
*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.*

Positive Neuroplasticity Training:

***Turning Everyday Experiences
Into Lasting Inner Strengths***

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www.RickHanson.net

www.WiseBrain.org



Class 1:

The Essence of Positive Neuroplasticity



Introduction

*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.*

Classes of PNT

- 1. The Essence of Positive Neuroplasticity**
- 2. Having, Enriching, and Absorbing Experiences**
- 3. Linking Positive and Negative Material**
- 4. Growing Strengths for Safety**
- 5. Growing Strengths for Satisfaction**
- 6. Growing Strengths for Connection**



Challenges and Resources

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring this question:

What are some of the challenges in your life these days? (Out in the world, in your body, in your mind)

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring this question:

What are some of the resources in your life these days? (Out in the world, in your body – and especially in your mind)



A Taste of Taking in the Good

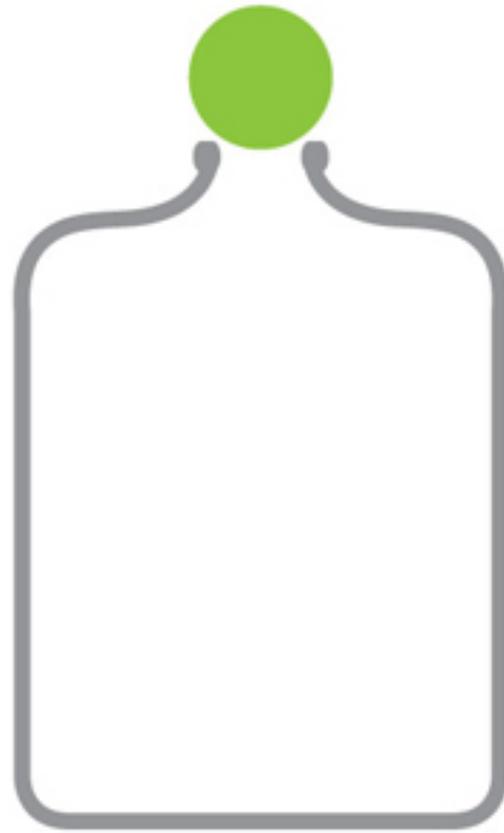
Positive Neuroplasticity – How to Take in the Good: HEAL

Activation

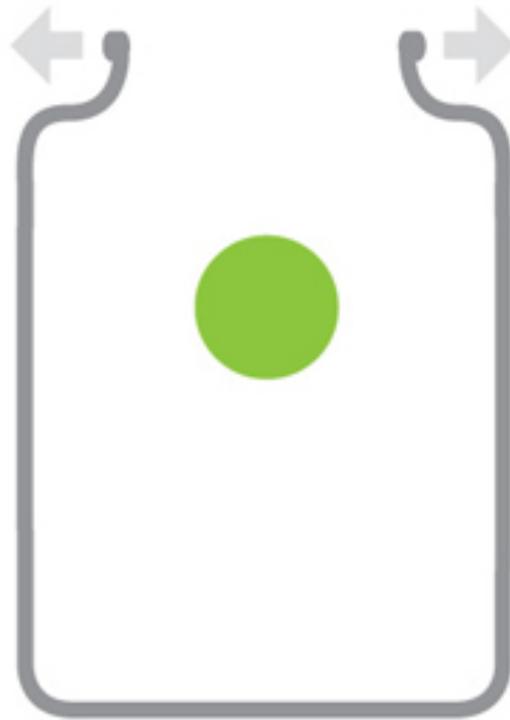
1. Have a beneficial experience.

