Physician Wellness
And Determining Factors

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Therapist Mindfulness = Patient Improvement

- Therapists in training (n = 18) randomized to meditation training or not
- Outcomes in patients with a therapist participating in meditation (n = 63) compared with outcomes in patients with control group therapist (n = 61)

Grepmair L, Mitterlehner F, Loew T, Bachler E, Rother W, Nickel M. Promoting mindfulness in psychotherapists in training influences the treatment results of their patients: a randomized, double-blind, controlled study. Psychotherapy and psychosomatics. 2007;76(6):332-338.

Therapist Mindfulness = Patient Improvement

Patients of therapists who participated in meditation training had significantly better outcomes on:

- Global Severity Index
- Somatization
- Insecurity in Social Contact
- Obsessiveness
- Anxiety
- Anger/Hostility
- Phobic Anxiety
- Psychoticism (paranoid thinking did not improved significantly, but trended in the expected direction, $p = 0.16$).

Grepmair L, Mitterlehner F, Loew T, Bachler E, Rother W, Nickel M. Promoting mindfulness in psychotherapists in training influences the treatment results of their patients: a randomized, double-blind, controlled study. Psychotherapy and psychosomatics. 2007;76(6):332-338.

Outline

- What is physician wellness?
  - Why is it important?

- Why focus on burnout... and professional fulfillment?
  - What are the determinants of burnout... and professional fulfillment?

- What other aspects of physician wellness are important?

What is Physician Health/Wellness/Well-being?

A plausible assumption and foundation definition…

Physicians

Homo Sapiens
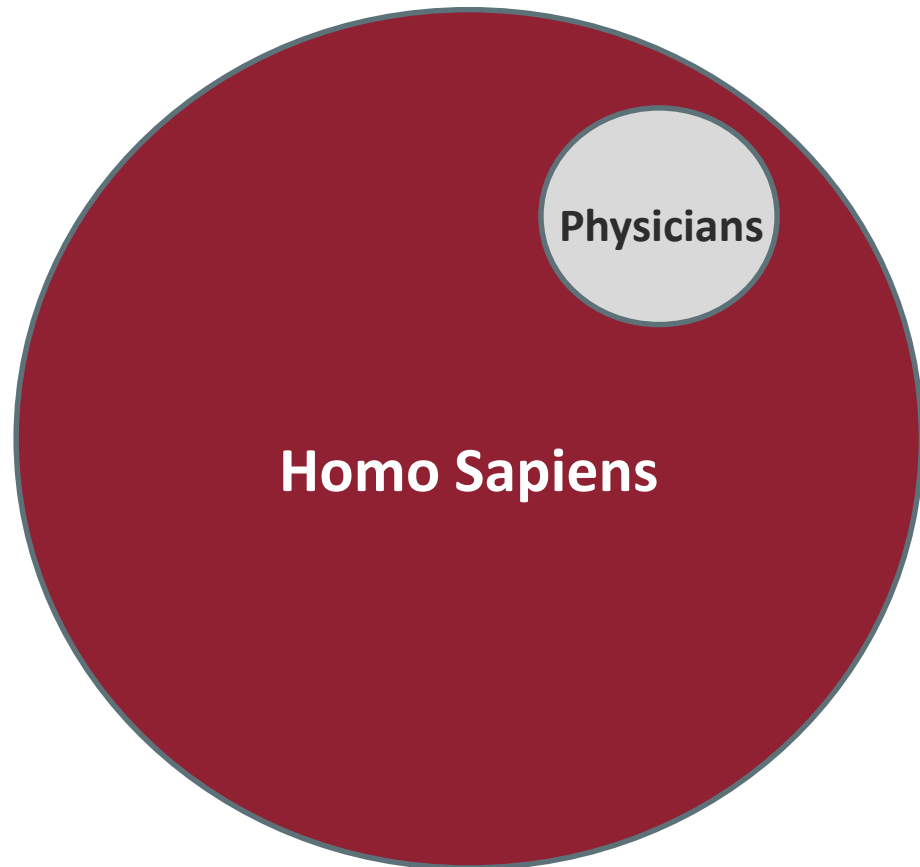
"Health is a state of complete **physical, mental and social well-being** and not merely the absence of disease or infirmity."

1948 Preamble to the Constitution of the World Health Organization

Systematic Review of Physician Wellness/Well-being Literature (up to 2015)
Brady, K.S., et. al., under review

Portion of Papers Including at Least One Measure in Category

Category	Percentage
Explicit defintion	14%
Integrated	37%
Physical	49%
Social	50%
Mental	89%
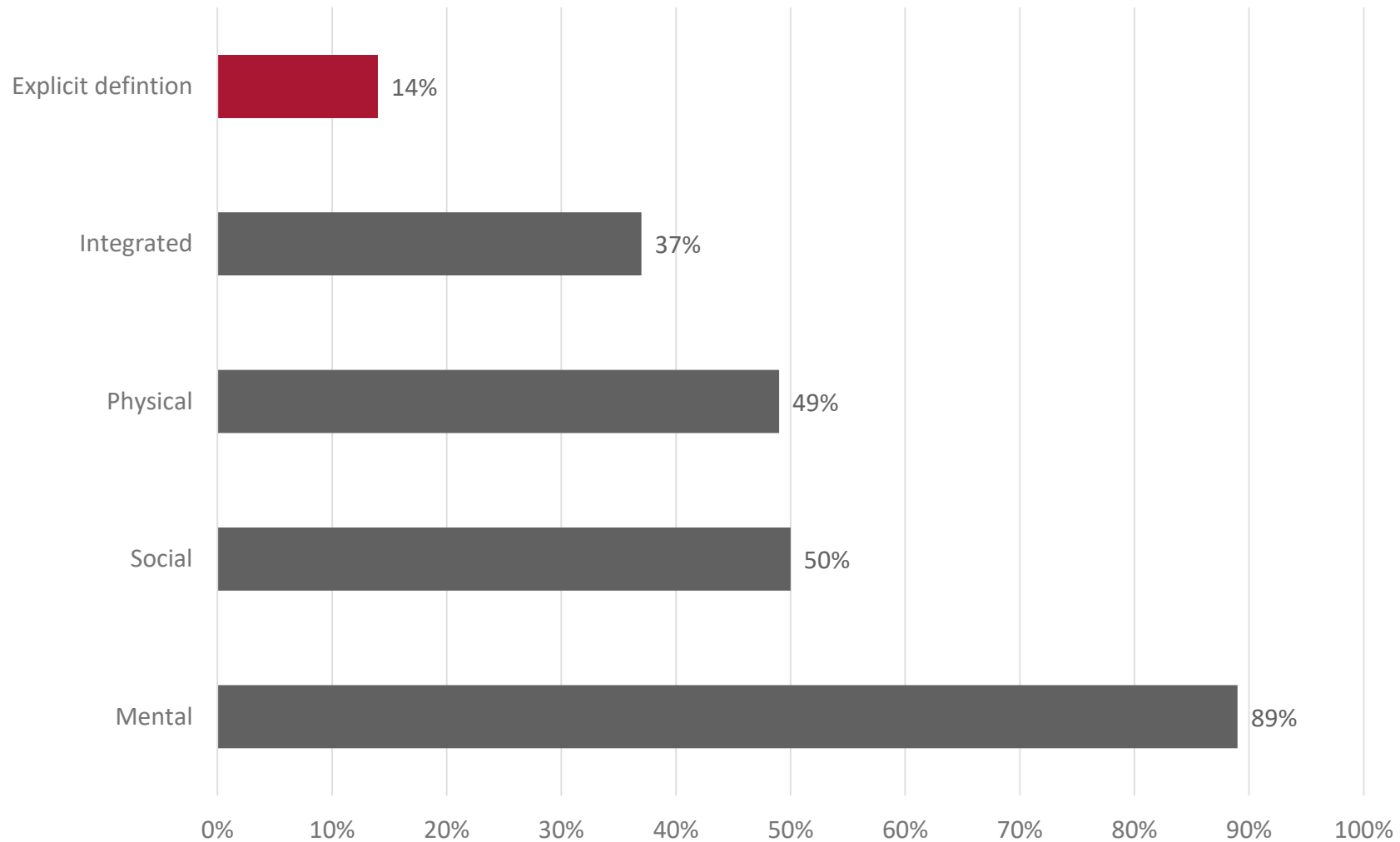
Importance of Addressing Physician Wellness

