


# The Neuroscience of Inner Peace, Resilience and Well-Being

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Serenity is not freedom from the storm  
but peace amidst the storm.


- author unknown


# 6 C's of Coping

- Calm
- Compassion
- Clarity
- Connections to Resources
- Competence
- Courage

# Resilience


- Bouncing back from challenges and crises
- Recovering our balance and groundedness
- Finding refuges and maximizing resources
- Shifting perspectives, opening to possibilities, creating options, finding meaning and purpose

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- Inner focus – Calm, Clarity
  - Other focuses – Compassion, Connections to Resources
  - Outer focus – Clarity, Competence, Courage



The brain is shaped by experience. And because we have a choice about what experiences we want to use to shape our brain, we have a responsibility to choose the experiences that will shape the brain toward the wise and the wholesome.

- Richard J. Davidson, Phd




The field of neuroscience is so new,  
we must be comfortable not only  
venturing into the unknown  
but into error.

- Richard Mendius, M.D.

# Neuroplasticity

- Growing new neurons
- Strengthening synaptic connections
- Myelinating pathways – faster connections
- Rebuilding brain structure
- Re-organizing functions of structures
  
- ....lifelong




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- Evolutionary legacy
  - Genetic loading
  - Family of origin conditioning
  - Norms-expectations of culture-society

Who we are and how we cope...

...is not our fault.

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- Given neuroplasticity
  - And choices of self-directed neuroplasticity

Who we are and how we cope...  
...is our responsibility.



Between a stimulus and response there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom. The last of human freedoms is to choose one's attitude in any given set of circumstances.

- Viktor Frankl, Austrian psychiatrist, survivor of Auschwitz

# Conditioning

- Experience causes neurons to fire
- Repeated experiences, repeated neural firings
- Neurons that fire together wire together
- Strengthen synaptic connections
- Connections stabilize into neural pathways
  
- Conditioning is neutral, wires positive and negative

# Pre-Frontal Cortex

- Executive center of higher brain
- Evolved most recently – makes us human
- Development kindled in relationships
- Matures the latest – 25 years of age
- Evolutionary masterpiece
  
- CEO of resilience

# Functions of Pre-Frontal Cortex

- Regulate body and nervous system
- Quell fear response of amygdala
- Manage emotions
- Attunement – felt sense of feelings
- Empathy – making sense of experience
- Insight and self-knowing
- Response flexibility

# Mechanisms of Brain Change

- New Conditioning – focused attention
- Re-Conditioning – juxtaposed attention
- De-Conditioning – de-focused attention

# New Conditioning

- Choose new experiences
- Create new learning, new memory
- Encode new wiring
- Install new pattern of response



# Re-conditioning

- “Light up” neural networks
- Juxtapose old negative with new positive
- De-consolidation - re-consolidation
- New rewires old

# De-conditioning

- De-focusing
- Loosens grip
- Creates mental play space
- Plane of open possibilities
- New insights, new behaviors

# Modes of Processing

Focused

Tasks and details

Self-referential

Mindful focus on breath, image, phrase

New conditioning and re-conditioning

# Modes of Processing

De-focused

Default network

Fertile neural background noise

Open, spacious, vast

Mindful dissolving self into sacred

De-conditioning

# Practice to Accelerate Brain Change

- Presence – primes receptivity of brain
- Intention/choice – activates plasticity
- Perseverance – creates and installs change

# Keep Calm and Carry On

- Regulate distress of lower brain; create response flexibility in higher brain
- Equanimity
- Return to physiological baseline of calm
- Access being mode to anchor doing mode

# Window of Tolerance

SNS – explore, play, create, produce OR  
fight-flight-freeze

Baseline physiological equilibrium

Calm and relaxed, engaged and alert

WINDOW OF TOLERANCE

Relational and resilient

Equanimity

PNS – inner peace, serenity OR numb out, collapse

# Hand on the Heart

- Touch – oxytocin – safety and trust
- Deep breathing – parasympathetic
- Breathing ease into heart center
  - Brakes on survival responses
  - Coherent heart rate
- Being loved and cherished
- Oxytocin – direct and immediate antidote to stress hormone cortisol



# Touch

- Hand on heart, hand on cheek
- Head rubs, foot rubs
- Massage back of neck
- Hugs – 20-seconds, full-bodied

# Body-Based Resources for Calm

- Hand on the Heart
- Progressive Muscle Relaxation
- Friendly Body Scan
- Movement Opposite

# The Calm of Spacious Awareness

Awareness is like a vast sky that clouds and storms pass through.

A contracted mind is like looking at the sky with a pipe; with awareness we put down the pipe and look at the sky whole.

# Modern Physics and Awareness

Matter is more space than “stuff”

Self is more space than “stuff”

We can shift and flow amongst the “stuff”

Self as a verb

Dissolve into non-self, the sacred



I am larger than I thought.

I didn't know I held so much goodness.

- Walt Whitman

# Equanimity for Two

Partner A lies on the floor, and breathes.

Partner B sits near partner A, places one hand on A's forearm, and the other hand on the crown of A's head.

Partner B synchronizes his/her breathing with Partner A

# Brahma Viharas

- Loving Kindness
- Compassion
- Sympathetic Joy
- Equanimity



Wisdom teaches me I am nothing.

Love teaches me I am everthing.

Between the two, my life flows.

- Sri Nisargadatta



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