

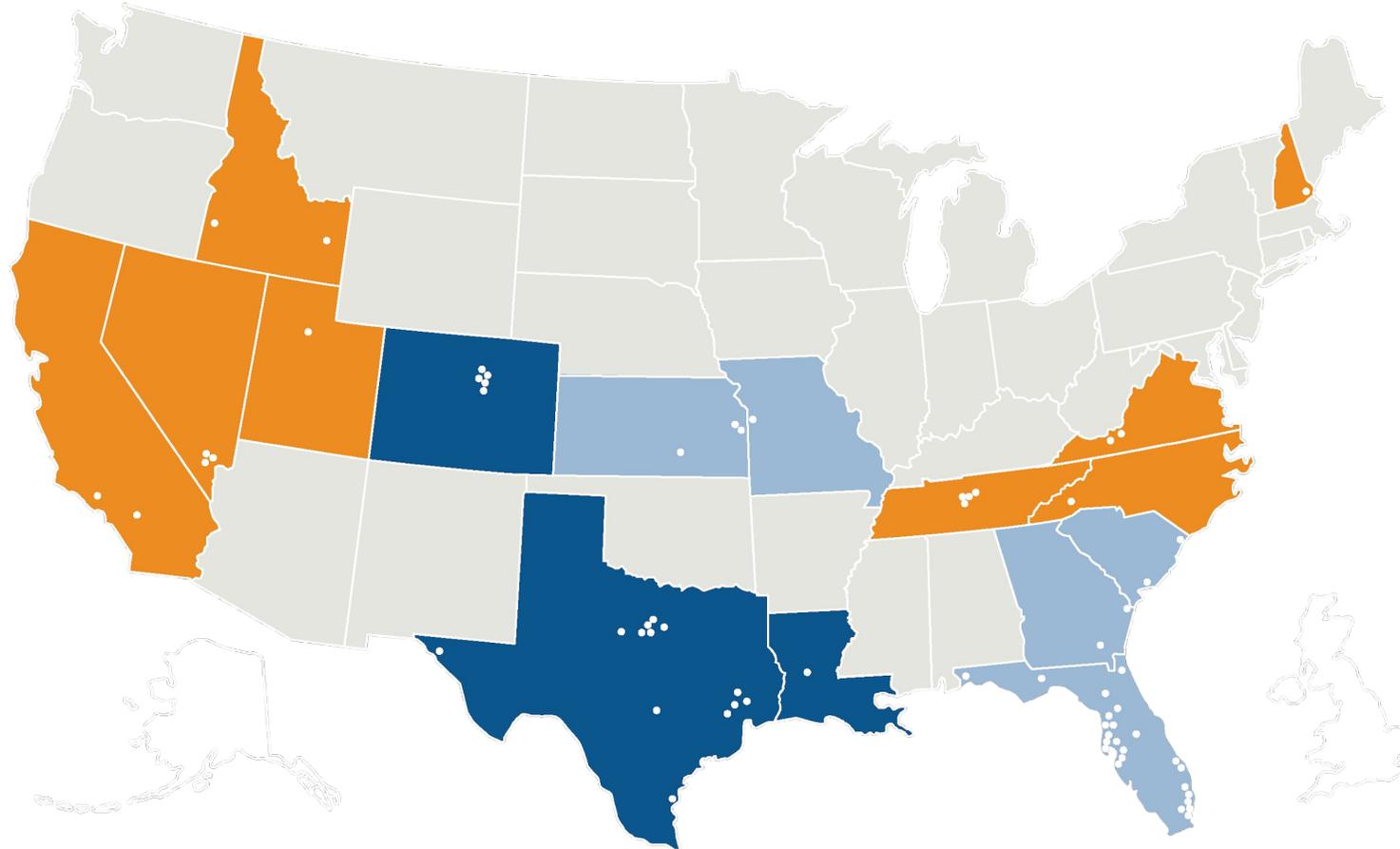


Developing a sustainable approach to wellness: Lessons from an award-winning program

Greg Guldner, MD, MS, FACEP
Program Director Emeritus, EM Residency
HCA Healthcare Riverside
Vice President of Academic Affairs
HCA Healthcare
Clinical Professor of Emergency Medicine
University of California Riverside School of Medicine

This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

HCA Healthcare Enterprise Map - GME



By the Numbers ('24-'25)

Residents and
Fellows 5,439

Teaching
Hospitals 79

Graduates 1,752

 American Group

 Atlantic Group

 National Group

HCA Healthcare/CGU Physician Wellness Research Lab

World Class Well-Being Psychologists



Jason T. Siegel, Ph.D.
(Director)
Social/Health
Psychology

The motivationWorks Team

motivationWorks was created by the same folks who created Self-Determination Theory and who currently lead its research and applied work worldwide.



Scott Rigby, Ph.D.



Richard M. Ryan, Ph.D.



Edward L. Deci, Ph.D.



Sabrina Menezes, MA
(co-director)
Positive Health
Psychology



Alex Marshburn, MA
(co-director)
Social Psychology



Kelsey Carpenter, MPH
Positive Health Psychology



Savannah Carpenter
Social Psychology



Victoria Do
Organizational Psychology

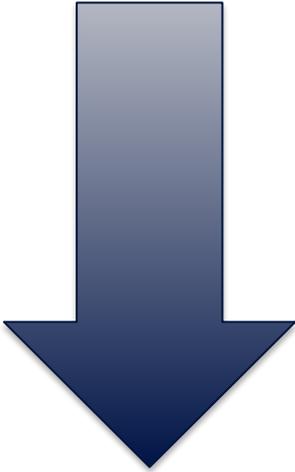


Xitao Liu, MA
Social Psychology

Clinical Learning Environment



Patient Care



Education



Well-being & Affinity

**Phase I:
Initial Pilot Site**



**Approval for Emergency
Medicine Residency Program
at HCA Healthcare Riverside**



Scope of Well-Being Initiatives

Wellness and Resiliency Didactics

- Psychological Skills Building
- Small group courses / classes / online
 - Mindfulness
 - Resilience
- Lectures / Didactics / Knowledge transfer
- Discussion groups

Social Event Planning

- Offset negative emotions with positive
- Ice cream social model

Coaching

- Psychological skills building
- Appraisal support
- Character / wisdom / caring



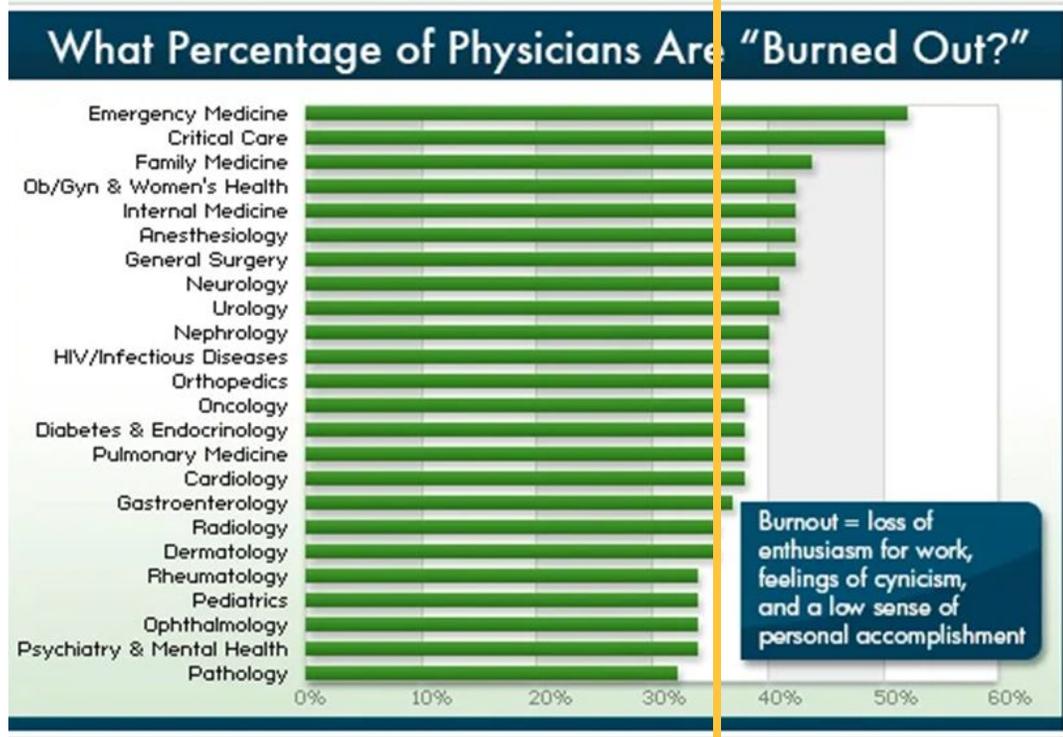
Pleasurable Activities

- Massage Chairs
- Spa days
- Pet therapy

Holistic Approach

- Exercise
- Nutrition
- Sleep hygiene
- Natural light
- Nature
- Relationships

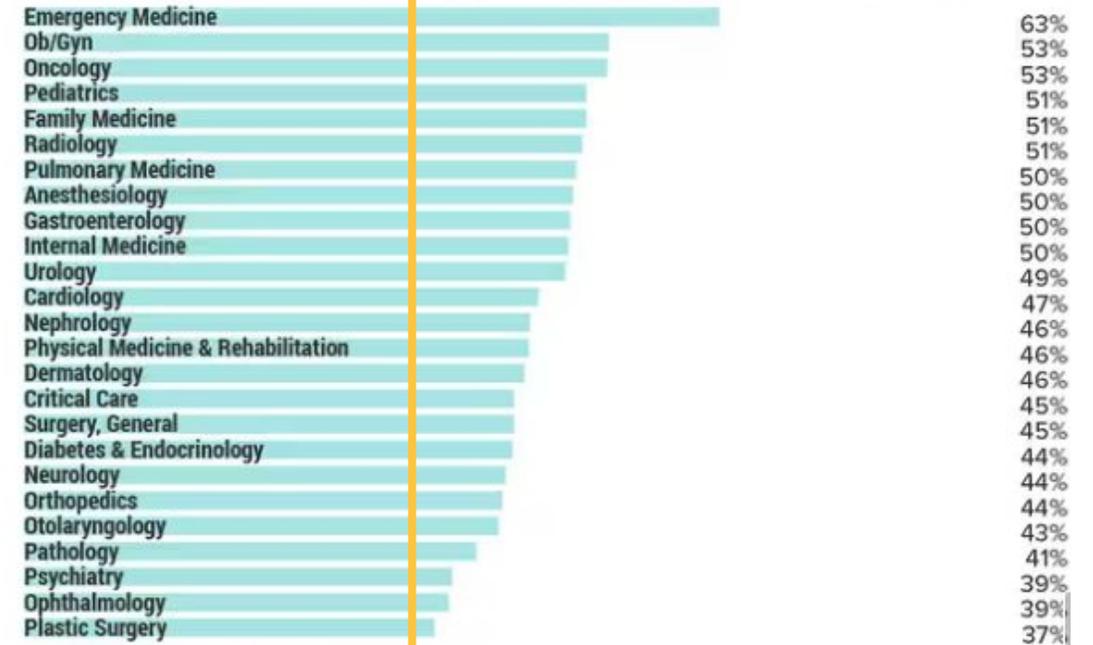
THEN



2014

NOW

Which Specialties Have the Greatest Burnout Rates?

