

# **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 close-up of a domestic dog, likely a husky, with thick white and grey fur and brown eyes. It has a black collar around its neck and is smiling, showing its teeth. The right side shows a close-up of a wild wolf with grey and brown fur and yellowish-brown eyes. It is also smiling, showing its teeth, and appears to be in a natural, outdoor setting with some dry sticks or branches visible. The text "Two wolves in the heart" is written in a white, serif font across the middle of both images.

Two wolves in the heart

# Resources in the Mind

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

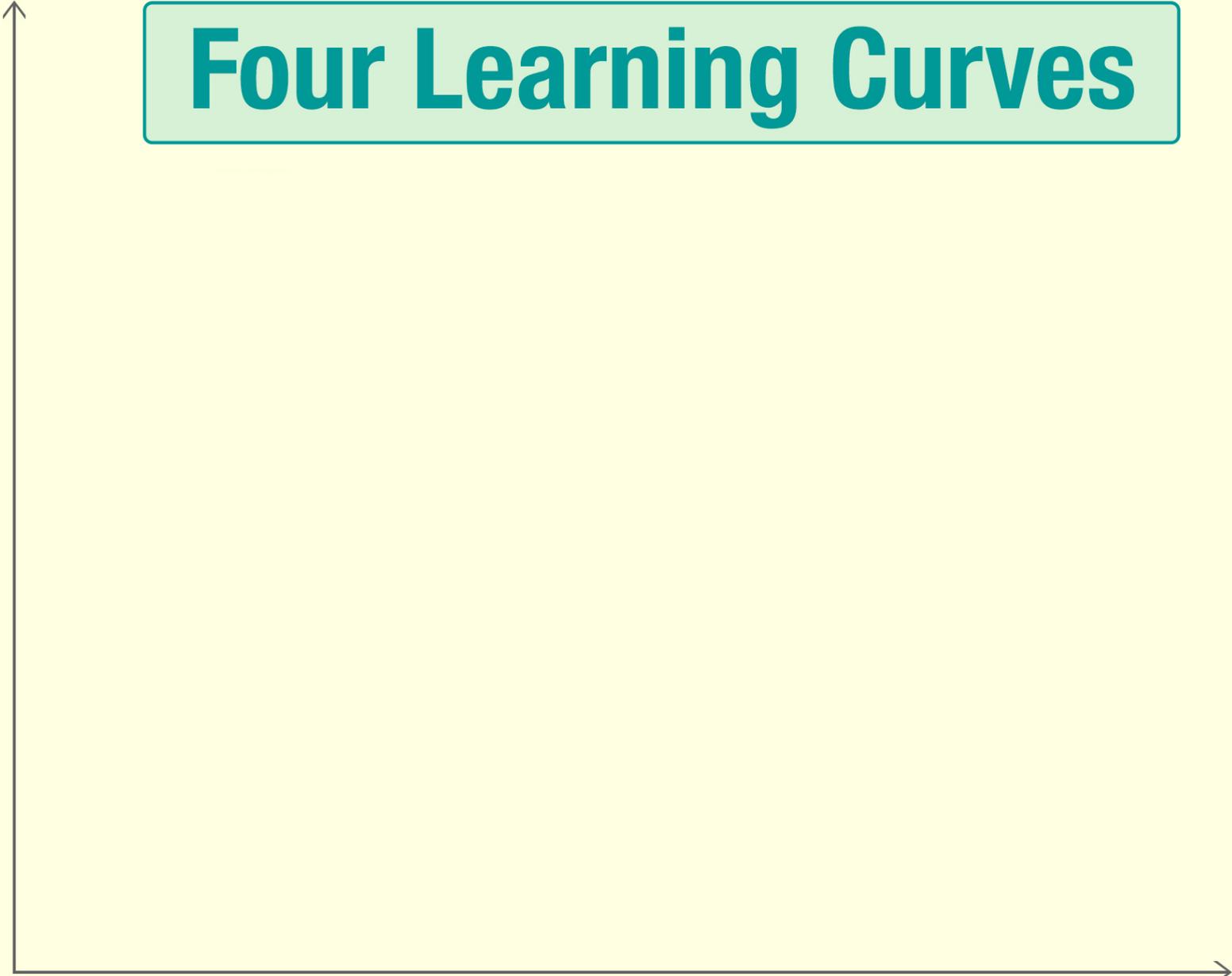
Trait resources are durable and reliable.

