Love 2.0: The Value of Positivity Resonance

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www.PositiveEmotions.org
www.PositivityResonance.com
Ode to the PEP Lab

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The Broaden-and-Build Theory of Positive Emotions

Positivity Broadens Awareness

...and **Builds** Resources

Positive Emotions Unlock Other-Focused Thinking
More Inclusion of Other in the Self

Better Perspective Taking

More Oneness

What Love is Not…

- Sexual Desire
- A Special Bond
- Commitment
- Exclusive
- Lasting
- Unconditional
WHAT IS LOVE?

• Two views from relationship science:
  o “Investment in the well-being of the other for his or her own sake” (IWB; Hegi & Bergner, 2010).
  o Perceived Responsiveness, or “gets me”, i.e., feel understood, validated, and cared for (Reis, Clark & Holmes, 2004)

• What emotion science can add:
  o Biobehavioral components
  o A momentary lens
  o A broaden-and-build theoretical backdrop
Love is…

- an interpersonally situated experience marked by **momentary** increases in:
  - shared positive emotions;
  - biobehavioral synchrony;
  - mutual care;
- which, over time, **builds**:
  - embodied rapport (e.g., we really “clicked”);
  - social bonds;
  - commitment.

Positivity Resonance
Love’s 1st Precondition: Safety

Image from Living Links Center, Emory University; Frans de Waal, Director
Love’s 2\textsuperscript{nd} Precondition: Connection
Smiles Draw Attention

Eye Contact Causes Mimicry

Mimicry Creates Inter-Subjectivity

Biobehavioral Synchrony: Acting as One

Behavioral Synchrony

Oxytocin Synchrony

Neural Synchrony

Love is...Mini Mind-Melds
Love is Positivity Resonance

Love and Health
Changing Daily Diets
Lifestyle Change
Seed Love

Loving-Kindness Meditation (LKM)
Increases Positivity...

…Builds Resources

The Vagus Nerve
Cardiac Vagal Tone

Tidal Volume

Inspiration

Flow

Expiration

ECG

712  697  817  762  745  745
Upward Spirals of the Heart

Cardiac Vagal Tone

Positivity Resonance

Conceptual Model

Statistical Model
Vagal Tone Predicts Positive Emotion Yield of LKM

Changes in Positive Emotions Predict Changes in Social Connections

Changes in Social Connections Predict Changes in Vagal Tone

Love Creates Health
Health Creates Love

Savor Love

Kok & Fredrickson (under review).
Cellular Effects of Seeding Love

Loving-Kindness Meditation (LKM)
Randomized Controlled Trial
(Completed May 2014)

Meditation Workshop:
Loving Kindness Meditation (N = 59)
or
Mindfulness Meditation (N = 62)

Daily Reporting:
Meditation Practice
Emotions

Oxytocin
RSA
BP
CRP
DNA
RNA
Wellness
Behaviors
Illness SX

2 weeks
7 weeks
3 weeks

Lab Visit
Daily Reporting
Meditation Workshop & Daily Reporting
Daily Reporting
Lab Visit
Loving Kindness Meditation Increases Daily Positive Emotions

Our a priori “Region of Interest”:
**Conserved Transcriptional Response to Adversity (CTRA):**
Evidence-based 53-gene composite that reflects:
-- increased expression of proinflammatory genes
-- decreased expression of antiviral genes
-- decreased expression of antibody synthesis genes
LKM reduces adversity-related patterns of gene expression

Love alters molecular physiology

What’s a Smile For?

- To express positivity (Ekman, 1975);
- To evoke positivity (Bachorowski & Owren, 2003);
- To evoke inter-subjectivity (Niedenthal et al., 2010);
- To broaden collective mindsets and build collective resources (Gervais & Sloan Wilson, 2005);
- **ALL OF THE ABOVE:** To create the life-giving nutrient of positivity resonance (Fredrickson, 2013).
LOVE IS …micro-moments of positivity resonance

a.k.a., “day-to-day micro-utopias”

-- Nicholas Bourriaud (1998)
“Love doesn’t just sit there, like a stone; it has to be made, like bread; remade all the time, made new.”

- Ursula K. Le Guin