

The background features a gradient from light green at the top to dark blue at the bottom. It is overlaid with several semi-transparent circular elements, including concentric circles, dashed lines, and arrows, suggesting a scientific or technical theme. A large, faint scale is visible on the left side, with numbers ranging from 40 to 260 in increments of 10.

# The Biology of the Human Condition

CHRISTINE O'BRIEN DO

VA Whole Health Director

Medical Acupuncturist

Trauma sensitive Yoga Instructor

Contemplative Outreach Coordinator

Heartmath Biofeedback Trainer

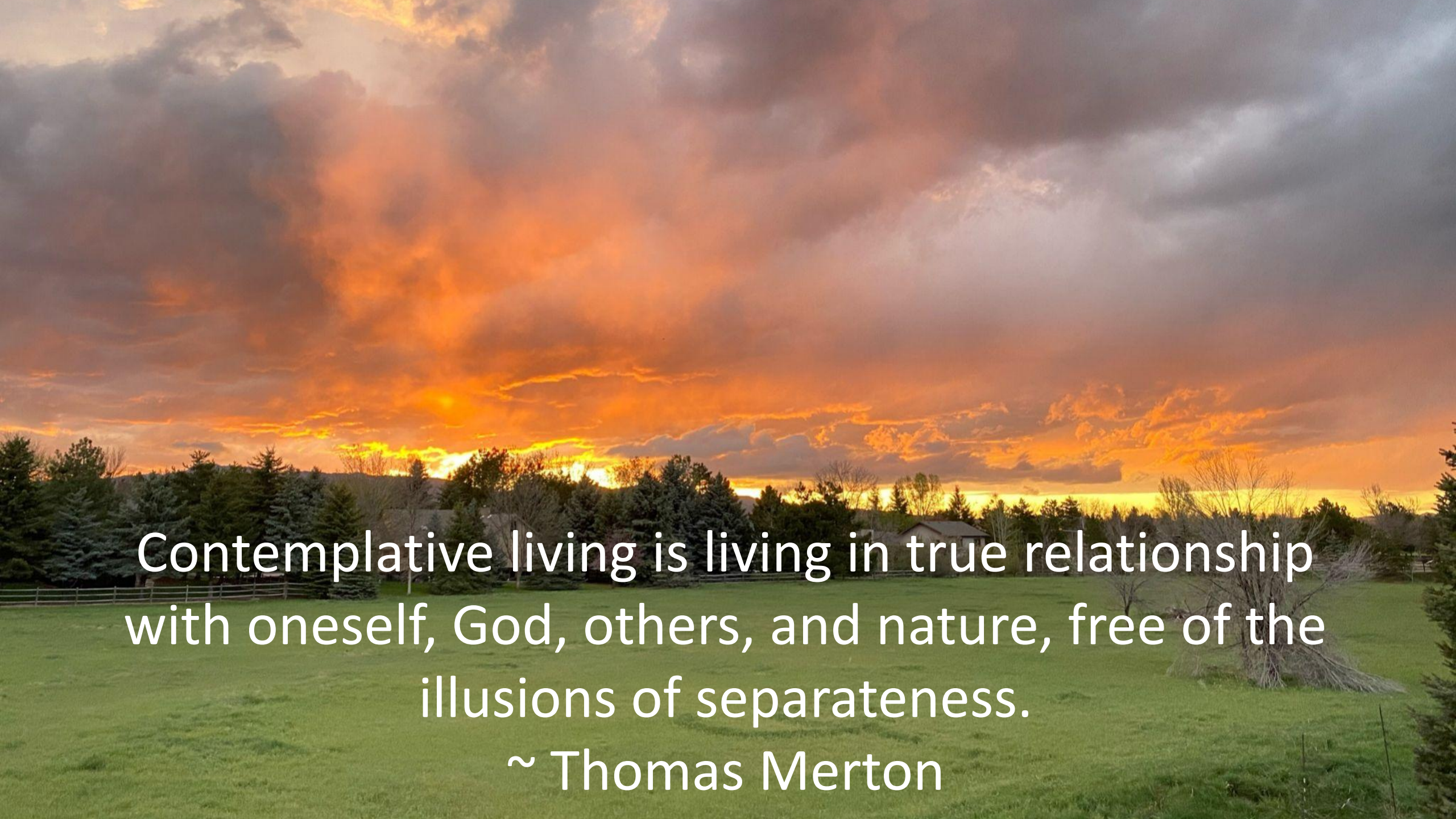


The Neuroscience of the Human Condition and Trauma

The Human Condition, Trauma and Moral Injury

Trauma, Moral Injury and Contemplative Practices for Whole Person Integration (harmonizing our centers).



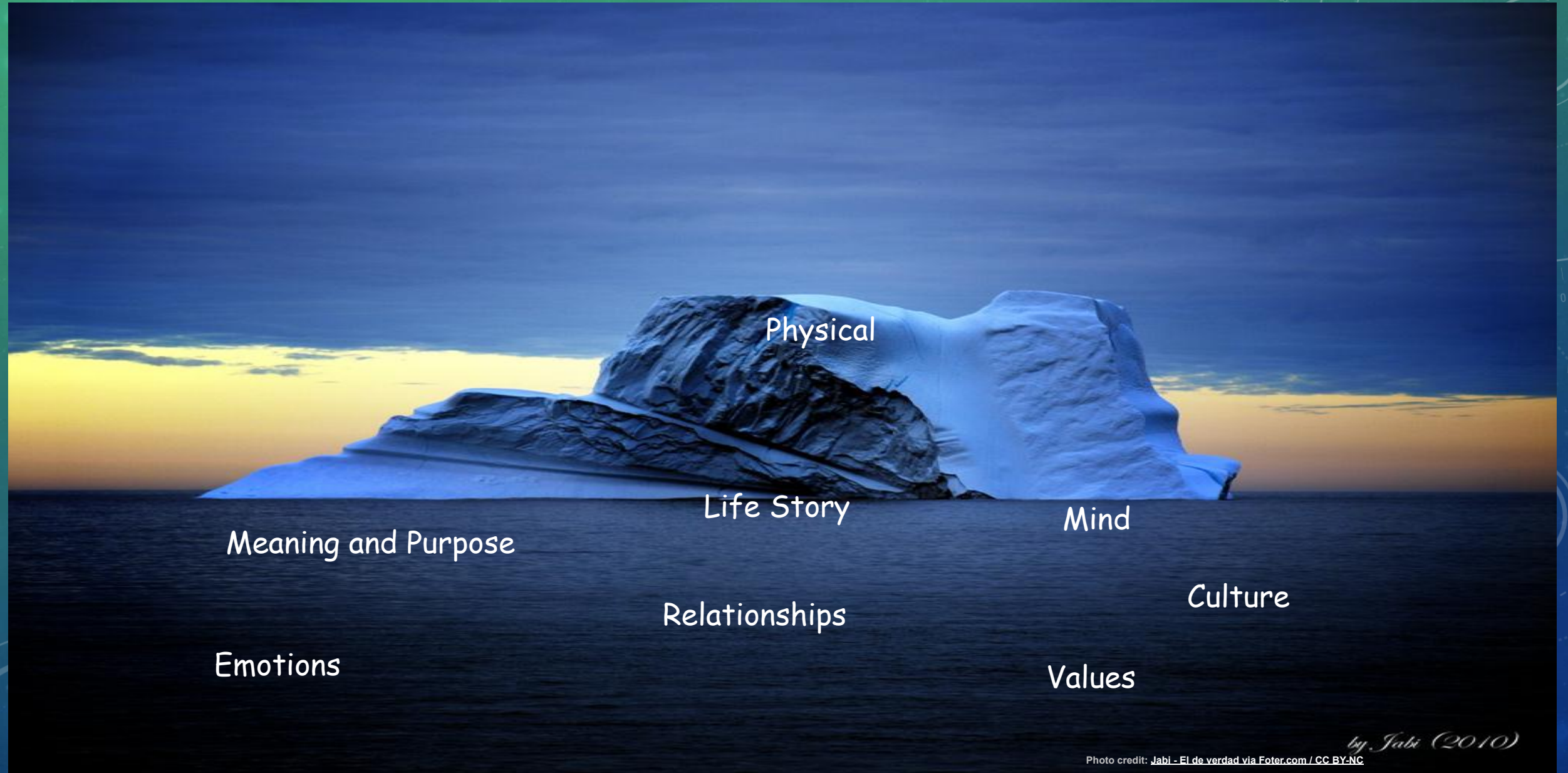
A dramatic sunset over a green field. The sky is filled with large, dark clouds that are illuminated from below by the setting sun, creating a vibrant orange and yellow glow. The sun is visible as a bright, glowing orb on the horizon, partially obscured by the clouds. In the foreground, there is a lush green field. In the middle ground, there is a line of trees, including evergreens and deciduous trees, and a small house is visible behind them. The overall scene is peaceful and serene.

Contemplative living is living in true relationship  
with oneself, God, others, and nature, free of the  
illusions of separateness.