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

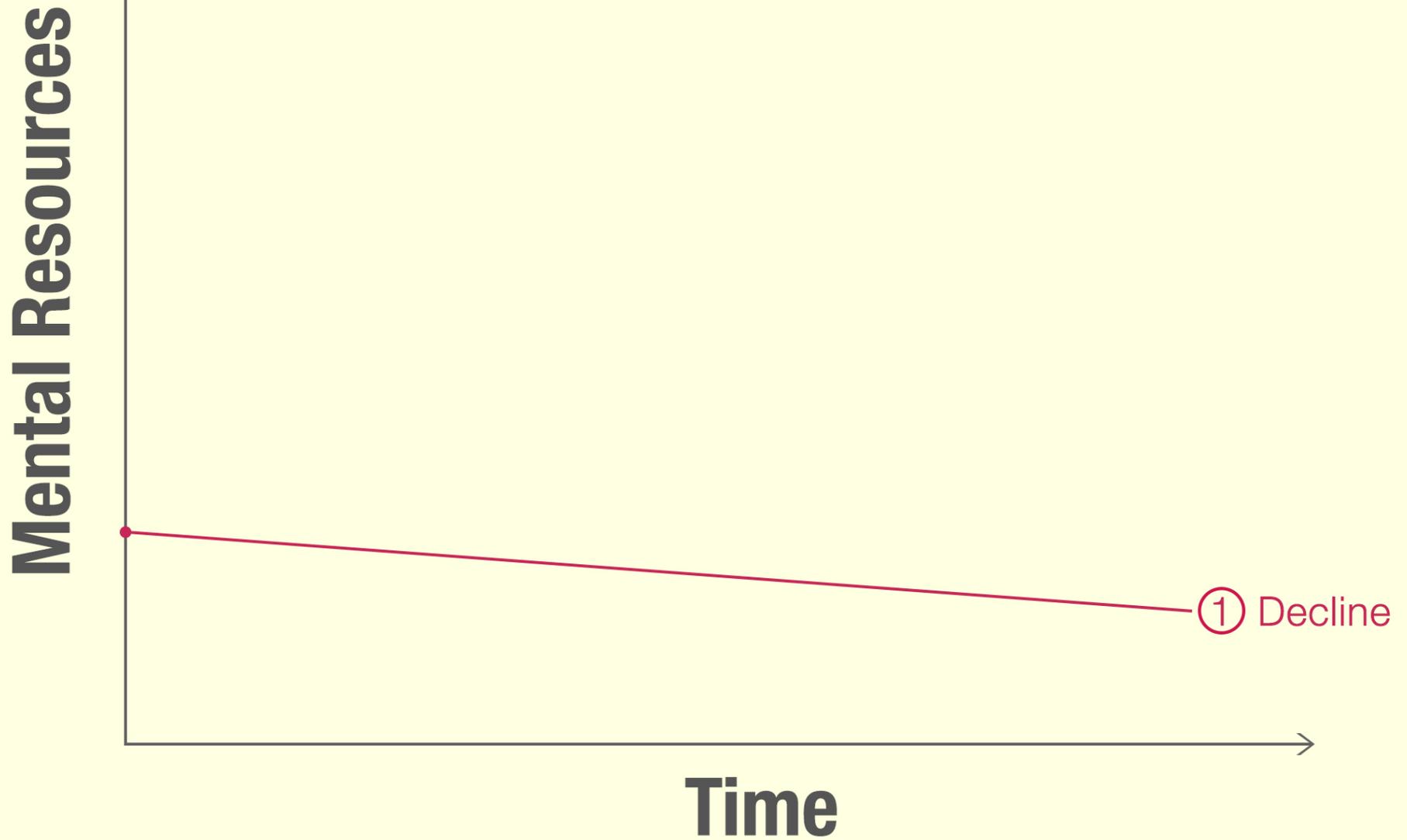
# Four Learning Curves

**Mental Resources**

**Time**

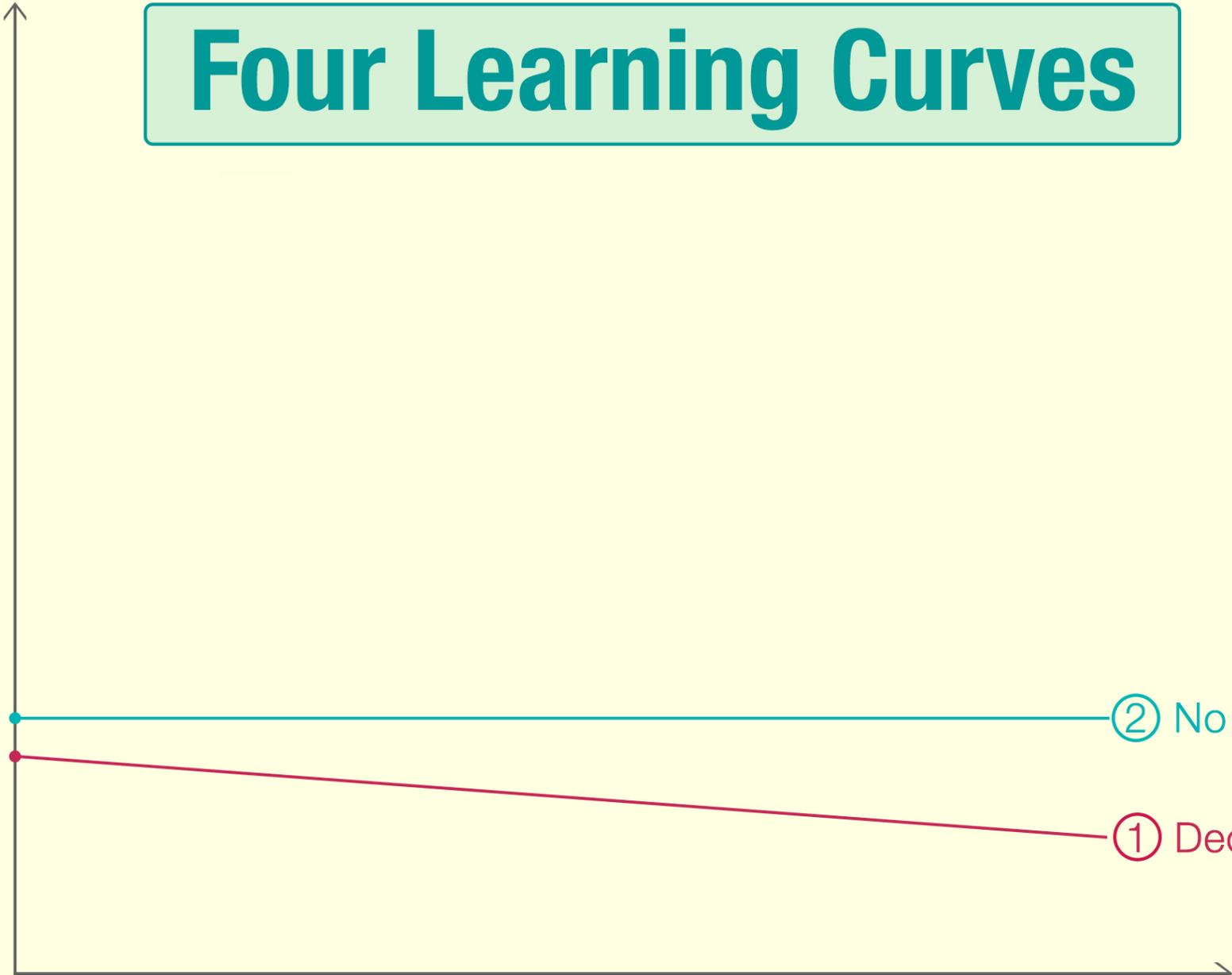


# Four Learning Curves



# Four Learning Curves

Mental Resources

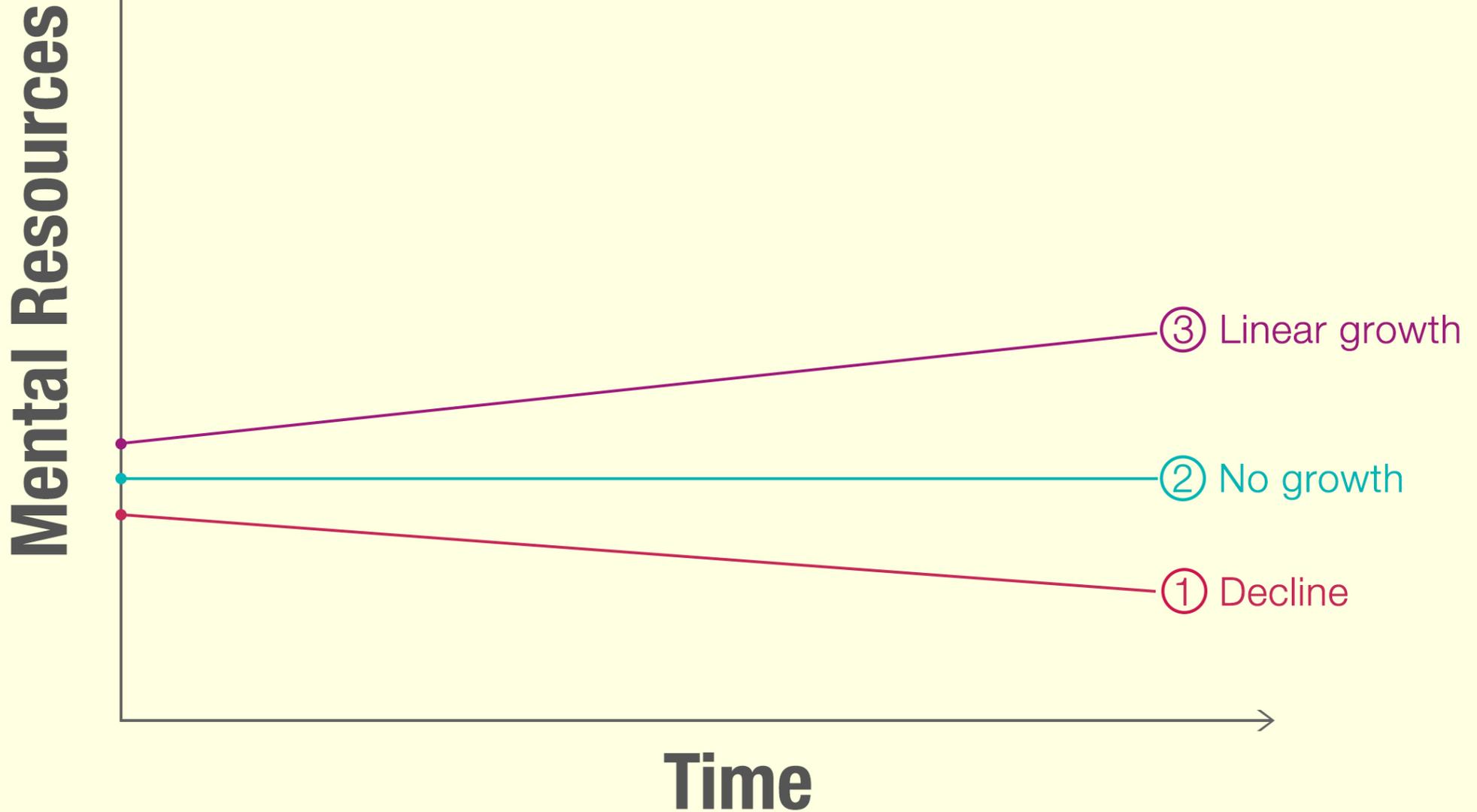


Time

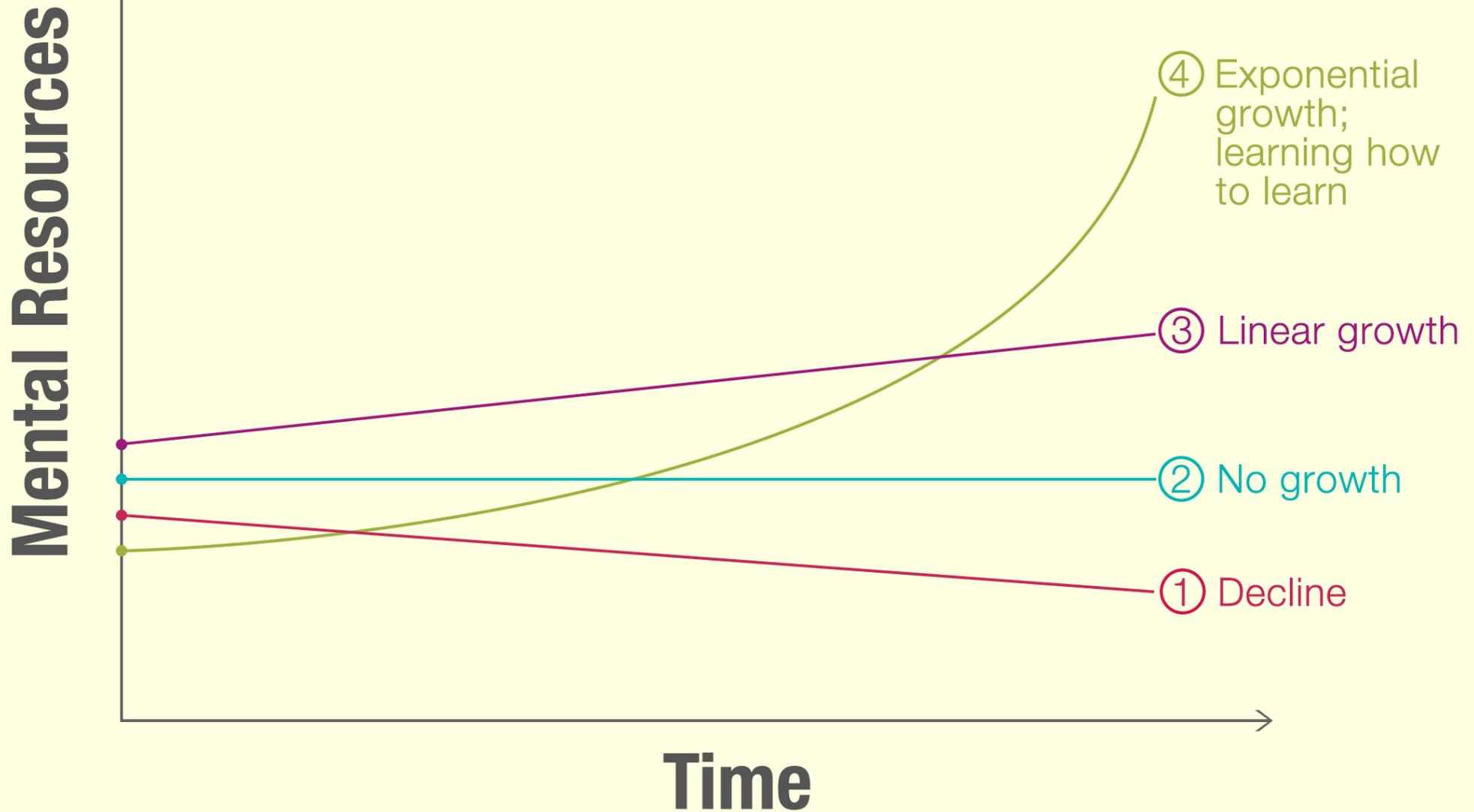
② No growth

① Decline

# Four Learning Curves



# Four Learning Curves



# Experience-Dependent Neuroplasticity

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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

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**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 thin, yellow, fiber-like structures. The central neuron has a bright green nucleus and is surrounded by a network of yellow fibers. The background is dark, making the glowing neurons stand out.

Neurons that fire together,

wire together.

# Two Conditions for Learning

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## **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.**

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**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

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**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

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The negativity bias

bad experiences

good experiences

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**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

