

Mindful Cultivation: Turning Passing States Into Beneficial Traits

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Acquiring Durable Mental Resources

The image is a split-screen comparison of two wolves. The left side shows a domesticated wolf, likely a husky, with a soft, white and grey coat and warm, brown eyes. It has a gentle expression, with its mouth slightly open, showing its teeth. The right side shows a wild wolf, with a more rugged, grey and brown coat and darker, more intense eyes. It has a more aggressive or determined expression, also with its mouth slightly open, showing its teeth. The text "Two wolves in the heart" is overlaid in a white, serif font across the center of both images.

Two wolves in the heart

Resources in the Mind

Mental resources – which help us heal, cope, thrive, and contribute – include capabilities, knowledge, positive emotions, attitudes, motivations, and virtues.

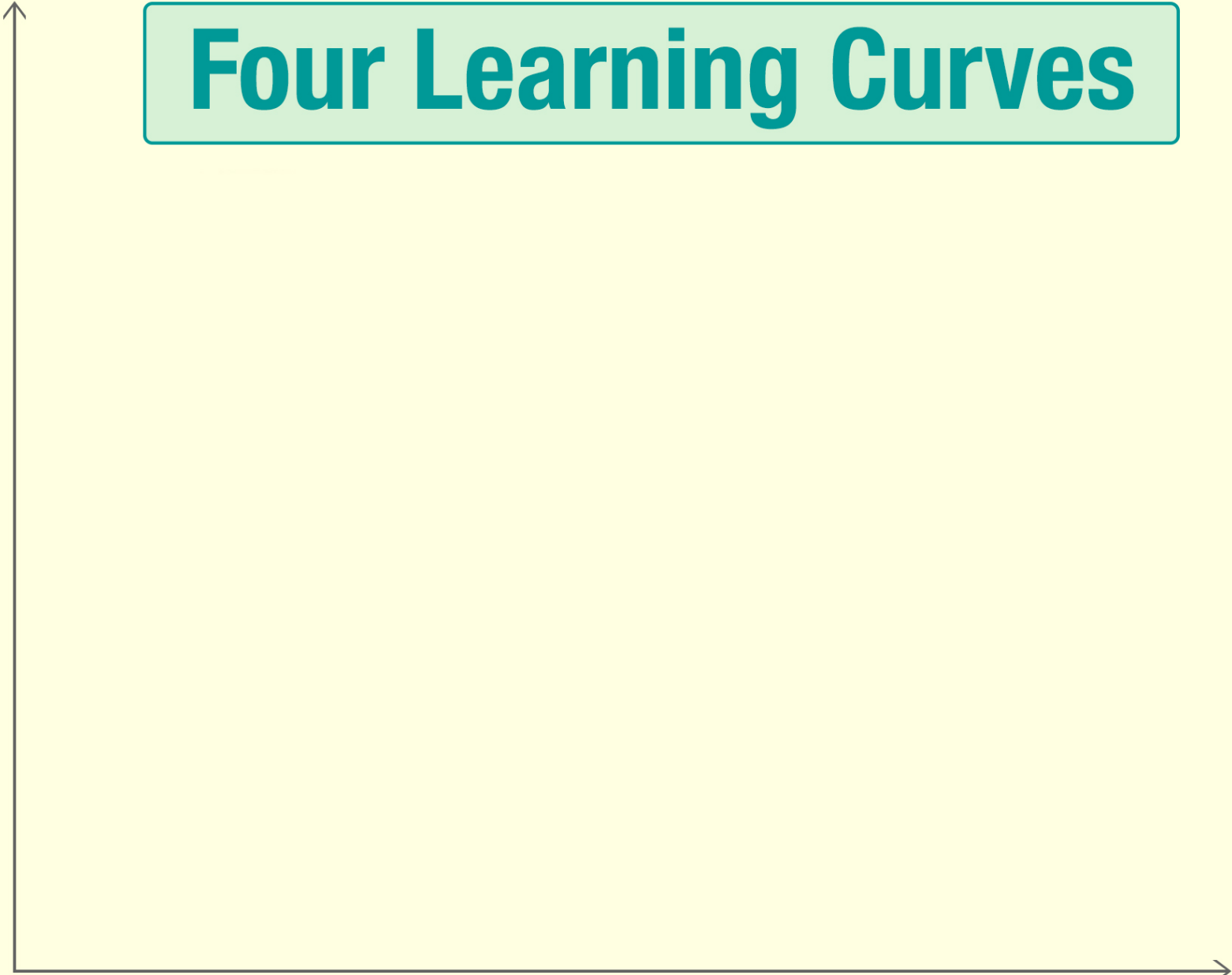
Trait resources are durable and reliable.

To a large extent, trait resources are acquired, through emotional, somatic, social, attitudinal, etc. **learning**.