~ Thomas Merton



# Whole Person: 90% Under the Surface



Physical

Life Story

Mind

Meaning and Purpose

Relationships

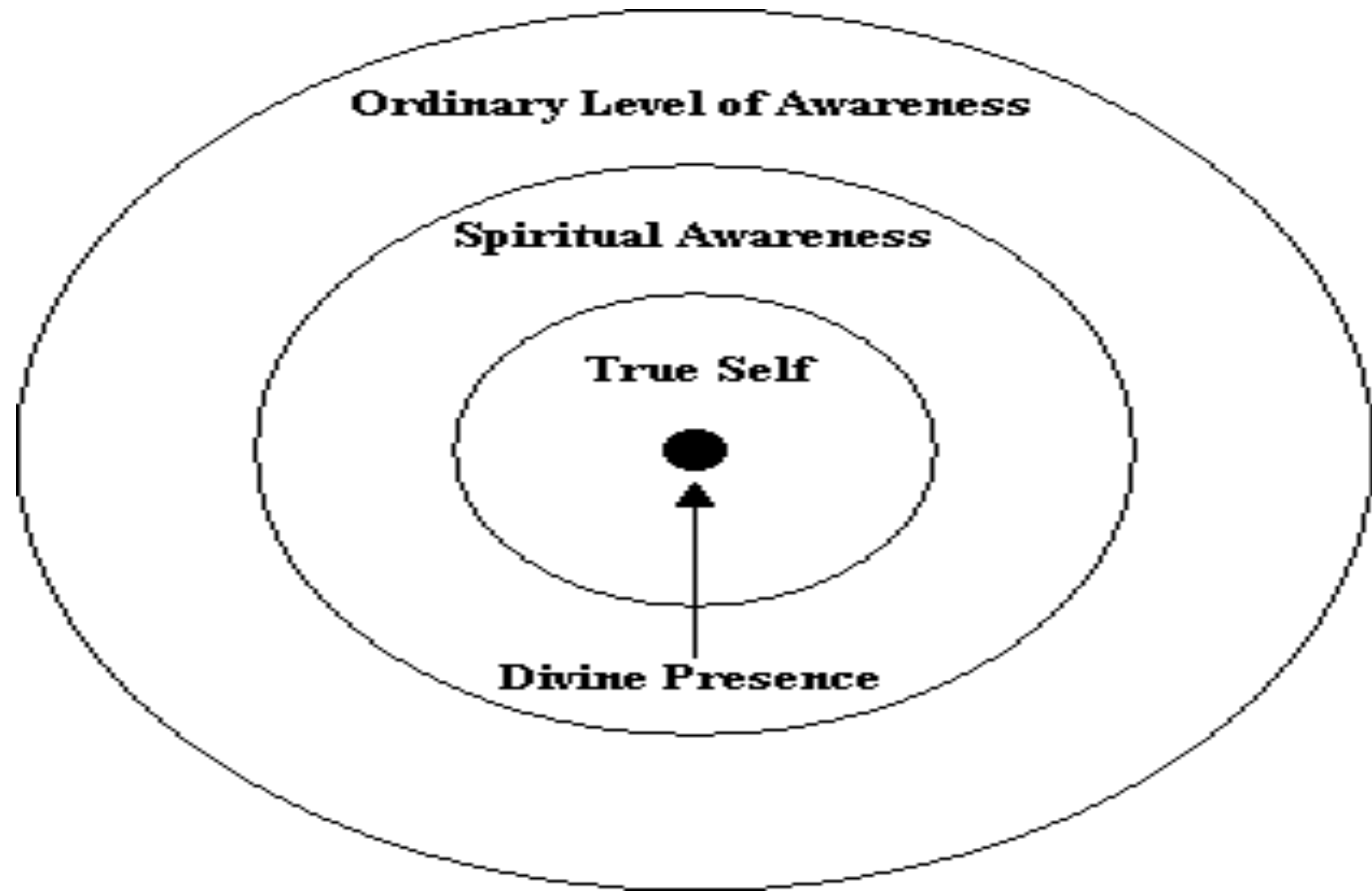
Culture

Emotions

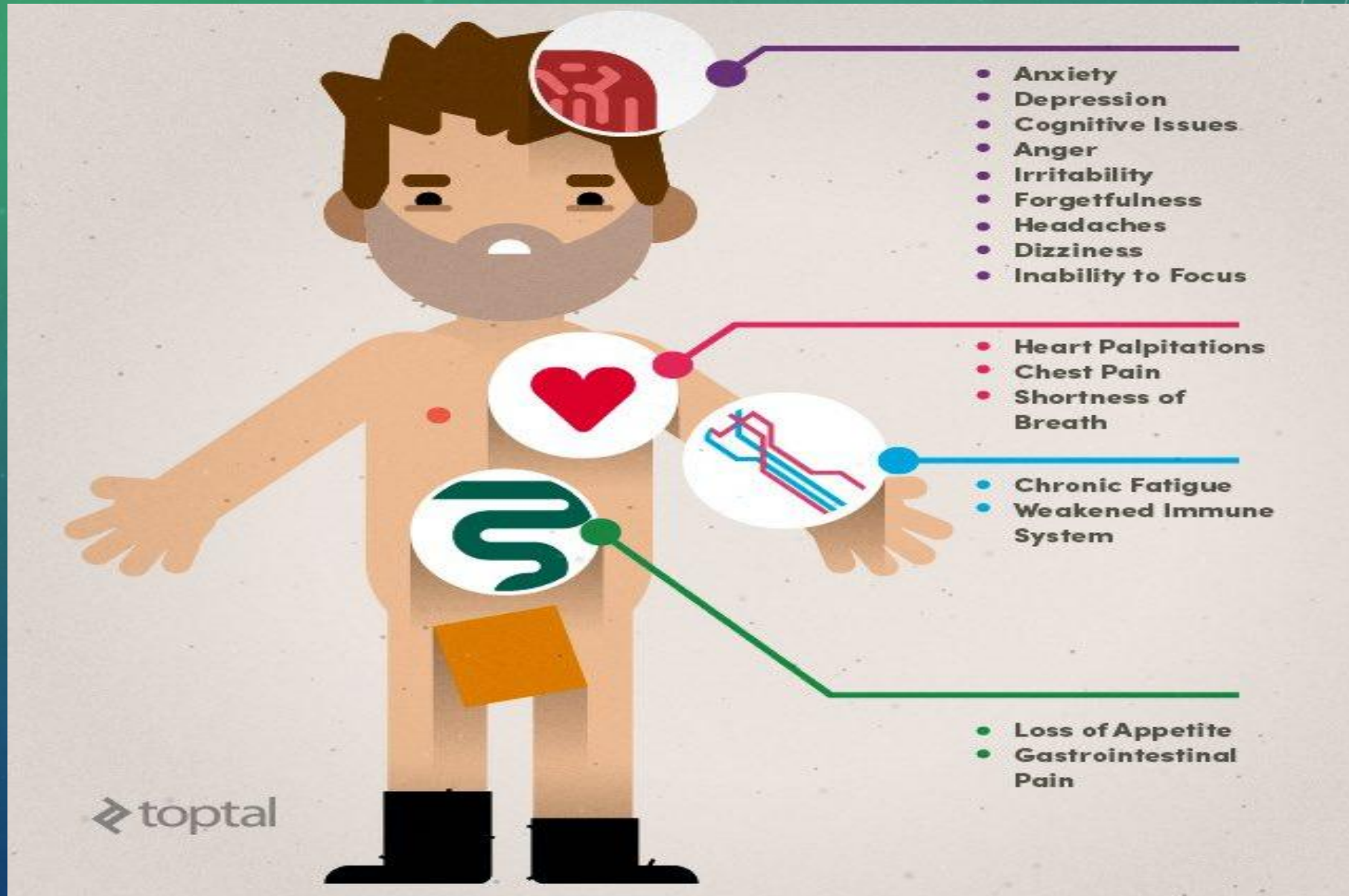
Values

*by Jabi (2010)*

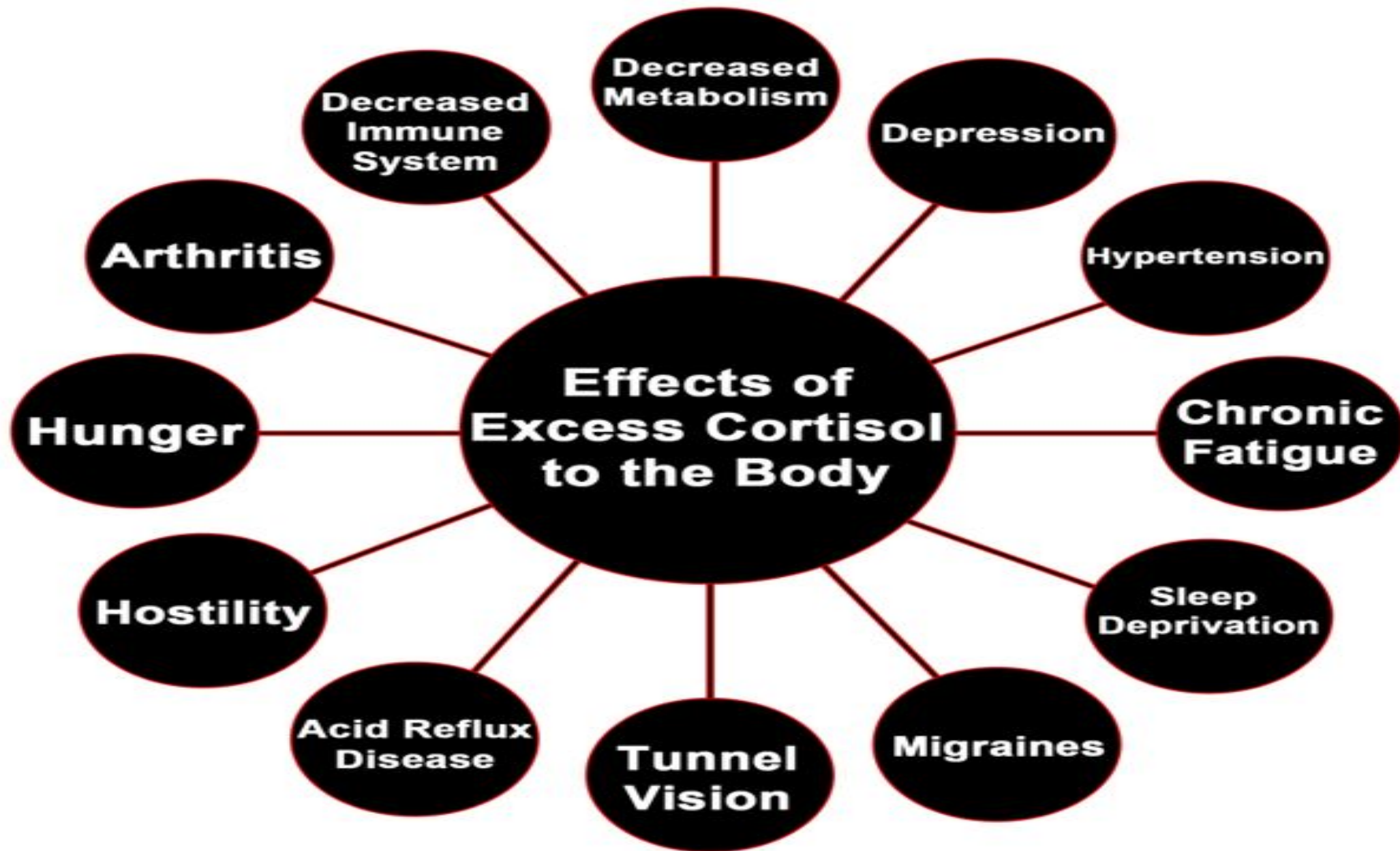
Photo credit: Jabi - El de verdad via Foter.com / CC BY-NC



# Symptoms of Sympathetic Fight, Flight, Freeze







**Cortisol - The Stress Hormone**

## Abuse



Physical abuse



Sexual abuse



Verbal abuse

## Neglect



Emotional neglect



Physical neglect

## Growing up in a household where:



There are adults with alcohol and drug problems



There are adults with mental health problems



There is domestic violence



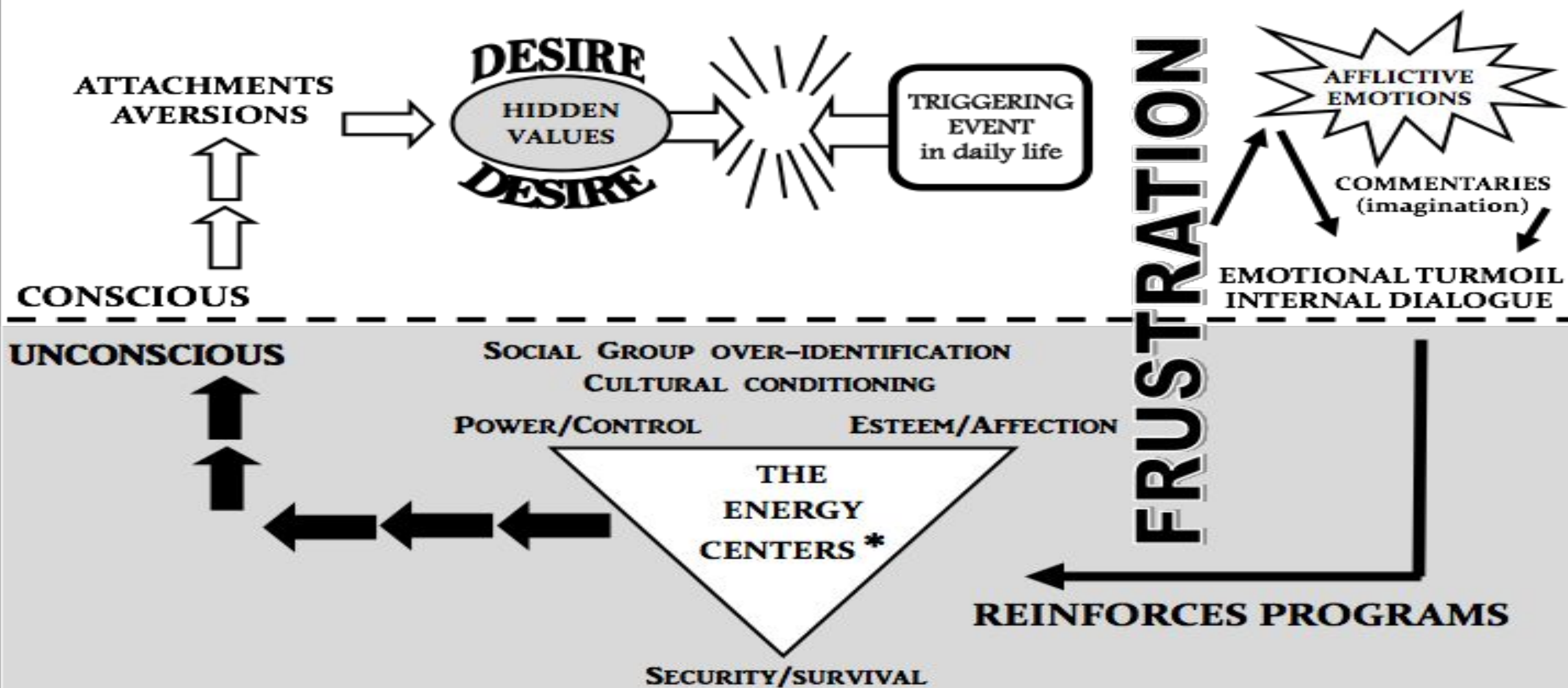
There are adults who have spent time in prison



Parents have separated

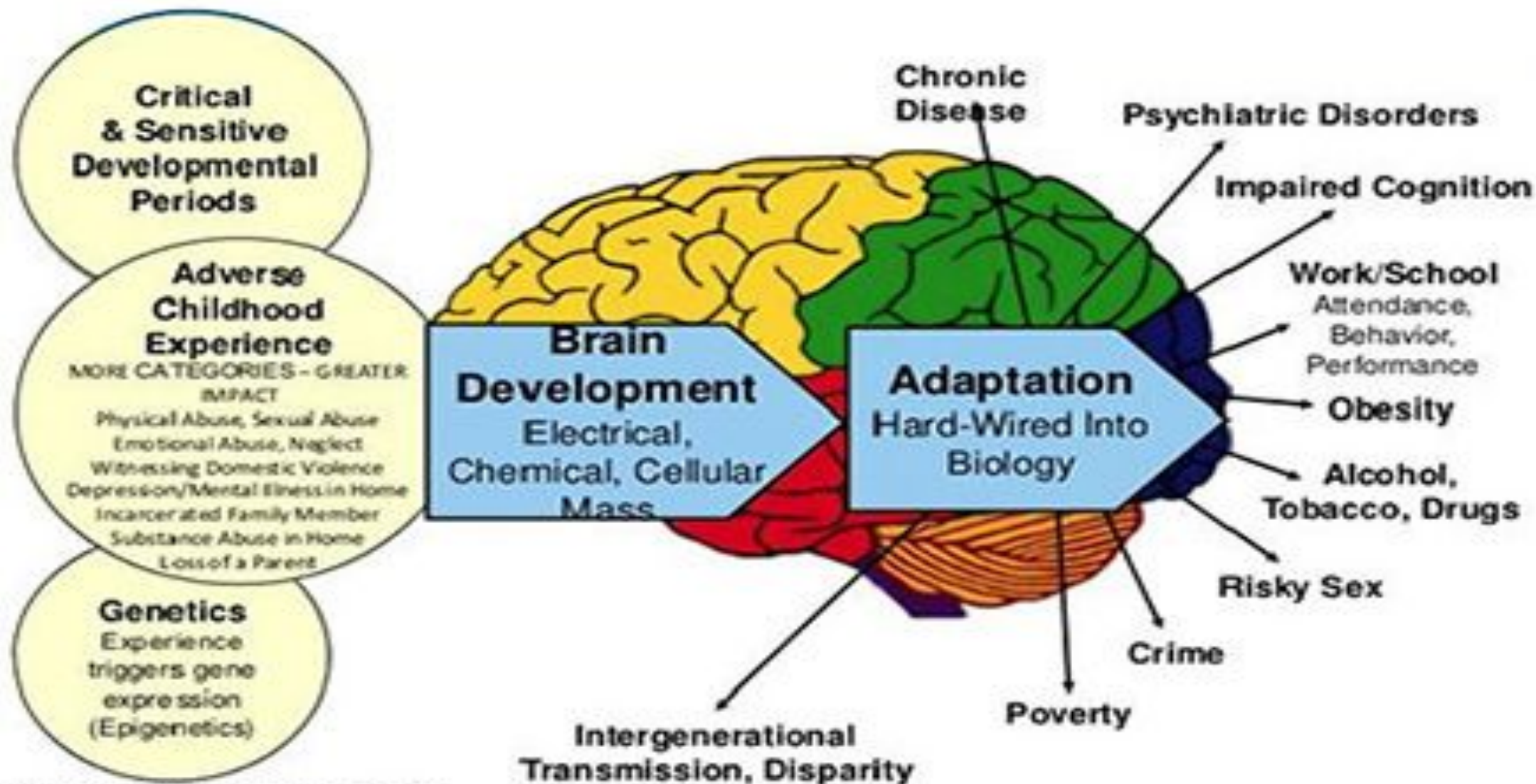


# THE FALSE SELF SYSTEM



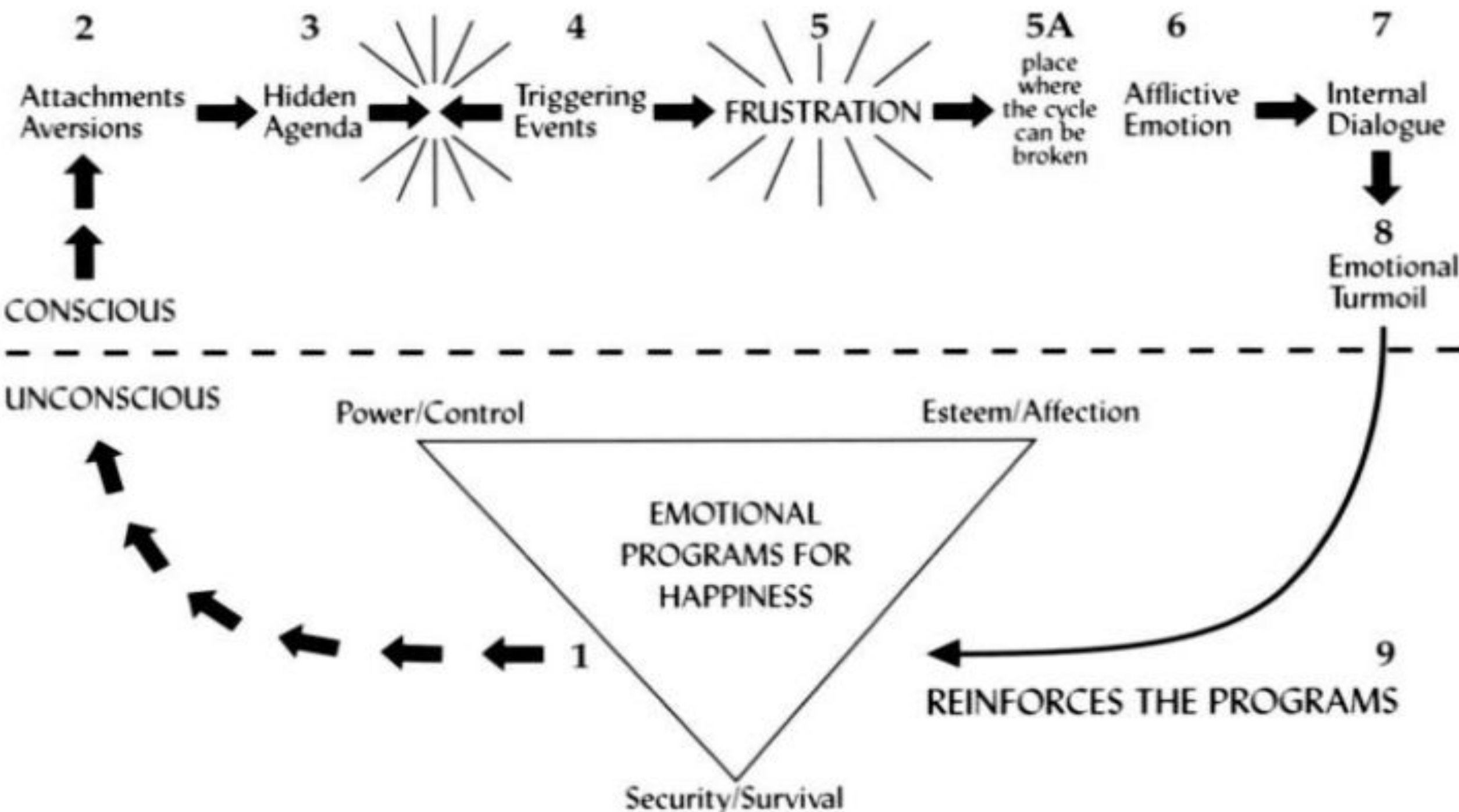
*\*Emotional programs for happiness based on values from early childhood.*

