

New Directions in Corrections:

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Hidden Assets: Using Neuroscience to Reduce Stress and Increase the Well Being of Correctional Officers

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Major Stressors for Corrections Officers

- Inmate Related
- Occupational
- Organizational
- Psycho-social



Impact of Stress on COs

- Hypertension and cardiovascular disease
- Musculoskeletal problems
- Psychological distress
- Dramatic weight gain in first year on the job
- Diabetes
- Sleep problems
- Burnout
- Substance Abuse
- Increased risk of suicide
- Family conflict
- Divorce
- Early mortality

Costly for Correctional Agencies

- **Low morale and job satisfaction**
- **Burnout**
- **Absenteeism**
- **Impaired decision making**
- **Escalation of conflict**
- **Increased use of force**

Stress, Distress and Trauma

- Can be addressed by employing techniques grounded in neuroscience to increase our resilience.
- These self regulation skills can be readily learned and appropriately practiced at work as well as in our personal lives.

The Social Resiliency Model (SRM)

- Used extensively with the military and veterans
- In countries affected by natural disasters like Haiti and China
- Currently with prisoners leaving prisons in Rwanda and in the California Department of Corrections and Rehabilitation

What Neuroscience-Based Models Can Contribute to CO Wellness

Focus on:

- Resilience as well as decreased reactivity
- Wired to respond to **perceived** threat and fear
- Intervene at the **sensory level**
- Access unconscious (implicit) memory system
- “Bottom-up” processing

Neuroplasticity: The Brain Can Be Trained

- **Through attention**
- **Plasticity strengthens some circuits and eliminates others**
- **Attention practice builds hardiness & rewires brain**

Neuroplasticity in Corrections

- Neuroeducation promotes dignity
- Can enhance immune function
- SRM skills can be used peer-to-peer
- Compatible with a focus on control

Our *Subconscious* Appraisal System:

Appraisal of event as threatening + helplessness =
defenses activated

“When people believe they have sufficient resources to cope with stressors they can experience a **challenge response** rather than a **threat response**.” Jamieson et al., 2012”



Attention:

*“Attention is an intentional, unapologetic discriminator. It asks what is relevant right now, and gears us up to notice **only** that.”*

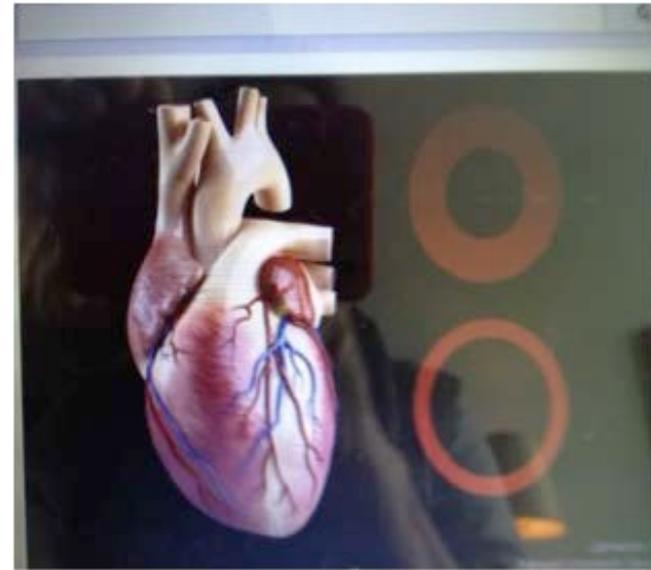
Alexandra Horowitz

“My experience is what I agree to attend to. Only what I notice shapes my mind.” *William James*

“When a pickpocket walks down the street all he notices are pockets” *Unknown*

Attentional Bias: For Perceived Emotionally Negative Information

- A survival mechanism
- Affects interpersonal relationships
- Affects cognitive reactions
- Associated with accelerated “brain-aging” and cognitive decline
- Associated with reduced cardiovascular efficiency and vasoconstriction