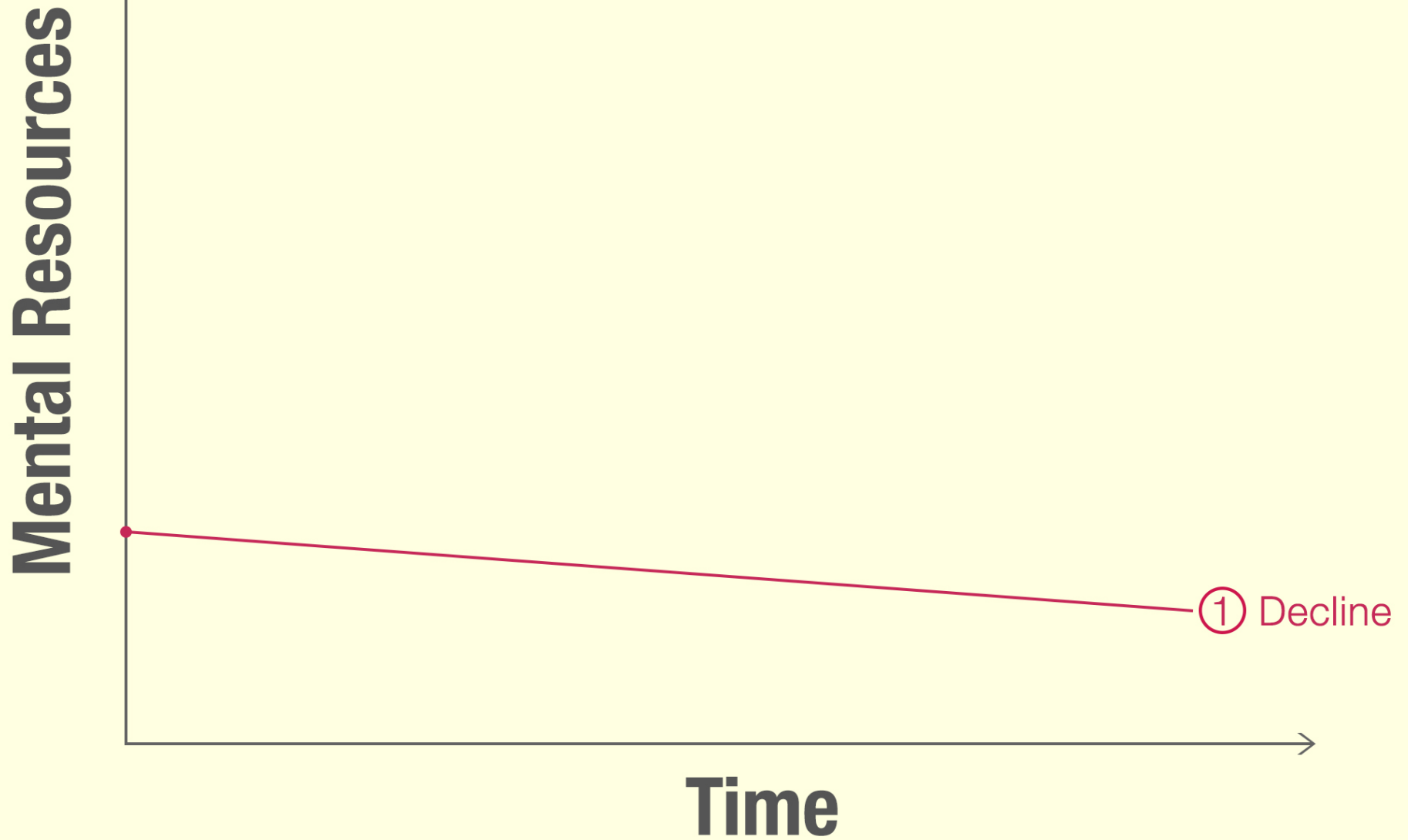
Four Learning Curves

Mental Resources

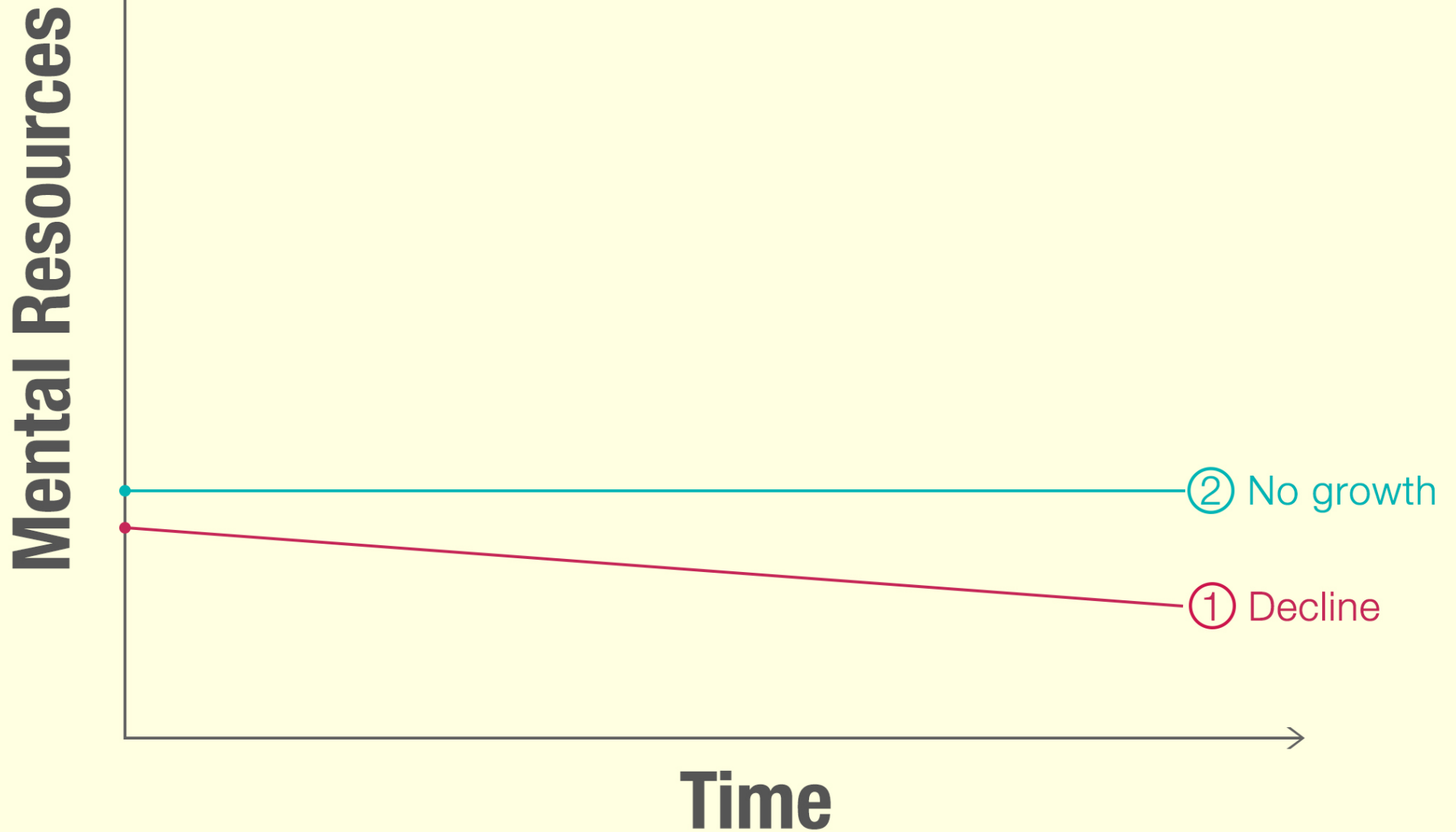
Time



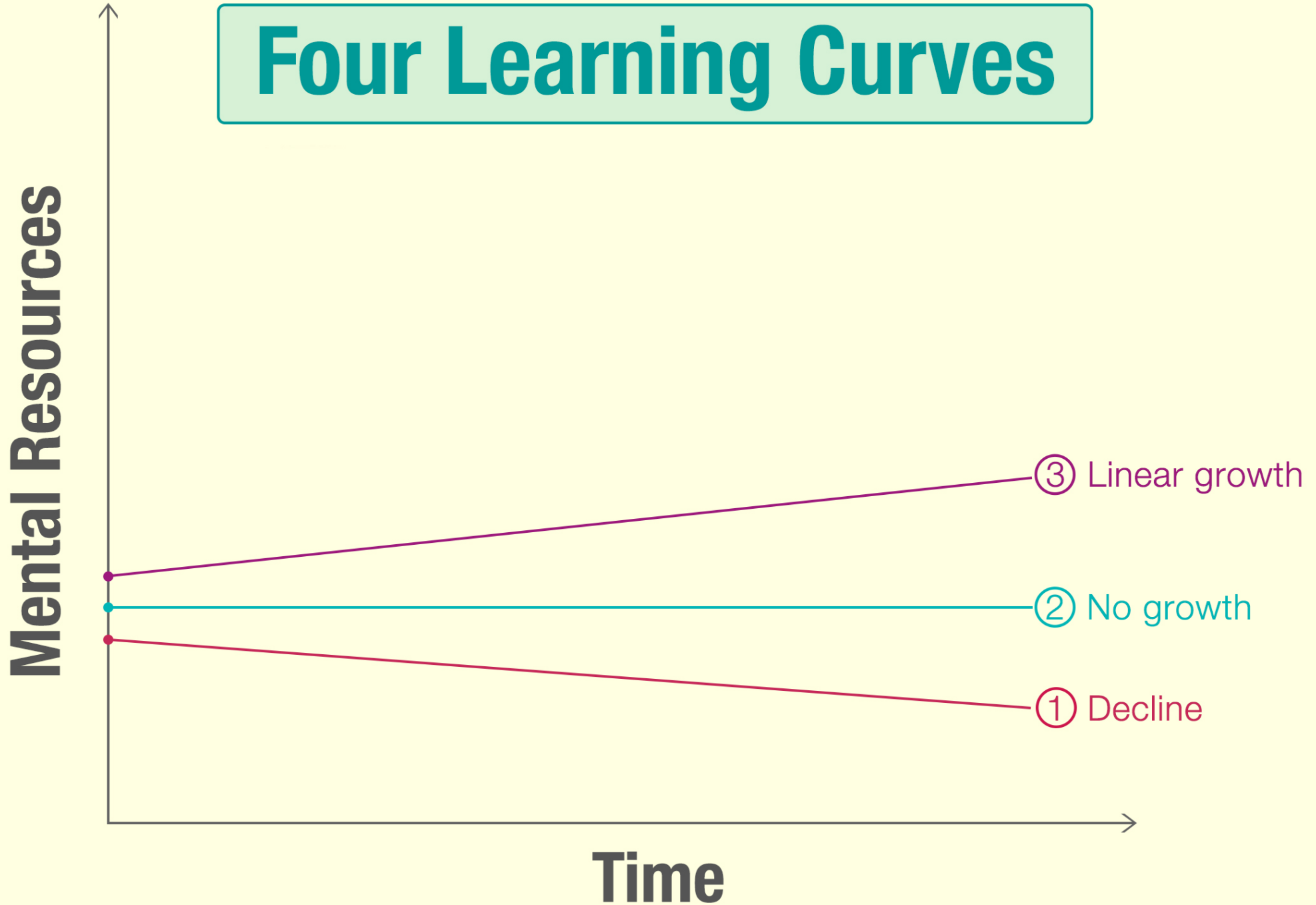
Four Learning Curves



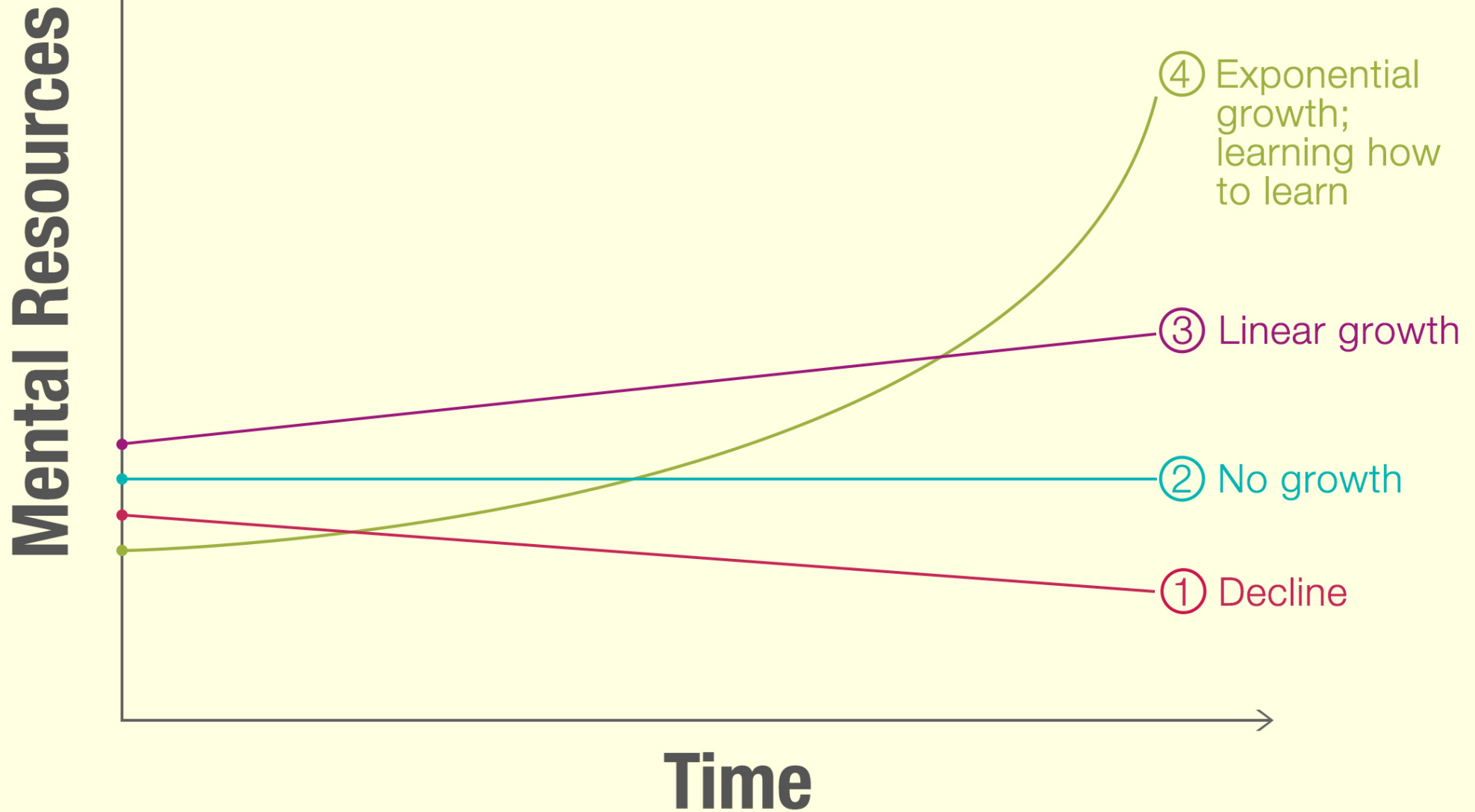
Four Learning Curves



Four Learning Curves



Four Learning Curves



Experience-Dependent Neuroplasticity

Most human learning begins with and is shaped by our **experiences**: immaterial consciousness represented by material neurobiology.

Momentary patterns of mental/neural activity are encoded, consolidated, and reconsolidated into **lasting changes of neural structure or function** – that may also involve other bodily systems as well (e.g., immune, cardiovascular).

Major Neural Mechanisms of Learning

Sensitizing (or desensitizing) existing synapses

Building new synapses

Altered patterns of gene expression in neurons

Building and integrating new neurons

Increased ongoing activity in a brain region

Increased connectivity of brain regions

Altered patterns of neurochemical activity

Information from hippocampus to cortex

Modulation by stress hormones, cytokines

Slow wave and REM sleep

A network of glowing yellow neurons with a central neuron highlighted in green. The neurons are interconnected by a dense web of fibers, creating a complex, interconnected structure. The background is dark, making the glowing neurons stand out.

