# Happiness 2.0:

# Rethinking Mindfulness and the Science of Psychological Well-Being

UCLA Extension October 17, 2015

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The Wellspring Institute & The Center for Mindful Living

<u>RickHanson.net</u> <u>Mindfullivingla.org</u>

# **Topics**

- Foundations
- Positive neuroplasticity
- Play
- **■** Three modes of practice
- Heart

# **Foundations**

# What's wrong with happiness 1.0?

# Being with and Working with

- Over the past 100 years, psychology has swung back and forth between emphasizing:
  - Receptive acceptance: being with what is
  - Wise effort: working with what is
- These two great themes are often set against each other, but they are actually synergistic:
  - We need to work with the mind to build resources for being with pain, etc.
  - We need to be with the results of our work.
- The bird of practice needs two wings to fly. 5

# Two Aspects of Working with the Mind

Preventing, reducing, and ending what is suffering and harmful

Creating, increasing, and preserving what is happy and beneficial

#### Three Ways to Engage the Mind

- Be with what is present without any deliberate effort to change it
- Decrease what is suffering and harmful
- Grow what is happy and beneficial
- → Let be, let go, let in
- → In the garden of the mind: Witness it, pull weeds, and plant flowers

On a foundation of wisdom and benevolence, practice is like a three-legged stool:

heart mindfulness cultivation

# The Key Attitude to Optimizing Learning



"It is in playing and only in playing that the individual child or adult is able to be creative and to use the whole personality, and it is only in being creative that the individual discovers the self."

- D.W. Winnicott, Playing and Reality

# Setting Up the Day

- Focus on the elements of Happiness 2.0
- There will be a mix of presentation, discussion, and experiential activity
- Ultimately, take what is useful to you and leave the rest ②.

# **Positive Neuroplasticity**

# What Shapes Your Course?

# Challenges

**Vulnerabilities** 

Resources

#### Where Are Resources Located?

World

**Body** 

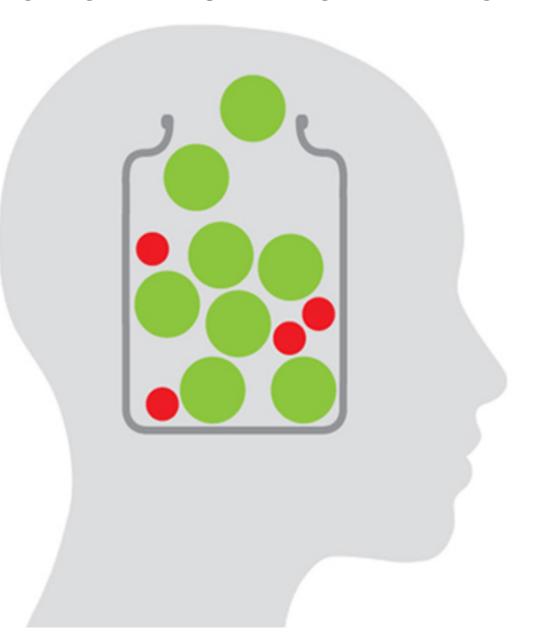
Mind

#### Resources in Your Mind

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



# INNER STRENGTHS ARE BUILT FROM BRAIN STRUCTURE



# How do you get these inner strengths into your brain?

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:

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

Listener: Find a sincere gladness for the other person.

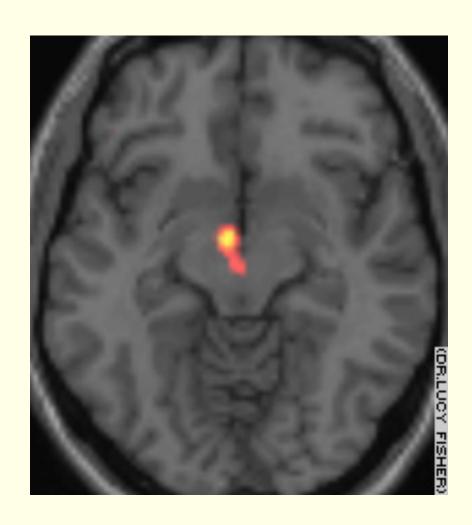
**Both**: Repeatedly take 5-10 seconds to feel and register enjoyable, beneficial experiences

# What was happening in your brain?



Mental activity entails underlying neural activity.

# **Rewards of Love**

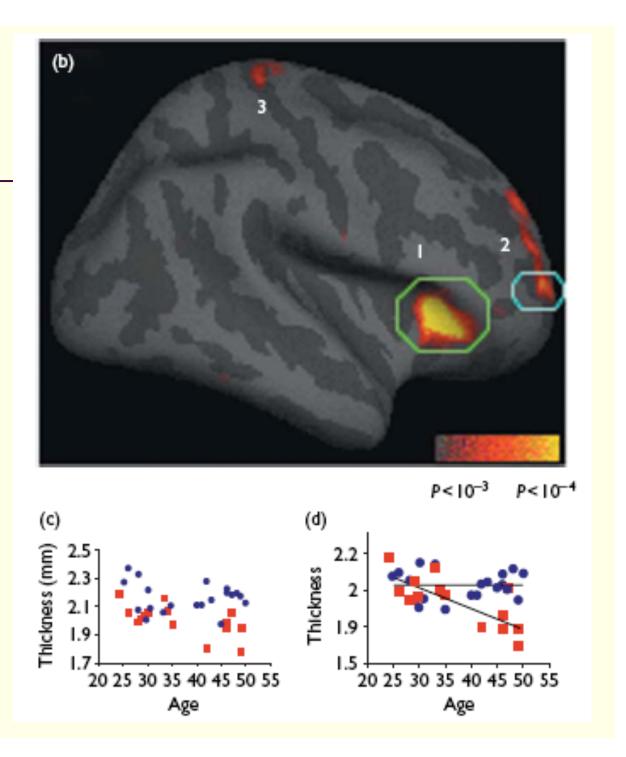


Repeated mental activity entails repeated neural activity.

