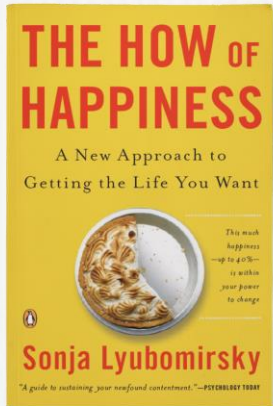




# THE HOW, WHAT, AND WHY OF HAPPINESS:

## THE SCIENCE OF INTERVENTIONS AIMED AT INCREASING WELL-BEING



Sonja Lyubomirsky, Ph. D.

*Department of Psychology*

Lou-boe-MERE-ski

UNIVERSITY OF CALIFORNIA  
**UC RIVERSIDE**



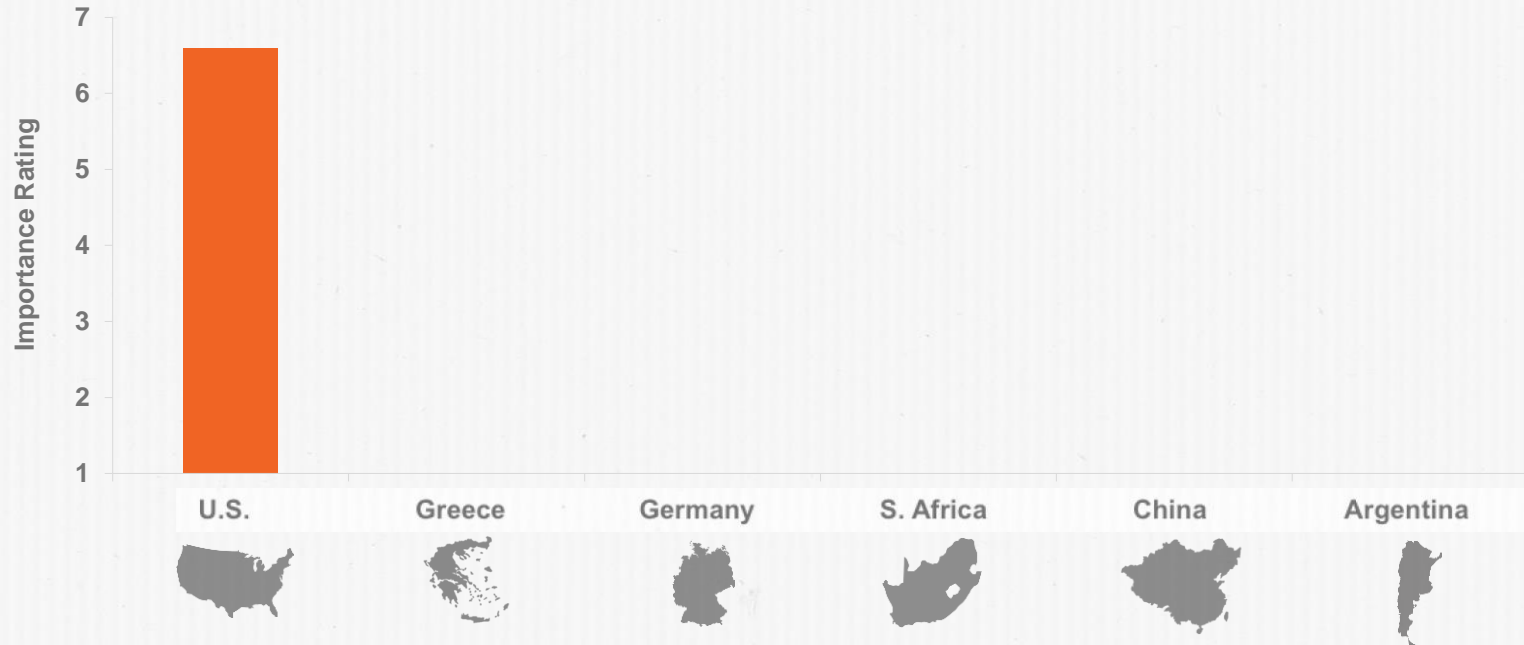




## Primary Collaborators:

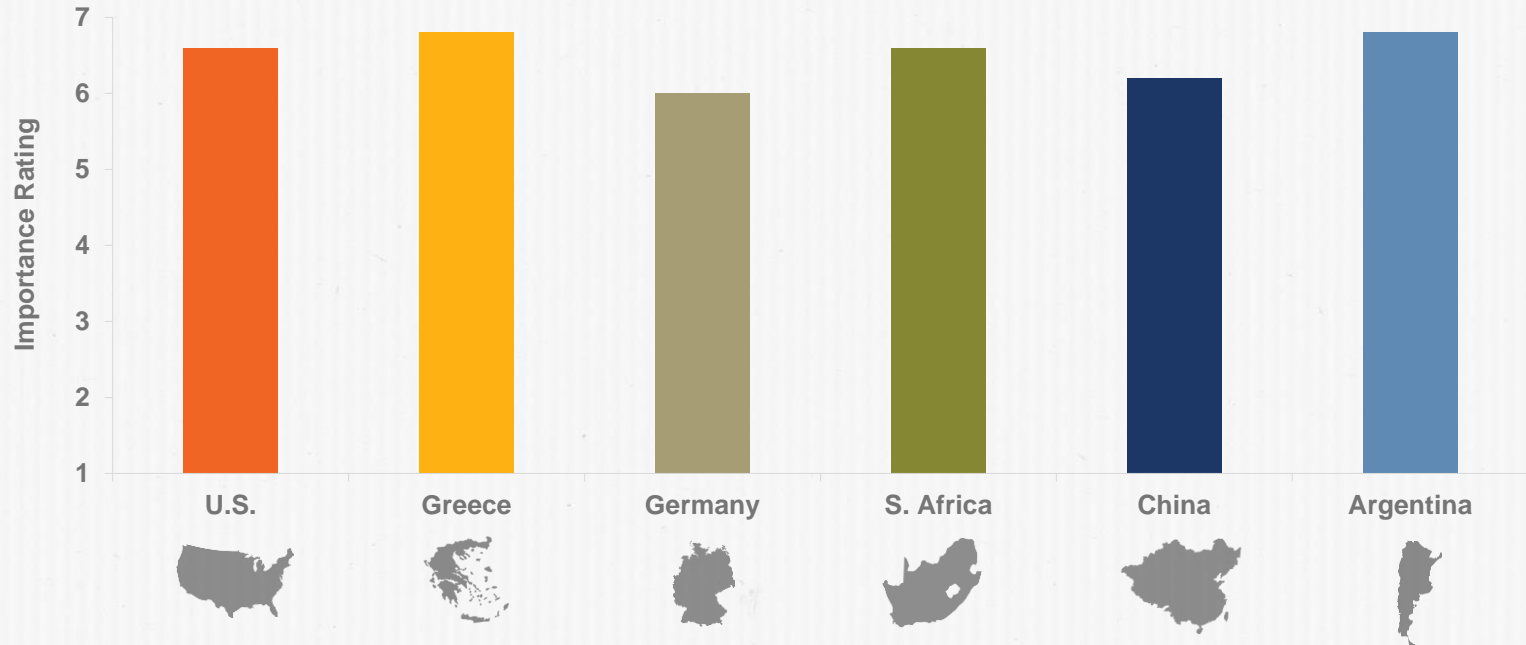
- Christina Armenta, (now at) State Farm
- Julia Boehm, (now at) Chapman University
- Joseph Chancellor, (now at) Facebook, Inc.
- Incheol Choi, Seoul National University
- Steve Cole, University of California, Los Angeles
- Rene Dickerhoof, (now at) Department of Defense
- Kristin Layous, (now at) Cal State-East Bay
- Katie Nelson-Coffey, (now at) Sewanee: University of the South
- Peter Ruberton, (now at) Penn State University
- Ken Sheldon, University of Missouri
- **Current Lab:** Megan Fritz, Lilian Shin, Seth Margolis, Julia Revord, Lisa Walsh, Annie Regan, Karynna Okabe-Miyamoto, & Ashley Stapley

# HOW IMPORTANT IS HAPPINESS TO YOU?



**FROM:** (1) Diener, E., Suh, E. M., Smith, H., & Shao, L. (1995). National differences in reported subjective well-being: Why do they occur? *Social Indicators Research*, 34, 7-32; (2) Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55, 34-43.

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(2) Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55, 34-43.

# 225 STUDIES ON THE BENEFITS OF HAPPINESS

## Happy people...

- Are more productive at work and more creative
- Make more money and have superior jobs
- Are better leaders and negotiators
- Are more likely to marry and to have fulfilling marriages, and less likely to divorce
- Have more friends and social support
- Have stronger immune systems, are physically healthier, and even live longer
- Are more helpful and philanthropic
- Show more resilience to stress and trauma

**FROM:** Lyubomirsky, S., King, L. A., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131, 803-855. **SEE ALSO:** Walsh, L. C., Boehm, J. K., & Lyubomirsky, S. (2018). Does happiness promote career success? Revisiting the evidence. *Journal of Career Assessment*, 26, 199-219.



# DEFINING HAPPINESS

- **Cognitive and affective component:**  
Experience of frequent positive emotions  
AND a sense that one's life is good
- Researchers let people judge their happiness for themselves
- Happiness is subjective

# MEASURING HAPPINESS

- Subjective Happiness Scale
- Satisfaction With Life Scale
- Affect-Adjective Scale

The screenshot shows a web browser window with the URL `survey.modernresearch.org/SurveyEnter.aspx?id=a56c90cd0fe74440b5d85bf43ac20120&ss=false`. The survey content is on a black background with white text. It asks the user to rate their agreement with five statements using a seven-point scale from 'Strongly disagree' to 'Strongly agree'. The statements are:

- In most ways my life is close to my ideal.
- The conditions of my life are excellent.
- I am satisfied with my life.
- So far I have gotten the important things I want in life.
- If I could live my life over, I would change almost nothing.

