# DAYO Students

### Using Coregulation To Support Student Stress In The Classroom

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Susan Cooper, OTR/L
Blaine County School District
Susan Cooper Pediatric OT Services





#### Learning Objectives

- Participants will develop a basic understanding of how the brain and body react under stress and importance of felt safety and use of co-regulatory strategy
- Participants will identify basic physiology of co-regulation
- Participants will identify key "ingredients of co-regulation" how to coregulate with a student



 OTP's have an educational background in sensory processing, motor development, neurophysiology, anatomy, pediatric development and mental health.

- OTP's have the "lens" to address the interplay of a child's individual differences in their development and how these differences may interfere with the development of a child's regulatory capacities and vulnerability toward stress responses.



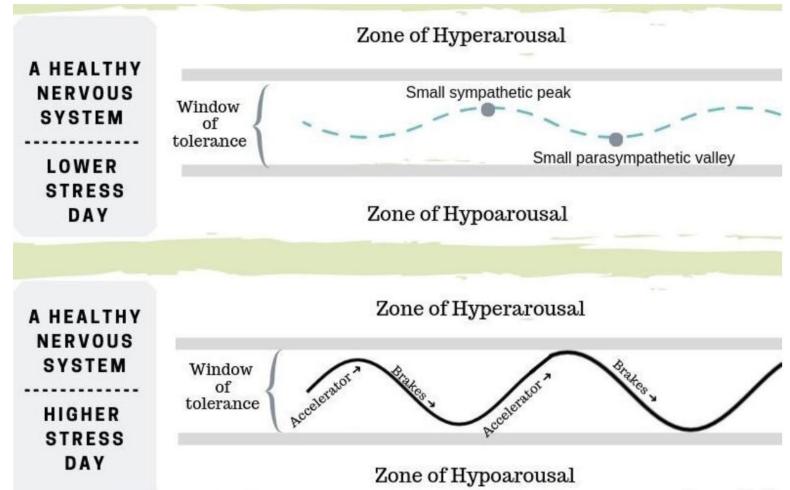
#### What is Regulation?

- Regulation develops from infancy in ALL HUMANS children are biologically wired to connect with others.
- Regulation is mediated by the autonomic nervous system, "safe and unsafe"
- Regulation is how a student is able to shift and maintain their arousal/alertness states according to the demands of an environment
- Window of tolerance: the term to describe the optimal state of emotional and physiological arousal where a person can function effectively, and manage their feelings.





## A Regulated Nervous System Able to Cope with Stress

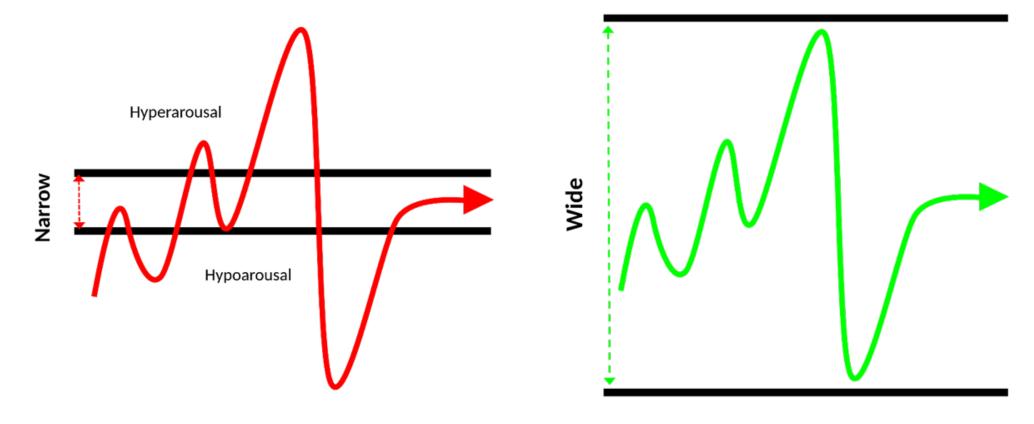




• Gobbel, R. (2024).