Installation

2. Enrich the experience.
3. Absorb the experience.
4. Link positive and negative material. [optional]



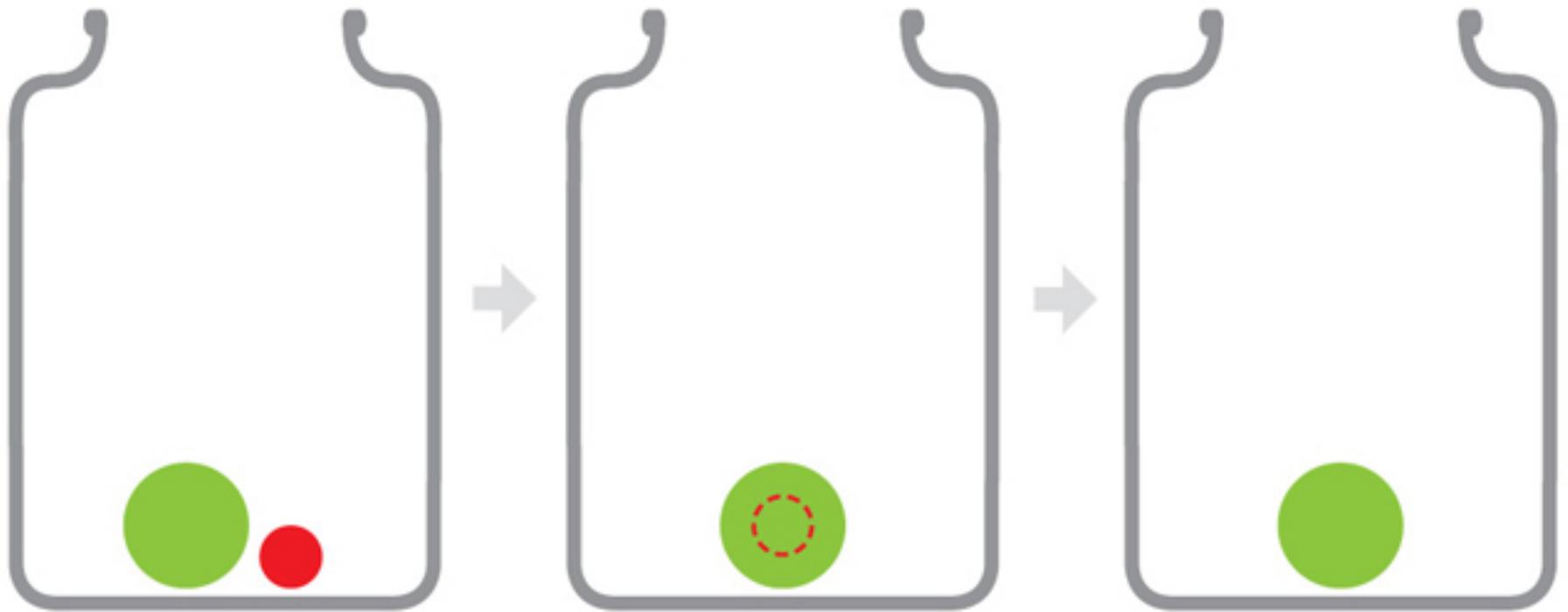
Have a Good Experience



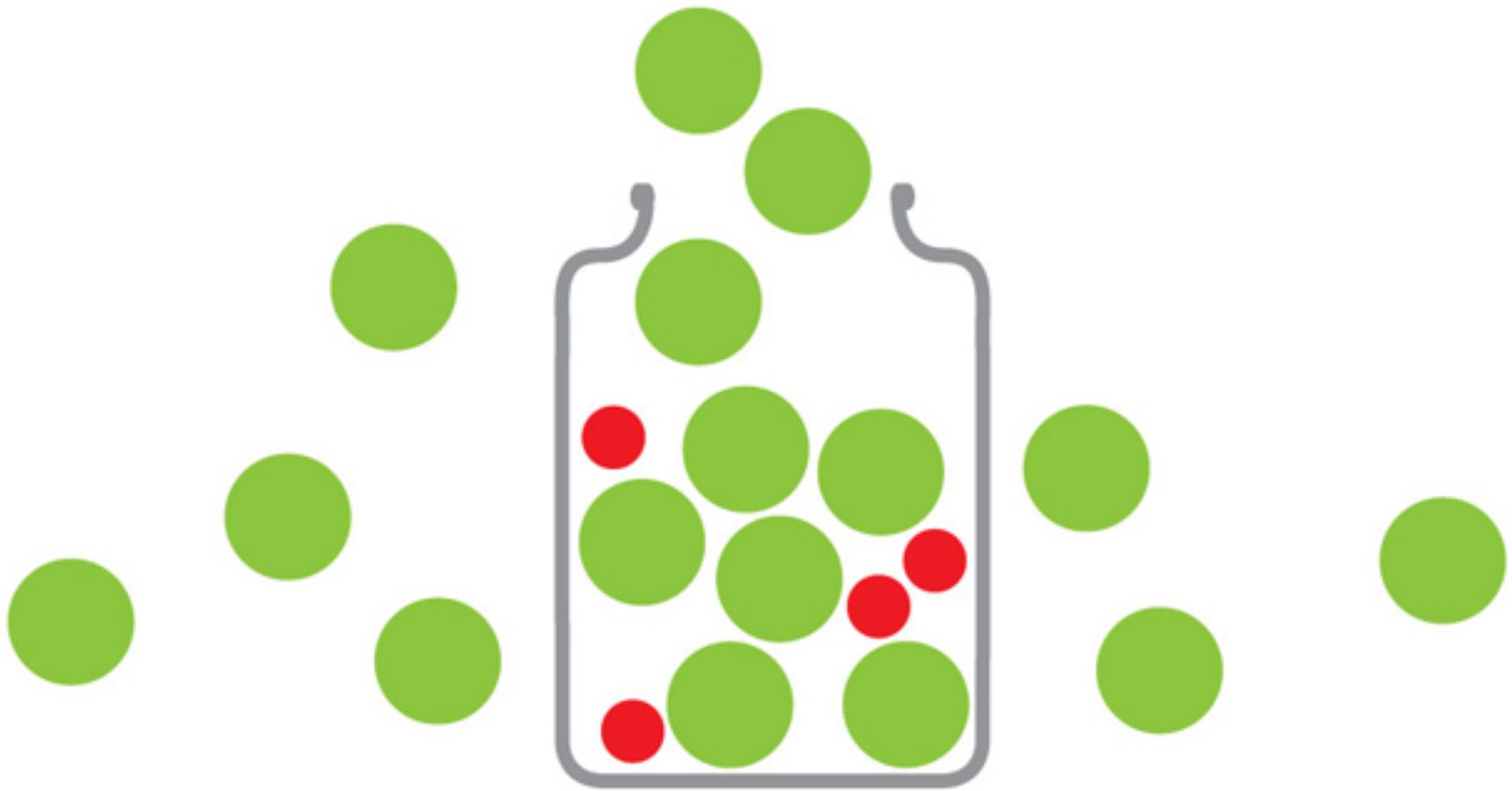
Enrich It



Absorb It



Link Positive and Negative Material



Have It, Enjoy It

Let's Try It

- **Notice** something beneficial in awareness.
 - Have the experience – more in the foreground.
 - Enrich it – sustain it, feel it in your body.
 - Absorb it – receive it, imagine or sense it's sinking in.

- **Create** the experience of gladness or gratitude.
 - Have the experience.
 - Enrich it.
 - Absorb it.

- **Create** the experience of feeling cared about.
 - Have the experience.
 - Enrich it.
 - Absorb it.



Growing Inner Strengths

The image is a split-screen composition. The left side shows a close-up of a wolf's face, which is smiling, showing its teeth and tongue. The right side shows a close-up of a wolf's face, which is snarling, showing its sharp teeth and a dark, menacing expression. The text "Two wolves in the heart" is overlaid in the center of the image.