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**Environmental** – setting, actions of others

**Behavioral** – type or frequency of activities

**Mental** – intention, self-awareness

# Distal, Proximal Mental Learning Factors

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## 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

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**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

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- **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

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## 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

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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

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## 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

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

# Multimodality

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

## 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

# 3. Absorb the Experience

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- 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

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## **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

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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.<sup>32</sup>

# It's Good to Take in the Good

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- **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**<sup>33</sup>

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

**Lao Tsu**

# Pilot Study on the HEAL Process

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- 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**

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**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

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Avoiding harms for **safety**

Approaching rewards for **satisfaction**

Attaching to others for **connection**

# Mental Resources for Core Needs

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**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

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**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

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**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

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**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.**

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*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/](http://www.RickHanson.net/key-papers/) for other suggested readings.

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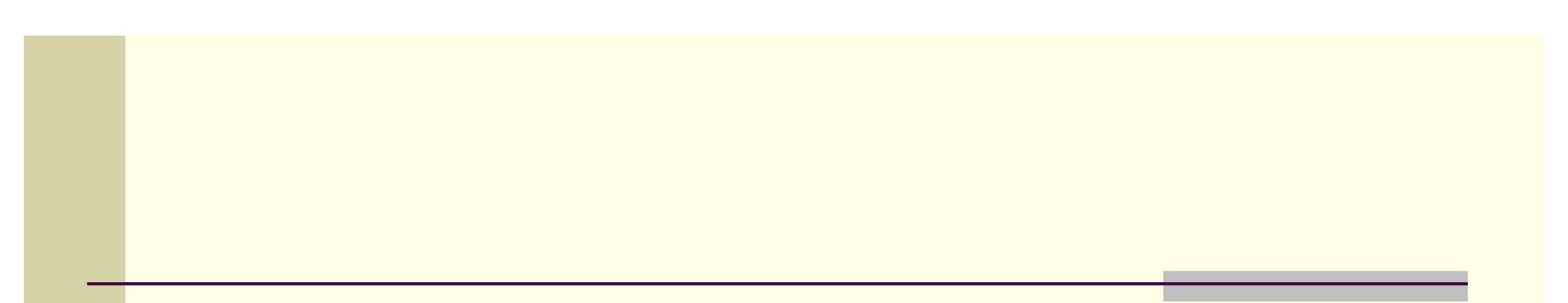
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# **Additional Materials**