Human Argument, Physicians at Risk

- Suicide (Schernhammer et al. , 2004)

- Burnout
    - Diabetes (Melamed, et al. 2006)
    - Heart disease among men (Honkonen, et al., 2006)
    - Musculoskeletal disorders among women (Honkonen, et al., 2006)
    - Depression (Oskrochi et al., 2016)

Well Physicians = Higher Performance

Clinician Performance

Physicians who are well:

- Higher patient satisfaction (Beach, et al. 2013)

- More likely to support preventive health practices in patients (Duperly, et al., 2009; Frank, et al., 2008; Frank, et al. 2013)

- Lower medical error rate (Fahrenkoph, et al. 2008; Shanfelt, et al. 2010; West, et al. 2006)

- Better patient outcomes, e.g. decreased post-hospital discharge recovery times (Halbesleben and Rathert, 2008)

Why Focus on Burnout?

- Burnout (Maslach et al., 1982)

  - Emotional exhaustion

  - Interpersonal disengagement/depersonalization

  - Diminished personal accomplishment

Associated with patient outcomes

Why Focus on Burnout?

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Public Health & Policy

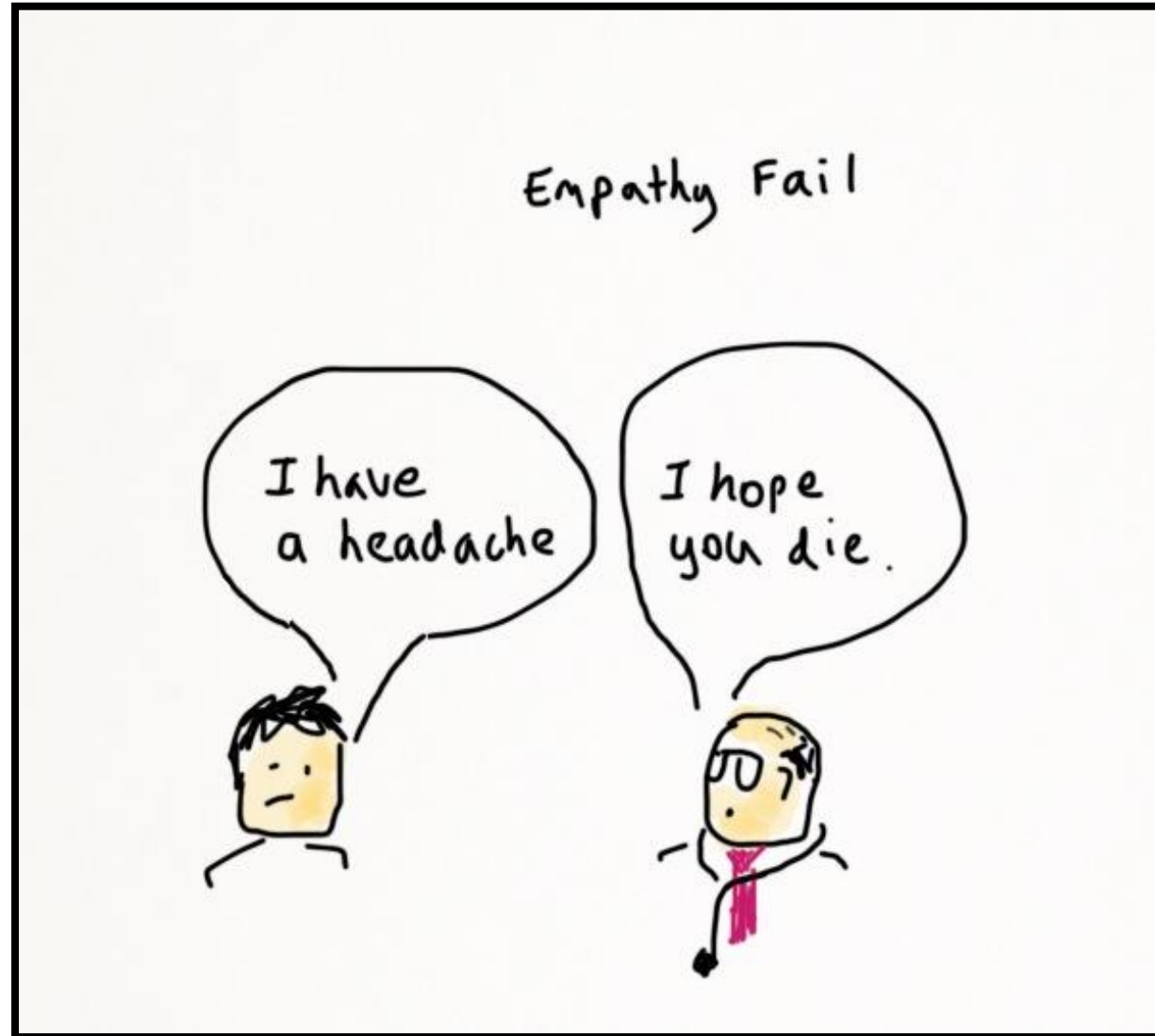## Surgeon General Concerned About Physician Burnout

— If physicians aren't happy, they can't heal others

by Joyce Frieden
News Editor, MedPage Today

April 10, 2016

Physician Burnout May Impair Patient Recovery

- Study of 178 physician/patient pairs

- Patients were asked: *''In your estimation, how many days did it take you to recover fully (regain normal functioning) after your hospitalization?''*

Halbesleben JR, Rathert C. Linking physician burnout and patient outcomes: exploring the dyadic relationship between physicians and patients. *Health care management review.* Jan-Mar 2008;33(1):29-39.