Repeated neural activity builds neural structure.



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



We can use the mind

To change the brain

To change the mind for the better

To benefit ourselves and other beings.

# The Neuropsychology of Learning

Learning – changing neural structure and function – has two stages:

From <u>short-term</u> memory buffers to <u>long-term</u> storage

From state to trait

From activation to installation.

Inner strengths are grown from experiences of them – activated states – that are <u>installed</u> as traits. You become more compassionate by installing experiences of compassion.

You become more grateful by installing experiences of gratitude.

You become more mindful by installing experiences of mindfulness.

# Installation

#### Installation

Installation

#### Installation

Installation

Most experiences of inner strengths are <u>enjoyable</u>.

They feel good because they <u>are</u> good for us and others.

Without <u>installation</u>, there is no learning, no change in the brain. We're good at activation but bad at installation.

This is the fundamental weakness in most patient education, human resources training, psychotherapy, coaching, and mindfulness training.

The same research that proves therapy works shows no improvement in outcomes over the last 30 or so years.

**Scott Miller** 

Meanwhile your painful, harmful experiences are being rapidly converted into neural structure.

#### The Brain's Negativity Bias

As our ancestors evolved, avoiding "sticks" was more important than getting "carrots."

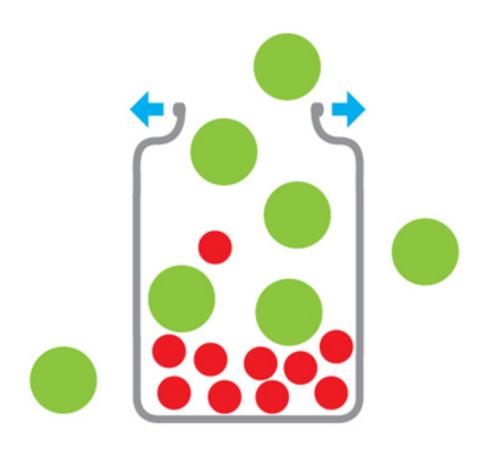
- 1. So we scan for bad news,
- 2. Over-focus on it,
- 3. Over-react to it,
- 4. Install it fast in implicit memory,
- 5. Sensitize the brain to the negative, and
- 6. Create vicious cycles with others.

### Velcro for Bad, Teflon for Good

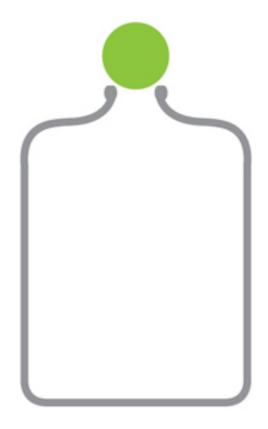


The brain is good at learning from bad experiences but bad at learning from good ones.

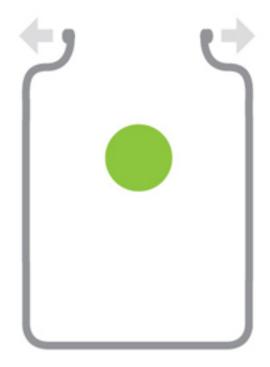
Even though learning from good experiences is the primary way to grow resources in the mind.



