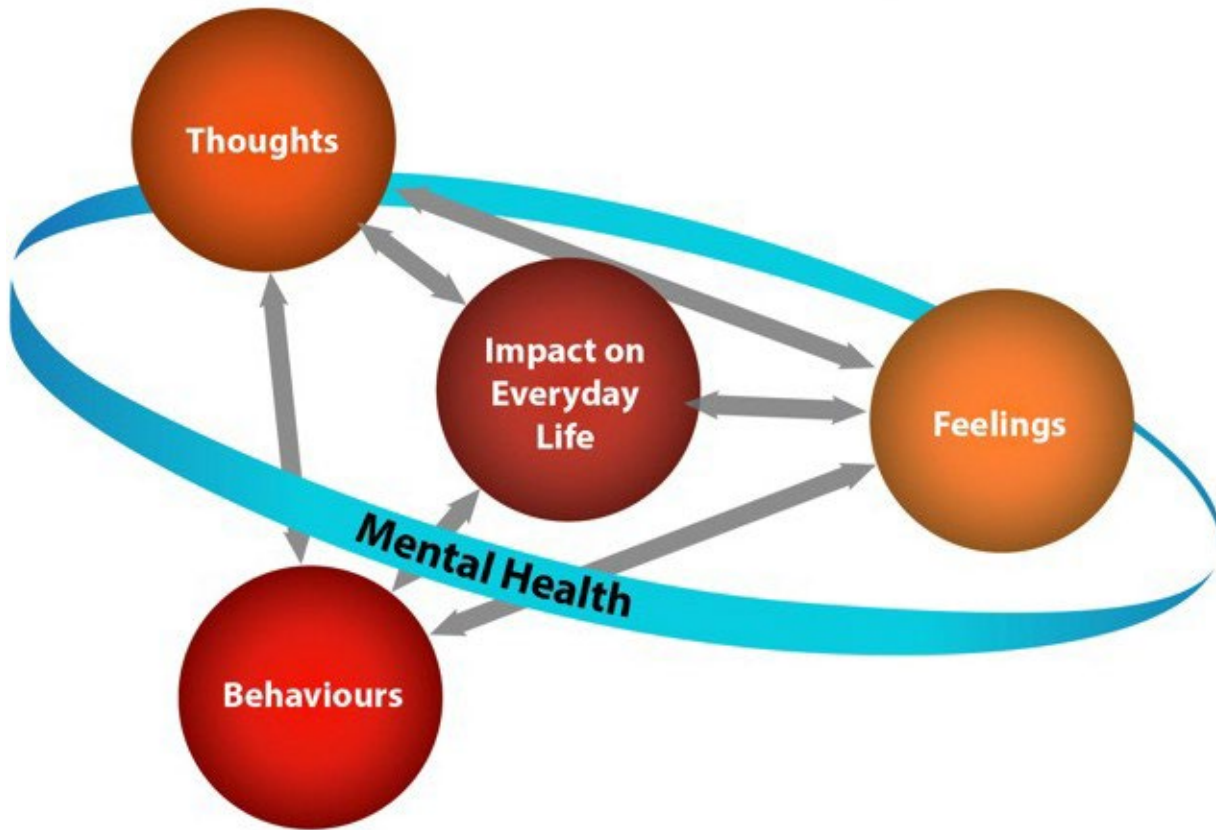
[1 in 5 students will struggle with mental health issues such as depression, anxiety, or ADHD.](#)

Early intervention creates the best possible outcome.

The capacity of us all to feel, think, and act in ways that enhance our ability to enjoy life and deal with the challenges we face requires “**a positive sense of emotional and spiritual well-being** that respects the importance of culture, equity, social justice, interconnectedness, and personal dignity.”

