



**THE MASTER PRACTITIONER
YOU CAN CHANGE YOUR BRAIN:**

***NEUROSCIENCE:
COMPLEXITY OF THE SOCIAL BRAIN***

Presented by
Nan Waller Burnett, MA

November 2017
for
CCLP



THE *INTENTION*:

....is life long learning,
bridge multi-dimensional understanding
apply it...




Science

- *in your field of practice*

- *in your own life*



Practice

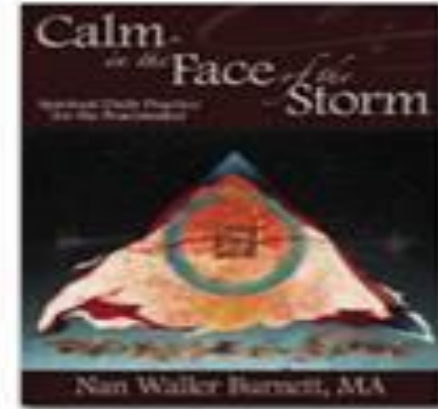


We now have the neuroscience to verify
previous theory about human dynamics,
motivation, development and brain
evolution.

“When you become the master of your thinking, you become the master of your life.”

Ernest Holmes

Holistic Intelligence



“Mind, body, and spirit research has shown that our bodies are more responsive when treated with a holistic approach. We have concrete evidence that different parts of the brain respond to positive, healthy thoughts, meditation, prayer, and optimism. To be the master of your thinking is to create a more positive experience during your time on earth. Joy is welcomed. Exercise your intelligence, be the master of your thoughts.”

Nan Waller Burnett, MA



Why should collaborative practitioners study neuroscience?

- To define the mind.
- To understand neurobiology of the mind
- To explore neuro-cognitive social interaction.
- To understand the effect of trauma on decisions.
- To explore interventions and impact of conflict.
- ***Intention***, manifestation, and empowerment.
- Systemic thinking, hypothesis and reactivity.





CONSCIOUSNESS

“We are disturbed not by what happens to us, but by our thoughts about what happens.”

- Epictetus, 1A.D. Enchiridion, Book V



Neuroscience is proving that Epictetus was exactly correct, 2000 years ago.

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CONSCIOUSNESS

William James [19th Century]



Properties of consciousness-

-A form of awareness

-Is a process and not the brain

-Is individually specific

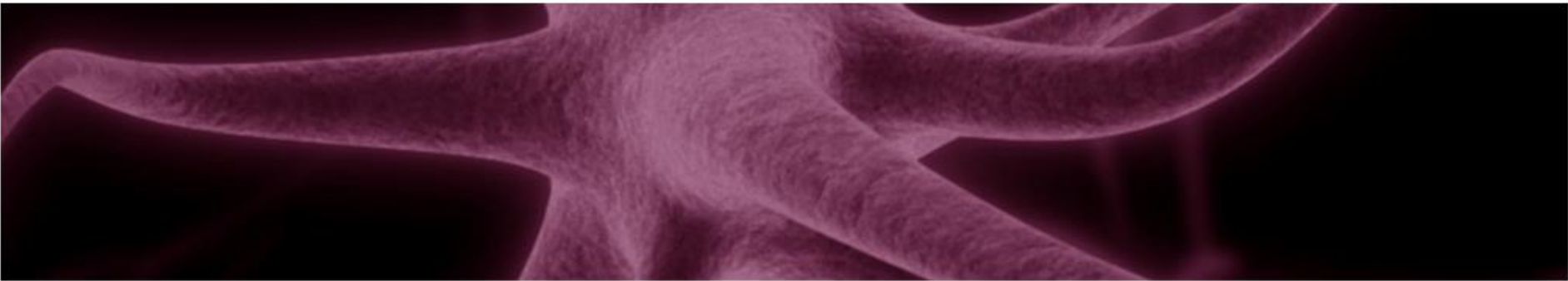
-Is continuous and dynamic

CONSCIOUSNESS ~21st Century

“Consciousness emerges when the mind, in the process of thinking, reaches a certain level of complexity and produces an ever changing stream of thought.

“The Neurobiology of We”, D. Siegel, 2008





The Brain - is the **connective organ** which creates connections of energy, and informs brain processing; it is an electric, chemical and dynamic organ.