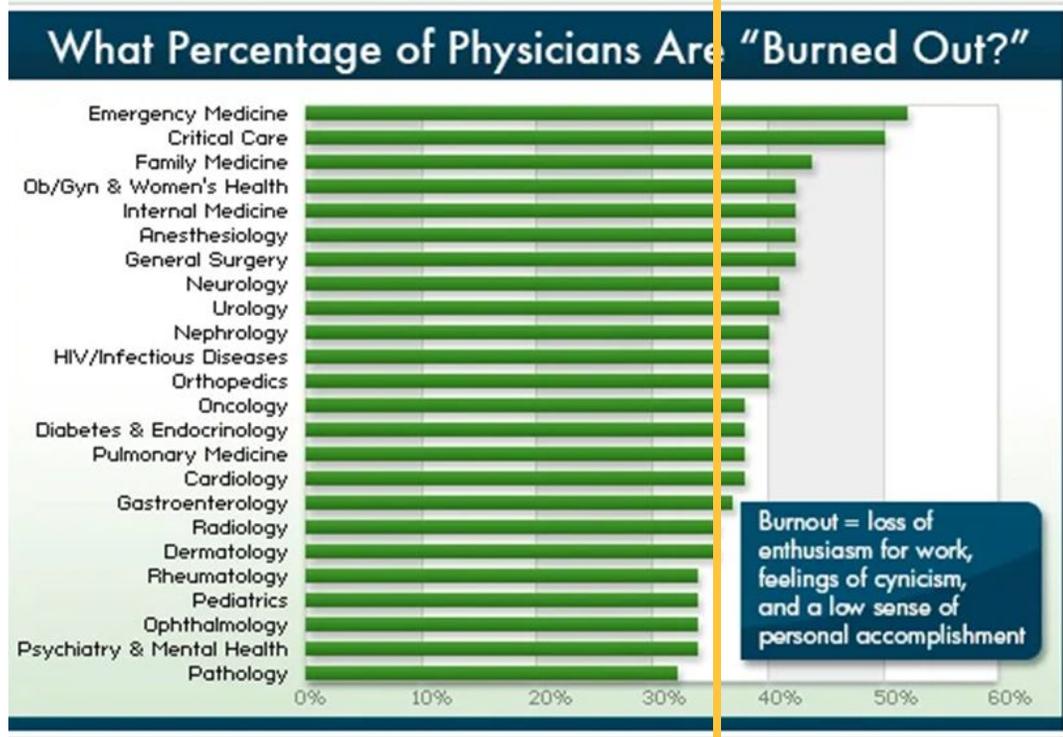


Not all specialties are shown.

2024

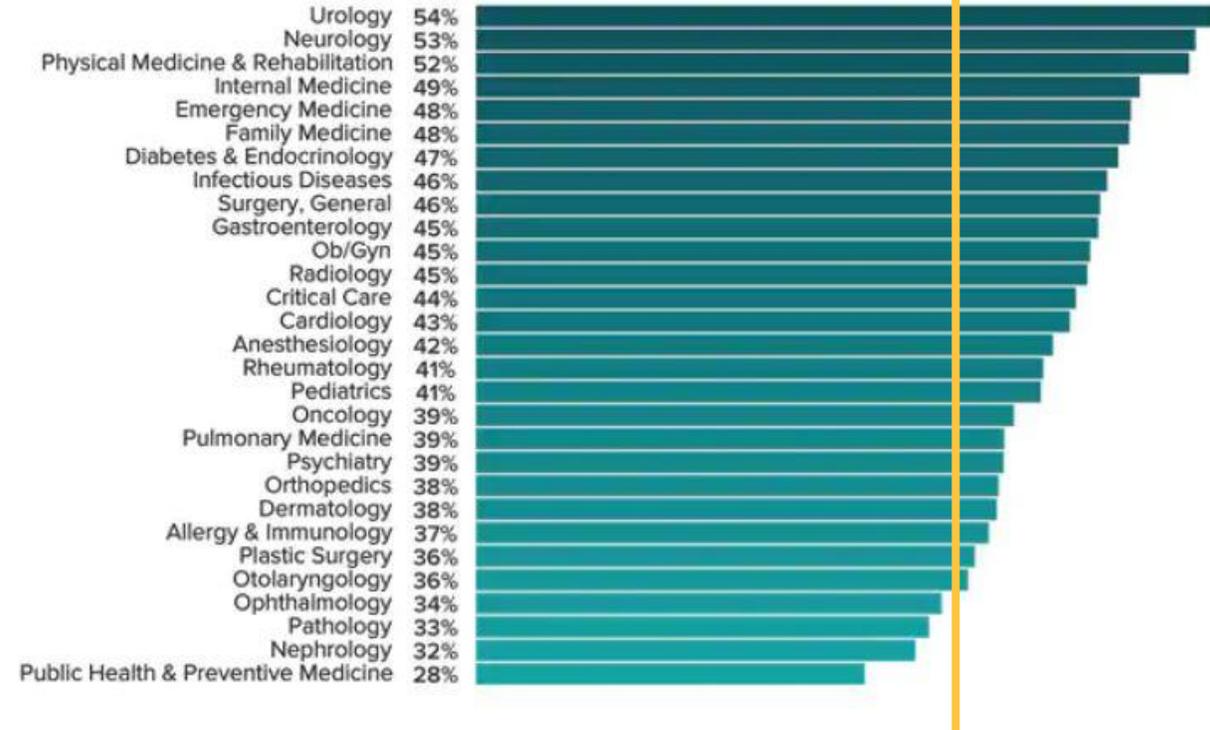
Source: Medscape, 2014, 2024

THEN



2014

PRE-COVID



2019

Source: Medscape, 2014, 2021

Frequency of Intervention Types versus Likelihood of Impact

9 Systematic Reviews
101 Interventions



79 Physician Interventions
21% “Significant”



22 System Interventions
50% “Significant”



Systematic Review and Meta-Analysis of Randomized Trials Testing Interventions to Reduce Physician Burnout

Alyson Haslam, PhD, Jordan Tuia, BS, Sarah L. Miller, MAS, Vinay Prasad, MD, MPH

University of California San Francisco.

Haslam, Am J Med, Vol 137(3), March 2024

“Studies testing interventions to decrease physician burnout led to significant numerical improvements in some domains of burnout, but it is unlikely that these changes result in meaningful changes in clinical burnout.”

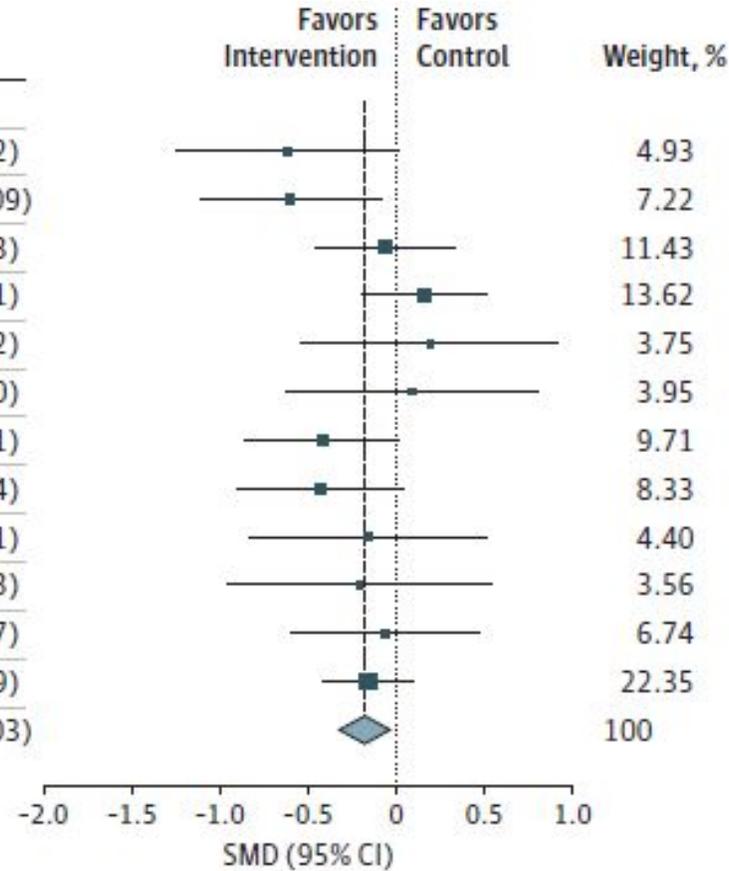
Controlled Interventions to Reduce Burnout in Physicians

A Systematic Review and Meta-analysis

Maria Panagioti, PhD; Efharis Panagopoulou, PhD; Peter Bower, PhD; George Lewith, MD; Evangelos Kontopantelis, PhD; Carolyn Chew-Graham, MD; Shoba Dawson, PhD; Harm van Marwijk, MD; Keith Geraghty, PhD; Aneez Esmail, MD

JAMA Intern Med. 2017;177(2):195-205. doi:10.1001/jamainternmed.2016.7674

Study ID	SMD (95% CI)
Physician-directed	
Amutio et al, ³⁸ 2015	-0.61 (-1.24 to 0.02)
Asuero et al, ³⁹ 2014	-0.60 (-1.11 to -0.09)
Bragard et al, ⁴⁰ 2010	-0.06 (-0.45 to 0.33)
Butow et al, ⁴¹ 2015	0.16 (-0.19 to 0.51)
Butow et al, ⁴² 2008	0.19 (-0.54 to 0.92)
Gunasingam et al, ⁴⁴ 2015	0.09 (-0.62 to 0.80)
Margalit et al, ⁴⁷ 2005	-0.42 (-0.85 to 0.01)
Martins et al, ⁴⁸ 2011	-0.43 (-0.90 to 0.04)
Milstein et al, ⁴⁹ 2009	-0.16 (-0.83 to 0.51)
Ripp et al, ⁵¹ 2016	-0.21 (-0.95 to 0.53)
Verweij et al, ⁵³ 2016	-0.06 (-0.59 to 0.47)
Weight et al, ⁵⁴ 2013	-0.16 (-0.41 to 0.09)
Overall ($I^2 = 11\%$, $P = .33$)	-0.18 (-0.32 to -0.03)



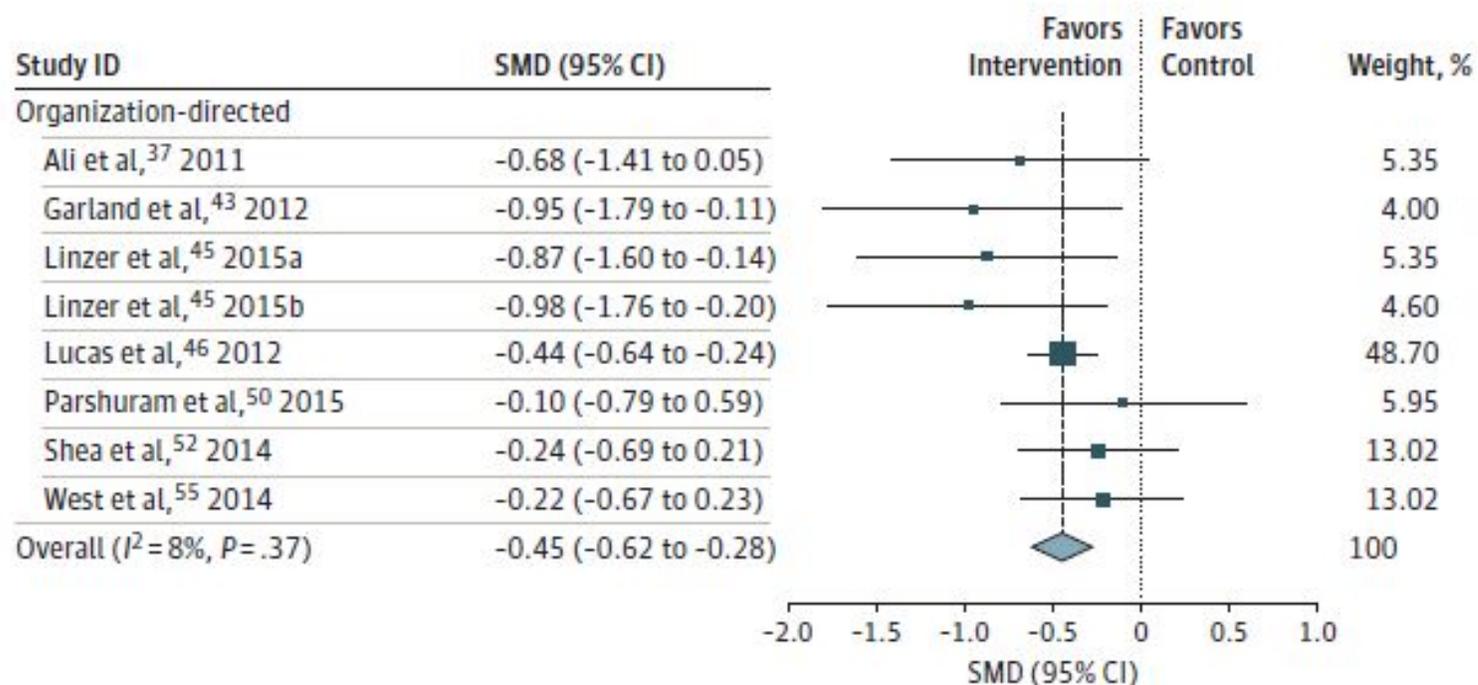
Controlled Interventions to Reduce Burnout in Physicians