# Lifespan Impacts of ACEs

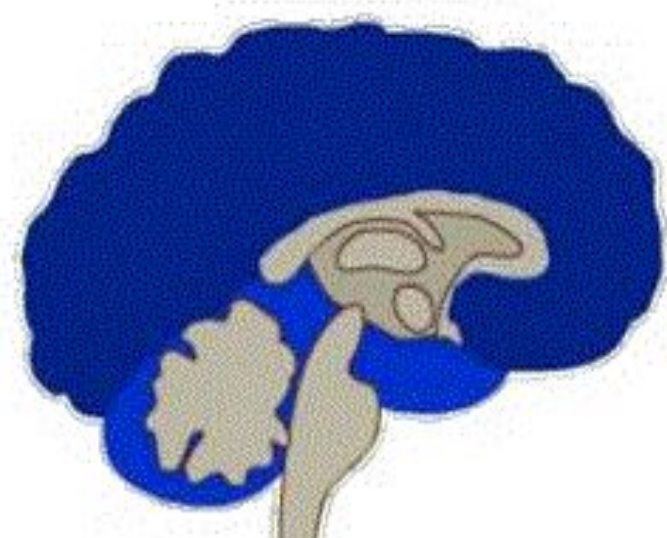
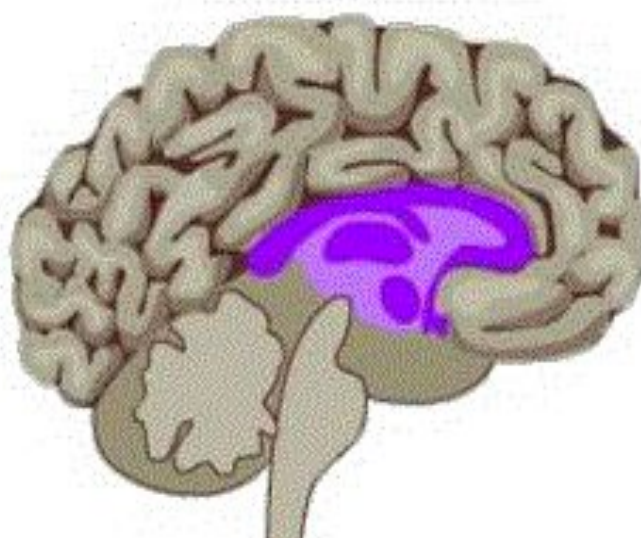
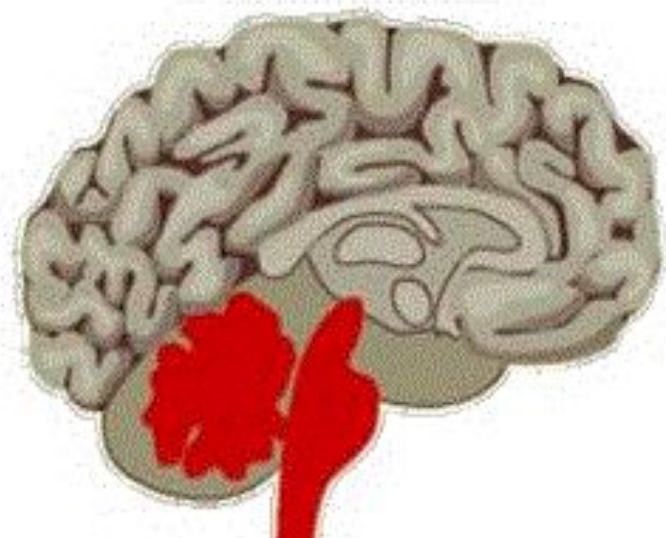


Source: Family Policy Council, 2012





Lizard Brain	Mammal Brain	Human Brain
Brain stem & cerebellum	Limbic System	Neocortex
Fight or flight	Emotions, memories, habits	Language, abstract thought, imagination, consciousness
Autopilot	Decisions	Reasons, rationalizes





# Why we 'flip our lid' or 'lose it'



- In the hand model of the brain, your fingers and thumb open and close in response to your internal body signals and your interpretation of the world around you.
- Bodily stress and distress, anxiety and fear make the fingers and thumb open up.
- Bodily safety, contentment and calm make the fingers and thumb close again.



# YOU HAVE 3 BRAINS



## THE HEAD

*The seat of logic and intellect. However the unconscious mind directs around 90% of behaviours.*



## THE HEART

*There are more neural pathways running from the heart to the head brain than from the head brain to the heart.*



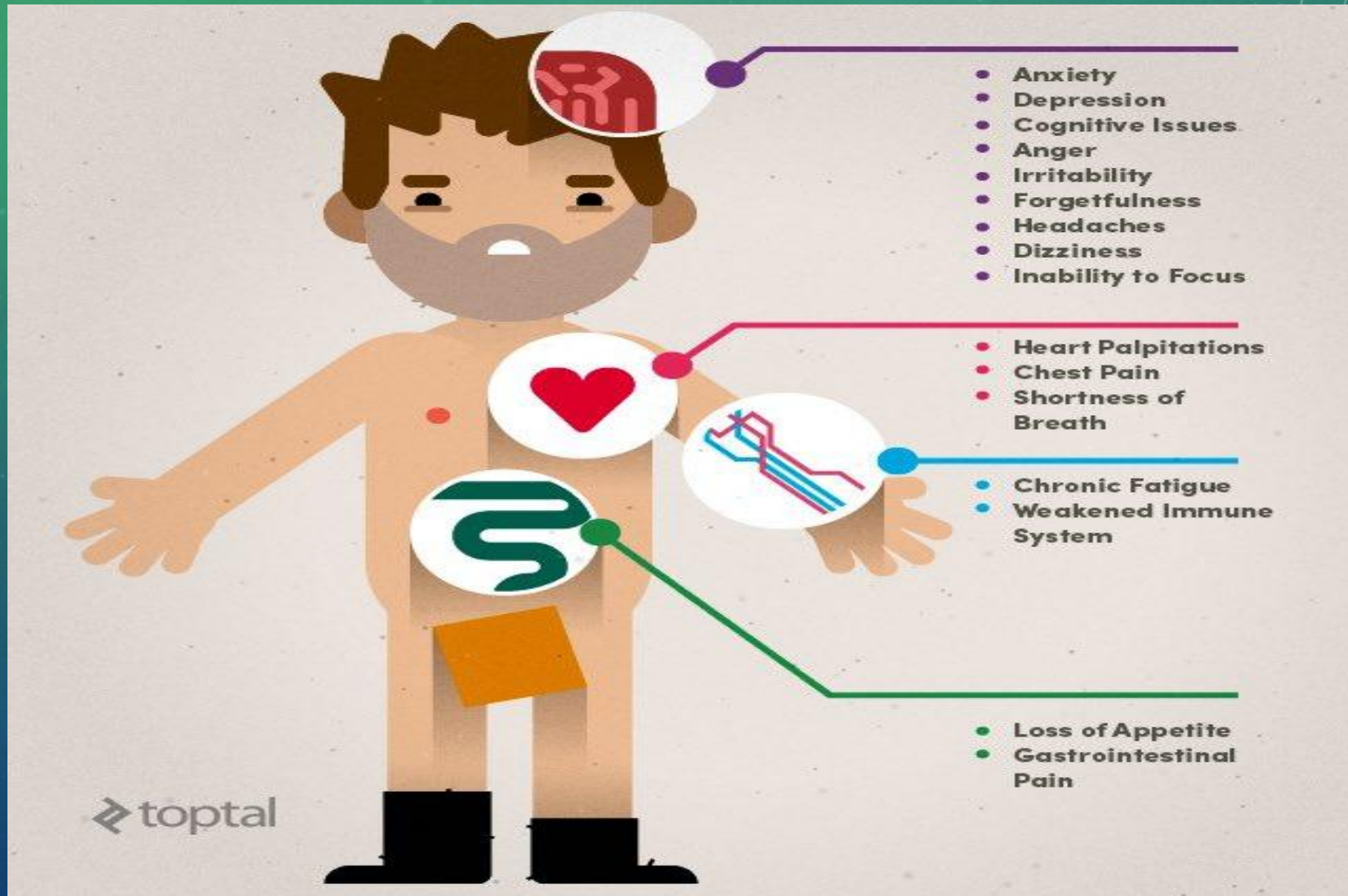
## THE GUT

*90% of the body's serotonin involved in mood management is produced in the gut*

*Now we know that the heart and gut have intricate networks of neurons, hormones and neurotransmitters that communicate with our brain and affect our perceptions, mental processes, feeling and performance in profound ways.*



# Symptoms of Sympathetic Fight, Flight, Freeze

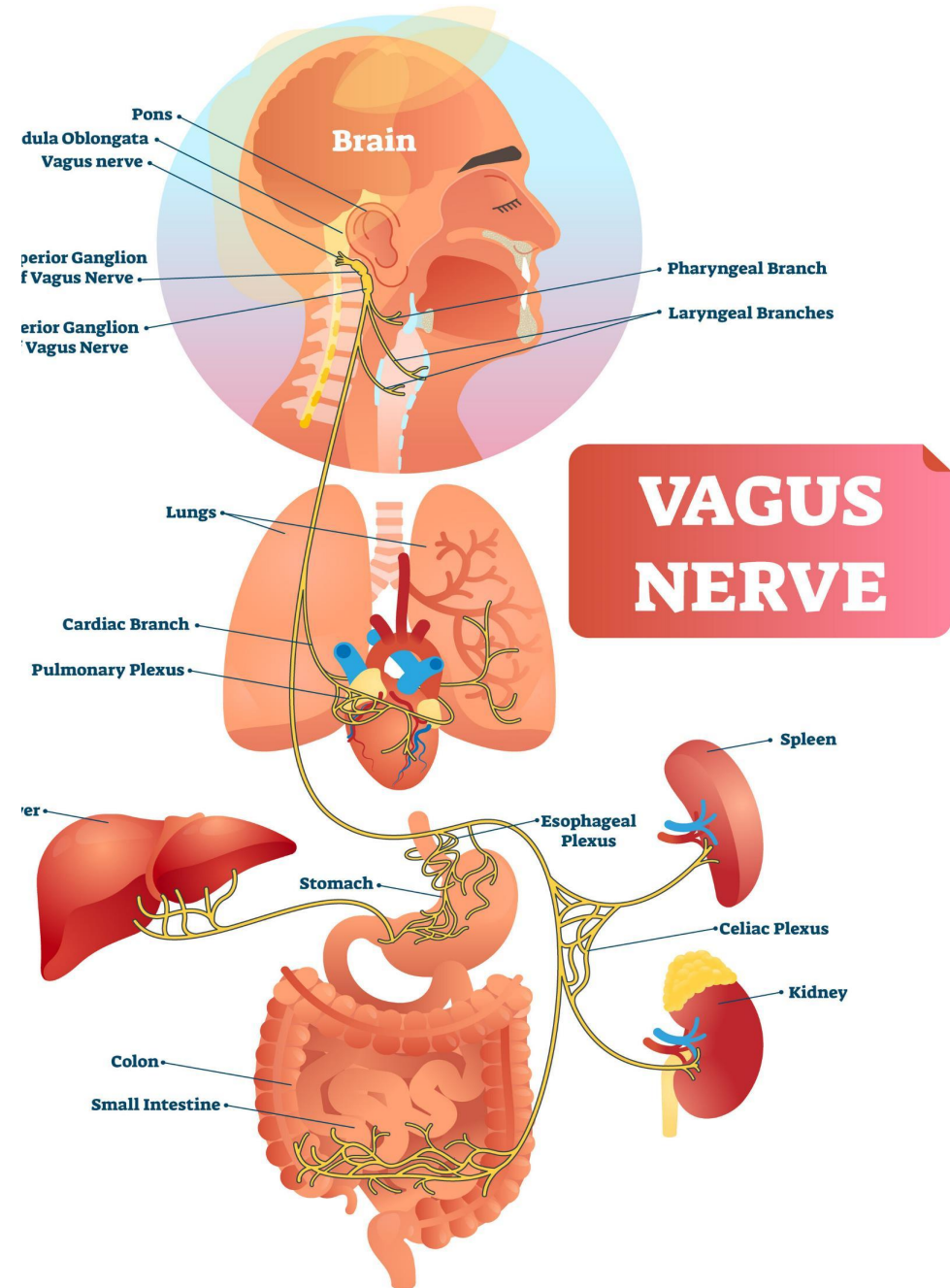


## • SAFETY/THRIVE

- Nerve of Compassion and Connection
- Wired for Innate Basis Goodness
- Parasympathetic: **Thrive** for Rest, Repair, Socially Engage

## • FEAR/THREAT

- Sympathetic: **Threat** for Fight Flight Freeze





## How The Vagus Nerve Affects Organ Systems

### Heart

Decreases heart rate, vascular tone.

### Liver

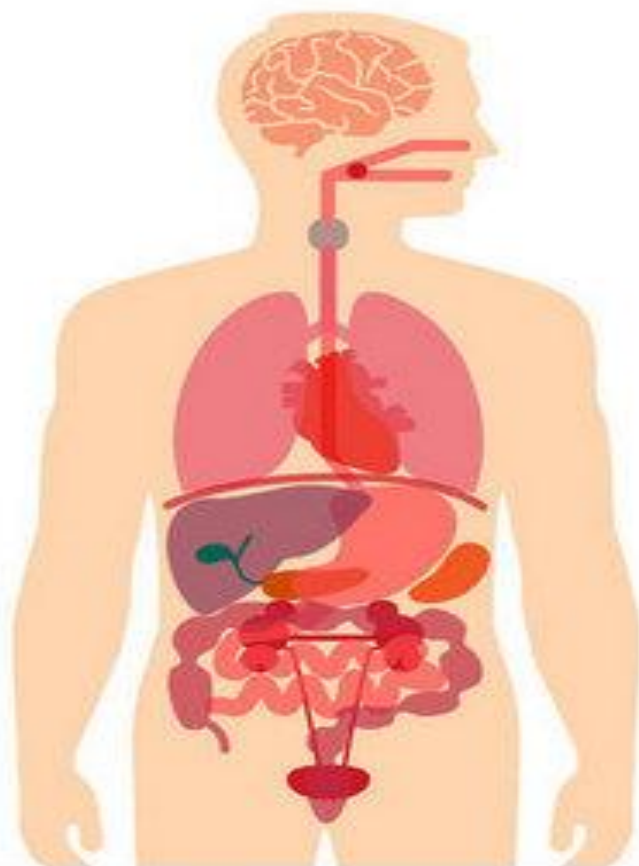
Regulates insulin secretion and glucos homeostasis in the liver.

### Gut

Increases gastric juices, gut motility, stomach acidity.

### Inflammation

Suppresses inflammation via the cholinergic anti-inflammatory pathway



### Brain

Helps keep anxiety and depression at bay. Opposes the sympathetic response to stress.

### Mouth

Taste information is sent via three cranial nerves, one of which is the vagus nerve. The vagus nerve is needed for the gag reflex, swallowing, and coughing.

### Blood Vessels

Decreases vascular tone, lowering blood pressure.

2. Inhale



1. Belly out



2. Exhale



1. Belly in







# Be Still and Know





## Oh My God

Oh: Nature caught your attention and made you present and mindful.

My: I am connected with something deep inside my soul yet a vast mystery.

God: God is the personal journey to be inspired and feel connected to a universe that celebrates life.

We as humans are a mystery, a miracle, minute and vast, interconnected.

Light processed in our eyes to create images in our brain that allow our heart to feel. The gift of nature cultivates appreciation and gratitude.

Louie Schwartzberg: time lapse photographer

# Vagus Nerve:

## Information Superhighway

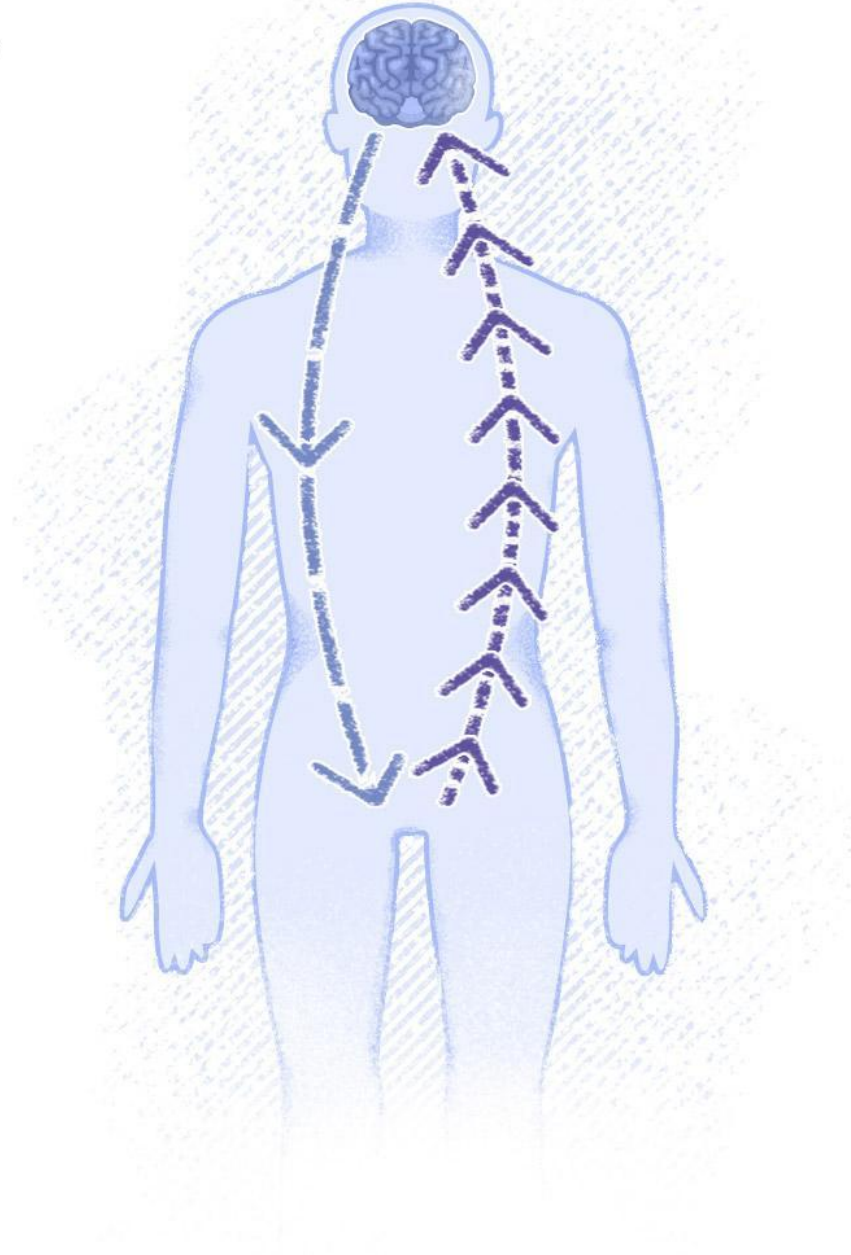
DID YOU KNOW?

