

# Bite-sized well-being during times of uncertainty

**J. Bryan Sexton, PhD**  
Director, Duke Center for  
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Duke University Health System



@JBryanSexton1

[www.hsq.dukehealth.org](http://www.hsq.dukehealth.org)

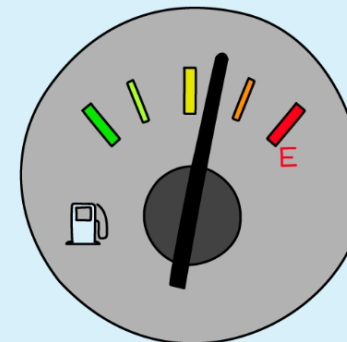




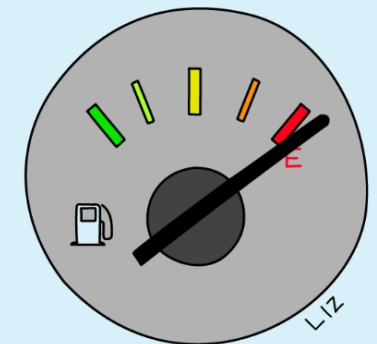
# Bite-sized well-being during times of uncertainty

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WHEN WE SHOULD  
TAKE A BREAK



WHEN WE ACTUALLY  
TAKE A BREAK





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# 3 links:

Option to use QR codes



## Burnout Self assessment:



## 1 tool:



## 1 hour Cont Ed :



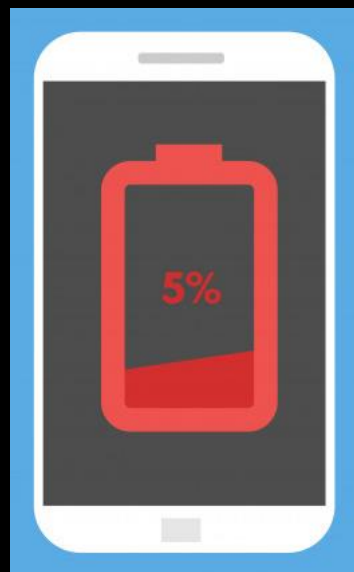




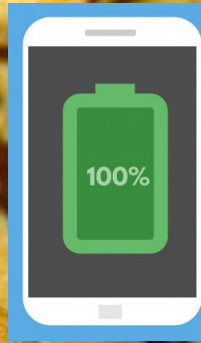
Image from Sally's Baking Addiction & Seasonal Veghead.com edited for OFQ Mom



Image from Sally's Baking Addiction & Seasonal Veghead.com edited for OFQ Mom

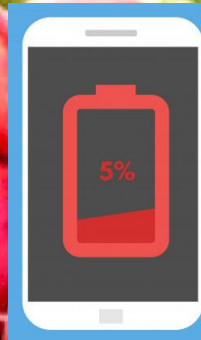






**Persevered:  
19 minutes**

# Cookies & Radishes



**8 minutes**



- Ego depletion is the loss of mental energy and a subsequent reduction in capacity to avoid urges or persevere on challenging tasks
- The research is summarized in Baumeister, R.R. & Tierney, J. (2011). *Willpower*. New York: Penquin Press







# A stress response pathway regulates DNA damage through $\beta_2$ -adrenoreceptors and $\beta$ -arrestin-1

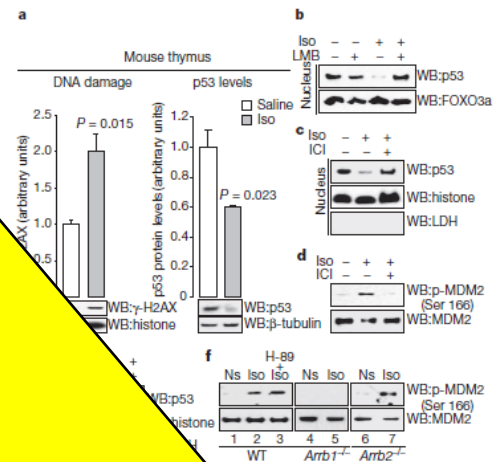
Makoto R. Hara<sup>1</sup>, Jeffrey J. Kovacs<sup>1</sup>, Erin J. Whalen<sup>1</sup>, Sudarshan Rajagopal<sup>1</sup>, Ryan T. Strachan<sup>1</sup>, Wayne Grant<sup>2</sup>, Aaron J. Towers<sup>1,3</sup>, Barbara Williams<sup>1</sup>, Christopher M. Lam<sup>1</sup>, Kunhong Xiao<sup>1</sup>, Sudha K. Shenoy<sup>1</sup>, Simon G. Gregory<sup>1,3</sup>, Seungkirl Ahn<sup>1</sup>, Derek R. Duckett<sup>4</sup> & Robert J. Lefkowitz<sup>1,4</sup>

The human mind and body respond to stress<sup>1</sup>, a state of perceived threat to homeostasis, by activating the sympathetic nervous system and secreting the catecholamines adrenaline and noradrenaline in the 'fight-or-flight' response. The stress response is generally transient because its accompanying effects (for example, immunosuppression, growth inhibition and enhanced catabolism) can be harmful in the long term<sup>2</sup>. When chronic, the stress response can be associated with disease symptoms such as peptic ulcers or cardiovascular disorders<sup>3</sup>, and epidemiological studies strongly indicate that chronic stress leads to DNA damage<sup>4,5</sup>. This stress-induced DNA damage may promote ageing<sup>6</sup>, tumorigenesis<sup>7</sup>, neurodegenerative conditions<sup>8,9</sup> and miscarriages<sup>10</sup>. However, the mechanism by which these DNA-damage events occur in response to stress is unclear. The stress hormone adrenaline stimulates  $\beta_2$ -adrenoreceptors expressed throughout the body, including in germ-line cells and embryonic tissues<sup>11</sup>. Activated  $\beta_2$ -adrenoreceptors promote the rapid activation of protein kinase A (PKA), which in turn promotes the recruitment of  $\beta$ -arrestins, which desensitize G-protein-coupled receptors as signal transducers in their own right. This mechanism by which  $\beta$ -adrenergic stimulation promotes both Gs-PKA and  $\beta$ -arrestin-mediated signalling leads to DNA damage and suppress p53 levels, leading to the accumulation of DNA damage and in human cell lines,  $\beta$ -arrestin-1,  $\beta$ -arrestin-2 and  $\beta$ -arrestin-3, facilitates AKT-mediated signalling and also promotes MDM2 binding to p53, leading to its degradation and acting as a molecular scaffold. Catecholamine-induced DNA damage is abrogated in *Arrb1*-knockout (*Arrb1*<sup>-/-</sup>) mice, which served p53 levels in both the thymus, and in the brain, and in stress may affect the offspring's genome. The emerging role of *ARRB1* as an E3-ligase for p53 reveals how DNA damage may accumulate in response to stress.

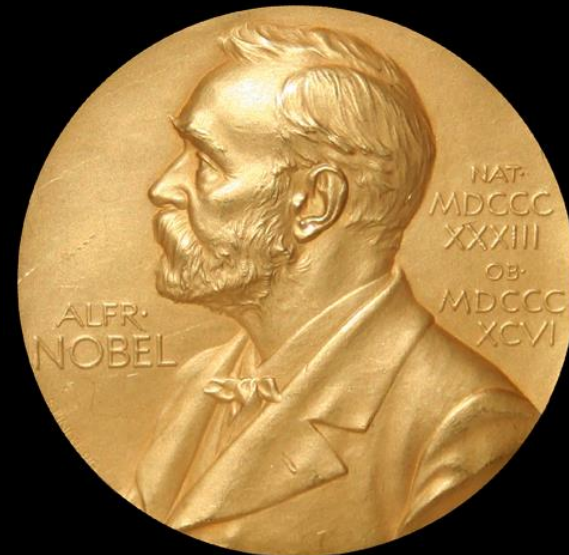
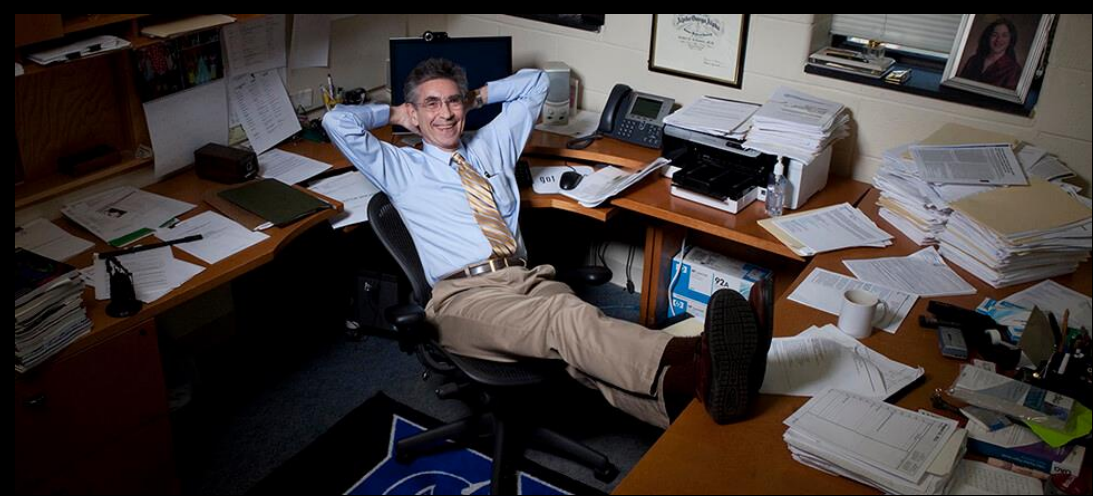
As a model of chronic stress and p53 regulation,  $\beta_2$ -adrenoreceptors<sup>12,13</sup>, wild-type mice were infused with either saline or the  $\beta_2$ -adrenoreceptor-agonist isoproterenol (a synthetic analogue of adrenaline). First, we tested

Fig. 1a–c), which endogenously express wild-type p53 and only the  $\beta_2$ -subtype of  $\beta$ -adrenoreceptors (Supplementary Fig. 2a–c). Moreover, the p53 in these cells, as well as in all other cell lines used in these studies (fibroblasts and HEK-293 cells), was demonstrated to be functional by a variety of techniques (Supplementary Fig. 3a–k), and all cell lines endogenously expressed only the  $\beta_2$ -subtype of  $\beta$ -adrenoreceptors (Supplementary Fig. 2a–c).

The isoproterenol-induced reduction in p53 levels results from p53 degradation, and is abolished by proteasome inhibition (Supplementary



stimulation leads to p53 degradation and *ARRB1*/AKT-mediated activation of p53 to accumulation of DNA damage and in human cell lines,  $\beta$ -arrestin-1,  $\beta$ -arrestin-2 and  $\beta$ -arrestin-3, facilitates AKT-mediated signalling and also promotes MDM2 binding to p53, leading to its degradation and acting as a molecular scaffold. Catecholamine-induced DNA damage is abrogated in *Arrb1*-knockout (*Arrb1*<sup>-/-</sup>) mice, which served p53 levels in both the thymus, and in the brain, and in stress may affect the offspring's genome. The emerging role of *ARRB1* as an E3-ligase for p53 reveals how DNA damage may accumulate in response to stress.



...prolonged exposure to our own stress hormones damages our DNA, promoting aging, cancer, psychiatric disorders and miscarriages...

and a decrease in p53 levels in cultured U2OS cells (Supplementary Fig. 2d). MDM2 phosphorylation at Ser 166. Ns, not stimulated.

<sup>1</sup>Department of Medicine, Duke University Medical Center, Durham, North Carolina 27710, USA. <sup>2</sup>Translational Research Institute, The Scripps Research Institute, Jupiter, Florida 33458, USA. <sup>3</sup>Center for Human Genetics, Duke University Medical Center, Durham, North Carolina 27710, USA. <sup>4</sup>Howard Hughes Medical Institute, Duke University Medical Center, Durham, North Carolina 27710, USA.

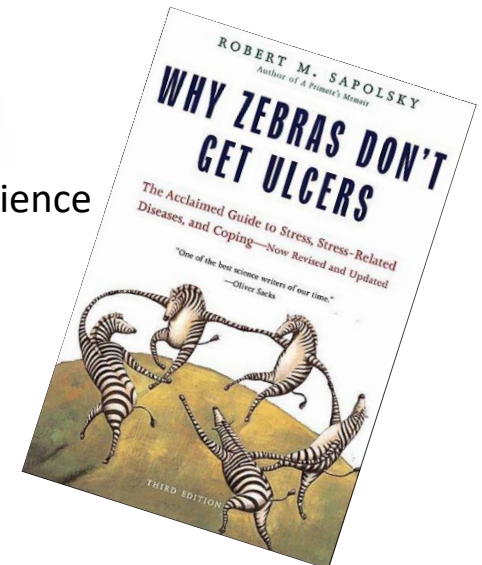


# Stress Comes from Things you can't Predict and/or Control



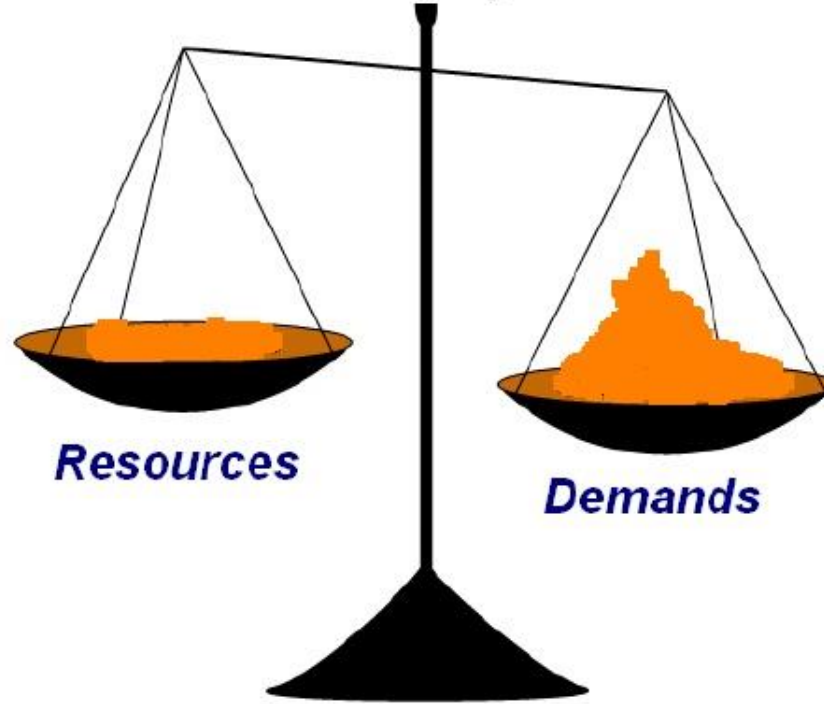
“Stress can wreak havoc with your metabolism, raise your blood pressure, burst your white blood cells, make you flatulent, ruin your sex life, and if that is not enough, possibly damage your brain.”

--Dr. Robert Sapolsky,  
Professor of Biological Sciences and Neuroscience  
Stanford University





*Imbalance between demands in your life and  
resources you have*



Too many demands over time lead to burnout  
and problems with well-being.





# QUALITY

THE RACE FOR QUALITY HAS NO FINISH LINE-  
SO TECHNICALLY, IT'S MORE LIKE A DEATH MARCH.



Let's get the elephants in  
the room out of the way...  
Impact of Covid-19, and  
Evidence that we can fix it...