**Getting the Good Stuff into Your Brain** 



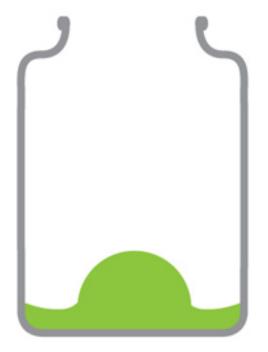
**Have a Good Experience** 



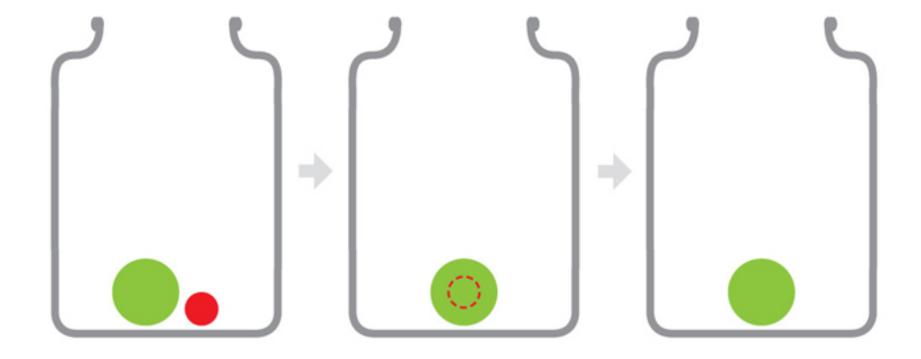
**Enrich It** 

#### How to Enrich an Experience

- Duration
- Intensity
- Multimodality
- Novelty
- Salience



Absorb It



Link Positive and Negative Material

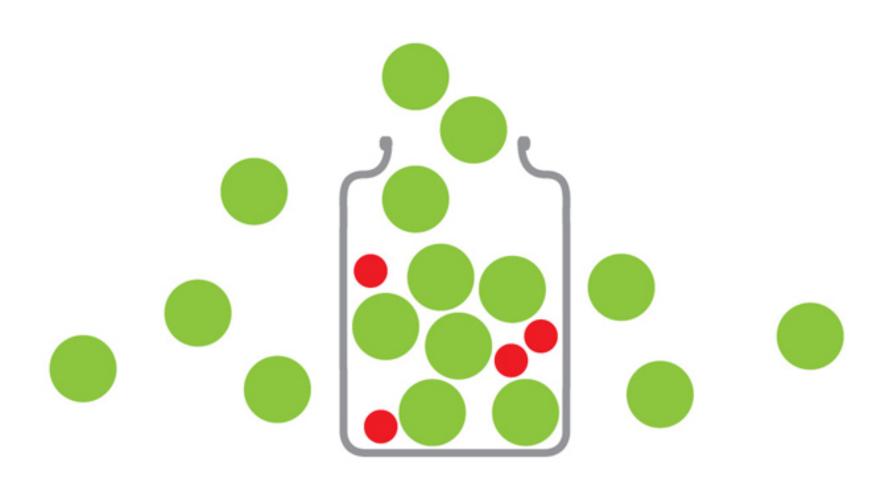
#### **HEAL Yourself**

Have a positive experience.

Enrich it.

Absorb it.

Link positive and negative material.



Have It, Enjoy It

#### Let's Try It

- **Notice** the experience present in awareness that you are basically alright right now.
  - Have the experience.
  - Enrich it.
  - Absorb it.
- Create the experience of gratitude.
  - Have the experience.
  - Enrich it.
  - Absorb it.

#### It's Good to Take in the Good

- Development of specific inner strengths
  - General resilience, positive mood, feeling loved
  - Key resources For challenges, deficits, wounds
- 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

### **Cultivation Undoes Craving**

We rest the mind upon beneficial states so that the brain may gradually take their shape.

This disentangles us from craving as we increasingly rest in a peace, contentment, and love that is independent of external conditions.

With time, even the practice of cultivation falls away – like a raft that is no longer needed once we reach the farther shore.

## Pet the Lizard



### Feed the Mouse



# **Hug the Monkey**



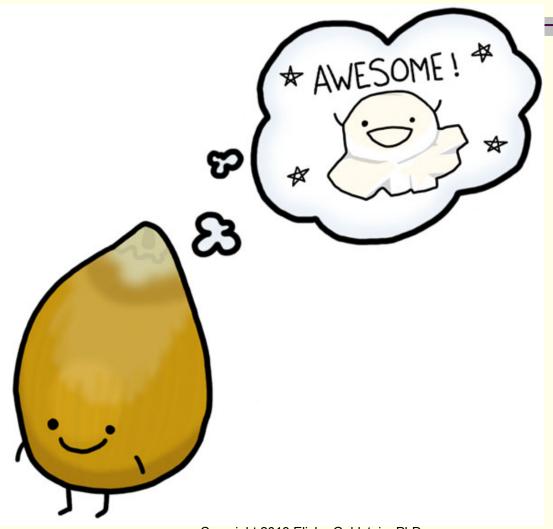
#### **Peace**

#### Contentment

Love



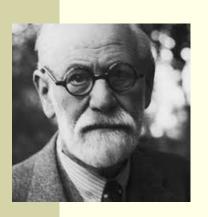
# Pop into the Present!

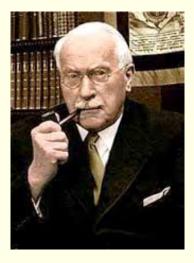


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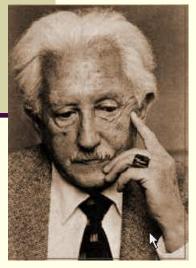
# A Scarcity of Play in Psychology



















The creation of something new is not accomplished by intellect, but by the play instinct.

~Carl Jung

# Let's Play!

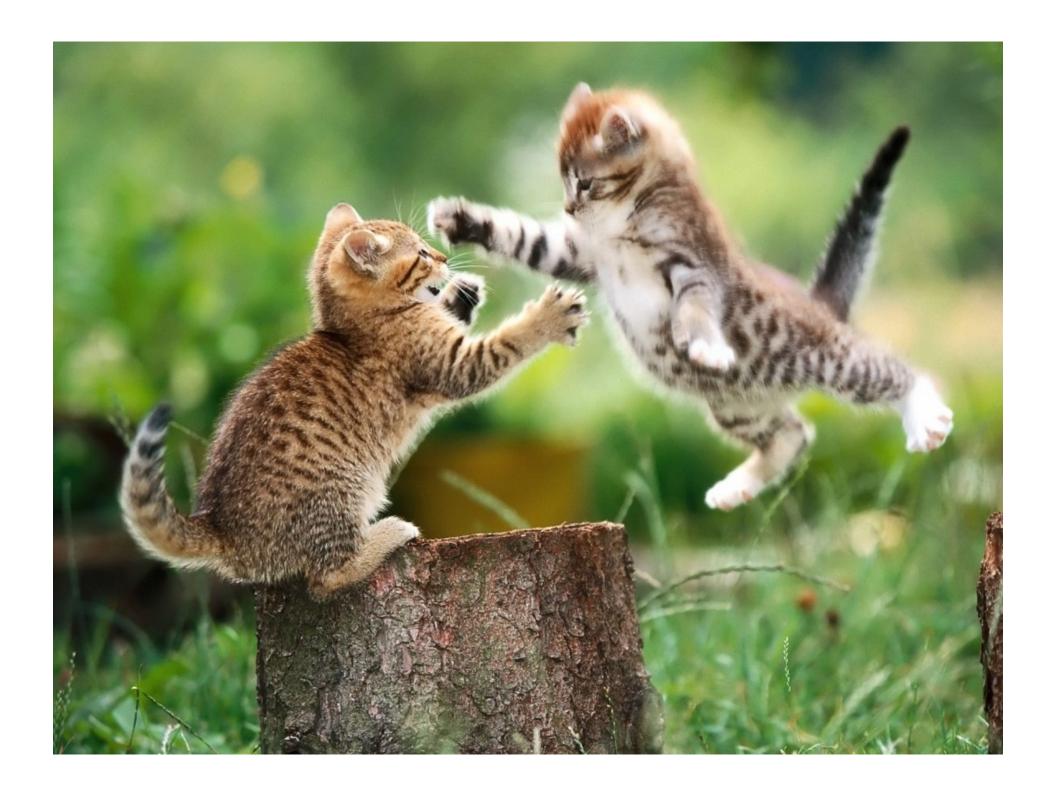
# What is Play?