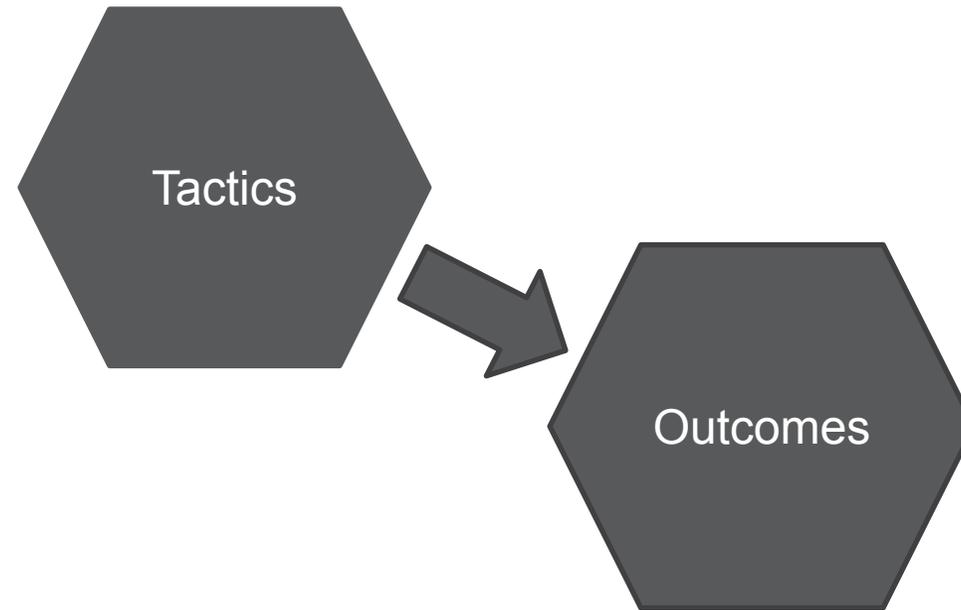
A Systematic Review and Meta-analysis

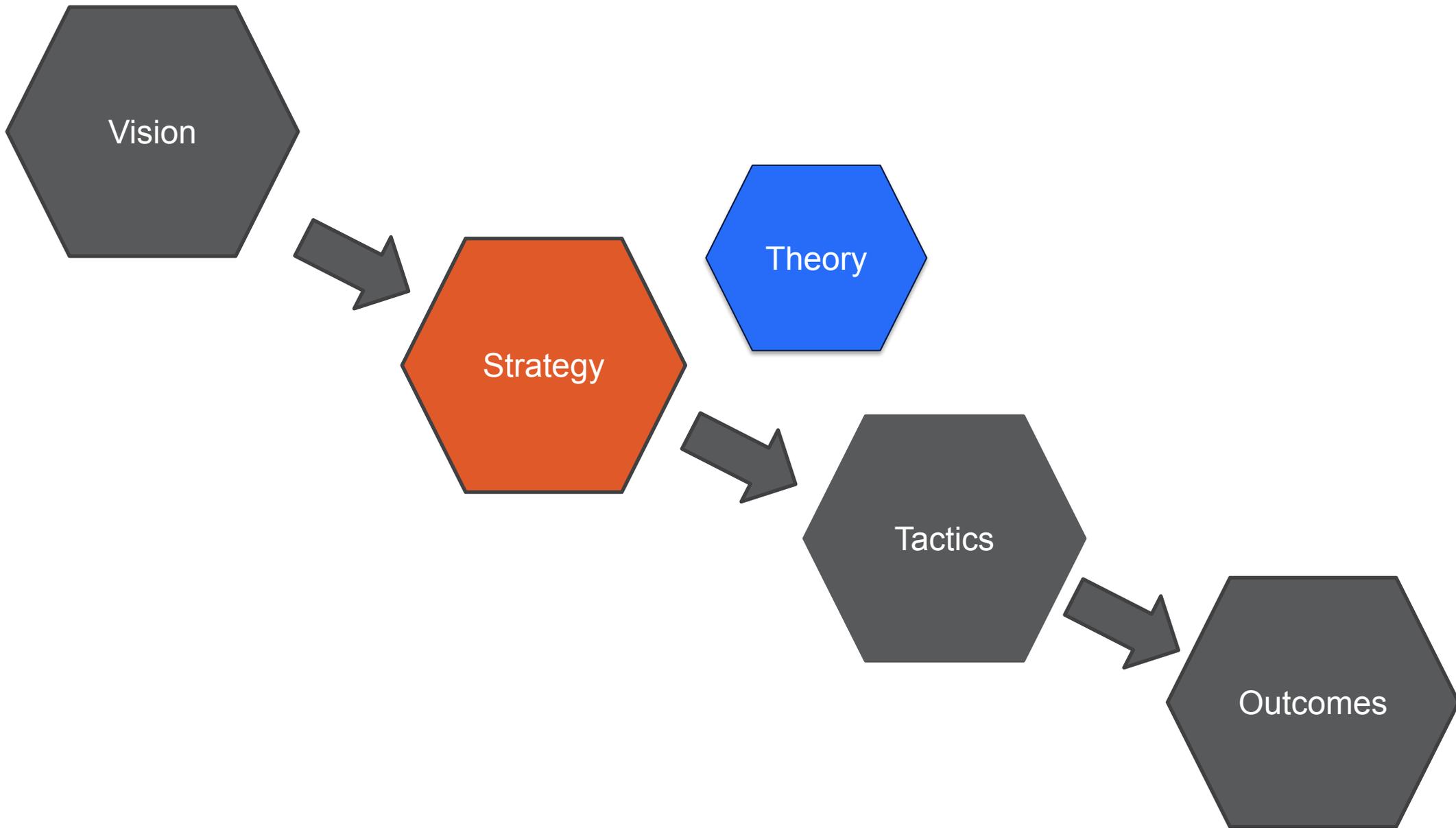
Maria Panagioti, PhD; Efharis Panagopoulou, PhD; Peter Bower, PhD; George Lewith, MD; Evangelos Kontopantelis, PhD; Carolyn Chew-Graham, MD; Shoba Dawson, PhD; Harm van Marwijk, MD; Keith Geraghty, PhD; Aneez Esmail, MD

JAMA Intern Med. 2017;177(2):195-205. doi:10.1001/jamainternmed.2016.7674

Figure 3. Forest Plot of the Effects of Different Types of Interventions on Burnout Scores







Our Vision

To create optimal work and learning environments to promote flourishing among all team members



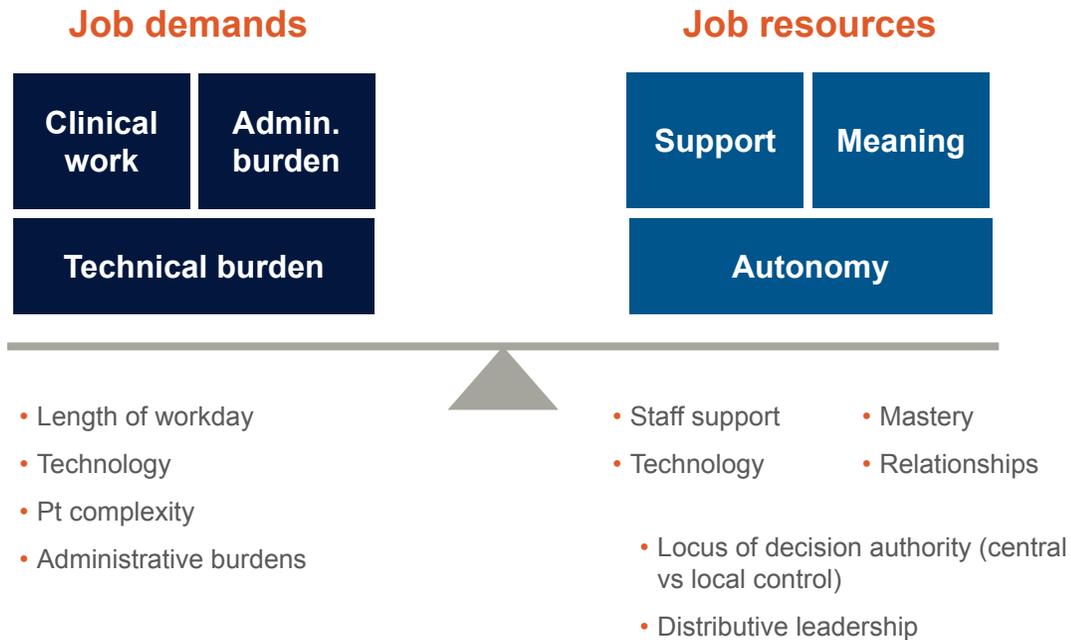




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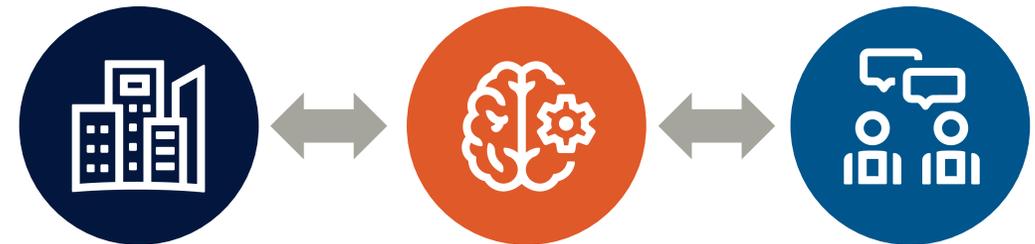
Theoretical Models

Job Demands-Resources



Job Demands and Job Resources Conceptual Model of Clinician Well-Being
 SOURCE: Developed by Christine Sinsky and Mark Linzer.

Self-Determination Theory



Organizational Evidence-Based and Promising Practices for Improving Clinician Well-Being

Christine A. Sinsky, MD, American Medical Association; **Lee Daugherty Biddison, MD, MPH**, Johns Hopkins Medicine; **Aditi Mallick, MD**, George Washington University; **Anna Legreid Dopp, PharmD**, American Society of Health-System Pharmacists; **Jessica Perlo, MPH**, Institute for Healthcare Improvement; **Lorna Lynn, MD**, American Board of Internal Medicine; and **Cynthia D. Smith, MD, FACP**, American College of Physicians

November 2, 2020

Burnout



Engagement

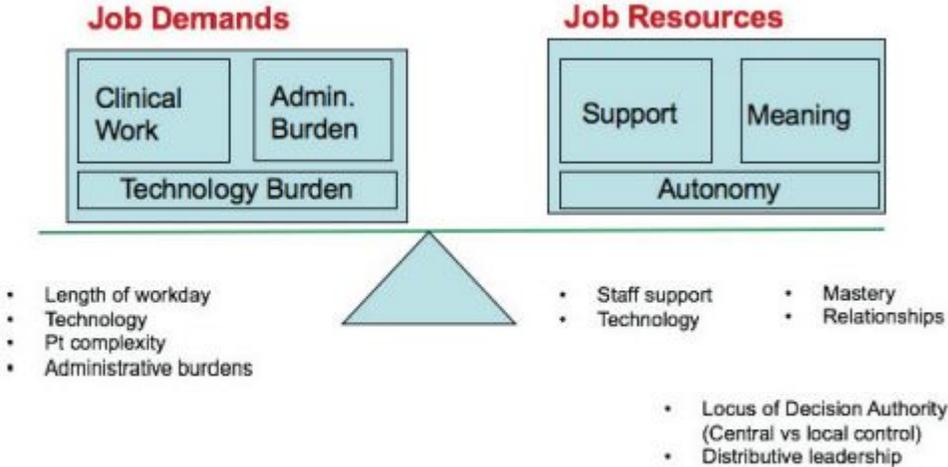


Figure 1 | Job Demands and Job Resources Conceptual Model of Clinician Well-Being
SOURCE: Developed by Christine Sinsky and Mark Linzer.

...the evidence for an association between job demands and clinician burnout is arguably the strongest for any independent variable.

National Academy of Medicine 2019

clinicians ...rated improvements in staffing and work environments as more important to their mental health and well-being than instituting clinician wellness and resilience programs.

Aiken, et al. JAMA Health Forum. 2023 Jul; 4(7): e231809.