Relationships – are the sharing of energy generated through **social construction** and brain electricity.



The Mind – is the **process** of the brain determines how we regulate the flow of energy and interpret information.

The mind makes us who we are.

{Sources: Kandel, Siegel, LeDoux}



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**PART TWO:
MOLECULAR BIOLOGY, BRAIN MECHANICS
& INTENTION**

How Does the Brain Work?

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Neurobiology

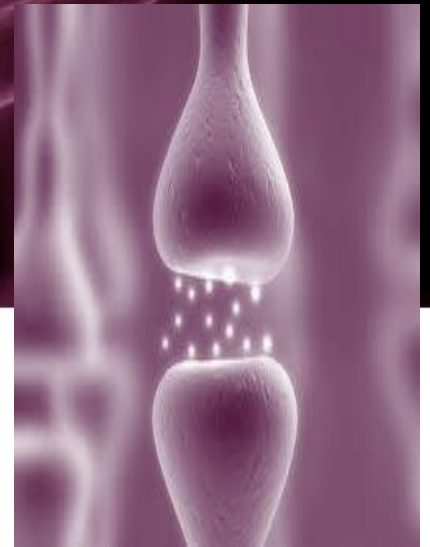


Neurogenesis is the constant regeneration of the neurons.

Neuroplasticity emphasizes that alterations in brain circuits can be readily driven by and dynamically modified by willfully directed ***[intention]*** and mental events .

Capra, 2002 ;Schwartz & Begley, 2002; Samploksy, 2010.

Intentional awareness can be used to modify brainwaves and modify behavior.



NEURONAL FIRING

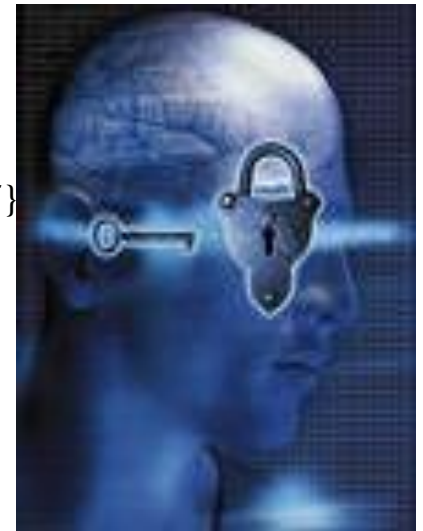
>Pre-synaptic firing

>cell translates electricity [excitability] into a chemical language

>the synapse, a fluid substance, drips onto another neuron when triggered

>the synapse fires.

- Post-synaptic neuron forms a receptor that fits like a key into a lock. { Sources, F. Capra, 2002; R. Samploksy, 2005 }
- The neurotransmitter becomes the carrier of information.
- Repeated stimulation of the same neurons causes calcium to be infused into the cell, which is turned into long term action potential ...for repeated stimulation.



[Intentional repetition is the pathway to transforming behavior]



Molecular Biology



- Human cells are epigenetic and adaptive. Cellular structure is malleable.
- ***Epigenetics*** is a biologically molecular dynamic process that allows creativity **within and** transformation of the intercellular structure activated by forces from **outside** the cellular wall.
- Practice any new task by rote, you create a new synaptic connection. { *F. Capra, 2002* }

An ***Intentional*** process...



Focus: *Intentional* Rewiring



- Focused attention enables the well-validated principle of Hebb (1955);

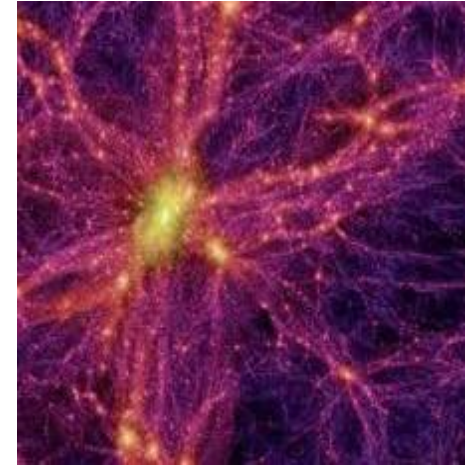
...interpreted repeated patterns of neural activity causes neuroplastic changes and new neural connectivities to form in well-established neural circuits, or

HEBB Theory: “*cells that fire together wire together*”