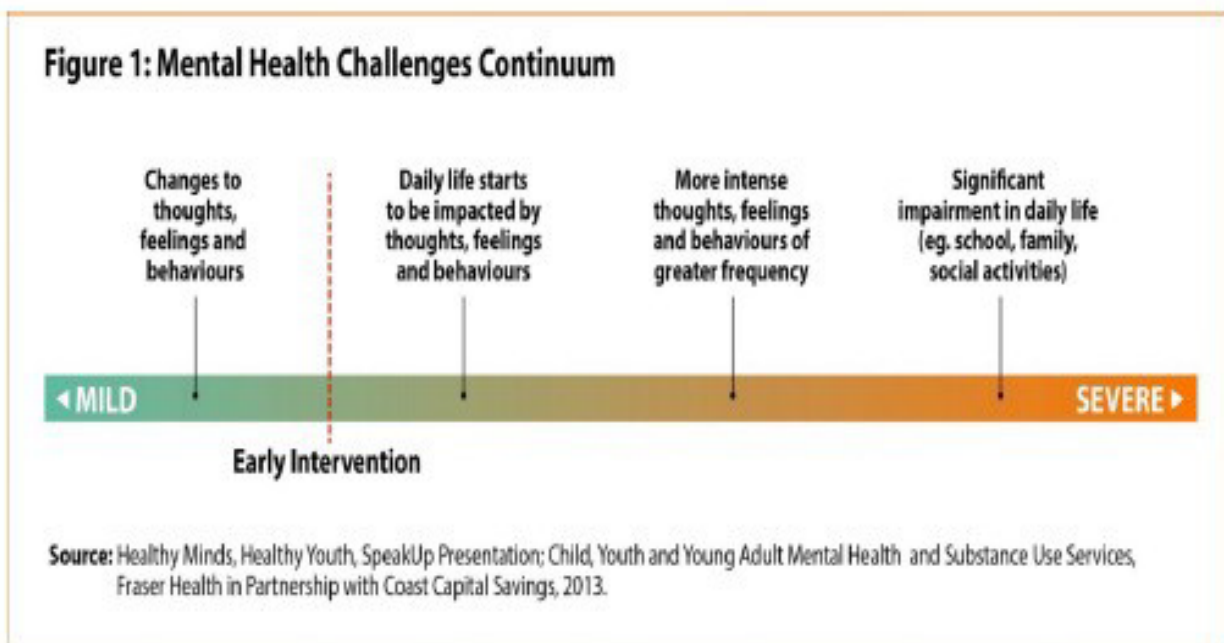
[Public Health Agency of Canada](#)

WHAT IS MENTAL HEALTH?



The Continuum

A person's place on the continuum is determined by their thoughts, feelings, and behaviors.



TRAUMA-INFORMED CLASSROOMS

Trauma

Trauma can be defined in many ways. The Oxford English Dictionary defines trauma as “a mental condition caused by severe shock, stress or fear.”¹ In psychiatry, it is usually reserved for an experience that involves actual or threatened death or serious injury. In emergency response and threat assessment, a traumatic event must include elements of overwhelming the systems’ capacity to deal with the event. Children in schools may have experienced any number of events that resulted in traumatic responses including abuse, exposure to violence or war, or ongoing stressors that have the same impacts such as chaotic home lives with exposure to substance use/abuse, neglect, mental health concerns, or tragedy. Adverse Childhood Experiences (ACES) may present similarly to trauma.

For trauma-informed classrooms, it doesn’t matter what the child’s specific experience has been. There are likely several kids in any given classroom that have had ACES. A classroom may also have children with anxiety, self-harming behaviors, sensory processing disorders or sensitivities, learning difficulties, slight developmental delays, or are on the autism spectrum. These children will benefit from classrooms that allow them to move out of an emotionally triggered, aroused, or amygdala-driven state. Every student will benefit from this environment as it promotes self-regulation, emotional identification, and a positive learning climate.

Trauma Facts for Educators

- [1 out of every 4](#) children attending school has been exposed to a traumatic event or ACES that can affect learning and/or behavior.
- Trauma can impact school performance – lower grades, higher absences, increased problems with behavior.
- Trauma can impair learning – affecting attention, memory, cognition, reading ability, and problem-solving.

Trauma Impacted Youth

Can have difficulty with their emotions/behavior:

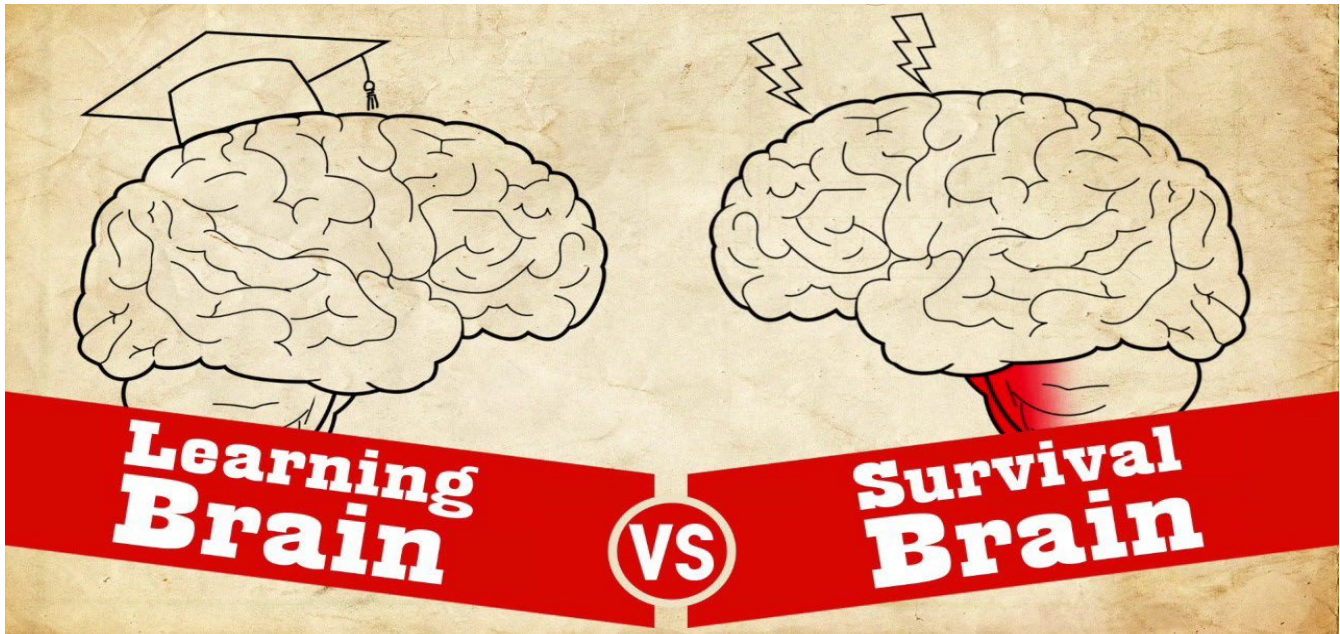
- Managing “big” emotions.
- Chronic irritability/anxiety that interferes with problem-solving.
- Expressing concerns/needs in words.
- Appreciating how one’s behavior impacts other people.
- Can have difficulty with others emotions/behavior
- Taking into account the wider context of a situation.
- Working in groups/connecting with others.
- Empathy.
- Reading emotions or body language.

¹ [What is Trauma?](#)

Trauma-Informed Classrooms

- Emphasize executive skill development, brain-based learning, emotional intelligence, emotional maturity, and non-adversarial discipline.
- Help children grow in their academic learning and self-regulation.
- Allow children to cope with the demands of the school day so they are able to learn.
- Do not replace therapy.

Learning Brain Vs. Survival Brain



[Learning Brain vs Survival Brain Video](#)

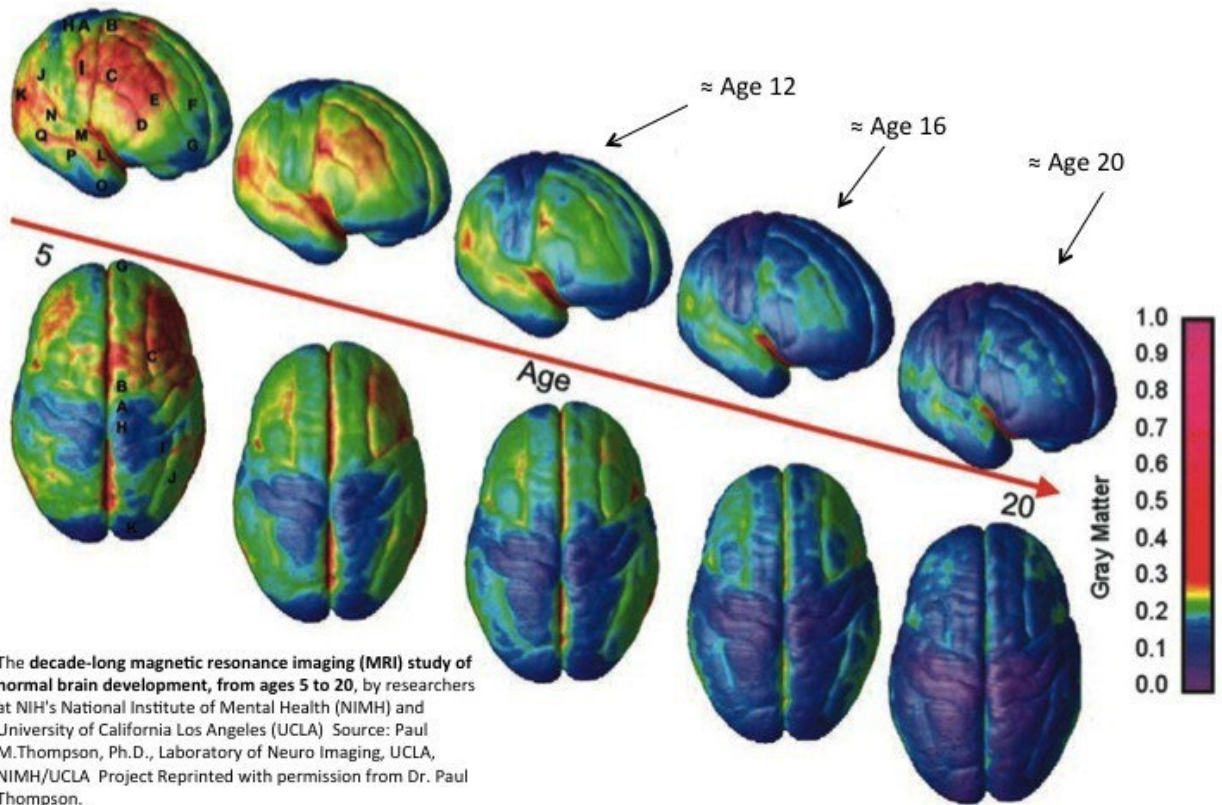
When the brain is in a state of hyperarousal or fight or flight, no learning can occur. In order for learning to occur, students must be relatively calm, feel safe, and not be triggered. Their brains must not perceive any threat.

