Hardwiring Happiness:  
*From Passing States To Lasting Traits*

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Topics

- Foundations
- Being on your own side
- The evolving brain
- Taking in the good
- Key resource experiences
- Healing old pain
- The fruit as the path
Foundations
Neurons that fire together, wire together.
Self-Directed Neuroplasticity

We can use the mind

To change the brain

To change the mind for the better

To benefit ourselves and other beings.
Inner Strengths Are Built From Brain Structure
States are temporary, traits are enduring.

States foster traits, and traits foster states

Activated states $\rightarrow$ Installed traits $\rightarrow$ Reactivated states $\rightarrow$ Reinforced traits

**Negative** states $\rightarrow$ Negative traits $\rightarrow$ Reactivated negative states $\rightarrow$ Reinforced negative traits

**Positive** states $\rightarrow$ Positive traits $\rightarrow$ Reactivated positive states $\rightarrow$ Reinforced positive traits
The education of attention would be the education *par excellence*.

William James
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]
Keep a green bough in your heart, and a singing bird will come.

Lao Tsu
Being on Your Own Side
The good life, as I conceive it, is a happy life.  
I do not mean that if you are good you will be happy;  
I mean that if you are happy you will be good.  

Bertrand Russell
If one going down into a river, swollen and swiftly flowing, is carried away by the current -- how can one help others across?

The Buddha
Self-Compassion

Compassion is the wish that a being not suffer, combined with sympathetic concern. Self-compassion simply applies that to oneself. It is not self-pity, complaining, or wallowing in pain.

Studies show that self-compassion buffers stress and increases resilience and self-worth.

But self-compassion is hard for many people, due to feelings of unworthiness, self-criticism, or “internalized oppression.” To encourage the neural substrates of self-compassion:

- Get the sense of being cared about by someone else.
- Bring to mind someone you naturally feel compassion for.
- Sink into the experience of compassion in your body.
- Then shift the compassion to yourself, perhaps with phrases like: “May I not suffer. May the pain of this moment pass.”
“Anthem”

Ring the bells that still can ring
Forget your perfect offering
There is a crack in everything
That’s how the light gets in
That’s how the light gets in

Leonard Cohen
The Negativity Bias
The Evolving Brain
Biological Evolution

- 4+ billion years of earth
- 3.5 billion years of life
- 650 million years of multi-celled organisms
- 600 million years of nervous system
- 200 million years of mammals
- 60 million years of primates
- 6 million years ago: ancestor with chimpanzees
- 2.5 million years of tool-making
- 150,000 years of *homo sapiens*
Evolution of the Brain

The Triune Brain - (P. MacLean 1990)
Three Motivational and Self-Regulatory Systems

- **Avoid Harms:**
  - Predators, natural hazards, aggression, pain
  - Primary need, tends to trump all others

- **Approach Rewards:**
  - Food, shelter, mating, pleasure
  - Mammals: rich emotions and sustained pursuit

- **Attach to Others:**
  - Bonding, language, empathy, cooperation, love
  - Taps older Avoiding and Approaching networks

Each system can draw on the other two for its ends.
"With all due respects, I find your disparaging remarks about the 'reptilian brain' unnecessary"
The Homeostatic Home Base

*When not disturbed by threat, loss, or rejection [no felt deficit 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 Responsive Mode
Some Benefits of Responsive Mode

- Recovery from “mobilizations” for survival:
  - Refueling after depleting outpourings
  - Restoring equilibrium to perturbed systems
  - Reinterpreting negative events in a positive frame
  - Reconciling after separations and conflicts

- Promotes prosocial behaviors:
  - Experiencing safety decreases aggression.
  - Experiencing sufficiency decreases envy.
  - Experiencing connection decreases jealousy.
  - We’re more generous when our own cup runneth over.
## The Responsive Mode

<table>
<thead>
<tr>
<th></th>
<th>View</th>
<th>Action</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avoid</strong></td>
<td>Resources, challenges-in-context</td>
<td>Govern/restrain, truth-to-power, forgive</td>
<td>Strength, safety, peace</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Sufficiency, abundance, disenchantment</td>
<td>Aspire, give, let go</td>
<td>Glad, grateful, fulfilled, satisfied</td>
</tr>
<tr>
<td><strong>Attach</strong></td>
<td>Connection, belonging, social supplies</td>
<td>Open to others; join; be empathic, compassionate, kind, caring; love</td>
<td>Membership, closeness, friendship, bonding loved and loving</td>
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</tbody>
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Coming Home, Staying Home

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.
But to Cope with Urgent Needs, We Leave Home . . .