NEUROSCIENCE AND INTENTION

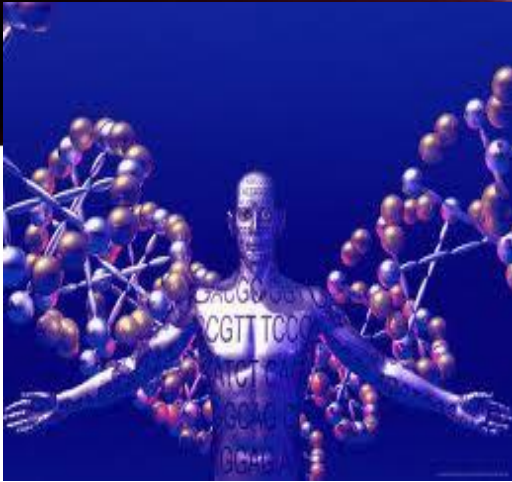
- The higher the intensity, the higher the density,
- The increased number of observations per unit.
- Therefore...increased focus causes neural circuitry

to become *stabilized* and explains how the brain's response to emotion can be *systematically modified by the quality of attention that is focused (or not focused) upon it.*



[Source: Wang, 2010]

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COMPLEXITY & NEUROBIOLOGY

- *The brain is a complex system.* It is a diverse, adaptive, connected, and independent entity.
- Mind processing is unpredictable.
- It is robust and can withstand trauma, will regenerate brain circuitry and is resilient.
- Neurons have self organizing properties, chemical and biological changes outside the cell cause the environment to be fluid.



EVOLUTIONARY BRAIN



- Structured complexity is built into the brain & is not random.
- Brain functionality is epigenetic.
- Brain has evolved neural circuitry, enables thriving in a social world.
- Context of our world changes with new knowledge and experience.
- Our personal narrative is computed by and embodied within the brain.
- How we change, live and experience is determined by this narrative.
- Impacts the way we make **decisions**.

[Source: Michael Gazzaniga, 2009]



**THE MASTER PRACTITIONER
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**PART THREE
THE SOCIAL BRAIN
AND
APPLICATIONS IN THE FIELD:
*How Do We Interface With Each Other?***

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THE SOCIAL APPLICATIONS OF NEUROBIOLOGY

“We are wired to connect in ways that we could not understand before the recent research in the neurosciences.”

Daniel Goleman

THE SKILLS of a SOCIAL BRAIN: EQ

- Ability to monitor and manage your emotions
- Ability to motivate your self toward a goal
- Ability to have empathy for others
- Ability to handle conflict and relationships well



SOCIAL Q MODEL

Intrapersonal

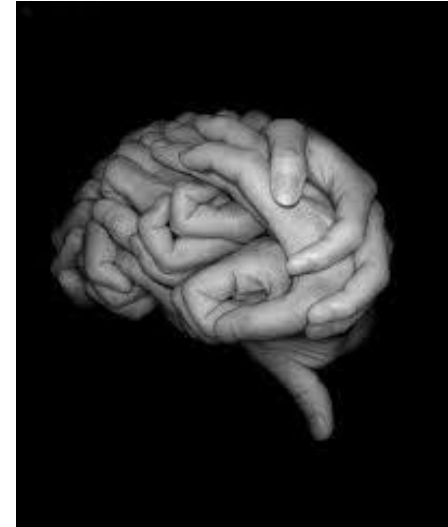
- **Awareness:** The degree to which people seem in touch with their emotions
- **Regulation:** The degree to which people seem to maintain positive emotional states
- **Expression:** The degree to which people seem to communicate desired emotional states to others

Interpersonal

- **Perception:** Detection- The degree to which people seem aware of others' emotions
- **Emotional Control – Influence-** The degree to which people seem to intentionally affect others' moods, thoughts, and behaviors
- **Emotional Sharing:** Empathy- The degree to which people seem to feel what others are feeling

SOCIAL INTELLIGENCE

SOCIAL INTELLIGENCE - Has Two Parts:



- **SOCIAL AWARENESS** - continuum spanning another's inner state through understanding their feelings thoughts to understanding complex social situations which include:
 1. Primal empathy-listening with full receptivity; attuning to a person.
 2. Attunement-to make aware or be in harmony with another.
 3. Empathic accuracy- understanding another's thoughts, feelings, intentions.
 4. Social cognition- knowing the social landscape of a situation.