Two wolves in the heart

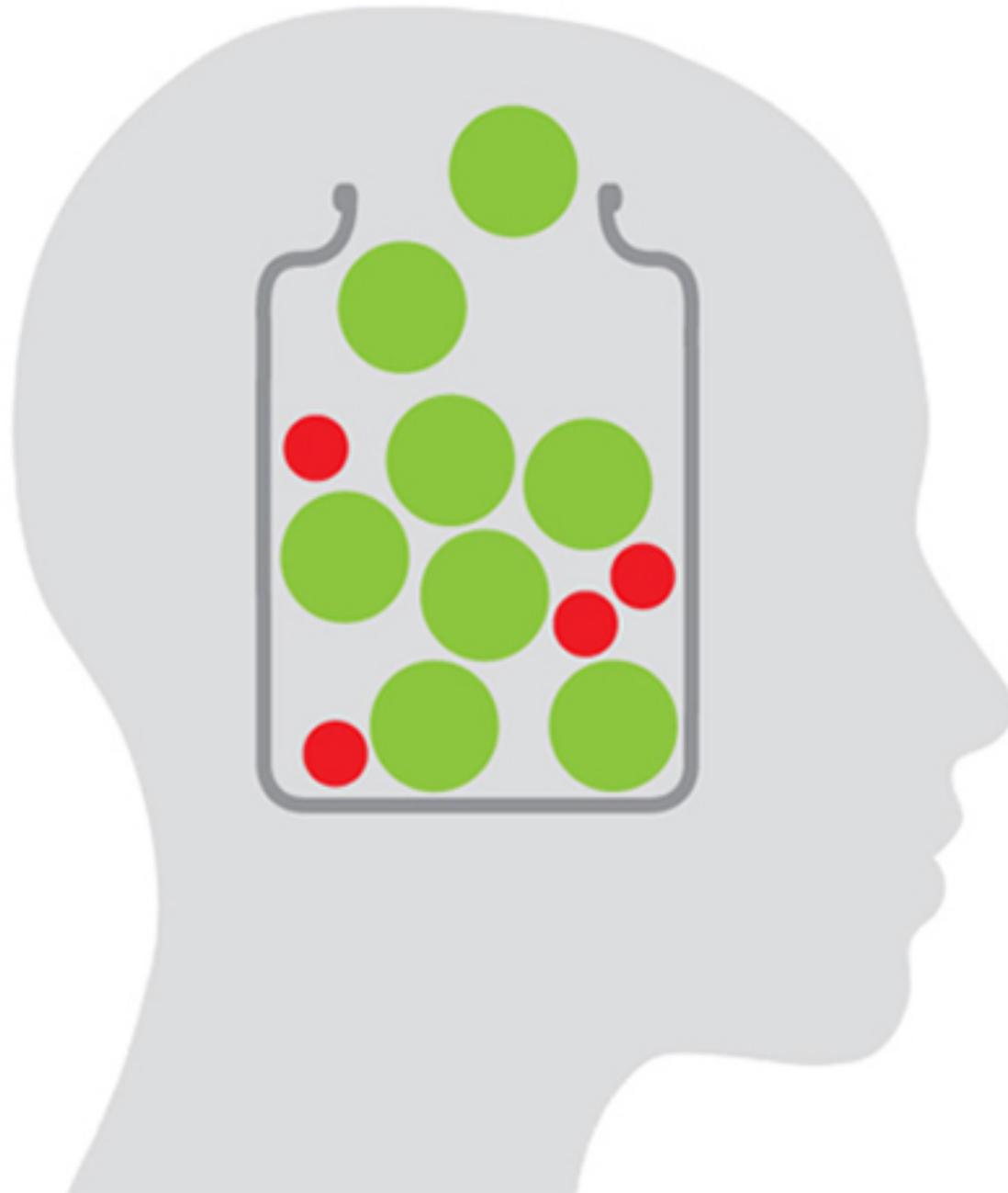
Inner Strengths

- **Understandings**
- **Capabilities**
- **Positive emotions**
- **Attitudes**
- **Motivations**
- **Virtues**

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring this question:

What psychological resources – inner strengths – would you like to grow or develop in yourself?

INNER STRENGTHS ARE BUILT FROM BRAIN STRUCTURE



**Mental activity entails
underlying neural activity.**

**Repeated mental activity entails
repeated neural activity.**

**Repeated neural activity
builds neural structure.**

A network of glowing yellow neurons with a central neuron highlighted in green. The neurons are interconnected by a dense web of thin, yellow fibers, creating a complex, interconnected structure. The central neuron is a larger, more prominent cell with a bright green nucleus and several branching processes extending outwards. The overall appearance is that of a highly organized and interconnected neural network.

Neurons that fire together,

wire together.

The Neuropsychology of Learning

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

Activation without installation is pleasant, but has no lasting value.

What fraction of your beneficial mental states ever become neural structure?

Positive Neuroplasticity – How to Take in the Good: HEAL

Activation

1. Have a beneficial experience.

Installation

2. Enrich the experience.
3. Absorb the experience.
4. Link positive and negative material. [optional]



The Three Ways to Engage the Mind

In the Garden of the Mind

1. Be with what is there
2. Decrease the negative
3. Increase the positive

Witness. Pull weeds. Plant flowers.

Let be. Let go. Let in.

Mindfulness is present in all three.

“Being with” is primary – but not enough.