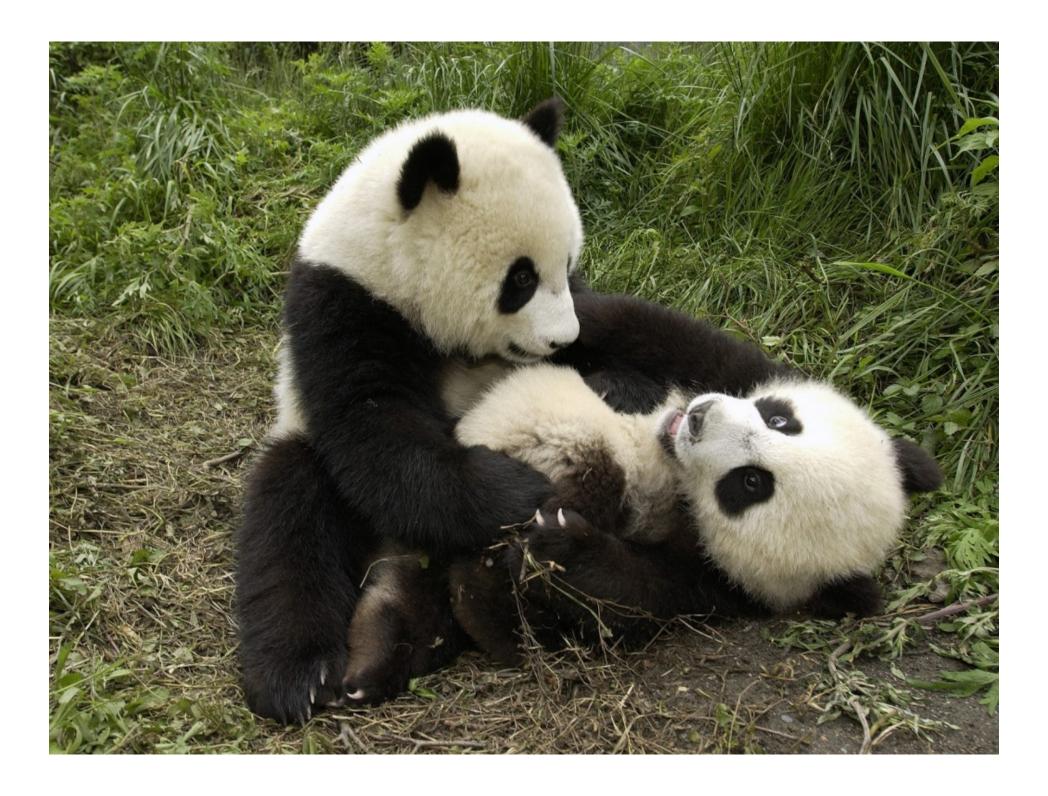
# What Play is Not!

#### Our Culture's Implicit Messages

- Unproductive
- ■Guilty pleasure
- Petty
- Except: Competitive Play OKAY!

# It's Natural







## **Defining Play**

- \*Play: a flexible state of mind in which you are presently engaged in some freely chosen and potentially purposeless (or purposeful) activity that you find interesting, enjoyable, and satisfying."
  - ~ Uncovering Happiness

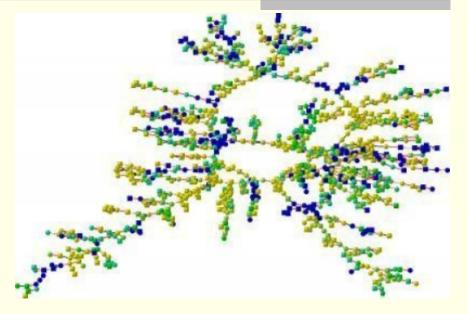
# It's Contagious



# The Science of Happy Contagion

If you're happy and you know it, thank your friends...

- 4,739 Individuals; Over 50,000 social and family ties
- ■Within a mile a friend increases 25%;
  Next door neighbor 34%;
  Indirect relationship 10%



Fowler, James H. and Christakis, Nicholas A., Dynamic Spread of Happiness in a Large Social Network: Longitudinal Analysis Over 20 Years in the Framingham Heart Study (December 7, 2008). British Medical Journal, Vol. 3, January 2009

## What Happens if We Don't Play?

1970's study with Mihaly Csikzentmahalyi

Instructions: Stop doing anything "instrumental" (Walks with friends, reading).