Physician Burnout May Impair Patient Recovery
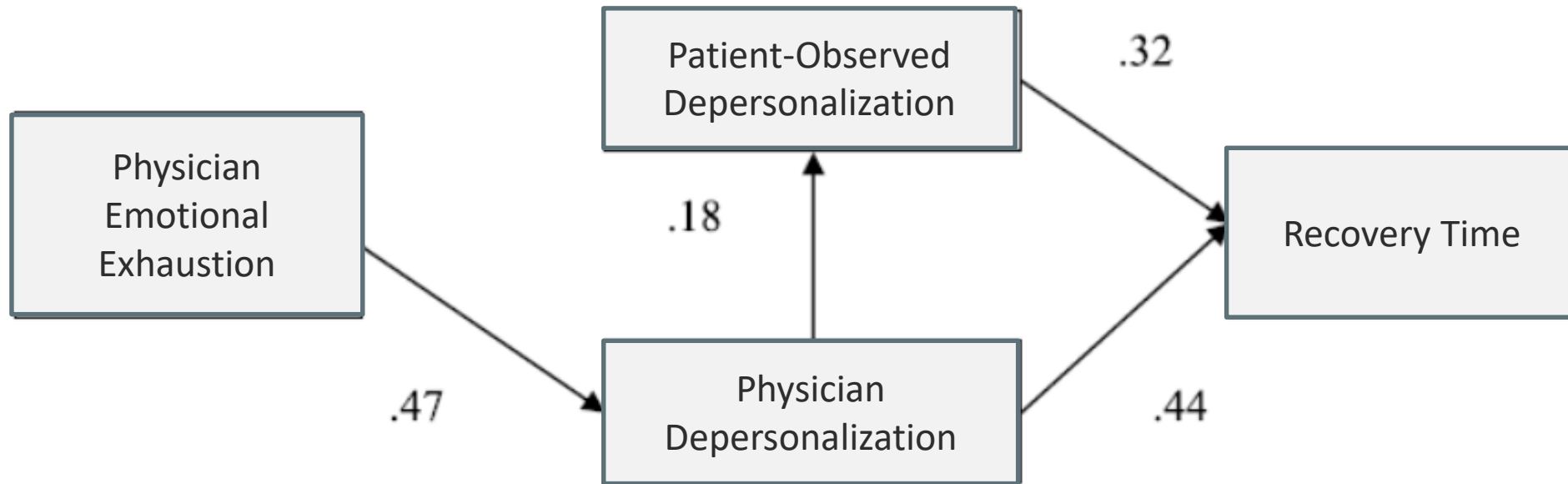
Model fit: χ^2 ($df = 2$) = 1.18, GFI = 0.99, CFI = 1.00, NNFI = 1.03, AIC = −2.88, BIC = −9.24, RMSEA = 0.00

Burned Out Physicians DO LEAVE !
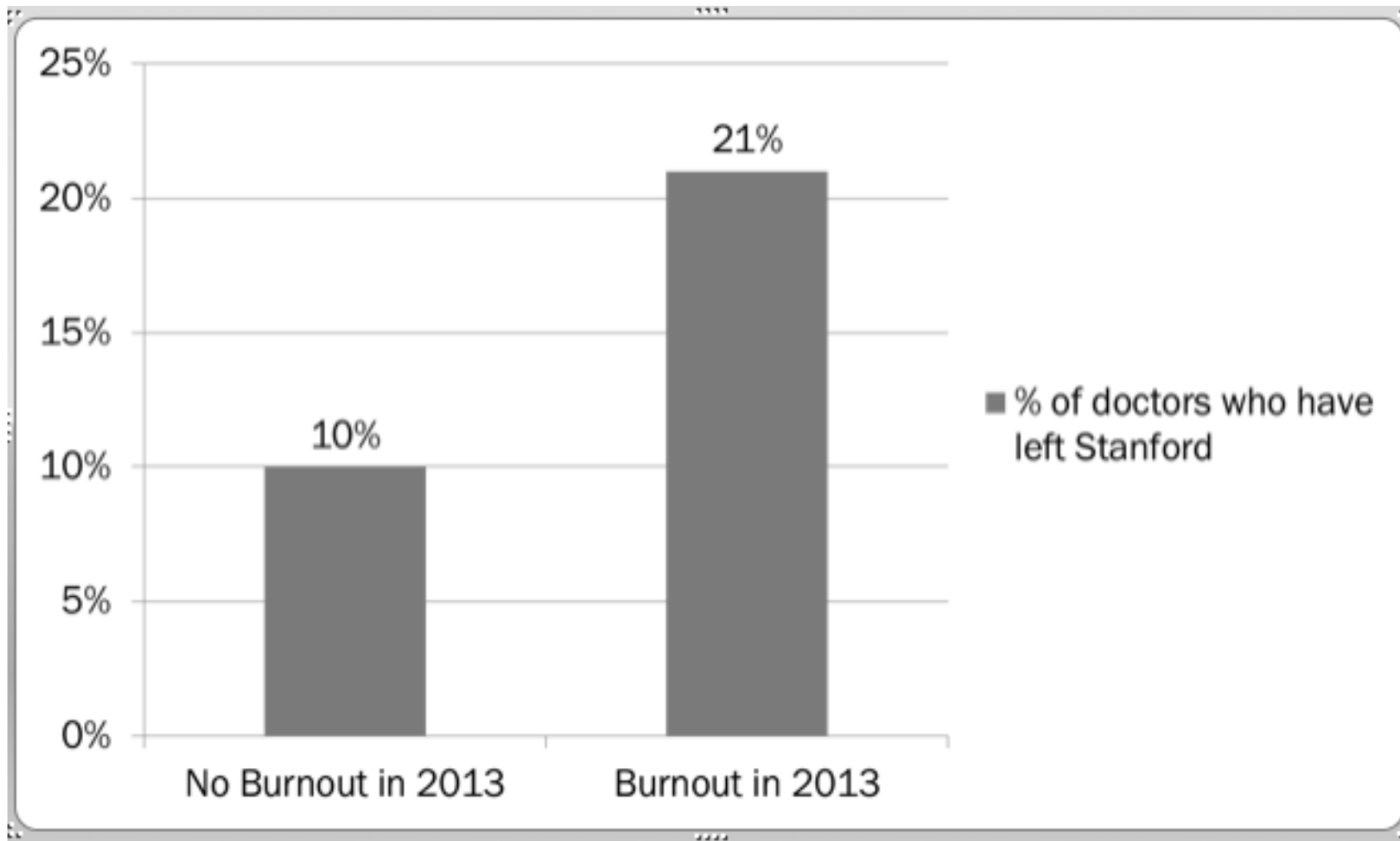
Association of burnout and leaving: X2 = 10.0: p = 0.002

Attrition Attributable to Burnout is Expensive

Without any intervention, and if burnout rates remain the same, in the next 2 years:

❑ 88 physicians may leave Stanford due to burnout
- An estimated loss of $22,000,000- $88,000,000

