Self-Directed Neuroplasticity
Common - and Fertile - Ground

Neuroscience

Psychology

Contemplative Practice
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.
Growing the Feeling of Being Alright

- **Notice** the experience already present in awareness that you are alright right now.
  - Have the experience.
  - Enrich it.
  - Absorb it.
Be mindful of the difference between an idea and an experience.

Be mindful of the difference between having an experience and internalizing it.
Growing Gratitude

- **Create** the experience of gladness or gratitude.
  - Have the experience.
  - Enrich it.
  - Absorb it.
Be mindful of the difference between noticing an experience and creating it.
What are we doing here?
Growing resources in your mind and brain
What Shapes Your Course in Life?

Challenges

Vulnerabilities

Resources
What Can You Usually Affect the Most?

Resources
Where Are Resources Located?

The World

The Body

The Mind
What Can You Usually Affect the Most?

The Mind
Inner Strengths Include

Capabilities

Positive emotions

Attitudes

Somatic inclinations

Virtues
Inner Strengths Are Built From Brain Structure
How do you get those strengths into your brain?
Growing Inner Strengths
Two wolves in the heart
Growing Compassion

- **Create** the experience of compassion.
  - Have the experience - bring to mind someone you care about . . . Feel caring . . . Wish that he or she not suffer . . . Open to compassion.
  - Enrich it.
  - Absorb it.
Why are we emphasizing enriching and absorbing?
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
Positive Neuroplasticity: How to Take in the Good

Activation
1. Have a beneficial experience.

Installation
2. Enrich the experience.

3. Absorb the experience.
Growing Feeling Cared About

1. **Have** – Bring to mind one or more beings who care about you . . . In your life today or from your past . . . The relationship need not be perfect . . . But in real ways you are included, or seen, or appreciated, or liked, or loved . . .

2. **Enrich** – Help this experience last . . . Open to it in your heart, your body . . . If your mind wanders, bring it back . . .

3. **Absorb** – Intend and sense that this experience is sinking into you . . . Like water into a sponge . . . Giving over to it . . .
Growing Inner Strengths

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.
Without this installation – without turning passing mental states into enduring neural structure – there is no learning, no change in the brain.

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

Scott Miller
Meanwhile your painful, harmful experiences are being rapidly converted into neural structure.
The Negativity Bias
The Brain’s Negativity Bias

- As our ancestors evolved, avoiding “sticks” was more important for survival than getting “carrots.”

- Negative stimuli receive more attention and processing.

- Preferential encoding in implicit memory:
  - We learn faster from pain than pleasure.
  - Negative interactions: more impactful than positive
  - Easy to create learned helplessness, hard to undo
  - Rapid sensitization to negative through cortisol
Velcro for Bad, Teflon for Good

The negativity bias

good experiences

bad experiences
The Negativity Bias
Stone age brains in the 21st century
We can deliberately use the mind to change the brain for the better.
Positive Neuroplasticity: Taking in the Good
Learning to Take in the Good
Have a Good Experience
Enrich It
“Enriching” Factors

- Duration
- Intensity
- Multimodality – thought, perception, emotion, desire, action
- Novelty
- Personal relevance
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 Self-Compassion

1. Have – “Warm up the circuits” by calling up the feeling of being cared about . . . Call up the feeling of compassion, the wish that beings not suffer along with warm-hearted feelings of sympathetic concern . . . And then apply this compassion to yourself . . . Aware of your challenges, stresses, pain . . . But centering mainly in compassion for yourself . . .


3. Absorb – Receive compassion into yourself . . . Like a warm soothing balm . . . Waves of compassion coming in . . .
The Taking in the Good course (18 hours) was researched with collaborators from the University of California, using a randomized waitlist control group.

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)
Keep a green bough in your heart, 
and a singing bird will come.

Lao Tsu
Let’s Try It Again

- **Notice** the experience already present in awareness of some kind of strength . . . focus, determination, vitality, endurance
  - Have the experience
  - Enrich it
  - Absorb it

- **Create** the experience of goals attained
  - Have the experience - bring to mind a time you finished something large or small . . . Open to a sense of completion, accomplishment, relief, success . . .
  - Enrich it
  - Absorb it
Coming Home
Evolution of the Brain

The Triune Brain - (P. MacLean 1990)
Needs Met by Three Systems

Safety – Avoiding harms

Satisfaction – Approaching rewards

Connection – Attaching to others
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
Psychological Antidotes

Avoiding Harms
- Strength, efficacy --> Weakness, helplessness, pessimism
- Safety, security --> Alarm, anxiety
- Compassion for oneself and others --> Resentment, anger

Approaching Rewards
- Satisfaction, fulfillment --> Frustration, disappointment
- Gladness, gratitude --> Sadness, discontentment, “blues”

Attaching to Others
- Attunement, inclusion --> Not seen, rejected, left out
- Recognition, acknowledgement --> Inadequacy, shame
- Friendship, love --> Abandonment, feeling unloved or unlovable
Pet the Lizard
Feed the Mouse
Hug the Monkey
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
Suggested Books

See www.RickHanson.net for other suggestions.

Key Papers - 1

See [www.RickHanson.net](http://www.RickHanson.net) for other scientific papers.


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 - 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