Positive Work and Learning Environment

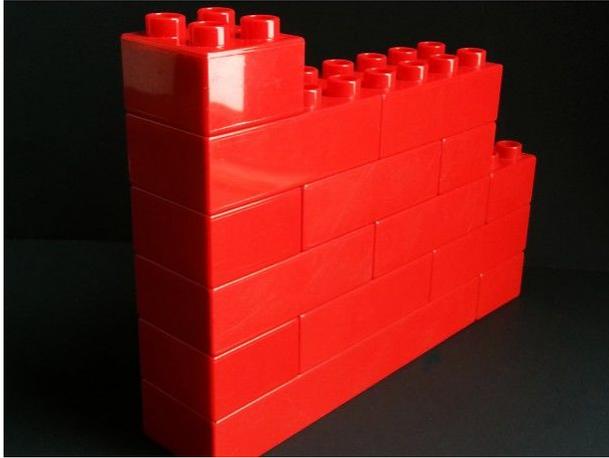
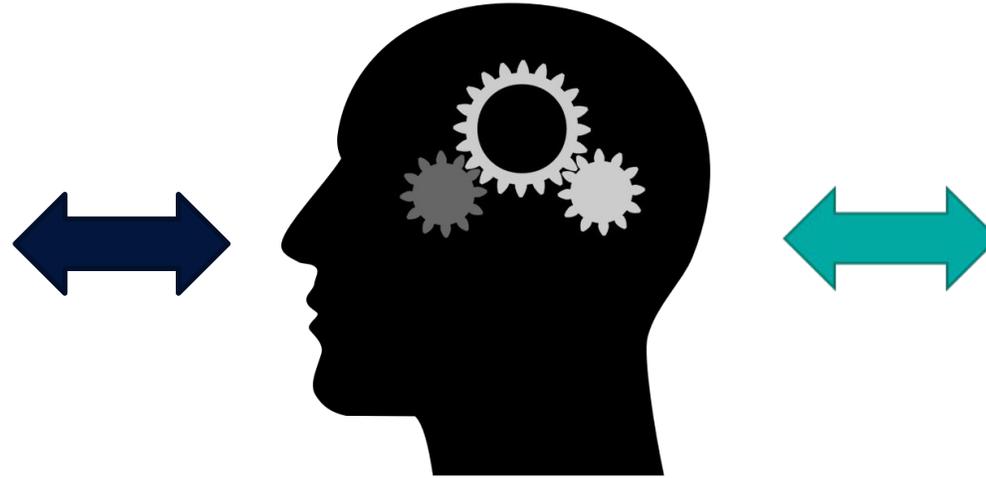


Image: public domain

- Safety
- Temperature
- Food & Beverage
- Sleep
- Personal Space
- Noise Control
- Computers
- Chairs
- Parking



- Educational Efficiencies
- Challenge versus Capability
- Cognitive load
- Policies and Procedures
- Systems & Processes

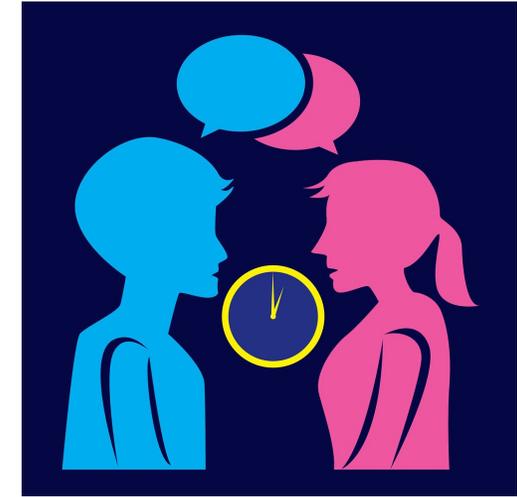
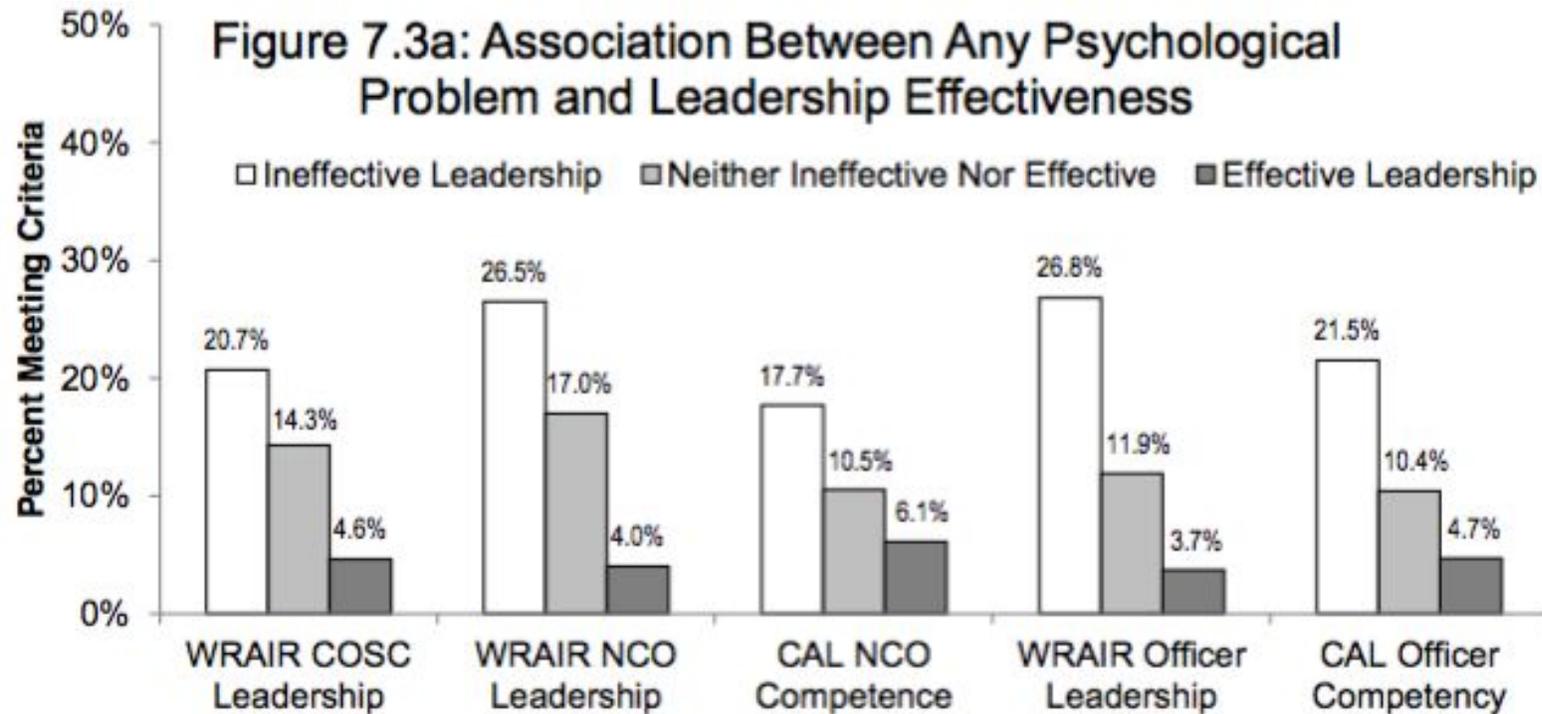


Image: flickr

- Leadership
- Civility
- Interpersonal interactions
- Bullying & Harassment

Leadership Matters



Source: Mental Health Advisory Team 9 (MHAT 9) 2013

Self-Determination Theory

Autonomy

Belonging

Competence

Deep Meaning

Needs supportive environments



Source: Ann Brafford, JD, MAPP, PhD

Motivational Continuum of Self-Determination Theory

Less Self-Determined

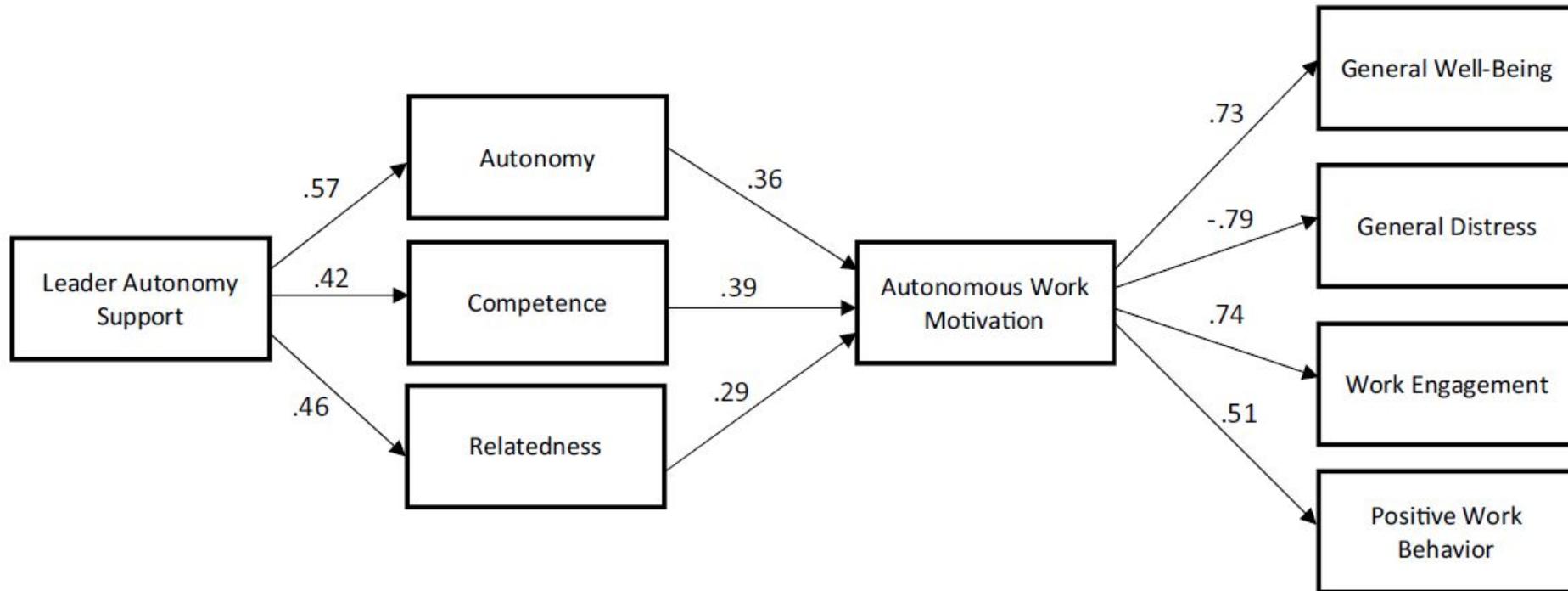
Self-Determined



Distress



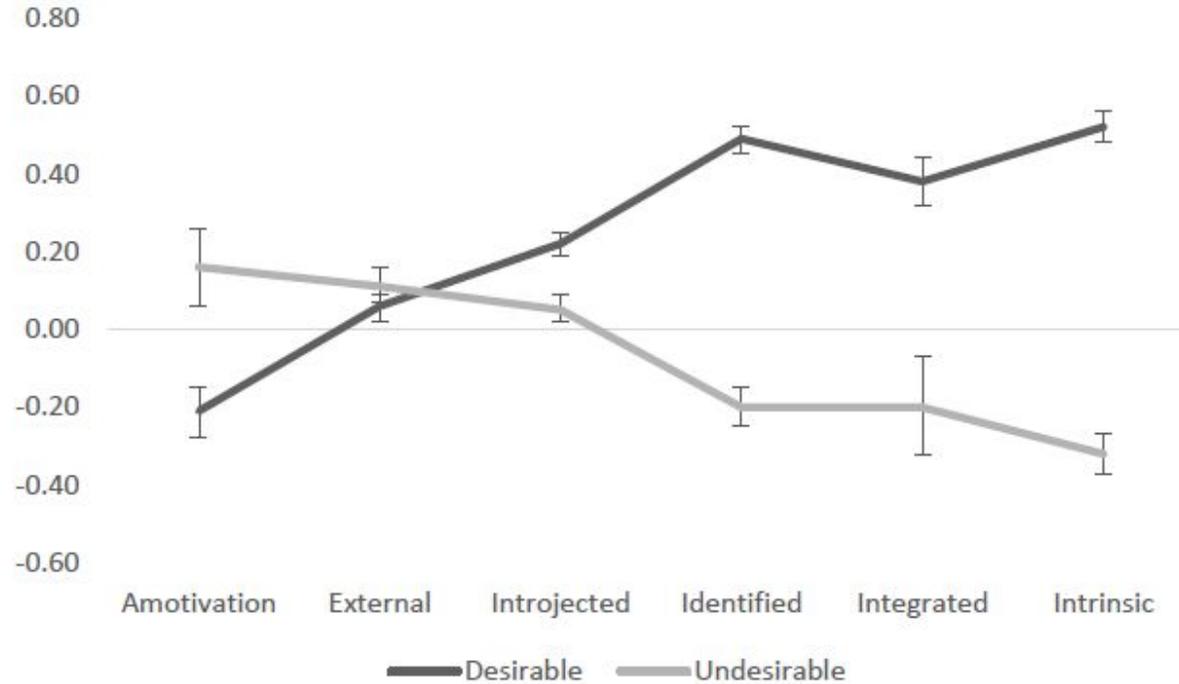
Flourishing



Van den Broeck, A., Howard, J. L., Van Vaerenbergh, Y., Leroy, H., & Gagné, M. (2021). Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation. *Organizational Psychology Review*, 11(3), 240-273.