*When disturbed by threat, loss, or rejection [felt deficit 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. 27
The Reactive Mode
# The Reactive Mode

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<tr>
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<th>Action</th>
<th>Experience</th>
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</thead>
<tbody>
<tr>
<td><strong>Avoid</strong></td>
<td>Harms present</td>
<td>Fight, flight, freeze</td>
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<tr>
<td></td>
<td>or lurking</td>
<td>Fear, anger, weakness</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Scarcity, loss,</td>
<td>Grasp, acquire</td>
</tr>
<tr>
<td></td>
<td>unreliability,</td>
<td>Greed, longing,</td>
</tr>
<tr>
<td></td>
<td>not expected</td>
<td>frustration,</td>
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<tr>
<td></td>
<td>rewards</td>
<td>disappointment</td>
</tr>
<tr>
<td><strong>Attach</strong></td>
<td>Separated,</td>
<td>Cling, seek approval, reproach</td>
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<tr>
<td></td>
<td>being “beta,”</td>
<td>Loneliness, heart-break, envy,</td>
</tr>
<tr>
<td></td>
<td>devalued</td>
<td>jealousy, shame</td>
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</table>
Reactive Dysfunctions in Each System

- **Avoiding** - Anxiety disorders; PTSD; panic, terror; rage; violence

- **Approaching** - Addiction; over-drinking, -eating, -gambling; compulsion; hoarding; driving for goals at great cost

- **Attaching** - Borderline, narcissistic, antisocial PD; symbiosis; “looking for love in all the wrong places”
Choices . . .

Reactive Mode

Responsive Mode

Or?
Negative Experiences In Context

- Negative about negative --> more negative

- Some inner strengths come only from negative experiences, e.g., knowing you’ll do the hard thing.

- But negative experiences have inherent costs, in discomfort and stress.

- Could an inner strength have been developed without the costs of negative experiences?

- Many negative experiences are pain with no gain.
Velcro for Bad, Teflon for Good

The negativity bias

bad experiences

good experiences
A Major Result of the Negativity Bias: Threat Reactivity

- Two mistakes:
  - Thinking there is a tiger in the bushes when there isn’t one.
  - Thinking there is no tiger in the bushes when there is one.

- We evolved to make the first mistake a hundred times to avoid making the second mistake even once.

- This evolutionary tendency is intensified by temperament, personal history, culture, and politics.

- Threat reactivity affects individuals, couples, families, organizations, nations, and the world as a whole.
Unfortunately, the brain is inefficient at turning positive experiences into neural structure.

This design feature of the brain creates a kind of bottleneck that reduces the conversion of positive mental states to positive neural traits.

Most positive experiences are wasted on the brain.

This is the fundamental weakness in psychotherapy, mindfulness training, character education, human resources training, and informal efforts at growth.
The Negativity Bias
We can deliberately use the mind
to change the brain for the better.
Taking in the Good
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

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4. **Link** positive and negative material. [optional]
Let’s Try It

- **Notice** anything positive already present in awareness – perhaps vitality, interest, warmth
  - Have the experience
  - Enrich it
  - Absorb it

- **Create** an experience of strength, determination
  - Have the experience - bring to mind a time you felt strong and determined . . . Feel this now . . .
  - Enrich it
  - Absorb it
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
Resources for Taking in the Good

- Intention; willing to feel good
- Identified target experience
- Openness to the experience; embodiment
- Mindfulness of the steps of TG to sustain them
- Working through obstructions
Targets of TG