#### After 24 hours

Increased sluggishness Difficulty concentrating Felt sleepy

Restless

#### After 48 hours

48 hours "the general deterioration in mood was so advanced that prolonging the experiment would have been unadvisable."



# "The opposite of play is not work, it's depression."

~ Brian Sutton-Smith

# Play ≠ Depression

Play	Depression
Engaged (Left Prefrontal)	Disengaged (Right Prefrontal)
Absence of self-critic	Self-Judgment
Flexible Mind	Rigid Thinking
Positive Emotions	Negative Emotions
Social (High Vagal Tone)	Isolation (Low Vagal Tone)
Open to possibilities	Helplessness

# Play Enhances Learning & Memory (aka "Installation")



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#### Three Conditions

- 1. Playmates and Toys
- 2. Playmates, No Toys
- 3. No playmates, No Toys



#### Results

Group 1 had a significantly thicker cerebral cortex - Cognitive processing, attention and awareness. (Key determinant of change – novelty).

When thicker is sometimes better - They could also navigate a maze better (higher behavioral performance).

Group 3 showed decreased cortical thickness.

# Mouse from Group 1



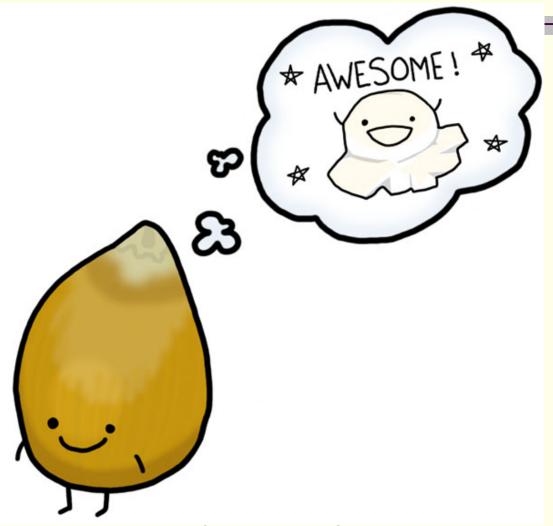
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## Play Helps Maintain Brain Cells BDNF "Brain Fertilizer"



Gordon NS, Burke S, Akil H, Watson SJ, and Panskepp J. 2003. Socially-induced brain 'fertilization': play promotes brain derived neurotrophic factor transcription in the amygdala and dorsolateral frontal cortex in juvenile rats. Neuroscience Letters 341(1): 17-20.

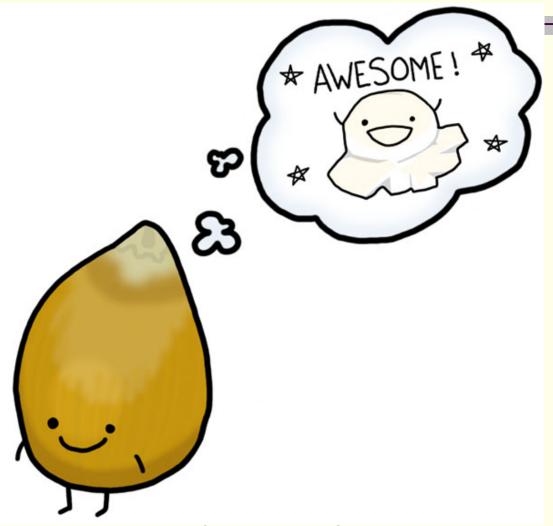
# Pop into the Present



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# Pop into the Present



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# How to Nurture Play?

#### Take a Play History

- ■Diego's Story
- ■Julie's story

#### **Bring it to the Present**

- ■What are your toys?
- ■Who are your playmates?
- Make a playbook and playdates.

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# What Gets in the Way?

- Cultural Implicit Messages (unproductive, guilty pleasure, petty)
- Perfectionism
- Vulnerability
- Foreboding Joy

"To be in harmony with the oneness of things is to be without anxiety about imperfection."

- Dogen Zenji

# Your Turn to Uncover Play

# Takeaway!

The Good News!

Play isn't just for kids.

On Top of That!

Taking regular play-breaks builds our play muscle and as we continue to make learning playful, it enhances our natural capacities for resiliency and a deeper installation of learning.

#### **Three Modes of Practice**

#### In the Garden of the Mind

- 1. Be with what is there.
- 2. Decrease what's harmful.
- 3. Increase what's beneficial.

Witness. Pull weeds. Plant flowers.

Let be. Let go. Let in.

Mindfulness is present in all three.

"Being with" is primary – but not enough.



# SPIRIT ROCK MEDITATION CENTER



Join us for

#### Cultivating Inner Strength - Monastic Daylong [Dana - No Fee Day]

with Ayya Anandabodhi and Ayya Santacitta on

Sunday, July 8

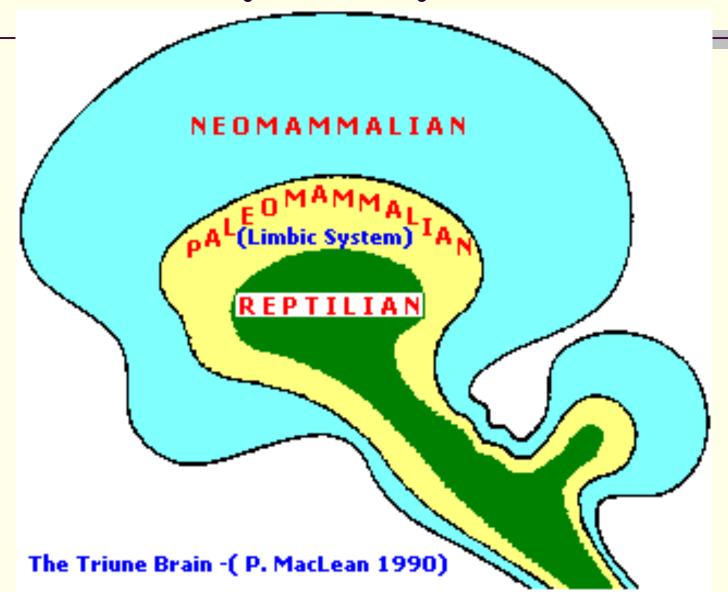
from 9:30 am - 5 pm.