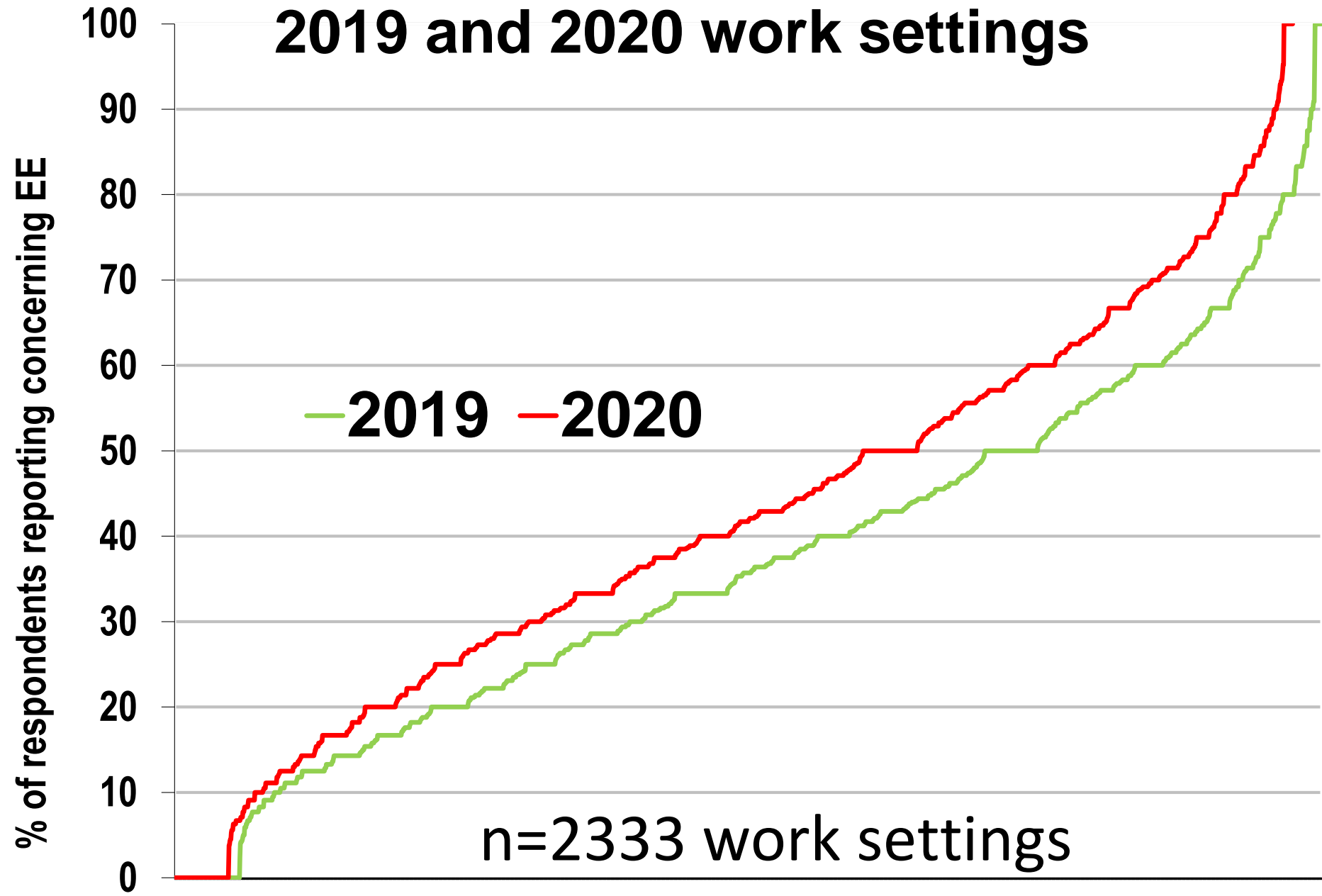




**We have data from 50,000 healthcare workers in Sept 2019 and Sept 2020**



# Emotional Exhaustion across 2019 and 2020 work settings

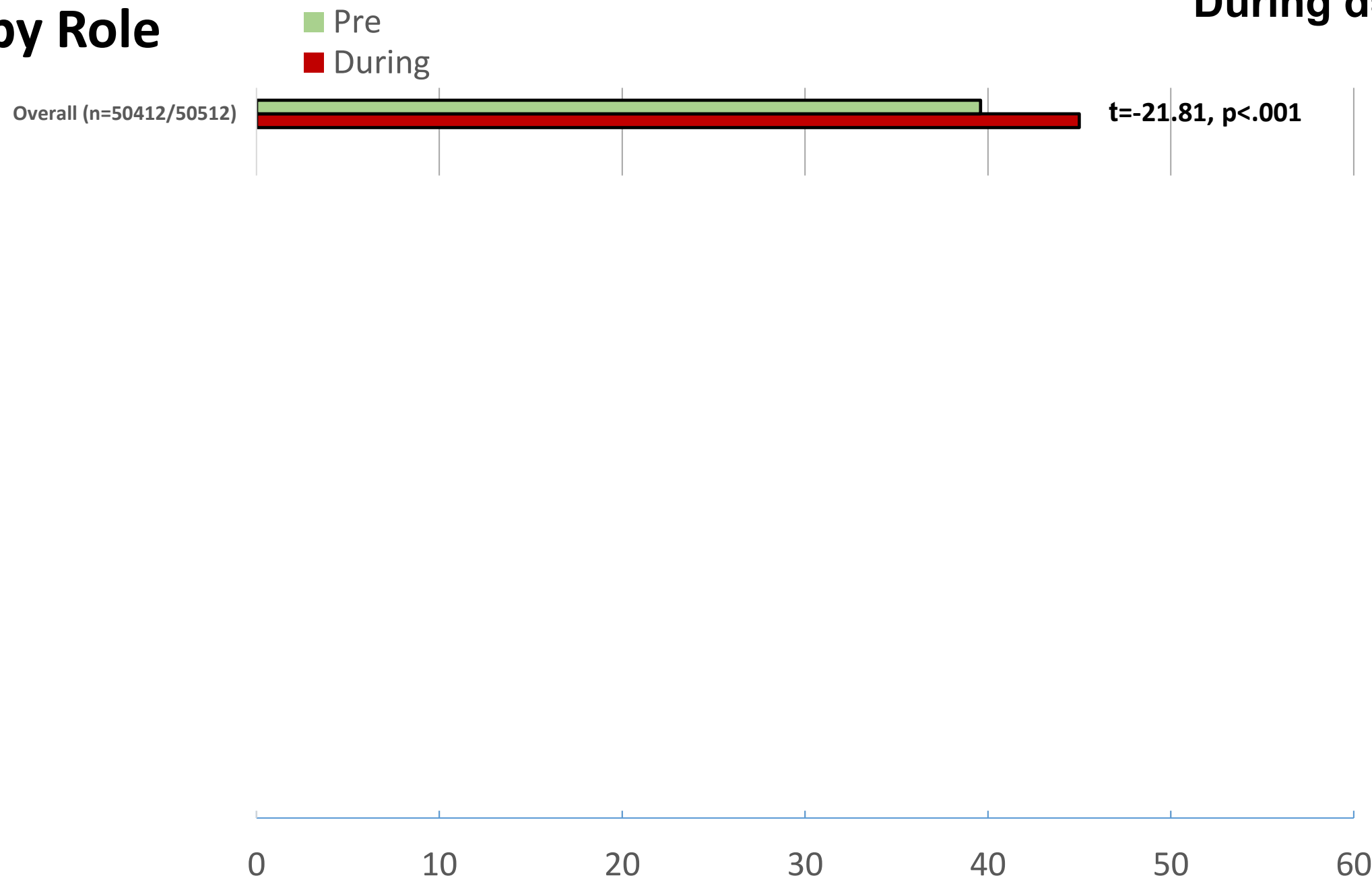




# % Emotionally Exhausted Before and During Covid-19

## Overall & by Role

Pre  $\alpha=.93$   
During  $\alpha=.94$

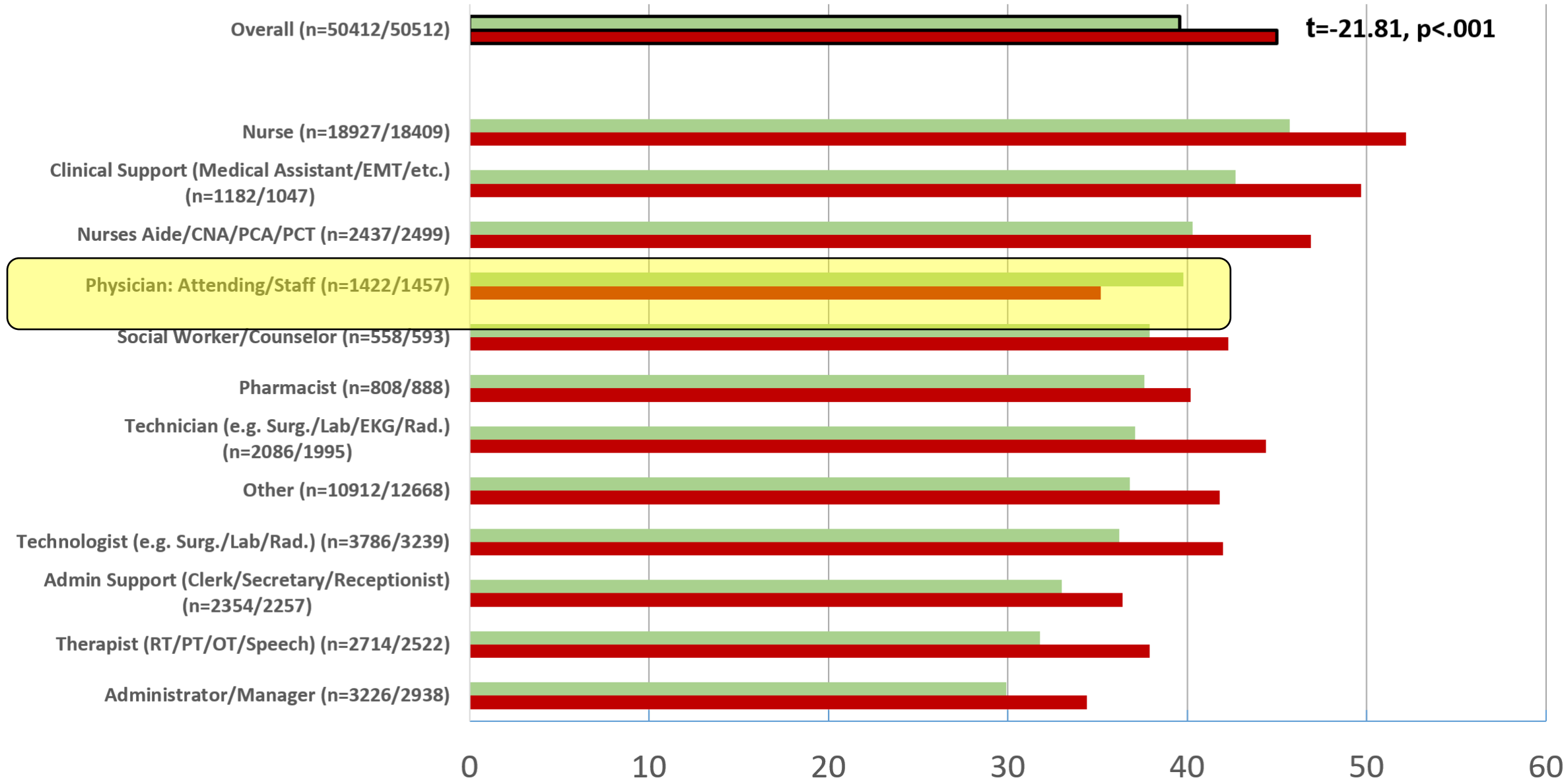


# % Emotionally Exhausted Before and During Covid-19

## Overall & by Role

Pre  $\alpha=.93$   
During  $\alpha=.94$

■ Pre  
■ During





**Burnout is intense, can we  
cause it to go down?**



# Randomized controlled trial of the “WISER” intervention to reduce healthcare worker burnout

Jochen Profit<sup>1,2</sup> · Kathryn C. Adair<sup>3,4</sup> · Xin Cui<sup>1,2</sup> · Briana Mitchell<sup>1</sup> · Debra Brandon<sup>5,6</sup> · Daniel S. Tawfik<sup>7</sup> · Joseph Rigdon<sup>8</sup> · Jeffrey B. Gould<sup>1,2</sup> · Henry C. Lee<sup>1,2</sup> · Wendy L. Timpson<sup>9</sup> · Martin J. McCaffrey<sup>10</sup> · Alexis S. Davis<sup>1</sup> · Mohan Pammi<sup>11</sup> · Melissa Matthews<sup>12</sup> · Ann R. Stark<sup>13</sup> · Lu-Ann Papile<sup>14</sup> · Eric Thomas<sup>15</sup> · Michael Cotten<sup>16</sup> · Amir Khan<sup>14</sup> · J. Bryan Sexton<sup>3,4</sup>

Received: 13 January 2021 / Revised: 26 April 2021 / Accepted: 6 May 2021  
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## Abstract

**Objective** Test web-based implementation for the science of enhancing resilience (WISER) intervention efficacy in reducing healthcare worker (HCW) burnout.

**Design** RCT using two cohorts of HCWs of four NICUs each, to improve HCW well-being (primary outcome: burnout). Cohort 1 received WISER while Cohort 2 acted as a waitlist control.

**Results** Cohorts were similar, mostly female (83%) and nurses (62%). In Cohorts 1 and 2 respectively, 182 and 299 initiated WISER, 100 and 176 completed 1-month follow-up, and 78 and 146 completed 6-month follow-up. Relative to control, WISER decreased burnout (−5.27 (95% CI: −10.44, −0.10),  $p = 0.046$ ). Combined adjusted cohort results at 1-month showed that the percentage of HCWs reporting concerning outcomes was significantly decreased for burnout (−6.3% (95% CI: −11.6%, −1.0%);  $p = 0.008$ ), and secondary outcomes depression (−5.2% (95% CI: −10.8, −0.4);  $p = 0.022$ ) and work-life integration (−11.8% (95% CI: −17.9, −6.1);  $p < 0.001$ ). Improvements endured at 6 months.

**Conclusion** WISER appears to durably improve HCW well-being.

**Clinical Trials Number** NCT02603133; <https://clinicaltrials.gov/ct2/show/NCT02603133>

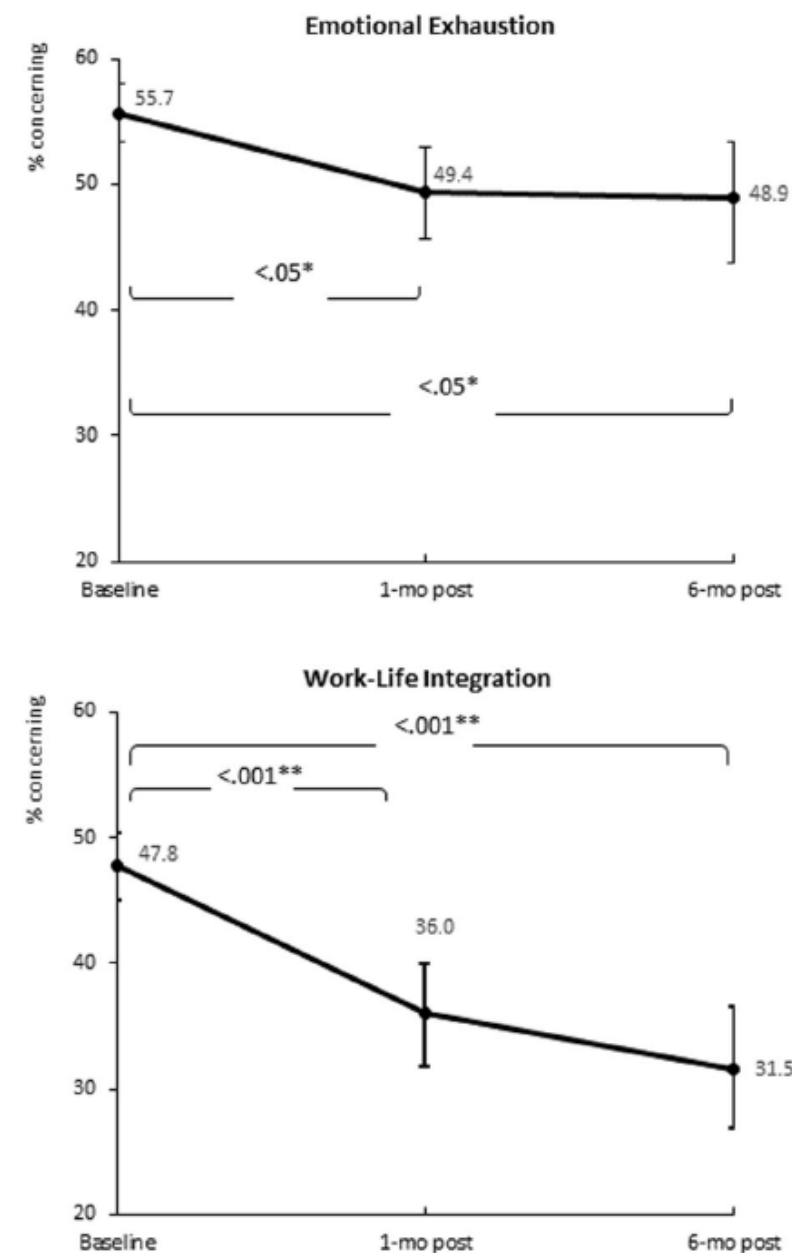
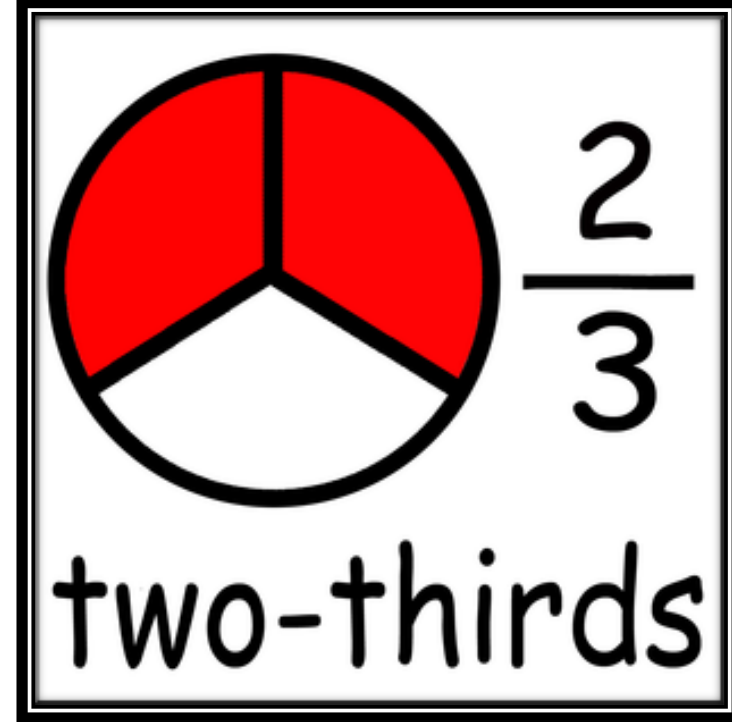


Fig. 2 Effect of WISER on the percent concerning scale. Statistical significance for 1-month post provided in brackets.





Haidari et. al, 2021 *Journal of Perinatology*. Maternal and neonatal health care worker well-being and patient safety climate amid the COVID-19 pandemic.

# COVID-19 impact is equivalent of 2.5 EMRs in 1 year

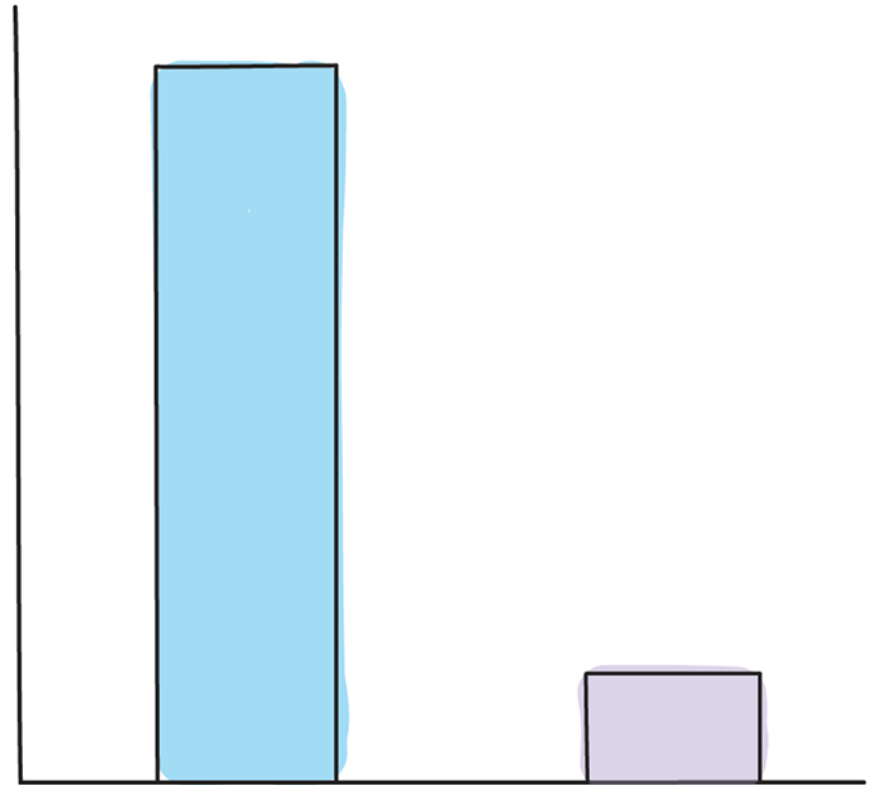


Haidari et. al, 2021 *Journal of Perinatology*. Maternal and neonatal health care worker well-being and patient safety climate amid the COVID-19 pandemic.



# We need bite-sized strategies

HOW MUCH I'M ABLE  
TO GET DONE



NORMALLY

DURING AN  
UNPRECEDENTED,  
GLOBAL CRISIS



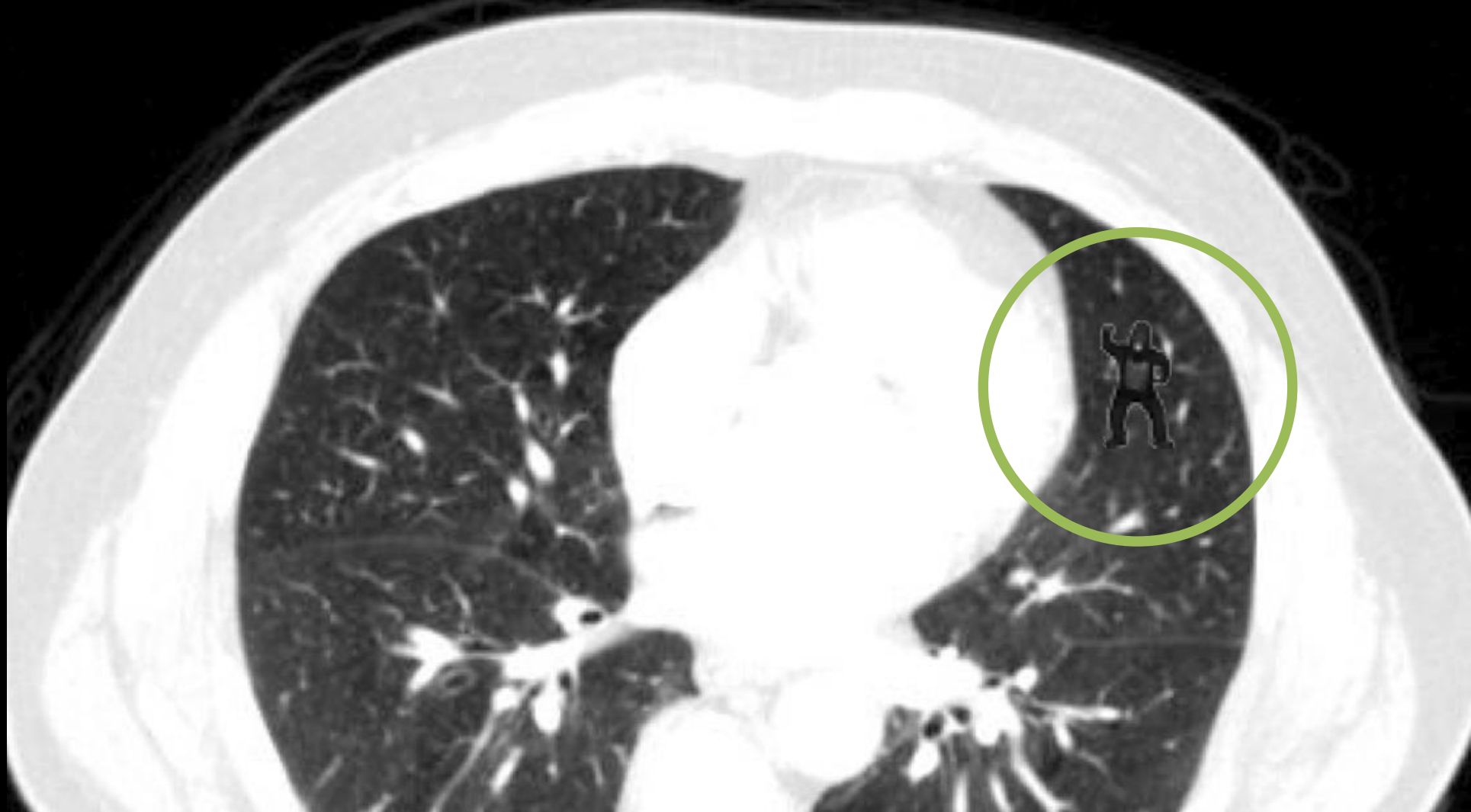
**Psychology of Burnout**  
Your focus and reflections  
determine your reality

# Psychology of Burnout

Your **focus**  
determines  
your reality







Notice anything  
unusual about this  
lung scan?

Harvard researchers found that **83%**  
of radiologists didn't notice the gorilla  
in the top right portion of this image.

## Emotional information processing in depression and burnout: an eye-tracking study

Renzo Bianchi · Eric Laurent

Received: 12 July 2014  
© Springer-Verlag Berlin Heidelberg 2014

**Abstract** Whether emotional information processing is affected in burnout is unclear. The aim of this study was to investigate the advance of the burnout syndrome on emotional attentional processing in burnout, depression, and depression and depression. Eye-tracking was used to assess overt attentional deployment. The gaze of 34 human services employees was monitored as they freely viewed a series of emotional images, labeled as dysphoric, positive, anxiogenic, and neutral. Similar to depression, burnout was associated with increased attention for dysphoric stimuli and decreased attention for positive stimuli.

**What the burned out eyes are able to see is limited:  
Eye-tracking of attention of burned out and depressed participants was the same:  
more focus on dysphoric stimuli/  
less focus on positive stimuli**

Emotional exhaustion, the hallmark of burnout, denotes a state of fatigue and helplessness; it reflects the worker's response to unresolved stress and is considered the entry point into the syndrome; depersonalization characterizes a way of coping with emotional exhaustion by detaching oneself from one's



DEADLINE





# The Science of Health Care Worker Burnout

## Assessing and Improving Health Care Worker Well-Being

Kyle Rehder, MD; Kathryn C. Adair, PhD; J. Bryan Sexton, PhD

**Context.**—Problems with health care worker (HCW) well-being have become a leading concern in medicine given their severity and robust links to outcomes like medical error, mortality, and turnover.

**Objective.**—To describe the state of the science regarding HCW well-being, including how it is measured, what outcomes it predicts, and what institutional and individual interventions appear to reduce it.