Neurons that fire together,

wire together.

Two Conditions for Learning

Activation and installation:

- **What we're learning and how it's internalized**
- **State becoming trait**

Acquired traits begin with states.

But states alone are not enough.


Experiencing does not equal learning.

Without installation,

there is no learning, no change in the brain.

**We are often better at activation
than we are at installation.**

**This is a limitation in much
psychotherapy, human resources
training, coaching, character education,
and mindfulness programs.**



**Meanwhile,
stressful, painful, harmful experiences
are being rapidly converted
into lasting changes
in neural structure or function.**

The Negativity Bias

During the 600 million year evolution of the nervous system, 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. Install it quickly in 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

good experiences

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

**Even though
learning from good experiences
of mental resources and related factors
grows inner strengths.**

Types of Learning Factors

Environmental – setting, actions of others

Behavioral – type or frequency of activities

Mental – intention, self-awareness

Distal, Proximal Mental Learning Factors

Distal

Openness

Mindfulness

View of pos. exper.

Growth/learning mindset

Motivation

Self-efficacy

Self-esteem

Feeling supported

Sense of safety

Proximal

Personal relevance

Alertness, sense of novelty

Arousal

Valence, valuing, reward

Emotion

Granularity of attention

Interoception

Maintenance, repetition

Meaning, elaboration

Imagery, metaphor

Enacted, shared with others

Benefits of Mental Learning Factors

Benefits of both types of learning factors:

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

Proximal factors have additional benefits:

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



The HEAL Process

Let's Try It

- **Notice** that you are relaxing as you exhale
 - Have the experience
 - Enrich it
 - Absorb it
- **Create** the experience of compassion
 - Have the experience
 - Enrich it
 - Absorb it

Mindful Cultivation: the HEAL Process

Activation

1. Have a beneficial experience.

Installation

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

1. **Have** a Beneficial Experience

A beneficial thought, perception, emotion, desire, action, or blend.

Typically enjoyable or otherwise rewarding

Notice an experience already present.

- In the foreground of awareness
- In the background

Or create one. For example:

- Immediate situation or recent events
- The lives of others
- Take action

Two Aspects of Installation

Enriching

Mind – big, rich, protected experience

Brain – intensifying and maintaining neural activity

Absorbing

Mind – intending and sensing that the experience is received into oneself, with related rewards

Brain – priming, sensitizing, and promoting more effective encoding and consolidation

2. Enrich the Experience

- **Duration** – Maintenance, repetition
- **Intensity** – Arousal
- **Multimodality** – Multiple aspects of experience
- **Novelty** – Alertness, sense of freshness, granularity of attention
- **Salience** – Personal relevance

Multimodality

- **Thought** – Meaning, elaboration, metaphor
- **Perception** – Interoception
- **Emotion** – Valence
- **Desire** – Valuing
- **Action** – Enacted, shared with others

2. Enrich the Experience

- **Duration** – Maintenance, repetition
- **Intensity** – Arousal
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- **Novelty** – Alertness, sense of freshness, granularity of attention
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3. Absorb the Experience

- Intend to internalize the experience (priming).
- Sense the experience sinking in (sensitizing).
 - Imagery – water into a sponge; jewel in treasure chest
 - Sensation – warm soothing balm spreading inside
 - Knowing – “I am becoming a little more ____.”
 - Felt sense of a shift – embodied registration of a change
- Find rewards in the experience (promoting encoding and consolidation).

Reflections So Far

Like a fire:

- **See it or light it.**
- **Protect it and add fuel.**
- **Take its warmth into yourself.**

This is the fundamental how of “experiential gain” that can be applied to any what – any inner resource.

Aspects of Enriching and Absorbing may be in psychotherapy, etc. But systematic, explicit guidance for installation is not widespread.

4. Link Positive and Negative Material

This step is optional since it is not necessary for acquiring beneficial traits, and it has the risk of a person getting flooded or hijacked by the negative material.

It's common in everyday life (e.g., talking about an upset with a friend) and widely used for personal growth (e.g., replacing harmful beliefs, Coherence Therapy).

The person must be able to:

- Hold two things in awareness

- Keep the positive one more prominent

- Not get hijacked by the negative one

Drop the negative if it's too powerful; just Enrich, Absorb.³²

It's Good to Take in the Good

- **Explicit development of inner strengths**
 - **General – resilience, positive mood, feeling loved**
 - **Key resources – for challenges, deficits, wounds**
- **Implicit benefits:**
 - **Receptive intimacy with experience; undivided attention**
 - **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**
- **May sensitize brain to positive: like Velcro for good**³³

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

Lao Tsu

Pilot Study on the HEAL Process

- A randomized waitlist control pilot study on the Taking in the Good course (46 subjects), not yet peer-reviewed.
- Course participants, compared to the control group, reported significantly more Contentment, Self-Esteem, Satisfaction with Life, Savoring, and Gratitude.
- After the 7-week course and also at 2-month follow-up, pooled participants also reported significantly more Love, Compassion, Self-Compassion, Mindfulness, Self-Control, Positive Rumination, Joy, Amusement, Awe, and Happiness, and less Anxiety and Depression.



Growing Key Resources

What – if it were more present in the mind of a person – would really help with challenges, temperament, or inner wounds or deficits?

How could the person install more experiences of this mental resource?

Meeting Three Core Needs

Avoiding harms for **safety**

Approaching rewards for **satisfaction**

Attaching to others for **connection**

Mental Resources for Core Needs

Safety – Grit, determination, seeing threats clearly, relaxation, calm strength

Satisfaction – Gratitude, impulse control, accomplishment, frustration tolerance

Connection – Feeling cared about, self-worth, compassion, interpersonal skills



Wider Implications

Managing Challenges and Opportunities

Life brings challenges and opportunities re: safety, satisfaction, and connection.

Do we manage them from an underlying sense of deficit and disturbance – Reactive mode – with fear, frustration, and heartache?

Or from a sense of **fullness and balance – Responsive mode – with peace, contentment, and love?**

Growing a “Green Zone” Brain

Repeatedly installing experiences of core needs being met – or experiences of mental resources that help us meet these needs – builds up an increasingly unconditional internal sense of fullness and balance.

Then we are increasingly able to meet challenges and opportunities from the Responsive mode – or recover more quickly – even when others, the world, or parts of our own minds are flashing red.

Societal Benefits

**As we develop
the neural substrates of the Responsive mode,
in terms of our needs for
safety, satisfaction, and connection,
we become harder to manipulate
by appeals to fear and anger,
greed and drivenness,
and “us” vs. “them” rivalries.**

*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.*

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See www.RickHanson.net/key-papers/ for other suggested readings.

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Additional Materials

What Shapes a Person's Course?

Challenges

Vulnerabilities

Resources

Where Are Resources Located?