**80%**

of the vagus nerve fibers  
communicate from  
the body to the brain

**20%**

communicate from  
the brain to the body



- Bidirectional Flow of Energy and Information from body to brain and brain to body



# Why we 'flip our lid' or 'lose it'



- In the hand model of the brain, your fingers and thumb open and close in response to your internal body signals and your interpretation of the world around you.
- Bodily stress and distress, anxiety and fear make the fingers and thumb open up.
- Bodily safety, contentment and calm make the fingers and thumb close again.



## Upstairs Brain

Allows us to think before we act

Decision-making

Control over emotions & body

Focus/concentration

Empathy

Self awareness



## Downstairs Brain

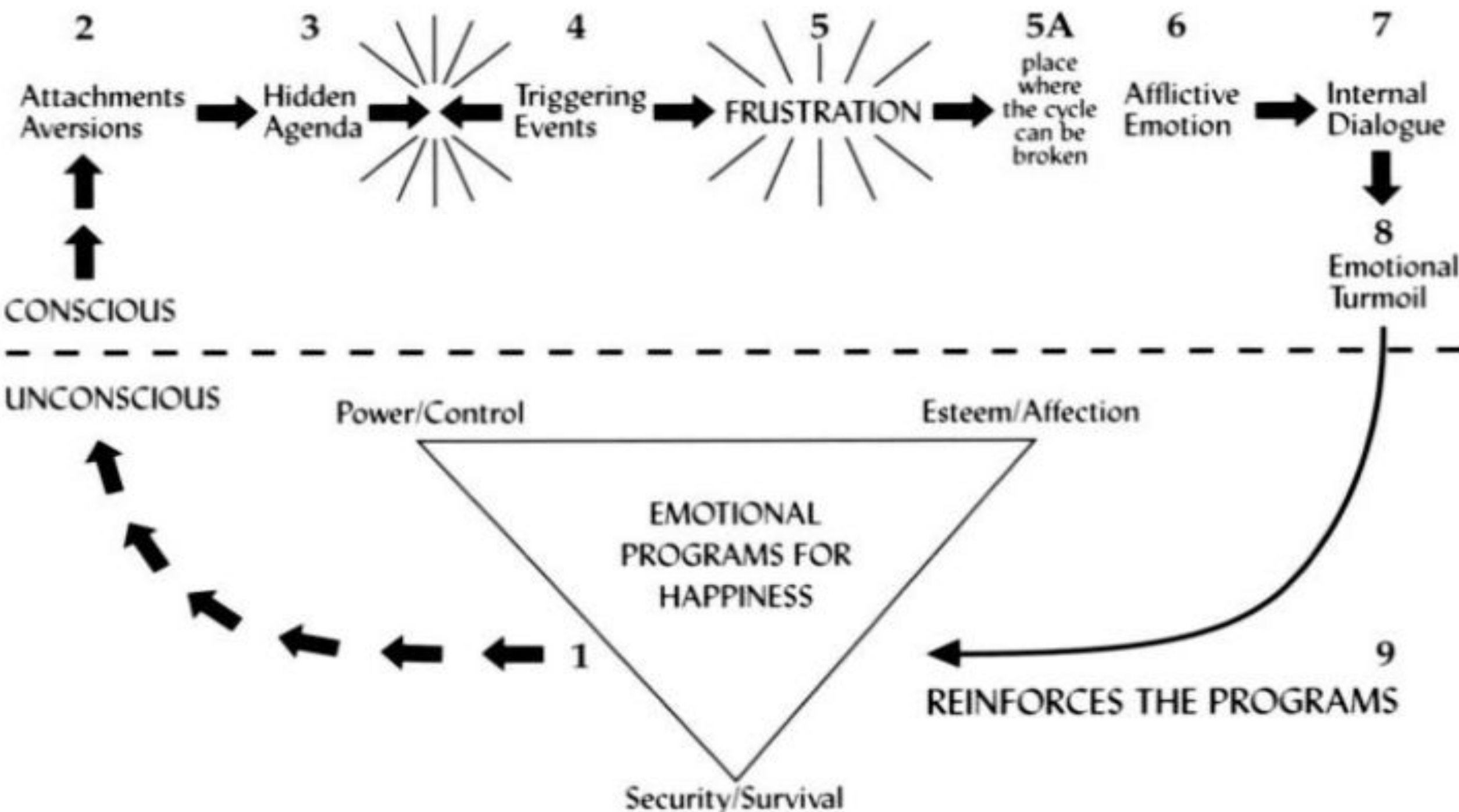
Allows us to act before we think

Fight/Flight response

Emotional reactions

Bodily functions





# Vagus Nerve:

## Information Superhighway

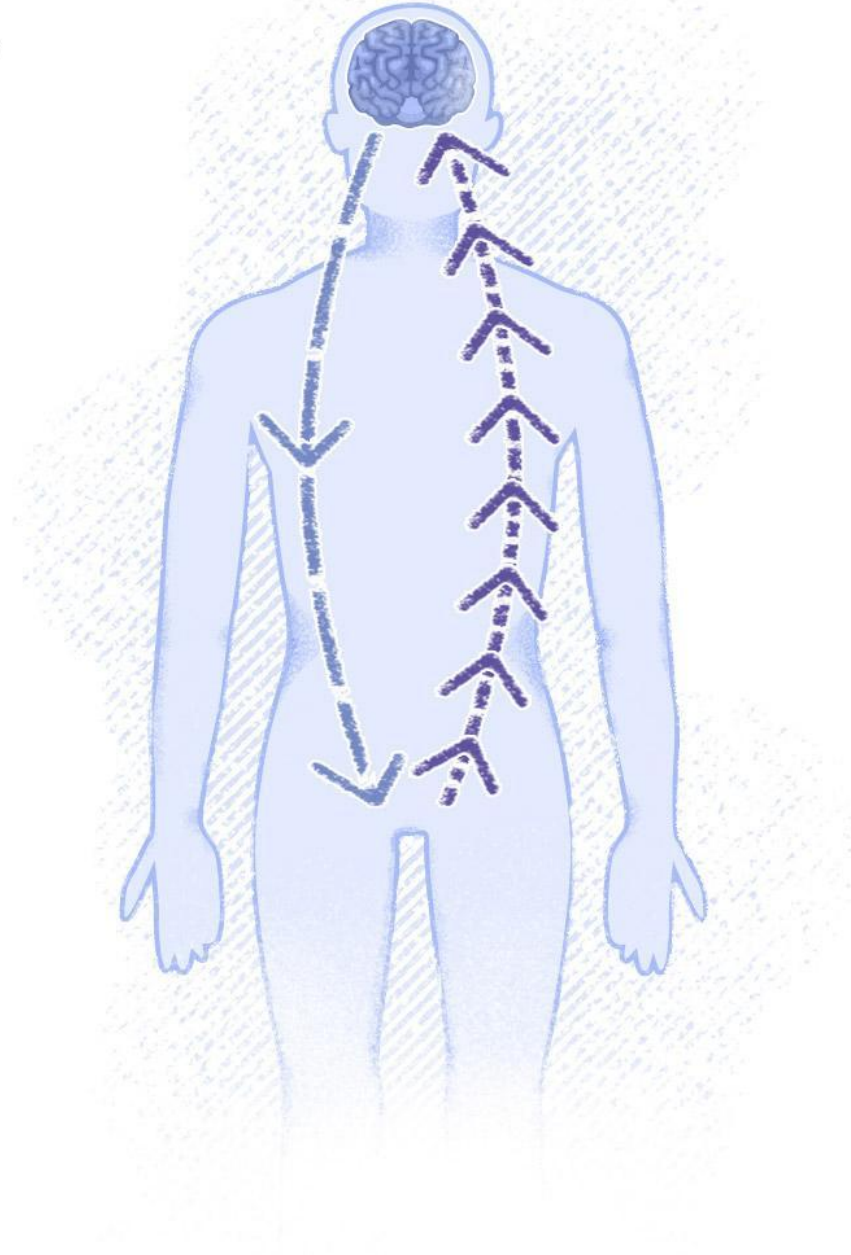
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# Neuroplasticity

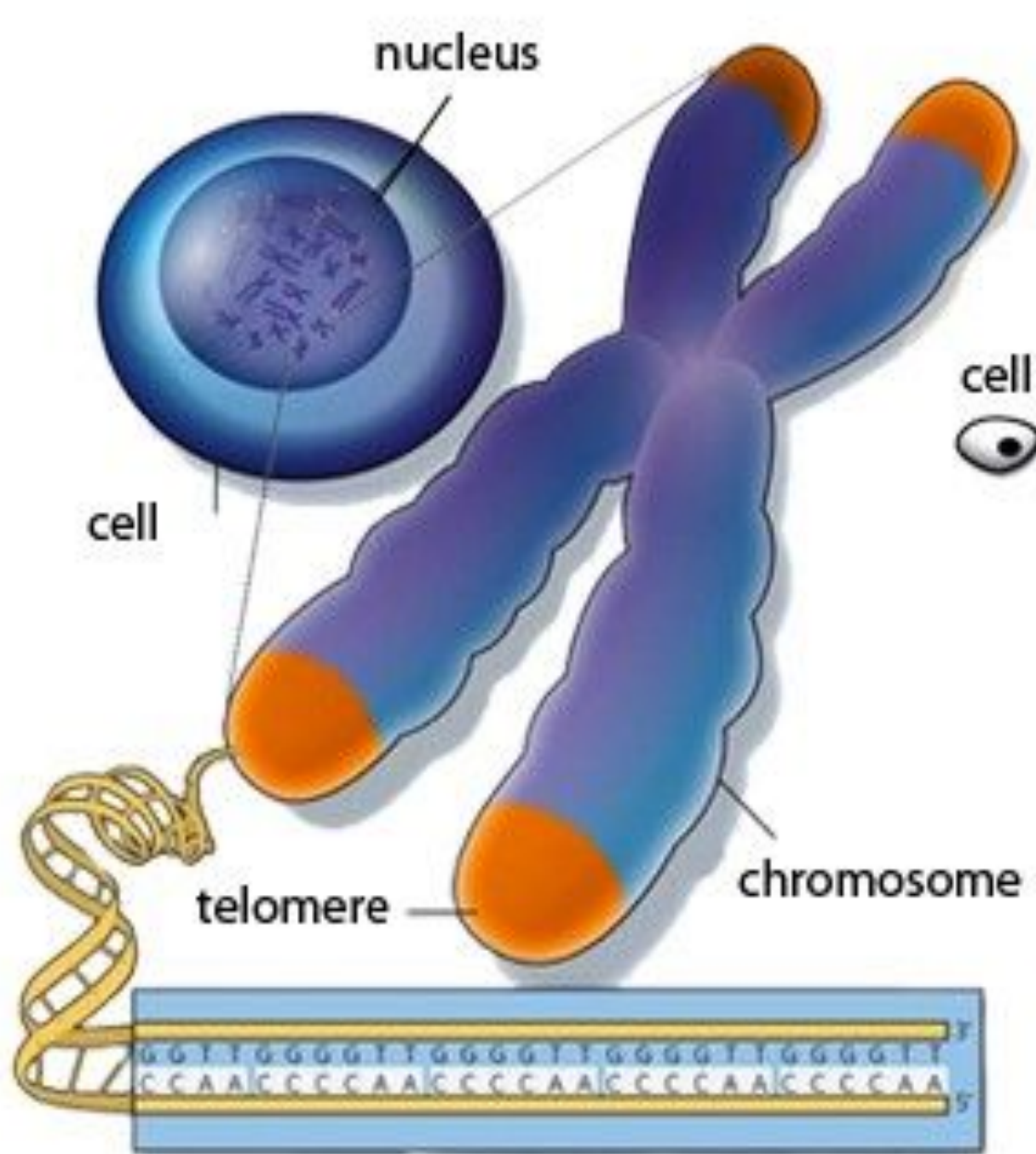
Your Brain's Ability to Rewire And Repair Itself



Neuroplasticity is the brain's ability to reorganize itself by forming new neural connections throughout life. Neuroplasticity allows the neurons (nerve cells) in the brain to compensate for injury and disease and to adjust their activities in response to new situations or to changes in their environment.