- **Thoughts** - expectations; object relations; perspectives on self, world, past and future

- **Perceptions** - sensations; relaxation; vitality

- **Emotions** - both feelings and mood

- **Desires** - values, aspirations, passions, wants

- **Behaviors** - reportoire; inclinations
Promoting Client Motivation

- During therapy and between sessions, TG:
  - Key resource experiences
  - When learning from therapy works well
  - When realistic views of you, the world, etc. come true
  - Good qualities in yourself
  - New insights

- Can be formalized in daily reflections, journaling

- Try appropriate risks of “dreaded experiences,” notice the (usually) good results, and then take these in.
TG and Children

- All kids benefit from TG.

- Particular benefits for mistreated, anxious, spirited/ADHD, or LD children.

- Adaptations:
  - Brief
  - Concrete
  - Natural occasions (e.g., bedtimes)
Doing TG with a Couple

Basic steps (often informal):

- Attention to a good fact
- Evoking and sustaining a good experience
- Managing obstructions
- Awareness of the impact on one’s partner
- Debriefing, often from both partners

Pitfalls to avoid:

- Seeming to side with one person
- Unwittingly helping a person overlook real issues
- Letting the other partner pile on
Synergies of TG and Mindfulness

- Improved mindfulness enhances TG.

- TG increases factors of mindfulness (e.g., self-acceptance, self-compassion, distress tolerance).

- TG heightens learning from mindfulness:
  - The sense of stable presence itself
  - Confidence that awareness itself is never disturbed
  - Peace of realizing that experiences come and go
Obstructions to Taking in the Good

- General
  - Distractibility
  - Blocks to self-awareness in general

- Specific
  - Fears of losing one’s edge or lowering one’s guard
  - Sense of disloyalty to others (e.g., survivor guilt)
  - Culture (e.g., selfish, vain, sinful)
  - Gender style
  - Associations to painful states
  - Secondary gains in feeling bad
  - Not wanting to let someone off the hook
  - Thoughts that TG is craving that leads to suffering
Key Resource Experiences
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
Healing Old Pain
Using Memory Mechanisms To Help Heal Painful Experiences

- The machinery of memory:
  - When explicit or implicit memory is re-activated, it is re-built from schematic elements, not retrieved \textit{in toto}.
  - When attention moves on, elements of the memory get re-consolidated.

- The open processes of memory activation and consolidation create a window of opportunity for shaping your internal world.

- Activated memory tends to associate with other things in awareness (e.g., thoughts, sensations), esp. if they are prominent and lasting.

- When memory goes back into storage, it takes associations with it.

- You can imbue implicit and explicit memory with positive associations.
The Fourth Step of TG

- When you are having a positive experience:
  - Sense the experience sinking down into old pain and deficits, and soothing and replacing them.

- When you are having a negative experience:
  - Bring to mind a positive experience that is its antidote.

- Have the positive experience be prominent while the negative experience is small and in the background.

- You’re not resisting negative experiences or getting attached to positive ones. You’re being kind to yourself and cultivating resources in your mind.
For the fourth step of TIG, try to get at the youngest, most vulnerable layer of painful material.

The “tip of the root” is commonly in childhood. In general, the brain is most responsive to negative experiences in early childhood.

Prerequisites
- Understanding the need to get at younger layers
- Compassion and support for the inner child
- Capacity to “presence” young material without flooding
TG and Trauma

- General considerations:
  - People vary in their resources and their traumas.
  - Often the major action is with “failed protectors.”
  - Cautions for awareness of internal states, including positive
  - Respect “yellow lights” and the client’s pace.

- The first three steps of TG are generally safe. Use them to build resources for tackling the trauma directly.

- As indicated, use the fourth step of TG to address the peripheral features and themes of the trauma.

- Then, with care, use the fourth step to get at the heart of the trauma.

*First of all, do no harm.*
The Fruit as the Path
The Goal as the Method

Peace

Contentment

Love
Penetrative insight
goinged with calm abidingutterly eradicatesafflicted states.

Shantideva
Thank you
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


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