FIGURE 2

Summary of Results Regarding the Relationships of the Types of Motivation on Outcomes



Note. Desirable outcomes include affective commitment, normative commitment, engagement, job satisfaction, OCB, performance, & proactivity. Undesirable outcomes include absenteeism, burnout, continuance commitment, distress, turnover intention.

Van den Broeck, A., Howard, J. L., Van Vaerenbergh, Y., Leroy, H., & Gagné, M. (2021). Beyond intrinsic and extrinsic motivation: A meta-analysis on self-termination theory's multidimensional conceptualization of work motivation. *Organizational Psychology Review*, 11(3), 240-273.

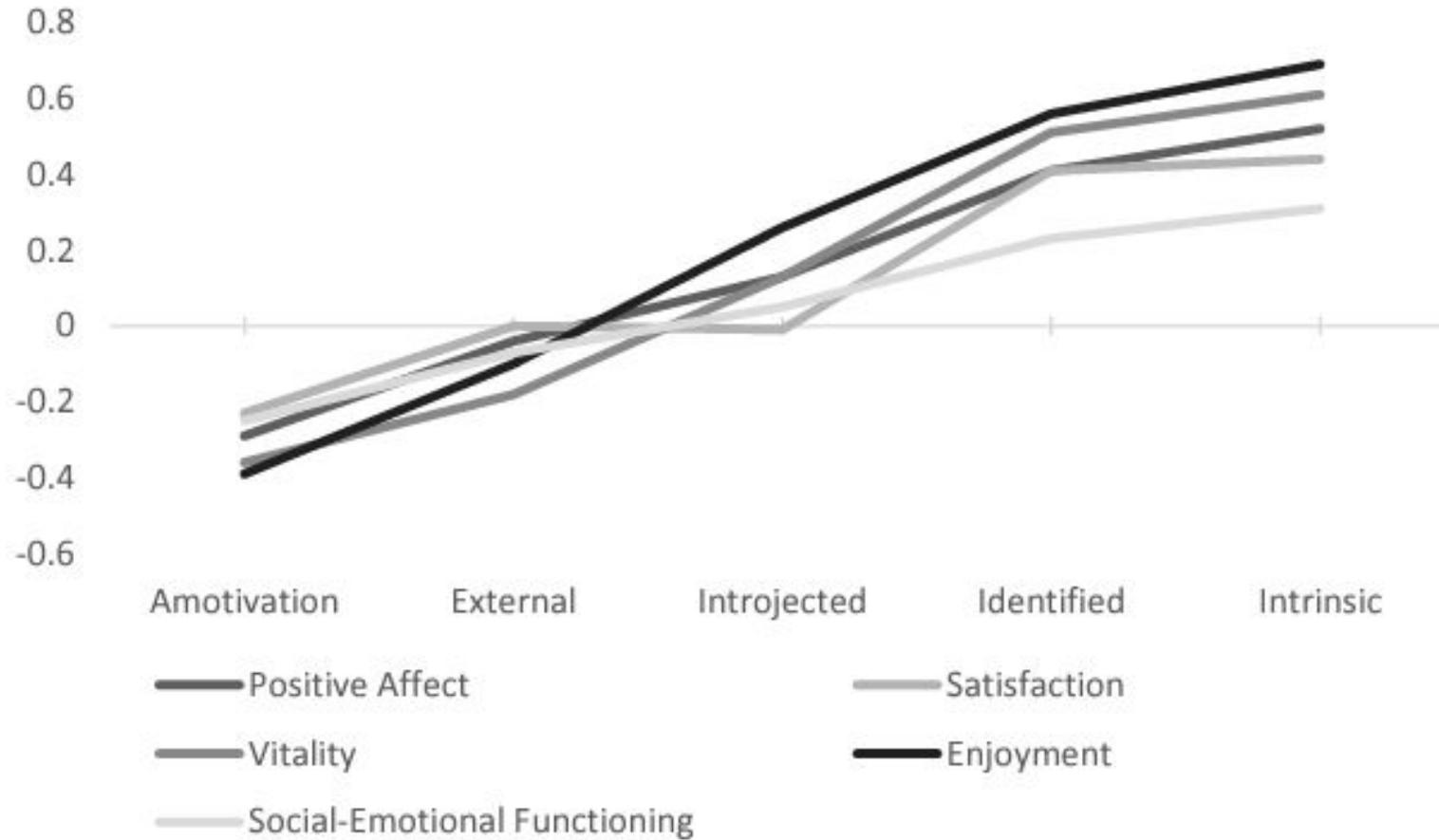


Figure 7
Graphical Representation of Correlations between Motivation and Adaptive Well-being Outcomes

Howard, J.L., Bureau, J.S., Guay, F., Chong, J.X.Y., Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Perspectives on Psychological Science*.
<https://doi.org/10.1177/1745691620966789>

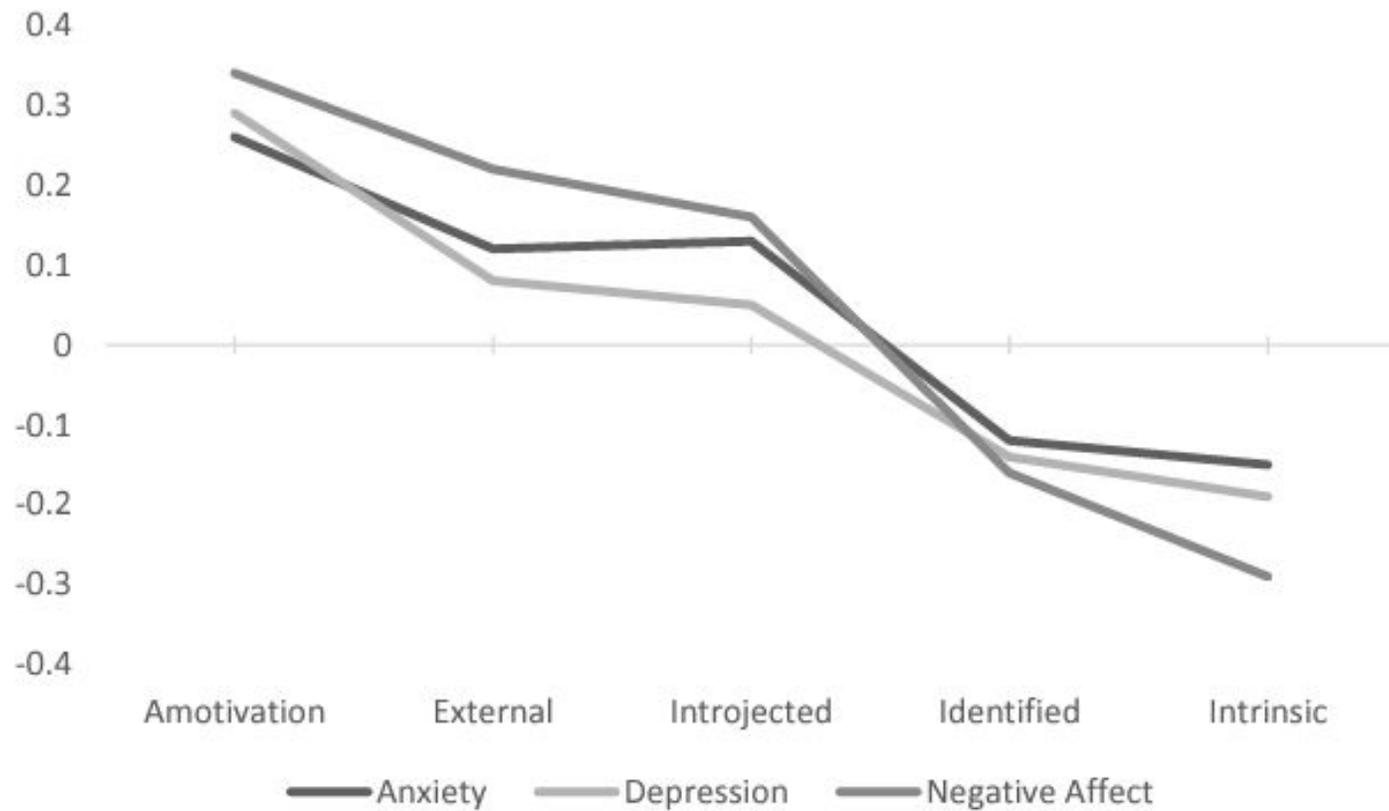


Figure 8

Graphical Representation of Correlations between Motivation and Maladaptive Well-being Outcomes

Howard, J.L., Bureau, J.S., Guay, F., Chong, J.X.Y., Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Perspectives on Psychological Science*.
<https://doi.org/10.1177/1745691620966789>

Model Driven by Well-Researched Theory



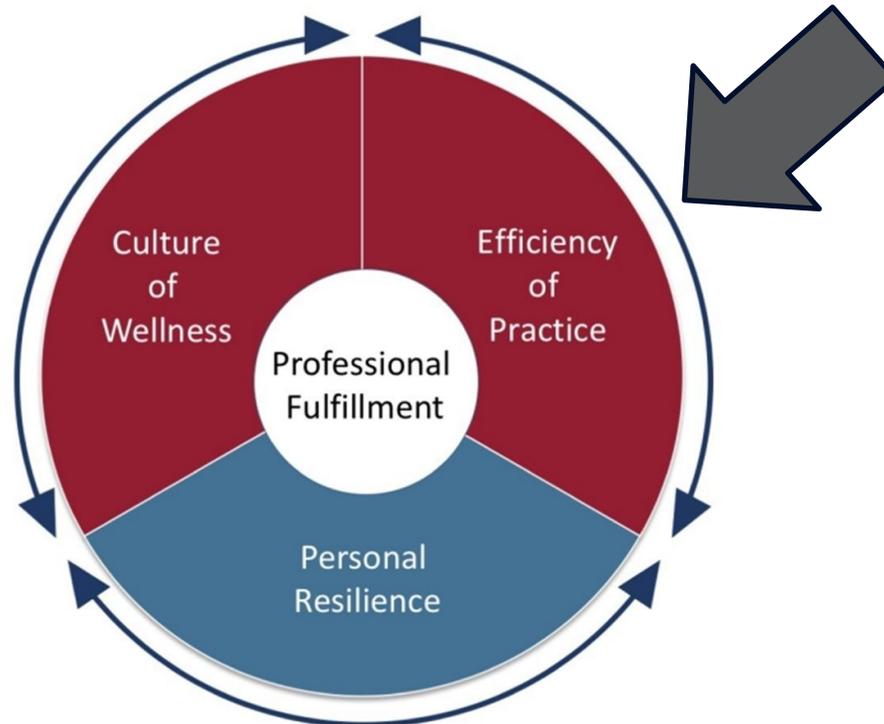
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Likely Effective Interventions



Likely Effective Interventions

- Identify and Decrease Hindrance Job Demands



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Likely Effective Interventions

- Autonomy
- Belonging
- Competence
- Deep Meaning



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I'm truly happier than I ever have been in my life. I feel like my work makes a difference. I feel like my workplace is a family. I would choose this residency over and over and over again if given the chance. Thank you for fostering a place of growth and warmth.