(Photo by Ed Ritger)

#### **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*

## **Evolutionary History**



#### Three Stages of Brain Evolution

#### Reptilian:

- Brainstem, cerebellum, hypothalamus
- Reactive and reflexive
- Avoid hazards

#### Mammalian:

- Limbic system, cingulate, early cortex
- Memory, emotion, social behavior
- Approach rewards

#### Human:

- Massive cerebral cortex
- Abstract thought, language, cooperative planning, empathy
- Attach to "us"

#### **Meeting Three Core Needs**

Need Signal Strategy

Safety Unpleasant Avoiding

Satisfaction Pleasant Approaching

**Connection** Heartfelt Attaching

#### Mental Resources for Challenges

Safety – Grit, protection, relaxation, feeling alright right now, peace

Satisfaction – Gratitude, gladness, accomplishment, contentment

Connection – Belonging, appreciation, friendship, compassion, love

#### **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

# Societal Implications of Positive Neuroplasticity

- For most of the time our human and hominid ancestors have lived, it was not possible to meet the core needs of everyone. But now the resources and know-how exist to do this. How we handle this unprecedented opportunity will be the central theme of this century.
- Improving external conditions is vital but not enough.
  Many affluent people dwell in anxiety and anger, frustration and drivenness, and hurt and ill will.
- Repeatedly internalizing Responsive experiences develops a "green brain" that is harder to manipulate with threats and fear, greed and consumerism, and "us" vs. "them" rivalries. A critical mass of "green brains" will bring a tipping point that changes the course of human history.

# 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.

# Encouraging the Heart

## 4 Ways to Warm the Heart

- Toward our pain Self-Compassion
- Toward others pain Compassion
- Toward our joy Mudita (self-less joy)
- Toward others joy Mudita



Self-Compassion and Compassion

## Self-Compassion: What is it?

"Being aware of our own suffering with an inclination to help ourselves."



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## Self-Compassion ≠ Depression

- 142 Depressed, 120 not-depressed
- Depressed showed lower self-compassion
  - Controlling for depressive symptoms
- Self-compassion ≠ depressive symptoms, rumination and avoidance
- Rumination and avoidance mediated relationship between self-compassion and depressive symptoms
- Tobias Krieger, David Altenstein, Isabelle Baettig, Nadja Doerig, Martin Grosse Holtforth, Self-Compassion in Depression: Associations With Depressive Symptoms, Rumination, and Avoidance in Depressed Outpatients, **Behavior Therapy**, Volume 44, Issue 3, **September 2013**, Pages 501-513

# Translating the Non-Verbal Experience of Compassion

Since it's difficult to cultivate self-compassion with a history of depression. How do you convey the quality of compassion when dealing with our own emotional suffering?

We need to appeal beyond the rational brain and to the emotional brain.

How can we do this?

# What Comes Up for You?



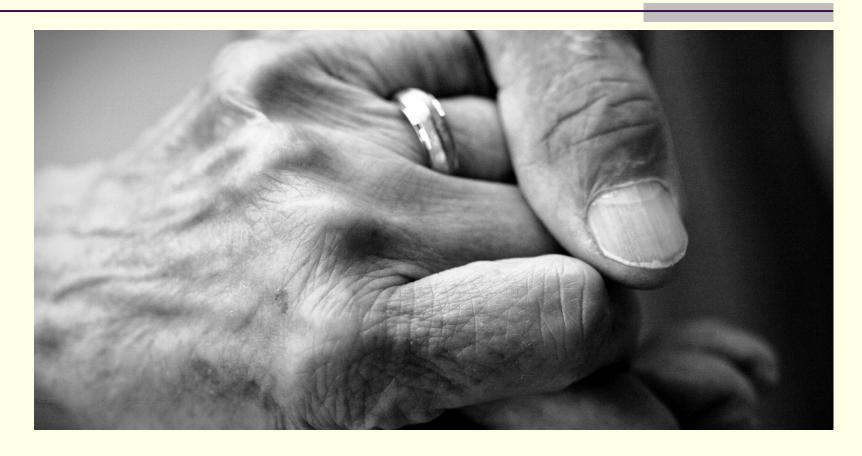
# The Power of Vulnerability



# Don't turn away. Keep your gaze on the bandaged place. That's where the light enters you.

~ Rumi 13<sup>th</sup> Century Sufi Poet

# The Power of Touch



Coan JA, Schaefer HS, Davidson RJ (2006) Lending a hand: social regulation of the neural response to threat. Psychol Sci 17: 1032–1039.