A learning brain:

- Is open to new information.
- Is comfortable with ambiguity.
- Feels calm, peaceful, and excited to learn.
- A survival brain.
- Is focused on threat.
- Doesn't like ambiguity.
- Doubts their abilities, feels panicky, and is fearful of being wrong.

Developing Brain

- Brain is developed based on experiences.
- Trauma impacts the development of the brain (neuro-developmental insult – neuroplasticity).
- Continuous trauma causes major multi-systemic impacts on the developing brain.



Anxiety

- Behaviors need to be addressed regardless of diagnosis.
- Anxiety can mirror a lack of ability, interest, or effort.
- During heightened anxiety, executive functioning skills are compromised.
- Understanding how anxiety presents is crucial.
- Anxiety is normal and helpful in some situations.

Emotions

The most associated emotions with anxiety are feeling fearful, worried, or apprehensive. However, those struggling with anxiety are just as likely to feel detached, sad, irritable, restless, or angry. Youth often use words such as nervous, shaky, freaked out, panicky, jumpy, on edge, stressed, afraid, or agitated to describe anxious feelings. Anxious youth are likely to be overly sensitive to real or perceived criticism or discipline, and present with an excessive need for approval.

THE MIGHTY AMYGDALA

Fight Or Flight Response

When faced with a life-threatening danger it often makes sense to run away or, if that is not possible, to fight. The *fight or flight* response is an automatic survival mechanism which prepares the body to take these actions. All of the body sensations produced are happening for good reasons – to prepare your body to run away or fight – but may be experienced as uncomfortable when you do not know why they are happening.

Thoughts racing

Quicker thinking helps us to evaluate danger and make rapid decisions. It can be very difficult to concentrate on anything apart from the danger (or escape routes) when the fight or flight response is active

Changes to vision

Vision can become acute so that more attention can be paid to danger. You might notice 'tunnel vision' or vision becoming 'sharper'

Dry mouth

The mouth is part of the digestive system. Digestion shuts down during dangerous situations as energy is diverted towards the muscles

Heart beats faster

A faster heart beat feeds more blood to the muscles and enhances your ability to run away or fight

Nausea and 'butterflies' in the stomach

Blood is diverted away from the digestive system which can lead to feelings of nausea or 'butterflies'

Hands get cold

Blood vessels in the skin contract to force blood towards major muscle groups

Muscles tense

Muscles all over the body tense in order to get you ready to run away or fight. Muscles may also shake or tremble, particularly if you stay still, as a way of staying 'ready for action'

If we don't exercise (e.g. run away or fight) to use up the extra oxygen then we can quickly start to feel dizzy or lightheaded

Dizzy or lightheaded

Breathing becomes quicker and shallower

Quicker breathing takes in more oxygen to power the muscles. This makes the body more able to fight or run away