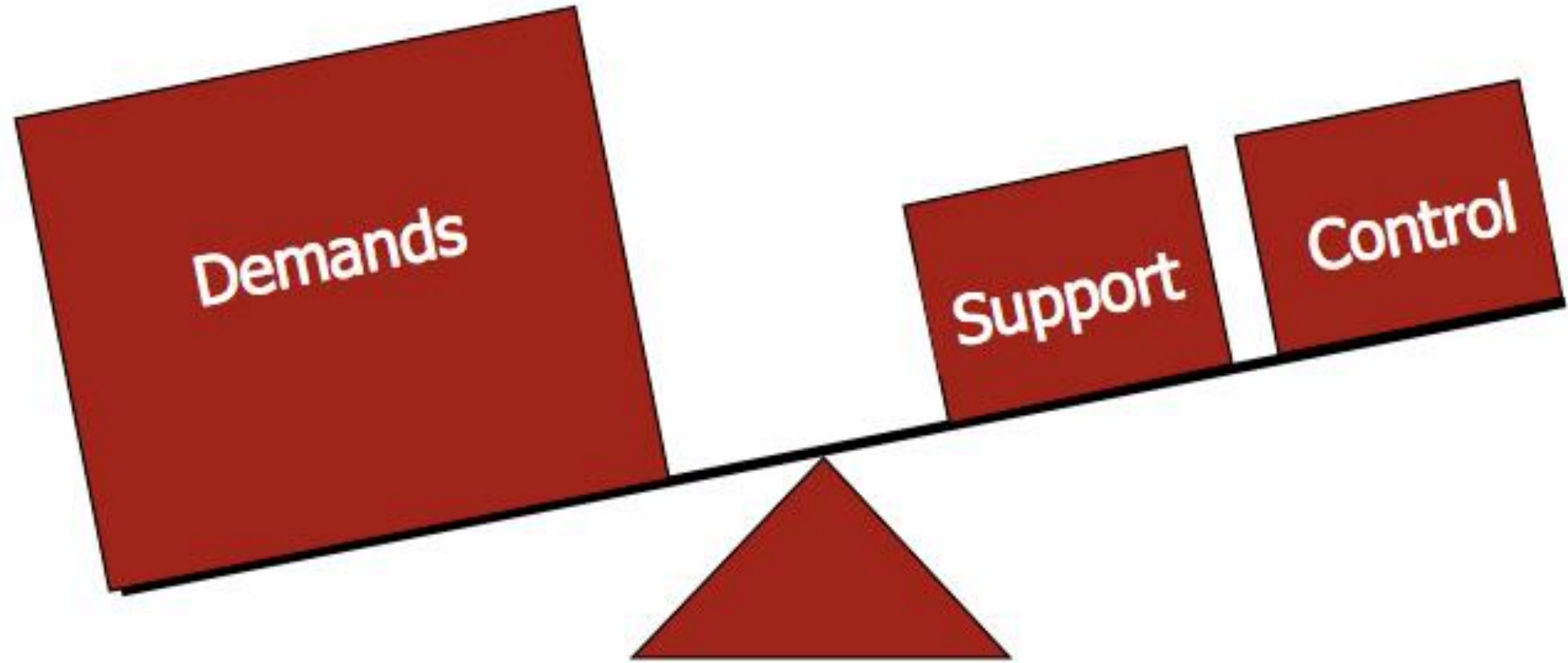❑ Reducing burnout to half, may save $11,000,000 to $44,000,000

Physicians Needed!

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Static Risk-Factors for Burnout

- Being a physician- Dealing with pain, illness and death
- Specialty
- Gender
- Age
- Greater educational debt

Shanafelt et al. 2003; Shanafelt et al. 2012 ; West et al 2011.

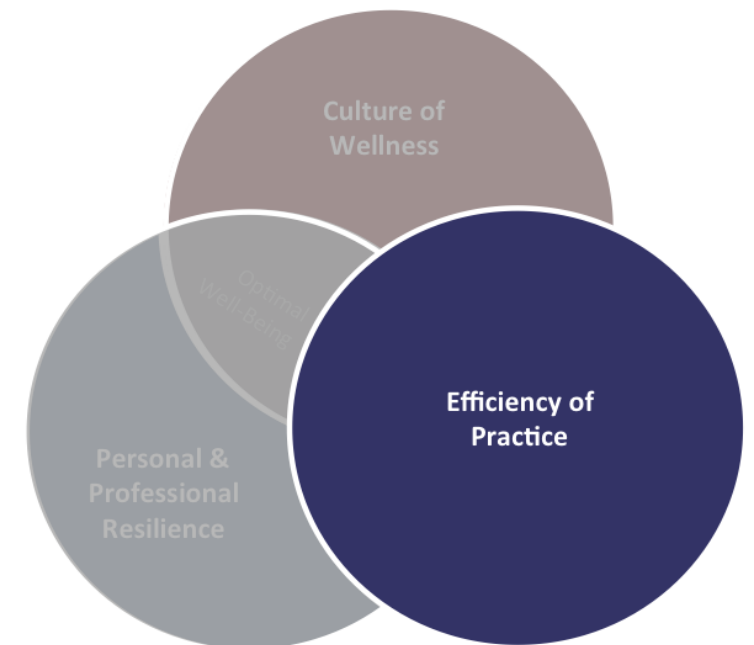# Modifiable Predictors of Burnout

Demand Control Model (Karasek et al. 1981)

Modifiable Predictors of Burnout

Modifiable Predictors of Burnout - Efficiency of Practice

- Excessive workload/ Reduced Work-Life Balance
    - Clerical work demands (e.g. EHR, documentation)
    - Inefficient technology and workflows
    - Health care reform
    - Increased cognitive load
    - Reduced control over work & schedules

Culture of Wellness

Personal & Professional Resilience

Efficiency of Practice

Sinscky et al, 2016; Shanafelt et al, 2016; Bodenheimer et al.,2014; Dyrbye et al.,2011 ; Sinsky e al., 2013; Privitera et al., 2014; West et al.,2006; Shanafelt et al, 2003

Modifiable Predictors of Burnout - Culture of Wellness

- Professional autonomy
- Time spent on work perceived as most meaningful
- Support
- Perception of medical errors
- Work home conflict (and favoring work in resolution)
- Quality of organizational leadership

Bodenheimer et al,. 2014; Dyrbye et al.,2011 ; Sinsky e al., 2013; Privitera et al., 2014; West et al.,2006; Shanafelt et al., 2003; Physician Stress and Burnout Survey. Physician Wellness Services and Cejka Search, 2011; Shanafelt et. all 2016.