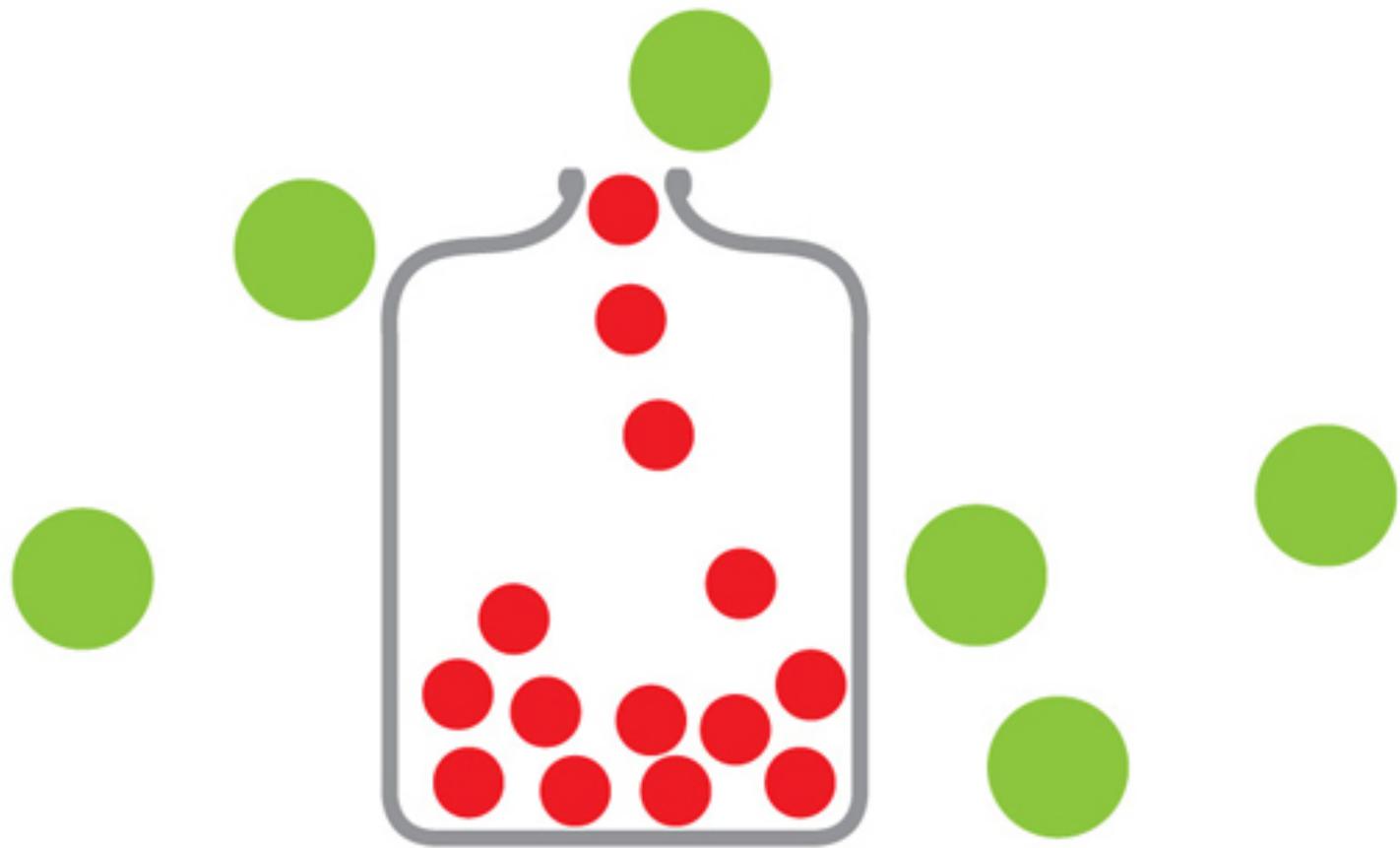
We also need “wise effort.”

Velcro for Bad, Teflon for Good

The negativity bias

bad experiences

good experiences



The Negativity Bias

In the Garden of the Mind

1. Be with what is there
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Positive Neuroplasticity – How to Take in the Good: HEAL

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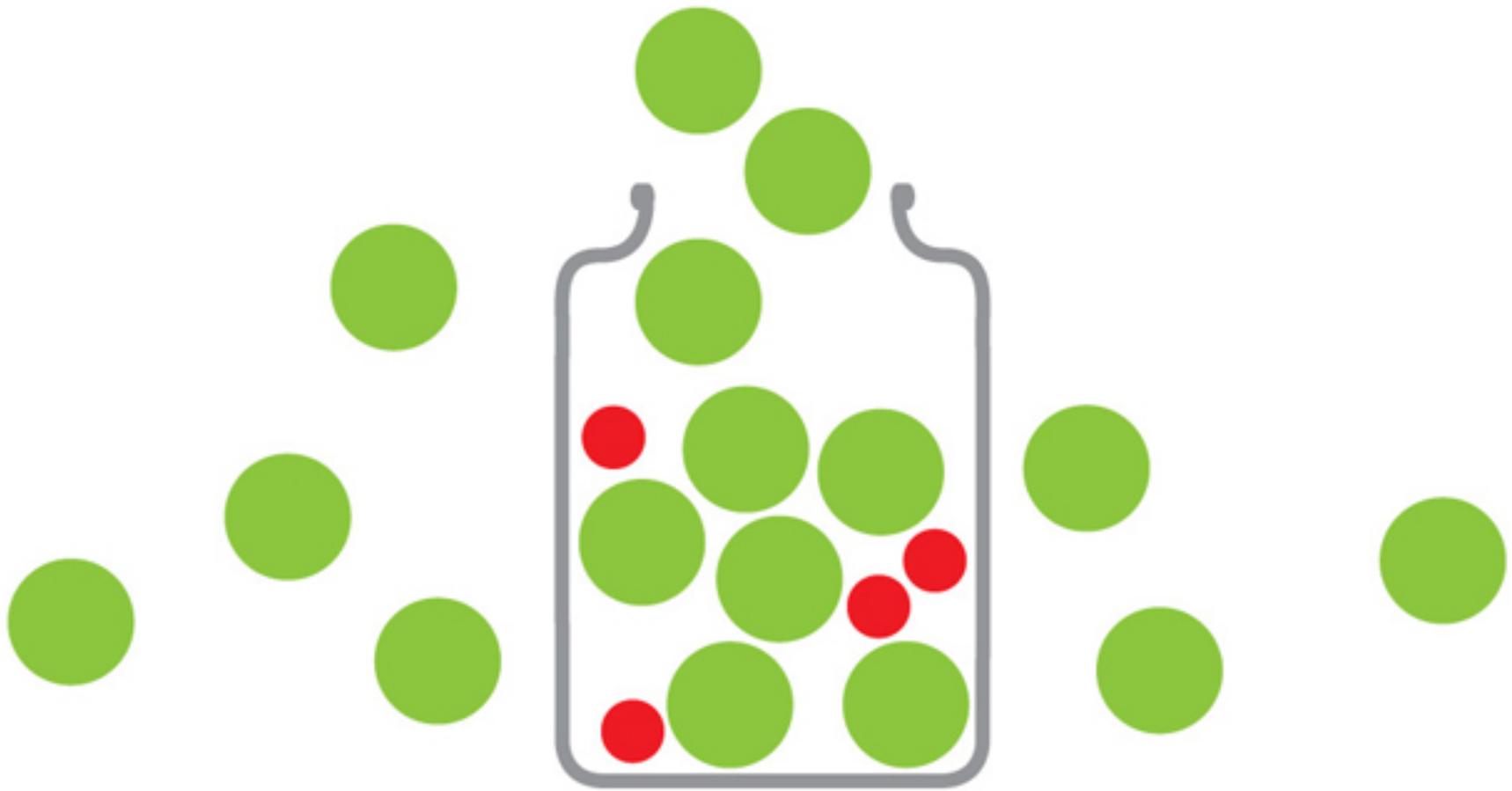
1. Have a beneficial experience.

