

Psychological Safety and Clinician Well-Being among Surgical APPs in Collaborative Team Practice

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Making Cancer History

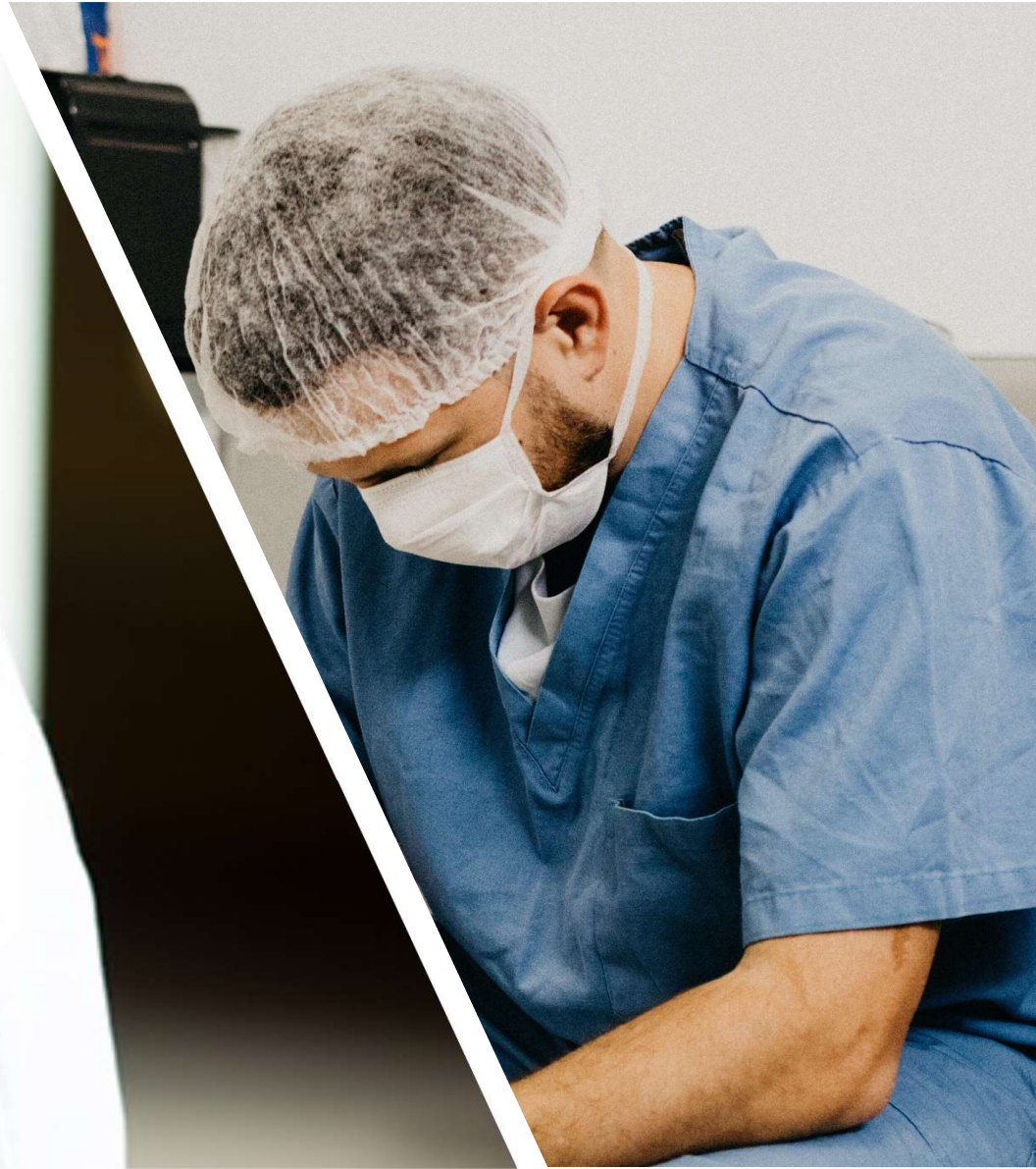
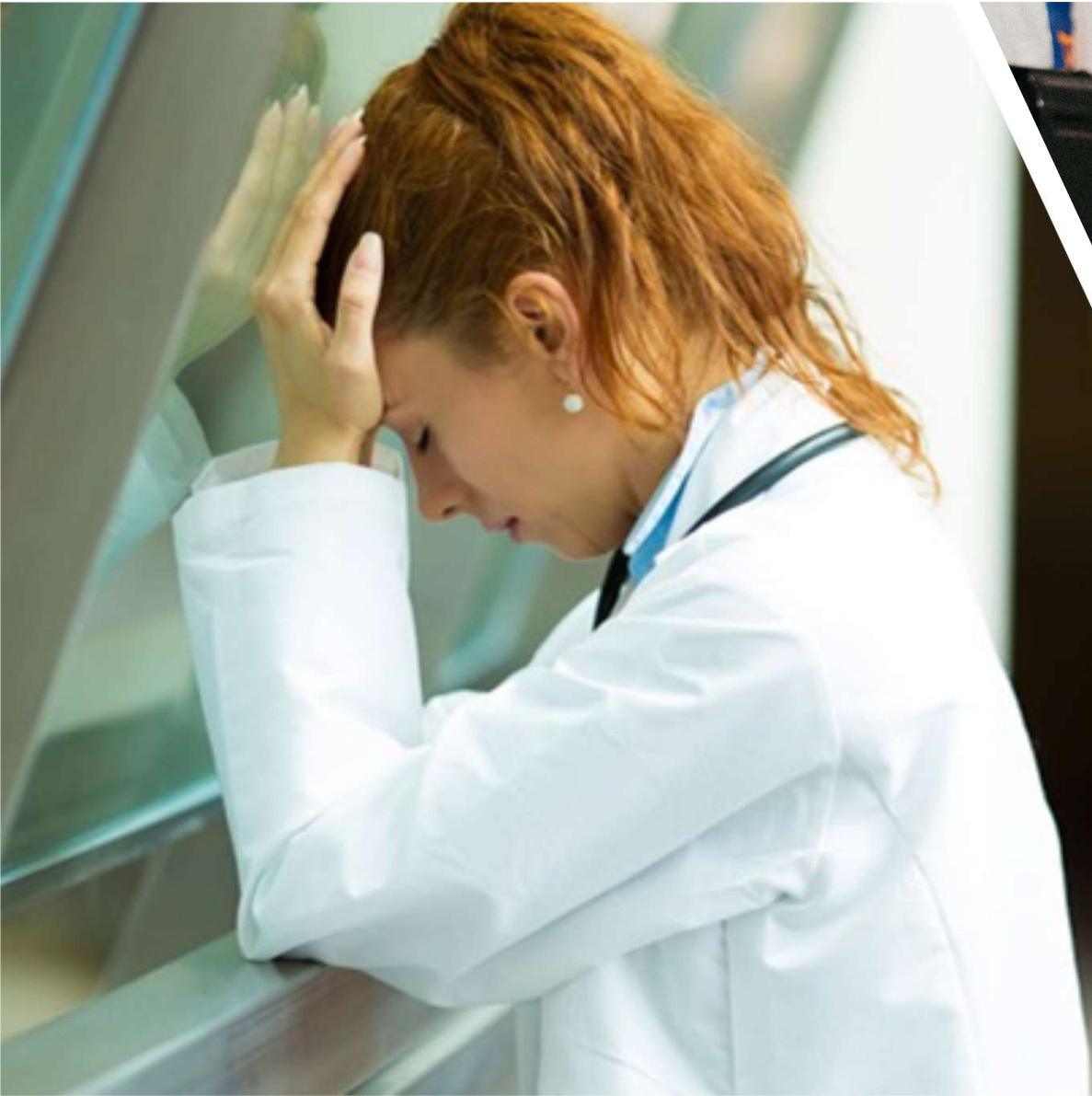