**Data Sources.**—Peer review articles as well as multiple large data sets collected within our own research team are used to describe the nature of burnout, associations with

institutional resources, and individual tools to improve well-being.

**Conclusions.**—Rates of HCW burnout are alarmingly high, placing the health and safety of patients and HCWs at risk. To help address the urgent need to help HCWs, we summarize some of the most promising early interventions, and point toward future research that uses standardized metrics to evaluate interventions (with a focus on low-cost institutional and personal interventions).

(Arch Pathol Lab Med. 2021;145:1095–1109; doi: 10.5858/arpa.2020-0557-RA)

Before the global pandemic of 2020 placed an even greater strain on busy and stressed HCWs, the impact and consequences of HCW burnout had already captured the attention of national and international health care leaders. Organizations that have come out with formal statements around the need to address burnout include the World Health Organization, the National Academy of Medicine, the Combined Critical Care Societies, the Accreditation Council for Graduate Medical Education, and many others.<sup>1–4</sup> The alarm bells have rung loudly for several years in fact, but the existing peer-reviewed literature does not provide a clear road map for leaders struggling to make evidence-based decisions. A PubMed search on “burnout” during the last 2 decades reveals the number of burnout articles published each year in the medical literature have increased more than 6-fold, with an even more rapid rise in the last 3 years. Remarkably, out of more than 16 000 published articles on burnout in the medical literature, there are fewer than 50 randomized controlled trials focused on interventions to improve burnout in HCWs. Many of these are classified as pilot studies, and almost all have small numbers (<100 participants) or limited follow-up. Many more articles discuss the prevalence or epidemiology of burnout, postulating about potential causes but with minimal data to support theories, and with little direction on potential solutions. Perhaps it should not be surprising that this paucity of evidence scattered throughout the literature interferes with leadership efforts to manage workforce well-being coherently and effectively.

Given the scarcity of high-quality articles investigating HCW burnout, this review seeks to detail the environmental and psychologic factors that drive the pathophysiology of burnout, and to synthesize the existing evidence supporting effective tools to reduce burnout and improve HCW well-being. We will also share our lessons learned from our

*“What is it that every leader... never wants, always has, often denies, and painfully mismanages?”*

*Workforce burnout.”*

—The Wellness Troll

The ability to predict clinical and operational outcomes at the work setting level is essential in health care quality improvement. Health care worker (HCW) well-being is one of a small handful of work setting variables with this potent power. Similar to leadership concerns about staffing levels, from an operational perspective it is helpful to think of HCW well-being as workers’ ability to “get the work done” and to be ready for the next task or challenge. We will take a deep dive into well-being, and in particular the variable of HCW emotional exhaustion as an essential metric predictive of clinical and operational outcomes, as well as patient and HCW outcomes. To manage and understand a workforce, it is instructive to assess and improve workforce well-being.

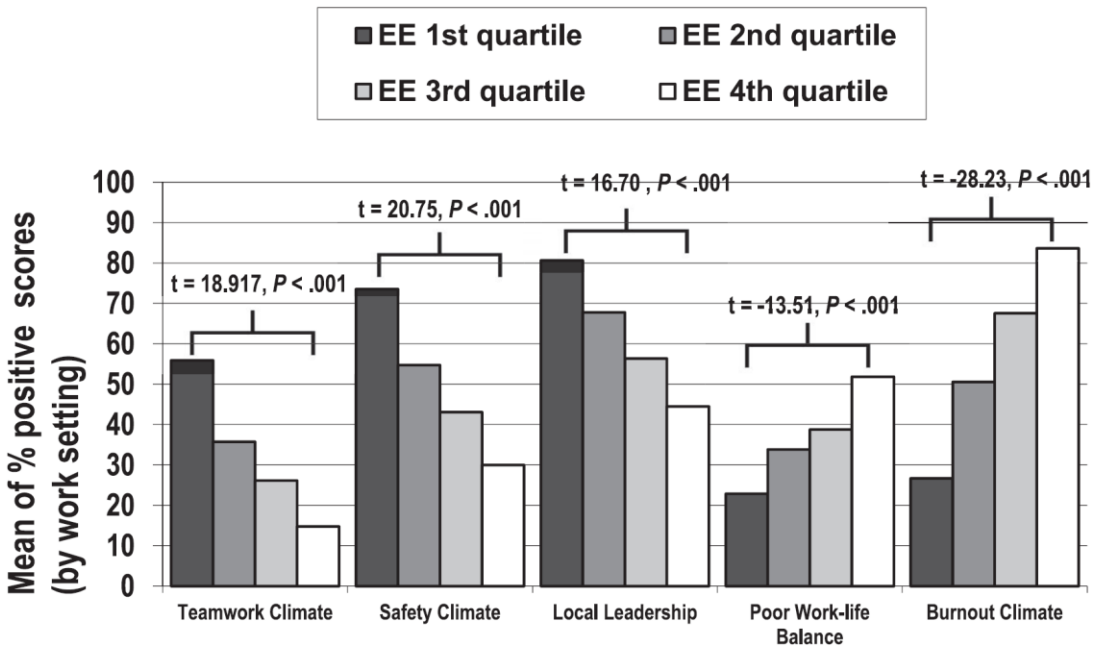
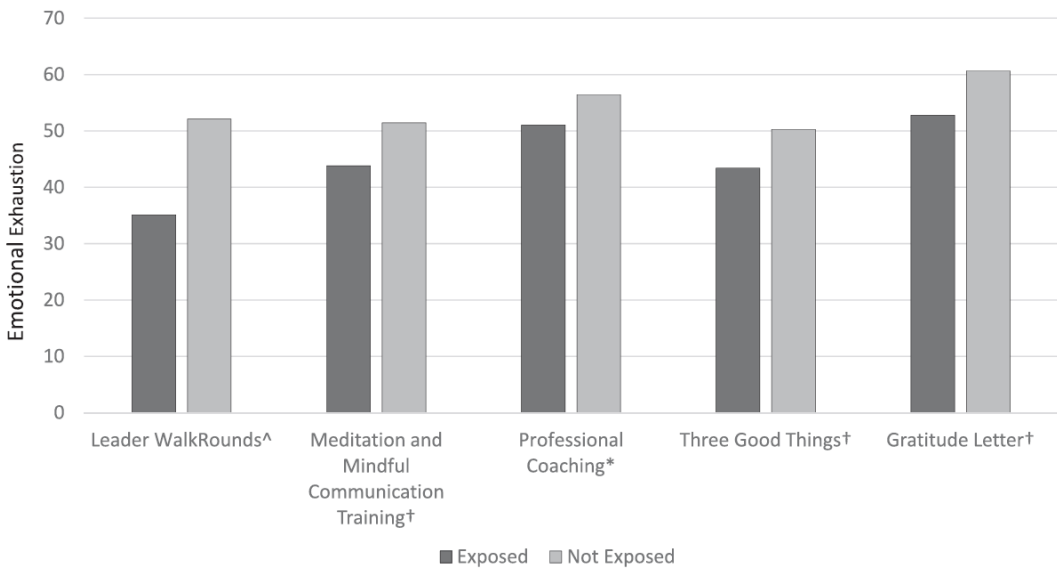
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Supplemental digital content is available for this article at <https://meridian.allenpress.com/aplm> in the September 2021 table of contents.

From the Duke Center for Healthcare Safety and Quality, Duke University Health System, Durham, North Carolina.

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Corresponding author: J. Bryan Sexton, PhD, Duke Center for Healthcare Safety and Quality, Duke University Health System, 3100 Tower Blvd, Suite 1510, Durham, NC 27707 (email: Bryan.Sexton@Duke.edu).



# Burnout is associated with:

## Lower Patient Satisfaction

Aiken et al. BMJ 2012;344:e1717  
Vahey, Aiken et al. Med Care. 2004 February; 42(2 Suppl): 1157-1166.



## Infections

Cimiotti, Aiken, Sloane and Wu.  
Am J Infect Control.  
2012 Aug;40(6):486-90.



## Medication Errors

Fahrenkopf et al. BMJ.  
2008 Mar 1;336(7642):488-91.

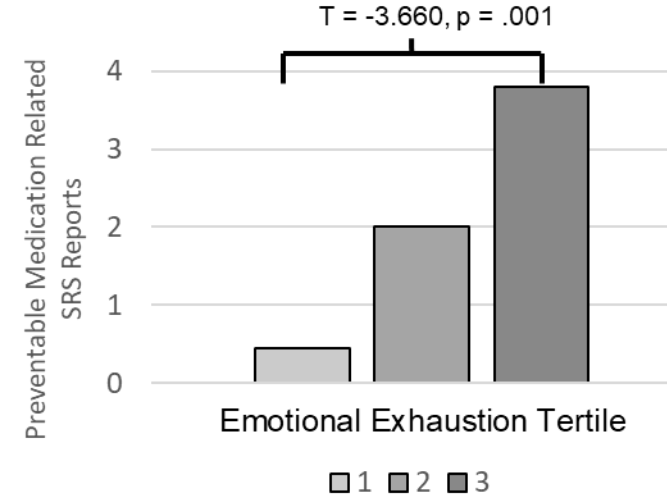
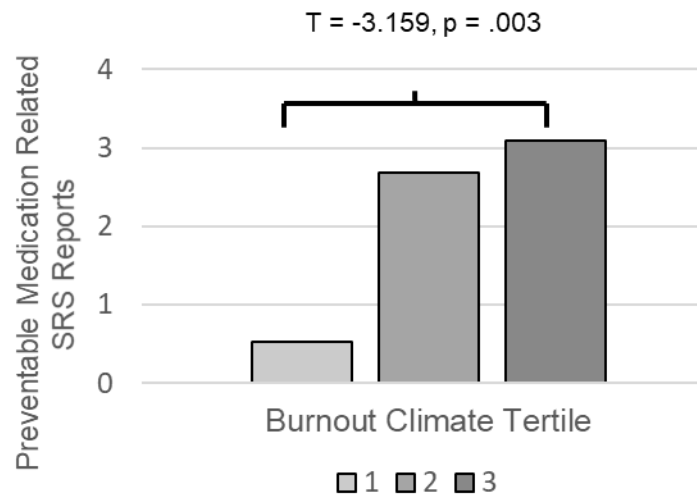
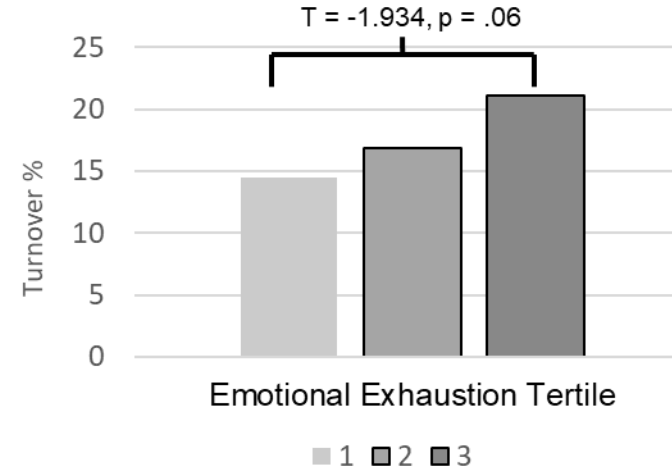
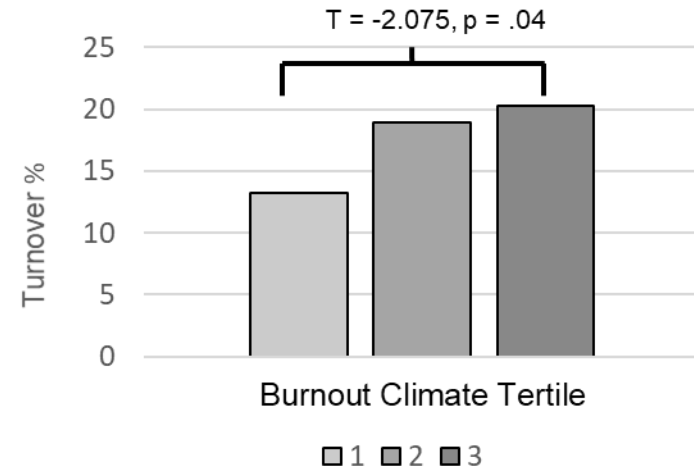


## Higher Standardized Mortality Ratios

Welp, Meier & Manser. Front Psychol. 2015 Jan 22;5:1573.



## Emotional Exhaustion and Burnout Climate's Associations with Turnover and Preventable Medication Related SRS Reports



1 = low exhaustion, 3 = high exhaustion

**Table 3. Spearman Correlations between HCW Well-being domains, Work Culture, and Operational Outcomes at the Work Setting Level**

	Burnout Climate SCORE	Emotional Exhaustion SCORE	Work-life Balance SCORE	Work Culture Press Ganey
<b>Turnover</b>	.35** N = 69	.26* N = 69	-.14 (NS) N = 69	-.06 (NS) N = 65
<b>Preventable Medication Related SRS</b>	.35** N = 68	.41*** N = 68	-.28* N = 68	-.15 (NS) N = 64





qualtrics@duke.edu

to me ▾

[bit.ly/yearofwellbeing](https://bit.ly/yearofwellbeing)



Hello,

Here is your feedback from the brief survey today:

**Your Score is: 95**

**out of 100 (higher is more burned out)**

**For context\*, the most burned out quartile ranges from 68-100**

**Second quartile ranges from 48-67.9**

**Third quartile ranges from 28-47.9**

**Fourth quartile is less than 28 (least burned out)**

\*This sample comes from 135,000 USA healthcare workers

**Severe Burnout is 100**

**Moderate Burnout is 75-99**

**Mild Burnout is 50-74**

**Resilient is 0-49**

How Am I  
Doing Today?



qualtrics@duke.edu

to me ▾

[bit.ly/yearofwellbeing](https://bit.ly/yearofwellbeing)



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**Mild Burnout is 50-74**

**Resilient is 0-49**

**03:00**

Christina Maslach, PhD  
author of the  
Maslach Burnout Inventory (MBI)  
Professor Emeritus, Berkeley



## MBI 3 Pillars of Burnout:

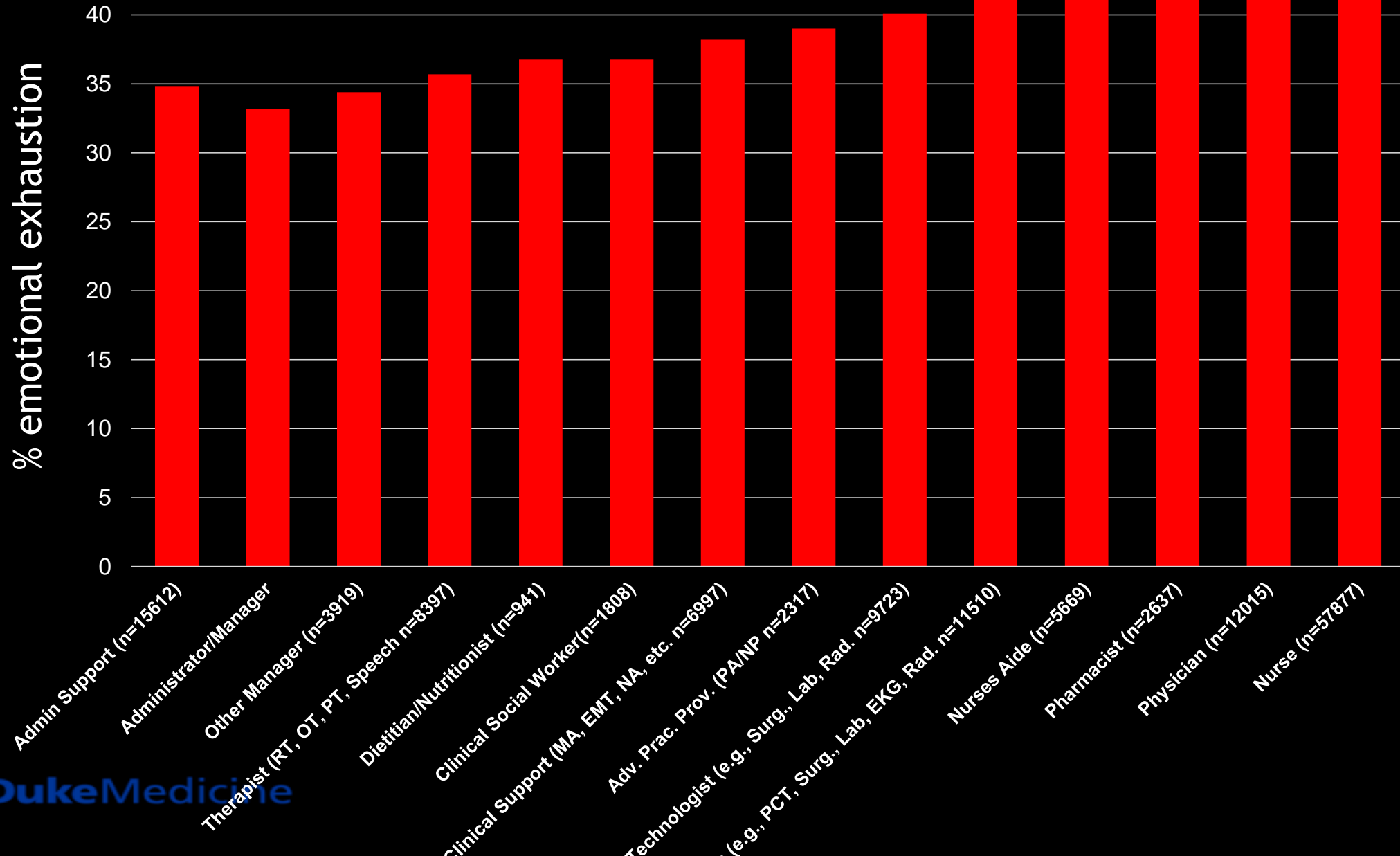
- **Emotional Exhaustion** (overwhelmed, drained, unable to meet demands)
- **Depersonalization** (callousness, seeing others as objects)
- **Inefficacy** (diminishes sense of accomplishment)



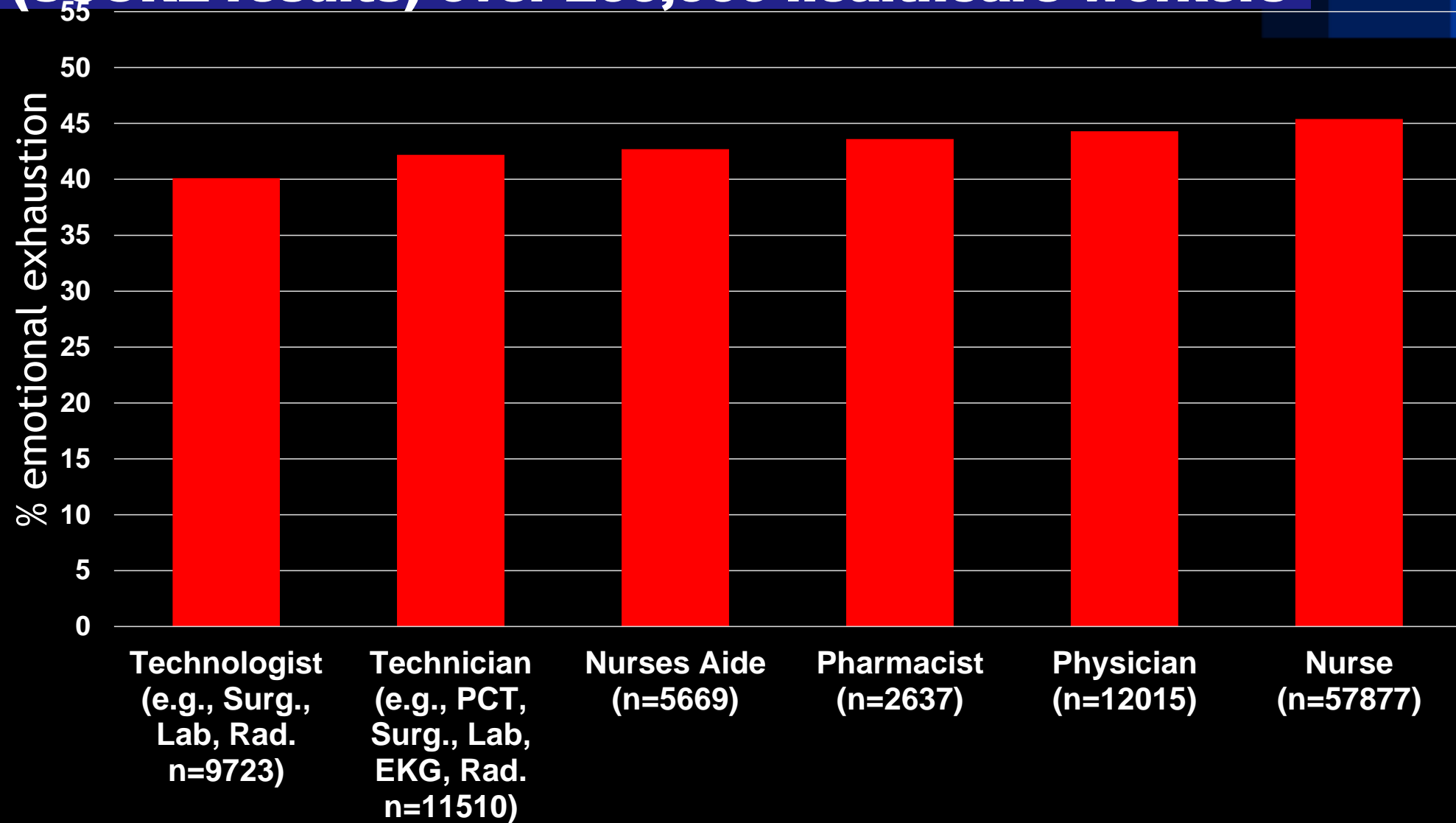
# Emotional Exhaustion Items:

- I feel fatigued when I get up in the morning and have to face another day on the job.
- I feel burned out from my work.
- I feel frustrated by my job.
- I feel I am working too hard on my job.
- Events at work affect my life in an emotionally unhealthy way.