World

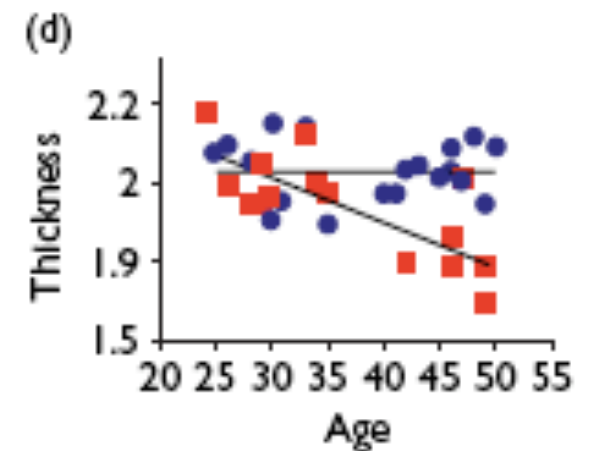
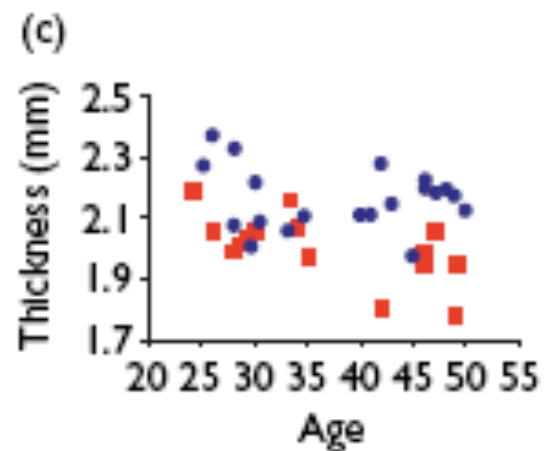
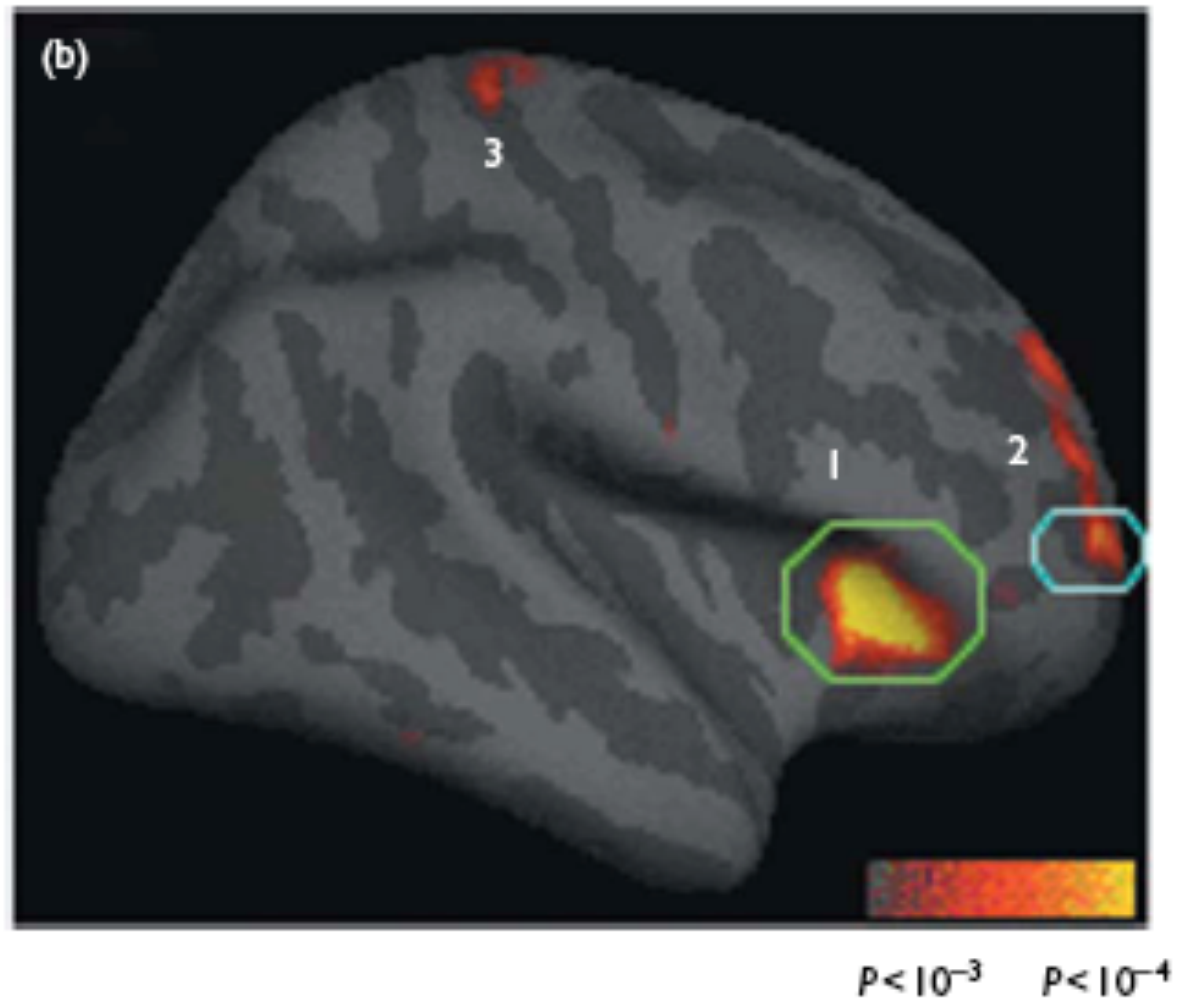
Body

Mind

Resources in the Mind

- **Knowledge** – insight into self and others
- **Capabilities** – self-regulation, social skills
- **Positive emotions** – gratitude, love, delight
- **Attitudes** – confidence, optimism, tolerance
- **Motivations** – helping others, wanting to learn
- **Virtues** – patience, generosity, courage, kindness

Lazar, et al. 2005.
Meditation
experience is
associated
with increased
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Neuroreport, 16,
1893-1897.