Adrenal glands release adrenaline

The adrenaline quickly signals other parts of the body to get ready to respond to danger

Bladder urgency

Muscles in the bladder sometimes relax in response to extreme stress

Palms become sweaty

When in danger the body sweats to keep cool. A cool machine is an efficient machine, so sweating makes the body more likely to survive a dangerous event

Breathing

A simple yet remarkably effective technique for managing anxiety is deep breathing. Deep breathing slows down the heart sending the message to the brain that there is no longer danger. Using deep breathing proactively can prevent panic attacks from occurring at the moment and can work as a “reset button” throughout the day to help lower building levels of anxiety. Often children and youth with anxiety will state they feel out of control of their lives – as if the anxiety is in control of them. One of the best ways to create buy-in is to let kids know that breathing is a way for them to control their anxiety instead of feeling it is the other way around. The most difficult part of deep breathing is remembering to do it. Try building deep breathing into the daily classroom routine.

FIGHT, FLIGHT, FREEZE, AND HYPERVIGILANCE SIGNS

Fight

- Tantrums; lying down, crying, etc.
- Destructive behavior as a result of strong emotional responses; punching walls, throwing objects, etc.
- Arguing, defiance, yelling, etc.

Flight

- Avoidance.
- Needing to be with a person or pet who makes them feel safe.
- Getting reassurance or repeatedly reassuring self.
- Finding a safe place to go.
- Trying to distract themselves.
- Self-medicating the symptoms with drugs, alcohol, or food.
- Sleeping or napping.

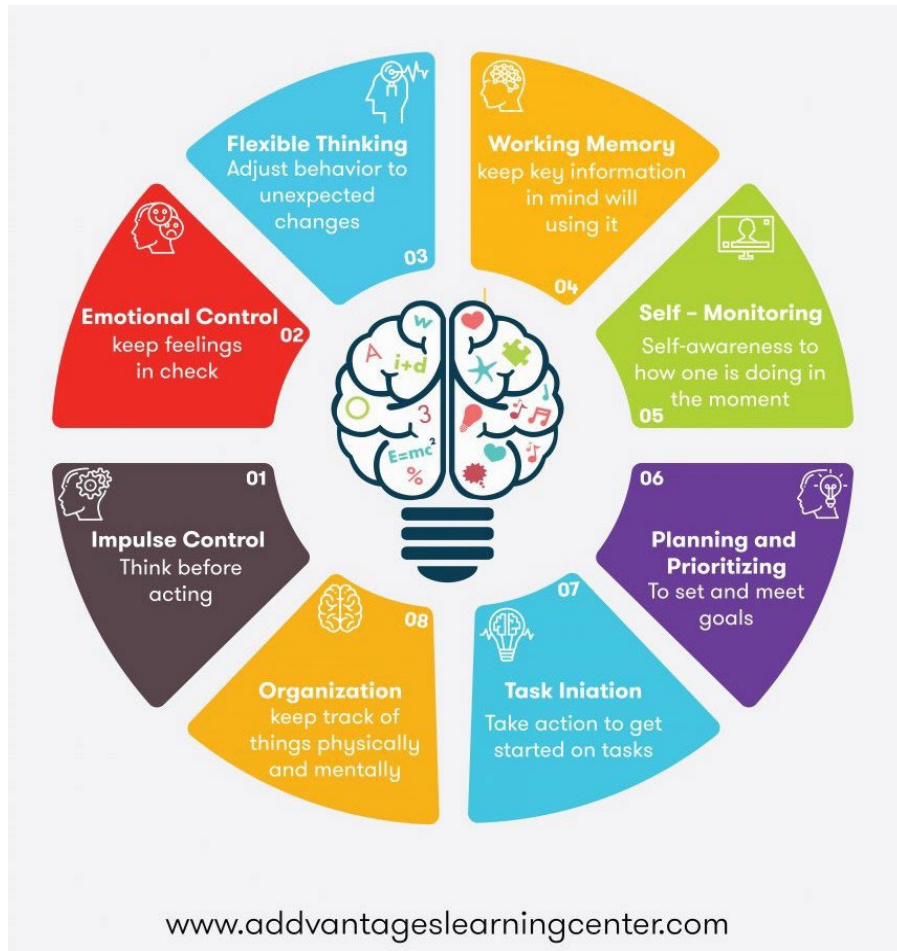
Freeze

- General shutdown, lack of vitality, emotional separation and detachment.
- Appears as an attitude of indifference.
- Refusing to speak.
- Staring blankly.
- Pulling up a hood or putting their head down on a desk.