# Burnout Scores by Role (SCORE results) over 200,000 healthcare workers



# Burnout Scores by Role (SCORE results) over 200,000 healthcare workers



What is burnout?



# What is burnout?

Burnout is what happens when it gets really hard to notice something funny, interesting, or amazing...



Burnout, at its core,  
is the impaired ability  
to experience  
positive emotion



Joy

Gratitude



Serenity



Interest

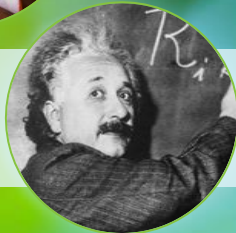


Hope



Pride

Amusement



Inspiration



Awe

Love







# NIH Public Access

## Author Manuscript

*Motiv Emot.* Author manuscript; available in PMC 2011 July 1.

Published in final edited form as:

*Motiv Emot.* 2000 December ; 24(4): 237–258.

## The Undoing Effect of Positive Emotions

Barbara L. Fredrickson<sup>1,3</sup>, Roberta A. Mancuso<sup>2</sup>, Christine Branigan<sup>2</sup>, and Michele M. Tugade<sup>2</sup>

<sup>1</sup>Department of Psychology, Women's Studies Program, and Research Center for Group Dynamics, University of Michigan, Michigan

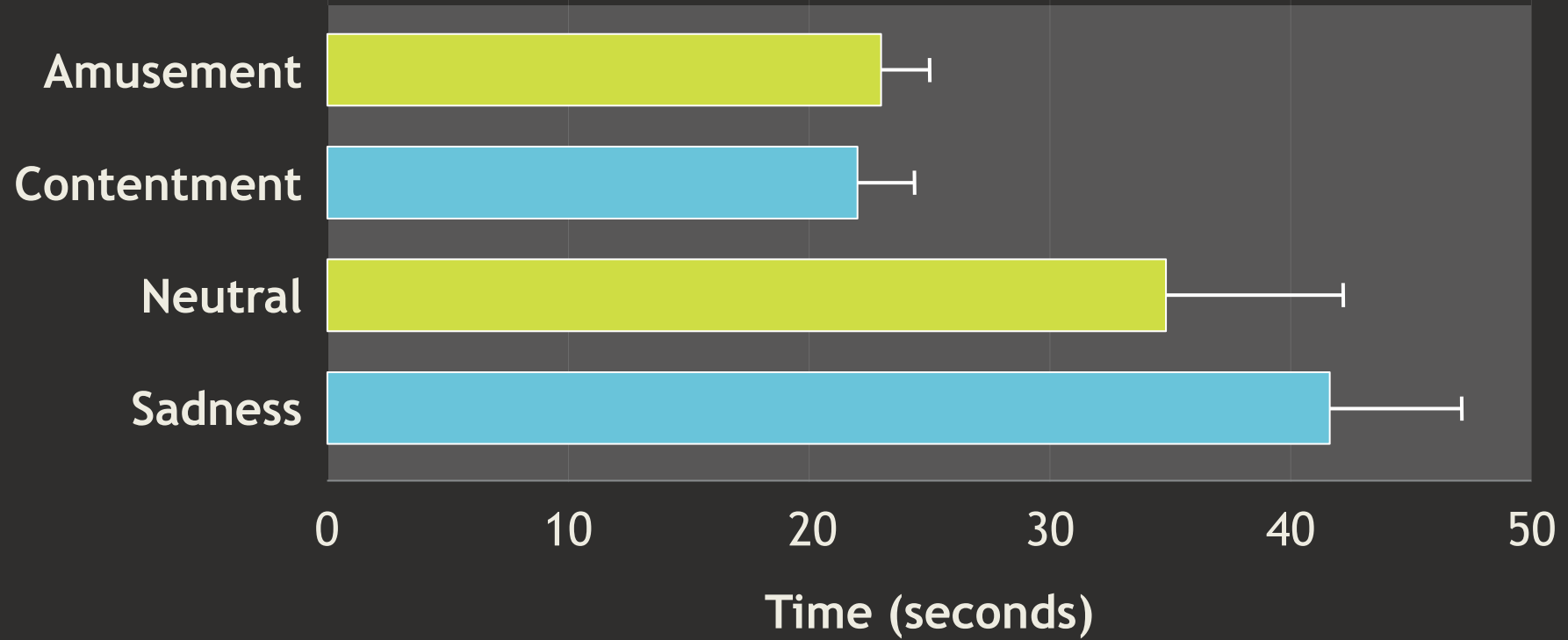
<sup>2</sup>Department of Psychology, University of Michigan, Michigan

### Abstract

Positive emotions are hypothesized to undo the cardiovascular aftereffects of negative emotions. Study 1 tests this undoing effect. Participants ( $n = 170$ ) experiencing anxiety-induced cardiovascular reactivity viewed a film that elicited (a) contentment, (b) amusement, (c) neutrality, or (d) sadness. Contentment-eliciting and amusing films produced faster cardiovascular recovery than neutral or sad films did. Participants in Study 2 ( $n = 185$ ) viewed these same films following a neutral state. Results disconfirm the alternative explanation that the undoing effect reflects a simple replacement process. Findings are contextualized by Fredrickson's broaden-and-build theory of positive emotions (B. L. Fredrickson, 1998).







MEANING  
AND  
PURPOSE

Through  
Positive  
Emotions...

Positive Emotions  
Recharge your  
Batteries...





**Psychology of Burnout**  
Your focus and reflections  
determine your reality

# Analogy:

- Noticing something about the world
- Commenting on it briefly through your mobile phone
- Seeing what other people commented on





# Psychological Language on Twitter Predicts County-Level Heart Disease Mortality



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Margaret L. Kern<sup>1,3</sup>, Gregory Park<sup>1</sup>, Darwin R. Labarthe<sup>4</sup>,  
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Psychological Science  
1–11

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## Twitter Topics Negatively Correlated With County-Level AHD Mortality

Skilled  
Occupations



$r = -.14$



$r = -.17$



$r = -.17$

Positive  
Experiences



$r = -.14$

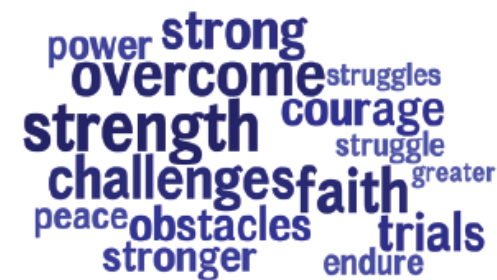


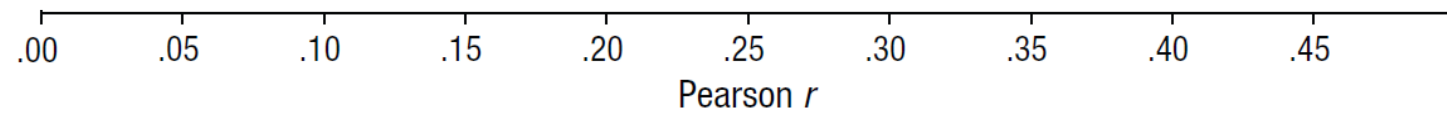
$r = -.15$



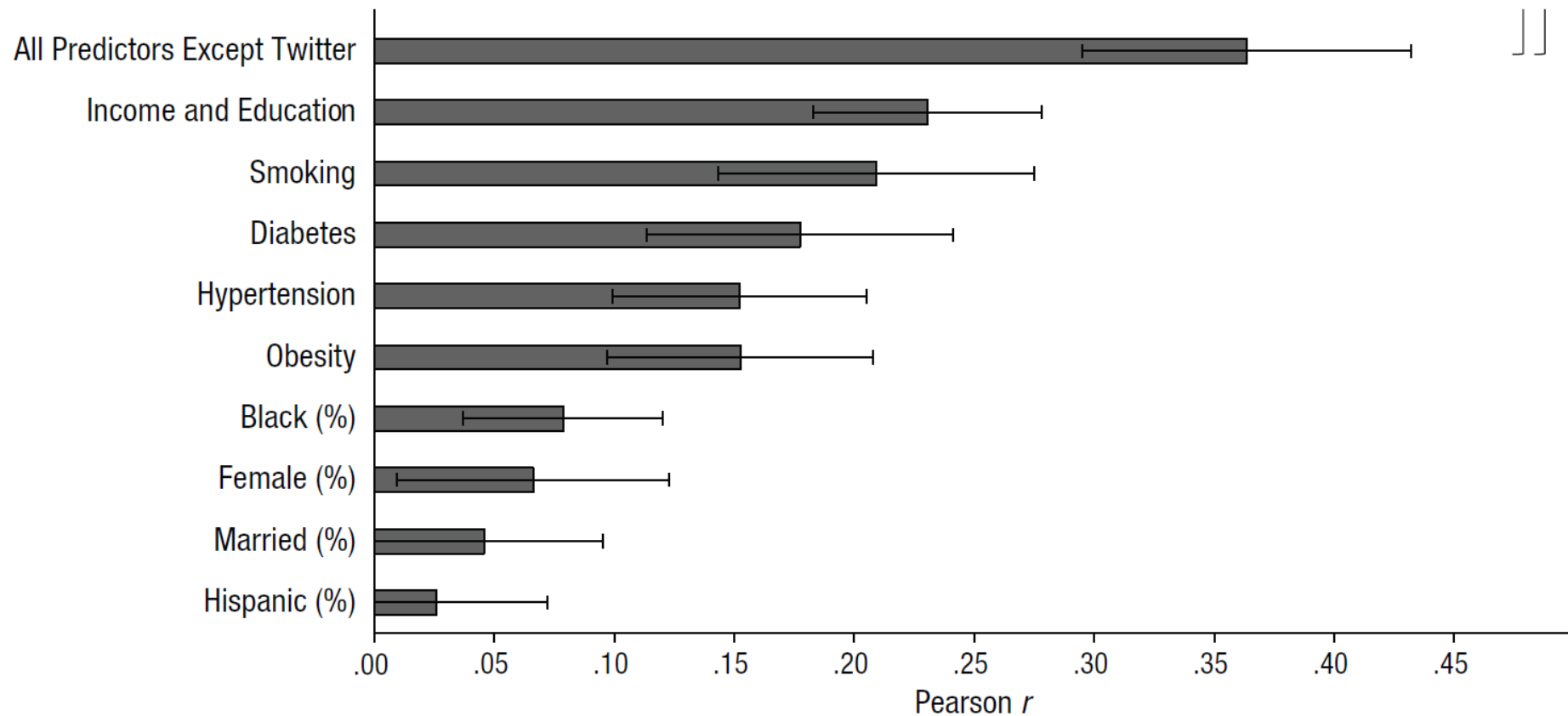
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Optimism



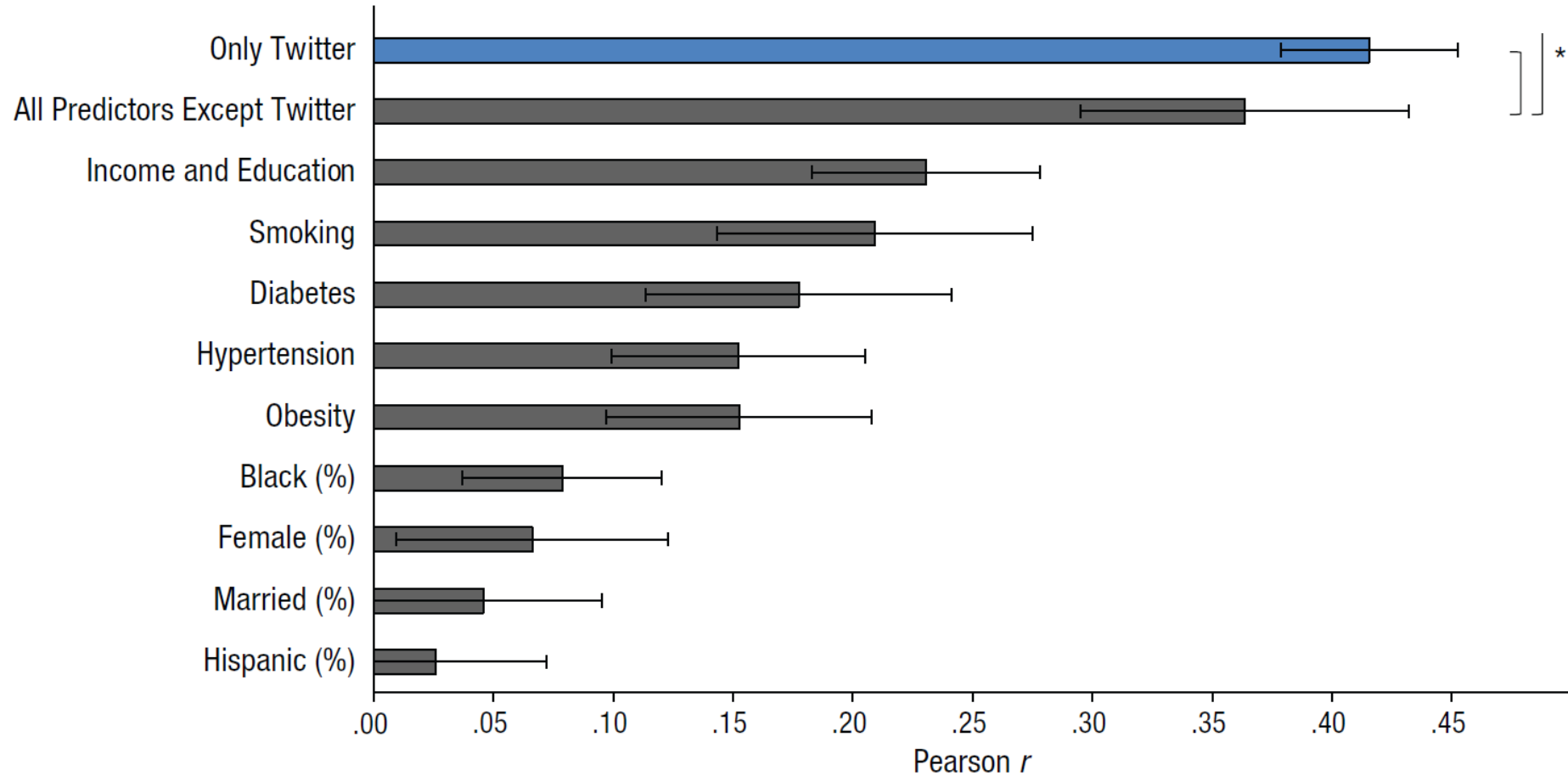


**Fig. 2.** Performance of models predicting age-adjusted mortality from atherosclerotic heart disease (AHD). For each model, the graph shows the correlation between predicted mortality and actual mortality reported by the Centers for Disease Control and Prevention. Predictions were based on Twitter language, socioeconomic status, health, and demographic variables singly and in combination. Higher values mean better prediction. The correlation values are averages obtained in a cross-validation process used to avoid distortion of accuracy due to chance (overfitting; for details, see the text). Error bars show 95% confidence intervals. Asterisks indicate significant differences between models ( $*p < .05$ ).

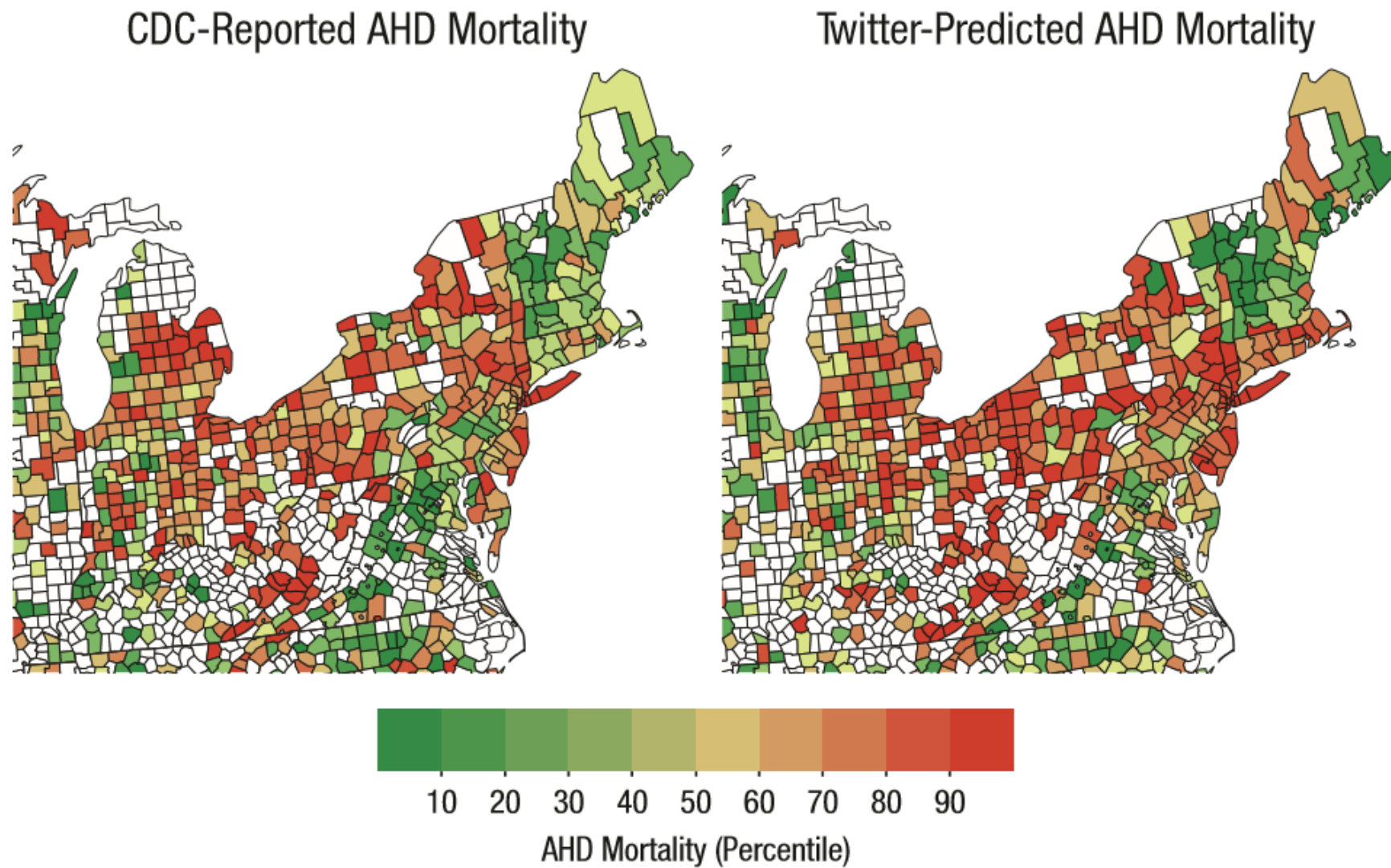


**Fig. 2.** Performance of models predicting age-adjusted mortality from atherosclerotic heart disease (AHD). For each model, the graph shows the correlation between predicted mortality and actual mortality reported by the Centers for Disease Control and Prevention. Predictions were based on Twitter language, socioeconomic status, health, and demographic variables singly and in combination. Higher values mean better prediction. The correlation values are averages obtained in a cross-validation process used to avoid distortion of accuracy due to chance (overfitting; for details, see the text). Error bars show 95% confidence intervals. Asterisks indicate significant differences between models ( $*p < .05$ ).