Installation

2. Enrich the experience.
3. Absorb the experience.
4. Link positive and negative material. [optional]

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring this question:

What was that practice of the three ways to engage the mind like for you?



Have It, Enjoy It



Class 2:

Having, Enriching, and Absorbing Experiences



Elements of Experience

Elements of Experience

- **Thought** – belief; perspective; expectation; image; memory; idea
- **Perception** – sensation (e.g., relaxation, vitality); sight; sound; taste; smell
- **Emotion** – feeling; mood
- **Desire** – want; wish; hope; value; drive; motivation; purpose; dream; passion; determination
- **Action** – behavior; posture; knowing how to



Having Beneficial Experiences

Positive Neuroplasticity – How to Take in the Good: HEAL

Activation

1. Have a beneficial experience.

Installation

2. Enrich the experience.
3. Absorb the experience.
4. Link positive and negative material. [optional]

The Two Ways To Have a Beneficial Experience

Notice one you are already having.

- **In the foreground of awareness**
- **In the background**

Create one.

How to Create A Beneficial Experience

Look for good facts in:

1. Immediate situation
2. Current or recent events
3. Stable conditions
4. Your character
5. The past
6. The future
7. Bad situations
8. The lives of others
9. Your imagination
10. Care about others
11. Directly evoke a beneficial experience
12. Produce good facts
13. Share about good facts with others

Turning a Good Fact Into a Good Experience

- Bring awareness to your body.
- Soften and open yourself.
- Be a little active in your mind, recognizing aspects of the good fact that naturally elicit an experience.
- Imagine how another person might naturally feel in response to the good fact.
- Have kindness for yourself, encouraging yourself to have a beneficial experience.

Positive Neuroplasticity – How to Take in the Good: HEAL

Activation

1. Have a beneficial experience.

Installation

2. Enrich the experience.
3. Absorb the experience.
4. Link positive and negative material. [optional]

Reflections So Far

Noticing and creating an experience are different.

There are lots of ways to create experiences.

Beneficial experiences are usually based on facts.

Recognizing good facts does not deny bad ones.

Good facts about yourself are facts like any other.



Enriching Beneficial Experiences

How to Enrich an Experience

- **Duration** – 5+ seconds; protecting it; keeping it going
- **Intensity** – opening to it in the mind; helping it get big
- **Multimodality** – engaging multiple aspects of experience, especially perception and emotion
- **Novelty** – seeing what is fresh; “don’t know mind”
- **Salience** – seeing why this is personally relevant



Absorbing Beneficial Experiences

How to Absorb an Experience

- Enriching makes the experience more powerful.
Absorbing makes memory systems more receptive by priming and sensitizing them.
- Intend and sense the experience is sinking into you.
 - Imagery – Water into a sponge; golden dust sifting down; a jewel into the treasure chest of the heart
 - Sensation – Warm soothing balm
- Giving over to the experience; letting it change you
- Letting go of resisting, grasping, clinging: “craving”

*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

Care and Concern for Yourself

- Bring to mind someone you are *for*. Find a sense of caring, seeing suffering and worth, feeling support, being an ally. Know this stance toward someone.
- Apply this stance, this feeling, toward yourself.
- Recognizing your difficulties and burdens. Seeing softness and vulnerability inside like in any other person. Recognizing your stress, worry, frustration, hurt, pain.
- Finding warmth for yourself, the wish that you not suffer and instead be truly happy, determined to have a good life as best you can.



Class 3:

Linking Positive and Negative Material

How to Create A Beneficial Experience

Look for good facts in:

1. Immediate situation
2. Current or recent events
3. Stable conditions
4. Your character
5. The past
6. The future
7. Bad situations
8. The lives of others
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Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring this question:

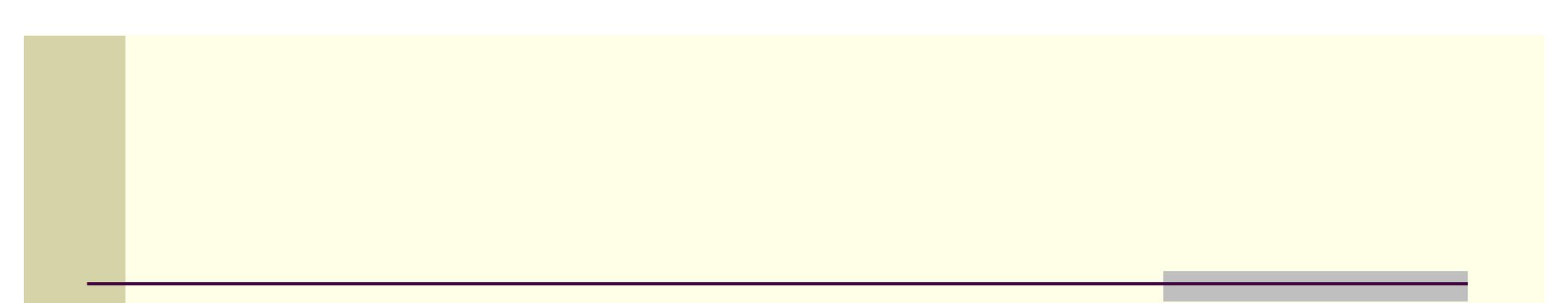
What are some of the good facts in your life these days?