2021-2022 ACGME Resident/Fellow Survey - page 1

1100500218 HCA Healthcare Riverside Program - Emergency medicine

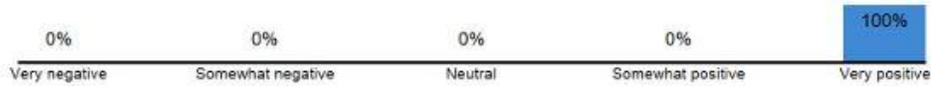
Survey taken: February 2022 - April 2022

Residents Surveyed 39

Residents Responded 38

Response Rate 97%

Residents' overall evaluation of the program



Residents' overall opinion of the program



2020-2021 ACGME Resident/Fellow Survey - page 1

1100500218 Riverside Community Hospital/University of California Riverside School of Medicine Program - Emergency medicine

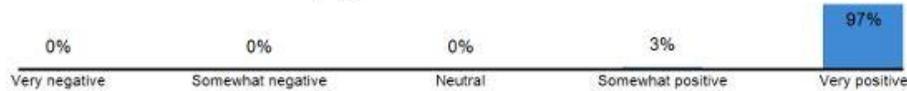
Survey taken: February 2021 - April 2021

Residents Surveyed 34

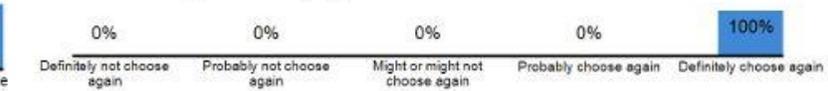
Residents Responded 34

Response Rate 100%

Residents' overall evaluation of the program



Residents' overall opinion of the program



2019-2020 ACGME Resident/Fellow Survey - page 1

1100500218 Riverside Community Hospital/University of California Riverside School of Medicine Program - Emergency medicine

Survey taken: January 2020 - February 2020

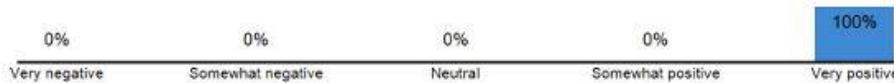
Residents Surveyed 29

Residents Responded 29

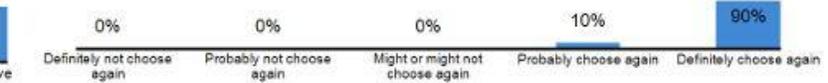
Response Rate 100%

National data has been omitted from this administration of the survey based on complications resulting from the COVID-19 pandemic.

Residents' overall evaluation of the program



Residents' overall opinion of the program



2022-2023 ACGME Resident/Fellow Survey - page 1

1100500218 HCA Healthcare Riverside Program - Emergency medicine

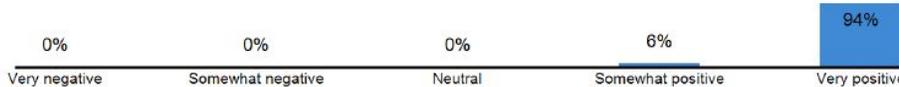
Survey taken: February 2023 - April 2023

Residents Surveyed 38

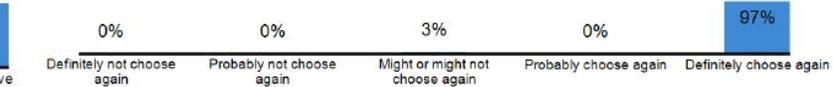
Residents Responded 36

Response Rate 95%

Residents' overall evaluation of the program



Residents' overall opinion of the program



2023-2024 ACGME Resident/Fellow Survey - page 1

1100500218 HCA Healthcare Riverside Program - Emergency medicine

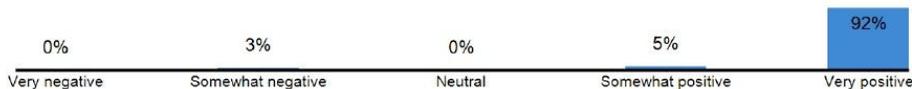
Survey taken: February 2024 - April 2024

Residents Surveyed 39

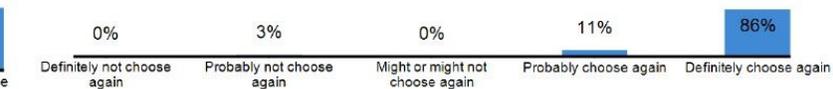
Residents Responded 37

Response Rate 95%

Residents' overall evaluation of the program



Residents' overall opinion of the program





2022 EM Wellness Center of Excellence Award

ACEPNow
The Official Voice of Emergency Medicine

NAVIGATION

CSL Behring



Is your hospital's stock of fresh frozen plasma low?

See an urgent warfarin reversal alternative

Residency Spotlight: HCA Healthcare Riverside Emergency Medicine Residency

By Allison Woodall, MD | on August 9, 2022 | 0 Comment



HCA 
Healthcare®

Phase II: Validation and generalization of relationships

Structural Equation Modelling with Replication



Year 1
981

Year 2
1272

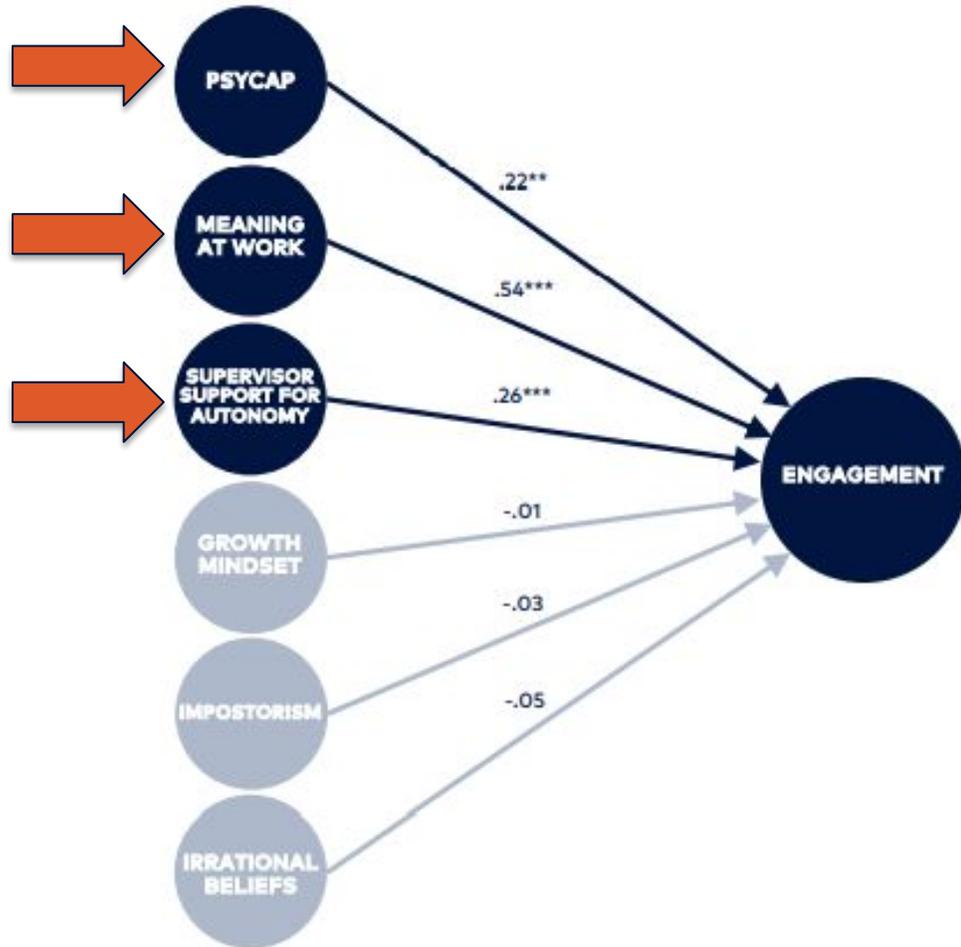
COVID
574

Total
2827

Brafford AM, Ellis B, Guldner G, Riazi G, Liu X, Wells JC, Siegel JT. A Multi-Wave Study of Factors Associated With Resident Engagement, Depression, Burnout, and Stay Intent. HCA Healthc J Med. 2024 Jun 1;5(3):313-330. doi: 10.36518/2689-0216.1837. PMID: 39015582

FINAL STRUCTURAL MODEL FOR ENGAGEMENT

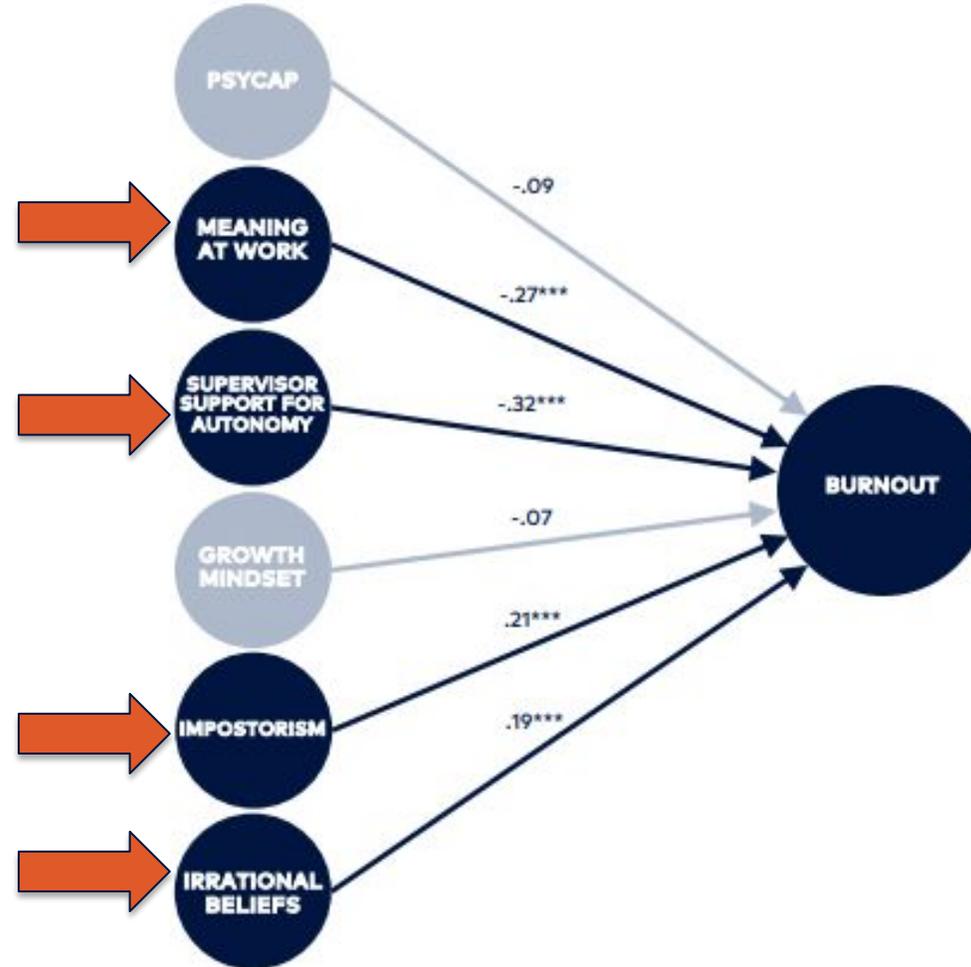
Figure C3
Structural Model for Engagement (N = 355)



Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Regression coefficients are standardized (β).

FINAL STRUCTURAL MODEL FOR BURNOUT

Figure C2
Structural Model for Burnout (N = 355)



Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Regression coefficients are standardized (β).

