

# The Stress-Trauma Continuum in Students with Visual Impairments

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## Disclaimer

I am not a medical provider. The information provided in this presentation is strictly for educational purposes. Strategies addressed do not replace mental health services.

## Objectives

1. Review the process of nervous system regulation in broad strokes
2. Discuss factors that influence how children process stressors
3. Identify visual impairment specific triggers children might experience
4. Describe strategies you can teach students to improve nervous system regulation

## Let's Take a Look at the Mechanisms of Stress & Trauma

### What is a Stressor? (Nagoski & Nagoski, 2019)

- Anything that creates demand or feels threatening
  - External - physical safety
  - Internal - emotional safety

A stressor involuntarily activates the autonomic nervous system (ANS) and triggering a fight, flight, freeze, or fawn response

### VI-specific Stressors Students Might Experience:

- Performing a visually demanding physical task in front of others such as sports
- Attending an eye appointment
- Assistive tech malfunction
- Disclosure of VI when using a tool
- An unexpected question related to their VI experience

### Stressors Can Result in Positive or Negative Stress Activation

Prior relational experiences comprise the “appraising lens” determining the intensity of how a stressor is experienced

Good stress = “Eustress”; short-term, manageable

Bad Stress = Distress

Flow Diagram:

Graphic #1 - box labeled "Stressor- a relevant stimulus that put demands on the individual" which leads to

Graphic #2 oval with text "individual appraisal of the stressor" which leads to

Graphic #3 Open angle labeled "Stress Response" which leads to

Graphic #4 Two options - box #1 labeled "Distress - negative, undesirable, harmful response to a stressor" and box #2 labeled "Eustress - positive, desirable advantageous response to a stressor" which leads to

Graphic #5 box labeled "Outcomes"

## The Stress Cycle (Nagoski & Nagoski, 2019)

- When a stressor occurs, it activates the sympathetic nervous system or “gas” releasing a cascading effect of involuntary physiological responses, including the release of the hormone cortisol.
- The body must experience a shift from feeling “unsafe” to “safe” to downshift from sympathetic nervous system to the parasympathetic nervous system – “the brake” – in order to stop releasing cortisol and other physiological threat responses and experience calm, thereby completing the “Stress Cycle.”

## The Stress Cycle (Nagoski & Nagoski, 2019)

- Big takeaway: You can’t think your way out of feeling stressed. Your body has to “feel safe” to complete the stress cycle.
- When the stress cycle isn’t completed, chronic stress, or the allostatic load, builds over time, negatively impacting health such as increasing the risk for systemic disease.

## Completing the Stress Cycle “Shake It Off!”(Nagoski & Nagoski, 2019)

- Movement
- Creative expression
- Emotional release
  - Crying
  - Laughing
- Connection
  - Physical affection
  - Supportive conversation
- Breathwork

## What Managing Stress Looks Like (Nagoski & Nagoski, 2019)

“You can’t control every external stressor that comes your way. The goal isn’t to live in a state of perpetual balance and peace and calm; the goal is to move through stress to calm, so that you’re ready for the next stressor, and to move from effort to rest and back again.”

## The Impact of Stress Exists on a Continuum

<https://developingchild.harvard.edu/science/key-concepts/toxic-stress/>

Venn diagram displayed vertically meant to represent a traffic light with correspond text descriptions to the right of each circle. Top green circle states "positive", middle yellow circle "tolerable", last red circle "toxic"

## Adverse Childhood Experiences (ACEs)/ “Toxic Stress” Linked to Children’s Current and Future Health

- Abuse
  - Physical
  - Emotional
  - Sexual
- Neglect
  - Physical
  - Emotional
- Household Instability
  - Mental illness
  - Mother treated violently
  - Incarcerated relative
  - Substance abuse
  - Divorce

<https://www.acesaware.org/wp-content/uploads/2019/12/1-What-are-ACEs-and-Why-Do-They-Matter-English.pdf>

## Factors Impacting How Children Experience an “ACE” Stressor

### Risk Factors

- Severity
- Proximity
- Frequency
- Caregivers’ reaction
- Prior history of trauma (Adverse Childhood Experiences)
- Family and community factors

## Protective Factors

- Individual - positive coping strategies
- Family - Family support/ parental warmth
- Community - Broader social support, positive relationships with teachers and peers, high friendship quality

## Mental Health Issues in Students w/ VI

**Depression** - 14% (pooled from systematic reviews) vs 25% in adults (Bakhla, 2023)

“Vision loss very early in life may be associated with less severe depression, perhaps due to a lesser need to relearn life skills compared to people who lose vision later in life.” (Demmin & Silverstein, 2020)

Children with myopia experienced significantly higher levels of depression and anxiety than their peers w/out VI; improvements in MH and academic performance w/ provision of glasses/ strabismus surgery (Li et.al., 2022)

## Mental Health Issues in Students w/ VI

### Anxiety

Prevalence of 25% (2001) - 45% (2024) among children and youth in the US

Adolescents w/ VI higher anxiety than those w/out; however few studies; varying quality; diverse populations; different studies found gender differences - in some girls are more impacted, in others boys more impacted

## Bullying- Lifetime prevalence in VI may be as high as 41.7% (Haegele et.al., 2017)

- Students w/ VI most susceptible to bullying in comparison to typically sighted peers and those with other disabilities
- One study of bullying found:
- 40% of parents of students w/ VI reported bullying 1-2x a month; almost 2x the rate of students w/out disabilities
- Bullying - 90% verbal, 81.9% social relational, 50% physical
- “PE may be a particular forum for bullying, as differences, and vulnerabilities are put on display”

## Bullying (Haegele et.al., 2017)

- Themes emerging from adults w/ VI reflecting on school-based bullying experiences
- “It would be when they knew there weren’t teachers watching’: bullying experiences in unowned and unstructured spaces”
- “Going through the motions’: feelings about verbal, social, and physical victimization”
- “They had their own insecurities’: understanding the bullies and bystanders

## Bullying (Haegele et.al., 2017)

“When I would be left alone in the hall, I would just be waiting for [bullying]. It would be when they knew there weren’t teachers watching, like when I was waiting for the bus. The bullies would know, the kids that were doing it knew if anyone was around or with me to deal with it.”