Hypervigilance

- Excessive eye contact.
- Tense body posture.
- Distancing themselves from other students.
- Scanning for signs of danger.
- Aggressive or provocative statements and actions.
- Hypervigilant students will often start conflict instead of waiting for something to happen.

EXECUTIVE FUNCTIONING



During heightened anxiety, executive functioning skills are compromised.

Executive functioning skills allow for focusing, following directions, starting a task, completing a task, keeping track of items, paying attention, remembering things, shifting tasks, holding their tongue, not over-reacting, handling criticism, and managing change.

Physical Responses

- Increased heart rate.
- Sweating, trembling, or shaking.
- Shortness of breath, dry mouth, or feeling of choking.
- Muscle tension or aches.
- Chest pain or discomfort.
- Nausea.
- Urge to urinate or defecate.
- Dizziness.
- Numbing or tingling sensation.
- Visual changes (e.g., light seems too bright, floaters, spots).
- Blushing or red, blotchy skin (especially around the face).

Thoughts

- Frightening thoughts, images, urges, or memories.
- Something bad happening to self (dying, not being able to cope, embarrassing ourselves, etc.).
- Something bad happening to others (family member dying, friend having an accident, etc.).
- Hypervigilance.
- Difficulty concentrating.
- Difficulty making decisions.
- Nightmares.

What you might see...

- Behavior such as anger outbursts, irritability, absenteeism, and excessive worry.
- Heightened difficulty with authority, redirection, or criticism.
- Over or under-reacting to environmental stimuli (sirens, physical contact, doors slamming, bells, etc.).
- Repetitive thoughts and comments about death or dying (including writing and/or artwork).
- Emotional numbing.

Anxiety

Mild	Moderate	Severe
<ul style="list-style-type: none"> • Missing sports practices • Decreasing social interaction; less engaged in groups 	<ul style="list-style-type: none"> • Missing games • Hanging out with fewer friends; not engaged in groups 	<ul style="list-style-type: none"> • Quitting sports team • Isolated; withdrawn from social activities
<ul style="list-style-type: none"> • Asking more questions in class; or not speaking at all • Not finishing in class assignments; requesting extensions • Complaining of headaches 	<ul style="list-style-type: none"> • Seeking reassurance; starting to miss classes • Handing in assignments late; lower quality work • Missing class due to physical discomfort 	<ul style="list-style-type: none"> • Missing classes regularly; dropping courses altogether • Not handing in assignments at all; significant drop in grades • Seeking medical help for physical ailments
<ul style="list-style-type: none"> • Decreased concentration • Appearing more fidgety 	<ul style="list-style-type: none"> • Unable to complete tasks • Jittery; shaky handwriting during exams 	<ul style="list-style-type: none"> • Memory impairment • Avoiding exams altogether

Avoidance

The most common way for youth to deal with anxious situations is to avoid them. Unfortunately, avoidance only serves to reinforce anxiety. By not going to class or participating in a situation in which they anticipate a negative outcome, that negative outcome doesn't occur; therefore, avoiding the situation solved the problem. Avoidance does not encourage building strength, skills, or tolerance. When a child has been avoiding a situation, a gradual exposure approach using techniques such as a fear ladder is most effective.

Visual Aids

- Students with trauma experiences may struggle to encode and access memories.
- Use strategies to support memory such as visual aids, multi-sensory experiences, retellings, review, and reminders such as sticky notes.
- Schedules which include visuals are helpful at all grade levels to support routines.
- Consistent, Clear Expectations and Responses.
- Greet students with the same phrase every morning. For example, "Good Morning, ____!".
- Use exactly the same words, not just the same sentiment.
- Routine.

Classroom Strategies

- Start class or break in class with deep breathing or guided imagery such as the mindful handwashing poster.
- Provide worry stones.
- 5 senses and total focus techniques.
- Provide visual reminders of strategies.
- Become aware of individual cues to anxiety (flushed face, increased fidgeting, etc.).

As with any behavior or mental health concern, if something seems out of the ordinary, or is worrisome, bring it to the attention of the school counselor or administrator. You can still intervene with supportive classroom strategies while ensuring the safety of all students.