#### **Increasing Your Window of Tolerance**



Narrow Window of Tolerance: Limited Capacity to handle Stress Wide Window of Tolerance: Resilient & Resourceful under Stress





## Stress Load Derails a Student's Regulatory Capacities

- Neurobiological differences:
  - Sensory processing and motor differences: sensory sensitivities, sensory overload
  - Neuroception differences
  - Communication differences and language load
  - Unpredictable environments, people, and activities
- When stress begin to **outweigh** a student's ability to cope, a student's window of tolerance narrows significantly and dysregulation occurs





#### We All Have Our Own Windows of Tolerance!

- The "Window of Tolerance" is the space inside our own nervous systems where we can manage stressors, AKA Connection Mode.
- It is critical that the adults who work students with vulnerable regulatory abilities be aware of their own stress levels and if they are able to interact with a student from a sturdy regulated platform.
- We must be able to access our own regulation or "oxygen mask" first before we are able to "lend our calm" or coregulate with a student in stress or protection mode.



#### What is Coregulation?

- A person's nervous system can be influenced by the state of another's.
  - For example, a calm and regulated nervous system can act as a buffer, helping to down-regulate the stress response in someone who is dysregulated.

 The core of co-regulation is the nervous system's ability to sense safety or danger from another person.



#### More Coregulation

- Coregulation uses "portals" through which the physiological state can be mediated using cues of safety to the other person.
- Regulation sends physiological signals to a student's nervous system to shift from dysregulation to a more connected regulated state.



#### How Coregulation Physiologically Works

 Oxytocin (a neurotransmitter) is shared between two people in a "blue tooth" mode through cues of safety during coregulation.

 Oxytocin regulates and dampens physiological stress responses by "halting" cortisol which is released during stress responses.

 The autonomic nervous system activates the parasympathetic nervous system to support a return to a more connected regulated state.



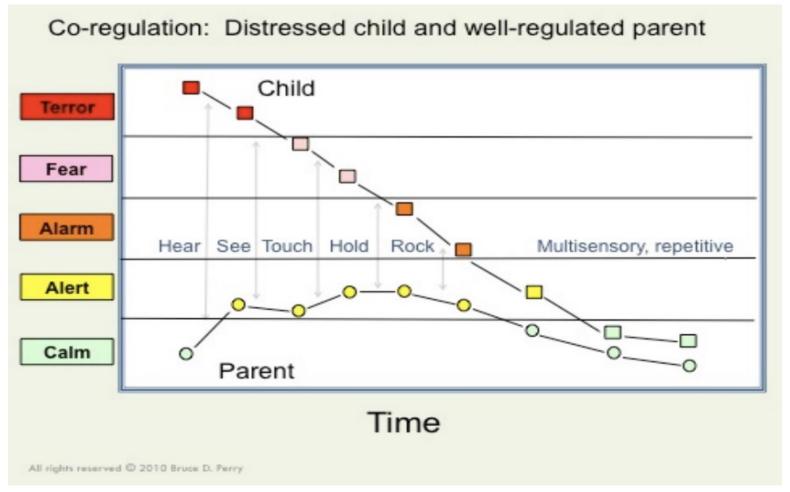
#### How to Cue Physiological Safety to Another

- **Presence**: Am I working from a regulated platform myself?
- Facial Expression: Is my face expressive of safety and engagement?
- Tone of Voice:
  - Is there inflection or prosody in my voice?
  - Is there warmth and a caring tone and volume to my voice?
- **Posture**: Do I have a relaxed posture and inviting gestures?
- Pacing and Timing: Am I pacing with the child in accordance with their needs?

Delahooke, 2019



### Coregulation in Action from Attuned Adult Partner







#### Coregulation Builds Self -Regulation

 Consistent coregulation from attuned/trusted adult partners allows for widening of the "window of tolerance" which results in a more resilient nervous system able to manage more stressors without their autonomic nervous system shifting to protection mode.

 Through connection and coregulation with others, we are able to proactively gain a more regulated nervous system state in our students.



#### Key Points: Neuroplasticity Matters

- Well -regulated adult partners can connect with children and build supportive relationships using coregulation.
- Supportive, positive adult relationships can reshape the brain and help students create new neural pathways through neuroplasticity.
- Through the repeated and predictable neural process of coregulation, students build sturdier self-regulation and wider more stable "windows of tolerance."
- Coregulation builds self -regulation!!



#### References

- Delahooke, M. (2019). Beyond Behaviors: Using brain science and compassion to understand and solve children's behavioral challenges. PESI Publishing. (Updated 2026 version available for pre-order.)
- Porges, S.W., & Porges, S. (2023). *Our Polyvagal World: How safety and trauma change us*. W.W. Norton & Company.
- Gobbel, R. (2023) Raising Kids With Big Baffling Behaviors: Brain-body-sensory strategies that really work. Jessica Kingsley Publishers.

