

# Strengthening Resilience Through Compassion and Gratitude



Kaiser Permanente

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Rick Hanson, Ph.D.

Greater Good Science Center, UC Berkeley

[www.RickHanson.net](http://www.RickHanson.net)



# Resilience from Compassion and Gratitude





# **Resilience**

enables us to cope with adversity  
and maintain a core of well-being  
along the way.



Resilience is supported  
by psychological factors such as  
mindfulness, grit, sense of purpose,  
**compassion and gratitude.**



For example, *compassion* fosters resilience by connecting us with others; self-compassion helps us feel supported, and it buffers against the harsh self-criticism that wears us down.

And *gratitude* antidotes despair, gladdens the heart when things are hardest, and highlights the good that endures.



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# From States to Traits

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We can have passing experiences – **states** – of compassion and gratitude.

And through “experience-dependent neuroplasticity,” we can turn those states into **traits** of compassion, gratitude – and resilience.



We become more **compassionate** by repeatedly internalizing experiences of compassion.

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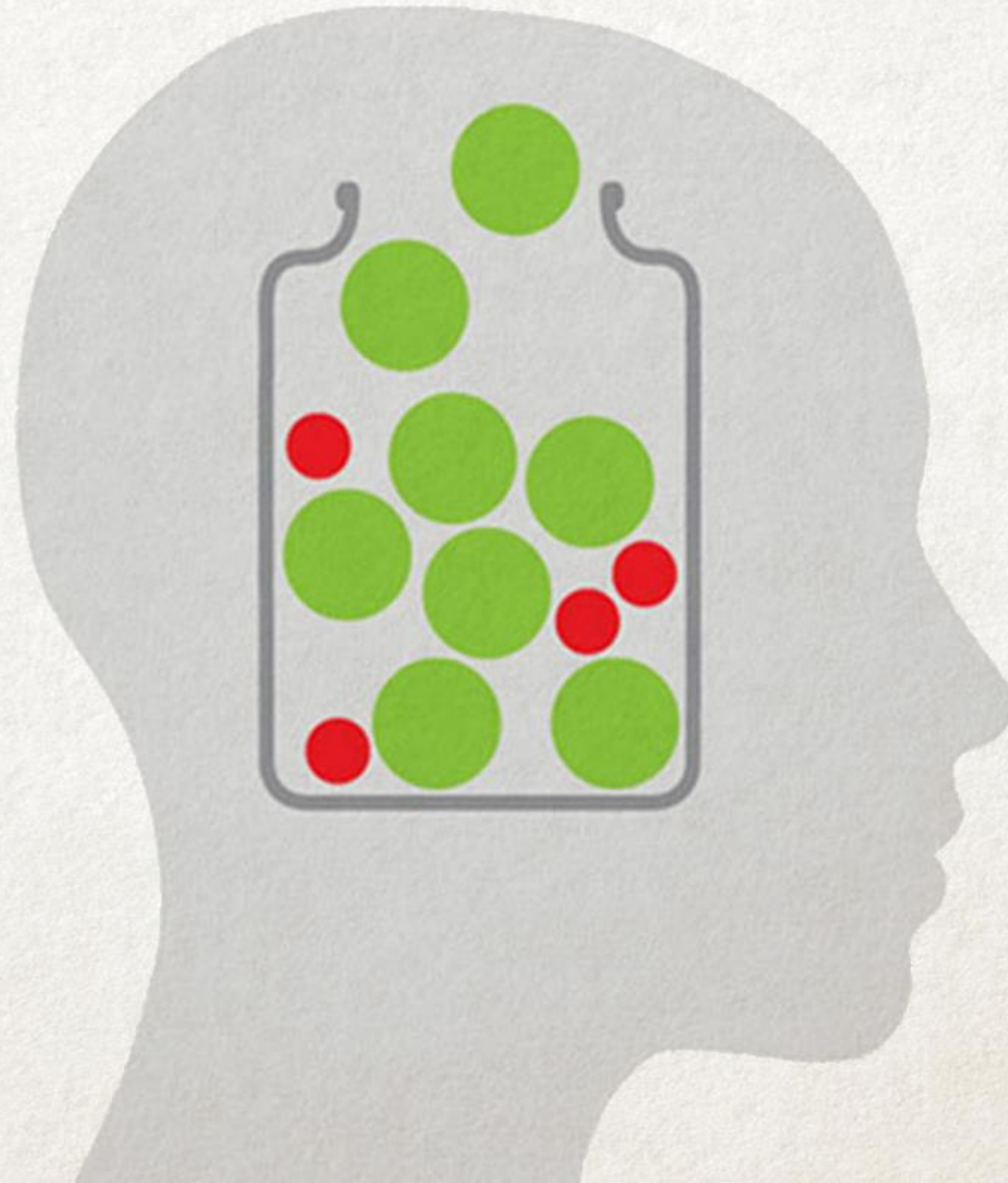
We become more **grateful** by repeatedly internalizing experiences of gratitude.