# What Shapes a Person's Course?

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**Challenges**

**Vulnerabilities**

**Resources**

# Where Are Resources Located?

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**World**

**Body**

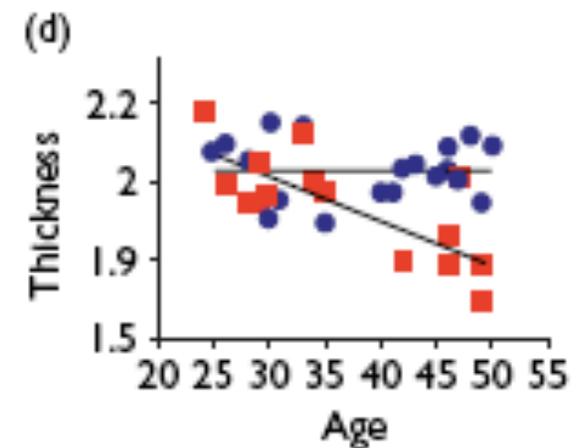
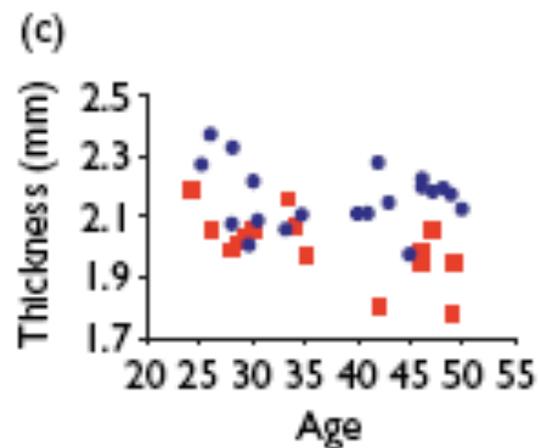
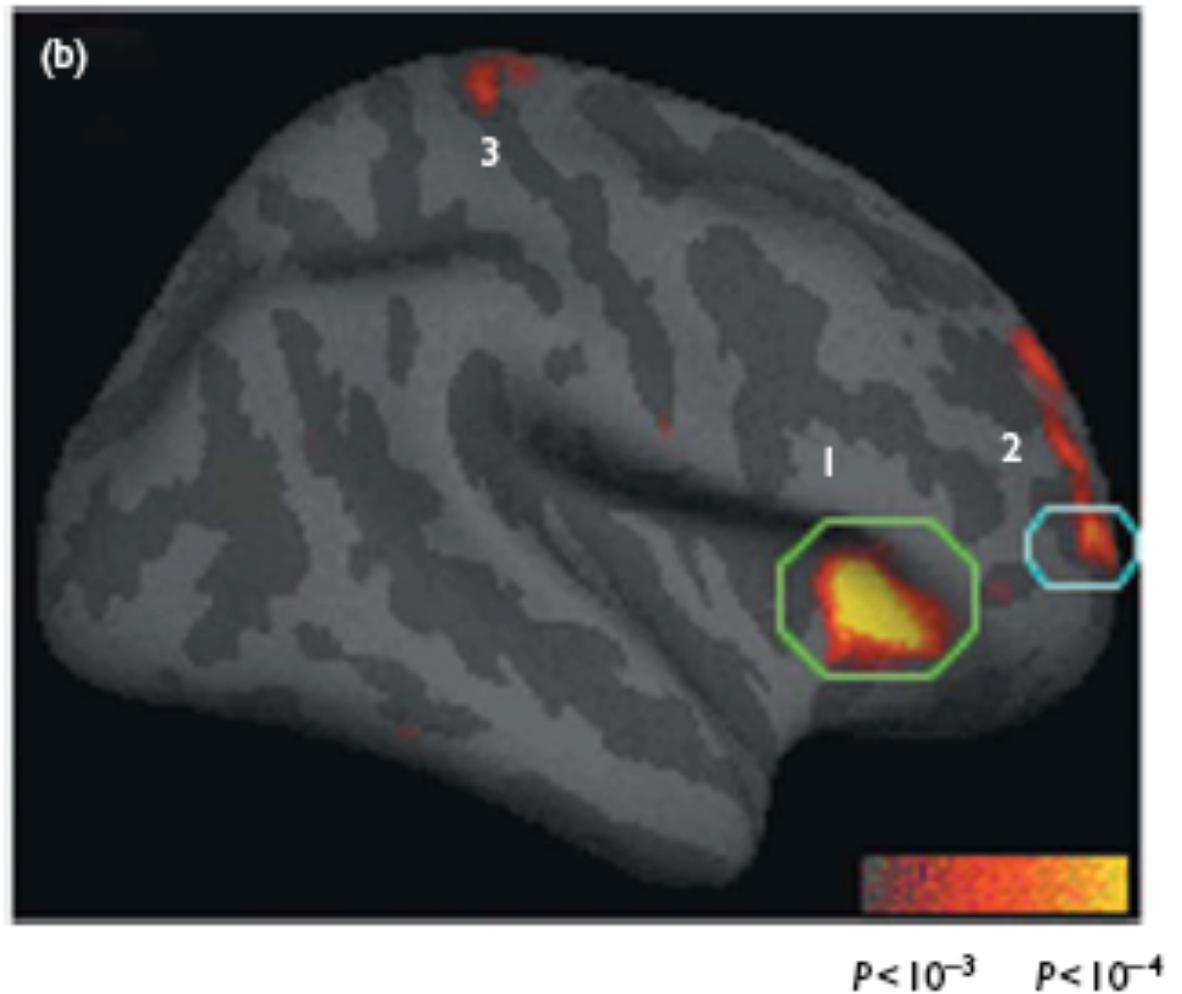
**Mind**

# Resources in the Mind

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- **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  
cortical thickness.  
*Neuroreport*, 16,  
1893-1897.