Modifiable Predictors of Burnout- Personal Resilience

- Personal behaviors & Self-care
  - Addressing sleep impairment (Gifford et al., 2014; Vela-Bueno et al., 2008)
  - Optimal nutrition & exercise (Hamidi et al., 2016; Morris et al., 2015; Bherer et al., 2013)
  - Contemplative practices (Singer et al., 2015; Seppala et al, 2014; Beach et al., 2013; Beckman et al., 2012; Krasner et al., 2009)

- Relationships (Hu et al., 2012)

Burnout by sleep-related impairment category

Percent of house-staff reporting significant burnout
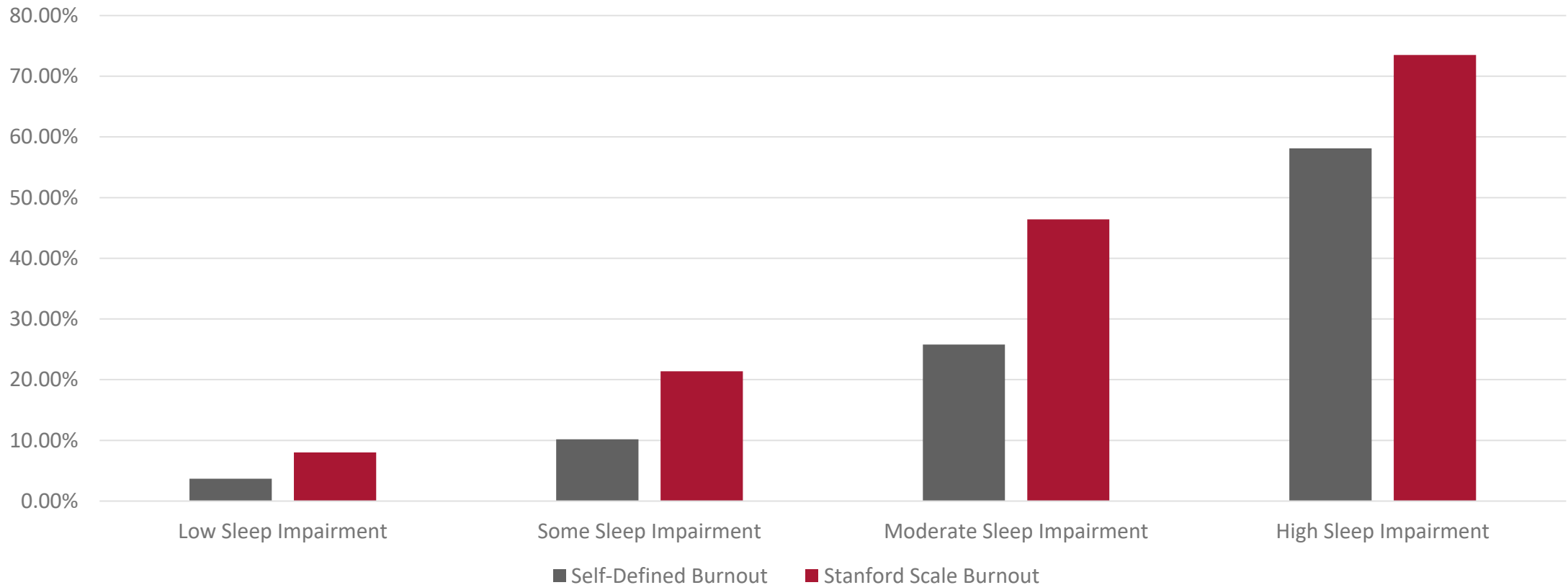
Logistic regression: Sleep impairment category and odds of high burnout score

Sleep Impairment Category	High Burnout: Odds Ratio (95% CI)
Low (8-13), n = 241	Reference category
Some (14-18), n = 237	3.17 (1.80-5.60)
Moderate (19-24), n = 181	12.27 (7.13-21.12)
High (≥ 25), n = 235	35.47 (19.89-63.27)

Odds rations are adjusted for: gender, age category, race, and fellow status
High Burnout = average score of 3.5 or higher on scale from 1 through 5 (8 item assessment)

Predictors of Burnout (R2 = 0.59)

	Standardized Beta	P-value
Sleep Related Impairment	0.51	< 0.001
Appreciation	-0.33	<0.001
Peer Support	-0.04	0.095

Predictors of Fulfillment (R2 = 0.57)

	Standardized Beta	P-value
Sleep Related Impairment	-0.21	< 0.001
Appreciation	0.52	<0.001
Peer Support	0.19	<0.001

What other aspects of physician wellness will we address?

- Physicians Preach What They Practice (Duperly et al., 2009)
  - Sleep is a strong predictor of burnout
  - Nutrition affects cognitive performance
    - In the short-term (Hamidi et al., 2016)
    - In the long-term (Morris et al., 2015)
  - Aerobic exercise prevents long-term cognitive decline (Bherer et al., 2013)
  - Self-compassion (Montero-Marn et al., 2016)

Summary

- Physician wellness is a broad domain.
- Rising awareness of burnout presents an opportunity
  - To mitigate burnout
  - To improve professional fulfillment
  - To promote physician wellness more broadly?

"To be truly radical, is to make hope possible, not despair convincing."

- Raymond Williams

Reciprocity in Promoting Physician Wellbeing

Promoting Physician Wellness

❑ Culture of wellness

- Leadership support may be the key actionable mechanism to improve physician wellness

❑ Efficiency of practice

- Working with IT leaders to improve EHR efficiency

- Involving physicians in the redesign of clinical practice

❑ Personal resilience

- Strategies to improve self-care and compassionate growth-mindset

All Three Wellness Domains Drive Burnout

1. **Personal Resilience: Strongest Driver of Burnout**
   I. **Low Self-Compassion**
   II. **Sleep-Related Impairment**
   III. **Low Meaningfulness of Clinical Work**

2. Culture of Wellness
   I. Low Perceived Appreciation
   II. Poor Control of Schedule
   III. Low Peer Support
   All three were associated with Leadership Support

3. Efficiency of Practice
   I. Perceived Negative EHR Experience

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All Three Domains Drive Professional Fulfillment

1. **Culture of Wellness: Strongest Driver of Fulfillment**
   I. **Perceived Appreciation**
   II. **Personal/Organizational Values Alignment**
   III. **Peer Support**
   All three were associated with Leadership Support

2. Personal Resilience
   I. Meaningfulness of Clinical Care
   II. Self-Compassion
   III. Low Sleep-Related Impairment

3. Efficiency of Practice
   I. High Perception of EHR Helpfulness

My immediate supervisor:

- Holds career development conversations with me
- Empowers me to do my job
- Encourages me to suggest ideas for improvement
- Treats me with respect and dignity
- Provides helpful feedback and coaching on my performance
- Recognizes me for a job well done
- Keeps me informed about changes taking place at Stanford
- Encourages me to develop my talents and skills
- Overall, how satisfied are you with your immediate supervisor?