– Abigail

## Bullying (Haegele et.al., 2017)

“I was constantly on guard and going to school thinking ‘what’s going to happen today? Is this going to be a bad day? Are people going to bother me? Just that extra alertness was exhausting. So. I would get home and exhausted and just go to bed.”

– Audrey

## Bullying (Haegele et.al., 2017)

“Being the only legally blind person in the school district, I was always different. Everything was always different, so I had large textbooks and large print everything, low vision aids. For kids, that’s different and kids don’t seem to accept the difference too well. I just didn’t fit the mold of a normal kid. So, I was always bullied”

– Terrell

“Tipping the Scales” - Strategies for Supporting Students’ Mental Health  
<https://developingchild.harvard.edu/resources/inbrief-the-science-of-resilience-2/>

## Resilience Can Be Built

- “Children are not born with resilience, which is produced through the interaction of biological systems and protective factors in the social environment.”
- Single most influential factor in building resilience in children is supportive relationships with adults.
- VI services need to be safe, containers where students experience protective factors to process the toxic stress they experience in their environment specific to VI.

## Using the Polyvagal (ANS) Ladder Stephen Porges/ Debra Dana

### The “Ladder”

- Ventral Vagal Activation

- Safe, social, engaged
- Sympathetic Activation
  - Mobilized, agitated, frantic
- Dorsal Ventral
  - Numb, collapsed, Shutdown

### Using the Ladder

- Hierarchy - down & up movement all day in response to stressors
- Neuroreception - scanning for cues; “story follows state”
- Co-regulation - emotional regulation relies on reciprocal relationships; closeness with another makes us feel better/ deactivates

### Making VI Services Feel “Safe”

- Awareness & empathy that the act of pulling kids out of classes may be experienced as a stressor
- Awareness & empathy that the skills/ tools (content of our lessons) might make kids feel/ look more different and may increase their risk of experiencing bullying
- Attune (observe & respond with empathy) to body language/ tone of voice/ engagement for cues to where a student may be on the polyvagal ladder when you meet with them

### When Your Student is in Ventral Vagal Activation

#### (Top of the “Ladder”; Regulated, Social, Engaged)

- Strategy: Create a ritual for checking in specifically with respect to how things are going with respect to VI
- Participate by sharing a vulnerability to model nervous system regulation (age appropriate/ professional)
- Activities
- Poopsicle, Popsicle, Dreamsicle
- <https://www.epilepsydad.com/epilepsy/poopsicle-popsicle-dreamsicle/>
- Feelings/ Trigger scale (incorporate what your student is already using)

### When Your Student is in Ventral Vagal Activation

#### (Top of the “Ladder”; Mobilized, Agitated, Frantic)

- Strategy: Invite your student to participate in a down regulating activity that helps ground them; offer choices
- Activities
- “Belly Breaths” - simple breathwork, hand on belly
- “Grounding Technique” - clenching & releasing

- “Mindful Hand Massage” - 90 seconds self-hand massage
- <https://education.umd.edu/sites/default/files/uploads/Emotion%20and%20Stress%20Regulation%20Magic%20Tool%20Box.pdf>

## When Your Student is in Dorsal Ventral Activation

### (Bottom of the “Ladder”; Numb, Collapsed, Shutdown)

- Strategy: Invite your student to sing or hum with you; select favorite songs in advance
- Activities
- Using singing or humming to calm
- [https://www.google.com/search?q=teaching+humming+for+nervous+system+to+kids&rlz=1C1CHBF\\_enUS776US776&oq=teaching+humming+for+nervous+system+to+kids&gs\\_lcrp=EgZiaHJvbWUyBggAEEUYOdIBCjE3Mzk0ajFqMTWoAgiwAgE&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:15470c95,vid:d6CJzVRE2ww,st:0](https://www.google.com/search?q=teaching+humming+for+nervous+system+to+kids&rlz=1C1CHBF_enUS776US776&oq=teaching+humming+for+nervous+system+to+kids&gs_lcrp=EgZiaHJvbWUyBggAEEUYOdIBCjE3Mzk0ajFqMTWoAgiwAgE&sourceid=chrome&ie=UTF-8#fpstate=ive&vld=cid:15470c95,vid:d6CJzVRE2ww,st:0)
- Journaling (written or voice memo) or drawing
- Turning trigger in to glimmers “Gliggers”
- <https://www.usatoday.com/story/life/health-wellness/2022/03/23/glimmers-opposite-triggers-mental-health-benefits/7121353001/>
- A walk in nature

Student - Amy (Teen from RNIB):

### Nervous System Regulation for Anxiety in Action (Sympathetic Activation)

<https://www.rsbc.org.uk/mental-health-awareness-week-sight-loss-can-have-a-profound-impact-on-childrens-mental-health/>

### Contact Information

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