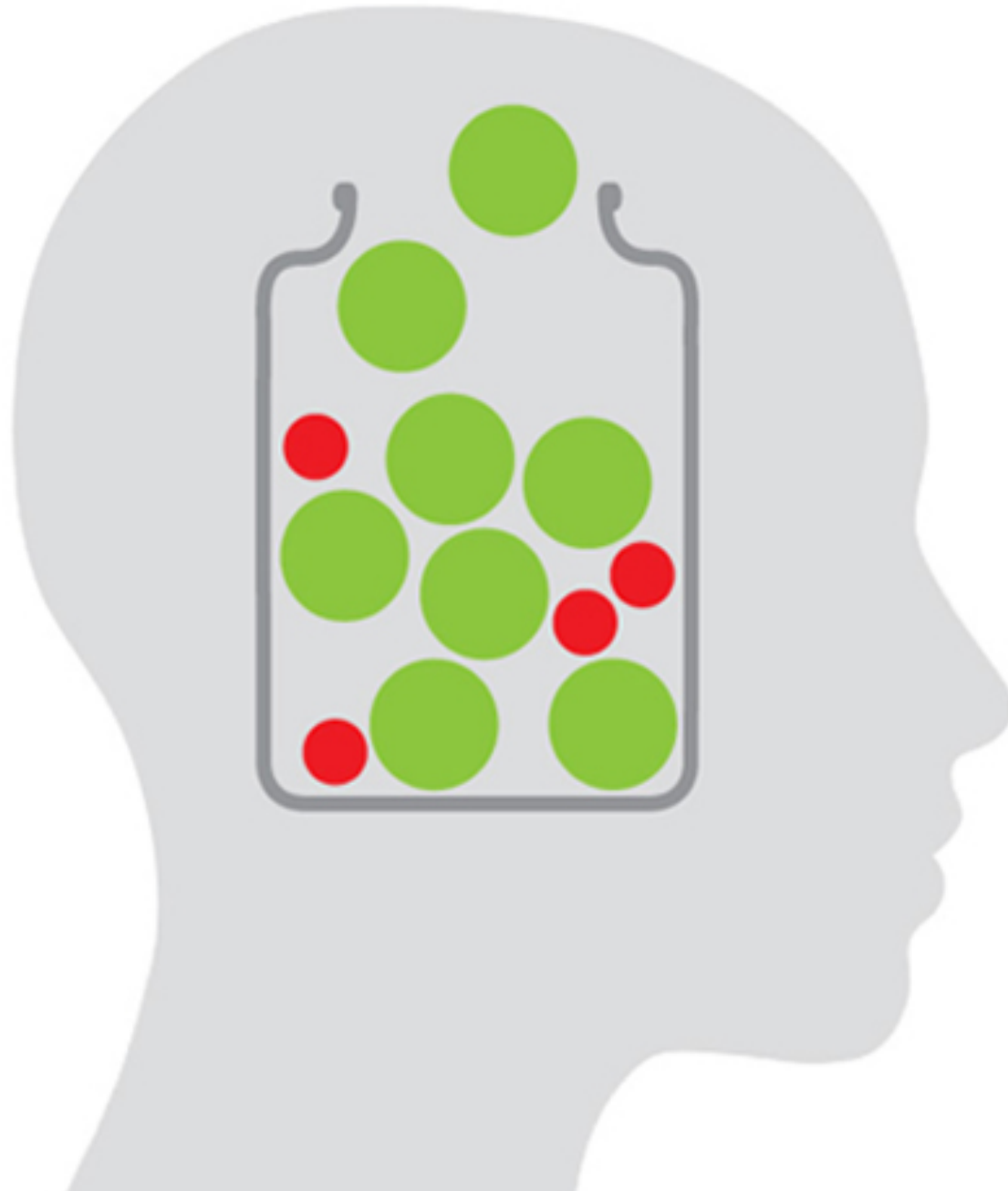


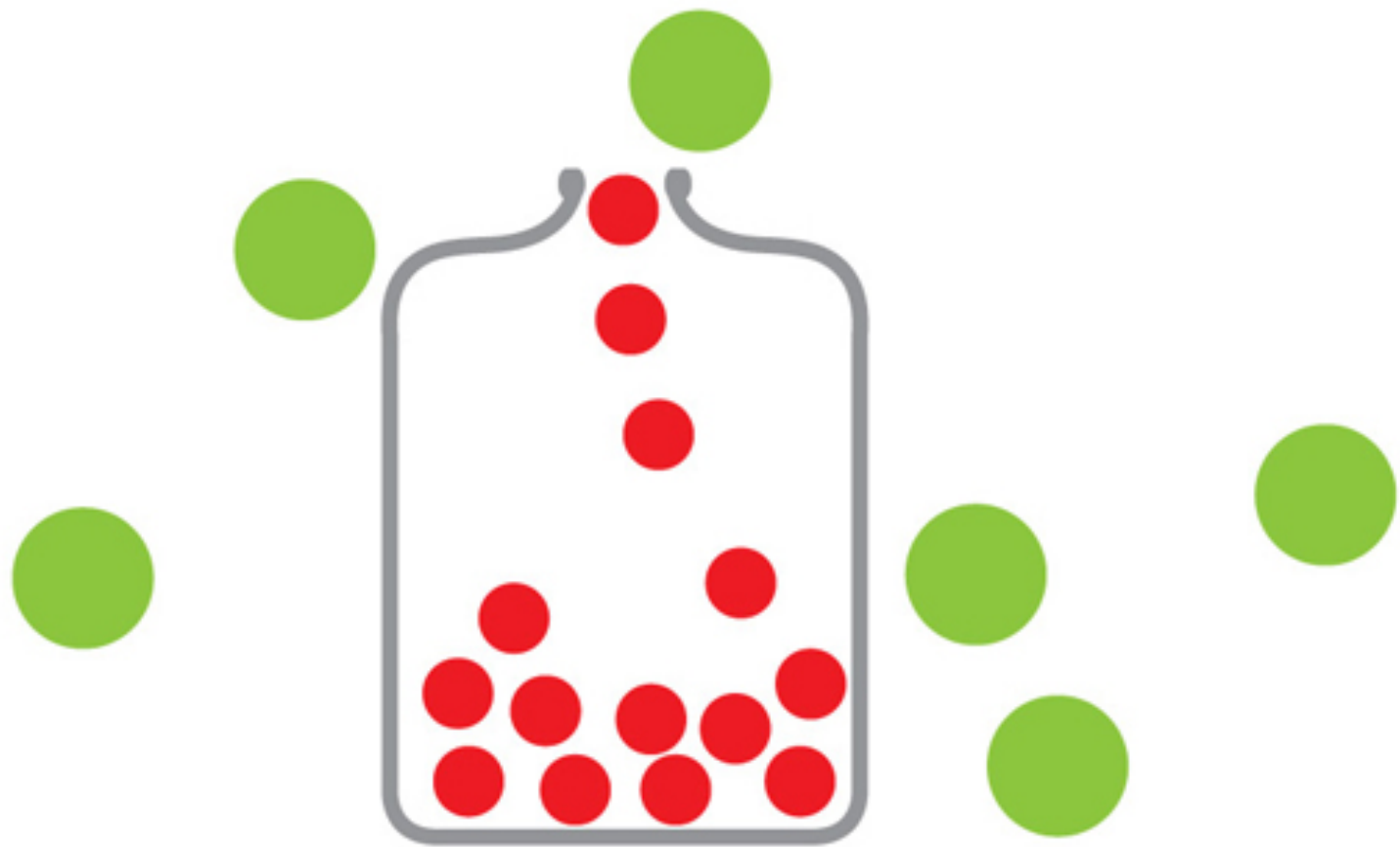
“Upward spirals” of state → state processes (or state → behavior → state or state → environment → state) are not themselves evidence of state → trait development.

These processes are dependent upon preceding states (or behavior or environment), and when these conditions change, so can one’s positive mental states.

