

- [Slides- The Neuroscience behind Regulation](#)
- [Local resource bank](#)
- [Topics for future Community of Practice Discussions](#)

## Recommended Reading & Resources

### Scientific & Professional Organizations

- **[The Neurosequential Model \(Dr. Bruce Perry\)](#)**: Since the presentation explicitly features Dr. Bruce Perry's "Three R's" (Regulate, Relate, Reason), his official site provides extensive materials on brain-based trauma-informed care.
  - **Website:** [bdperry.com](http://bdperry.com)
- **[Lurie Children's Hospital](#)**: Cited in the presentation as a source for information regarding early childhood brain development and "back to front" maturation.
  - **Website:** [luriechildrens.org](http://luriechildrens.org)
- **[The Hand Model of the Brain \(Dr. Daniel Siegel\)](#)**: The presentation utilizes the "Hand Model" to explain the prefrontal cortex and limbic regions. Dr. Siegel's "Mindsight Institute" offers videos and diagrams of this model.
  - **Website:** [drdanseigel.com](http://drdanseigel.com)
- [Stress workbook](#)

### For Children & Young People

- **[YoungMinds - Stress Bucket Activity](#)**: A comprehensive resource pack, including a video and a printable worksheet, for young people to identify their specific stressors and coping "taps".
- **[Social Workers Toolbox](#)**: Offers a creative 1-page worksheet designed for children to draw their stressors as water and their relief activities as emptying taps.

- [Down's Syndrome Association – Easy Read Booklet](#): A simplified visual guide to the stress bucket concept, ideal for younger children or those who benefit from clear, direct language.

### **For Adults & Professional Settings**

- [Psychology Today – Stress Wise Reflection](#): Provides a self-reflection guide to identify "buffer zones" (the space between current stress and overflow) and "release valves" like connection, solitude, or nature.
- [Spurgeons Charity](#): Resource bank
- [Wellbeing in Your workplace](#): Tailored for the workplace, this guide offers strategies for "emptying the bucket" through aerobic exercise, organization, and social support systems.

### **"Stress Bucket" Signs of Overflow**

- **Emotional**: Becoming snappy with colleagues, feeling "hopeless," or experiencing sudden outbursts.
- **Physical**: Insomnia, fatigue, and feeling "tired all the time" even after rest.
- **Behavioral**: Social withdrawal, overspending, or avoiding tasks.

**"How to Empty Your Stress Bucket" by Gin Lalli**: This book specifically uses the stress bucket metaphor to explain brain function and neuroscience in an accessible way. It provides simple techniques to recognize negative thoughts and prevent "overflow" before it leads to anxiety or depression.

### **Practical Application Resources**

- **The Sensory Toolbox**: To support the presentation's section on proprioception, vestibular, and oral sensory inputs, educators and parents can look for resources on "Sensory Diets."
  - **Resource Idea: "Heavy Work" activities** (pushing walls, carrying books) to calm the brainstem.

- **Co-Regulation Materials:** Since self-regulation is a learned skill and "mirror neurons" play a critical role, resources from **Conscious Discipline** or the **Zones of Regulation** (which uses the "Green Zone" terminology mentioned) would be highly relevant.

The "Stress Bucket" (also known as the "vulnerability-stress model") is a psychological metaphor that visualizes how we accumulate and manage stress.

### **Core Components of the Model**

- **The Bucket:** Represents your personal capacity for stress. Its size varies per person based on factors like genetics, early childhood experiences, and social support.
- **The Water (Stressors):** Represents day-to-day pressures such as work demands, financial worries, relationship strains, or "sensory overload".
- **The Overflow:** When stress exceeds your capacity, leading to signs like irritability, anxiety, fatigue, or "feeling stuck".
- **The Tap (Coping Strategies):** These are "release valves" or "holes" that drain the bucket.

For the Science-Minded (The Fundamentals)

- The Whole-Brain Child by Dr. Dan Siegel and Tina Payne Bryson.
  - *The definitive guide to the "Hand Model" and practical brain-based parenting.*
  - [Link: Official Book Page](#)
- The Boy Who Was Raised as a Dog by Dr. Bruce Perry.
  - *Explains the "Neurosequential Model" and how the brain develops from the bottom up.*
  - [Link: Child Trauma Academy Resources](#)

- Harvard Center on the Developing Child
  - *Deep-dive articles and videos on executive function and self-regulation.*
  - [Link: developingchild.harvard.edu](http://developingchild.harvard.edu)

#### For the Classroom (Educator Focus)

- Conscious Discipline (Dr. Becky Bailey)
  - *A comprehensive social-emotional learning program based on brain state regulation.*
  - [Link: consciousdiscipline.com/resources](http://consciousdiscipline.com/resources)
- The Zones of Regulation
  - *A framework designed to help students categorize their emotions into four colored zones.*
  - [Link: zonesofregulation.com](http://zonesofregulation.com)

#### For the Home (Parent Focus)

- The Polyvagal Theory in Therapy (and Life)
  - *While academic, the work of Stephen Porges and Deb Dana explains the "Safety vs. Threat" response in children.*
  - [Link: Rhythm of Regulation](#)
- Understood.org
  - *An excellent resource for understanding sensory processing and learning differences.*
  - [Link: Understood.org - Self-Regulation](#)

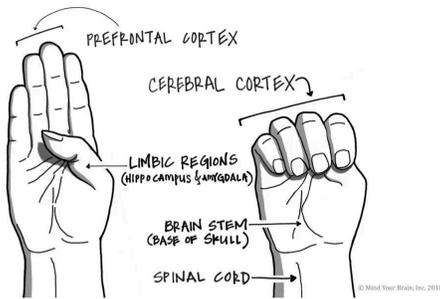
#### **Quick Video Tutorials**

- Video: [The 3 R's: Regulate, Relate, Reason \(6 mins\)](#)
- Video: [The Brain-Building Power of Serve and Return \(2 mins\)](#)

#### **Brain-Based Regulation: A Parent & Teacher Guide**

## 1. The "Hand Model" Quick Reference

Hand Model of the Brain



When a child's behavior is "out of control," their brain is physically disconnected.