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We become more **resilient** by repeatedly internalizing experiences of resilience –  
and its related factors.



# Gradually Changing the Brain For the Better





**But – experiencing does not equal learning.**

**Experiencing *without internalizing*  
may be enjoyable or useful,  
but no trait strengths are developed.**

What fraction of our experiences of  
compassion, gratitude, and resilience  
foster lasting changes in  
neural structure or function?



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# The Negativity Bias

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# Stone age brains in the 21st century





# The Negativity Bias

As the nervous system evolved, avoiding “sticks” was usually more consequential than getting “carrots.”

1. So we scan for bad news,
2. Over-focus on it,
3. Over-react to it,
4. Turn it quickly into (implicit) memory,
5. Sensitize the brain to the negative, and
6. Create vicious cycles with others.



# Velcro for Bad, Teflon for Good

**The negativity bias**

*bad experiences*

*6000 good experiences*





Deal with the bad.

Turn to the good.

Take in the good.





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# Positive Neuroplasticity

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# Mental resources are acquired in two stages:

Encoding



Consolidation

Activation



Installation

State



Trait





Neurons that fire together,

wire together.



# Turning States into Traits: HEAL

## Activation

1. **Have** a beneficial experience

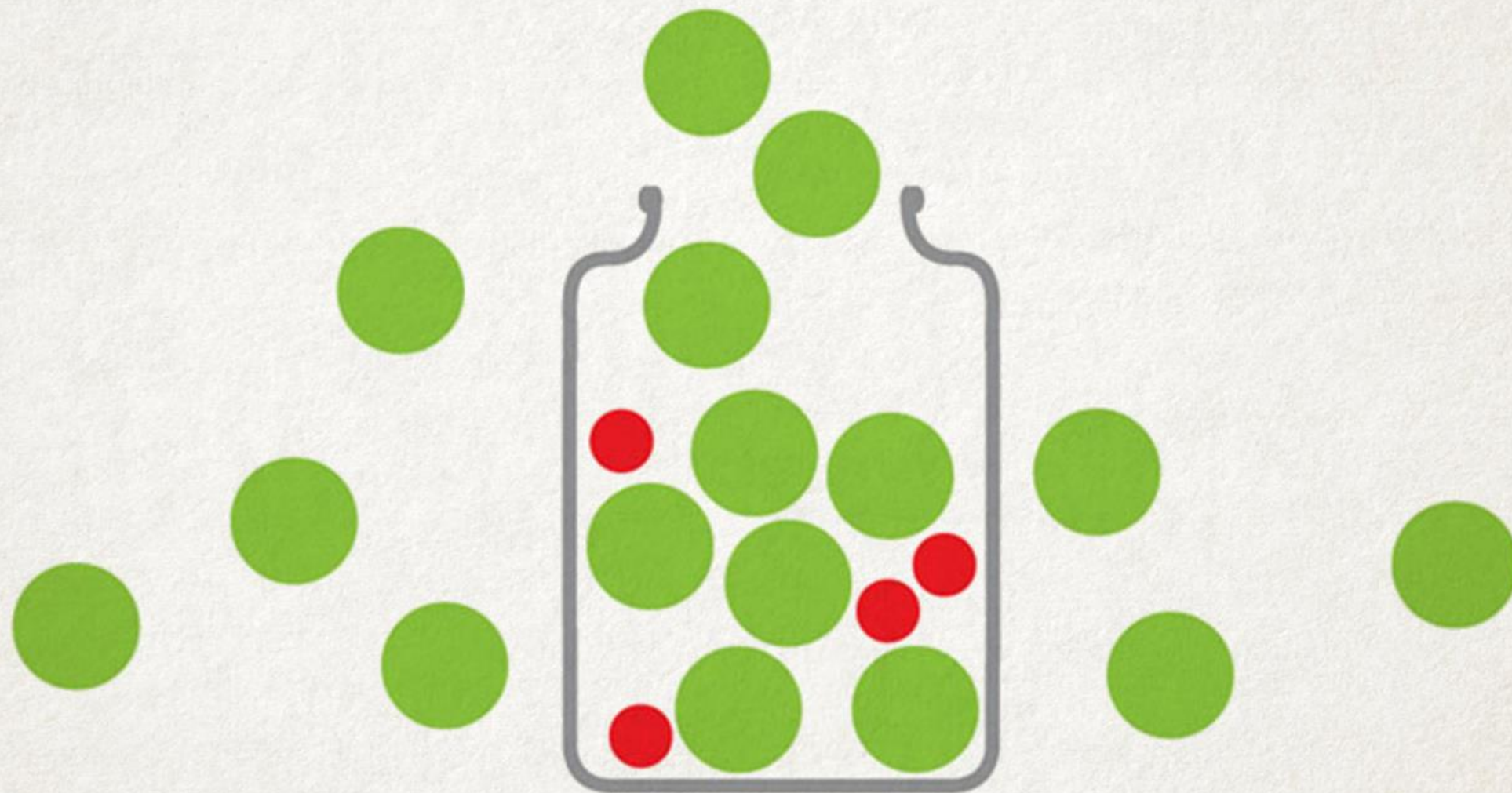
## Installation

2. **Enrich** the experience

3. **Absorb** the experience

4. **Link** positive and negative material  
(Optional)





Have It, Enjoy It



# 3 Simple Ways to Take in the Good

Stay with the experience for a breath or longer.

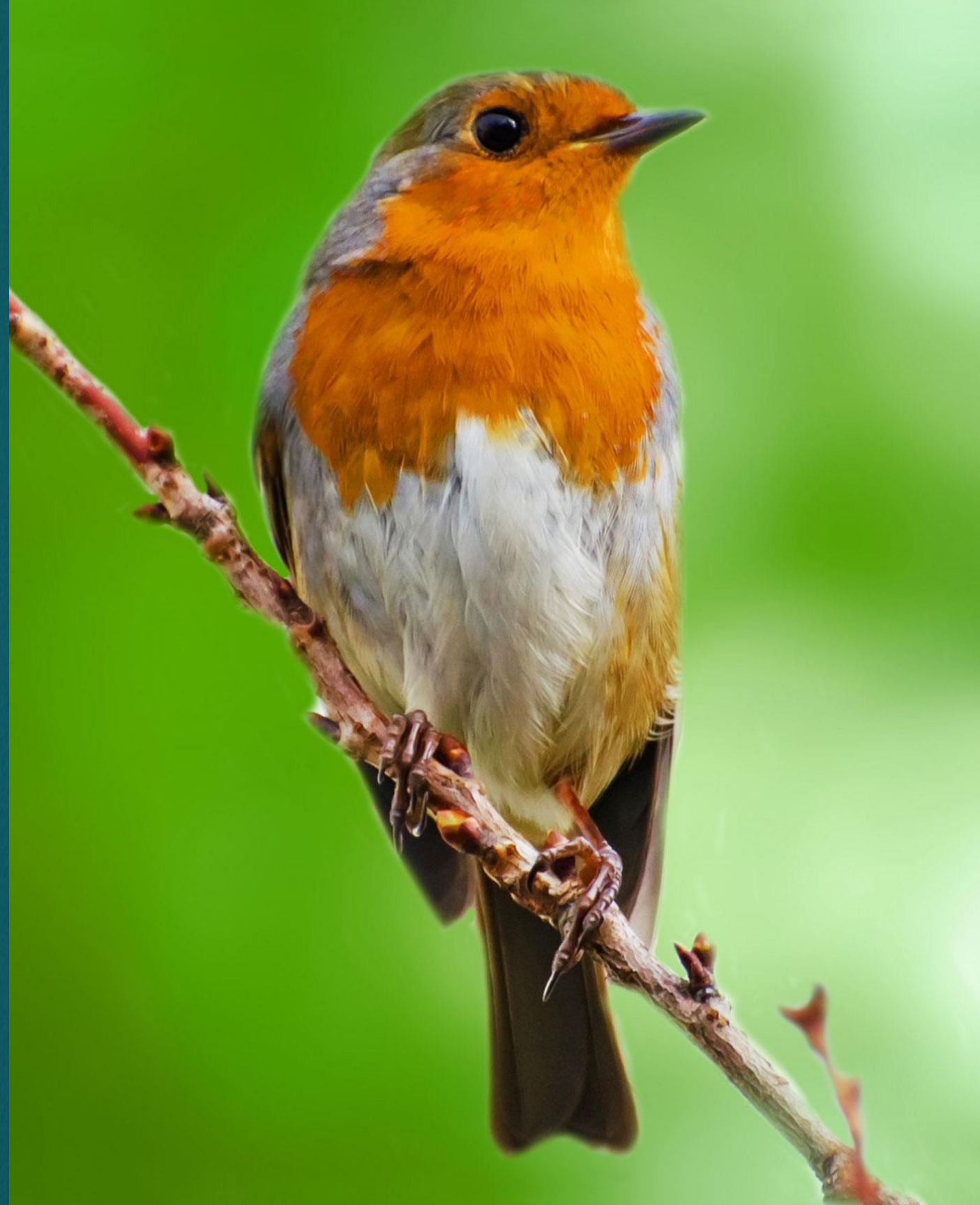
Feel it in your body.