At the bottom of the survey, there is a progress bar showing 0 to 1, and two buttons labeled 'Back' and 'Next' with green arrows.



# 225 STUDIES ON THE BENEFITS OF HAPPINESS

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**ALSO:** Walsh, L. C., Boehm, J. K., & Lyubomirsky, S. (2018). Does happiness promote career success? Revisiting the evidence. *Journal of Career Assessment*, 26, 199-219.

# PHYSICAL HEALTH

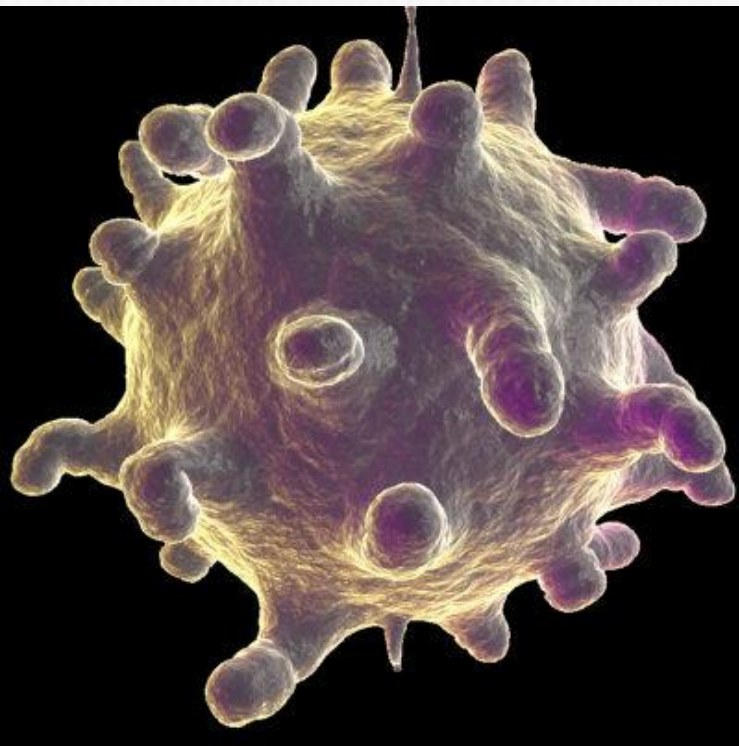


## People who are happy at one point in time...

- Have a lower incidence of stroke 16 years later and heart disease 10 and 15 years later
- If have heart disease, are more likely to survive it up to 11 years later
- If have lung cancer, are more likely to survive it 3 years later
- Are less likely to be receiving work disability pension up to 11 years later
- Are less likely to die in a car accident 8 years later
- Are less likely to die of all causes 50+ years later

FROM: Danner et al., 2001; Deeg & van Zonneveld, 1989; Kubzansky & Thurston, 2007; Davidson et al., 2010; Hamilton, 1996; Kirkcaldy & Furnham, 2008; Koivumaa-Honkanen et al., 2004; Krause et al., 1997; Lambiase et al., 2015; Xu & Roberts, 2010; Lacruz et al., 2011





# COLD VIRUS **STUDY**

- Healthy volunteers completed a measure of happiness (or “positive emotional style”)
- They were then administered a rhinovirus (via nasal drops)
- Researchers quarantined them for 5 days and monitored them for 1 month
- **RESULTS:** Happier volunteers were less likely to develop a cold

# 225 STUDIES ON THE BENEFITS OF HAPPINESS

## Happy people...

- **Are more productive at work and more creative**
- Make more money and have superior jobs
- Are better leaders and negotiators
- Are more likely to marry and to have fulfilling marriages, and less likely to divorce
- Have more friends and social support
- Have stronger immune systems, are physically healthier, and even live longer
- Are more helpful and philanthropic
- Show more resilience to stress and trauma



# CREATIVITY



- **STEP 1:**  
Induce happy mood
- **STEP 2:**  
Complete a test of creativity

**CRAB SAUCE PINE** \_\_\_\_\_

- **RESULTS:**  
Those in a happy mood are more creative than those in a neutral mood.

**QUESTION:** Is it possible to  
become happier?

And, if yes, precisely **how**?

# HAPPINESS INTERVENTIONS WE HAVE CONDUCTED:



Over the course of 1-3 months, participants are asked to do the following on a regular basis:

- Commit acts of kindness
- Count their blessings
- Live their life like it's their "last month"
- Act more extraverted or open
- Write gratitude letters
- Visualize their best possible future
- Affirm their most important values
- Savor and replay happy days

**FOR RECENT REVIEWS, SEE:** (1) Layous, K., & Lyubomirsky, S. (2014). The how, why, what, when, and who of happiness. In J. Gruber & J. Moskowitz (Eds.), *Positive emotion: Integrating the light and dark sides* (pp. 473-495). New York: Oxford University Press. (2) Boehm, J. K., Ruberton, P. M., & Lyubomirsky, S. (in press). The promise of fostering greater happiness. In S. J. Lopez, Edwards, L., & Marques, S. (Eds.), *Oxford handbook of positive psychology* (3<sup>rd</sup> ed.). New York: Oxford University Press.

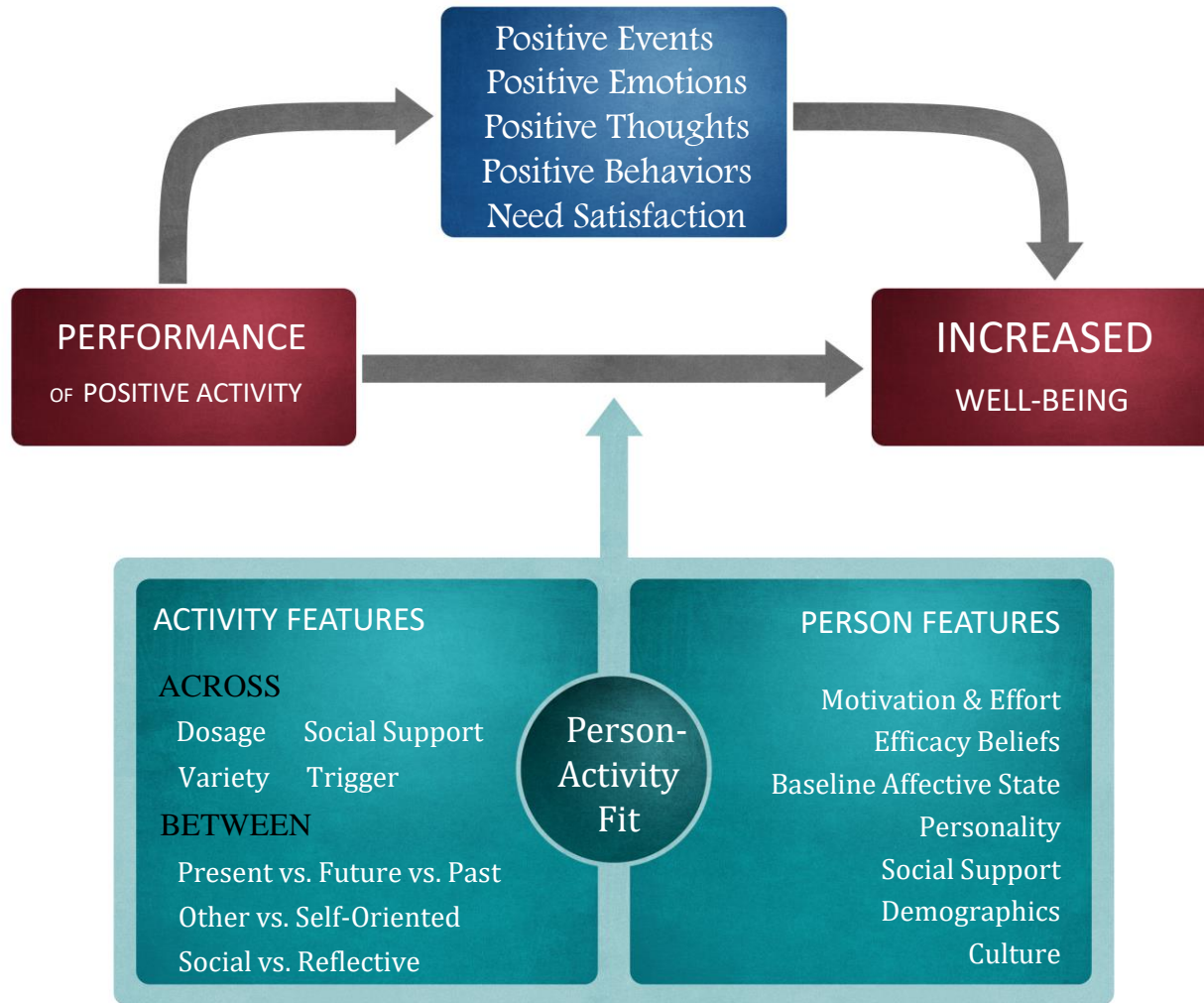
# OUR LAB'S FOCUS

**QUESTION:** How and why do happiness-enhancing strategies work?

That is, what are the moderators and mediators that underlie their success?



# POSITIVE ACTIVITY MODEL



Lyubomirsky, S., & Layous, K. (2013). How do simple positive activities increase well-being. *Current Directions in Psychological Science*, 22, 57-62.

# INSTRUCTIONS FOR 6-WEEK “COUNT YOUR BLESSINGS” INTERVENTION:



There are many things in our lives, both large and small, that we might be grateful about. Think back over the events of the past week and write down on the lines below up to five things that happened for which you are grateful or thankful.