Support for basic psychological needs (Autonomy Supportive Leadership) is strongly related to key resident outcomes

Autonomy Supportive Environments Drives Positive Outcomes

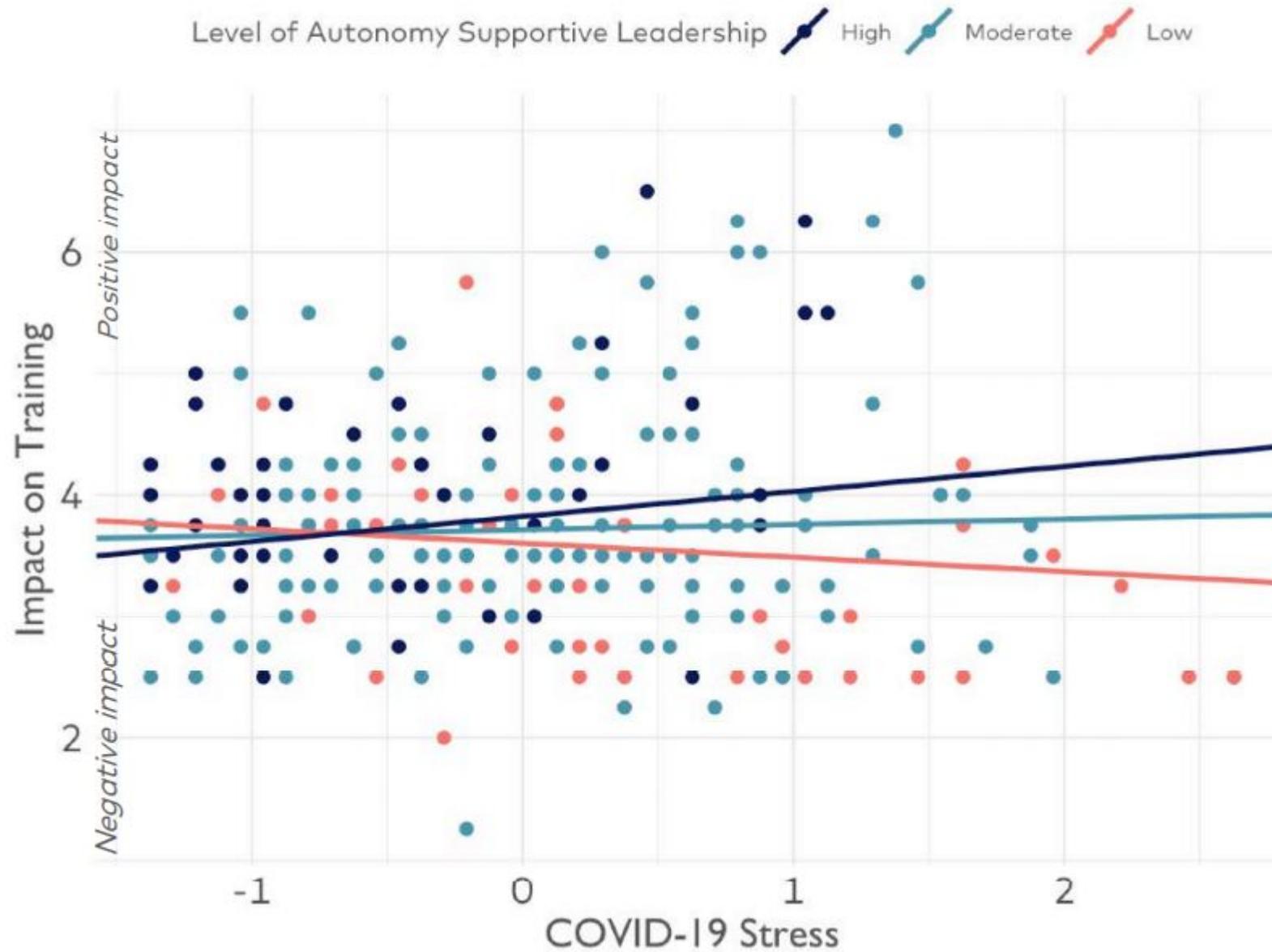
	Autonomy Support	Competence Support	Belonging Support
Professional Fulfillment	.53***	.54***	.56***
Pride in Hospital	.39***	.44***	.42***
High Quality Motivation	.58***	.59***	.64***
Well-Being (Vitality)	.41***	.44***	.50***

Support for basic psychological needs (Autonomy Supportive Leadership) is strongly related to key resident outcomes

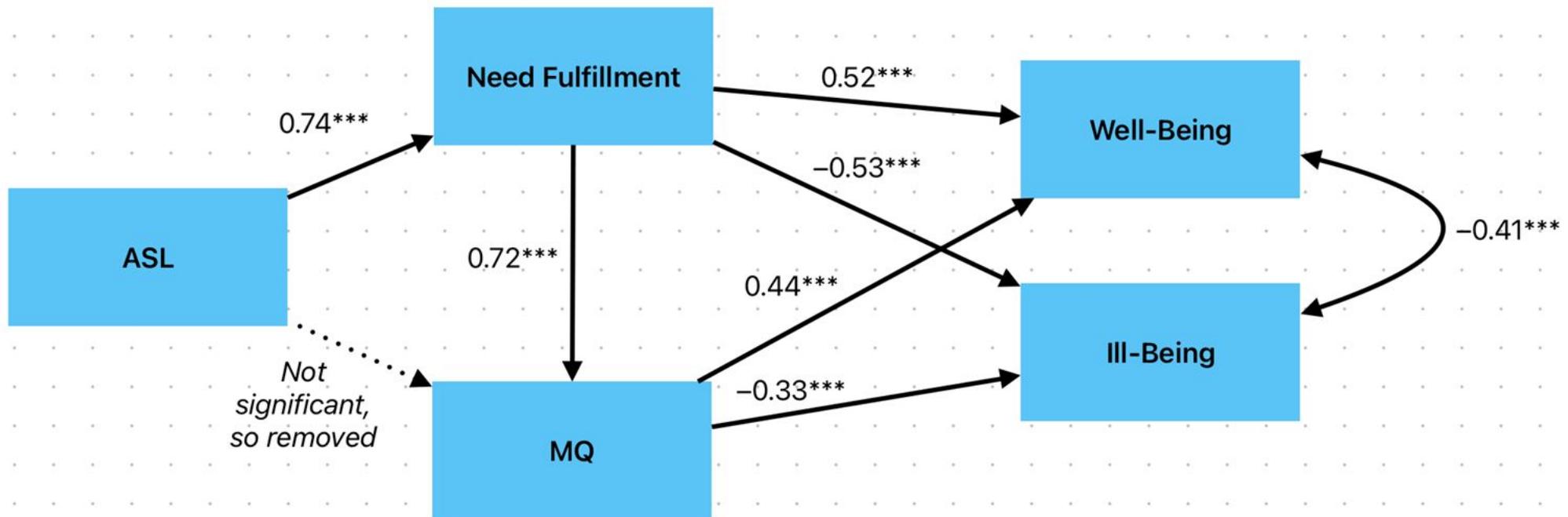
Autonomy Supportive Environments Build Resident Resilience to Negative Outcomes

	Autonomy Support	Competence Support	Belonging Support
Stress	-.32***	-.39***	-.42***
Work Exhaustion	-.43***	-.47***	-.53***
Interpersonal Disengagement	-.44***	-.47***	-.46***

Interaction of COVID-19 Stress & Autonomy Supportive Leadership



Self-Determination Theory Concepts and Impact on Work Related Well-Being



$\chi^2(3) = 2.124, p = 0.547, CFI = 1.000, RMSEA = 0.000, SRMR = 0.011$

Exit Survey Modeling

Autonomy

- I felt like I could make a lot of input into deciding how my job got done.
- I was free to express my ideas and opinions during my training program.
- My feelings were taken into consideration during my training program.
- There was not much opportunity for me to decide for myself how I went about my work in my training program.

2023: N = 705 2024: N = 1018

Phase III: Creating shared mental models

Austin, TX May 2023



Amelia Island, FL Sept 2023



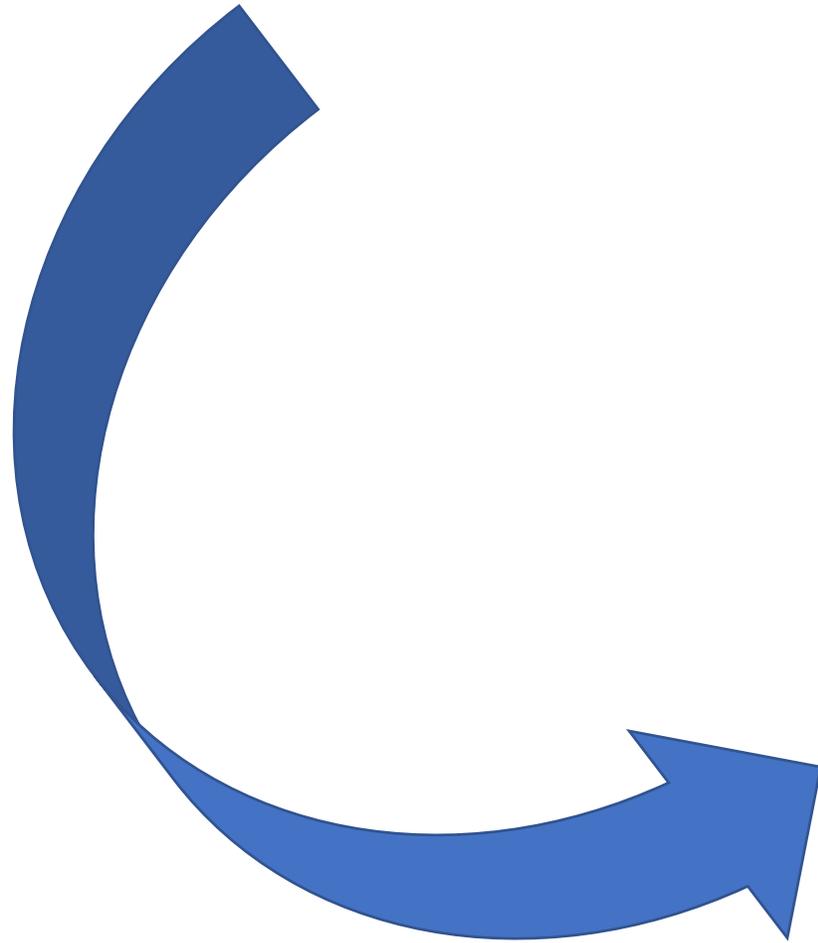
Savannah, GA May 2024



Nashville, TN August 2024



Theory and Evidence



PRACTICAL

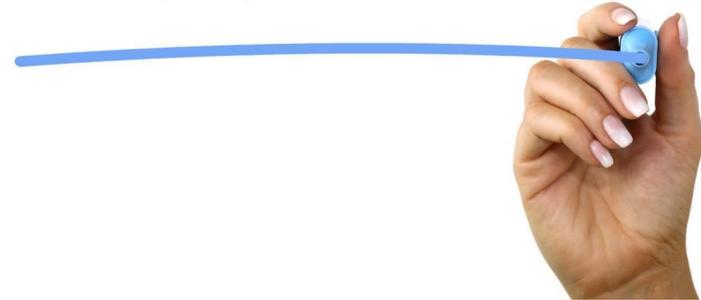


Image: The Blue Diamond Gallery

Resident Engagement Rounds

“What’s bugging you the most right now?”

“What could we change to make your work day better?”





Your Voice Matters!



Use this QR code for confidential or anonymous reporting to the DIO, National GME Leadership and the HCA Healthcare GME Ombudsperson

We are committed to creating an environment where residents, fellows and all team members can report concerns related to GME without fear of retaliation, intimidation or retribution. We hope this tool will be one more way for us to hear your voice.