(Shanafelt et al, 2015)

Leadership Support Drives Fulfillment

Perceived Leadership Support Scale includes:

- Appreciation
- Inclusiveness and High Expectations
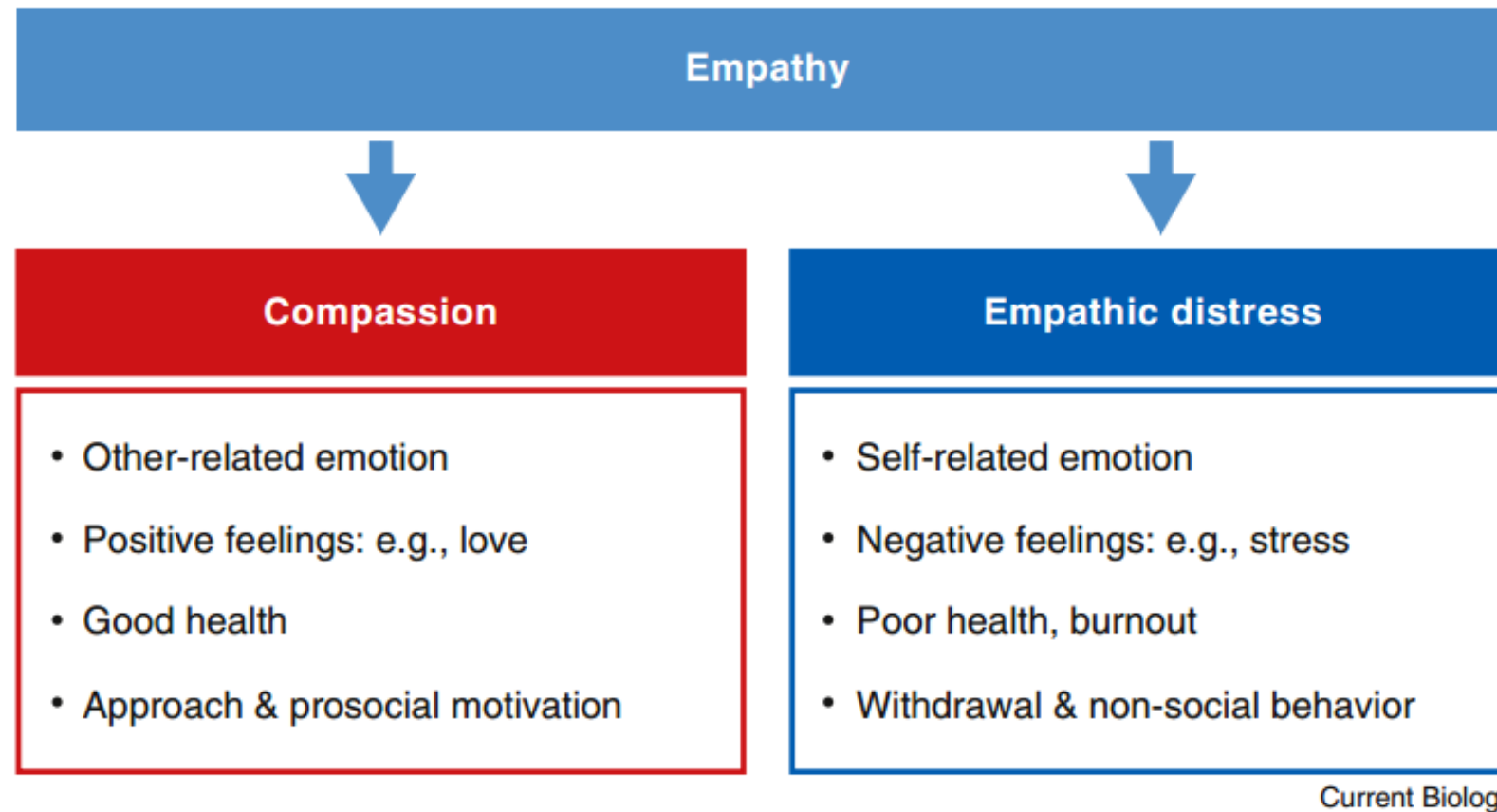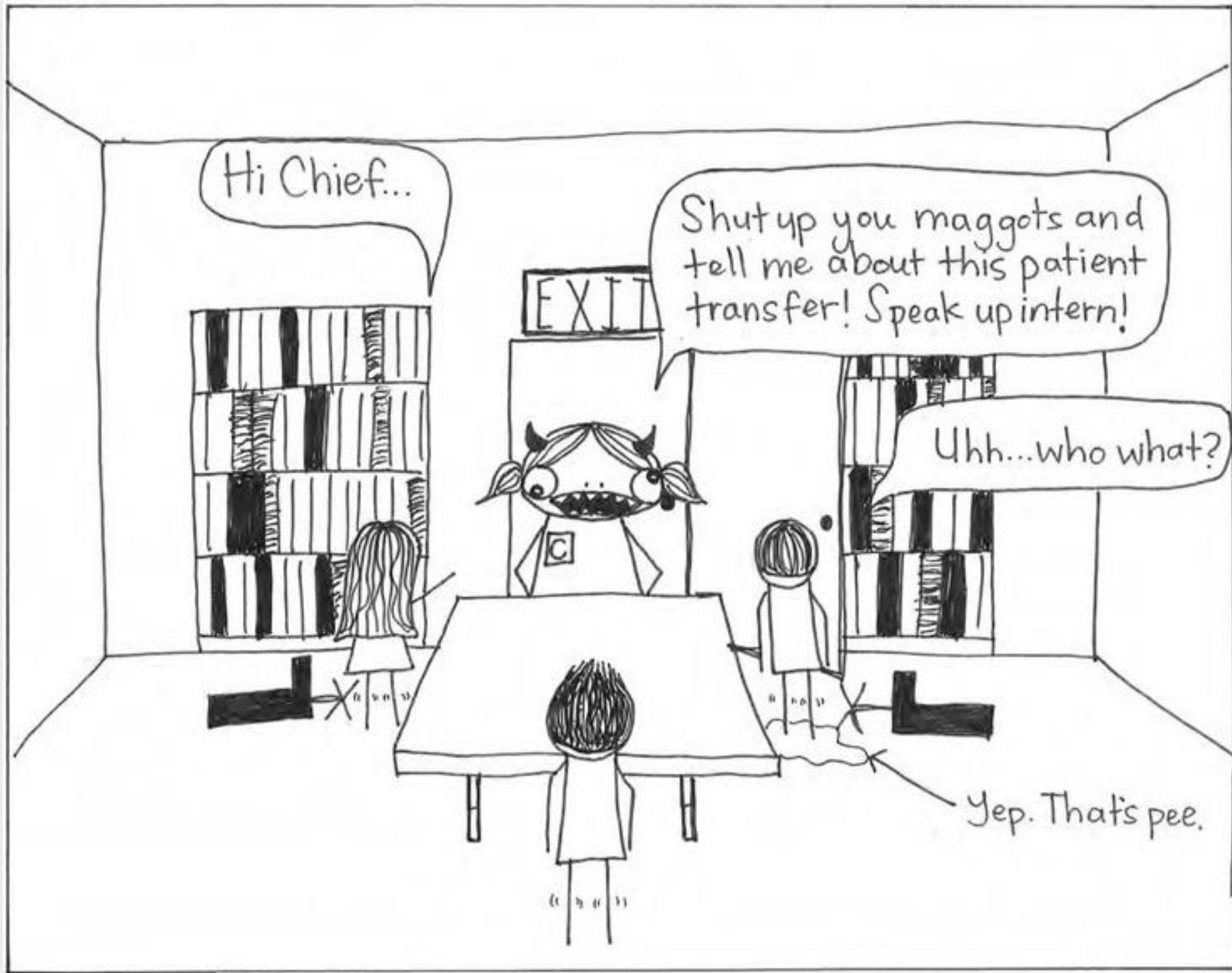- Support
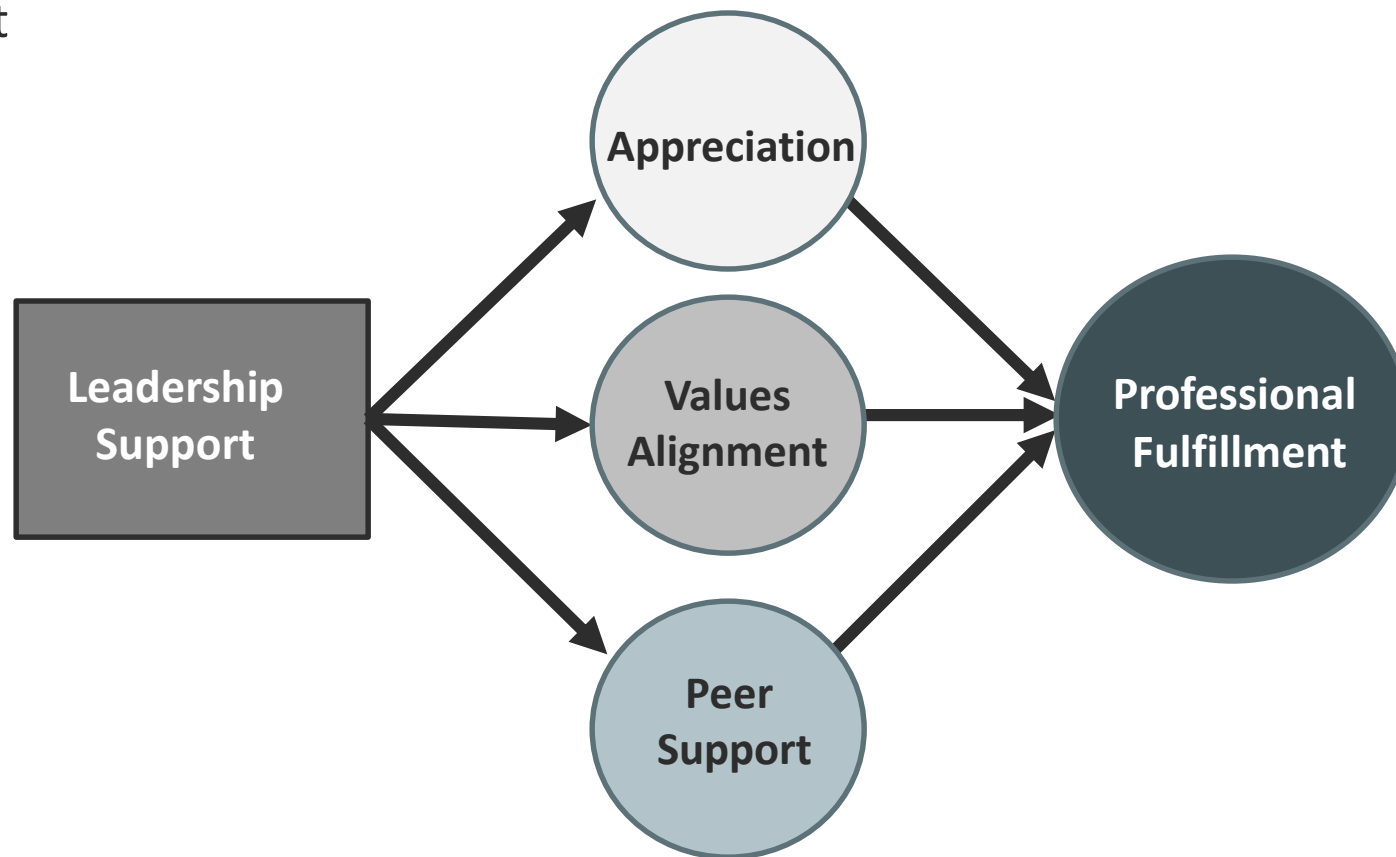
Compassion Fatigue Cure?