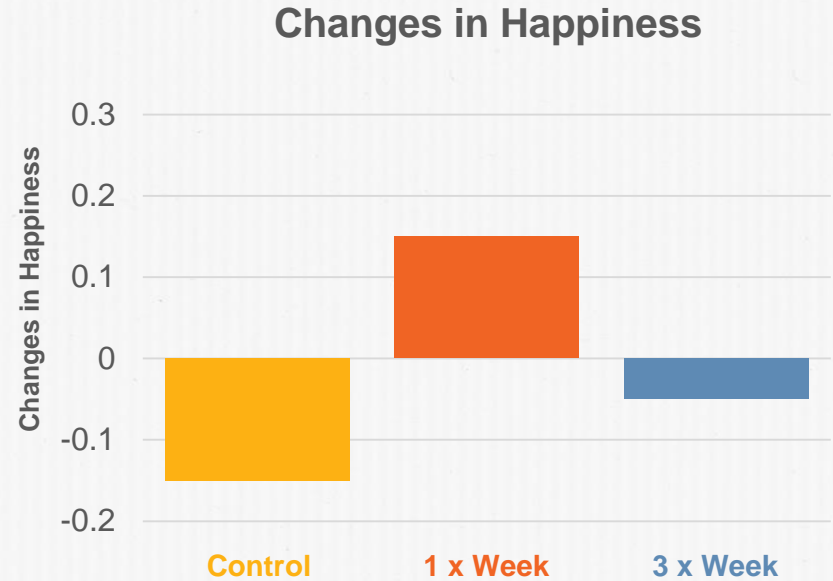
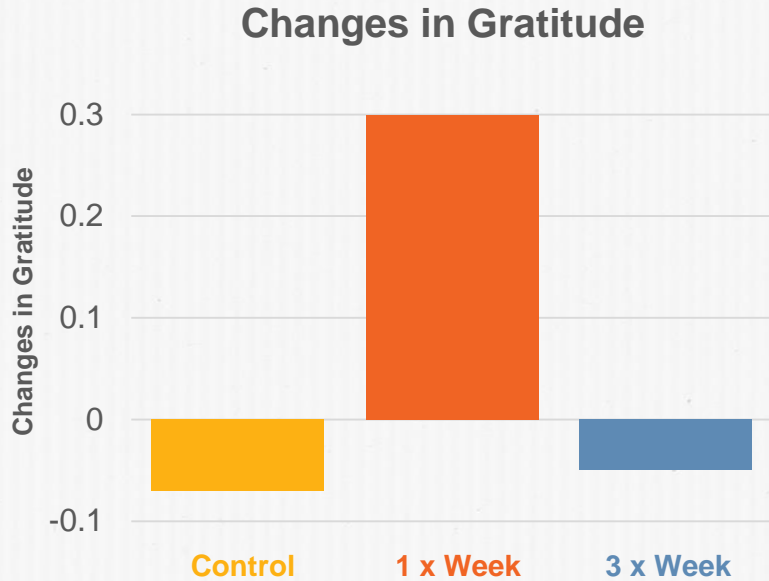
This week I am grateful for:

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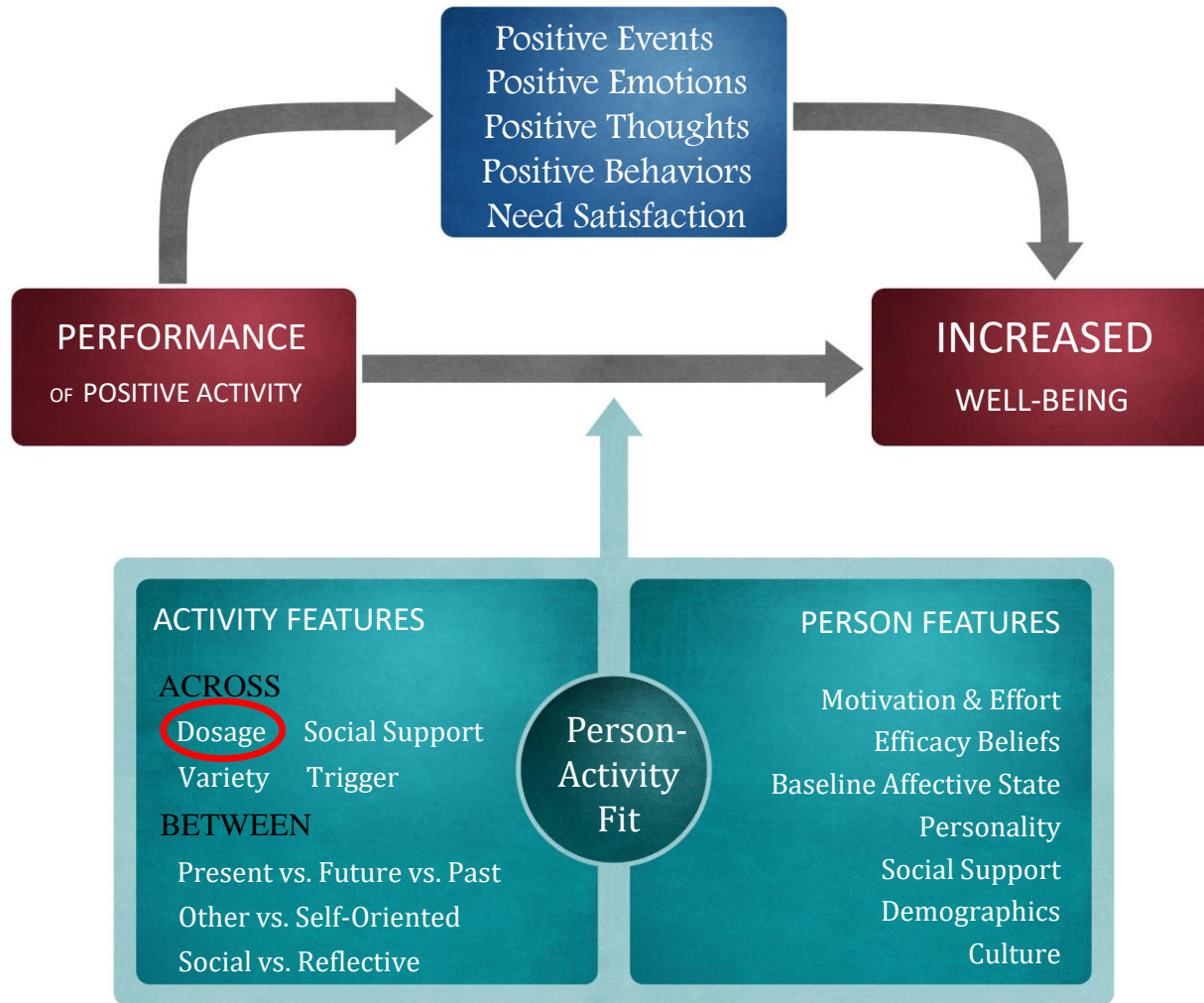
## 6-WEEK “COUNT YOUR BLESSINGS” INTERVENTION:

# DOSAGE AS MODERATOR



**FROM:** Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9, 111-131.

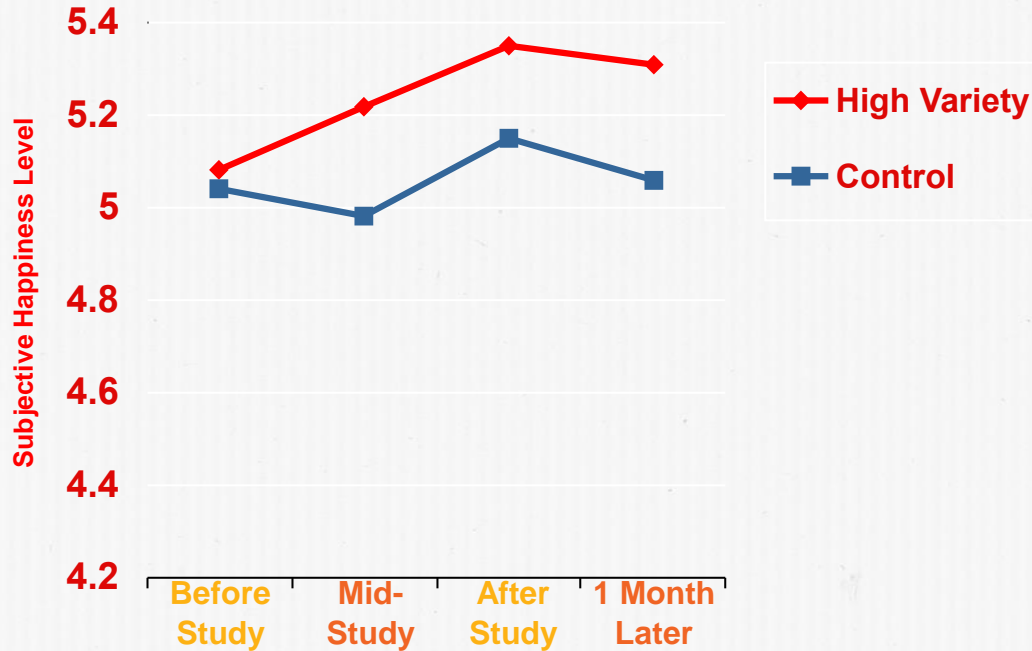
# POSITIVE ACTIVITY MODEL





## 10-WEEK “ACTS OF KINDNESS” INTERVENTION:

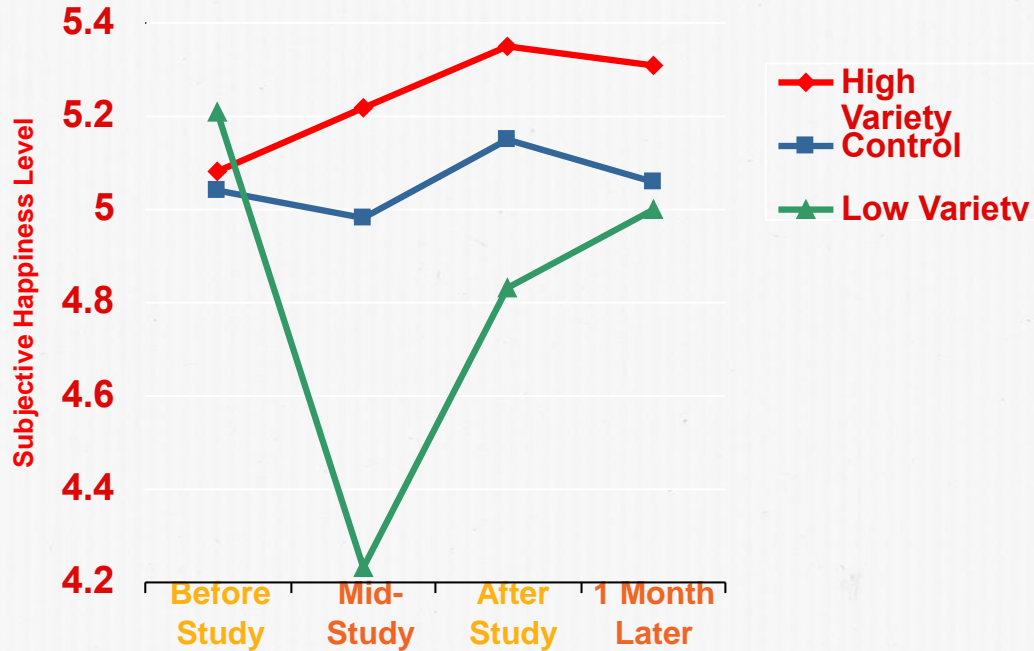
# VARIETY AS MODERATOR



**FROM:** Sheldon, K. M., Boehm, J. K., & Lyubomirsky, S. (2012). Variety is the spice of happiness: The hedonic adaptation prevention (HAP) model. In J. Boniwell & S. David (Eds.), *Oxford handbook of happiness* (pp. 901-914). Oxford: Oxford University Press.

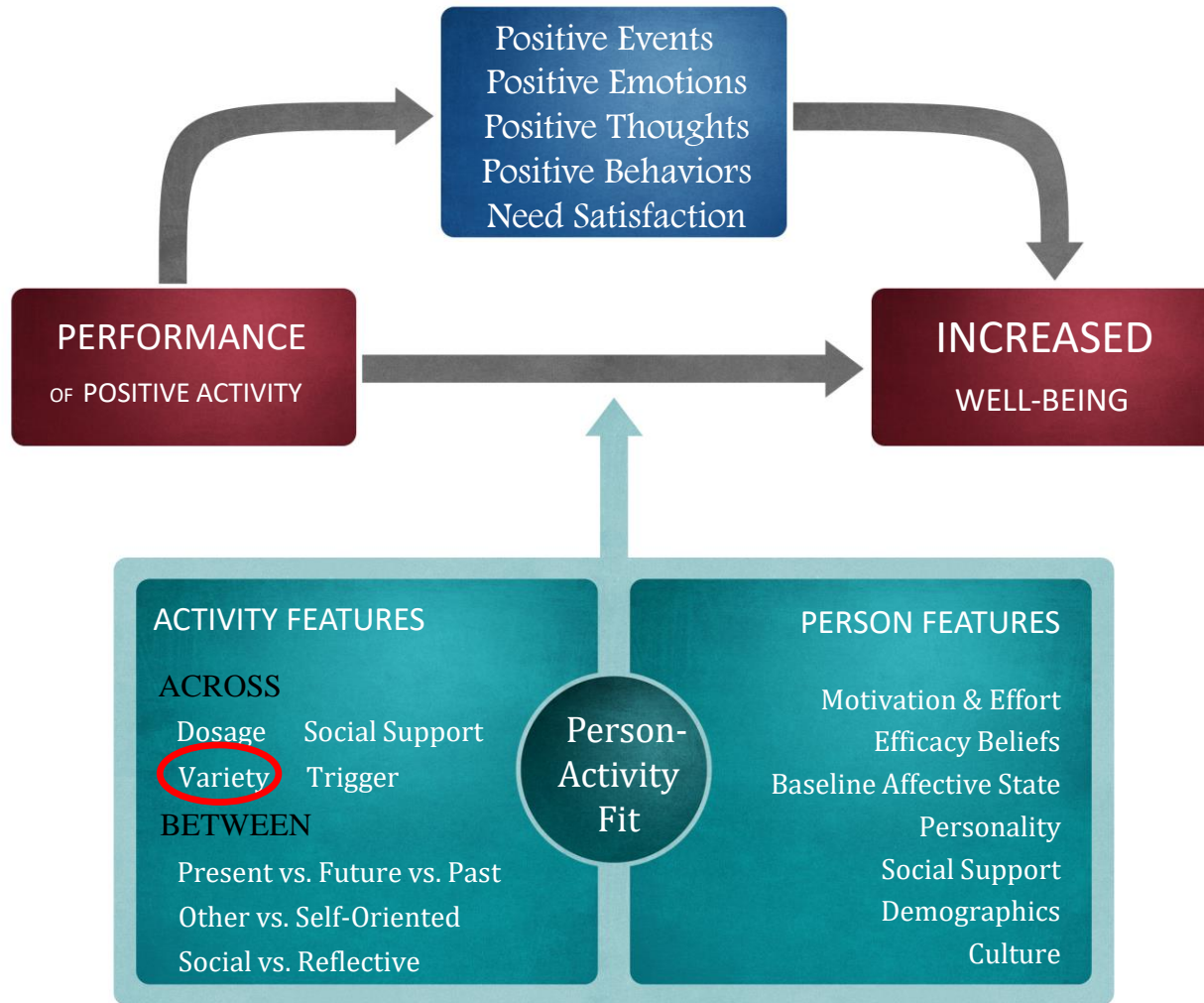
## 10-WEEK “ACTS OF KINDNESS” INTERVENTION:

# VARIETY AS MODERATOR



FROM: Sheldon, K. M., Boehm, J. K., & Lyubomirsky, S. (2012). Variety is the spice of happiness: The hedonic adaptation prevention (HAP) model. In J. Boniwell & S. David (Eds.), *Oxford handbook of happiness* (pp. 901-914). Oxford: Oxford University Press.

# POSITIVE ACTIVITY MODEL



# INSTRUCTIONS FOR OPTIMISM CONDITION:



Please take a moment to think about your best possible career or job in the future (say in 10 years). Imagine that everything has gone as well as it possibly could for you. Perhaps you have your “dream job” or manage your own business – whether it’s full-time or only a few hours a week. Think of this as the realization of the best possible career or job that you could ever hope for yourself. Now, for the next 15 min, write about what you imagined.

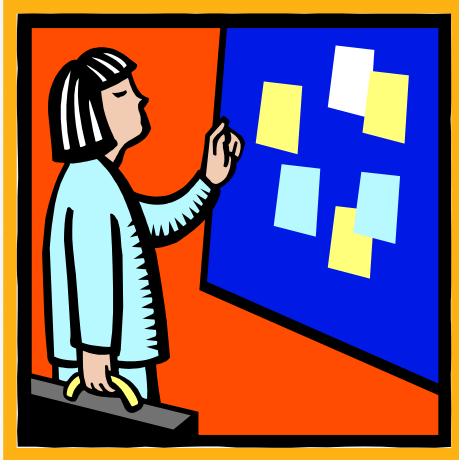


# INSTRUCTIONS FOR GRATITUDE CONDITION:



Please take moment to think back over the past several years of your life and remember an instance when someone did something for you for which you are extremely grateful. For **example**, think of the people – parents, relatives, friends, teachers, coaches, teammates, employers, and so on – who have been especially kind to you but have never heard you express your gratitude. **Although you should try to write your letter of gratitude to a new person each week; if you prefer, you can write another letter to the same person you wrote to previously.** Now for the next 15 min, write a letter to one of these individuals.

# TESTING THE ROLE OF **MOTIVATION**:



motivated group

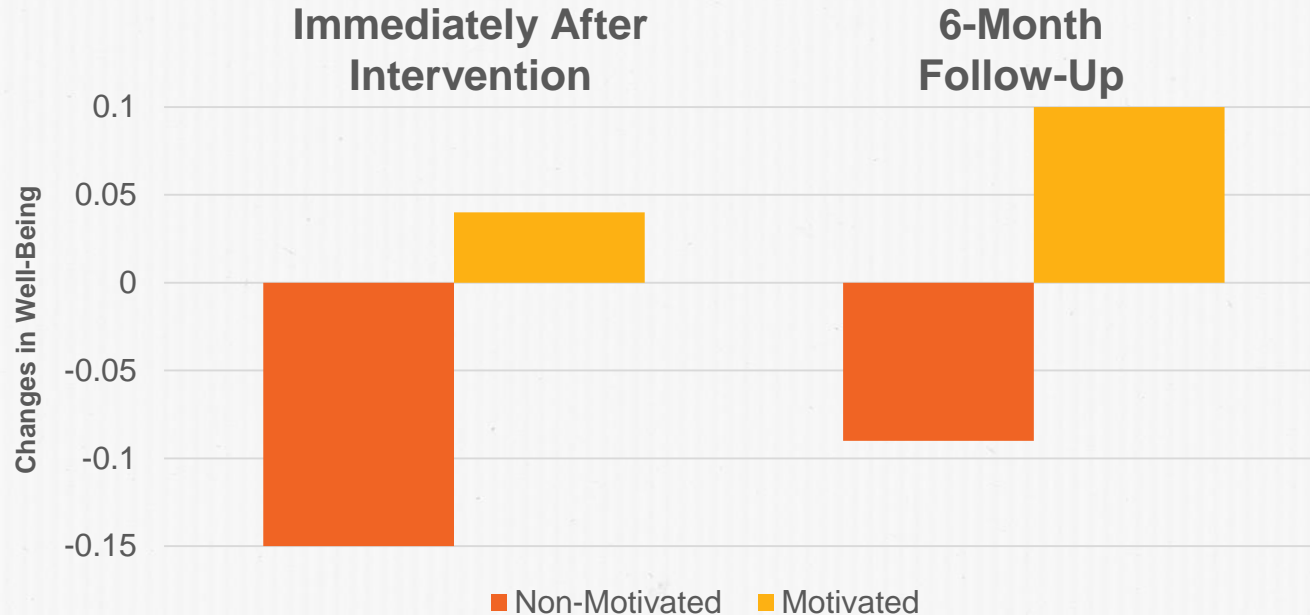
“Do you want to become happier? Sign up here to learn more...”