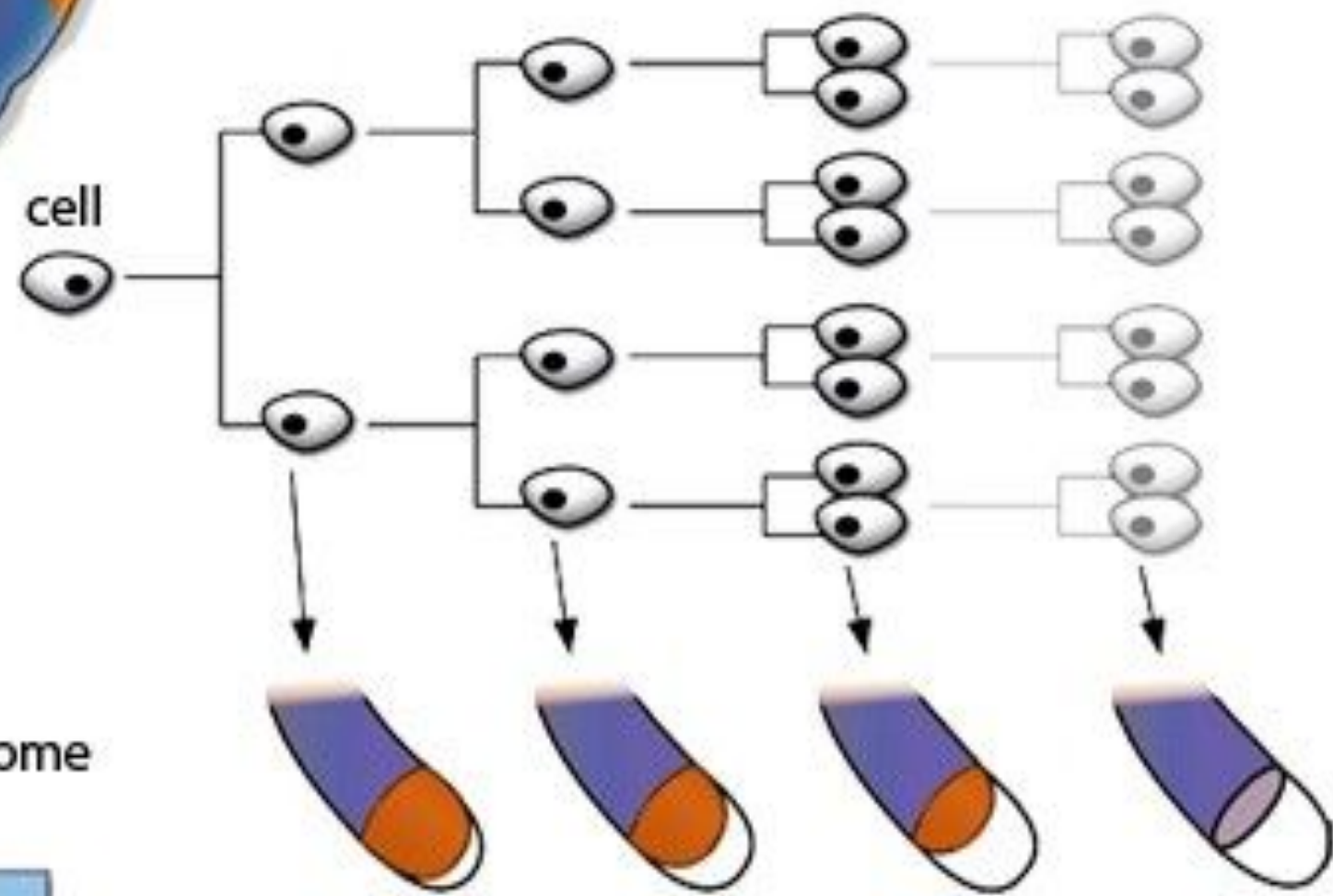
Source: medicinenet

S:EI @ScienceEvidenceIntelligence



# Epigenetics

*As the cell divide overtime (healthy cell)...*



*...telomeres shorten until cell division stops (senescence).*

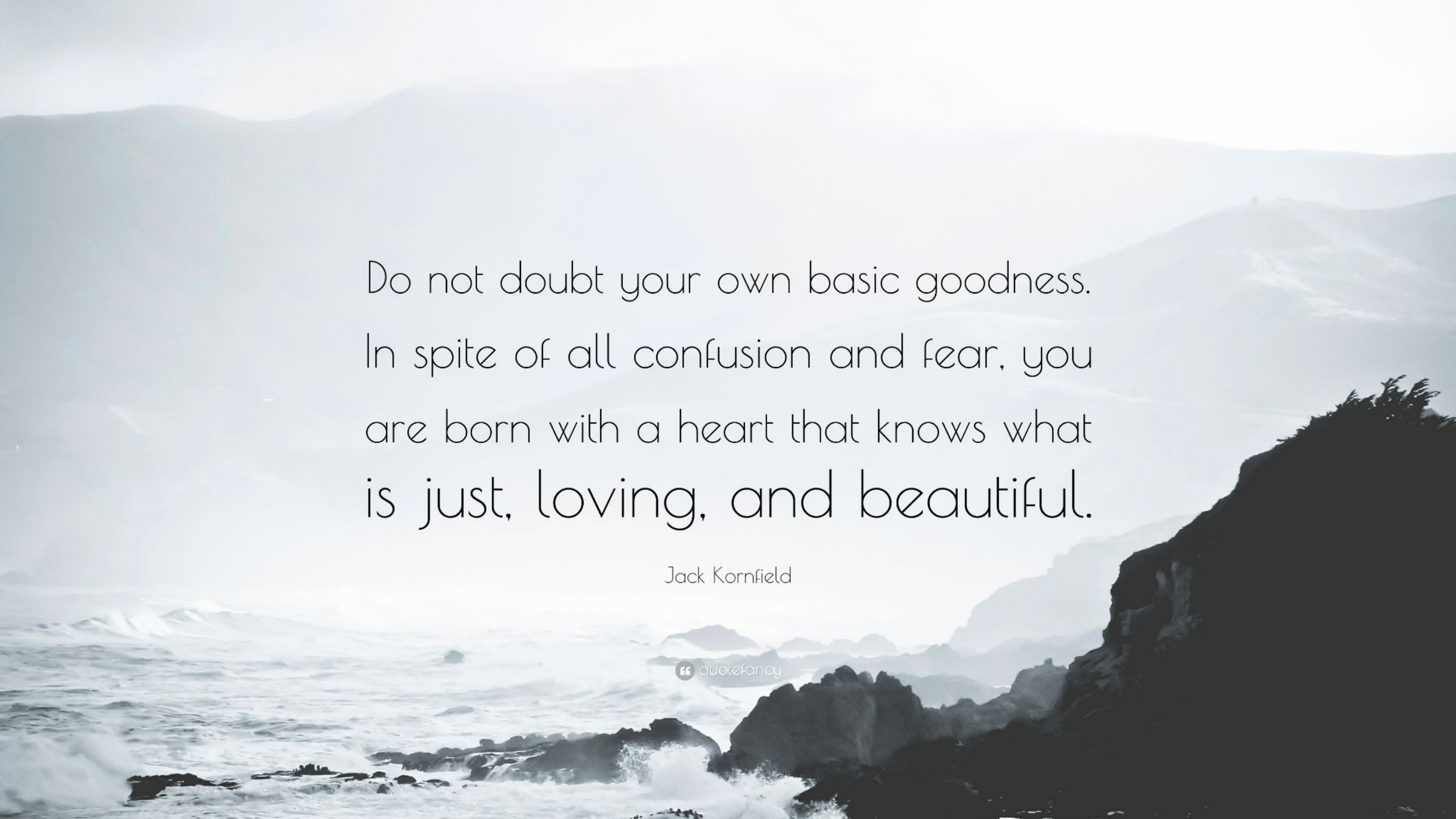


# Three Foundational Principles

1. The fundamental goodness of human nature ...  
is an essential element of Christian faith.  
This basic core of goodness is capable of unlimited  
development; indeed, of becoming transformed  
into Christ and deified.
2. Our basic core of goodness is our True Self. The center of  
gravity is God. The acceptance of our basic goodness is a  
quantum leap in the spiritual journey.
3. God and our True Self are not separate.  
Though we are not God,  
God and our True Self are the same thing.

*"Guidelines for Christian Life, Growth and Transformation," #1-3  
Open Mind, Open Heart*





Do not doubt your own basic goodness.  
In spite of all confusion and fear, you  
are born with a heart that knows what  
is just, loving, and beautiful.

Jack Kornfield

quote fancy



Contemplation, in this sense, is a common activity.

The kind of thinking has an open, intuitive and holistic quality, looking at things from different angles, rather than in a strictly rational, exclusive, linear, 'either-or', 'right-or-wrong' kind of way. Contemplation is non dualistic.

During contemplation, people tend to take more account of emotional experiences and reactions. Emotions may themselves become the focus of contemplative attention.

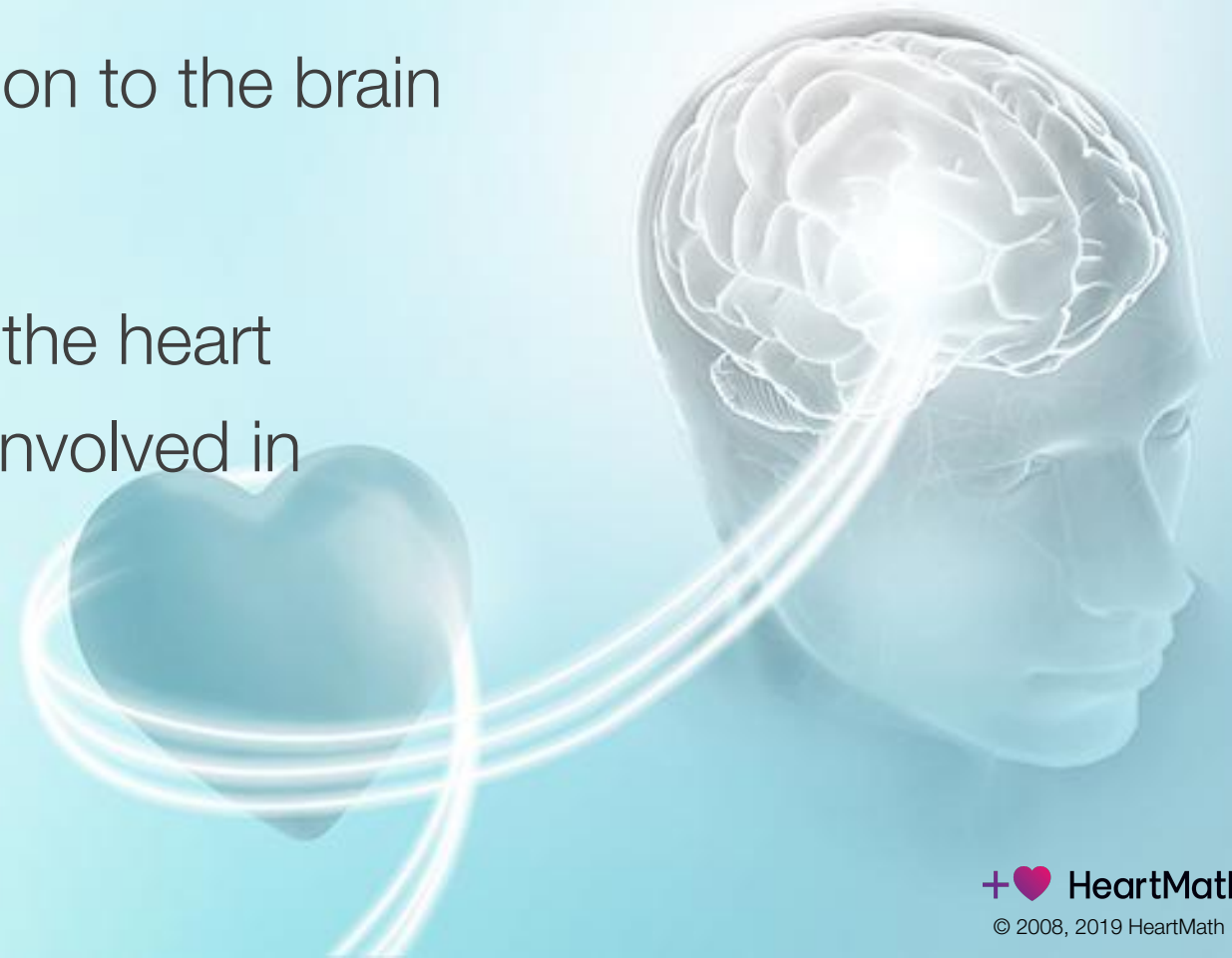
Troubling feelings may soften, becoming more bearable and better understood; calmness and clarity of mind are restored.

This brings about a kind of emotional healing, and allows a person to resume life refreshed, with new ideas and new purpose.



# Heart-Brain Communication

- The heart has its own complex nervous system: the “heart brain.”
- The heart sends far more information to the brain than the brain sends to the heart.
- Patterns in the neural signals from the heart especially affect the brain centers involved in perception, emotional experience and self-regulation.

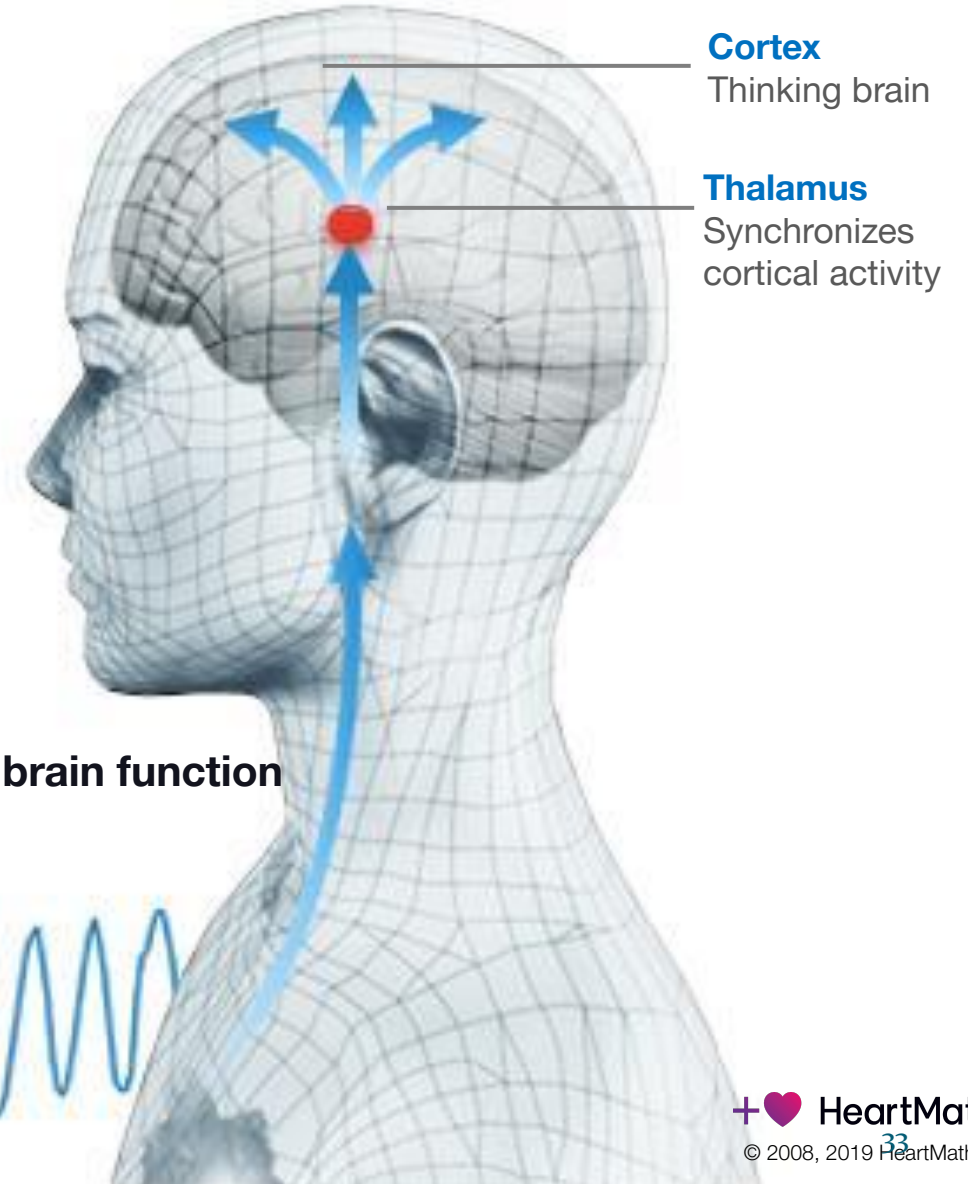




# Heart Rhythms

## Affect Physical and Mental Performance

Heart rhythms directly affect brain centers involved in foresight, decision-making, social awareness, and our ability to self-regulate.