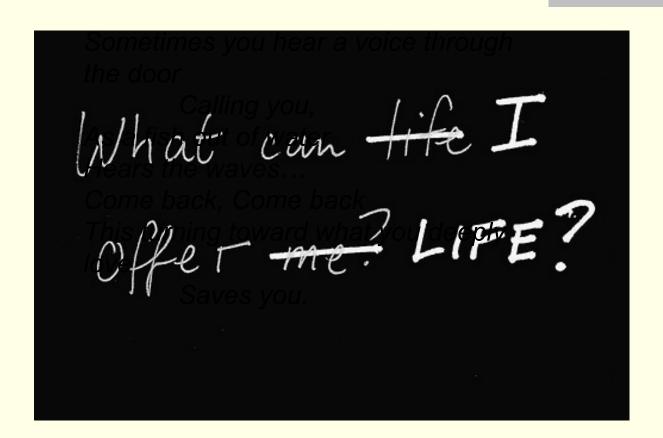
### Discussion

- What did you notice?
- i.e., thoughts, sensations, emotions?
- How is this relevant to installing a deeper sense of well-being?

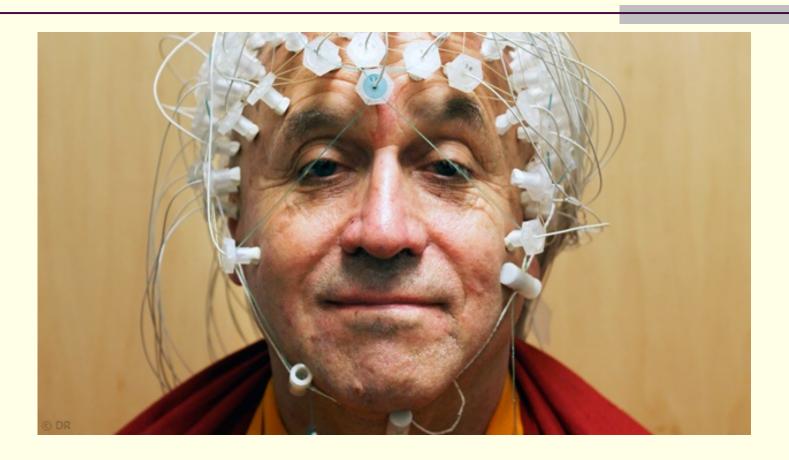




### Live With Purpose & Compassion



# The Neuroscience of Compassion



Grief can be the garden of compassion. If you keep your heart open through everything, your pain can become your greatest ally in your life's search for love and wisdom.

~ Rumi

### **Reducing Inflammation**

#### **Hedonic Happiness**

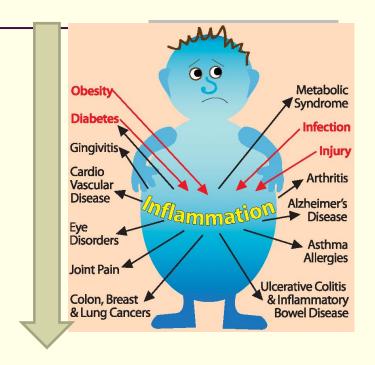
"Living the good life" High Inflammation

#### **Eudaimonic Happines**

"A life of purpose and meaning"

"A life rich in compassion"

= Low Inflammation



Barbara Fredrickson et al. "A Functional Genomic Perspective on Human Well-Being," Proceedings of the

National Academy of Sciences of the United States of America 110, no. 33 (August 13, 2013): 13684-89.

# Raises Vagal Tone

### High Vagal Tone

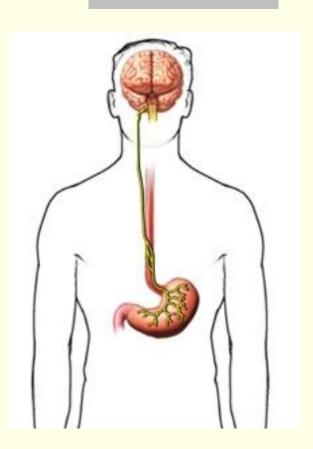
Slows heart rate, regulates internal systems, Calm, rest, relaxation, contentment

### Low Vagal Tone

Difficulty regulating emotions Flat affect

Low voice tone

Tied in with Oxytocin network (Connection) Associated with Trauma and Depression



## When Money Can Buy Resiliency Pro-Social Vs. Anti-Social



# When Money Can't Buy Resiliency



# Purpose = Happiness/Resiliency

2009 – Mayo Clinic

556 Academic Physicians sampled

34% met criteria for burnout (aka "Compassion Fatigue")

The amount of time spent on meaningful work had an inverse relationship with burnout.

Tiat Shanafelt et al., "Career Fit and Burnout Among Academic Faculty," *Archives of Internal Medicine* 169, no. 10 (may 2009): 990 – 990. Copyright 2013 Elisha Goldstein, PhD

"It's not enough to be compassionate, you must act."

~ The Dalai Lama

# What Do You Value?

# Making Pro-Social Values into Verbs

Compassion A daily practice of thinking of people in my

life or in the world who are struggling and

wishing them lovingkindness

Strong Family
Have nightly meals together without

electronics

World Peace Volunteer or give money to (Pick your

organization)

# Too Much Compassion?

We're all at risk

Between 16 – 85% of healthcare workers develop "compassion fatigue" – a gradual lessening of compassion.

Balance with compassion and...