“This study is about practicing cognitive exercises. Sign up here to learn more...”

non-motivated group

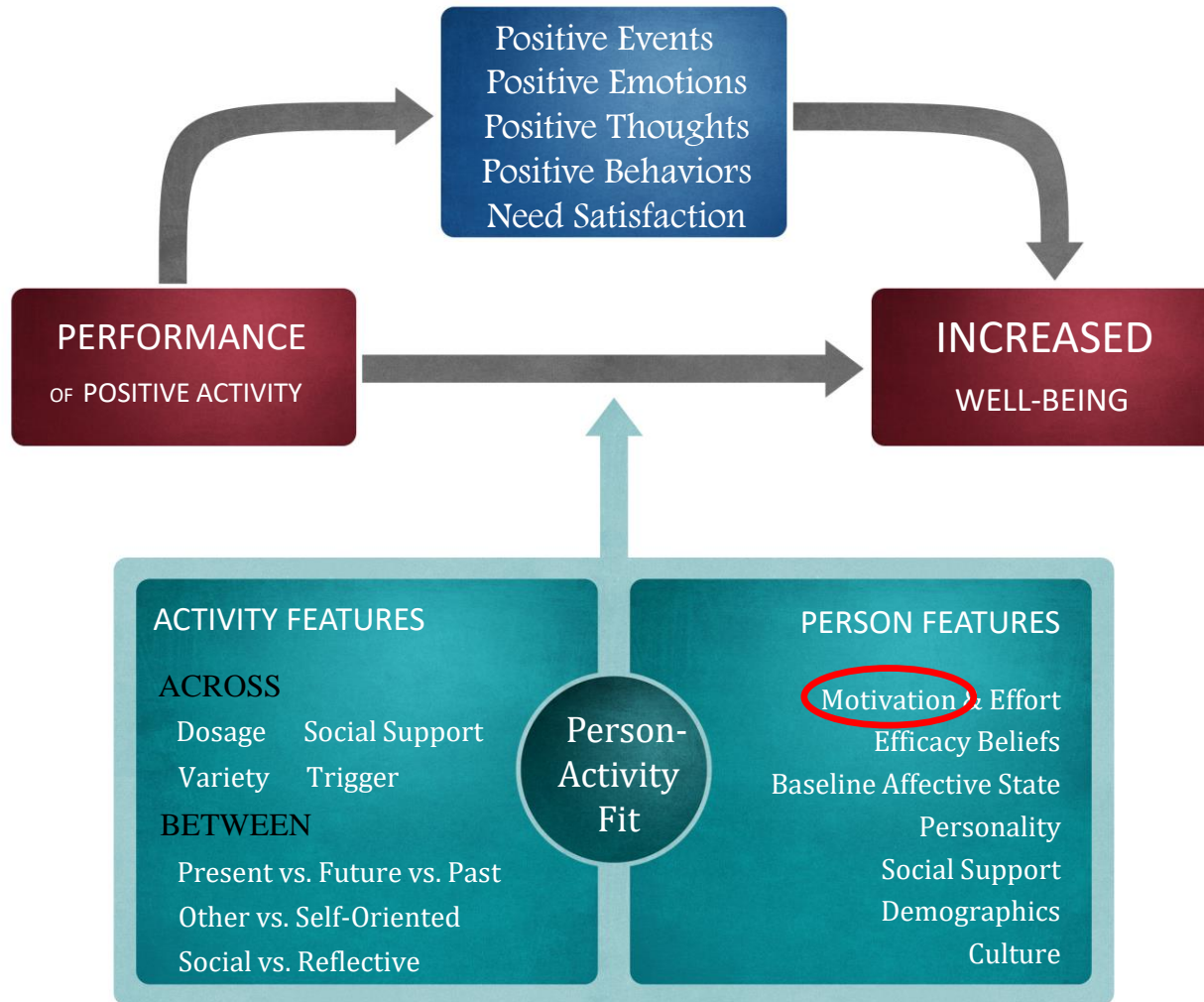
## 8-WEEK GRATITUDE & OPTIMISM INTERVENTION:

# MOTIVATION AS MODERATOR

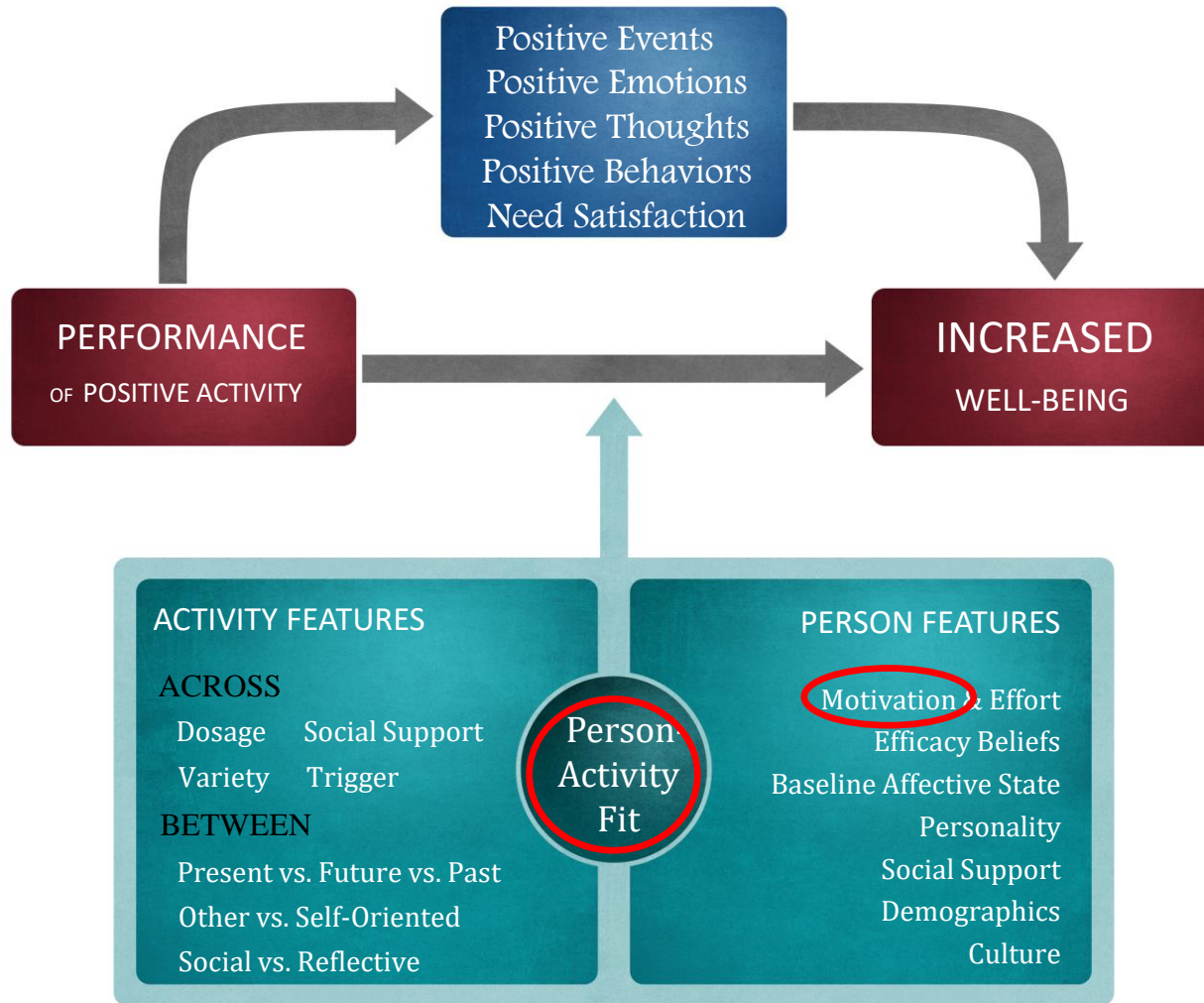


**FROM:** Lyubomirsky, S., Dickerhoof, R., Boehm, J. K., & Sheldon, K. M. (2011). Becoming happier takes both a will and a proper way: An experimental longitudinal intervention to boost well-being. *Emotion*, 11, 391-402.