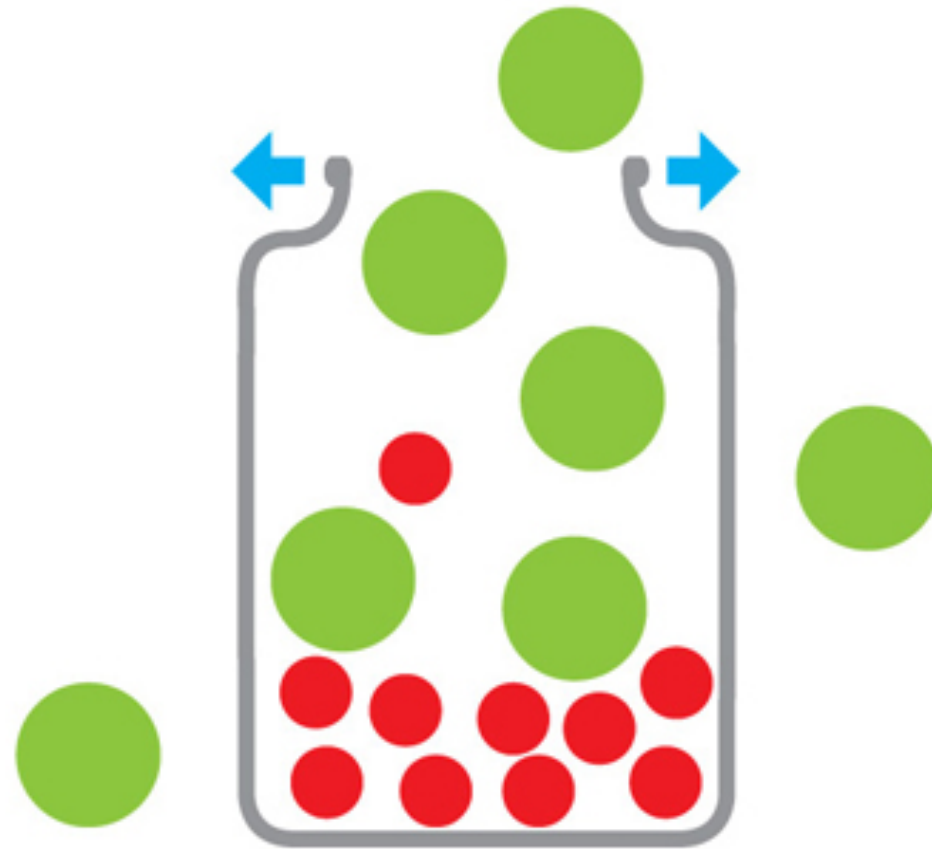
Traits are more reliable than states. You take them with you wherever you go.