It's Good to Take in the Good

- Development of specific inner strengths
 - General - resilience, positive mood, feeling loved
 - “Antidote experiences” - Healing old wounds, filling the hole in the heart
- Implicit benefits:
 - Shows that there is still good in the world
 - Being active rather than passive
 - Treating yourself kindly, like you matter
 - Rights an unfair imbalance, given the negativity bias
 - Training of attention and executive functions
- Sensitizes brain to positive: like Velcro for good

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

Lao Tsu



Centering Practices

Centering Practices

- Feeling already safe
- Feeling already satisfied
- Feeling already connected

Positive Neuroplasticity – How to Take in the Good: HEAL

Activation

1. Have a beneficial experience.

Installation

2. Enrich the experience.
3. Absorb the experience.
4. Link positive and negative material. [optional]



Key Resource Experiences

Our Three Fundamental Needs

Safety

Satisfaction

Connection

Needs Activated by . . .

Safety – Unpleasant; aversion; threat

**Satisfaction – Pleasant; opportunity;
loss**

**Connection – Heartfelt; attraction;
rejection**

Needs Met by Three Systems

Safety – Avoiding harms

Satisfaction – Approaching rewards

Connection – Attaching to others

Needs Feel Met: Responsive Mode

- When we feel basically safe – not disturbed by threat – the Avoiding system goes Responsive, with a sense of **peace**.
- When we feel basically satisfied – not disturbed by loss – the Approaching system goes Responsive, with a sense of **contentment**.
- When we feel basically connected – not disturbed by rejection – the Attaching system goes Responsive, with a sense of **love**.

The Responsive Mode Is Home Base

In the Responsive “green zone,” the body defaults to a sustainable equilibrium of refueling, repairing, and recovering.

The mind defaults to 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.

Needs Don't Feel Met: Reactive Mode

- When we feel unsafe – disturbed by threat – the Avoiding system goes Reactive, with a sense of **fear**.
- When we feel dissatisfied – disturbed by loss – the Approaching system goes Reactive, with a sense of **frustration**.
- When we feel disconnected – disturbed by rejection – the Attaching system goes Reactive, with a sense of **heartache**.

The Reactive Mode Is Leaving Home

In the Reactive “red zone,” the body fires up into the stress response: fight, flight, or freeze; outputs usually exceed inputs; long-term building projects are deferred.

The mind fires up into:

- **Fear** (the Avoiding system)
- **Frustration** (the Approaching system)
- **Heartache** (the Attaching system)

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

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.

Can You Stay in the Green Zone When:

Things are unpleasant?

Things are pleasant?

Things are heartfelt?

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

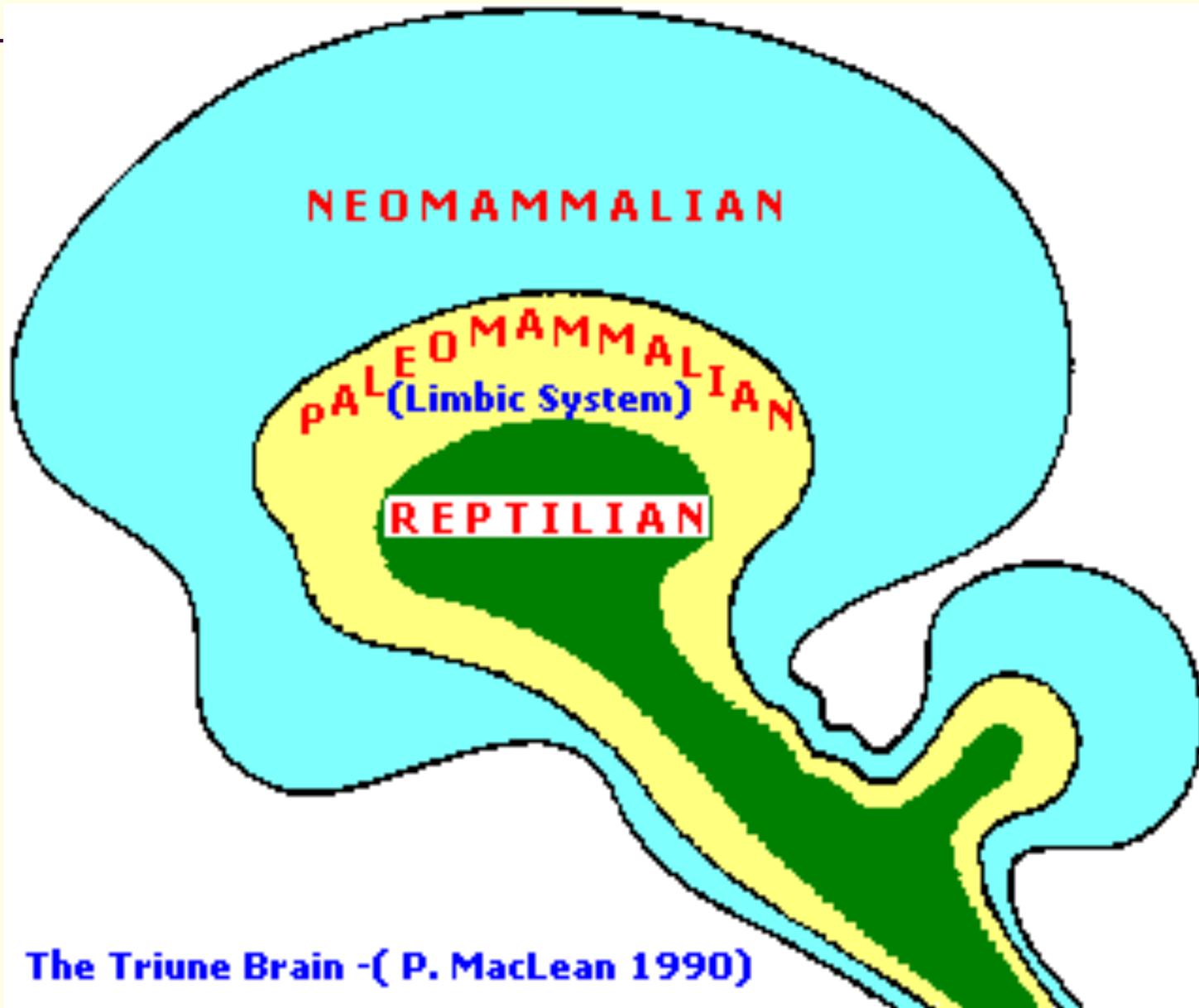
Approaching Rewards

- Feeling basically full, the enoughness in this moment as it is
- Feeling pleased, 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