2012

Jamieson, Nock and Mendes,

Self-regulation

..” Our system is self-regulatory in the highest degree: self maintaining, repairing, readjusting and even improving. The chief, strongest, and ever-present impression ... nothing remains stationary, unyielding; and everything could always be attained, all could be changed for the better, *were only the appropriate conditions realized.*”

Pavlov

Old Brain/New Brain: Why We Need Self-Regulation

We have inherited an old brain as well as a remarkable new brain that is unique to humans

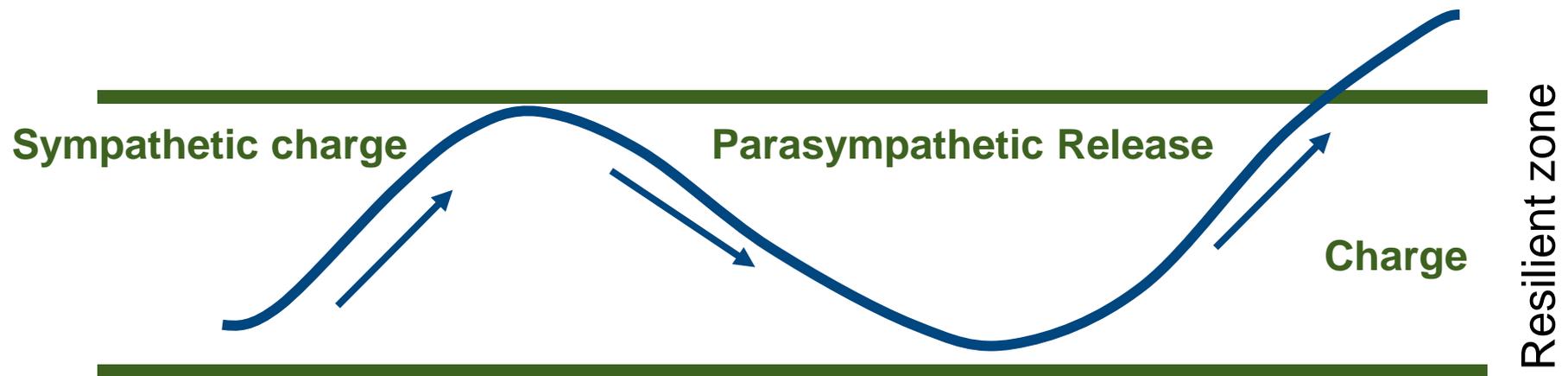
The new brain sits on top of the old brain