Focus on what feels good about it.



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

**Lao Tzu**







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# Growing Compassion

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# Elements of Compassion

Empathy for “suffering” (e.g., pain, stress, loss, fatigue, unfulfilled longings, injustice)

Sincerely wishing that the suffering be relieved, with a sense of caring and concern

Often: a movement to help if one can

Sometimes also with respect, love, loyalty, sense of injustice, moral outrage, camaraderie, etc.



# Self-Compassion

The same elements of compassion – empathy, benevolence, (often) action – applied to oneself

Self-compassion occurs alongside perseverance, self-guidance, resourcefulness, and other kinds of coping.

We can receive compassion into ourselves – including when we are the ones offering it.



# Compassion and Self-Compassion

Bring to mind someone who is easy to feel compassion for.

Know what compassion is like . . .

Be aware of something that is hard for you . . . stressful, tiring, wearing . . . And find compassion for yourself.





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# Growing Gratitude

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# Elements of Gratitude

Appreciation for what one has been given . . .

. . . such as good fortune, talents, kindness from others, doors opened, science and culture, the natural world, the Big Bang universe, life itself . . .

Often with related feelings like gladness and awe

Generosity and gratitude form a beautiful circle.



# Perspectives on Gratitude

Gratitude is about facts; it's not hype or exaggeration.

Alongside gratitude can be sorrow or outrage.

Appreciating what is good doesn't mean overlooking what is bad; gratitude can help us recognize our privilege and be even more motivated to help others.

With gratitude can come a humbling recognition of one's dependence on so many things.



# Resting in Gratitude

Bring to mind some good things you've been given

Let this knowing become *feelings* of thankfulness,  
appreciation, gratitude . . .

Find gratitude for someone at work . . . perhaps  
even gratitude for the chance to to help and  
comfort and sometimes heal others, despite these  
stressful times . . .



# Thank You!





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# Supplemental Materials

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Every day gives us opportunities  
to heal a little bit, to grow a little bit,  
to become wiser and stronger and  
happier and more loving.

This requires  
not just having experiences,  
but **learning** from them.



The brain is good  
at learning from bad experiences  
but relatively bad  
at learning from good ones.

Even though  
learning from good experiences  
of inner strengths  
is how to grow them  
and have them with you every day.



We focus more on activation  
more than installation.

This reduces the gains from  
psychotherapy, coaching,  
human resources training,  
mindfulness programs,  
and self-help activities.



How can we increase  
the conversion rate  
of beneficial states  
to beneficial **traits**?



# 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.”



**What** – if it were more present  
in the mind of a person –  
would really help?

**How** could a person have and  
install more experiences of  
these mental resources?



# Key Mechanisms of Neuroplasticity

- (De)Sensitizing existing synapses
- Building new synapses between neurons
- Altered gene expression inside neurons
- Building and integrating new neurons
- Altered activity in a region
- Altered connectivity among regions
- Changes in neurochemical activity (e.g., dopamine)
- Changes in neurotrophic factors
- Modulation by stress hormones, cytokines
- Slow wave and REM sleep
- Information transfer from hippocampus to cortex



# An Overview of Current Research

Much research on people that psychological practices lead to psychological benefits, presumably via changing their brains.