The Evolving Brain



Pet the Lizard



Feed the Mouse



Hug the Monkey





Linking Positive and Negative Material

“Negative” Material

- “Negative” material includes pain, discomfort, worry, helplessness, anger, frustration, disappointment, drivenness, addiction, loneliness, insecure attachment, hurt, jealousy, resentment, inadequacy, shame
- Comes from the presence of the “bad” and the absence of the “good”
- Activated explicitly and implicitly

How Linking Works

- Activated negative material associates to whatever is also present in awareness.
- When negative material leaves awareness, these associations are reconsolidated in memory.
- This means that positive material can soothe, ease, put in perspective, and even replace negative material.
- Examples: pain held in spacious awareness; telling a friend about a problem; self-compassion for an upset; feeling cared about alongside feeling hurt

HEAL by Taking in the Good

1. **Have** a beneficial experience.
2. **Enrich** it.
3. **Absorb** it.
4. **Link** it with negative material. [optional]

Conditions for the Link Step

- Divided awareness; holding two things at once
- Not hijacked by negative; if so, drop negative
- Positive material is more prominent in awareness.

Degree of Engagement with Negative

- The idea of the negative material
- A felt sense of the negative material
- The positive material goes into the negative material (e.g., soothing balm, filling up hollow places, connecting with younger layers of the psyche)

→ Throughout, the positive material remains more prominent in awareness.

Skills with the 4th Step

- Be on your own side; you want the positive to win. Perhaps imagine inner allies with you.
- Be resourceful. It's OK to be creative, even playful.
- If the negative gets too strong, drop it; return to positive.
- Get a sense of receiving the positive into the negative.
- End with just the positive.
- Start with positive or negative material.



Class 4:

Growing Strengths for Safety

Multi-Purpose Inner Strengths

- Being on your own side
- Centering
- Calming
- Love
 - Feeling cared about
 - Feeling caring
 - Self-compassion

Self-Compassion

- Compassion is the wish beings not suffer, with warm-hearted concern. Compassion is sincere even if we can't make things better.
- Self-compassion simply applies this to oneself.
- To encourage self-compassion:
 - Get the sense of being cared about.
 - Bring to mind beings you care about. Find compassion for them.
 - Shift the compassion to yourself.

“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

Reflections on Fear

- Fear is normal. Avoiding harms is fundamental.
- Much anxiety is unnecessary and unreasonable.
- We tend to overestimate threats and underestimate opportunities and resources.
- People can be afraid . . . to give up fear.
- Remember that you can give up unnecessary anxiety and still remain appropriately cautious, watchful, and strong.

Class 4: Strengths for Safety

- Feeling protected
- Feeling alright right now
- Handling threats in a Responsive way
- Centering in peace, contentment, and love

Extra Strengths for Safety

- Feeling strong
- Sense of agency, efficacy
- Relaxation
- Seeing threats and resources accurately
- Finding refuges
- Dropping directly into peace

Feeling Protected

- Protections in your setting
- Resources inside you and in your life
- Other beings who could help protect you
- Imagining a wall, a shield, a force field protecting you
- Feeling as safe as you reasonably can
- Needless anxiety falling away . . . No need to struggle with anything unpleasant inside you or out in the world . . .

Feeling Basically Alright Right Now

- Tuning into the body's signals that all is well right now
- Aware of breathing going fine . . . the heart beating . . . awareness itself keeps on going no matter what arises . . .
- Letting go of the past, not worrying about the future. Noticing that at least in this moment you are OK.
- Being alright, you can let go of any need to struggle with anything unpleasant.
- Feeling alright sinking into places inside that haven't . . . ⁹⁴

Reactive Approaches to Pain or Threat

- Disturbing and depleting bodily systems
- Overestimating threats and underestimating resources
- Fear, anger, immobilization, helplessness
- Fight, flight, freeze
- Strong sense of I-me-mine
- Vicious cycles in relationships

Responsive Approaches to Pain, Threat

- Sustainable outflow, intensity, pace
- Centered, grounded, in balance
- Fear or anger contained in mindfulness, calm, strength
- Perhaps positive emotions (e.g., confidence, vigor)
- Less sense of I-me-mine
- Assertive, firm; cautious but not cowed

Strengths Supporting Responsive Approaches to Pains and Threats

- Recognizing costs of Reactive mode; knowing you can deal with challenges Responsively
- Multi-purpose: on your own side, centered, calm, love
- Feeling strong, agency, protected, alright, relaxed
- Seeing threats and resources accurately
- Finding refuges
- Peace in your core

Coming Home

Peace

Contentment

Love



Class 5:

Growing Strengths for Satisfaction

Multi-Purpose Inner Strengths

- Being on your own side
- Centering
- Calming
- Love
 - Feeling cared about
 - Feeling caring
 - Self-compassion

Class 5: Strengths for Satisfaction

- Sense of accomplishment
- Finding beauty
- The fullness of this moment
- Imagining the rewards of something you'd like to help yourself want
- Handling opportunities and losses in a Responsive way
- Centering in peace, contentment, and love

Extra Strengths for Satisfaction

- Noticing something already pleasant
- Gratitude
- Gladness
- Taking pleasure
- Finding enthusiasm and passion
- Making good plans

Class 5: Strengths for Satisfaction

- Sense of accomplishment
- Finding beauty
- The fullness of this moment
- Imagining the rewards of something you'd like to help yourself want
- Handling opportunities and losses in a Responsive way
- Centering in peace, contentment, and love

Liking and Wanting

- Desire (positively or negatively valenced):
 - Liking: enjoying, preferring, valuing, “nice to have”
 - Wanting: pressure, tunnel vision, insisting, “must have,” addiction, craving; different from simple determination, passion, ambition, aspiration, commitment
 - You can like without wanting and want without liking.
- Liking without wanting: heaven; wanting without liking: hell.
- Dealing with the unpleasant, pleasant, heartfelt, and neutral on the basis of liking without tipping into wanting is the essence of the Responsive mode.