[source: Daniel Goleman, 2006]

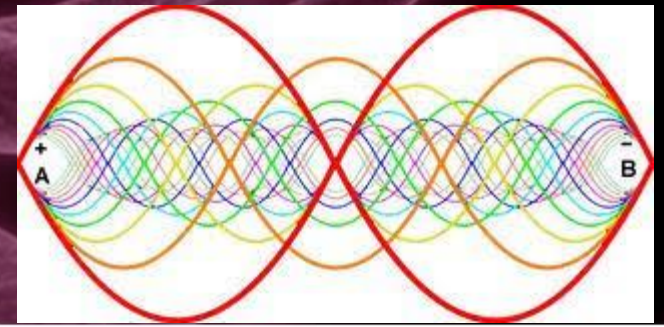
SOCIAL INTELLIGENCE



- **SOCIAL FACILITY** - Sensing how another feels, knowing their intentions builds on social awareness to allow smooth effective interactions; the spectrum includes:
 1. Synchrony- smooth interaction at the non verbal level.
 2. Self-presentation – presenting ourselves effectively.
 3. Influence- shaping the outcome of social interactions.
 4. Concern-Caring about other’s needs and acting accordingly.

[source: Daniel Goleman, 2006]

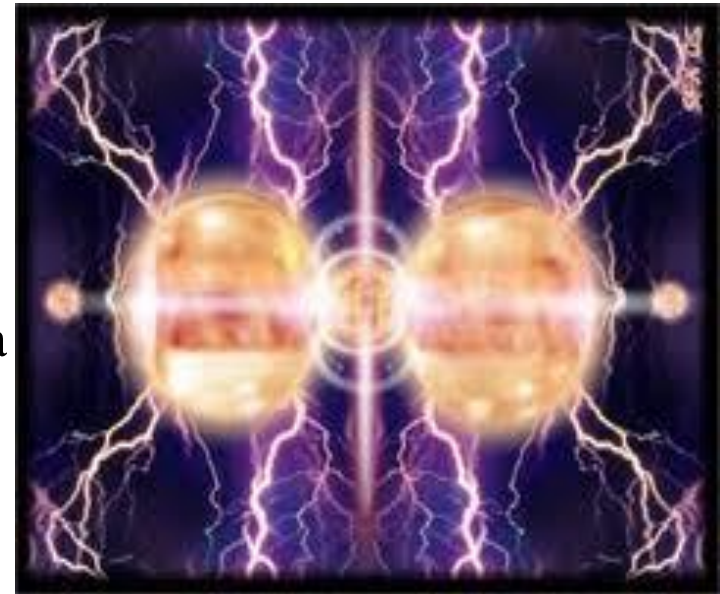
ATTUNEMENT



- ATTUNEMENT -facilitates rapport [seeking to understand, deep listening]
- ATTUNEMENT creates physical synchrony and builds trust
- ATTUNEMENT can be enhanced through practice by simply paying more attention.

RESONANCE

- Resonance can be understood as a merging created when energy moves back and forth between two or more bodies.
- Communication is a resonance between two or more people. Cognitive resonance is achieved when someone talks about an idea or concept that we agree with.
- Affective resonance is the source that generates emotions such as sympathy, empathy and telepathy. If one is present in the moment and connected with another person (or a group), they are able to pick up their emotional states and feelings, which is a sympathetic response.





NEUROCHEMISTRY

- OXYTOCIN is the antidote to adrenalin.
- Appears to enhance cooperation within socially-close groups, while promoting defensive aggression toward unrelated, competing groups. [*bonding within group*].
- Is involved in social recognition and may be involved in the formation of trust between people and generosity.

[P. Zak, 2009]

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COGNITIVE RESONANCE RESULTS IN TRANSFORMATION

- Occurs when people are feeling understood and the information is shared
- Resonance happens within social construction, when narratives are exchanged...





“We cannot arrive at the place of empathy without dancing our own waltz first.”

NW Burnett, Calm in the Face of the Storm, 2010

WHAT IS REQUIRED TO READ THE SOCIAL MAP?

- Mirroring
- Inner Imitation
- Feeling your pain
- Feeling your thoughts
- Feeling their pain



EMPATHIC INTELLIGENCE

Webster - “the imaginative projection of one’s own consciousness into another being.”