Figure 1. Compassion and empathic distress.
Schematic model that differentiates between two empathic reactions to the suffering of others.
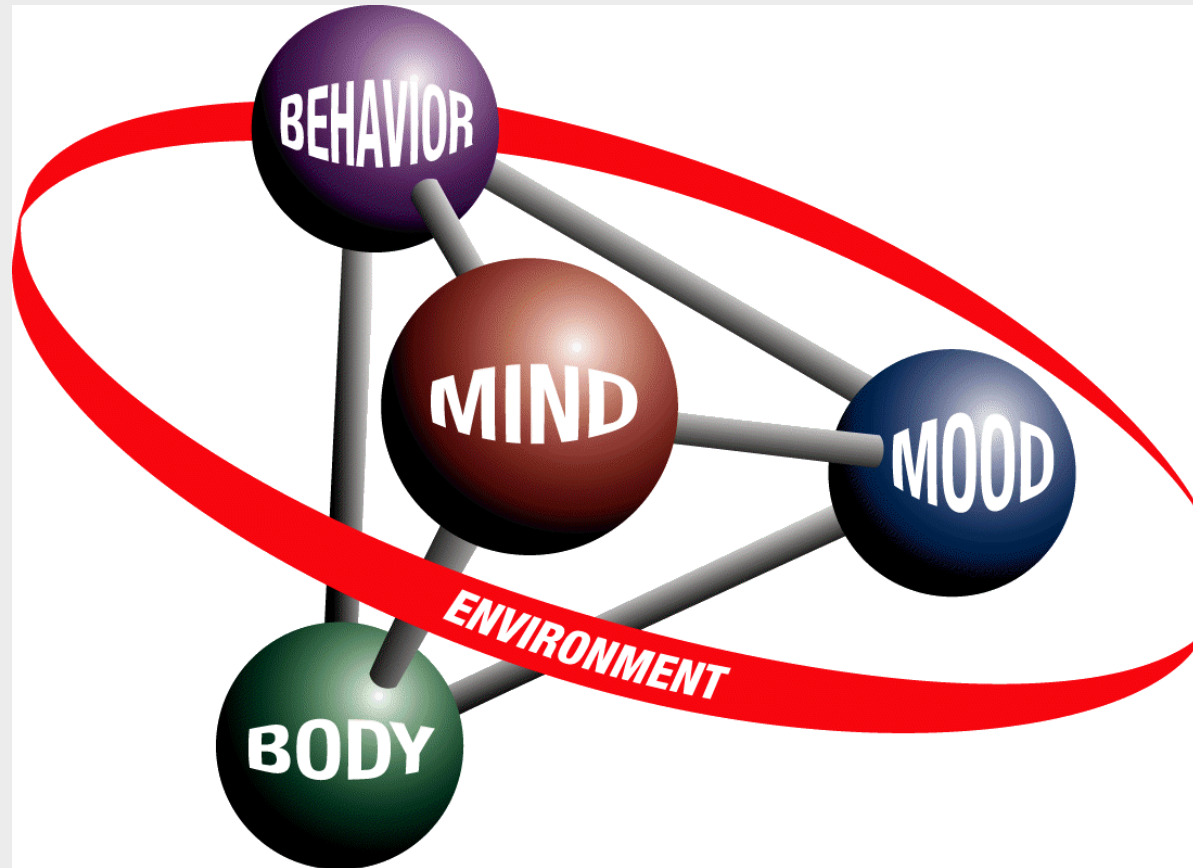
Basic CBT premise...
The mind (thoughts) matter

- Australian online program found helpful for house-staff physicians

Remember…

A time when you made a "mistake" at work?
 – Forgot to send an order
 – Missed an important phone call
 – Didn't catch a diagnosis as early as you would like

What moment or event comes to mind?