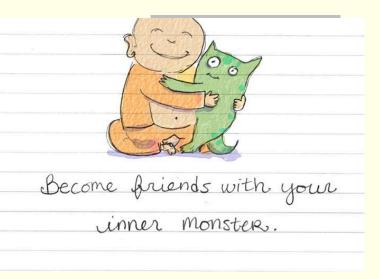
Hooper, et al. (2010). Compassion Satisfaction, Burnout, and Compassion Fatigue Among Emergency Nurses Compared With Nurses in Other Selected Inpatient Specialties. Journal of Emergency Nursing, 36(5), 420-427. Retrieved from http://dx.doi.org.hsl-ezproxy.ucdenver.edu/10.1016/j.jen.2009.11.027

# Who is Your Compassion Hero?



### S.A.F.E

- **S Soften** into the feeling
- A Allow/Accept it as it is
- **F Feel into it** with inquiry
  - \* Use Self-Compassion Hero
  - \* What am I needing?
  - \* Integrating Lovingkindness



E – Expand Lovingkindness to all who are in the same boat.

Source: Uncovering Happiness: Overcoming Depression with Mindfulness and Self-Compassion

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# A Boost for Sharing, and an Extra Boost for Self-less Joy

#### **One Study – Three Conditions**

- Kept a journal of grateful experiences (no sharing)
- ■Kept class notes (sharing)



Kept a journal of grateful experiences (sharing)(increased in life satisfaction, positive affect, happiness)

#### Follow-up study

■People who received an active supportive response expressed more positive affect than all other previous conditions.

Lambert, N. M., Gwinn, A. M.\*, Baumeister, R. F., Strachman, A., Washburn, I. J., Gable, S. L., & Fincham, F. D. (2013). A boost of positive affect: The perks of sharing positive experiences and grateful experiences. *Journal of Social and Personal Relationships*, 30, 24-43

## Making it Real Sharing Joy

- **Speaker:** Think of an experience where you were generous, kind, caring or loving
- Share the story with a partner
  - Note obstacles: don't want to show off, guilty that we might feel good while others are suffering.
- **Listener:** Connect with your heart and listen with the understanding that this person is just like me, be happy for their joy.
  - Or say phrases in your mind such as:
  - May you learn to appreciate the happiness and joy you experience.
  - May the joy you experience continue and grow.
  - May you be filled with joy and gratitude.
- **Bonus:** After the person is done speaking, take about 10 seconds to register that this person has been glad for me. Uncover a piece of happiness that is right there.

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### The Golden Rule:

### Getting Better is Not About Performing Well



### **Mindset Matters**

### <u>Fixed Mindset - Performance</u>

- Rigid belief that you have finite abilities.
- Every encounter with the boosting real happiness becomes a measure of your ability. Setbacks just reinforced the fixed belief.

### Growth Mindset - Learning

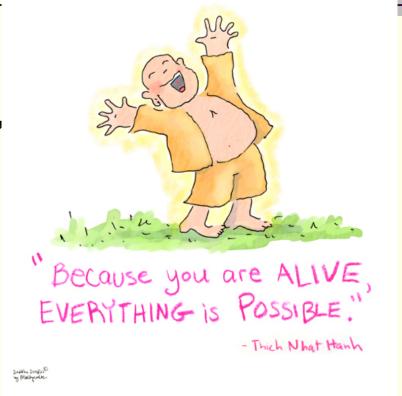
- Flexible belief that we all have varying abilities, with strategy and effort we can increase them.
- Every encounter with the boosting real happiness becomes an opportunity to learn and grow.

# 3 Steps to Happiness 2.0

- **Engage** Be on the lookout for good moments (big and small), add some mindfulness for deeper installation.
- 2. **Forgive** When the mind wanders, practice "forgive and invite" and gently guide it back.
- 3. Repeat Repeat step 2 indefinitely.

### Remember...

"Wherever you are that's the entry point." ~Kabir









### **Suggested Books**

See <a href="https://www.RickHanson.net">www.RickHanson.net</a> & <a href="https://www.MindfulLivingla.org">www.RickHanson.net</a> & <a href="https://www.MindfulLivingla.org">www.MindfulLivingla.org</a> for other books.

- Austin, J. 2009. Selfless Insight. MIT Press.
- Begley. S. 2007. Train Your Mind, Change Your Brain. Ballantine.
- Carter, C. 2010. Raising Happiness. Ballantine.
- Goldstein, E. & Stahl, B. 2015. MBSR Every Day: Daily Practices from the Heart of Mindfulness-Based Stress Reduction
- Hanson, R. (with R. Mendius). 2009. Buddha's Brain: The Practical Neuroscience of Happiness, Love, and Wisdom. New Harbinger.
- Keltner, D. 2009. Born to Be Good. Norton.
- Kornfield, J. 2009. The Wise Heart. Bantam.
- 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.

See <a href="https://www.RickHanson.net">www.RickHanson.net</a> for other scientific papers.

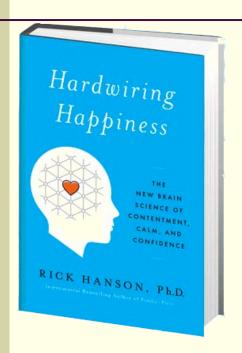
- Atmanspacher, H. & Graben, P. 2007. Contextual emergence of mental states from neurodynamics. Chaos & Complexity Letters, 2:151-168.
- Baumeister, R., Bratlavsky, E., Finkenauer, C. & Vohs, K. 2001. Bad is stronger than good. Review of General Psychology, 5:323-370.
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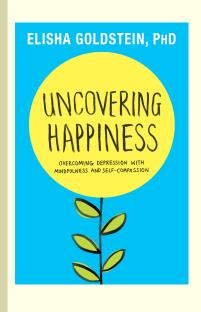
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