# POSITIVE ACTIVITY MODEL



# POSITIVE ACTIVITY MODEL





THEME OF MY RESEARCH:

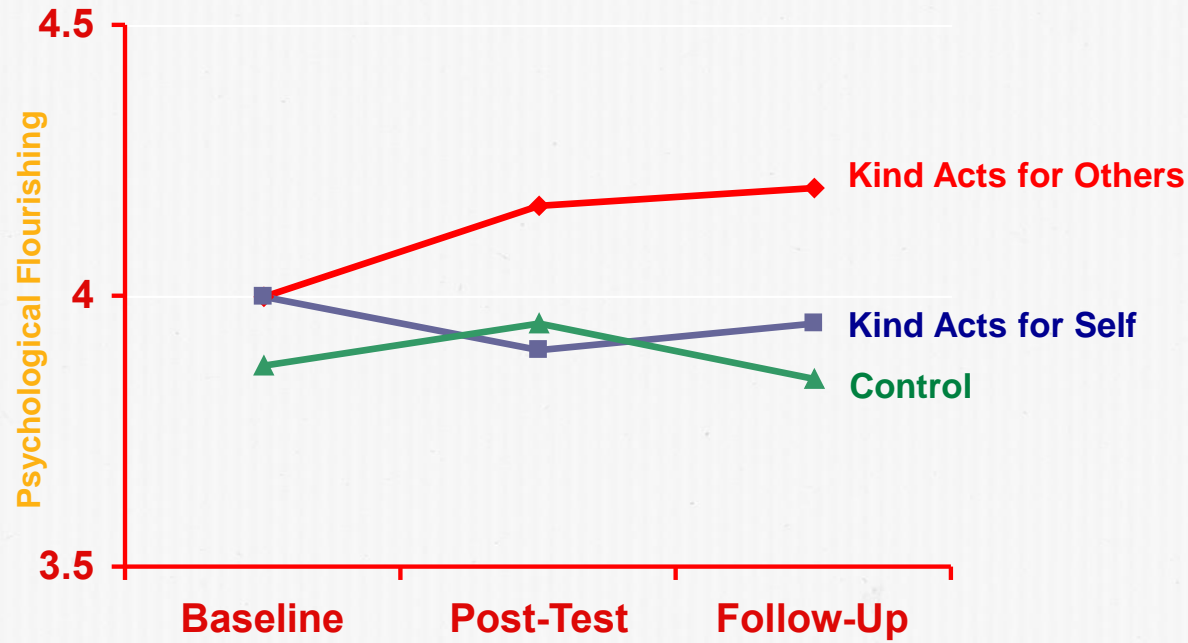
## “FIT” IS CRITICAL

- Fit with your personality
- Fit with your goals
- Fit with your strengths
- Fit with your culture
- Fit with the source of your unhappiness



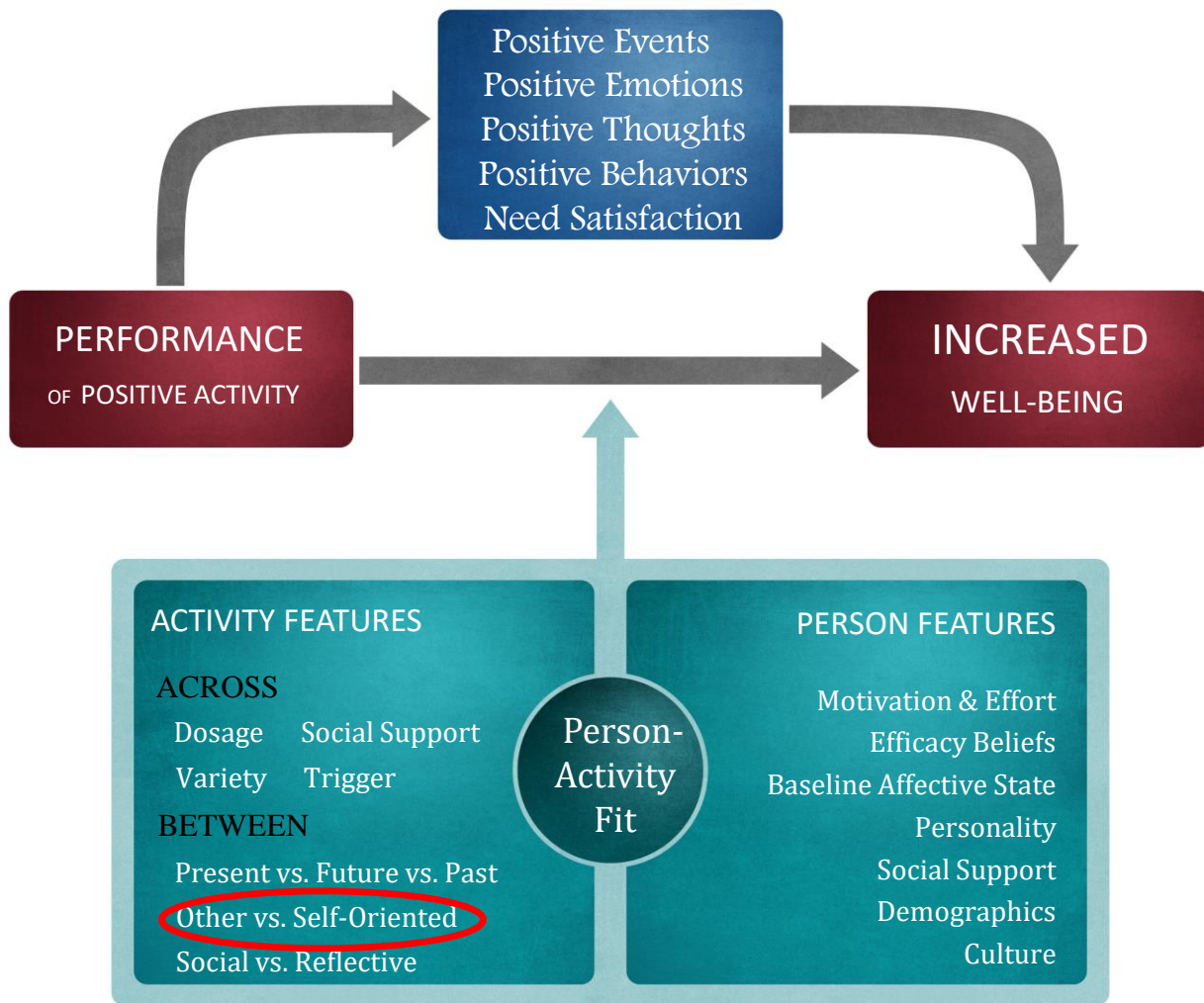
## 4-WEEK “KIND ACTS FOR SELF VS. OTHERS” INTERVENTION:

# OTHER ORIENTATION AS MODERATOR



**FROM:** Nelson, S. K., Layous, K., Cole, S., & Lyubomirsky, S. (2016). Do unto others or treat yourself?: The effects of prosocial and self-focused behavior on psychological flourishing. *Emotion*, 16, 850-861.

# POSITIVE ACTIVITY MODEL



## 6-WEEK “KINDNESS & GRATITUDE” INTERVENTION

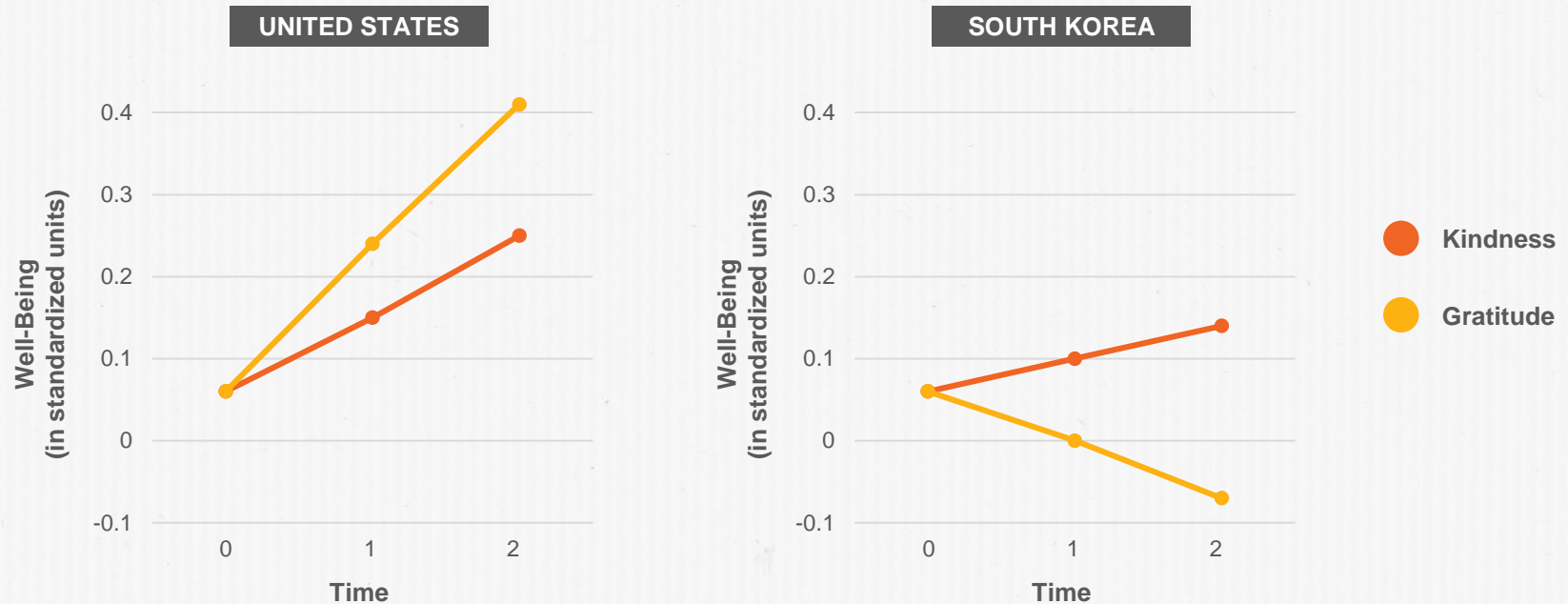
# OVERVIEW



- **Two samples** (mean age = 19.97; 51% female)
  - Seoul National University students ( $n = 270$ )
  - UC Riverside students ( $n = 250$ )
- **Groups**
  - Students wrote a **gratitude letter** each week
  - Students did 3 **acts of kindness** each week