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring these questions:

What do “liking” and “wanting” feel like for you, and the differences between them?

What helps you pursue your aims that you like without tipping into pressure, drivenness, and other aspects of wanting it?

Liking and Wanting

- Desire (positively or negatively valenced):
 - Liking: enjoying, preferring, valuing, “nice to have”
 - Wanting: pressure, tunnel vision, insisting, “must have,” addiction, craving; different from simple determination, passion, ambition, aspiration, commitment
 - You can like without wanting and want without liking.
- Liking without wanting: heaven; wanting without liking: hell.
- Dealing with the unpleasant, pleasant, heartfelt, and neutral on the basis of liking without tipping into wanting is the essence of the Responsive mode.

Encouraging Motivation

- In some ways, the key to life is helping yourself learn to want things that are good for you that you don't yet want.
- It is said that wisdom is choosing a greater happiness over a lesser one.
- To help your brain want and choose that greater happiness, associate anticipated rewards with whatever you want to encourage, by:
 - Before doing it, imagine the rewards of it.
 - While doing it, focus on the rewards of it.
 - After doing it, recall the rewards of it.

Strengths Supporting Responsive Approaches to Opportunities and Losses

- Seeing costs of Reactive and possibility of Responsive
- Multi-purpose: on your own side, centered, calm, love
- Sense of accomplishment, beauty, fullness of this moment, rewards of what you'd like to encourage, pleasure along the way, gratitude, gladness
- Finding enthusiasm and passion
- Making good plans and drawing in needed resources
- Contentment in your core

Coming Home

Peace

Contentment

Love



Class 6:

Growing Strengths for Connection

Multi-Purpose Inner Strengths

- Being on your own side
- Centering
- Calming
- Love
 - Feeling cared about
 - Feeling caring
 - Self-compassion

Class 6: Strengths for Connection

- Happiness at the good fortune of others
- Feeling already connected
- Feeling of worth
- Empathy, given and received
- Engaging relationships in a Responsive way
- Centering in peace, contentment, and love

Extra Strengths for Connection

- Feeling cared about
- Feeling caring
- Self-compassion
- Generosity
- Knowing that you are a good person
- Sense of community
- Healthy boundaries
- Compassionate assertiveness
- Not taking things personally

The Tip of the Root

- In the fourth step of TG, you could 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

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring this question:

What are some good things in your life these days – including whatever you are gaining from this training?

→ While listening, open to happiness at the good fortune of your partner.

Feeling of Worth

- It is natural and important to feel that you have worth as a person – which does not mean arrogance or ego.

- You develop this sense of worth through:
 - Others including, appreciating, liking, and loving you
 - You respecting yourself

- Take in experiences of being:
 - Capable, skillful, talented, helpful
 - Included, wanted, sought out, chosen
 - Appreciated, acknowledged, respected
 - Liked, befriended, supported
 - Loved, cherished, special

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring this question:

What was that practice like for you, exploring feelings of worth?

→ While listening, be as empathic as you can with your partner.

Strengths Supporting Responsive Approaches to Closeness and Rejection

- Seeing costs of Reactive and possibility of Responsive
- Multi-purpose: on your own side, centered, calm, love
- Feeling of worth
- Feeling cared about
- Self-compassion
- Feeling caring; empathy
- Compassion for the other person
- Autonomy
- Clarity
- Acting with strength and with heart
- Love in your core

Pick a partner and choose an A and a B (A's go first). Then you'll take turns, with one partner mainly speaking while the other person listens, exploring these questions:

What are the key benefits for you from this training? What are your key intentions for the days and weeks ahead?

*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.*

Coming Home

Peace

Contentment

Love

Thank you



Suggested Books

See www.RickHanson.net for other great books.

- Austin, J. 2009. *Selfless Insight*. MIT Press.
- Begley, S. 2007. *Train Your Mind, Change Your Brain*. Ballantine.
- Carter, C. 2010. *Raising Happiness*. Ballantine.
- Hanson, R. (with R. Mendius). 2009. *Buddha's Brain: The Practical Neuroscience of Happiness, Love, and Wisdom*. New Harbinger.
- Johnson, S. 2005. *Mind Wide Open*. Scribner.
- Keltner, D. 2009. *Born to Be Good*. Norton.
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- LeDoux, J. 2003. *Synaptic Self*. Penguin.
- Linden, D. 2008. *The Accidental Mind*. Belknap.
- Sapolsky, R. 2004. *Why Zebras Don't Get Ulcers*. Holt.
- Siegel, D. 2007. *The Mindful Brain*. Norton.
- Thompson, E. 2007. *Mind in Life*. Belknap.

Key Papers - 1

See www.RickHanson.net for other scientific papers.

- Atmanspacher, H. & Graben, P. 2007. Contextual emergence of mental states from neurodynamics. *Chaos & Complexity Letters*, 2:151-168.
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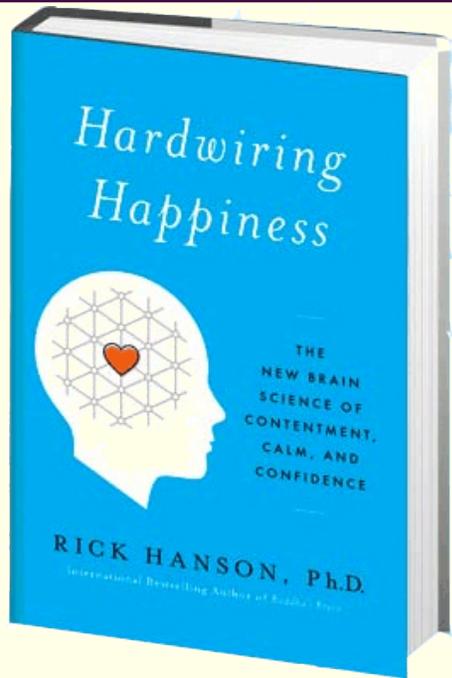
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