The old brain automatically overrides the new brain

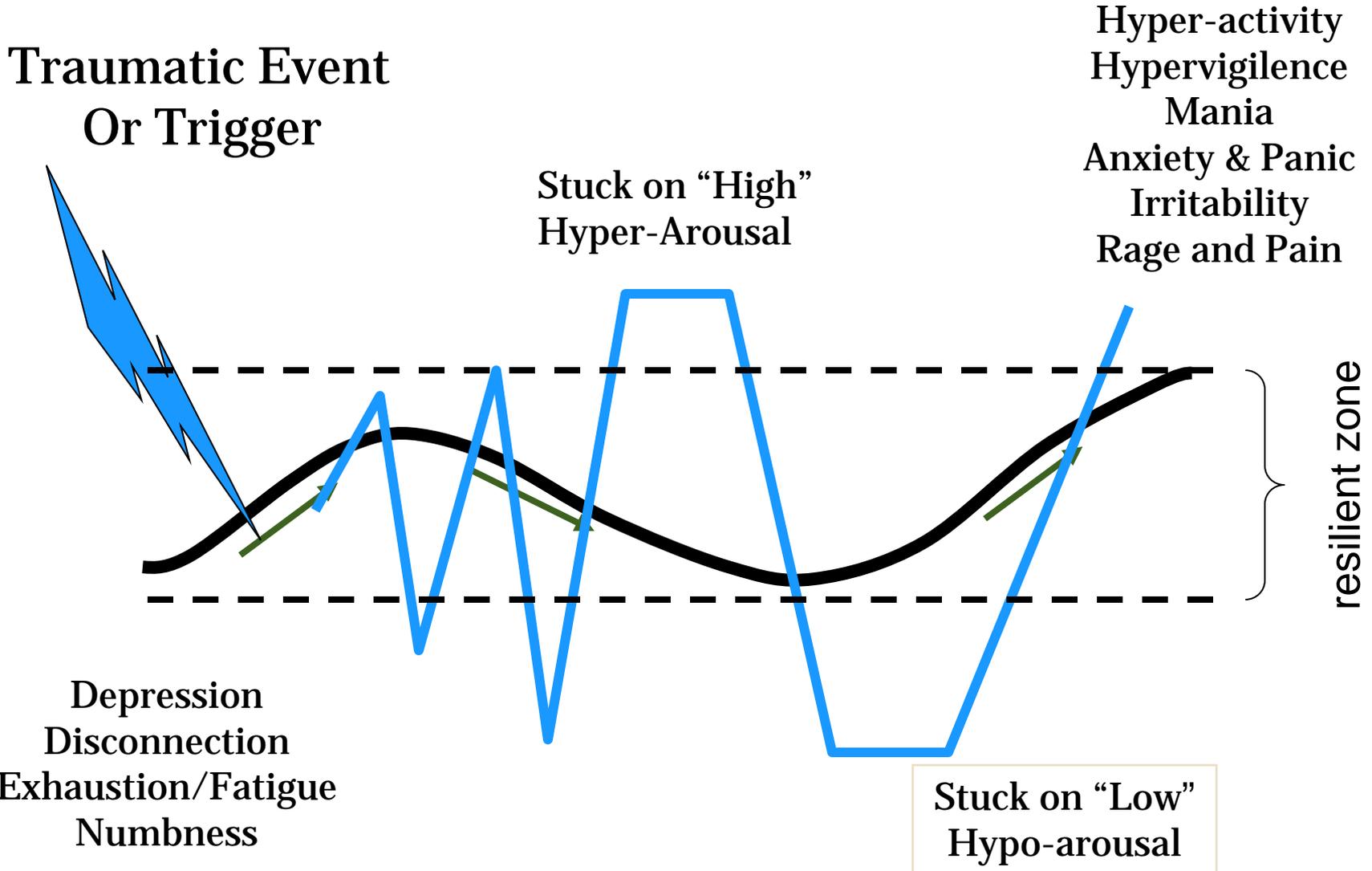
Defensive responses **impair analytic thinking & problem solving** and can **trigger reactivity**

The Resilient Zone: Individual Level

In the “Resilient Zone” we have the best capacity for flexibility and adaptability in mind, body and spirit and for integrative functioning.