Much research on other animals that various stimuli lead to many kinds of changes in their brains.

Some research that psychological practices change people's brains.

Scattered research on deliberate internal mental factors that lead to individual differences in gains from experiences.

“The absence of evidence is not evidence of absence.”



# Learning Factors

Environmental – setting, social support

Behavioral – activities, repetition

**Mental** – motivation, engagement



# Types of Mental Learning Factors

## Contextual

Openness

Mindfulness

View of positive experience

Growth/learning mindset

Motivation

Self-efficacy

Self-esteem

Feeling supported

Sense of safety

## Engagement

Personal relevance

Alertness, sense of novelty

Arousal, enactment

Sense of reward

Emotion

Granularity of attention

Interoception

Maintenance, repetition

Meaning, elaboration



# Benefits of Mental Learning Factors

Benefits of both types of factors:

- Increase learning from the present experience
- Prime NS for future beneficial experiences
- Heighten consolidation of past experiences

**Engagement factors** have additional benefits:

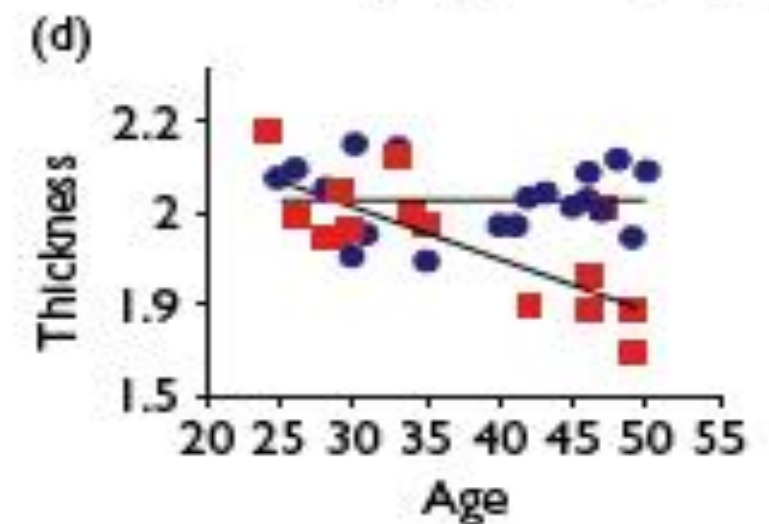
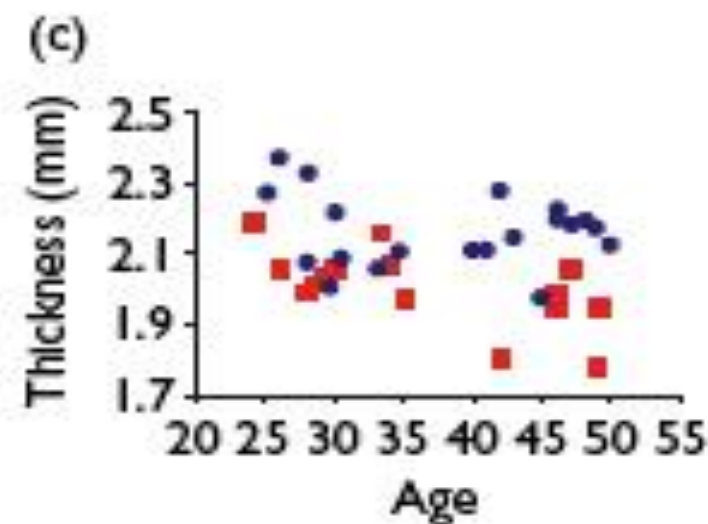
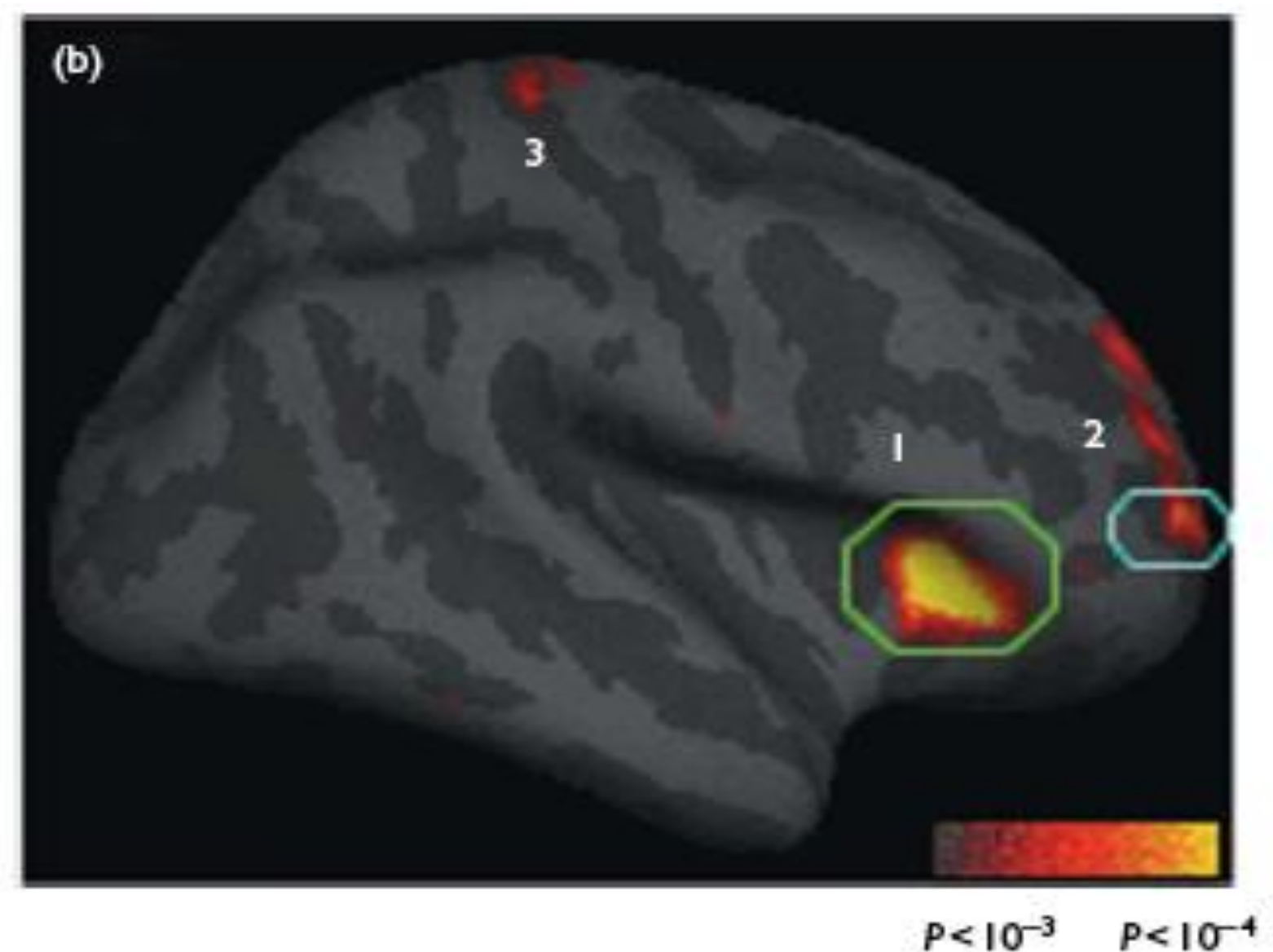
- Regulate experience directly
- Increase initial processes of consolidation
- Are under volitional control



Meditation  
experience is  
associated  
with increased  
cortical thickness.

Lazar, et al. 2005.

*Neuroreport*, 16, 1893-1897.





# It's Good to Take in the Good

Develops psychological resources:

- General – resilience, positive mood, feeling loved, etc.
- Specific – matched to challenges, wounds, deficits

Has built-in, implicit benefits:

- Training attention and executive functions
- Treating oneself kindly, that one matters

May sensitize the brain to the positive

Fuels positive cycles with others



Learning  
is the strength of strengths,  
since it's the one we use  
to grow the rest of them.

Knowing how to learn  
the things that are important to you  
could be the greatest strength of all.