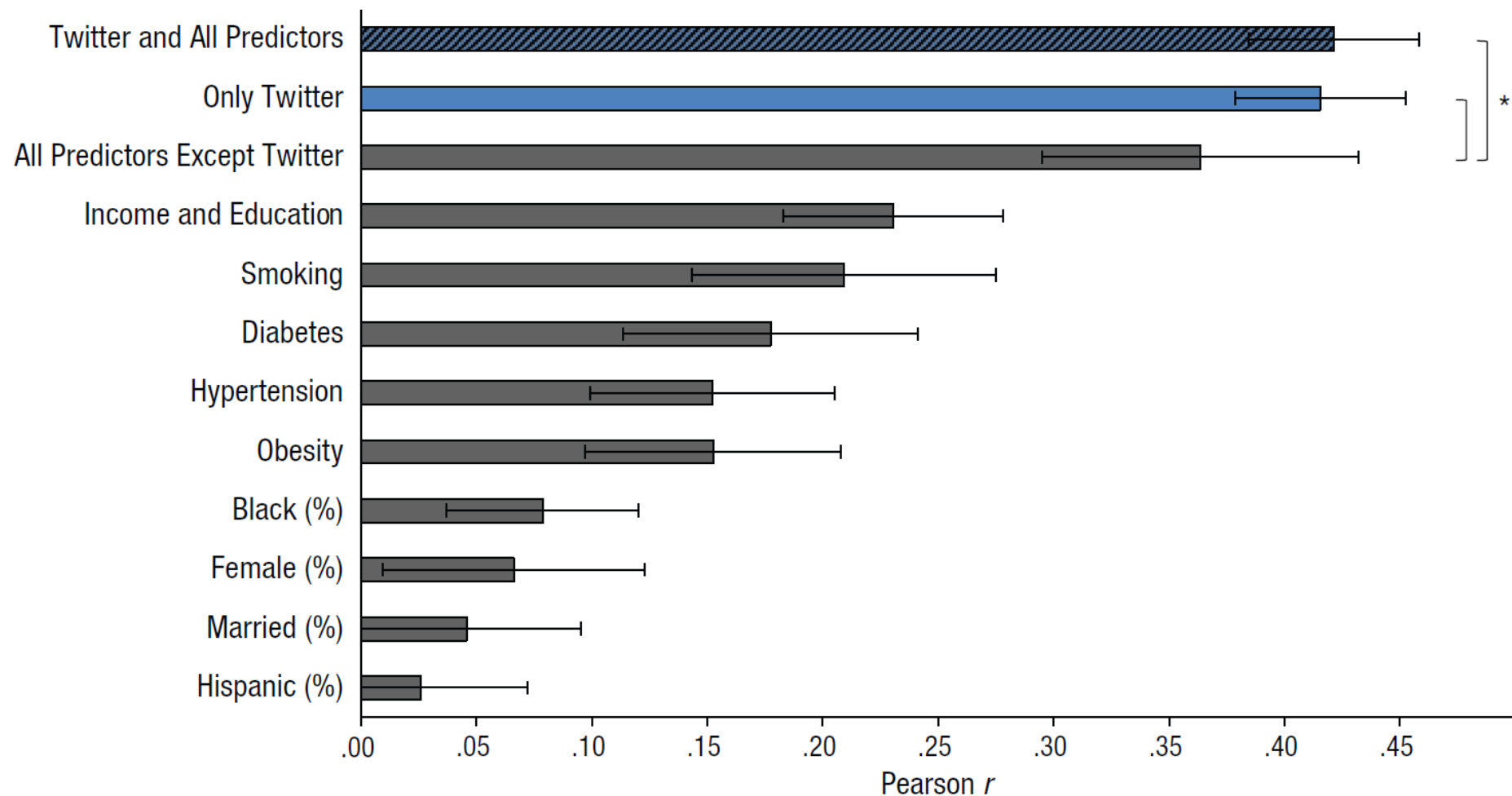




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**Fig. 3.** Map of counties in the northeastern United States showing age-adjusted mortality from atherosclerotic heart disease (AHD) as reported by the Centers for Disease Control and Prevention (CDC; left) and as estimated through the Twitter-language-only prediction model (right). The out-of-sample predictions shown were obtained from the cross-validation process described in the text. Counties for which reliable CDC or Twitter language data were unavailable are shown in white.



**Fig. 2.** Performance of models predicting age-adjusted mortality from atherosclerotic heart disease (AHD). For each model, the graph shows the correlation between predicted mortality and actual mortality reported by the Centers for Disease Control and Prevention. Predictions were based on Twitter language, socioeconomic status, health, and demographic variables singly and in combination. Higher values mean better prediction. The correlation values are averages obtained in a cross-validation process used to avoid distortion of accuracy due to chance (overfitting; for details, see the text). Error bars show 95% confidence intervals. Asterisks indicate significant differences between models ( $*p < .05$ ).



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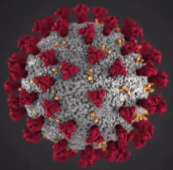
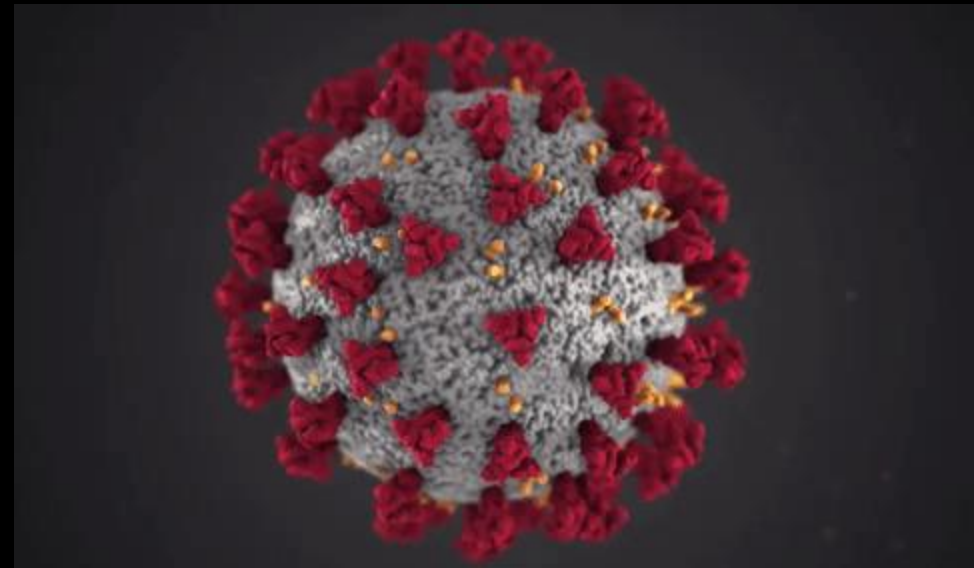
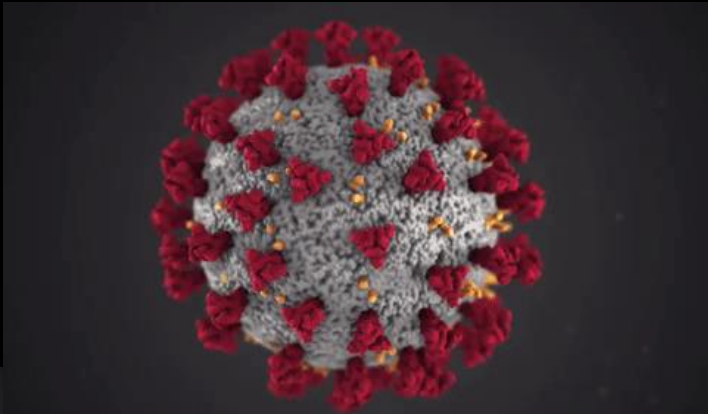
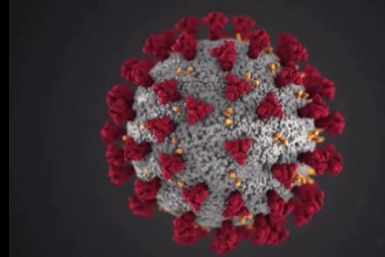
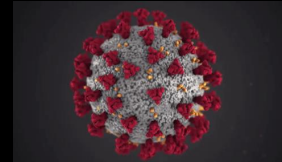
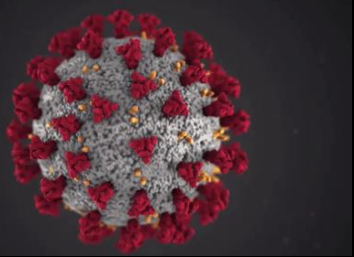
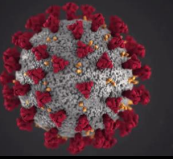
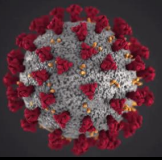


 **@JBryanSexton1**



Burnout, at its core,  
is the impaired ability  
to experience  
positive emotion

It seems like the world is  
on fire, how do I access  
positive emotions  
right now?





Joy

Gratitude



Serenity



Interest



Hope



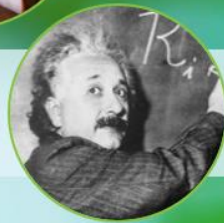
Pride



Amusement



Inspiration



Awe



Love





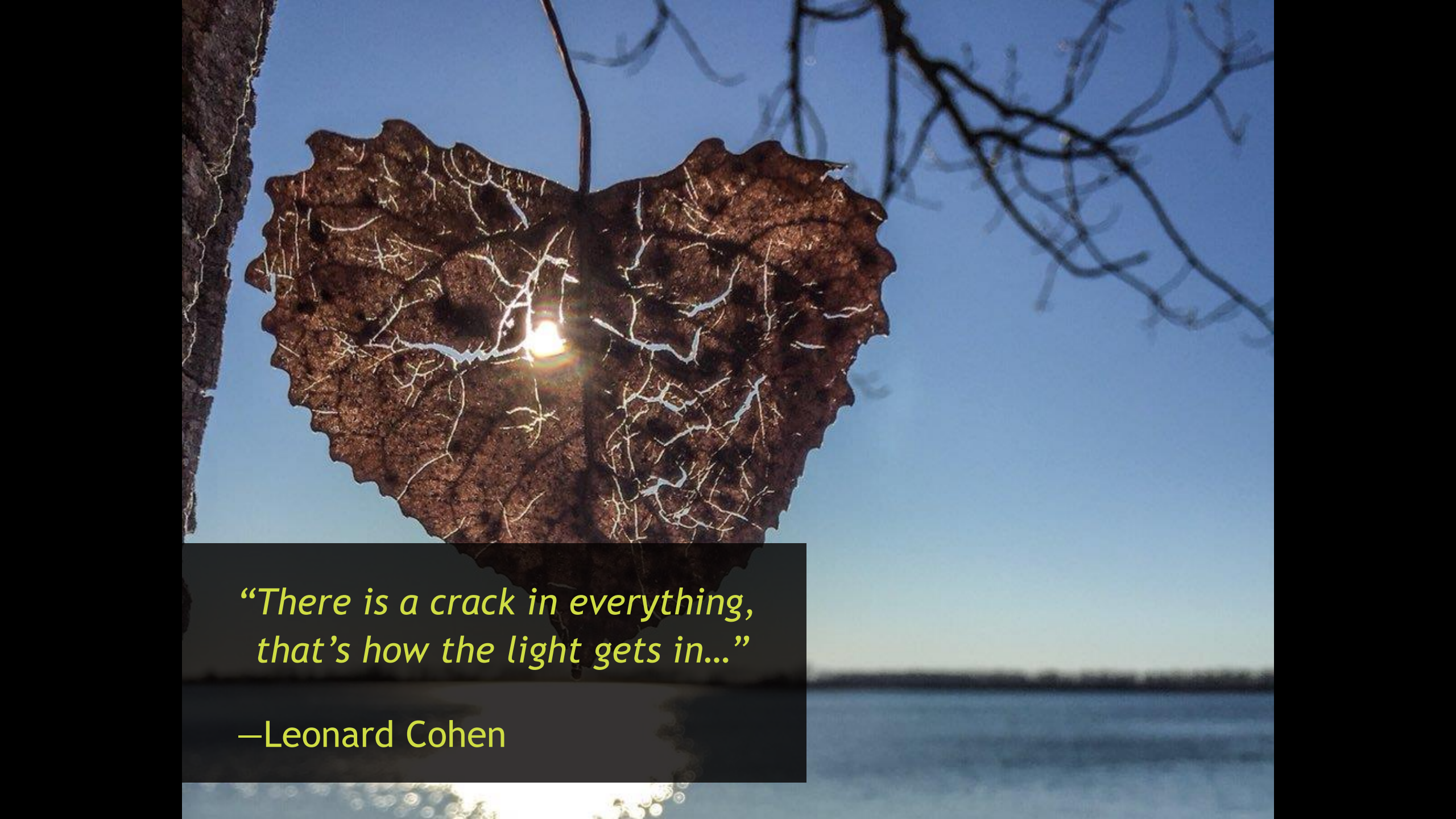


# HOPE THEORY



*“There is a crack in everything,  
that’s how the light gets in...”*

—Leonard Cohen



*“There is a crack in everything,  
that’s how the light gets in...”*

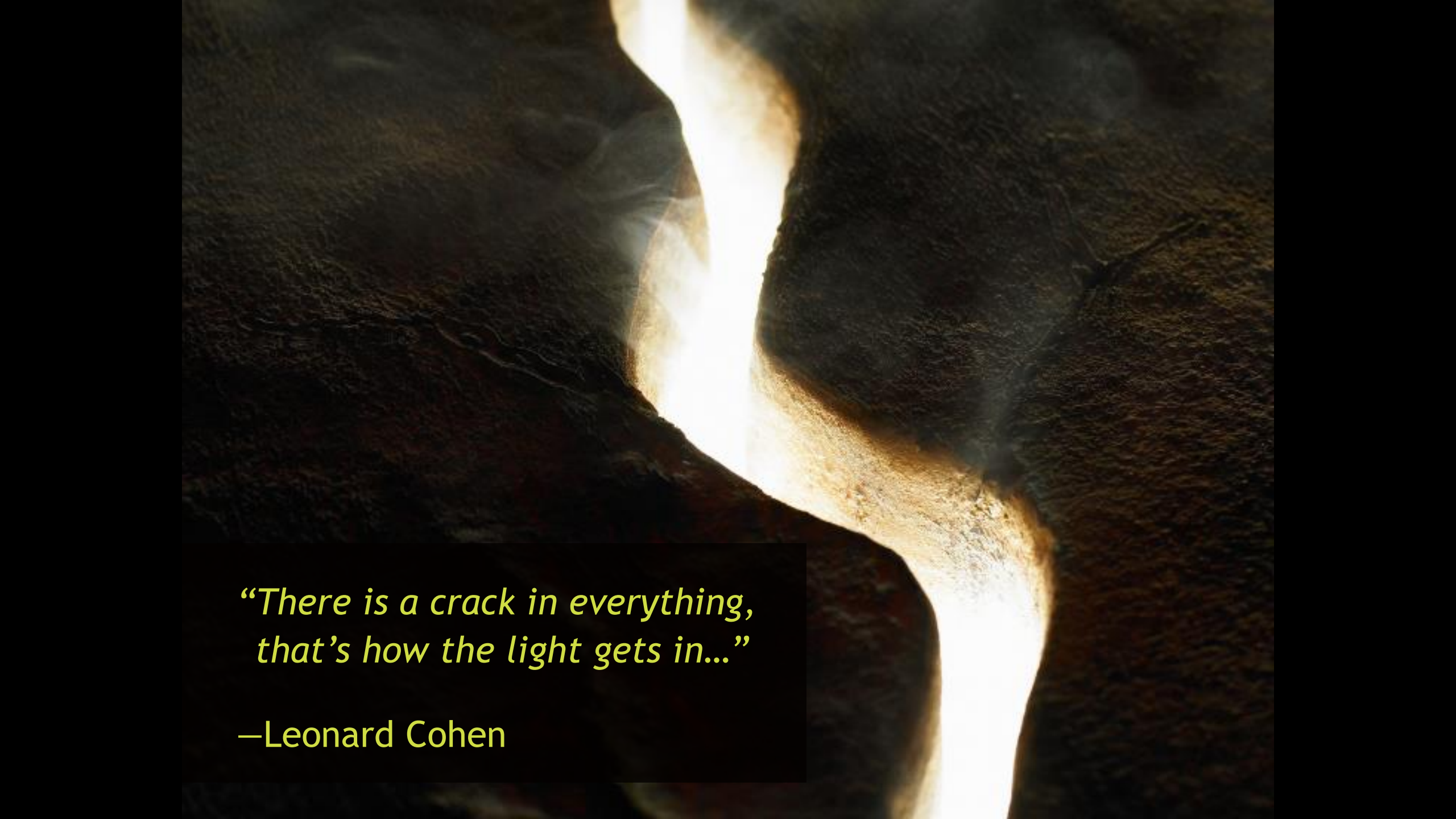
—Leonard Cohen

*“There is a crack in everything,  
that’s how the light gets in...”*

—Leonard Cohen








*“There is a crack in everything,  
that’s how the light gets in...”*

—Leonard Cohen



A photograph of a rustic wooden cabin interior. The walls are made of horizontal wooden logs. A large, open wooden door is on the right, and bright sunlight streams in from outside, creating long, sharp shadows and rays of light across the floor. The scene is warm and atmospheric.

*“There is a crack in everything,  
that’s how the light gets in...”*

—Leonard Cohen

The opposite of depression  
isn't happiness...

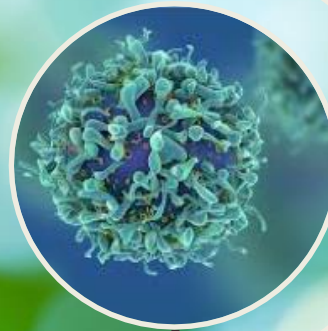
...it is hope





# Optimism is Associated with:

Higher T Cell  
Count/Immune  
Functioning



Less  
Chronic  
Pain



Lower  
Blood  
Pressure



Lower all-cause  
Mortality

# What is the evidence?



# Dispositional Optimism and All-Cause and Cardiovascular Mortality in a Prospective Cohort of Elderly Dutch Men and Women

Erik J. Giltay, MD, PhD; Johanna M. Geleijnse, PhD; Frans G. Zitman, MD, PhD; Tiny Hoekstra, PhD; Evert G. Schouten, MD, PhD

**Background:** Major depression is known to be related to higher cardiovascular mortality. However, epidemiological data regarding dispositional optimism in relation to mortality are scanty.

**Objective:** To test whether subjects who are optimistic live longer than those who are pessimistic.

**Design:** Our analysis formed part of a prospective population-based cohort study in the Netherlands (Arnhem Elderly Study).

**Setting:** General community.

**Participants:** Elderly subjects aged 65 to 85 years (999 men and women) completed the 30-item validated Dutch Scale of Subjective Well-being for Older Persons, with 5 subscales: health, self-respect, morale, optimism, and contacts. A total of 941 subjects (466 men and 475 women) had complete dispositional optimism data, and these subjects were divided into quartiles.

**Main Outcome Measure:** Number of deaths during the follow-up period.

**Results:** During the follow-up period of 9.1 years (1991-2001), there were 397 deaths. Compared with subjects with a high level of pessimism, those reporting a high level of optimism had an age- and sex-adjusted hazard ratio of 0.55 (95% confidence interval, 0.42-0.74; upper vs lower quartile) for all-cause mortality. For cardiovascular mortality, the hazard ratio was 0.23 (95% confidence interval, 0.10-0.55) when adjusted for age, sex, chronic disease, education, smoking, alcohol consumption, history of cardiovascular disease or hypertension, body mass index, and total cholesterol level. Protective trend relationships were observed between the level of optimism and all-cause and cardiovascular mortality ( $P < .001$  and  $P = .001$  for trend, respectively). Interaction with sex ( $P = .04$ ) supported a stronger protective effect of optimism in men than women for all-cause mortality but not for cardiovascular mortality.

**Conclusions:** Our results provide support for a graded and independent protective relationship between dispositional optimism and all-cause mortality in old age. Prevention of cardiovascular mortality accounted for much of the effect.

*Arch Gen Psychiatry.* 2004;61:1126-1135

MANY STUDIES HAVE consistently linked depression to an excess risk of cardiovascular and all-cause mortality,<sup>1-7</sup> whereas relationships with positive aspects of personality have received less attention. The personality trait of optimism for a given individual is relatively stable across time and has been related to better health outcomes. However, optimism has been conceptualized in 2 rather different ways; that is, as an explanatory-style measure by Peterson et al<sup>8-10</sup> (ie, the general belief that the causes of bad events are not one's own fault, are temporary, and are confined to the present circumstances rather than attributable to internal, stable, and/or global factors) and as dispositional optimism by Scheier et al<sup>11-14</sup>

(ie, generalized outcome expectancies that good things rather than bad things will happen). On the one hand, evidence suggests that explanatory-style optimism has been associated with better health and lower morbidity and mortality.<sup>9,10,15-18</sup> Explanatory-style optimism was associated with a lower incidence of coronary heart disease in cohort studies.<sup>16,18</sup> On the other hand, dispositional optimism has been linked to medical staff ratings of better physical health after surgery for heart transplantation,<sup>19</sup> a more rapid recovery from coronary artery bypass surgery,<sup>13</sup> and a lower rate of rehospitalization after coronary artery bypass grafting.<sup>14</sup> The related score for positive life orientation was linked to physicians' and patients' ratings of good recovery after hospitalization for myocardial infarction.<sup>20</sup> Another study found that

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## Optimism is associated with exceptional longevity in 2 epidemiologic cohorts of men and women

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Edited by Bruce S. McEwen, The Rockefeller University, New York, NY, and approved July 30, 2019 (received for review January 18, 2019)

Most research on exceptional longevity has investigated biomedical factors associated with survival, but recent work suggests nonbiological factors are also important. Thus, we tested whether higher optimism was associated with longer life span and greater likelihood of exceptional longevity. Data are from 2 cohorts, women from the Nurses' Health Study (NHS) and men from the Veterans Affairs Normative Aging Study (NAS), with follow-up of 10 y (2004 to 2014) and 30 y (1986 to 2016), respectively. Optimism was assessed using the Life Orientation Test-Revised in NHS and the Revised Optimism-Pessimism Scale from the Minnesota Multiphasic Personality Inventory-2 in NAS. Exceptional longevity was defined as survival to age 85 or older. Primary analyses used accelerated failure time models to assess differences in life span associated with optimism; models adjusted for demographic confounders and health conditions, and subsequently considered the role of health behaviors. Further analyses used logistic regression to evaluate the likelihood of exceptional longevity. In both sexes, we found a dose-dependent association of higher optimism levels at baseline with increased longevity ( $P$  trend  $< 0.01$ ). For example, adjusting for demographics and health conditions, women in the highest versus lowest optimism quartile had 14.9% (95% confidence interval, 11.9 to 18.0) longer life span. Findings were similar in men. Participants with highest versus lowest optimism levels had 1.5 (women) and 1.7 (men) greater odds of surviving to age 85; these relationships were maintained after adjusting for health behaviors. Given work indicating optimism is modifiable, these findings suggest optimism may provide a valuable target to test for strategies to promote longevity.

optimism | longevity | aging | psychological well-being | longitudinal study

As life span has increased in industrialized countries, exceptional longevity—commonly defined as survival to 85 y (1)—has become less rare. Research across diverse organisms consistently demonstrates that increases in life span are often accompanied by delayed morbidity (2). Therefore, factors that promote exceptional longevity are highly relevant to public health as they may extend the duration of good health (also known as “health span”; ref. 3). Research on exceptional longevity has largely focused on identifying biomedical factors (e.g., genetic variants) associated with increased survival, but emerging evidence suggests nongenetic factors also contribute. Recent epidemiologic studies have identified psychosocial assets such as optimism as potential predictors of longer life, based on findings linking higher optimism to reduced risk of developing chronic diseases of aging and premature mortality (4–10).