**Incoherence** inhibits brain function

**Coherence** facilitates brain function



# Emotions and Feelings that Create Coherence

Courage, Honor, Dignity

Confidence

Appreciation, Gratitude

Kindness

Care, Love

Compassion

Tolerance, Patience

Enthusiasm, Joy





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## Josh and Mabel

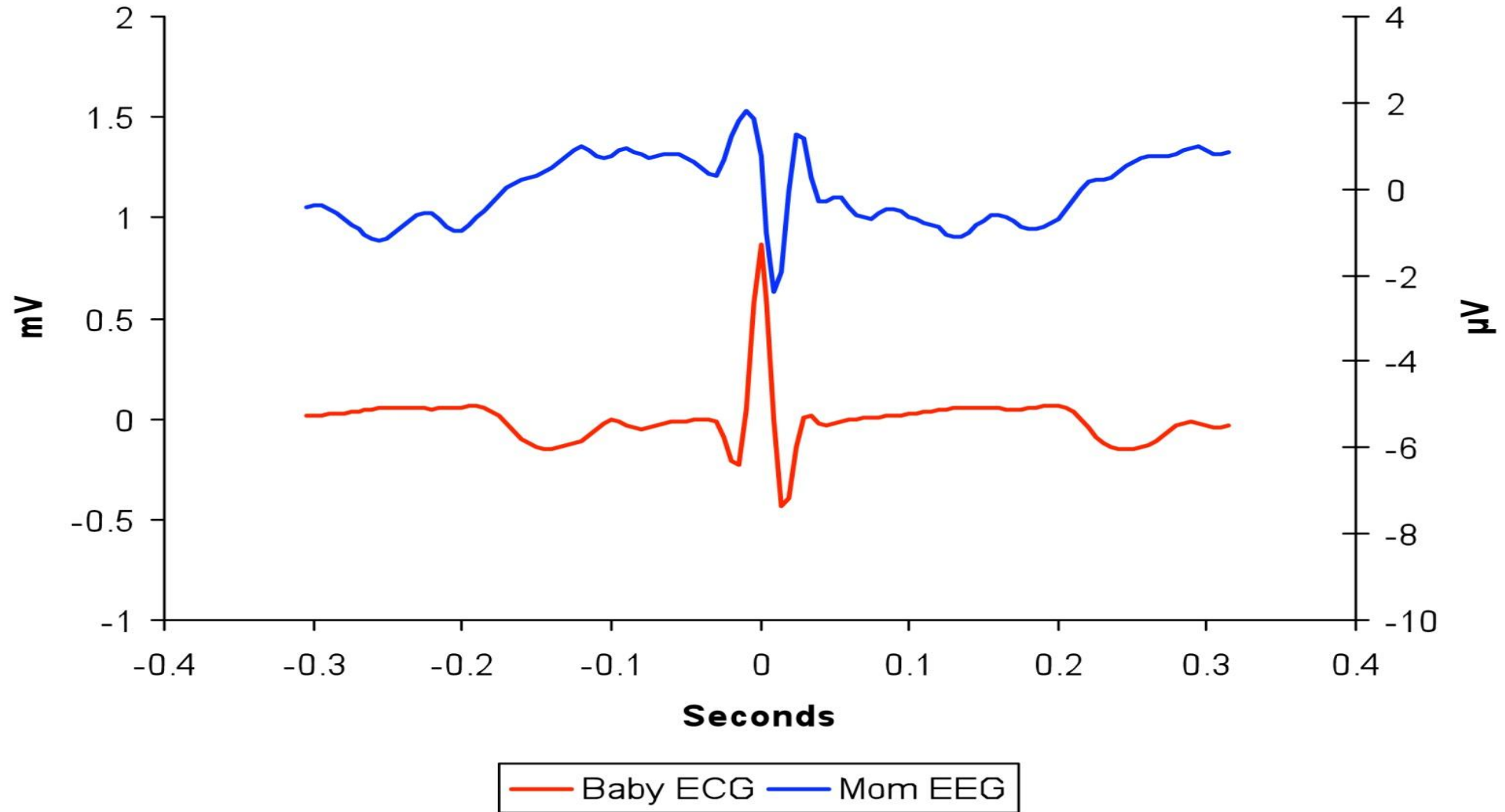


# Mother and Baby



# Mother's Brainwaves Sync to Baby's Heartbeats

*Baby's heartbeat detected in mother's brainwaves*





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# Heart-Focused Breathing™

## An Intelligent Energy Self-Regulation Technique

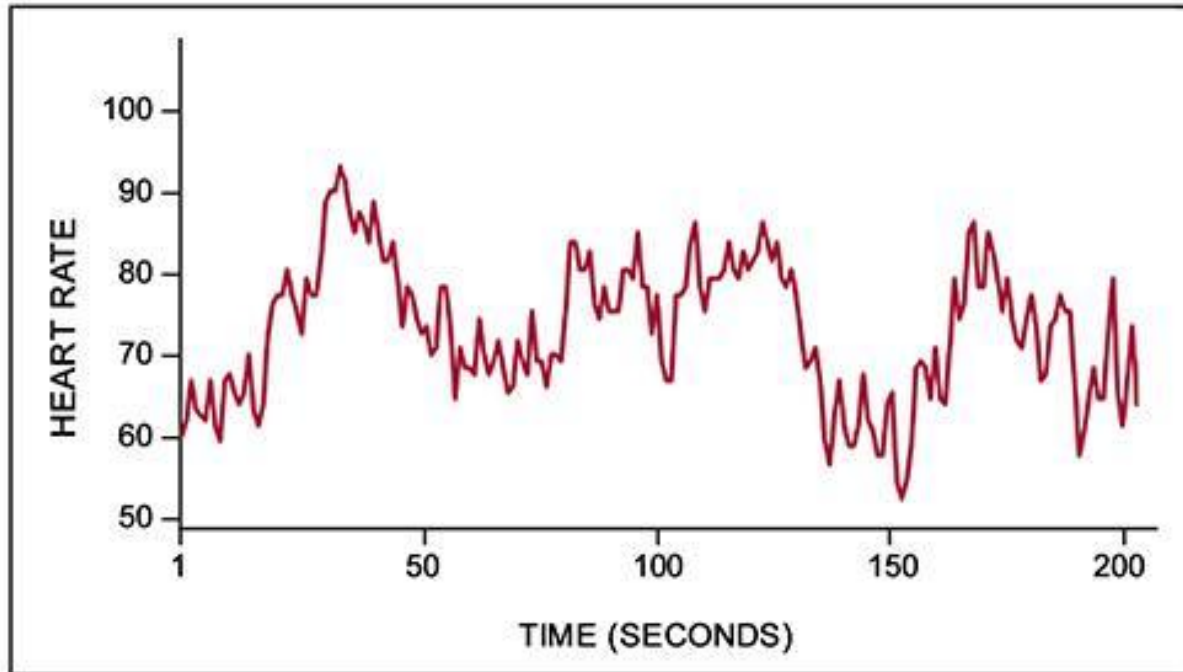
- Heart-Focused Breathing is a powerful and effective tool for self-regulation.
- It's the first step in shifting to a more coherent state – you are alert and calm at the same time.
- It can help you maintain your composure in challenging situations.



# Emotions and Heart Rhythms

## Incoherence

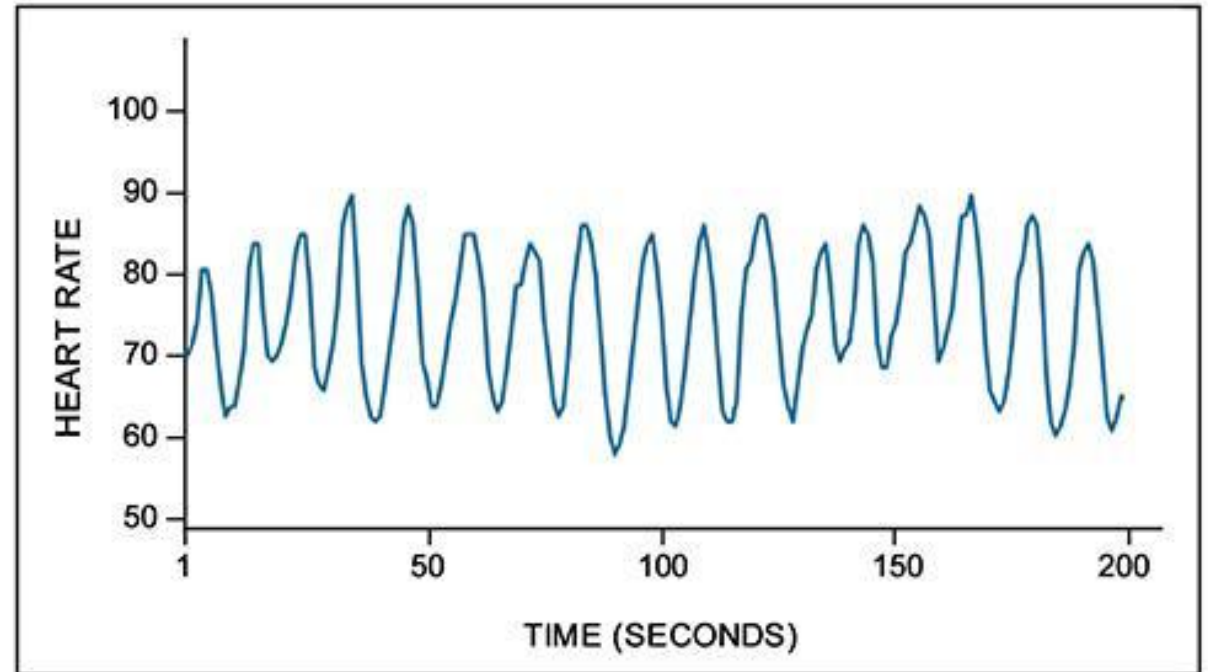
frustration, irritation, impatience, worry



Inhibits brain function – impairs performance

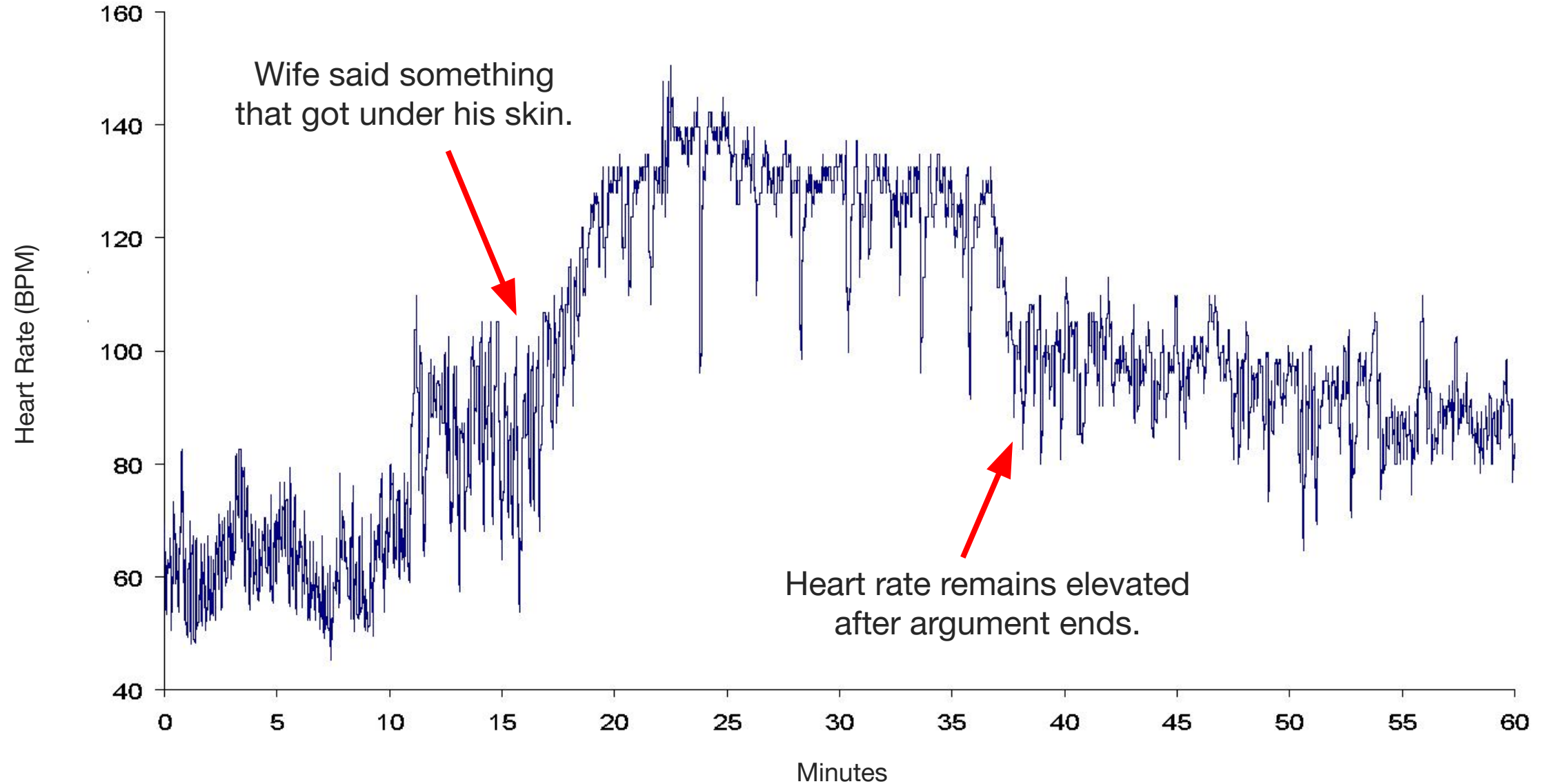
## Coherence

appreciation, calm, patience, confidence



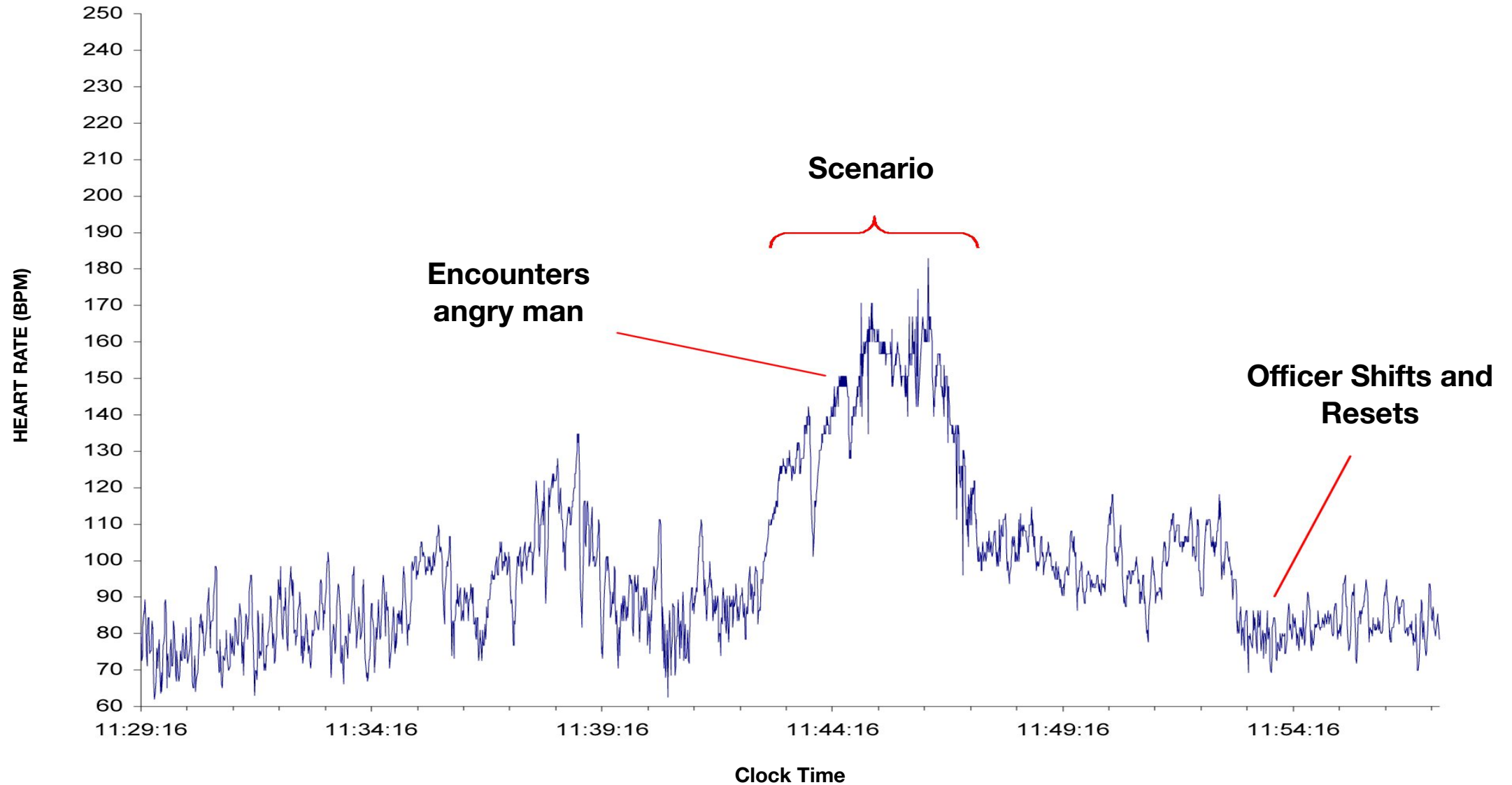
Facilitates brain function – promotes optimal performance

# Husband and Wife Arguing





# Police Officer Resets After Domestic Violence Scenario

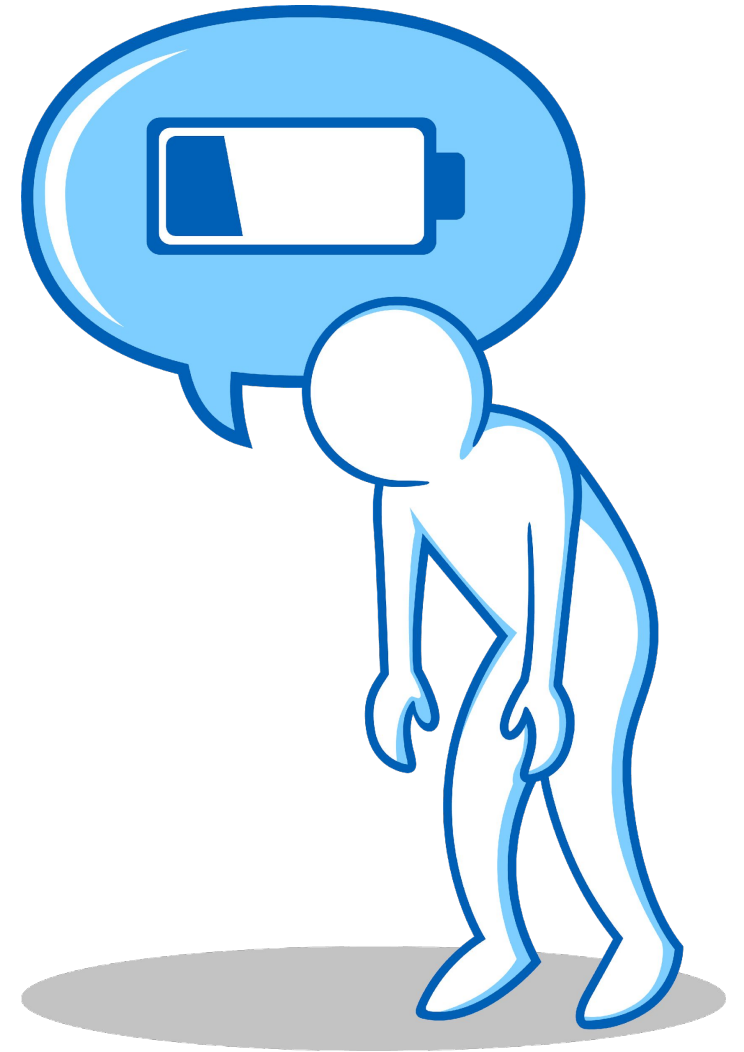


# Depleting Emotions

Emotions such as fear, frustration, impatience and anger have a toxic feeling and cause the release of stress hormones like Cortisol.