ACQUIRING MENTAL RESOURCES

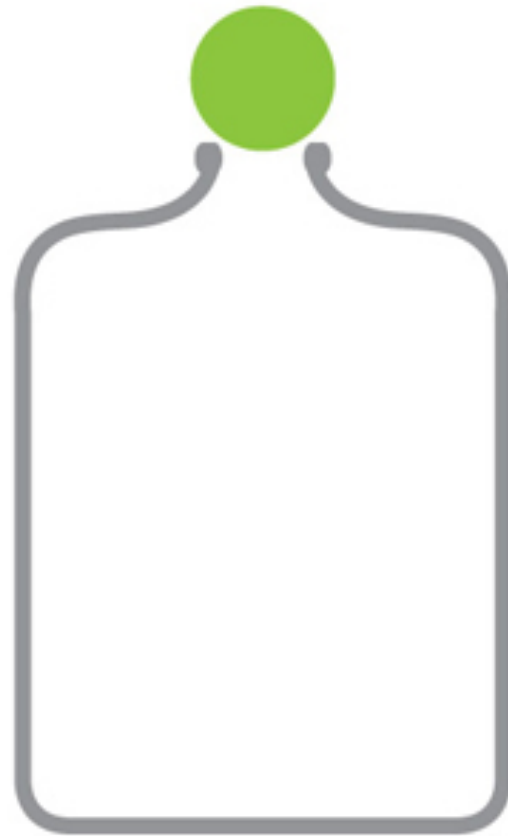




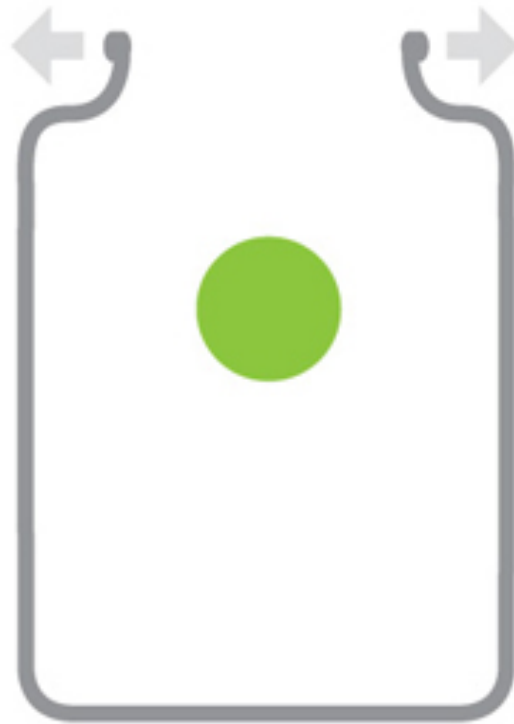
The Negativity Bias



Getting the Good Stuff into Your Brain



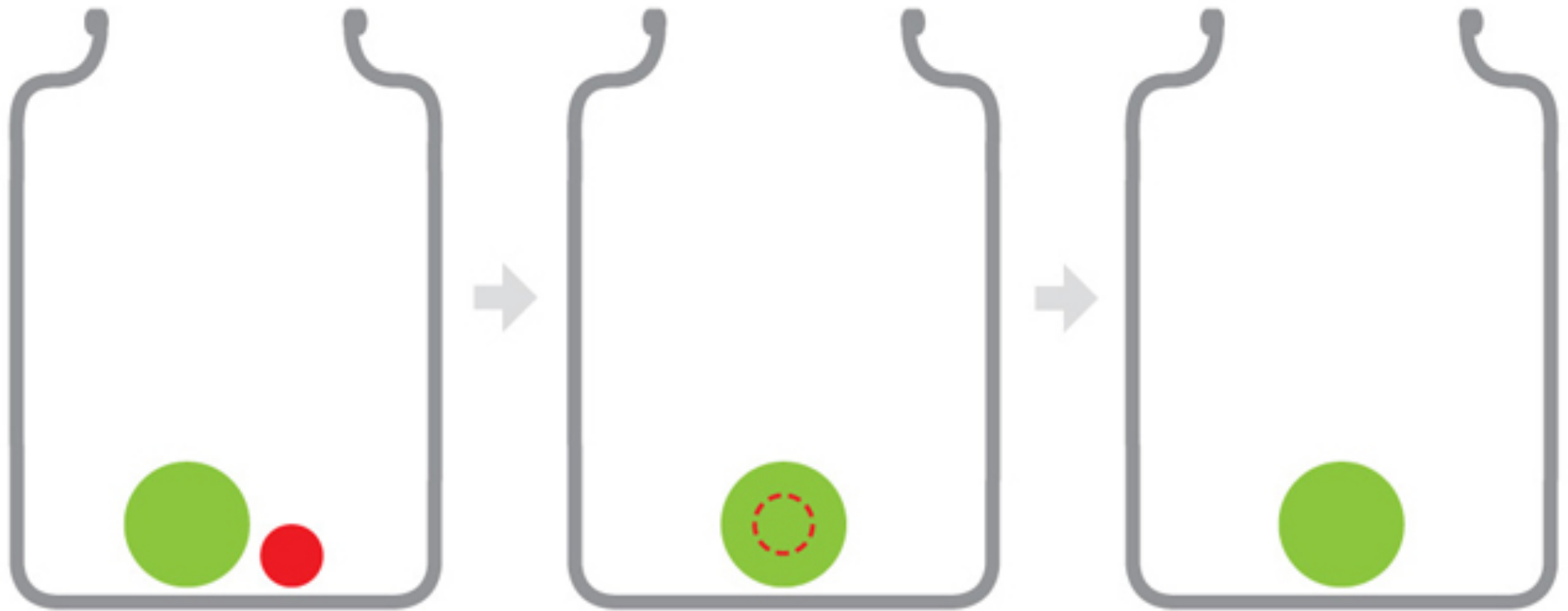
Have a Good Experience



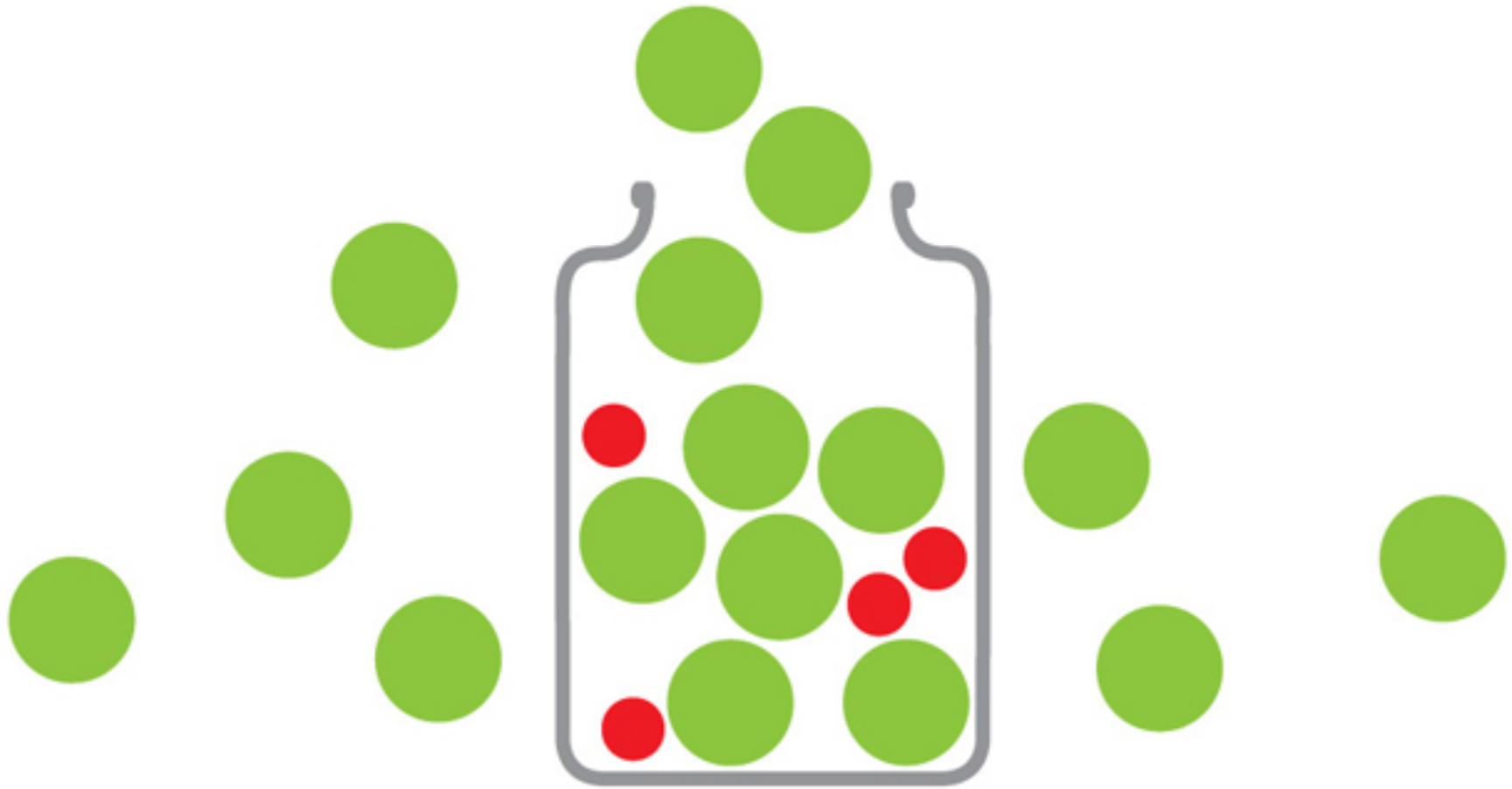
Enrich It



Absorb It



Link Positive and Negative Material



Have It, Enjoy 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

HEAL in Classes, Trainings, Families

- Take a few minutes to explain it and teach it.
- In the flow, encourage enriching and absorbing, using natural language.
- Encourage people to use HEAL on their own.
- Do HEAL on regular occasions (e.g., at the end of a therapy session, meals, just before bed).

RESOURCES FOR AVOIDING HARMS

Challenge

Weakness

Helplessness

Freezing,
immobilization

Inflated threats

Alarm

Tension

Worry, fear

Irritation, anger

Resource

Strength

Agency

Action, venting

Accurate appraisal

Protection, calming

Relaxation

Feeling alright now,
making a plan

Big picture, peace

RESOURCES FOR APPROACHING REWARDS

Challenge

What I don't have

Scarcity

Disappointed, sad

Frustration, failure

Bored, numb

Grief

Giving up

Drivenness

Resource

What I do have

Enoughness,
fullness

Gratitude, gladness

Accomplishment

Pleasure, excitement

Loved and loving

Aspire, lived by good

Already satisfied

RESOURCES FOR ATTACHING TO OTHERS

Challenge

Left out, excluded
Inadequacy, shame
Ignored, unseen
Lonely

Resentment
Envy, jealousy

Feeling stifled

Resource

Belonging, wanted
Appreciated, respected
Receiving empathy
Friendship, caring
to others and oneself
Recognize it hurts you
Self-compassion, take
action, good will
Skillful assertiveness