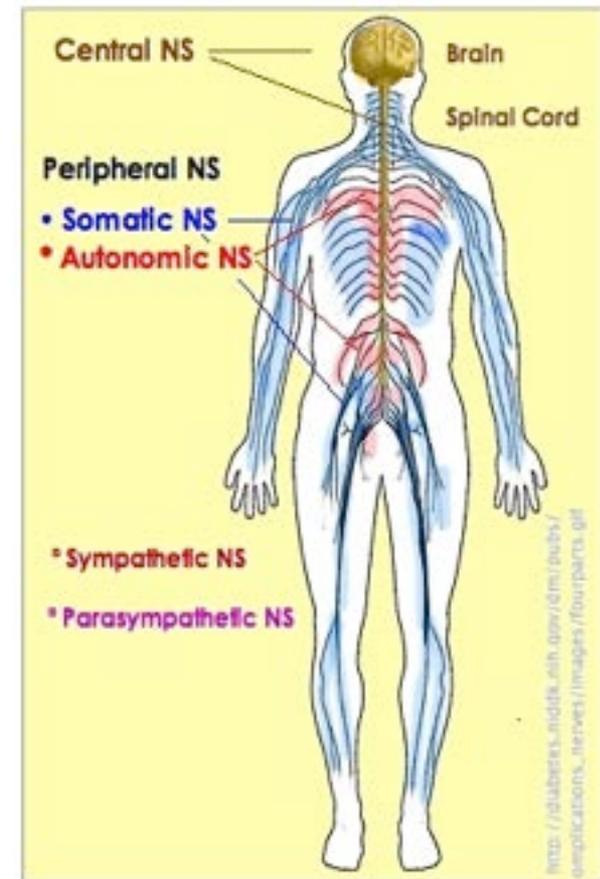


With practice SRM skills can help deepen the Resilient Zone



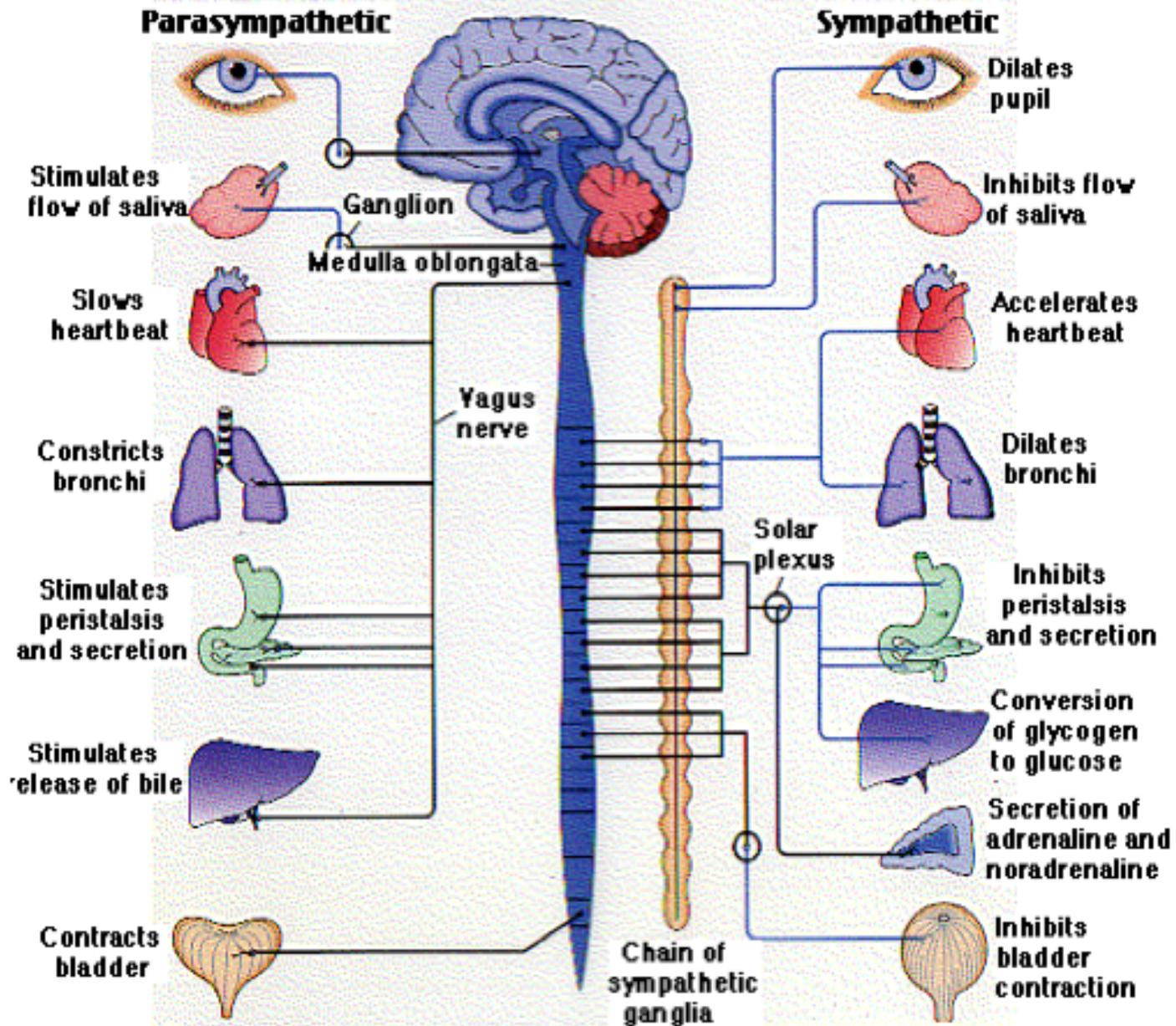
Biology vs. Pathology

- ◆ Stress, Distress, & trauma have a major effect on the nervous system
- ◆ We can learn to manage NS activation and calming
- ◆ Reframes symptoms from pathology to biology
- ◆ Attention to the non-traumatic sensations in the body helps people “come back into their bodies”



Focus: the Autonomic Nervous System

- ◆ Influences every organ in the body
- ◆ Below our level of consciousness
- ◆ ANS activity: a key way our system responds to sensory input from the environment
- ◆ Attention can be trained so that the ANS can be tracked and regulated



Arousal and the Nervous System

Arousal activates the Sympathetic NS.

It is our vitality when it remains within the Resilient Zone

When outside the Resilient Zone a cascade of physical, emotional, cognitive, spiritual and behavioral responses occurs

Arousal shapes perceptions of relationships



The Amygdala and Arousal

Some researchers have likened the amygdala to a “protection device” Mason, et.al, 2006

Strong evidence from animal studies that the amygdala is the critical nexus of fear conditioning Whalen & Phelps, 2009

Initially neutral cues become **coupled** with an aversive stimulus or “trigger”

Fear responses are stored in the implicit memory system and can be triggered by these associational cues

Perceptions of danger (or safety) can be projected onto other individuals and places whether “true” or not

Correction Officer Overarousal

- Can lead to “**armor**ing”
- Influenced by mirror neurons via others in the prison
 - Copies the emotions of others
 - Creates risk of spreading across work teams
 - Can lead to **secondary traumatization** and ‘burnout’
- Importance of **sensory tracking via self-directed attention**
- Amygdala: the “**smoke detector**” of the brain
 - Designed for survival