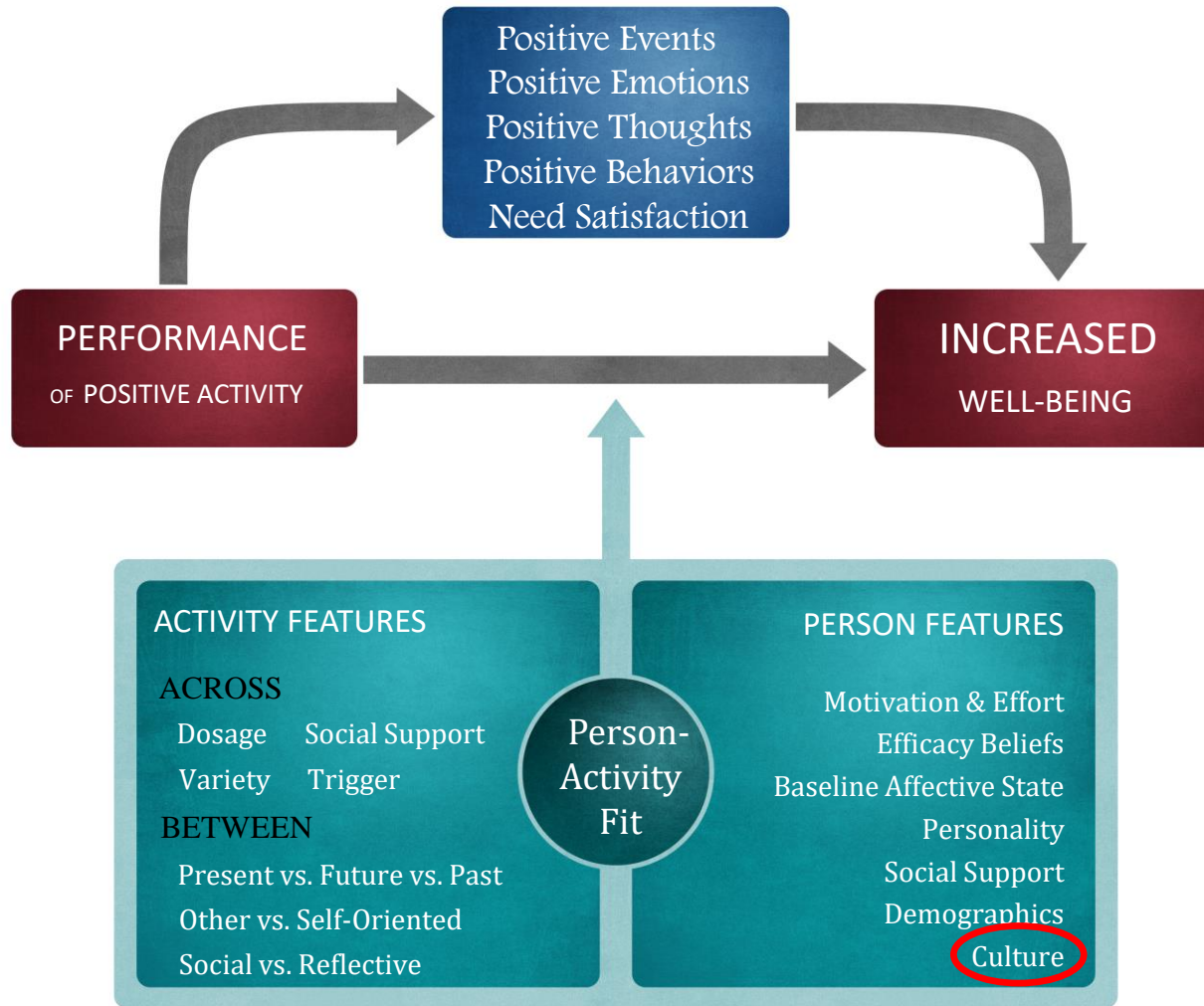
## 6-WEEK “KINDNESS & GRATITUDE” INTERVENTION

# CULTURE AS MODERATOR



**FROM:** Layous, K., Lee, H., Choi, I., & Lyubomirsky, S. (2013). Culture matters when designing a successful happiness-increasing activity: A comparison of the United States and South Korea. *Journal of Cross-Cultural Psychology*, 44, 1294-1303. **See also:** Layous, K., Sweeny, K., Armenta, C. N., Na, S., Choi, I., & Lyubomirsky, S. (in press). The proximal experience of gratitude. *PLOS ONE*.

# POSITIVE ACTIVITY MODEL



Lyubomirsky, S., & Layous, K. (2013). How do simple positive activities increase well-being. *Current Directions in Psychological Science*, 22, 57-62.

# DO POSITIVE ACTIVITIES DO **MORE** THAN INCREASE HAPPINESS?

- Gratitude moves one to become a **better person**<sup>1,2,3,4</sup>



<sup>1</sup>Armenta, C. N., Fritz, M., & Lyubomirsky, S. (in press). Functions of positive emotions: Gratitude as a motivator of self-improvement and positive change. *Emotion Review*.

<sup>2</sup>Layous, K., Sweeny, K., Armenta, C. N., Na, S., Choi, I., & Lyubomirsky, S. (2017). The proximal experience of gratitude. *PLOS ONE*, 12(7), e0179123.

<sup>3</sup>Fritz, M. M., Armenta, C. M., Walsh, L. C., & Lyubomirsky, S. (in press). Gratitude facilitates healthy behavior in adolescents and young adults. *Journal of Experimental Social Psychology*.

<sup>4</sup>Armenta, C. M., Fritz, M. M., Walsh, L. C., & Lyubomirsky, S. (in prep). Satisfied yet striving: Gratitude stimulates life satisfaction and self-improvement motivation in adolescents.



# Intended Effort for Self-Improvement in 14 to 15-Year Olds

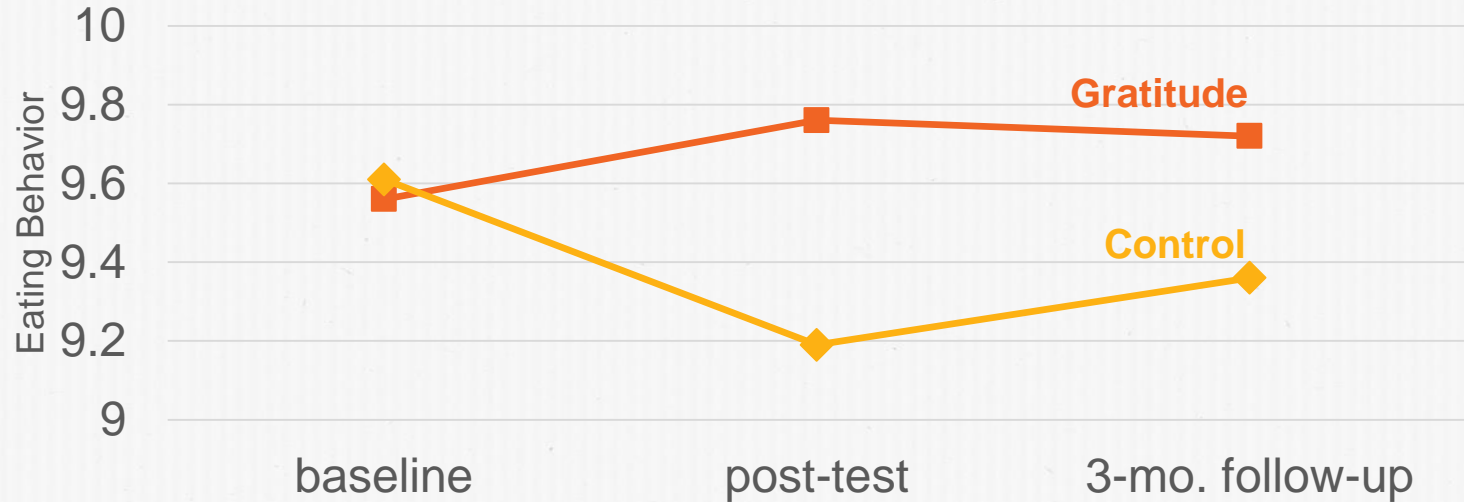
(4-week intervention;  
 $N = 1,079$ )



**FROM:** Armenta, C. N., Fritz, M. M., Walsh, L. C., & Lyubomirsky, S. (2019). *Satisfied yet striving: Gratitude promotes life satisfaction and improvement motivation in youth*. Manuscript submitted for publication.

# Healthy Eating in 14 to 15-Year Olds

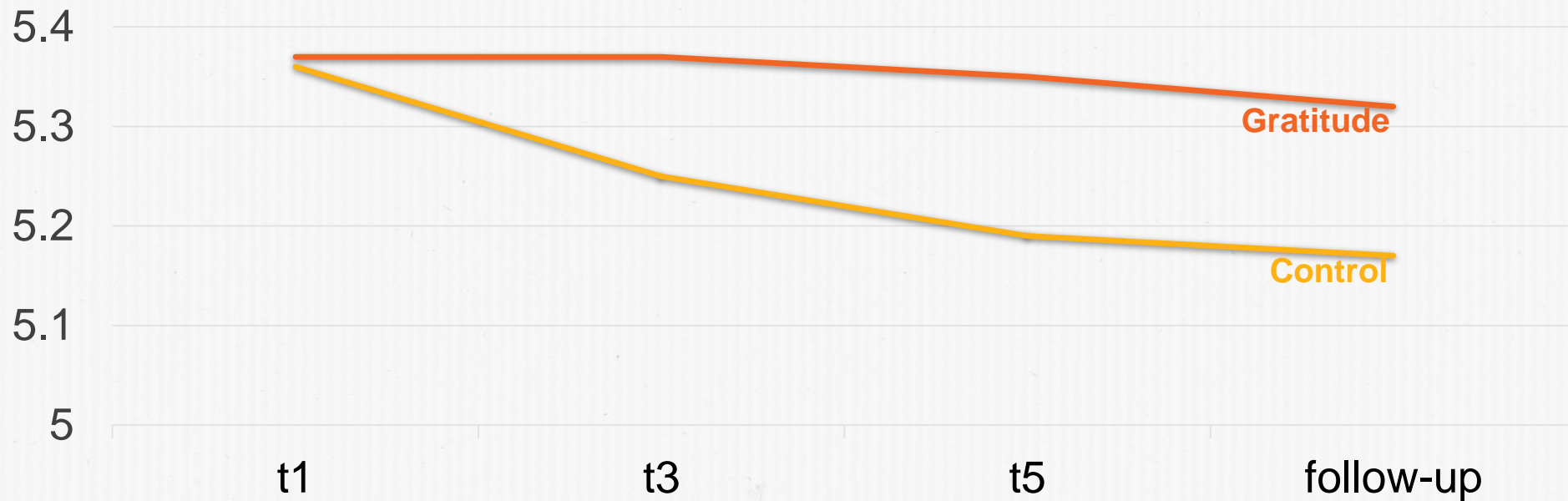
(4-week intervention;  $N = 1,079$ )



**FROM:** Fritz, M. M., Armenta, C. M., Walsh, L. C., & Lyubomirsky, S. (2019). Gratitude facilitates healthy behavior in adolescents and young adults. *Journal of Experimental Social Psychology*, 81, 4-14.