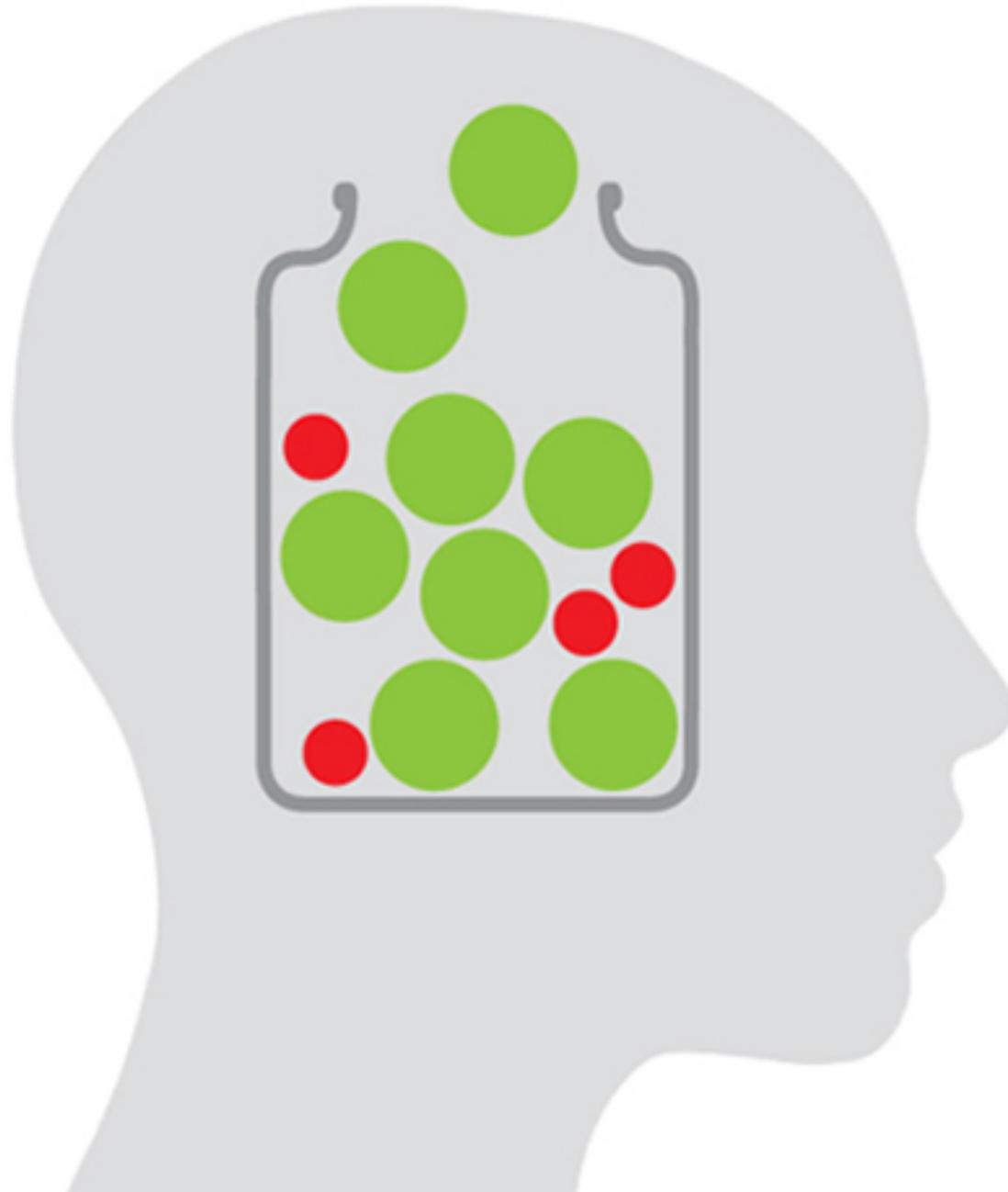
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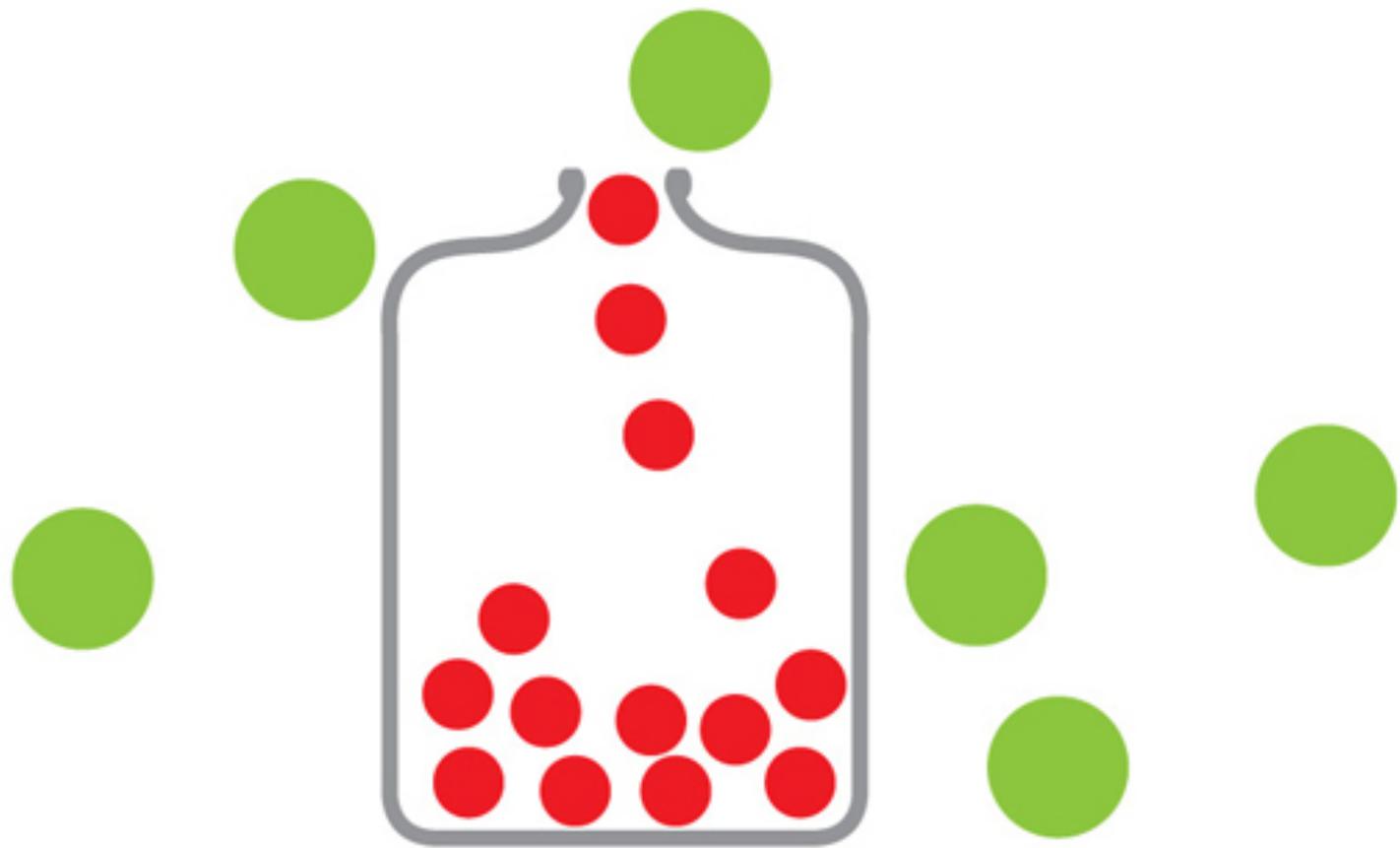
**“Upward spirals” of state → state processes (or state → behavior → state or state → environment → state) are not themselves evidence of state → trait development.**