- **The Flipped Lid:** The **Prefrontal Cortex** (logic/reasoning) has gone offline.
- **The Alarm:** The **Amygdala** (fear/anger) is in charge.
- **The Goal:** Do not try to teach or logic a child whose "lid is flipped." Your only job is to help them **close the lid**.

## 2. The 3 R's: The Sequence of Success

*Follow these steps in order. You cannot skip to step 3 until steps 1 and 2 are solid.*

| Step               | Action               | What to do/say  |
|--------------------|----------------------|---|
| <b>1. Regulate</b> | <b>Calm the Body</b> | Focus on the physical. Rhythmic movement, deep "belly" breaths, a cool drink of water, or a firm hug. |

|                  |                          |   |
|------------------|--------------------------|---|
| <b>2. Relate</b> | <b>Connect the Heart</b> | Use a soft voice. Get below their eye level. Validate the feeling: <i>"I can see you're frustrated. This is really hard."</i> |
| <b>3. Reason</b> | <b>Teach the Mind</b>    | <i>Only once they are calm:</i> Reflect on what happened. Talk about consequences or better choices for next time.            |

### 3. The "Co-Regulation" Check-In

Before you intervene, check your own "Internal Weather."

- **Is my jaw clenched?**
- **Is my voice loud?**
- **Am I reacting out of anger or helping out of empathy?**

**Pro-Tip:** Your calm is contagious. If you stay regulated, their mirror neurons will eventually help them match your state.

### 4. Sensory "Reset" Buttons

When a child is overstimulated or "crashing," try these 60-second resets:

- **Heavy Work:** Push against the wall or carry a stack of heavy books.
- **Rhythm:** Pat a steady beat on their knees or march in place.
- **Proprioception:** A "tight squeeze" hug or wrapping up in a heavy blanket.
- **Temperature:** A cold washcloth on the back of the neck or hands.

**Remember:**

**Behavior is Communication.** A dysregulated child is not *giving* you a hard time; they are *having* a hard time. Their brain is temporarily unable to meet the demands of the environment.

## **Practice Scenarios: "Name It to Tame It"**

### **Scenario 1: The Transition Terror (Classroom Focus)**

The Situation: It is time to clean up the blocks and move to circle time.

5-year-old Leo refuses to stop building. When the teacher insists, Leo knocks over his tower, screams, and throws a block across the room.

- The Brain State: Flipped Lid. Leo is in the "Limbic/Brainstem" zone. He is reacting to the loss of his "work" and feels out of control.
- The Wrong Move: Threatening to take away outdoor time or lecturing him on safety while he is screaming.
- The "3 R's" Approach:
  - Regulate: The teacher moves closer but stays quiet. She uses a "hushing" motion and may offer a sensory tool, such as a stress ball.
  - Relate: "Leo, you worked so hard on that tower. It's really sad to see it go."
  - Reason: Once he is calm, "Blocks stay on the floor to keep friends safe. Next time, would you like me to take a photo of your tower before we clean up?"

### **Scenario 2: The Grocery Store Meltdown (Parent Focus)**

The Situation: You are at the checkout line after a long day. 3-year-old Maya wants a candy bar. When you say "no," she drops to the floor, kicking and screaming so loudly that other shoppers are staring.

- The Brain State: Total System Overload. Maya is tired, hungry, and sensory-overloaded. Her "Limbic" system is sounding an alarm.
- The Wrong Move: Trying to explain the nutritional value of sugar, feeling embarrassed, and yelling back.
- The "3 R's" Approach:
  - Regulate: Ignore the onlookers. Get down on the floor with her. Provide a "firm hug" (proprioception) or just stay physically present to ensure she's safe.
  - Relate: "You really wanted that candy. You are so disappointed. I'm right here."
  - Reason: (Done in the car, 10 minutes later) "When we go inside next time, we will pick out one fruit together so we don't get the 'hungry-grumpies'."

### **Scenario 3: The "Shut Down" (The Freeze Response)**

The Situation: 6-year-old Sam is asked to write a sentence. He stares at the paper, starts to tear the edges, and eventually puts his head on the desk and refuses to speak or move.

- The Brain State: The Freeze Response. This is a "Bottom-up" survival tactic. He isn't being "lazy"; his brain has perceived the task as a threat he can't escape.
- The Wrong Move: "If you don't finish this, you'll stay in for recess." This increases the perceived threat.
- The "3 R's" Approach:
  - Regulate: Change the sensory input. "Let's do three wall-pushes together."
  - Relate: "Sometimes a blank page feels really big and scary. It happens to me, too."
  - Reason: "Let's just do the first letter together. I'll hold the paper, you hold the pencil."

<https://thinkkids.org/regulate-relate-reason/>