# Life Satisfaction in 14 to 15-Year Olds

(4-week intervention;  $N = 1,079$ )



**FROM:** Armenta, C. N., Fritz, M. M., Walsh, L. C., & Lyubomirsky, S. (2019). *Satisfied yet striving: Gratitude promotes life satisfaction and improvement motivation in youth*. Manuscript submitted for publication.

# DO POSITIVE ACTIVITIES DO **MORE** THAN INCREASE HAPPINESS?

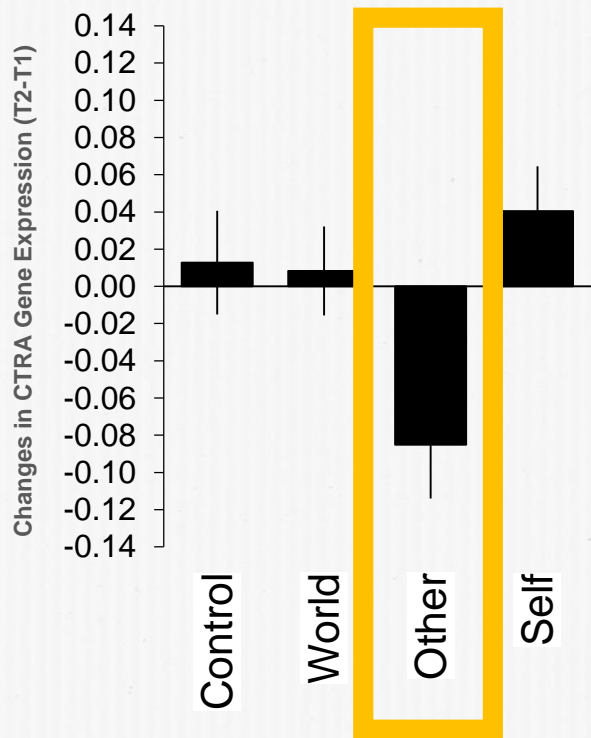


- Gratitude moves one to become a **better person**
- Kindness changes **immune gene expression**<sup>1</sup>

<sup>1</sup>Nelson-Coffey, S. K., Fritz, M., Cole, S., & Lyubomirsky, S. (2016). Kindness in the blood: A randomized controlled trial of the gene regulatory impact of prosocial behavior. *Psychoneuroendocrinology*, 81, 8-13.

# SHIFTS IN IMMUNE GENE EXPRESSION

(4-week intervention;  $N = 159$ )



## CONDITIONS:

- ✓ Control—Keep track of daily activities
- ✓ World—Do acts of kindness for the world
- ✓ Other—Do acts of kindness for others
- ✓ Self—Do acts of kindness for yourself

**FROM:** Nelson-Coffey, S. K., Fritz, M., Cole, S., & Lyubomirsky, S. (2016). Kindness in the blood: A randomized controlled trial of the gene regulatory impact of prosocial behavior. *Psychoneuroendocrinology*, 81, 8-13.

# DO POSITIVE ACTIVITIES DO **MORE** THAN INCREASE HAPPINESS?



- Gratitude moves one to become a **better person**
- Kindness changes **immune gene expression**
- Kindness boosts **peer acceptance**<sup>1</sup>

<sup>1</sup>Layous, K., Nelson, S. K., Oberle, E., Schonert-Reichl, K., & Lyubomirsky, S. (2012). Kindness counts: Prompting prosocial behavior in preadolescents boosts peer acceptance and well-being. *PLOS ONE*, 7, e51380.



# VANCOUVER STUDY



**FROM:** Layous, K., Nelson, S. K., Oberle, E., Schonert-Reichl, K., & Lyubomirsky, S. (2012). Kindness counts: Prompting prosocial behavior in preadolescents boosts peer acceptance and well-being. *PLOS ONE*, 7, e51380.

## PARTICIPANTS

- ✓  $N = 415$  4th, 5th, and 6th grade students
- ✓ 48.2% female
- ✓ Mean age = 10.61 years ( $SD = 0.99$ )

## RECRUITMENT

- ✓ Vancouver School District, Vancouver, BC, CANADA
- ✓ 19 classrooms in 11 schools
- ✓ Mean classroom participation = 80.6%

## DESIGN

- ✓ 10 classrooms did 4 weeks of acts of kindness
- ✓ 9 classrooms did 4 weeks of neutral control (“whereabouts”) activity

# CHANGES IN PEER ACCEPTANCE

Circle the names of students who you would like to be in school activities with.

Name #1

Name #2

Name #3

Name #4

Name #5

Name #6

Name #7

Name #8



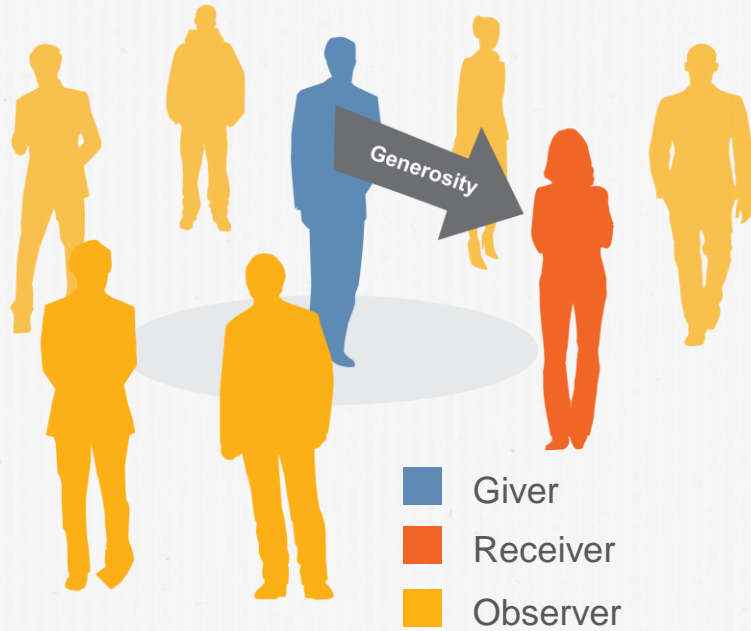


# DO POSITIVE ACTIVITIES DO **MORE** THAN INCREASE HAPPINESS?

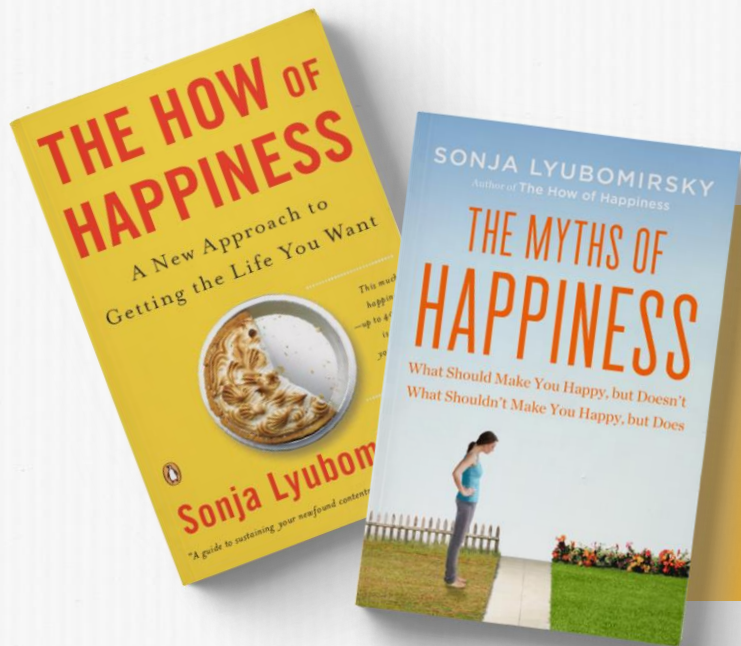
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- Kindness prompts **positive behavior** from targets and observers<sup>1</sup>

<sup>1</sup>Chancellor, J. M., Margolis, S. M., Jacobs Bao, K., & Lyubomirsky, S. (2018). Everyday prosociality in the workplace: The benefits of giving, getting, and glimpsing. *Emotion*, 18, 507-517.

# DO POSITIVE ACTIVITIES DO **MORE** THAN INCREASE HAPPINESS?



- Kindness prompts **positive behavior** from targets and observers<sup>1</sup>
  - A study at Coke Madrid showed that helping colleagues promoted higher well-being in everyone in the office, and led the receivers and observers of kindness to “pay it forward.”



**“Happiness depends  
upon ourselves.”**

*– Aristotle*