This often results in:

- Cause adrenal fatigue
- Drives threat sustained response
- Impaired memory
- Accelerated aging
- Impaired mental function
- Diminished performance



# Renewing Emotions

Emotions and attitudes such as care, kindness  
compassion and appreciation create neurochemicals that regenerate your system and offset energy drain, resulting in: Marinade in renewing chemical soup

- Increased health and longevity
- Increased resilience to adversity
- Improved memory
- Improved problem-solving
- Increased intuition and creativity
- Improved job performance and achievement





**Depletion**

**Renewal**



**High**

Anger  
Anxiety

Happiness  
Excitement

Cortisol



**Negative**

Frustration  
Resentment

Hormonal  
Response

Love  
Appreciation

**Positive**

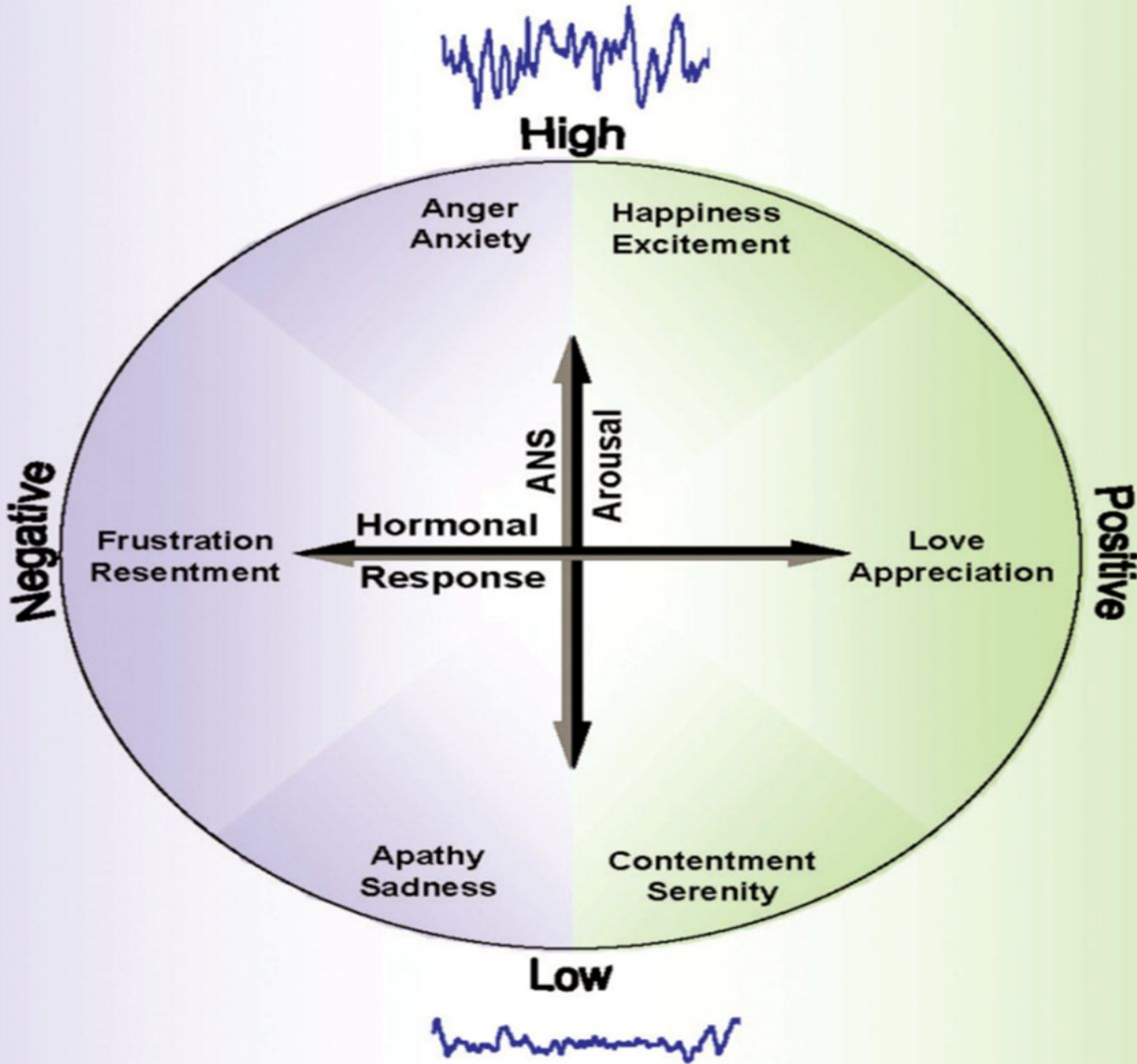
DHEA



**Low**

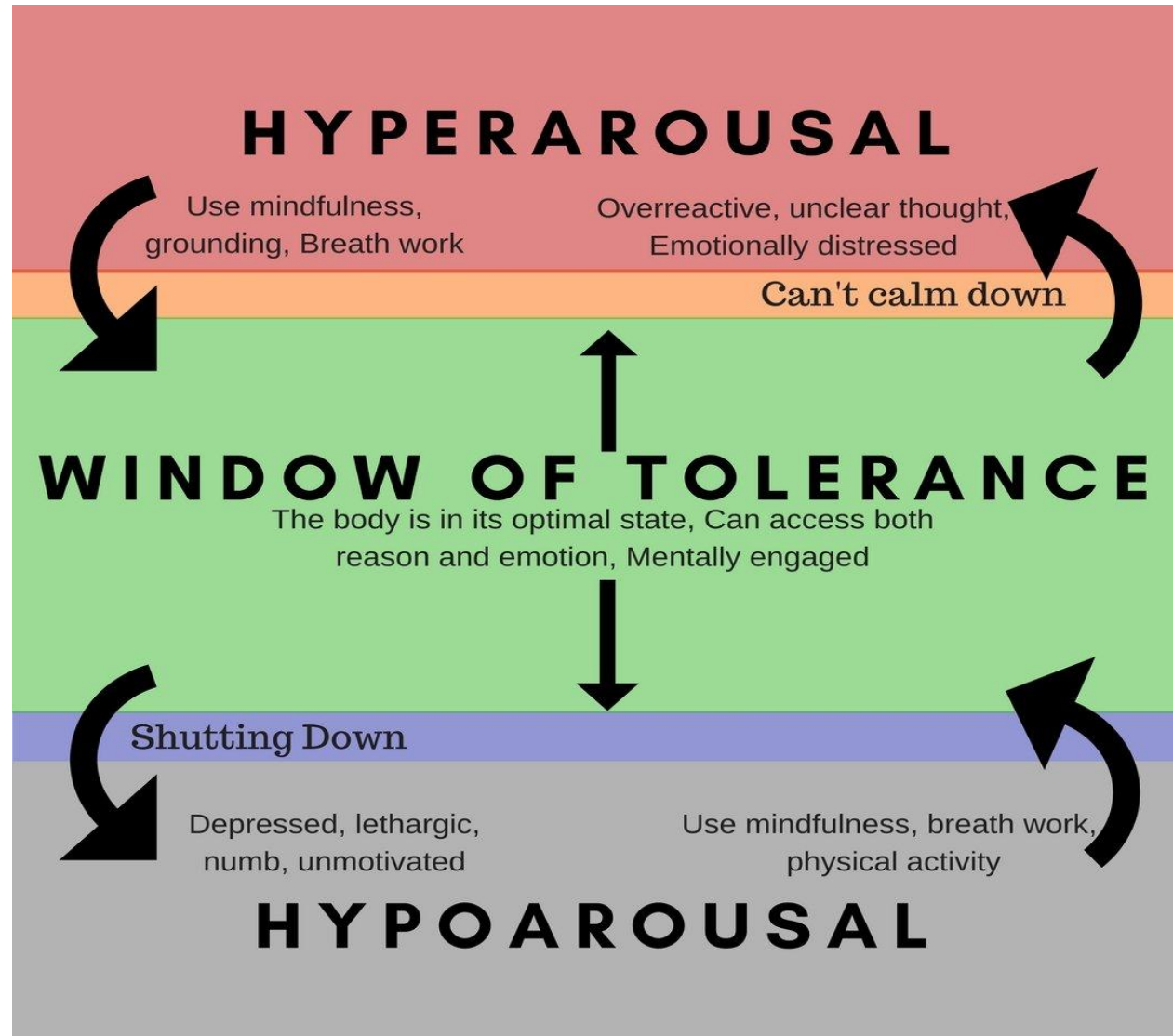
Apathy  
Sadness

Contentment  
Serenity





# Window of Tolerance





# Domains of Resilience

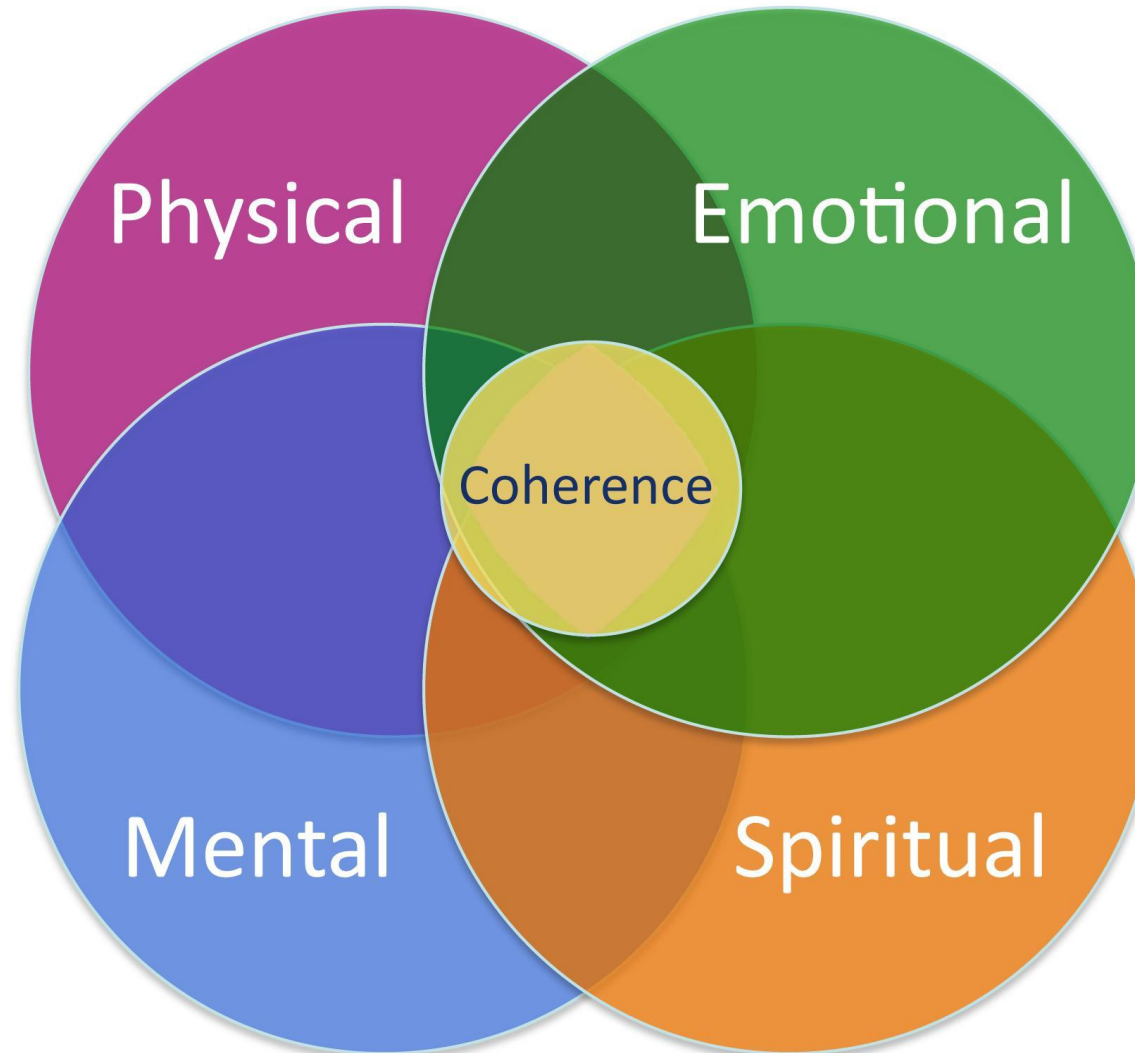
Resilience from *Resilience Advantage*®

## Physical flexibility

- Endurance
- Strength

## Mental flexibility

- Attention span
- Ability to focus
- Incorporate multiple points of view



## Emotional flexibility

- Positive outlook
- Self-regulation

## Spiritual flexibility

- Commitment to values
- Tolerance of others' values and beliefs

---

## Freeze Frame®

1. Acknowledge
2. Heart-Focused Breathing
3. Activate a positive or renewing feeling
4. Ask: From this more objective place, ask yourself what would be a more efficient or effective attitude, action or solution.
5. Observe and act



# Did you know?



**The human heart's magnetic field can be measured several feet away from the body.**



**Negative emotions can create nervous system chaos, but positive emotions do the opposite.**



**In fetal development, the heart forms and starts beating before the brain begins to develop.**



**Positive emotions create physiological benefits in your body.**

**Positive emotions can increase the brain's ability to make good decisions.**



**You can boost your immune system by focusing on positive emotions.**







Conscious awareness leads to spiritual awareness

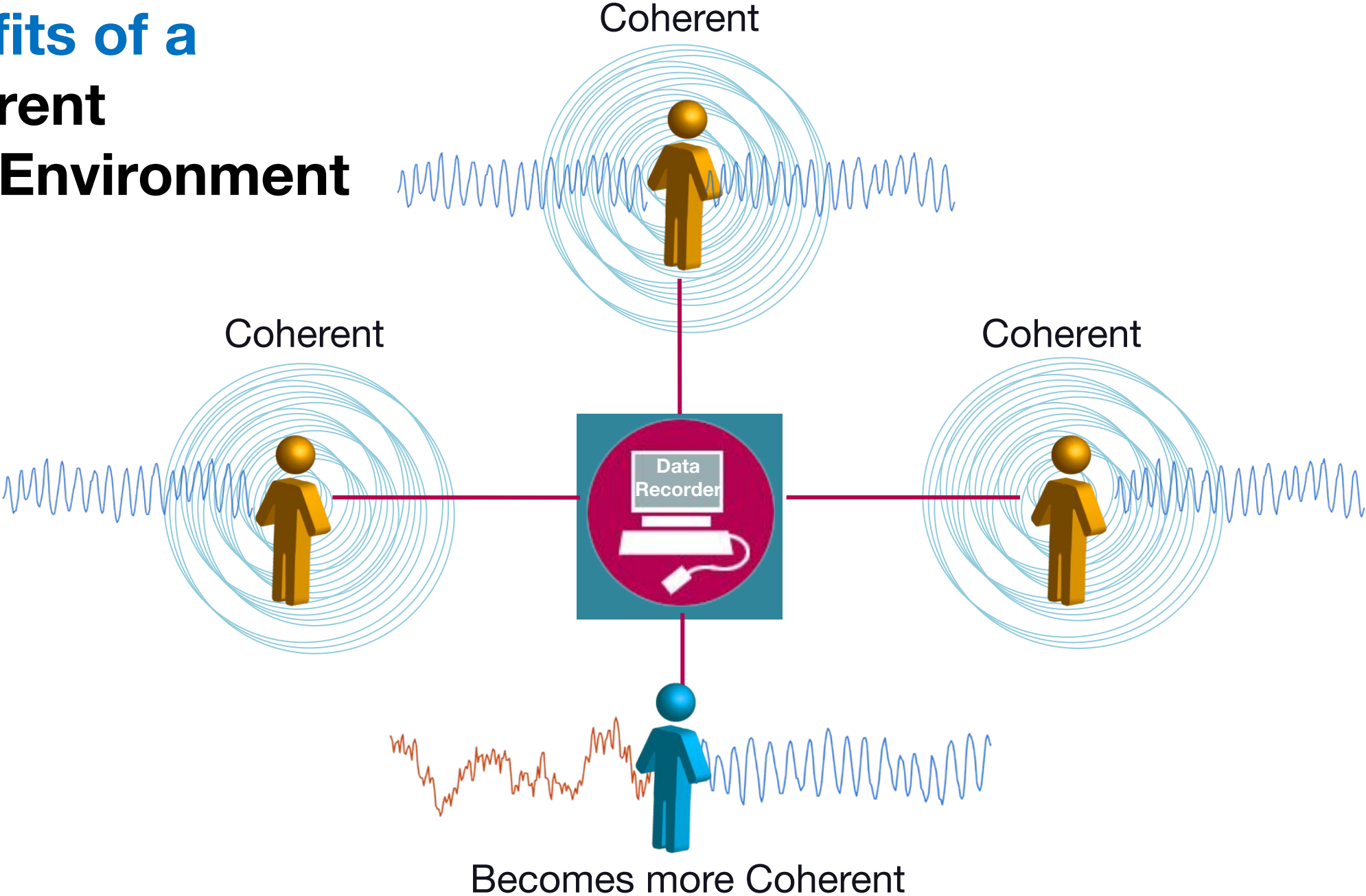
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## Coherence

An optimal state in which the heart, mind and emotions are aligned and in sync.