 - Can become stuck in over-vigilance
 - Affects relationship quality

SRM: Attentional Practice/Intervention

- Every skill relies on **focused attention**
- Studies show that attention is a **trainable** skill that can be enhanced through focused attention practices
- Managing attention promotes **management of arousal**
 - Less activation in the amygdala of the brain
 - Greater capacity for healthy social engagement
 - With practice **resilience is “wired in”**

The Eight Core SRM Skills

1 Sensory Tracking

2 Grounding

3 Resourcing

**4 Resource
Intensification**

5 Titration

6 Shift and Stay

7 Pendulation

**8 Completion of
Defensive Responses**

SRM Skills Can Be Used By Clinicians and Non-clinicians

CLINICAL: uses all 8 skills

- Used to work through distressing and traumatic events
- Sessions may be incorporated with other clinical modalities
EMDR
CBT, DBT
Other

NON-CLINICAL: uses 6 skills

- Individuals for self-care
- Families with family members
- Work teams
- Peer to peer
- Caregivers with self and others

Primary Goals of SRM

- ◆ To develop curiosity and self-awareness
- ◆ To develop the capacity to **shift attention** between states of discomfort and states of comfort = self-regulation
- ◆ To discharge undigested energy from stress, distress and trauma and **restore balance** to the nervous system
- ◆ To **deepen the Resilient Zone** through skills practice
- ◆ To restore hope, dignity and the ability to manage activation

Corrections Officer Well-being

- ◆ Sensory Attention is used to arousal/activation and calming in self and other
- ◆ SRM skills are used to **build sensory resources** which activate the parasympathetic NS, bring calming & balance, and change appraisal processes
- ◆ Neuroeducation is used to promote skills use and practice
- ◆ Greater self-regulation builds more positive relationships, collaboration, and self-respect

Engaging the Wisdom of the Mind-body System: Gentle, Powerful, and Effective

