Positive Neuroplasticity: How to Develop Inner Resources

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Rick Hanson, Ph.D.
The Wellspring Institute for Neuroscience and Contemplative Wisdom
WiseBrain.org  RickHanson.net
Topics

- Self-directed neuroplasticity
- How to grow inner strengths
- The negativity bias
- Taking in the good
- Key resource experiences
- Coming home
Waldo goes to India, finds himself.
Self-Directed Neuroplasticity
Two wolves in the heart
Inner Strengths

- Understandings
- Capabilities
- Positive emotions
- Attitudes
- Motivations
- Virtues
INNER STRENGTHS ARE BUILT FROM BRAIN STRUCTURE
A Neuron
Christian Nuns, Recalling a Profound Spiritual Experience

Beauregard, et al., Neuroscience Letters, 9/25/06
Neurons that fire together, wire together.
We can use the mind

To change the brain

To change the mind for the better

To benefit ourselves and other beings.
How to Grow Inner Strengths
Growing Gratitude

- Think of things you feel grateful for . . . Let this become a feeling of gratitude.
- Stay with this experience . . . Open to it.
- Imagine or sense that gratitude is sinking into you . . . As you sink into it.
Learning – changing neural structure and function – proceeds in two stages:

From **state** to **trait**

From **activation** to **installation**

From **short-term** memory buffers to **long-term** storage
Inner strengths are grown from experiences of them or related factors - activated states - that are installed as traits.
You become more compassionate by repeatedly installing experiences of compassion.

You become more grateful by repeatedly installing experiences of gratitude.

You become more mindful by repeatedly installing experiences of mindfulness.
Most experiences of inner strengths – resilience, kindness, insight, mindfulness, self-worth, love, etc. – are enjoyable.
Without **installation**, there is no learning, no change in the brain.
We’re good at activation but bad at installation.

This is the fundamental weakness in most patient education, human resources training, psychotherapy, coaching, and mindfulness training.
The same research that proves therapy works shows no improvement in outcomes over the last 30 or so years.
Installation
Installation

Installation
Installation

Installation

Installation
Meanwhile your painful, harmful experiences are being rapidly converted into neural structure.
The Negativity Bias
Velcro for Bad, Teflon for Good

The negativity bias
The Negativity Bias
Stone age brains in the 21st century
We can deliberately use the mind to change the brain for the better.
Taking in the Good
Learning to Take in the Good
Have a Good Experience
Enrich It
How to Enrich an Experience

- Duration
- Intensity
- Multimodality
- Novelty
- Salience
Absorb It
Link Positive and Negative Material
HEAL by Taking in the Good

1. **Have** a positive experience. Notice it or create it.

2. **Enrich** the experience through duration, intensity, multimodality, novelty, personal relevance

3. **Absorb** the experience by intending and sensing that it is sinking into you as you sink into it.

4. **Link** positive and negative material. [optional]
Have It, Enjoy It
Growing Compassion

- Think of someone you care about. Be aware of this person’s challenges, stress, and pain. Find the sincere wish that this person not suffer . . . With warmhearted concern.

- Stay with this experience . . . Open to it.

- Imagine or sense that compassion is sinking into you . . . As you sink into it.
It’s Good to Take in the Good

- Development of specific inner strengths
- Implicit benefits
- Sensitizes brain to the positive
- Creates positive cycles
Keep a green bough in your heart, and a singing bird will come.

Lao Tsu
Study on the HEAL Process

- With collaborators from the University of California, a 2013 study on the HEAL course, using a randomized waitlist control group design (46 subjects)

- Course participants, compared to the control group, reported more Contentment, Self-Esteem, Satisfaction with Life, Savoring, and Gratitude.

- After the course and at two month follow-up, pooled participants also reported more Love, Compassion, Self-Compassion, Mindfulness, Self-Control, Positive Rumination, Joy, Amusement, Awe, and Happiness, and less Anxiety and Depression.
Combined Sample: Depression (BDI) & Anxiety (BAI)
The Four Ways to Offer a Method

- Doing it implicitly
- Teaching it and then leaving it up to the person
- Doing it explicitly with the person
- Asking the person to do it on his or her own
Key Resource Experiences
The Evolving Brain

The Triune Brain - (P. MacLean 1990)
"With all due respects, I find your disparaging remarks about the 'reptilian brain' unnecessary"
Our Three Fundamental Needs

Safety

Satisfaction

Connection
Needs Met by Three Systems

Safety – Avoiding harms

Satisfaction – Approaching rewards

Connection – Attaching to others
Pet the Lizard
Feed the Mouse
Hug the Monkey
Some Types of Resource Experiences

Avoiding Harms
- Feeling basically alright right now
- Feeling protected, strong, safe, at peace
- The sense that awareness itself is untroubled

Approaching Rewards
- Feeling basically full, the enoughness in this moment as it is
- Feeling pleasured, glad, grateful, satisfied
- Therapeutic, spiritual, or existential realizations

Attaching to Others
- Feeling basically connected
- Feeling included, seen, liked, appreciated, loved
- Feeling compassionate, kind, generous, loving
Coming Home
The Brain’s Responsive Setting

When not invaded by threat, loss, or rejection [no felt deficit or disturbance of safety, satisfaction, and connection]

The body defaults to a sustainable equilibrium of refueling, repairing, and pleasant abiding.
The mind defaults to a sustainable equilibrium of:
- **Peace** (the Avoiding system)
- **Contentment** (the Approaching system)
- **Love** (the Attaching system)

This is the brain in its homeostatic **Responsive, minimal craving** mode.
The Brain’s Reactive Setting

When invaded by threat, loss, or rejection [felt deficit or disturbance of safety, satisfaction, or connection]:

The body fires up into the stress response; outputs exceed inputs; long-term building is deferred.

The mind fires up into:
- **Fear** (the Avoiding system)
- **Frustration** (the Approaching system)
- **Heartache** (the Attaching system)

This is the brain in allostatic, *Reactive, craving* mode.
Choices . . .

Or?

**Reactive Mode**

- Avoid
- Harred
- Ignorance
- Suffering
- Heartache
- Attach

**Responsive Mode**

- Avoid
- Peace
- Wisdom
- Contentment
- Love
- Attach
Positive experiences of core needs met - the felt sense of safety, satisfaction, and connection - activate Responsive mode.

Activated Responsive states can become installed Responsive traits. Responsive traits foster Responsive states.

Responsive states and traits enable us to stay Responsive with challenges.
Peace

Contentment

Love
Think not lightly of good, saying, 
"It will not come to me."

Drop by drop is the water pot filled.

Likewise, the wise one, 
gathering it little by little, 
fills oneself with good.

Dhammapada 9.122
Thank you
Suggested Books

See [www.RickHanson.net](http://www.RickHanson.net) for other great books.


Key Papers - 2


- Hanson, R. 2008. Seven facts about the brain that incline the mind to joy. In *Measuring the immeasurable: The scientific case for spirituality*. Sounds True.
Key Papers - 3


Key Papers - 4


Where to Find Rick Hanson Online

**Hardwiring Happiness: The New Brain Science of Contentment, Calm, and Confidence**

www.rickhanson.net/hardwiringhappiness

Personal website: www.rickhanson.net

Wellspring Institute: www.wisebrain.org

youtube.com/drrhanson  facebook.com/rickhansonphd