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

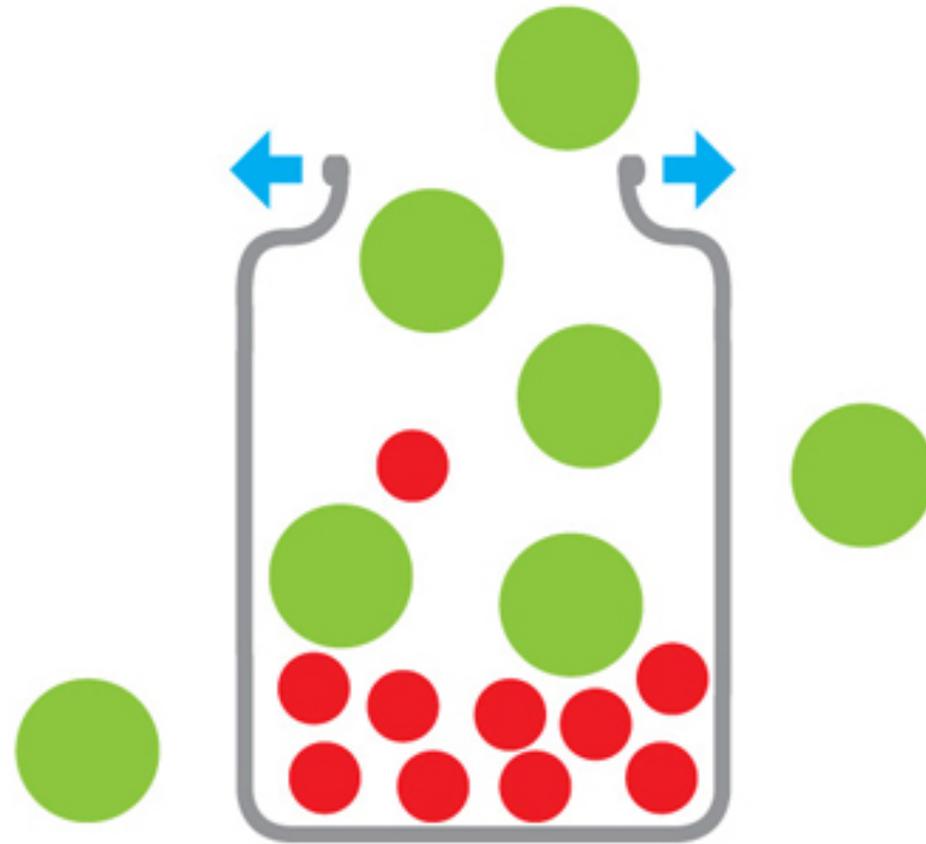
**Traits are more reliable than states. You take them with you wherever you go.**