Behavior Management Strategies

- Use of specific praise such as “You did a great job paying attention in class today” vs. “Good job today.”
- 10:1 ratio of positive to negative statements for traumatized children/adolescents.
- Consistent expectations and behavior plans.
- Active ignoring of negative behavior.
- Behavior plans based on rewards systems, not punishments.
- Remember that reporting worrisome behavior is not a punishment.

Communication

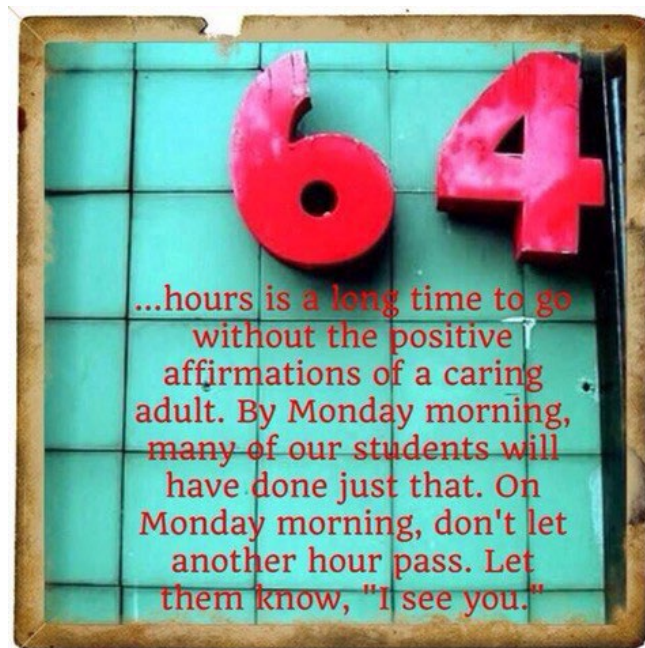
- Communication can occur before words in the limbic system.
- When a student is struggling, approach with curiosity – “what is happening for this student and why now?”

Co-Regulation

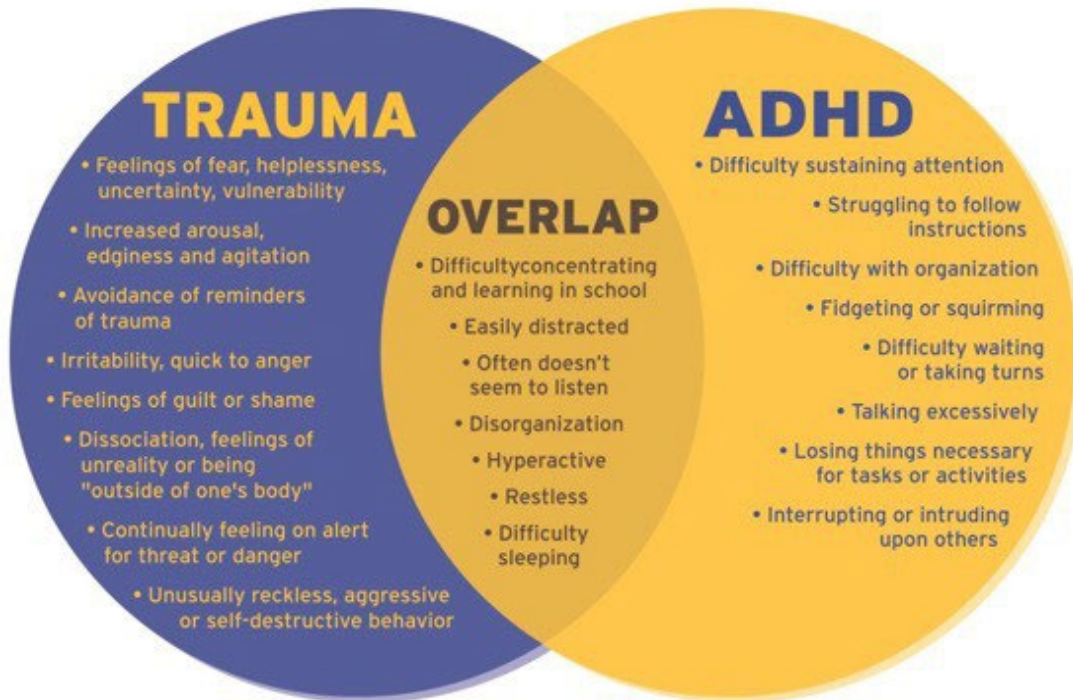
- Self-regulate before attempting to calm a student.
- Use visuals to support communication.
- Look through the lens of anxiety.