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Mirror Neurons & Empathy

“The meeting of two personalities is the contact of two chemical substances; if there is reaction, both are transformed.” Carl Jung

- Mirror neurons are - the source cells of imitation; the central aspect of empathy; lead to the environmental mapping of experience and information that forms a unique individual expression that takes us places the genome cannot explain; allows the sculpture of the brain according to our environment.
- Mirror neurons gives us a sense of self ...AND a sense of the other.

Source: Gallese, Iacoboni; Restak

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Mirror Neurons & Empathy

Without awareness of self **AND** awareness of the other, one cannot express empathy...(these people *are narcissists*).



my empathy gland
is depleted



HOMework: EXERCISES IN INFLUENCE

- ▣ When someone asks you a question that can be answered with a “yes” or “no” and you respond with a “no,” observe the effect this response has on the conversation. Does it broaden the discussion or tend to shut it down?
- ▣ The next time you are trying to influence someone in a face-to-face encounter try to read their body language and speech. Attempt to discern at what point you have reached the limit in trying to influence the other person, i.e., you have gone too far. This is the point at which you may be considered pushy if continuing onward. Observe the words they are saying, the intonation, and their body language for clues.
- ▣ When in a situation where you would like to influence someone, discern how you might best influence them. Once you have interacted with them, review how effective your approach was and how it might be improved.



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**PART FOUR
THE SOCIAL BRAIN
SELF REGULATION
& SELF CARE**

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INTENTION is EMPOWERING

Intention is the engine that powers change.

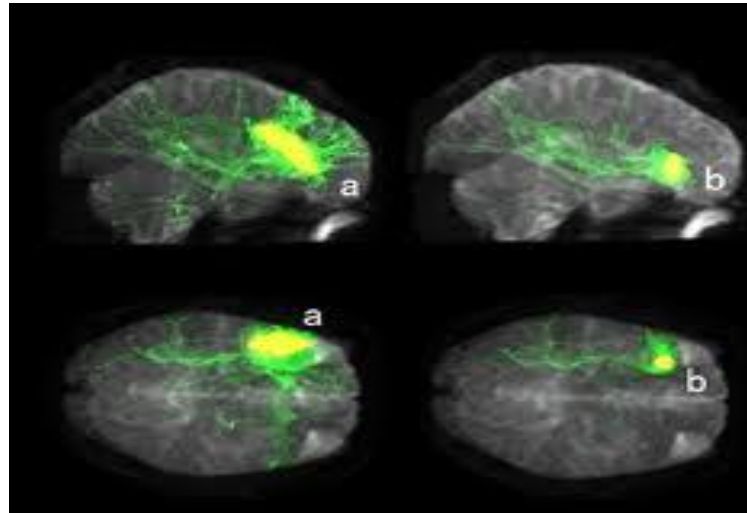




NEUROPSYCHOLOGY

JUST DO IT,

INTENTION



DO IT, DO IT

FOCUS

Willful, mindful, deliberate thought facilitates cognitive restructuring of the brain. This changes your life.