# ACQUIRING MENTAL RESOURCES

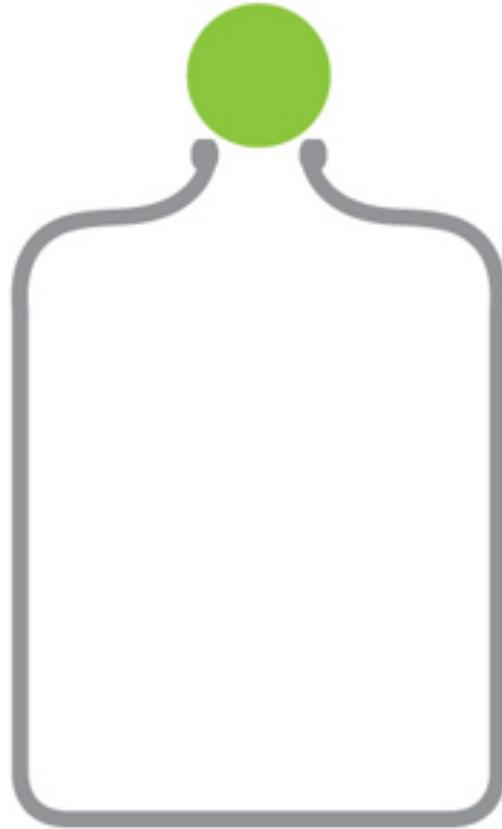




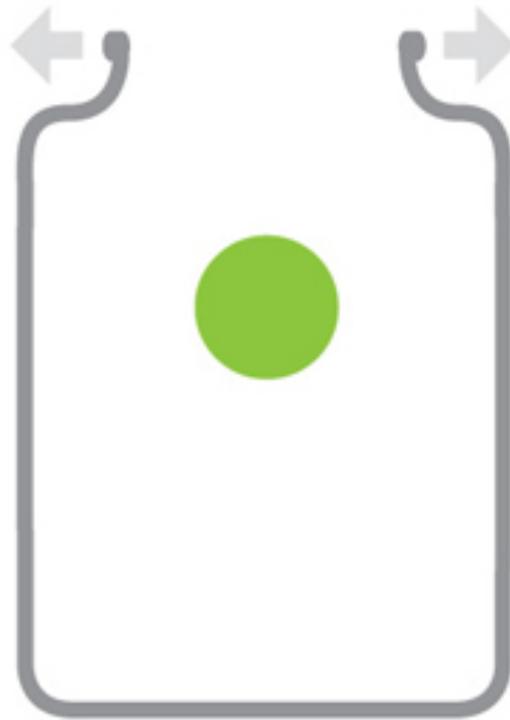
## **The Negativity Bias**



**Getting the Good Stuff into Your Brain**



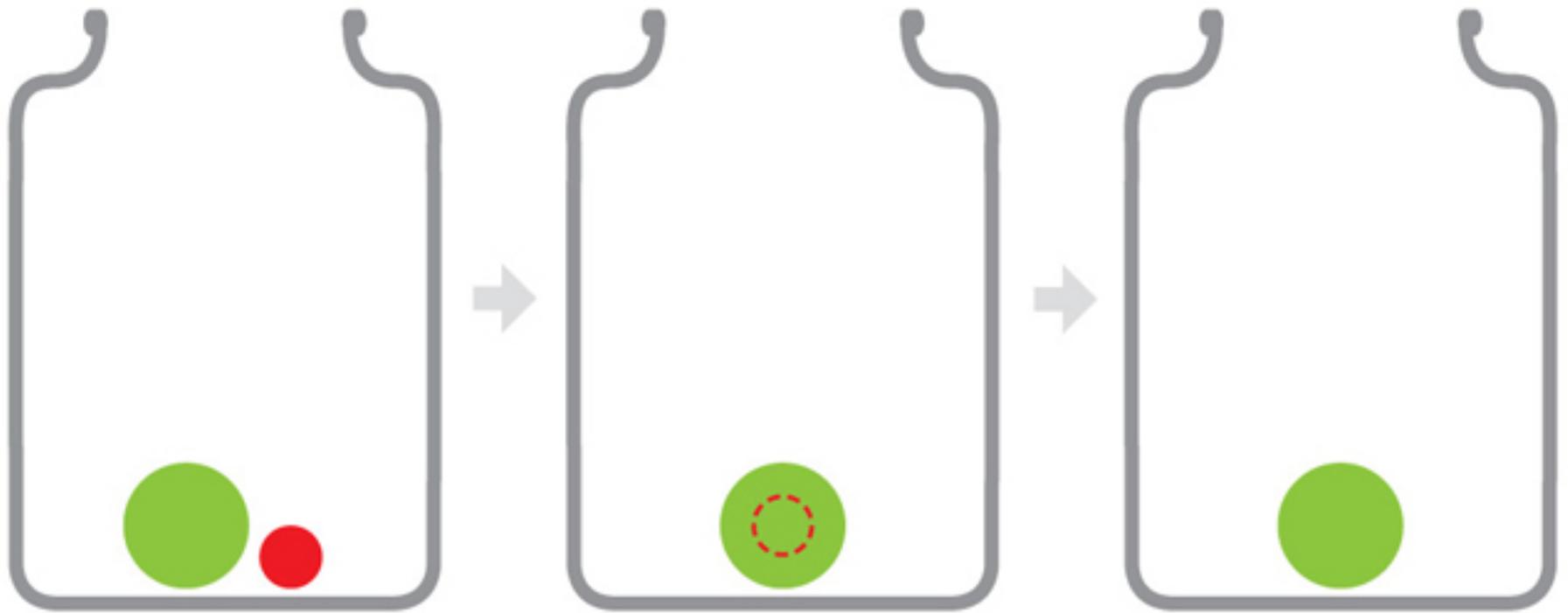
**H**ave a Good Experience



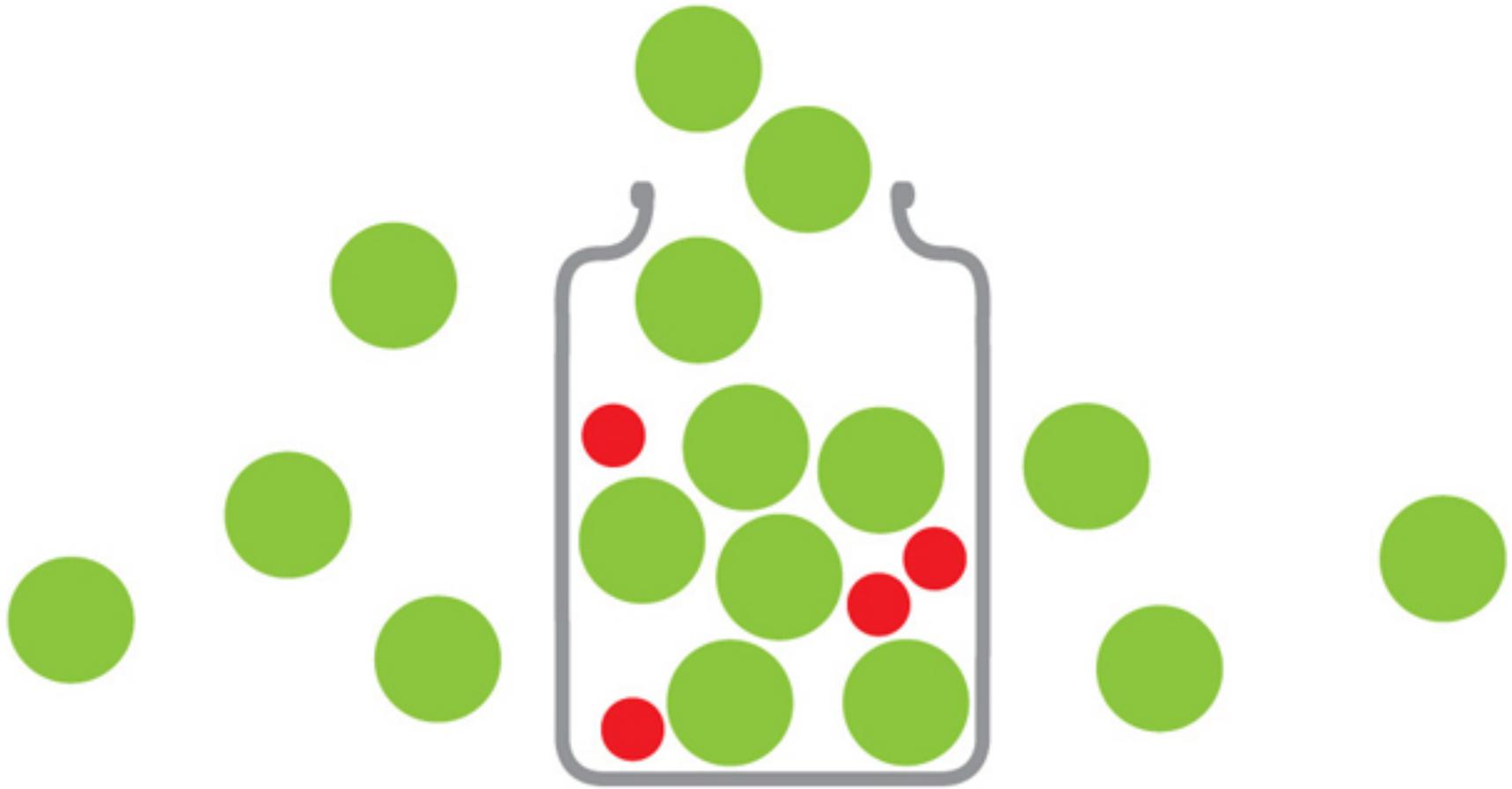
**Enrich It**



**A**bsorb It



**Link Positive and Negative Material**



**Have It, Enjoy It**

# The Four Ways to Offer a Method

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- 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

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- 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

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## 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

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## 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

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## 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