Physiologically, the immune, hormonal and nervous systems function in a state of energetic coordination.

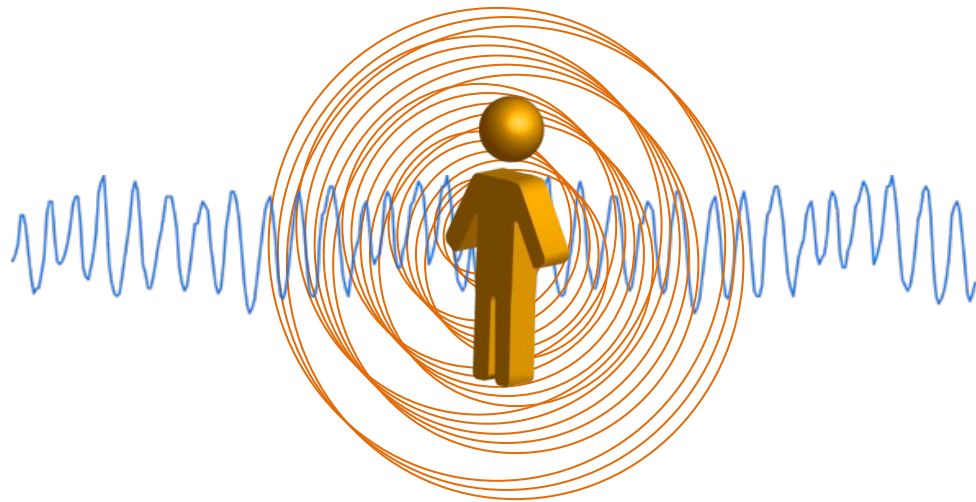
# Benefits of a Coherent Field Environment



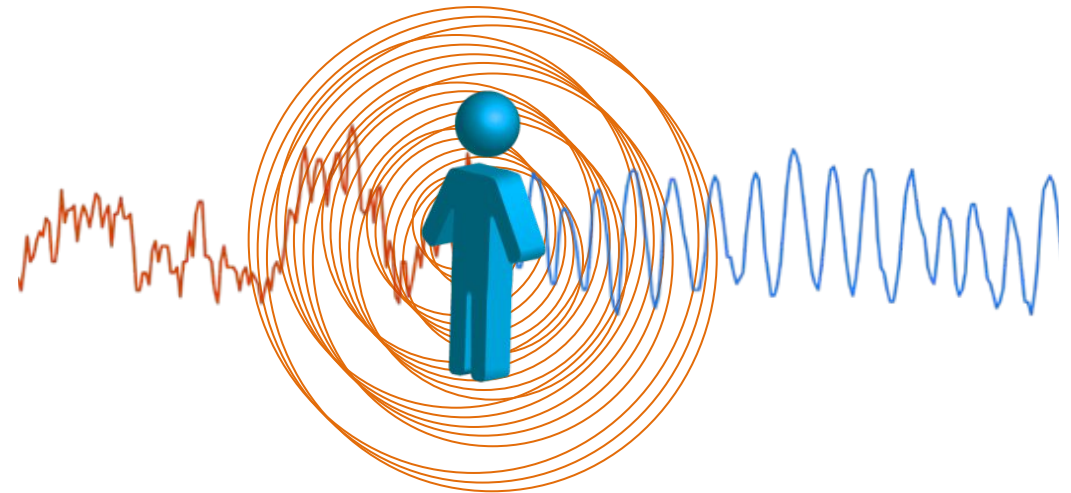
# Coherent Field Environment

Consistent practice of the Heart Focused Breathing, Quick Coherence, Heart Lock-in can create a new baseline that may help others to become more coherent.

Coherent



Becomes More Coherent





# Domains of Resilience

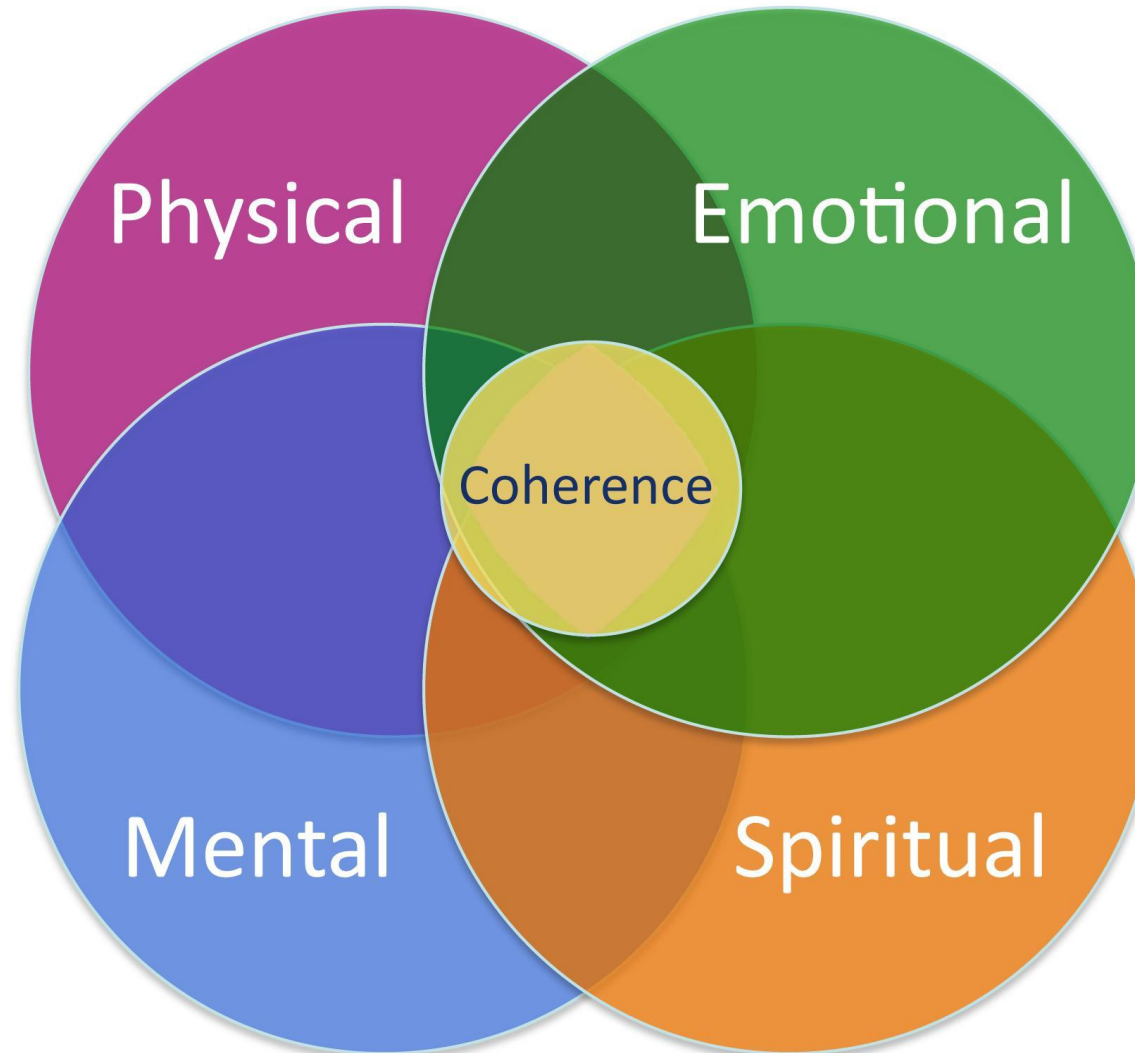
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# Moral Injury violates core values and beliefs and results in a dilemma

Acts of Betrayal by peers, leaders or self

Out of proportion violence toward others

Death or harm

Violence

Hiding what you know and fail to report

Inability to prevent death or suffering

Perceived errors or mistakes

# Moral Repair and Restoration

Body: sleep, change in stress load, physical health( diet, exercise, play), focus and concentration

Mind: Emotions, Guilt, Distorted thinking

Community: Connecting with others

Spirituality: meditation, forgiveness, nature, divine indwelling



# Burden Bag

Stupid Mistakes

Rejections/Hurts

Imperfections/ not good enough

Guilt

Loss

Grudges/Blame

Unforgivables

Betrayals

# Floating in Quicksand

Avoidance

Expression feeling/ over-control or under-control

Isolation

Substance Abuse

Spiritual/ Faith

Self-Esteem

Trust

# The Monster Within

Radical Acceptance: accepting yourself and your circumstances

Carrying the burden hurts you, locked in chains of sorrow (prison)

Forgiveness is release of your burdens

Forgiveness is a choice to move beyond your pain

Forgiveness comes from a place of compassion for yourself and others



# The Self Weaving Tapestry







# **HO opono pono**

**I'm sorry, Forgive me.**

**Thank you, I love you.**

**Say these phrases to your essence, your divine indwelling.**

*Communication concept for reconciliation*

*Mantra for self-love and balance and self esteem*



I AM SORRY

PLEASE FORGIVE ME

THANK YOU

I LOVE YOU

## MORRNAH'S PRAYER

*Divine creator, father, mother, son as one...*

*If I, my family, relatives and ancestors  
have offended you, your family, relatives  
and ancestors in thoughts, words, deeds and  
actions from the beginning of our creation to  
the present, we ask your forgiveness...*

*Let this cleanse, purify, release, cut all the  
negative memories, blocks, energies and  
vibrations, and transmute these unwanted  
energies into pure light....And it is done.*



**Part of the reason why this traditional Hawaiian forgiveness prayer is so powerful is that it first requires you to acknowledge that wrong was done by saying you're sorry.**

**Having other people acknowledge our feelings is a universal need; in ho'oponopono, you must first acknowledge that wrongdoing exists, which is a way of acknowledging these feelings. Only then will it be possible to find it in your heart to forgive someone else, or yourself.**

**In the final step, you acknowledge love— both for yourself, and others.**

**Most people, when attempting to forgive either others or themselves, make the mistake of thinking that forgiveness = total absolution, or an erasing of the wrongdoing. This is ultimately futile because it ignores hurt feelings, which inevitably bubble back up later if they are not addressed.**



# Loving yourself is the greatest way to improve yourself. As you improve yourself, you improve the world.

Order is restored in the inner and outer environment

Fears and negative memories transformed into love

Healing traumatic events or annoyances

Releases and cleanses negative thought forms to make room  
for harmony and love

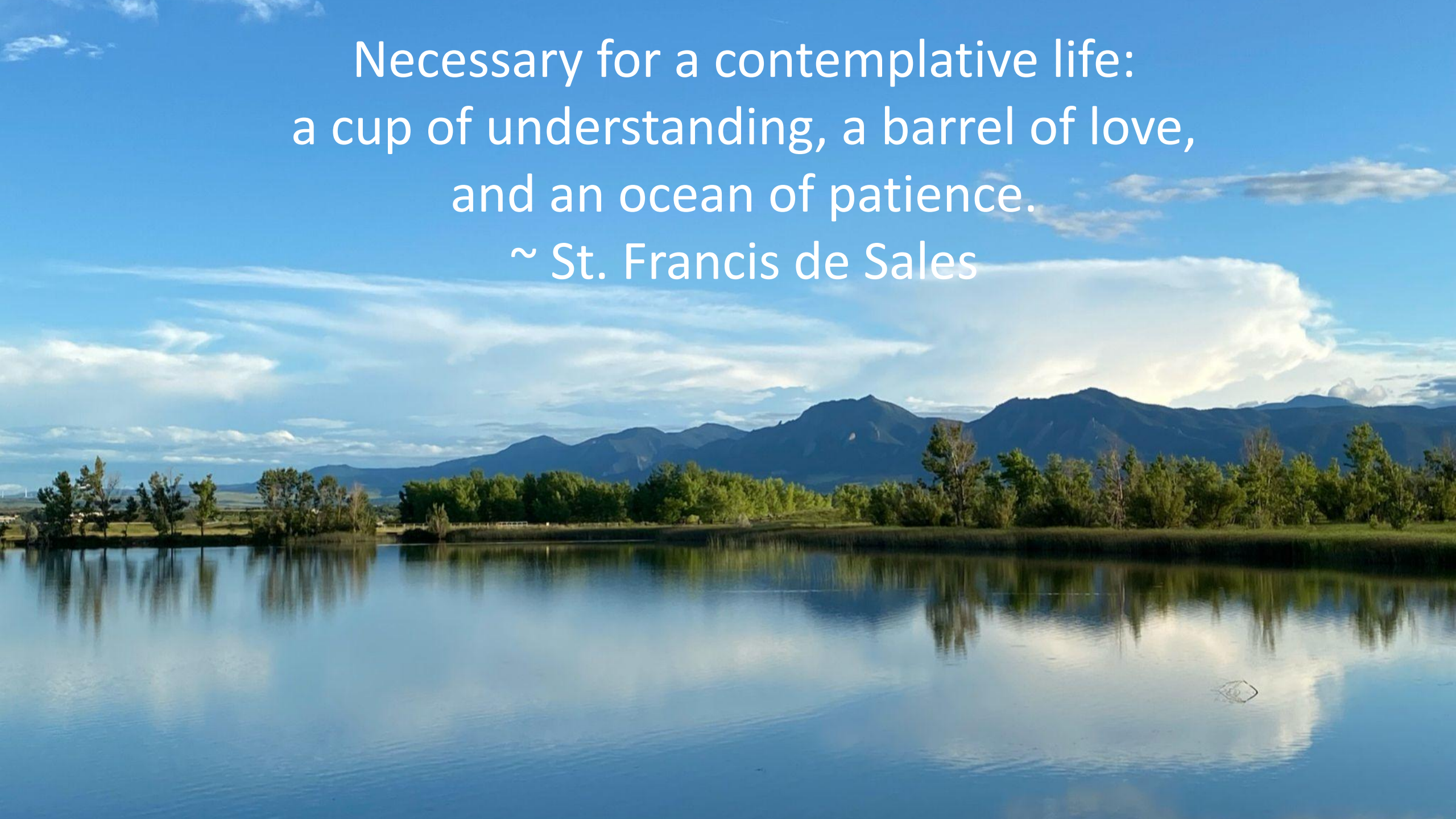
Intellect gives way to the intuition of the heart

Heals and cleanses the stored information of the unconscious

Allows reconciliation with our inner states

Necessary for a contemplative life:  
a cup of understanding, a barrel of love,  
and an ocean of patience.

~ St. Francis de Sales





**June 14-23, 2022**



**Veteran Testimonial**

[https://www.youtube.com/watch?v=gt8q-\\_Eaomk](https://www.youtube.com/watch?v=gt8q-_Eaomk)

Single room: \$1400      Shared room: \$850/person  
Funds available to help with partial scholarship

## **Veteran Retreat St. Benedict Monastery Snowmass, Colorado**

This unique retreat integrates hydrogenesis at the mineral hot springs in Glenwood Springs, yoga, centering prayer, trauma release exercises, ear acupuncture and neuroscience education on activation of the Vagus nerve to move from a STRESS response to THRIVE self-regulation.

Contemplative practices are skills that activate this THRIVE self-regulation and facilitate opening our hearts and minds to connect more deeply with ourselves and others. The retreat location under Mount Sopris allows one to experience the wonder and awe of nature.

Dr. Christine O'Brien is the retreat co-facilitator. She is the Clinical Director of the Whole Health Program at the Cheyenne VA, emphasizing life purpose and self-kindness to improve health. She teaches centering prayer, biofeedback, yoga, and contemplative neuroscience.

Eric Peters, a veteran, yoga instructor, trauma release and hydrogenesis specialist, and contemplative outreach educator, is also co-facilitating the retreat.

Email [snowmasscoc@gmail.com](mailto:snowmasscoc@gmail.com) for registration, or [drchristineobrien@gmail.com](mailto:drchristineobrien@gmail.com) with questions  
Additional details can be found here: <https://centeringprayersnowmass.godaddysites.com>



# Resources

The Human Condition

How God Changes the Brain

The Whole Brain Child

Biology of Belief

Heart Math Institute

Altered Traits

The Emotional Life of Your Brain

Born to Be Good

Thomas Keating

Andrew Neuberg, Mark Waldman

Daniel Siegel

Bruce Lipton

Heartmath.com

Daniel Goleman, Richard Davidson

Richard Davidson

Dacher Keltner