Importantly, psychosocial assets are associated with health outcomes above and beyond their role in signaling the absence of poor psychosocial functioning (11), such as depression (4), and independent of sociodemographic confounders, health conditions, and health behaviors (12, 13). Identifying diverse positive

assets that promote health across the life course, particularly in aging, could contribute to optimal functioning and improved health. Among psychosocial factors that appear to be potential health assets (e.g., social integration; ref. 14), optimism has some of the strongest and most consistent associations with a wide range of health outcomes, including reduced risk of cardiovascular events, lung function decline, and premature mortality (4–10), and associations that are independent of other psychosocial factors such as depression, anxiety, or anger (12). Investigators have speculated that optimism may facilitate healthier biobehavioral processes, and ultimately longevity, because optimism directly contributes to how goals are translated into behaviors (15). Optimism is ~25% heritable but is also shaped by social structural factors and can be learned, as demonstrated in experimental research (e.g., refs. 16 and 17).

Higher levels of optimism have been linked to reduced risk of premature mortality (4); however, researchers have not considered the association between optimism and achievement of exceptional longevity (18–20). Although no standard definition for exceptional longevity has been established, it has been defined as surviving to older age, and age 85 is a commonly used cutoff (1, 21) as it is well beyond the average life expectancy of individuals born

### Significance

Optimism is a psychological attribute characterized as the general expectation that good things will happen, or the belief that the future will be favorable because one can control important outcomes. Previous studies reported that more optimistic individuals are less likely to suffer from chronic diseases and die prematurely. Our results further suggest that optimism is specifically related to 11 to 15% longer life span, on average, and to greater odds of achieving “exceptional longevity,” that is, living to the age of 85 or beyond. These relations were independent of socioeconomic status, health conditions, depression, social integration, and health behaviors (e.g., smoking, diet, and alcohol use). Overall, findings suggest optimism may be an important psychosocial resource for extending life span in older adults.

**Author contributions:** F.G. and L.D.K. designed research; L.O.L., P.J., E.S.Z., E.S.K., and C.T.-F. performed research; L.O.L., P.J., and E.S.Z. analyzed data; and L.O.L., P.J., E.S.Z., E.S.K., C.T.-F., A.S., F.G., and L.D.K. wrote the paper.

**Conflict of interest statement:** E.S.K. has worked as a consultant with AARP and United Health Group.

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# Optimism, Cynical Hostility, and Incident Coronary Heart Disease and Mortality in the Women's Health Initiative

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JoAnn E. Manson, MD, DrPH; Jennifer G. Robinson, MD, MPH; Milagros C. Rosal, PhD;  
Greg J. Siegle, PhD; Karen A. Matthews, PhD

**Background**—Trait optimism (positive future expectations) and cynical, hostile attitudes toward others have not been studied together in relation to incident coronary heart disease (CHD) and mortality in postmenopausal women.

**Methods and Results**—Participants were 97 253 women (89 259 white, 7994 black) from the Women's Health Initiative who were free of cancer and cardiovascular disease at study entry. Optimism was assessed by the Life Orientation Test–Revised and cynical hostility by the cynicism subscale of the Cook Medley Questionnaire. Cox proportional hazard models produced adjusted hazard ratios (AHRs) for incident CHD (myocardial infarction, angina, percutaneous coronary angioplasty, or coronary artery bypass surgery) and total mortality (CHD, cardiovascular disease, or cancer related) over  $\approx 8$  years. Optimists (top versus bottom quartile ["pessimists"]) had lower age-adjusted rates (per 10 000) of CHD (43 versus 60) and total mortality (46 versus 63). The most cynical, hostile women (top versus bottom quartile) had higher rates of CHD (56 versus 44) and total mortality (63 versus 46). Optimists (versus pessimists) had a lower hazard of CHD (AHR 0.91, 95% CI 0.83 to 0.99), CHD-related mortality (AHR 0.70, 95% CI 0.55 to 0.90), cancer-related mortality (blacks only; AHR 0.56, 95% CI 0.35 to 0.88), and total mortality (AHR 0.86, 95% CI 0.79 to 0.93). Most (versus least) cynical, hostile women had a higher hazard of cancer-related mortality (AHR 1.23, 95% CI 1.09 to 1.40) and total mortality (AHR 1.16, 95% CI 1.07 to 1.27; this effect was pronounced in blacks). Effects of optimism and cynical hostility were independent.

**Conclusions**—Optimism and cynical hostility are independently associated with important health outcomes in black and white women. Future research should examine whether interventions designed to change attitudes would lead to altered risk. (*Circulation*. 2009;120:656-662.)

**Key Words:** cardiovascular diseases ■ mortality ■ women ■ hostility ■ optimism

Evidence suggests that psychological factors influence risk for cardiovascular disease (CVD) morbidity and mortality. Persistent negative affect, such as depression, anxiety, or anger, and cynical, hostile attitudes toward others predict CVD.<sup>1-4</sup> Recently, research has investigated the health effects of low levels of positive attributes.<sup>5</sup> One attribute that has received particular attention is dispositional optimism, defined as the general expectation that good things, rather than bad things, will happen in the future.<sup>6</sup> Evidence shows, for example, that optimistic individuals have a lower risk of rehospitalization after bypass surgery<sup>7</sup> and are at reduced risk of mortality.<sup>8,9</sup>

## Clinical Perspective on p 662

Important gaps remain in understanding the role of psychosocial factors. These gaps include whether the associations between optimism and cynical hostility with CVD and

mortality vary by race or ethnicity, because most of the evidence is based on white participants. Second, optimism and cynical hostility are inversely related<sup>10</sup> and have not been examined together extensively. Thus, it is not clear whether the effects are mirror images or whether they are independent of one another. Third, the link between incident coronary heart disease (CHD) and cynical hostility has been studied,<sup>11</sup> but not the link with optimism. The Women's Health Initiative<sup>12</sup> affords the largest sample to date to study health associations of optimism and cynical hostility prospectively in postmenopausal women. Our objectives were to determine the association of optimism and cynical hostility with a wide spectrum of cardiovascular risk factors, to assess the combined and independent influences of optimism and cynical hostility on incident CHD and mortality across 8 years of follow-up, and to evaluate associations by race/ethnicity.

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## Three Good Tools: Positively reflecting backwards and forwards is associated with robust improvements in well-being across three distinct interventions

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### ABSTRACT

Burnout in healthcare workers (HCWs) is costly, consequential, and alarmingly high. Many HCWs report not having enough time or opportunities to engage in self-care. Brief, engaging, evidence-based tools have unique potential to alleviate burnout and improve well-being. Three prospective cohort studies tested the efficacy of web-based interventions: Three Good Things ( $n = 275$ ), Gratitude Letter ( $n = 123$ ), and the Looking Forward Tool ( $n = 123$ ). Metrics were emotional exhaustion, depression, subjective happiness, work-life balance, emotional thriving, and emotional recovery. Across all studies, participants reported improvements in all metrics between baseline and post assessments, with two exceptions in study 1 (emotional thriving and happiness at 6 and 12-month post) and study 3 (optimism and emotional thriving at day 7). The Three Good Things, Gratitude Letter, and Looking Forward tools appear promising interventions for the issue of HCW burnout.

### ARTICLE HISTORY

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### KEYWORDS

Positive psychology  
Interventions; Three Good  
Things; gratitude; hope;  
burnout; healthcare

## Introduction

Globally, over half a billion people struggle with anxiety, depression or both, and the rates of these and other mental disorders are on the rise (World Health Organization, 2017). A recent study by the World Health Organization found that such disorders cost the global economy \$1 trillion in lost productivity each year (World Health Organization, 2017). The U.S. Department of Health and Human Services estimates that annually, one out of five adults have a mental illness, and less than half of them received mental health services (Hedden et al., 2015). The prevalence of suffering is high, and the utilization of resources is not keeping pace. This is particularly pronounced for healthcare workers (HCWs), who put themselves in sufferings' way at great personal cost to their own well-being (e.g. Mata et al., 2015; Shanafelt et al., 2015).

Roughly a third to a half of HCWs meet the criteria for burnout (Poghosyan et al., 2010; Shanafelt et al., 2019), and rates of burnout continue to climb. We know that HCW burnout is common (Poghosyan et al., 2010; Shanafelt et al., 2015), consequential to patients (i.e. mortality and healthcare acquired infection; Aiken et al., 2002; Cimiotti et al., 2012), interferes with the safe delivery of patient care (Hall et al., 2016), and the ability to engage in

quality improvement efforts (Adair et al., 2018). We also know burnout is bad for HCWs, with consequences ranging from marital problems (Kumar, 2016) to shorter life-span (Ahola et al., 2010). Moreover, recent evidence suggests burnout and problems with work-life balance are socially contagious (Petitta et al., 2017; Schwartz et al., 2019). In other words, eating lunch, taking breaks, and leaving work on time, as well as your burnout level, are variables that are associated with the behavior and well-being of your colleagues.

## Positive emotion

Just as depression and anxiety have been linked to lower levels of positive emotions (Fredrickson, 2001; Gloria & Steinhart, 2016), the same has been found for burnout (Gong, Schooler, Yong, & Mingda, 2018). Research has consistently shown that experiencing positive emotion is a causal link in the chain of feeling greater purpose (Fredrickson et al., 2008) and recovery after emotional upheavals (Fredrickson et al., 2000). Positive emotions, like hope, serve as little engines that effectively recharge our depleted batteries (Fredrickson & Joiner, 2002; Gong & Li, 2017). In controlled experiments, positive emotions

**CONTACT** Kathryn C. Adair [kathryn.c.adair@duke.edu](mailto:kathryn.c.adair@duke.edu)

Both Dr. Adair and Dr. Sexton developed the tools, conducted the studies, performed analyses, and contributed to the write-up. Dr. Kennedy contributed to the development of the Looking Forward tool and the write up.

Supplemental data for this article can be accessed here.

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Uncontrollable  
bad events

Perceived lack  
of control

Generalized  
helpless  
behavior

NATIONAL BESTSELLER

# LEARNED OPTIMISM

How to Change  
Your Mind and  
Your Life

WITH A NEW PREFACE

MARTIN E. P. SELIGMAN, Ph.D.

Author of *Authentic Happiness*

"Vaulted me out of my funk. . . . So, fellow moderate pessimists, go  
buy this book." —Marian Sandmaier, *The New York Times Book Review*

The good news is that hope is a muscle that we can strengthen...



NATIONAL BESTSELLER

# LEARNED OPTIMISM

How to Change  
Your Mind and  
Your Life

WITH A NEW PREFACE

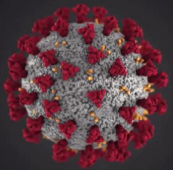
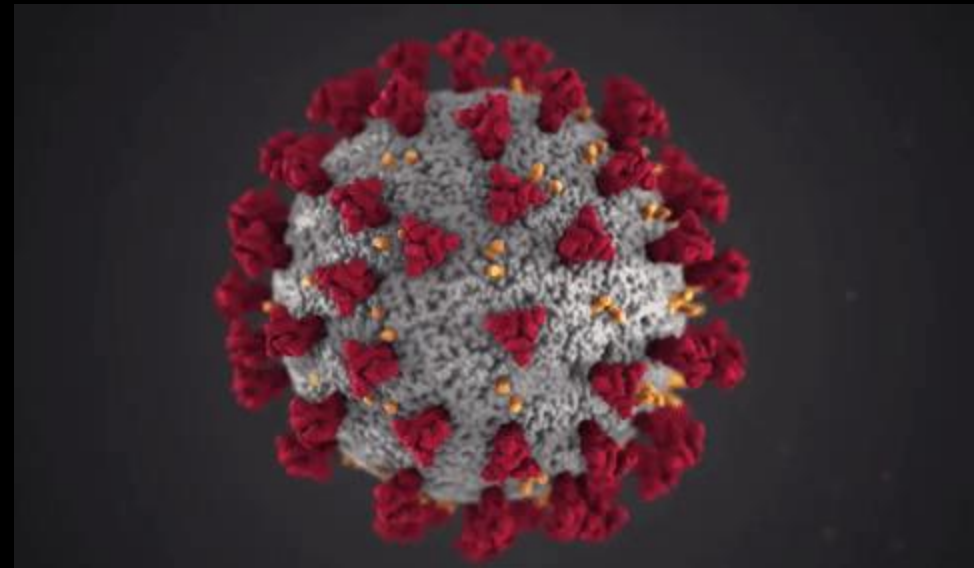
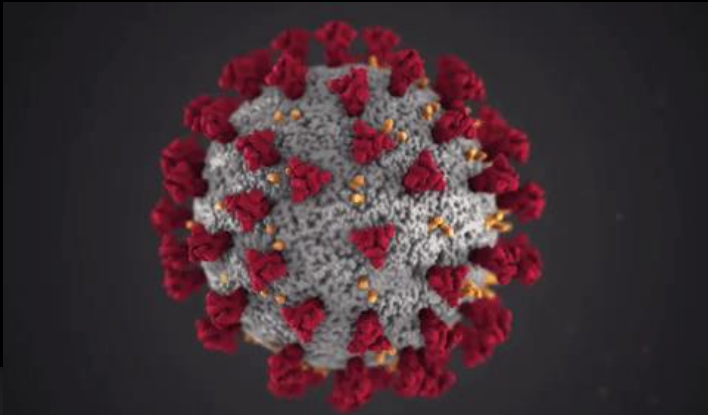
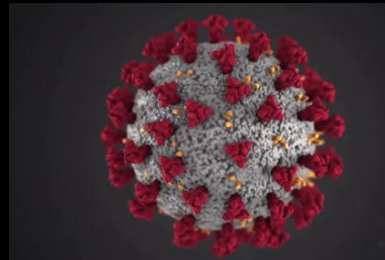
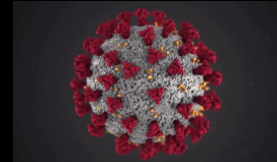
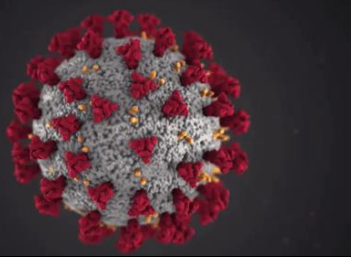
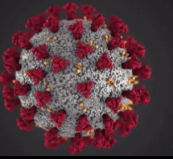
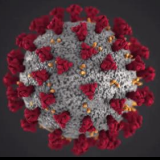
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"Vaulted me out of my funk. . . . So, fellow moderate pessimists, go buy this book." —Marian Sandmaier, *The New York Times Book Review*



How do you  
access hope  
right now?



**Does anyone have a mobile phone?**



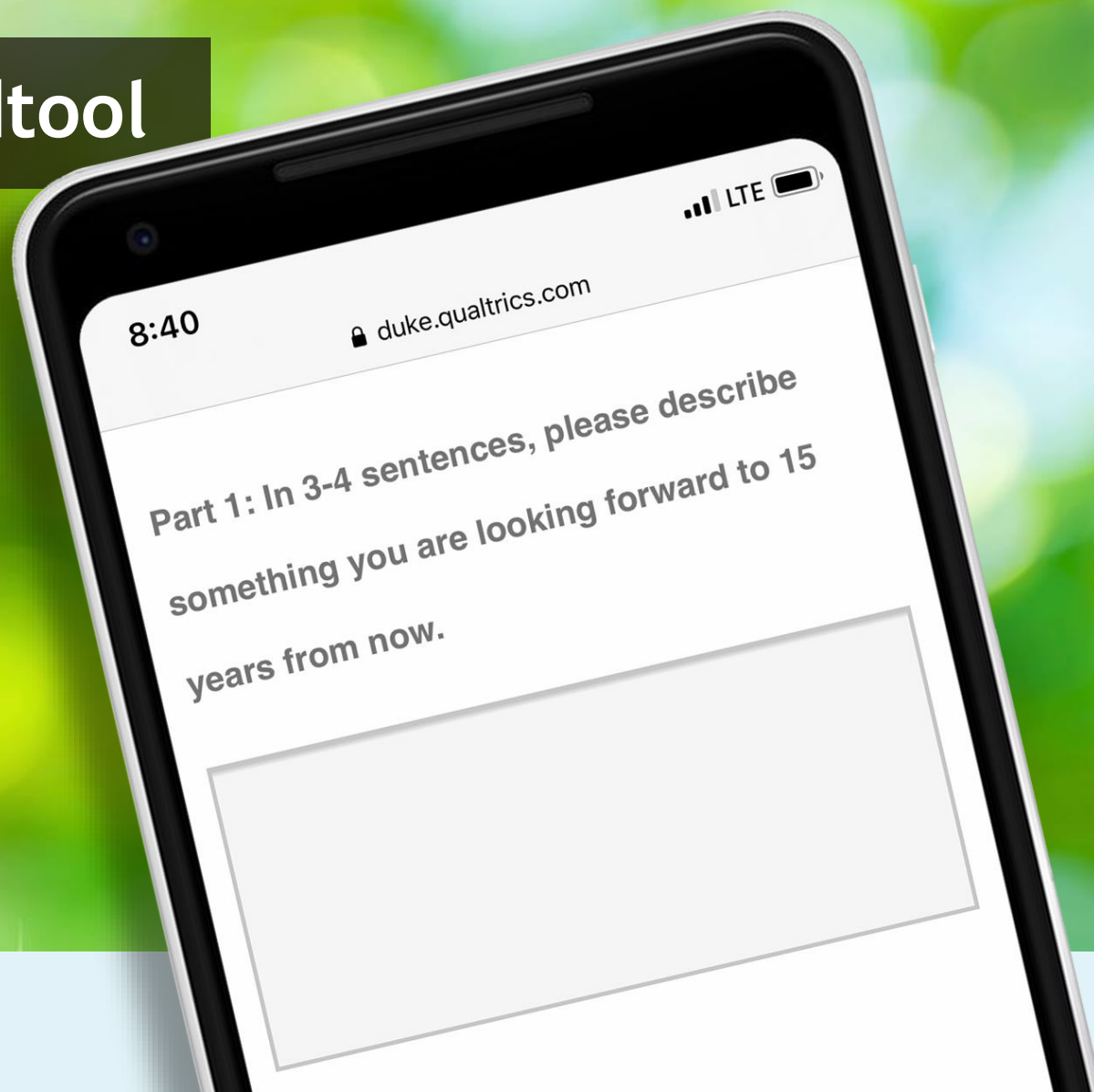
Please use your mobile browser to go to:

[bit.ly/fwdtool](https://bit.ly/fwdtool)

...or hold your phone camera over QR code



[bit.ly/fwdtool](https://bit.ly/fwdtool)

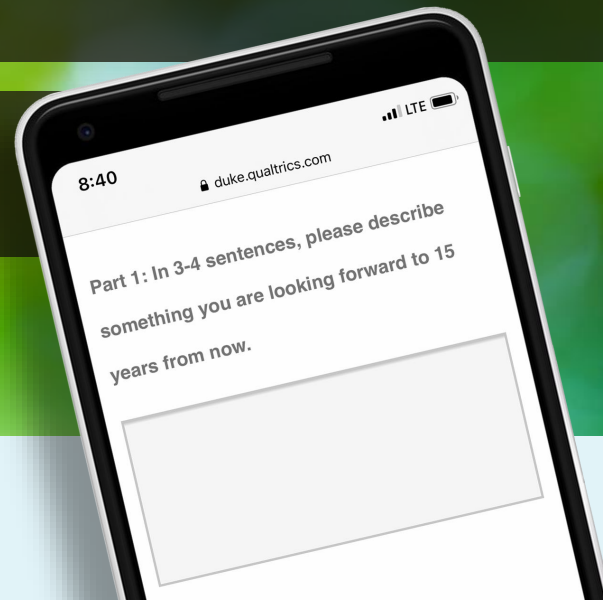




# Enroll for a week of brief looking-forward tasks:

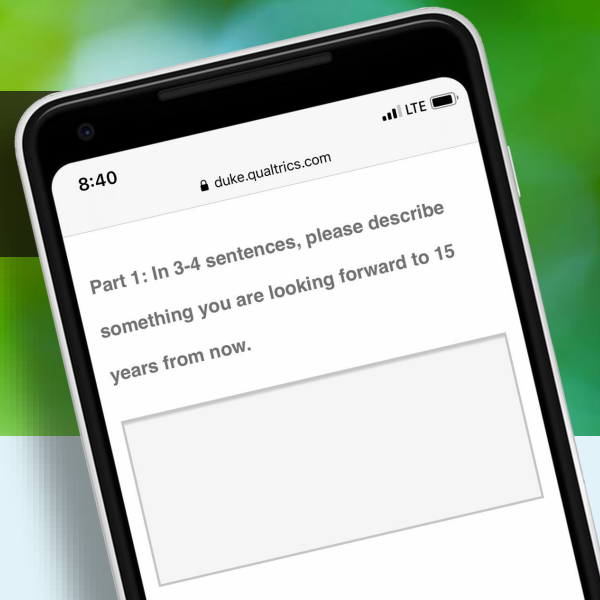
- Day 1
- Day 2
- Day 3
- Day 4 follow-up
- Day 5
- Day 6
- Day 7
- Day 8 follow-up

[bit.ly/fwdtool](https://bit.ly/fwdtool)



- Time to enroll:  
2-5 minutes
- Time each evening:  
2 minutes
- Time to finish:  
8 days

[bit.ly/fwdtool](https://bit.ly/fwdtool)



I am actually looking forward to a career and a home. I want to come home to my partner and make dinner while music plays. I want to feel fulfilled with my job and feel I'm making a difference in others' lives.