JUST THINK IT, THINK IT, THINK IT



INTEGRATION

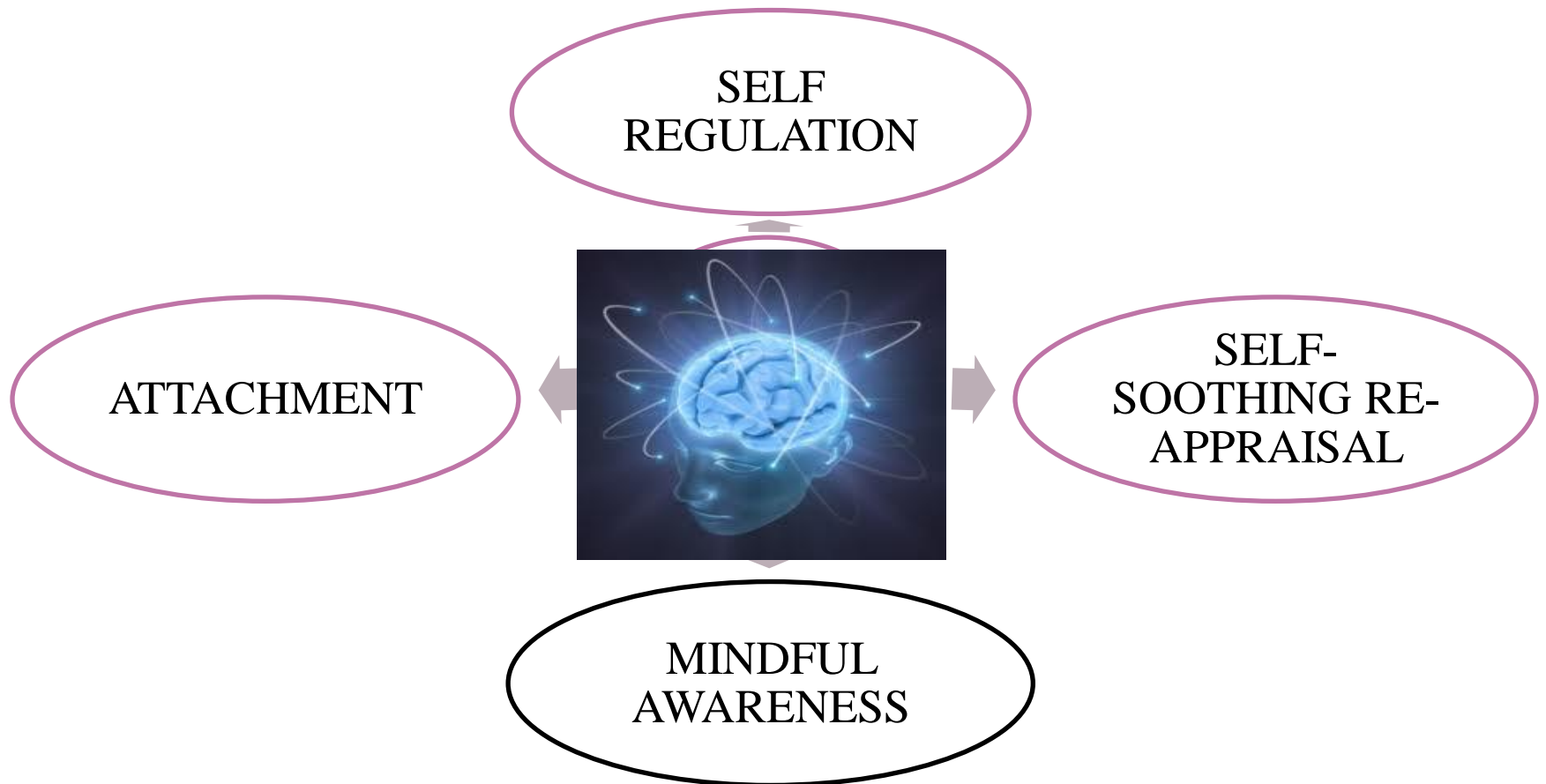
“May the outward and the inward man be as one.” Socrates

- ***Integration-*** your insides match your outside; allows authenticity.
- Trauma blocks integration of the mind, of the self, of the soul.
- Healing relationships promotes integration.
- Processes the stress and emotion.
- Promotes understanding your ‘self’ in a holistic way, and owning “the dark side”.

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THE FLOW OF INTEGRATION





EMOTIONAL REACTIVITY TO REGULATION

- Triggered event
- React to it and explore the belief
- Implement self regulating strategy
- Attentional focus alerting
- Re-orienting executive control
- Attentional distraction
- Cognitive reappraisal





PHYSICAL SELF REGULATION



Physical interventions that mediate the body

- **BRAIN STEM** Touch therapy, Acupressure, Yoga, Reiki, Qi Gong
- **MIDBRAIN** Music, Art, Dance, Meditation
- **LIMBIC** Hiking, playing, movement
- **CORTICAL** Storytelling, drama, mindfulness practice, writing.



STRENGTHEN THE NEURAL PATHWAY: MENTAL MUSCLE

EXERCISE

- Sit quietly bring focus to your breath
- Scan your body
- Love your self
- Stretch
- 20 times per day-less than 30 seconds

[Source: Kabat-Zinn;, 1995]

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EXERCISE ONE

What qualities do you have?

- List three qualities you have that make you effective in your life?
- List one that you think is spiritually intelligent.
- Share those qualities?

Nan Waller Burnett 2017 Neuroscience, The Social Brain & Self Care Bibliography:

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