What did you think?
What did you feel?

Thoughts	Emotions	Behaviors
(Fill in as the group provides thoughts)		

Cognitive Distortions
David Burns, "The Feeling Good Handbook"

1. All-or-Nothing Thinking. You look at things in absolute, black-and-white categories.

2. Overgeneralization. You view a single negative event as a never-ending pattern of defeat.

3. Should Statements. You use "shoulds," "shouldn'ts," "musts," "oughts," and "have tos."

Cognitive Distortions
Two That Are Common Among Physicians

4. Contingent self-worth. Self-rejection or self-disparagement due to imperfection. For example, instead of saying, "I made a mistake," you tell yourself, "I am a mistake."

5. Need to hide weakness. Belief that there will be negative consequences if others find out what you did or what you are really like.

Reframing automatic negative thoughts

Automatic Negative Thoughts	New Positive Thoughts
(Copy from slide 15)	*(Write in now…)*

Self-Compassion(ate Mindset)

How often have you experienced the following <u>during the past two weeks</u>?

During the past two weeks…	Never	Rarely	Sometimes	Often	Always
a. When I made a mistake, I felt more self-condemnation than self-encouragement to learn from the experience	[ ]	[ ]	[ ]	[ ]	[ ]
b. I was less compassionate with myself than I was with others	[ ]	[ ]	[ ]	[ ]	[ ]
c. I put off taking care of my own health due to time pressure	[ ]	[ ]	[ ]	[ ]	[ ]
d. Taking care of my needs seemed incompatible with taking care of my patients' needs	[ ]	[ ]	[ ]	[ ]	[ ]

Self-Compassion & Physician Wellness

	Self-Compassion
Depression	-0.4
Anxiety	-0.4
Self-Identified Burnout	-0.4
Burnout Scale	-0.5
Interpersonal Disengagement	-0.4
Emotional Exhaustion	-0.6
Professional Fulfillment	0.4
Meaningfulness of Clinical Work	0.2
Depression	-0.4
Damaged Relationships	-0.4

Spearman's rho, $p < 0.05$

Self-Compassion & Self-Care

	Self-Compassion
MIND Diet Score	0.2
Sleep-Related Impairment	-0.4
Mild Exercise	0.2
Moderate Exercise	0.2
Strenuous Exercise	0.2

Spearman's rho, p<0.05

Self-Compassion vs Mindfulness

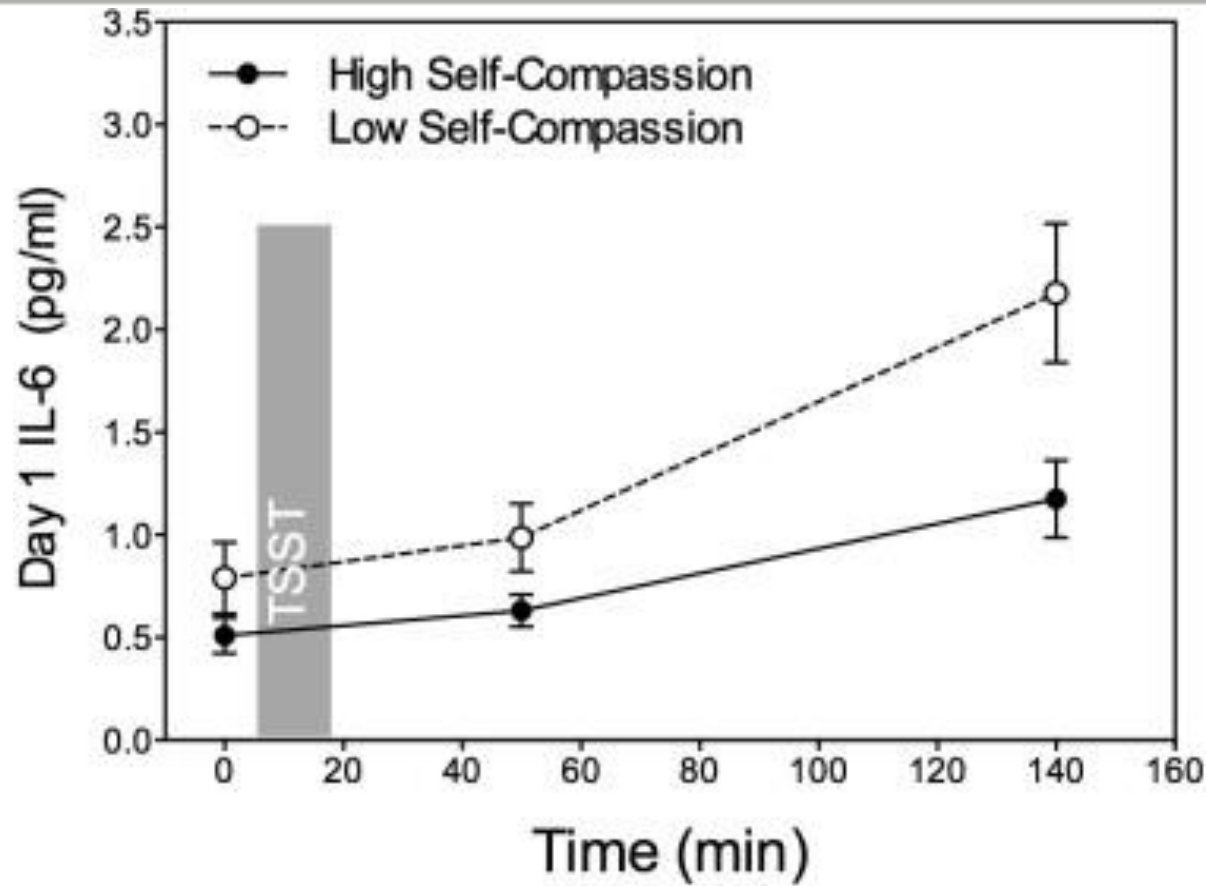|	Self-Compassion
Damaged Relationships	-0.4
Peer Support	0.2
Percieved Appreciation	0.3
Mission Alignment	0.2

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Fig. 3. Mean day 1 IL-6 levels at baseline and 30 and 120 min post-TSST for participants above and below the mean on self-compassion (ns = 20 and 21 for the high and low self-compassion groups, respectively).

After the Rain

Photo by Maryam Hamidi

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Questions and Answers