I am excited about seeing what kind of people my three kids grow up to be. I can't wait to see our farm/ garden. I look forward to seeing my wife and what new adventures we have I store for each other.

I am excited to graduate from college because I feel like I will have an opportunity to pursue my passions. I hope to attend law school and then begin a career. In ten years, I want to be practicing law in a way that makes a positive impact. This dream gives me hope.

I am excited to see my children graduate college and high school. I hope to develop a hobby that will fulfill my interest. I would like to travel more with my husband.

I am excited to watch my children grow into young adults and am hopeful that they will be strong, caring, gentle leaders in their own special way. Above all, I hope that they love the Lord with all of their heart, soul and mind and rely fully on him for direction setting and true North. In addition, I look forward to rediscovering my husband and reconnecting on a new level as our children will demand a little less of us in 10 years. Cheers to a bright future!

[bit.ly/fwdtool](https://bit.ly/fwdtool)

I am getting married soon so I am looking forward to the wedding and future marriage. I am excited to build a life



# bit.ly/fwdtool

Time to complete: mean of 2.20 minutes, median of 1.75 minutes, and a mode of 1.20 minutes.

81%

agreed “I enjoyed this Looking Forward tool.”

94%

agreed “The Looking Forward tool was relatively straightforward.”

73%

agreed “I noticed that it got easier to use the tool over time.”

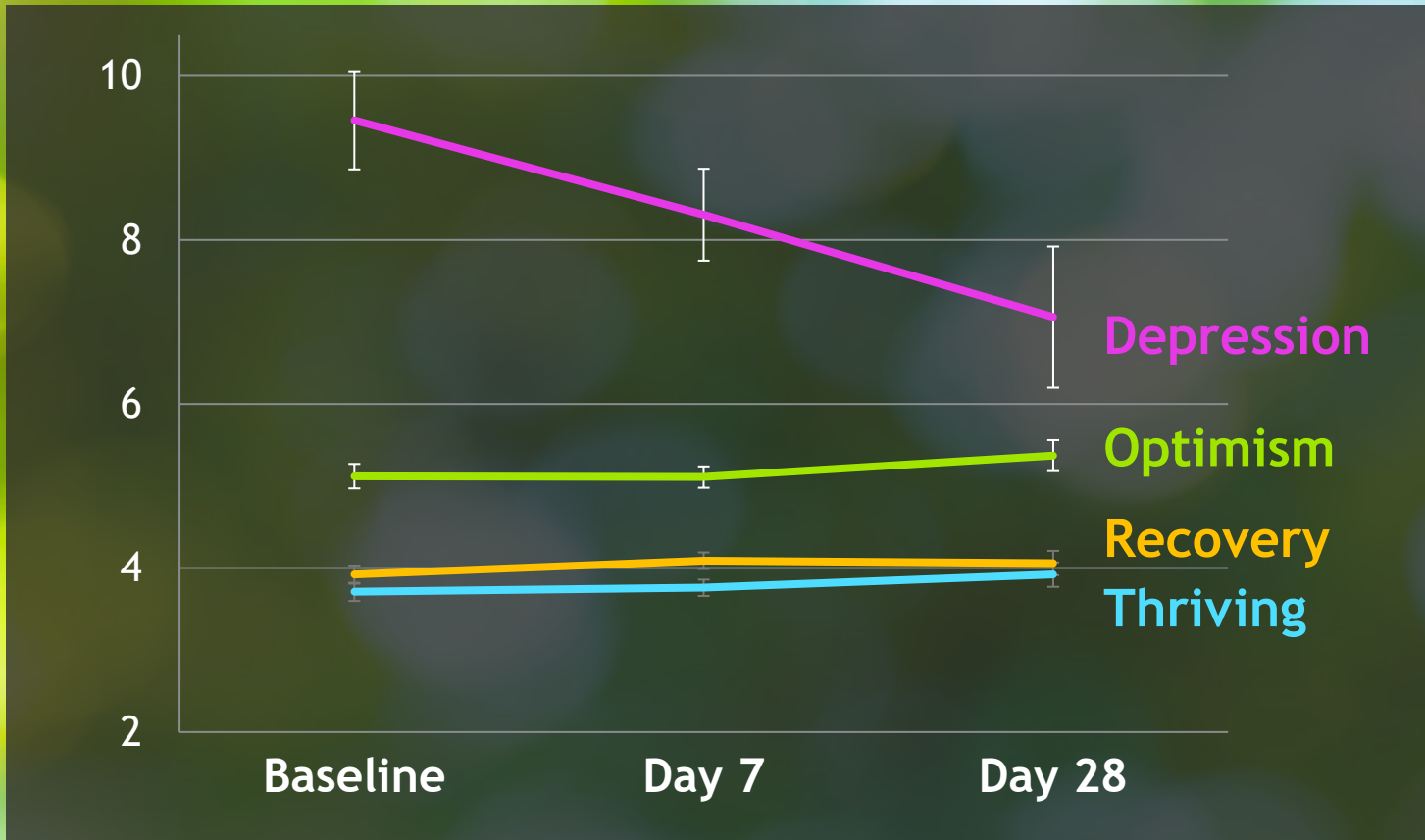


bit.ly/fwdtool



# Means and Standard Errors for Depression Symptoms, Optimism, Thriving, and Recovery Across Assessment Points

Significant improvements in depression symptoms, optimism, emotional thriving and emotional recovery between baseline and day 28.



## Table 2: Changes in well-being metrics across all three studies

	Time 0 (Baseline)	Time 1	Time 2	Time 3	Time 4
	Mean (SD)	Baseline to T1:	Baseline to T2:	Baseline to T3:	Baseline to T4:
		Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
		<i>t, df</i>	<i>t, df</i>	<i>t, df</i>	<i>t, df</i>
<b>Study 1: <i>Three Good Things</i></b>					
Emotional Exhaustion	62.32 (25.34)	53.71 (25.52) 5.36, 145***	50.40 (27.40) 5.65, 88***	52.34 (27.26) 4.62, 84***	50.01 (27.91) 4.91, 112***
Subjective Happiness	64.14 (21.61)	66.95 (20.22) -2.24, 145*	69.87 (21.97) -1.91, 88*	64.39 (23.37) -1.34 84	69.54 (20.6) -2.39, 115*
Work-life Balance	2.32 (0.62)	1.95 (0.51) 9.74, 145**	1.81 (0.47) 9.10, 86***	1.93 (0.58) 5.96, 84***	1.9 (0.60) 8.65, 112***
Depression Symptoms	10.79 (5.87)	8.03 (4.90) 6.35, 132***	7.02 (5.26) 7.86, 82***	7.83 (5.31) 4.31, 80***	7.29 (4.79) 5.45, 100***
Emotional Thriving	61.35 (25.34)	65.93 (22.99) -3.47 144**	66.43 (25.54) -2.27, 87 *	64.78 (25.93) -1.67, 82 <sup>†</sup>	68.69 (22.52) -1.72, 110 <sup>†</sup>
Emotional Recovery	74.08 (19.69)	77.21 (17.29) -2.38, 144*	77.51 (19.40) -2.76, 87**	77.28 (19.07) -3.89, 83**	78.83 (17.64) -3.04, 112**
<b>Study 2: <i>Gratitude Letter</i></b>					
Emotional Exhaustion	61.38 (25.28)	54.14 (26.44) 4.56, 122***			
Subjective Happiness	65.71 (17.25)	68.73 (17.71) -3.05, 122**			
Work-life Balance	2.33 (0.63)	2.04 (0.59) 6.21, 121***			
<b>Study 3: <i>Looking Forward</i></b>					
Depression Symptoms	9.46 (5.56)	8.31 (5.27) 2.69, 86 **	7.06 (6.23) 2.75, 51**		
Optimism	5.12 (1.36)	5.11 (1.24) .11, 86	5.37 (1.36) -2.49, 51*		
Emotional Thriving	67.7 (26.33)	68.90 (26.33) -1.75, 85	72.84 (27.83) -2.20, 51*		
Emotional Recovery	72.97 (20.68)	77.25 (18.91) -2.87, 85**	76.60 (20.02) -2.37, 51*		

\*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , <sup>†</sup>  $p < .10$  **Note:** Baseline means, SDs, and Ns reported are those used in the baseline to T1 paired T-tests. Assessment timing for each study was as follows: Study 1 (T1 = Day 15; T2 = 1 month; T3 = 6 months; T4 = 12 months); Study 2 (T1 = 1 month); Study 3 (T1 = Day 7; T2 = Day 28).



# Summary

- Burnout/Resilience predicts care quality
  - Half of USA healthcare workers are burned out
  - Burnout linked to:
    - clinical quality; patient mortality; patient satisfaction; depression and suicide
- Burnout: impaired ability to experience positive emotions
- Positive reflections backwards (3 good things) has a counterpart for reflecting on the future (fwdtool)



# BMJ QUALITY & SAFETY

April 2018 Volume 27 Issue 4

Ethnography to study healthcare improvements

Learning from voided computer medication orders



Providing Feedback: the secret sauce in Safety WalkRounds?

[qualitysafety.bmj.com](http://qualitysafety.bmj.com)





Traditional Patient Safety Rounding Frame:

“So how are we going  
to kill the next patient  
around here?”

Positive Rounding Frame:

“What are three things that  
are going well around here,  
and one thing that could be  
better?”



# Safety Culture and Workforce Well-Being Associations with Positive Leadership WalkRounds

J Bryan Sexton PhD<sup>a, b, c, d, e, f</sup>, Kathryn C. Adair PhD<sup>b</sup>, Jochen Profit MD<sup>c</sup>, Jonathan Bae MD<sup>b, d, e</sup>, Kyle Rehder MD<sup>b, e, f</sup>, Tracy Gosselin PhD, RN<sup>e, g</sup>, Judy Milne RN<sup>e, g</sup>, Michael Leonard MD<sup>h</sup>, Allan Frankel MD<sup>h</sup>

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<https://doi.org/10.1016/j.jcjq.2021.04.001>

Get rights and content

## Background

Interventions to decrease burnout and increase well-being in health care workers (HCW) and improve organizational safety culture are urgently needed. This study was conducted to determine the association between Positive Leadership WalkRounds (PosWR), an organizational practice in which leaders conduct rounds and ask staff about what is going well, and HCW well-being and organizational safety culture.

## Methods



## NEWS RELEASE

### FOR IMMEDIATE RELEASE

#### Media Contact:

Katie Bronk  
Corporate Communications  
(630) 792-5175  
[kbronk@jointcommission.org](mailto:kbronk@jointcommission.org)

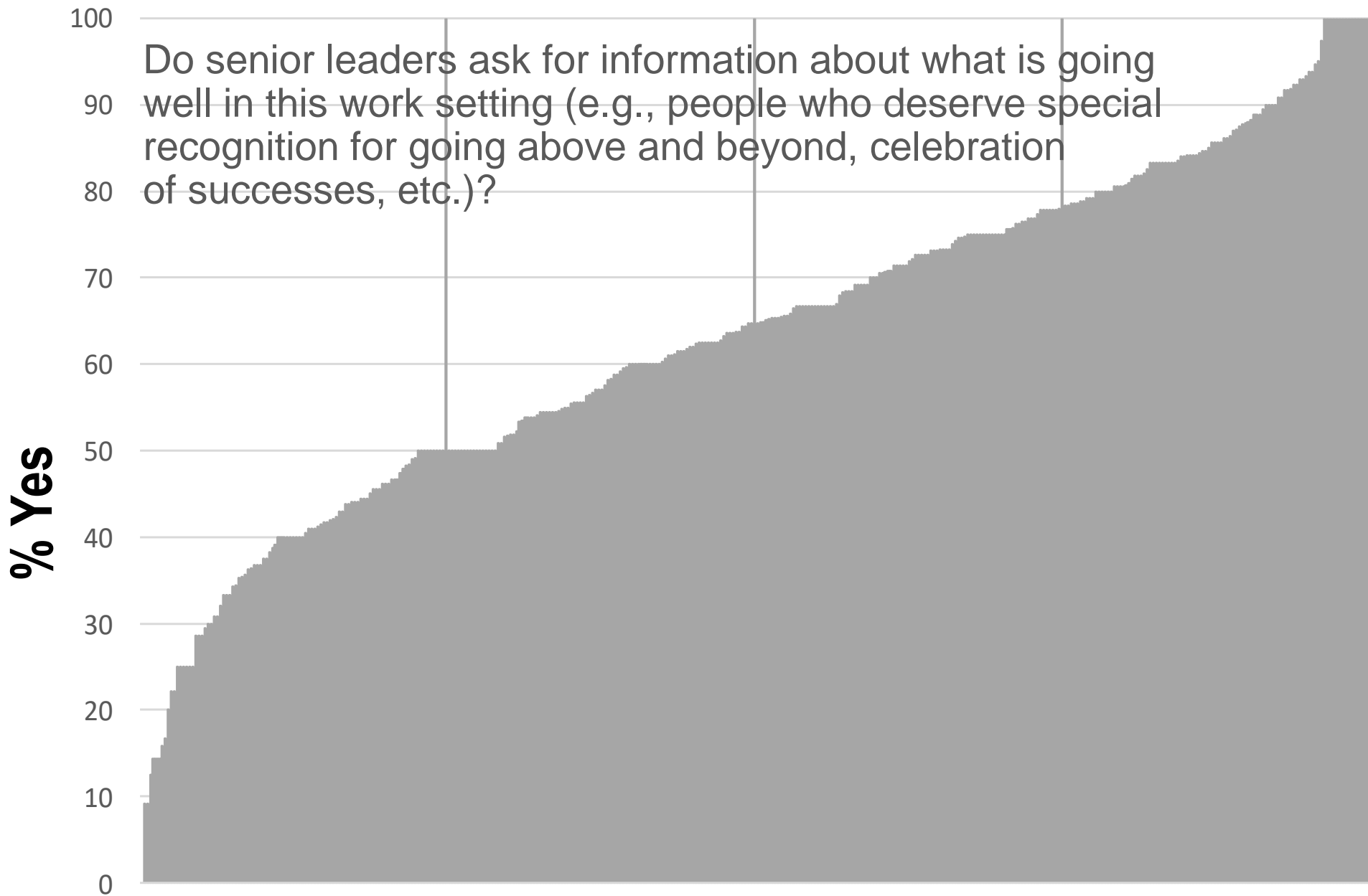
View the [multimedia news release](#)

## Positive Leadership WalkRounds improve health care worker well-being and safety culture

Study in July 2021 issue of *The Joint Commission Journal on Quality and Patient Safety*

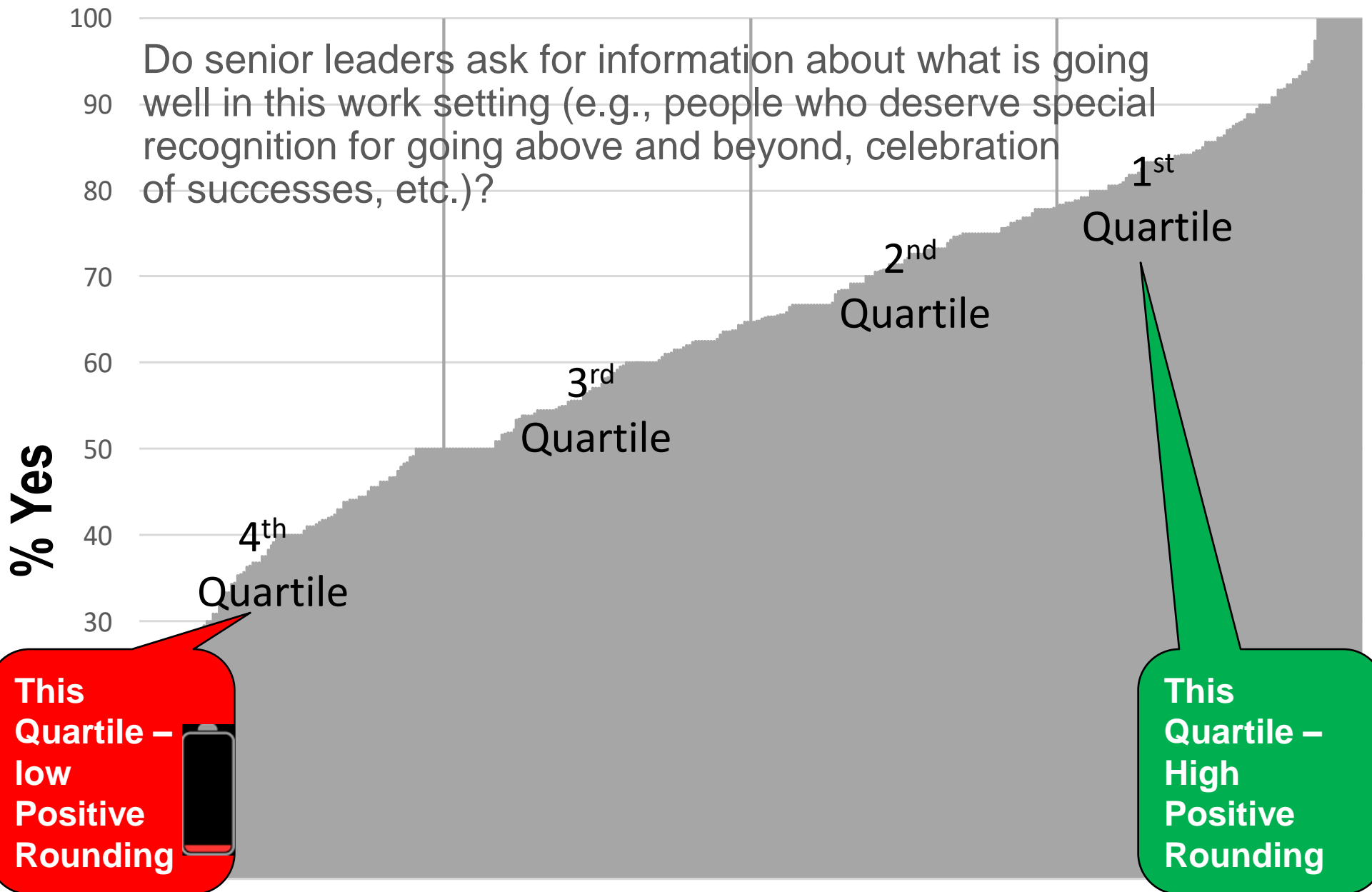
(OAKBROOK TERRACE, Illinois, June 22, 2021) – Interventions to decrease burnout in health care are urgently needed. A new study in the July 2021 issue of *The Joint Commission Journal on Quality and Patient Safety* (JQPS) evaluates the association between Positive Leadership WalkRounds (PosWR), and health care worker (HCW) well-being and organizational safety culture.

The study, “[Safety Culture and Workforce Well-Being Associations with Positive Leadership WalkRounds](#),” was completed at Duke University Health System, Durham, North Carolina, and involved senior leaders who were encouraged to conduct PosWR, an organizational practice in which leaders conduct rounds and ask staff about what is going well.



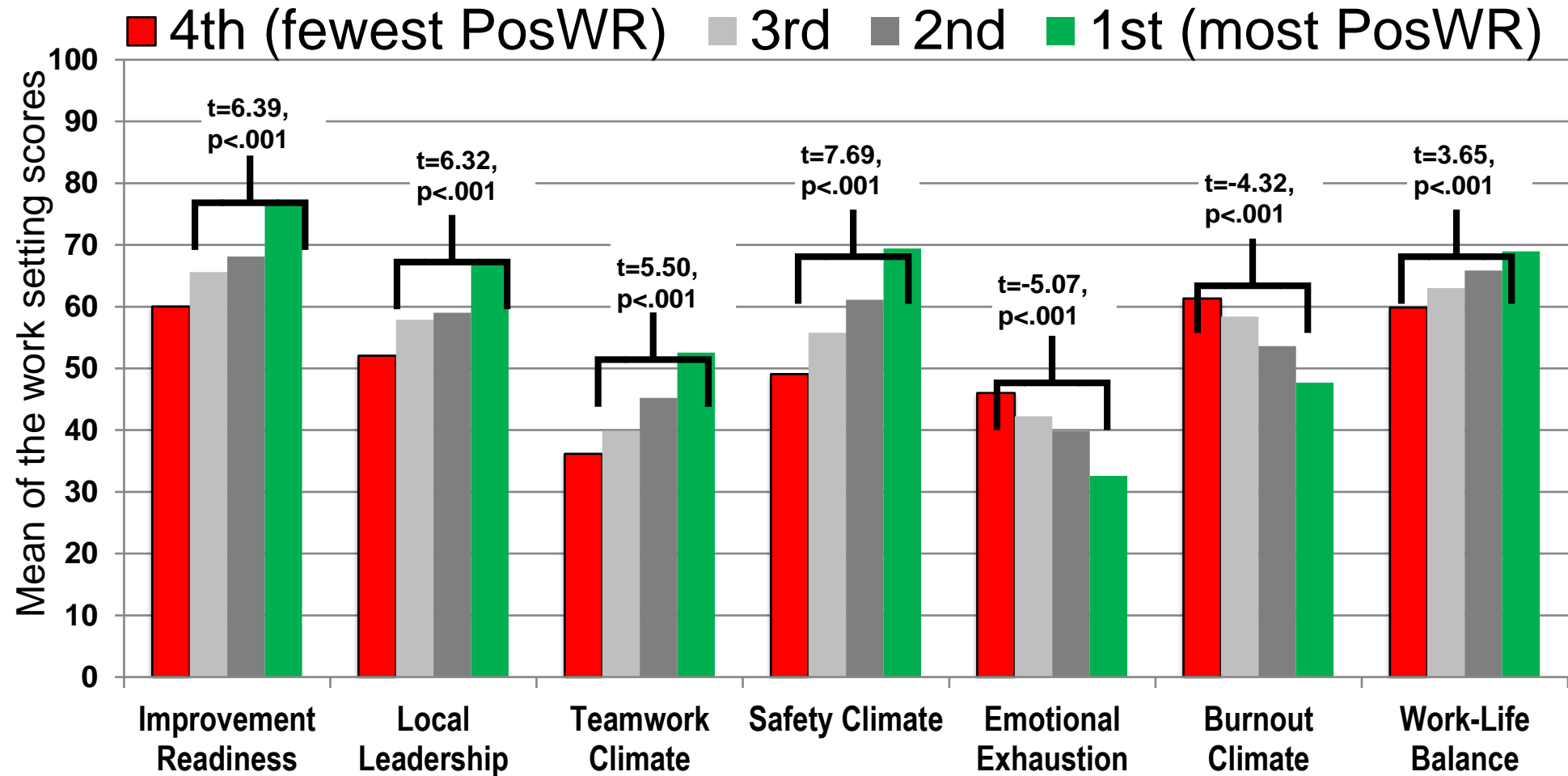
Sexton, J. B., Adair, K. C., Profit, J., et al. Safety culture and workforce well-being associations with Positive WalkRounds. Jt Comm J Patient Saf Qual. In press, 2021.