Understanding

When there is an understanding that certain behaviors may be related to traumatic experiences, it becomes easier to shift the school environment and classroom practices to respond more effectively to these behaviors.



ADHD/TRAUMA



[The National Child Traumatic Stress Network, 2016](#)

ADHD and Trauma Strategies

- Routines and structure; consistency is crucial.
- Seat students close to the teaching area/teacher.
- Externalize important information with visuals.
- Review the classroom schedule frequently (several times throughout the day).
- Modeling, repetition, & practice: demonstrate the instruction or problem.

ADHD and Anxiety Strategies

- Always use positive reinforcement before negative consequences (if at all).
- Use high-interest materials and activities as reinforcements.
- Provide immediate, specific feedback (e.g., praise and/or reward) while engaged in the task (and again when completed).

Sensory Strategies

- Create a quiet spot in the room that any child can use when they want some time away or free from distraction.
- Provide a non-verbal way, such as giving the teacher a 'quiet time' card.
- If a student has an outburst, coregulate.
- Equip multiple spaces in the classroom with 'koosh' balls, theraputty, bands on chairs, balls, non-disruptive fidgets, etc.

SUPPLEMENTAL RESOURCES & EVIDENCE-BASED ARTICLES



Articles and Information on Anxiety Relief Toys, Fidgets, etc.

https://www.medicinenet.com/what_are_some_good_fidget_toys/article.htm

<https://chadd.org/adhd-weekly/fidget-toys-and-adhd-still-paying-attention/>

<https://www.fastbraiin.com/blogs/blog/adhd-fidget-toys>

<https://www.healthyplace.com/other-info/mental-illness-overview/play-therapy-techniques-activities-and-who-its-for>

<https://www.scientificamerican.com/article/fidget-toys-arent-just-hype/>

For School Counselors – <https://www.youtube.com/watch?v=KztpPorWVQU> (teen using Sandtray Therapy)

Breathing/Yoga

<https://helpholive.org/health-benefits-blowing-bubbles/>

<https://www.stdavidscenter.org/article/calming-activities-for-children-and-parents/>

<https://www.ascd.org/el/articles/yoga-and-mindfulness-tools-for-managing-trauma>

<https://anxietyfreechild.com/yoga-for-children-with-anxiety/>

<https://www.brainbalancecenters.com/blog/yoga-for-anxiety-in-children>

<https://copingskillsforkids.com/deep-breathing-exercises-for-kids>

<https://www.mindfulmazing.com/10-breathing-exercises-for-kids-with-anxiety-or-anger/>

MindMapping

Mindmapping & ADHD – <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7908166/>

MindMap & Sketchnoting Research Study with ADHD -
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7908166/>

Trauma-Informed Classroom Learning Environment

<https://bigdbentley.com/2012/09/12/the-teachers-note-book-article-reviewsticky-notes-and-highlighters-for-students-with-adhd/>

<https://www.edutopia.org/discussion/17-ways-help-students-adhd-fidget>

<https://www.ldrfa.org/signs-and-symptoms-of-executive-function-disorder-efd/>

How Nature Supports Children's Mental Health

<https://www.institute4learning.com/2018/04/25/7-ways-to-use-nature-to-calm-and-focus-kids-with-adhd/>

<https://www.parentmap.com/article/a-walk-in-the-woods-calm-adhd-make-your-family-happier-and-deliver-your-kid-to-harvard>

<https://childmind.org/article/why-kids-need-to-spend-time-in-nature/>

<https://www.newportacademy.com/resources/mental-health/how-nature-supports-teen-mental-health/>

The Arts and Mental Health

<https://www.additudemag.com/art-therapy-for-adhd/>

<https://www.additudemag.com/music-therapy-for-adhd-how-rhythm-builds-focus/>

SEL, Anxiety, ADHD, & Children's Literature Resources

<https://www.publishersweekly.com/pw/by-topic/childrens/childrens-book-news/article/77750-social-and-emotional-learning-a-book-list.html>

<https://www.additudemag.com/slideshows/riveting-books-for-kids-with-adhd/>

<https://www.additudemag.com/slideshows/middle-school-books-adhd-character>

<https://www.common sense media.org/lists/books-with-characters-who-have-learning-and-attention-issues>

<https://www.readbrightly.com/kid-approved-middle-grade-books-mental-health/>

<https://readingmiddlegrade.com/middle-grade-books-about-anxiety/>



SAFER
SCHOOLS
TOGETHER



International Center for
Digital Threat Assessment