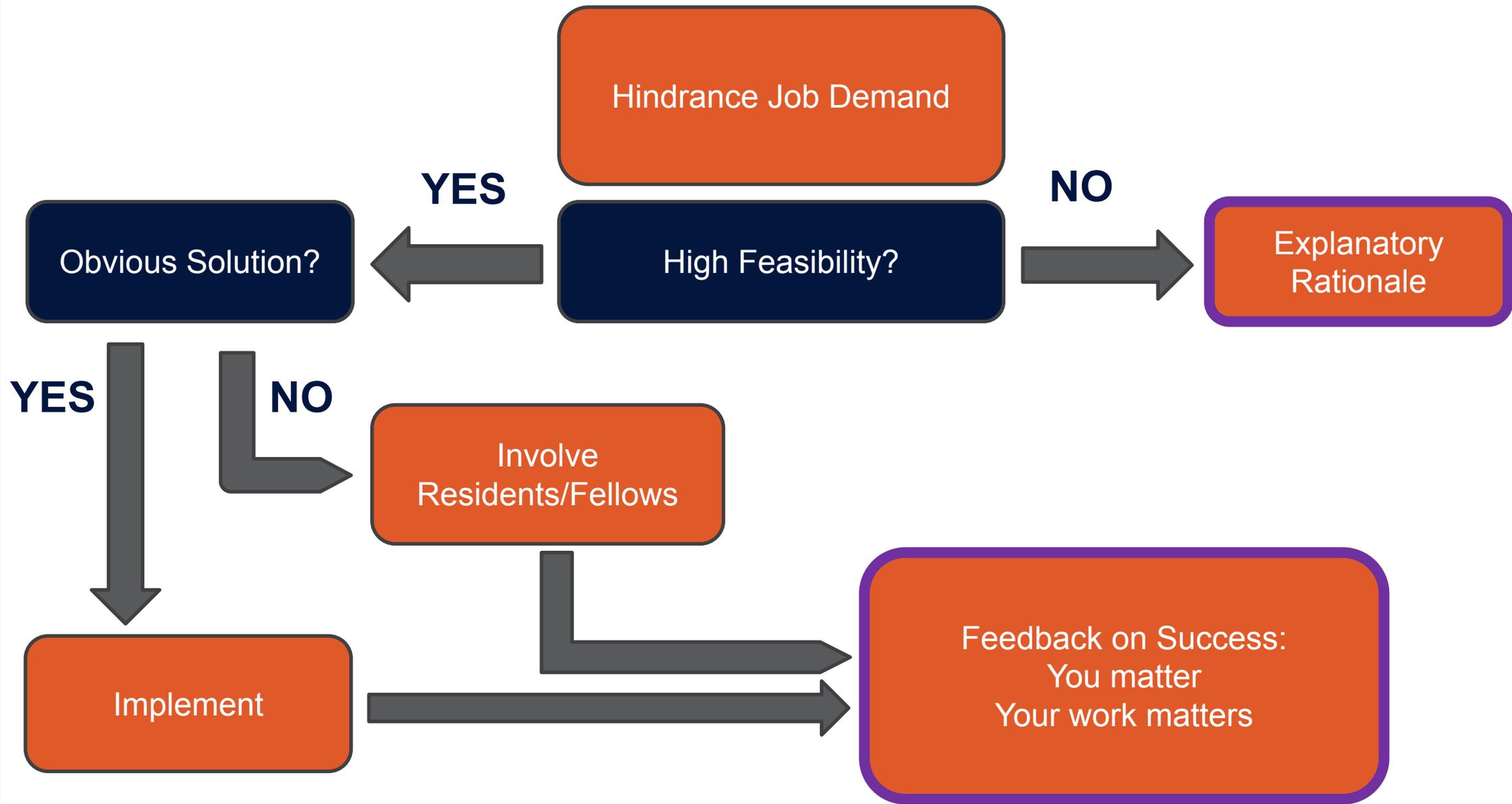
Impact	High	Defer until Resources	Priority # 1
	Low	Defer Indefinitely	Priority # 2
		Low	High
		Feasibility	

- Chairs in ER
- Call room pillows
- Otoscopes
- Keyboard broken
- Shower curtain
- Wheel on cart broken
- Ultrasound gel always empty
- AC blows on a specific charting area
- Nerve block equipment



Work and Learning Environment Optimization

Topic	Date Added	Source	Feasibility	Impact Priority	Comments	Date Resolved	Loop Closed (Provide Rationale if not possible)
Missing shower curtain in 3 rd floor call room.	7/3/21	Resident	H	L	Ordered from staples. Installed.	7/15/21	Y
Badges have first name only	7/3/21	DIO	H	H	Reprinting badges. Anticipated completion 8/1	8/1/21	Y
Computers in OR too slow causing delays	7/9/21	Attending	H	H	Patients cannot leave OR until note in computer but computers slow. Causing delays. Awaiting CFO approval for new computers ETA 7/15. IT agrees computer is slow		N
A/C broken in team room	7/9/21	Residents	Unsure	M	Addressed with COO and facilities engineering. Awaiting technician to review equipment. ETA 7/11		N



Autonomy - Interpersonal

1. Whenever possible let residents decide (decision latitude) / input

“What do you want to do?”

2. When residents decisions are out of standard of care then:

Guide them to make their own, revised, correct decision

“Knowing that, now what do you want to do?”

Give rationale for directives

Language is important – “If that’s what you’d like to do, let’s do that.”



Autonomy - Structural

- Autonomy “Audits” of Rotations, Policies, Requirements
- Could we / should we be doing this a different way?
- What is going well? What should be changed? What is unclear?
- Anything we’re doing for which you don’t understand the why?
- Where do you feel coerced, forced, or compelled to do things you otherwise wouldn’t do?
- **Work related communications**

Belonging

Where do we make people feel unwelcomed, in the way, burdensome, excluded, or undervalued?

- **Are there rotations that do this?**
- **Are there types of individuals/roles that may feel this way?**
- **Are there social events we plan that exclude people?**
- **Are there locations that do this?**
- **Mistreatment – are there individuals, rotations, procedures, or locations that routinely are perceived as resulting in mistreatment of team members?**

Belonging

Individual efforts to connect – introductions, goals, recognition

Program level efforts to develop social support

Emotional, Informational, Instrumental, Appraisal

- Routine planned check ins by text and/or email
- Peer-to-Peer Support “Battle Buddies”
- Peer interest groups (pickle ball, dog parks, gaming)
- Thank you notes
- “Missing you” videos
- Birthdays and Milestones
- Community Service Days



Belonging

Programs to develop social support

Emotional, Informational, Instrumental, Appraisal

- **Block Transition “Parties”**
- **Rotation Guidebooks**
- **“How to” CPOE Guides**
- **Lists of Recommended Services (cleaning, dog sitting, mechanics, plumbing)**
- **Lists of Recommended Restaurants & Entertainment**



Belonging

Programs to develop social support

Emotional, Informational, Instrumental, Appraisal

- Help with:
 - Dog sitting
 - Baby sitting
 - Drives to the airport / carpools
- Cleaning coupons / Grocery delivery / Food delivery
- Hotel-style mini-shop on honor system
- HOPE fund



Belonging

Programs to develop social support

Emotional, Informational, Instrumental, Appraisal

- Peer-to-peer mentors
- Faculty mentors
- Affinity groups
- Anonymous submissions to par
- Fellowship mentors



Belonging

- **Social Events**
- **Jackets and other “team branding”**
- **Significant other groups**
- **Significant other “rounds” or meals (bring to simulation lab)**
- **Thank you cards to significant others**



Competence - Individual

Individual efforts to point out, amplify, and support growth and mastery

“I noticed you’ve become really good at taking a difficult history”

“You were superb at that intubation. You’ve really improved over the year”

“What is your goal today? How can I help structure today to meet that goal?”



Competence - Structural

Competence “Audit”

Where in the program do you feel you are not growing?

Where in the program do you feel you are “unnecessarily incompetent”?



Meaning - Individual

Deliberate identification of pro-social meaning of actions

- **“Catching the pulmonary embolism may have saved her life.”**
- **“Reducing his cholesterol may have given him more time with his grandkids over the years.”**

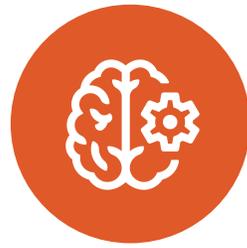
Give permission to feel good about a positive impact



Meaning - Structural

- Patients return to discuss positive impact and experience
- Patient Experience Comments
- Mini-Fellowships





Autonomy

Otosscopes in rooms

Onboarding requirements

What would you like to do?

Decision Latitude
Willing endorsement

Belonging

Photo Boards

“Physician” Lounge

“checking in”

Mutual care
Acceptance
Social Connection

Competence

Nerve block equipment

PGY2 transition without training

“What’s your goal today?”

Growth
Mastery

Meaning

Virginia Tech Quilt

Semi-annual evaluation with a paragraph impact to patients and families

“catching that PE may have saved her life.”

Pro-Social Impact



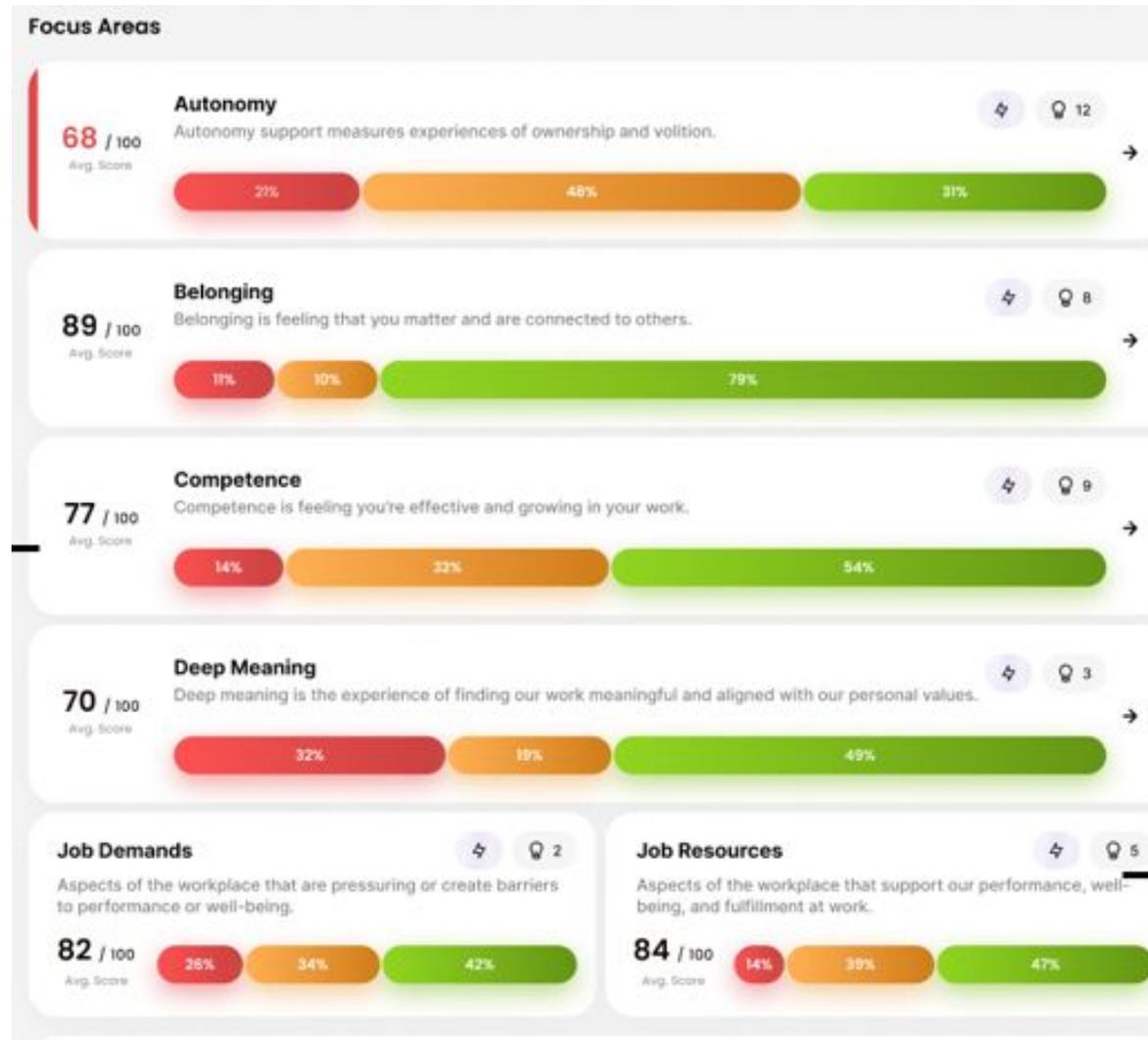
Our Vision

To create optimal work and learning environments to promote flourishing among all team members

An optimal work and learning environment is one in which the individual perceives that the **job demands** are balanced by job resources and that the environment supports **autonomy, belonging, competence, and meaning.**



Measuring the Environment



Top Recommendations

- Autonomy** 68 / 100: Practice "perspective taking" in your interpersonal interactions. [+ Save](#)
- Competence** 77 / 100: Provide your team with clear guidelines for new or challenging tasks. [+ Save](#)
- Job Demands** 82 / 100: Put a Process in Place to Identify Hinderance Job Demands. [+ Save](#)
- Autonomy** 68 / 100: Acknowledge effort and growth alongside success. [+ Save](#)

2024 ACGME Well-Being Survey

HCA Healthcare beats the national average on all 12 of the 2024 ACGME Survey Well-Being items

2023	2024	
HCA Above	HCA Above	
√	√	I find my work to be meaningful.
Tie	√	I work in a supportive environment.
√	√	The amount of work I am expected to complete in a day is reasonable.
√	√	I participate in decisions that affect my work.
√	√	I have enough time to think and reflect.
Tie	√	I am treated with respect at work.
√	√	I feel more and more engaged in my work.
Tie	√	I find my work to be a positive challenge.
Tie	√	I find new and interesting aspects in my work.
√	√	I often feel emotionally drained at work.
√	√	After work, I need more time than in the past in order to relax.
√	√	I feel worn out and weary after work.
√	√	Total

Thank You

Gregory.Guldner@HCAhealthcare.com

HCA  **Graduate
Medical
Education**
Wellness Matters