Sexton, J. B., Adair, K. C., Profit, J., et al. Safety culture and workforce well-being associations with Positive WalkRounds. Jt Comm J Patient Saf Qual. In press, 2021.

## Safety Culture & Well-Being by Positive Rounding Quartiles



Sexton, J. B., Adair, K. C., Profit, J., et al. Safety culture and workforce well-being associations with Positive WalkRounds. Jt Comm J Patient Saf Qual. In press, 2021.

Relationship between  
**institutional resources** and well-  
being after controlling for positive  
reflections:

Relationship between  
**institutional resources** and well-  
being after controlling for positive  
reflections:

**ZERO**

or nearly Zero



# Meeting Agenda Item

-One good thing so far this week



## Providing feedback following

The Leadership scale begins with the prompt “In this work setting, local leadership...”. Then individual items ask:

Is available at predictable times.

**Regularly makes time to provide positive feedback to me about how I am doing.**

Provides frequent feedback about my performance.

Provides useful feedback about my performance.

Communicates their expectations to me about my performance.

---

J Bryan Sexton,<sup>1,2</sup> Kathryn C Adair,<sup>3</sup>  
Michael W Leonard,<sup>4,5</sup> Terri Christensen Frankel,<sup>4</sup> Joshua Proulx,<sup>4</sup>  
Sam R Watson,<sup>6</sup> Brooke Magnus,<sup>7</sup> Brittany Boqan,<sup>8</sup> Maleek Jamal,<sup>9</sup>

Each 10-point increase in Leadership was associated with a 28% reduction in the odds of burnout for the respondent



end of article.

Correspondence to

associations between receiving feedback about actions taken as a result of WR and healthcare worker assessments of patient safety culture, employee

able leadership engagement with quality that can be an empowering resource for HCW.<sup>2</sup> at a time when resources are

## Key Points:

### Well-being Nuggets

bite-sized strategies have enduring effects

Social Contagion

Positive Emotions key to well-being

A must for QI to work

Institutional/Individual resources needed

Pausing and reflecting key

 @JBryanSexton1





[www.hsq.dukehealth.org](http://www.hsq.dukehealth.org) :

## Enduring Resources (for Pausing & Reflecting)



Positive Rounding

2<sup>nd</sup> Victim Support

Psychologically Safe  
Leadership

Leader WalkRounds

**Institutional  
resources**



**Individual  
resources**



[bit.ly/joyreflections](http://bit.ly/joyreflections) | 2 minutes | 8 days  
Simple joys. Cultivate joy and playfulness.

[bit.ly/awetool](http://bit.ly/awetool) | 10 minutes | 2 days  
Cultivate awe.

[bit.ly/grattool](http://bit.ly/grattool) | 10 minutes | 2 days  
Cultivate gratitude.

[bit.ly/start3ft](http://bit.ly/start3ft) | 2 minutes | 8 days  
3 Funny Things. Cultivate humor.

[bit.ly/wlbtool](http://bit.ly/wlbtool) | 2 minutes | 4 days  
Cultivate work-life balance.

[bit.ly/fwdtool](http://bit.ly/fwdtool) | 2 minutes | 8 days  
Looking Forward. Cultivate hope.

[bit.ly/inttool](http://bit.ly/inttool) | 5 minutes | 3 days  
Interest Tool. Cultivate engagement.

[bit.ly/3goodminutes](http://bit.ly/3goodminutes) | 3 minutes | 8 days  
3 Good Minutes. Cultivate mindfulness.

[bit.ly/doortool](http://bit.ly/doortool) | 10 minutes | 2 days  
1 Door Closes, Another Opens. Cultivate perspective.

[bit.ly/posfbtool](http://bit.ly/posfbtool) | 3 minutes | 8 days  
Positive Feedback. Cultivate the ability to uplift others.

[bit.ly/kindtext](http://bit.ly/kindtext) | 3 minutes | 8 days  
Cultivate kindness.

[bit.ly/selfcomptool](http://bit.ly/selfcomptool) | 10 minutes | 2 days  
Self-Compassion. Cultivate a kinder internal voice.

[bit.ly/serenitytool](http://bit.ly/serenitytool) | 2 minutes | 4 days  
Serenity. Cultivate routines and rituals.

[bit.ly/strengthstool](http://bit.ly/strengthstool) | 3 minutes | 8 days  
Signature Strengths. Cultivate your strengths.

[bit.ly/sleepool](http://bit.ly/sleepool) | 2 minutes | 8 days  
Sleep Tool. Cultivate rest.

[bit.ly/start3gt](http://bit.ly/start3gt) | 2 minutes | 15 days  
3 Good Things. Cultivate your uplifts.

[bit.ly/3wiser](http://bit.ly/3wiser) | 5-in-1 tool | 10 days  
WISER. A sampler of multiple resilience tools.

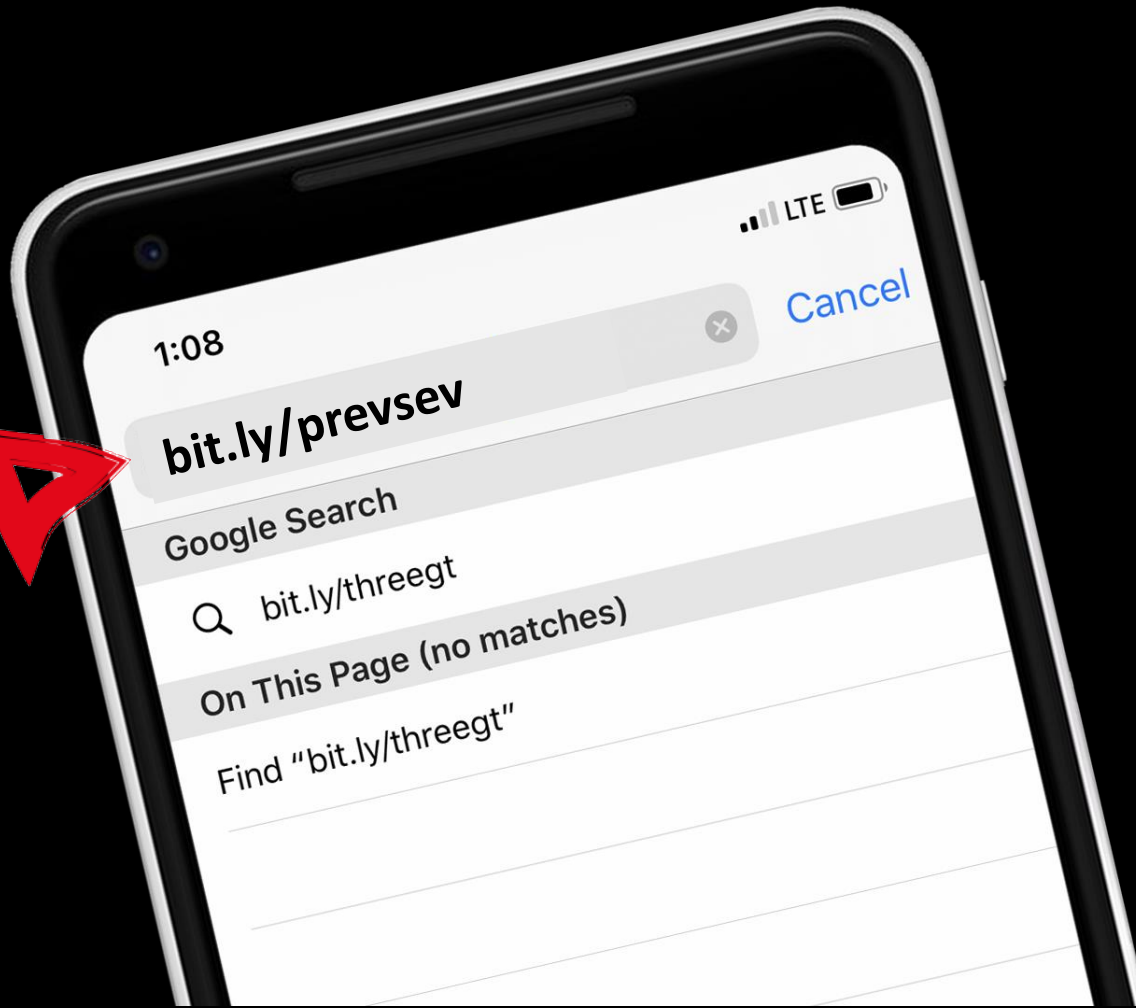
[bit.ly/storyburn](http://bit.ly/storyburn) | 20 minutes | 3 days  
Your Burnout Story. Cultivate healing through reflective writing



# For continuing education credit:

Go to: [bit.ly/prevsev](https://bit.ly/prevsev)

...or hold your phone camera over QR code



# Burnout Webinar Cont Ed Credit and Slides



Inbox ×

**Bryan Sexton** <qualtrics@duke.edu>

Continuing Ed:

[Duke webinar series enduring certificate](#)

[Well b 2 prev and sev of burnout](#)

Tool:

[bit.ly/fwdtool](#)

Article:

[Science of Health Care Worker Burnout](#)

# Duke Center *for* Healthcare Safety and Quality

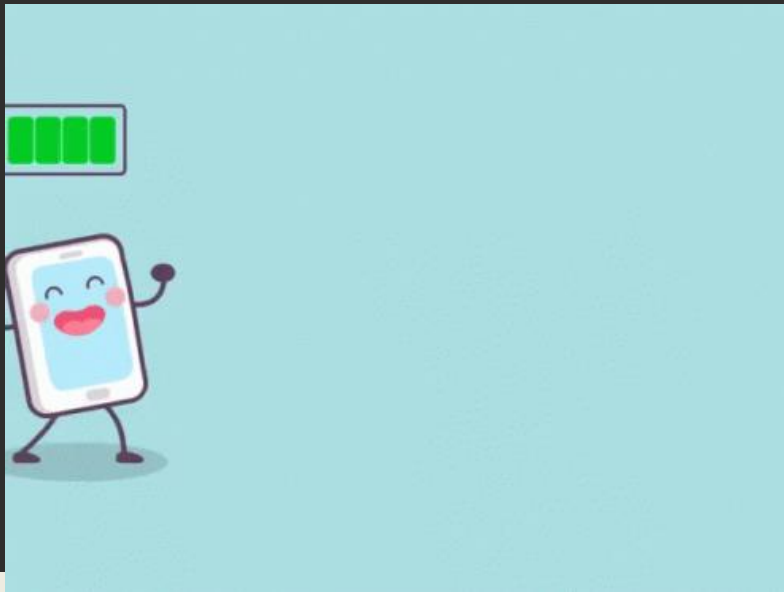
About ▾

Well-Being Programs ▾

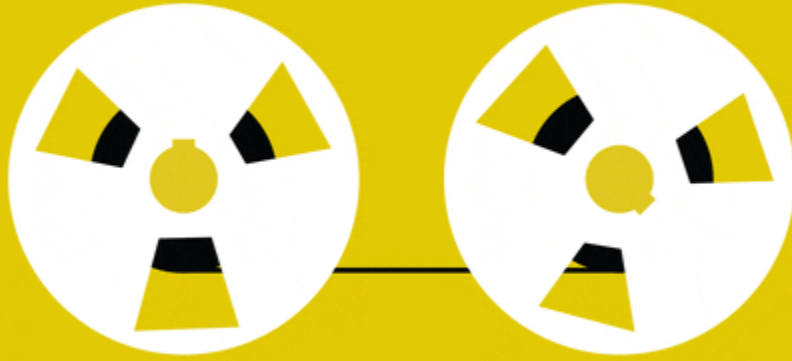
Quality & Safety Programs ▾

Training & Education ▾

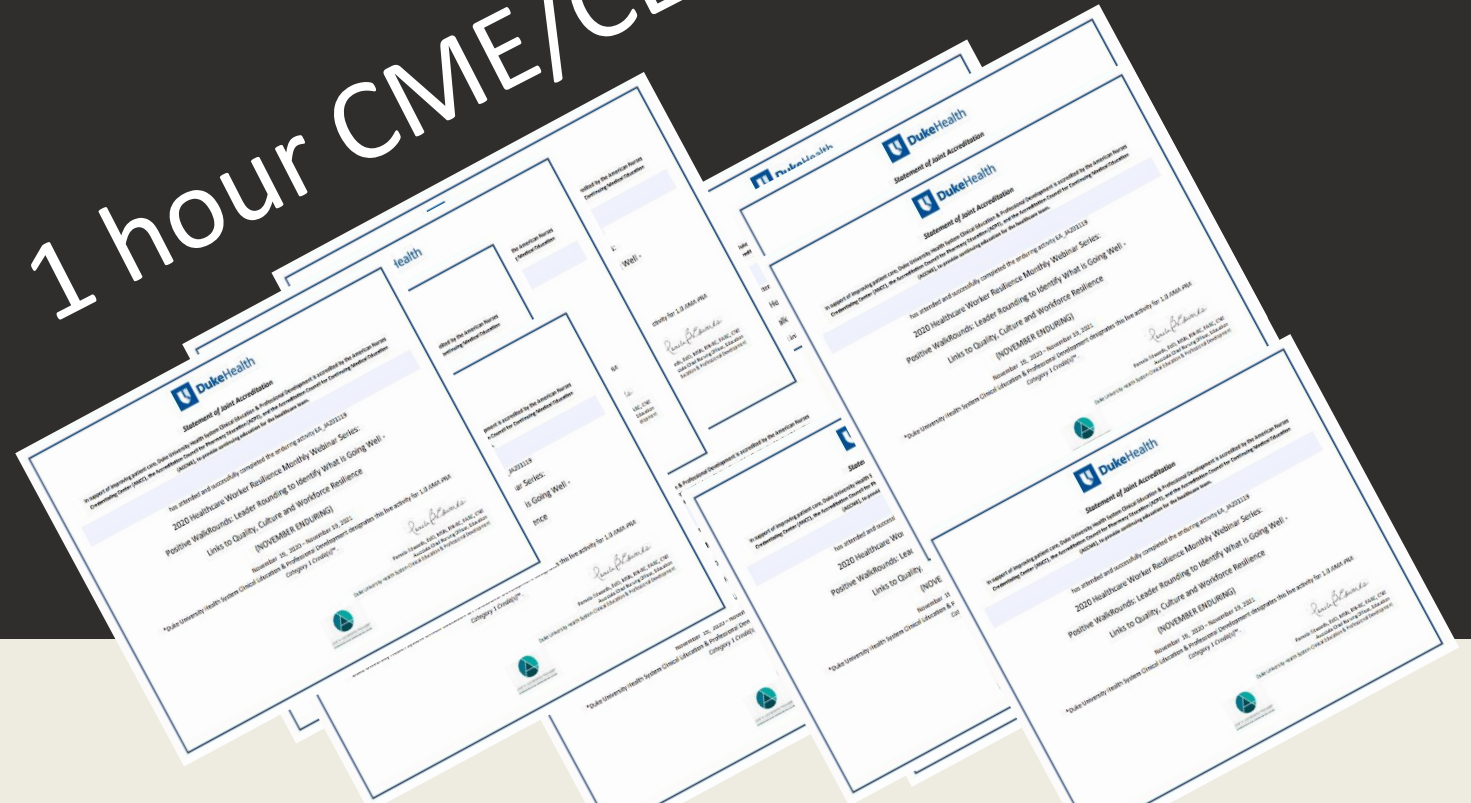
Resources ▾



# Recorded



## 1 hour CME/CEU (up to 10)





# Duke Well-Being Ambassador Virtual Course



## Interested in learning about well-being in Healthcare? .....

Enroll in the evidence-based well-being webinar training! For only one hour a week for 10 weeks, healthcare workers can learn about the science and practice of well-being for themselves and others.

Pandemic exhaustion is severe but treatable! Compared to anxiety and depression – burnout is relatively easy to treat using bite sized strategies. These strategies can enhance your well-being, and through sharing, the well-being of your co-workers.

**January 11th - March 15th, 2022**

Tuesdays at 3:00 p.m. EST

Recordings will be available after each live session

Up to 10 hours of CME/ANCC credit available

To enroll in the 10 week training, visit [bit.ly/wellamb](https://bit.ly/wellamb) or scan the QR code



# What questions do you have?

# What questions do you have?

TOOL | [bit.ly/fwdtool](https://bit.ly/fwdtool)



# What questions do you have?

TOOL | [bit.ly/fwdtool](https://bit.ly/fwdtool)

CONTINUING  
EDUCATION  
CREDIT | [bit.ly/prevsev](https://bit.ly/prevsev)

Full Well-  
Being Course | [bit.ly/wellamb](https://bit.ly/wellamb)



# What questions do you have?

TOOL | [bit.ly/fwdtool](https://bit.ly/fwdtool)

Full Well-Being Course

[bit.ly/wellamb](https://bit.ly/wellamb)



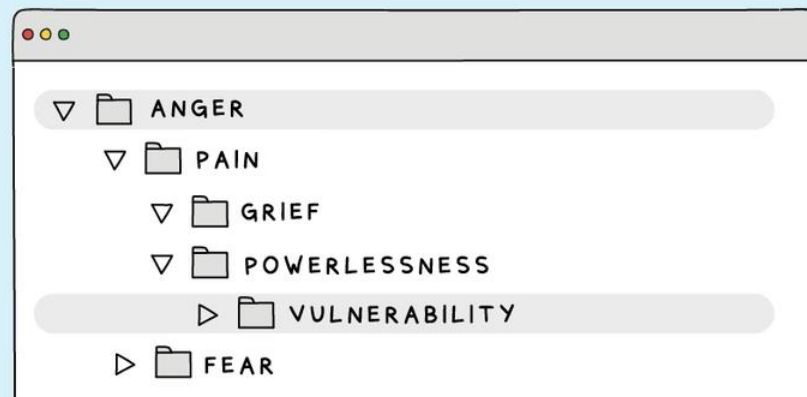
@JBryanSexton1



## AT FIRST GLANCE



## A CLOSER LOOK



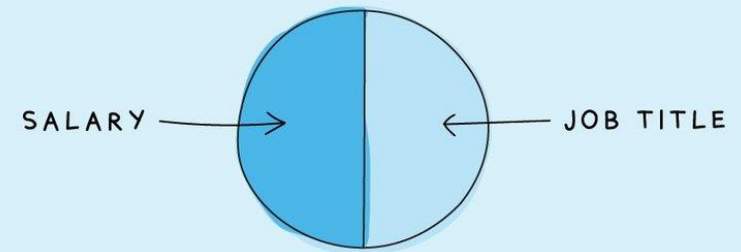
# What questions do you have?



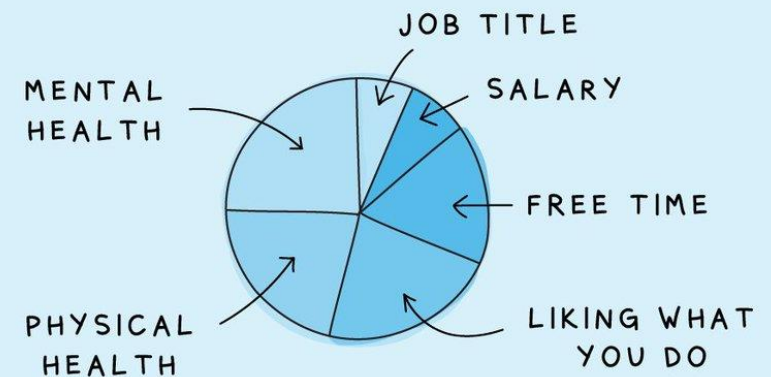


# What questions do you have?

## HOW WE'RE TAUGHT TO MEASURE SUCCESS



## A BETTER MEASURE





# Bite-sized well-being during times of uncertainty

J. Bryan Sexton, PhD  
Director, Duke Center for  
Healthcare Safety and Quality  
Duke University Health System