Disclosure

- I have Nothing to Disclose

Learning Objectives

- Define psychological safety and describe its role in among APPs in collaborative practice teams
- Discuss team leadership factors that contribute to psychological safety among collaborative practice teams and its relationship with clinician well-being
- Discuss the potential implications of optimizing psychological safety that may influence APP practice, education, and future research



Health Care - A System in Crisis

- Complex health care system that is constantly evolving
- Crisis in patient safety and quality- Institute of Medicine (2000, 2001)
- Rapid expansion and utilization of APPs in all medical/ surgical specialties
- High demands on health care professionals are associated with increased rates of clinician stress, depression, and burnout
- Multiple dimensions of clinician distress – difficult to fully measure and quantify

A photograph of a healthcare professional, likely a nurse or doctor, sitting on a bench in a hospital hallway. The person is wearing a white lab coat and blue scrubs, and is looking down with a somber expression. The hallway is dimly lit, with a door visible at the end of the corridor. The overall mood is one of exhaustion and despair.

30 – 50%

**Advanced Practice
Providers (APPs)
experience**

Burnout

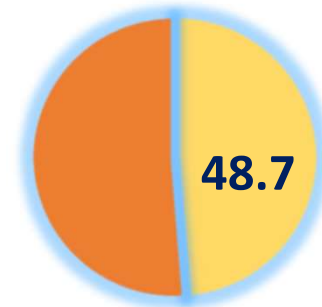


National Study of Burnout and Career Satisfaction Among Physician Assistants in Oncology: Implications for Team-Based Care

Eric Daniel Tetzlaff, Heather Marie Hylton, Lyudmila DeMora, Karen Ruth, and Yu-Ning Wong

National oncology APP BO rates:

- PAs 34.8% (2017)
- NPs 31.3% (2020)
- PA rate increased to 48.7% (2021)



**48.7% of
oncology PAs
reported
burnout**

Bourdeanu, 2020 & Tetzlaff, 2017, 2021

Perceived Leadership Qualities of Collaborating Physician (CP)

For the following statements, do you...

Strongly Agree... Agree... Neutral... Disagree...?



“I feel **valued** by my CP”

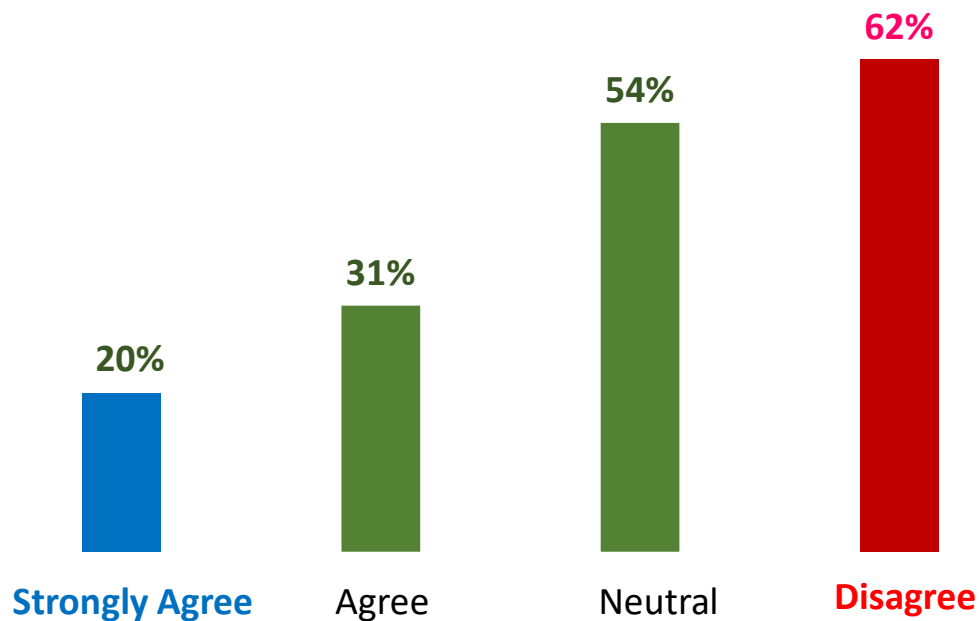


“My CP encourages me to achieve my professional **goals**”



“My CP acknowledges and understands my **contributions**”

Perceived CP Leadership Qualities and PA Burnout (%)



62% PAs
report burnout
with *unfavorable*
perceived CP
leadership qualities

“PA perception of collaborating physician (CP) and his or her leadership qualities was independently associated with professional burnout”

Tetzlaff et al., 2018



A Tale of
TWO TEAMS



The Institute of Medicine defines
Team-Based Care as...

“

... the provision of health services to individuals, families, and/or their communities by at least two health providers who work **collaboratively** with patients and their caregivers... to accomplish shared goals within and across settings to achieve coordinated, high-quality care.”

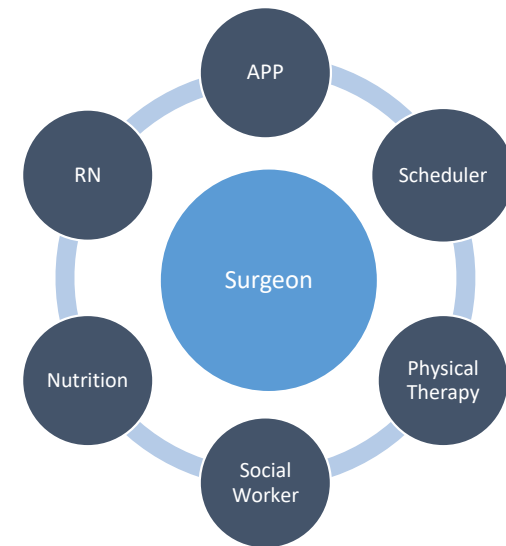
Mitchell, 2012

What is the **Optimal** Health Care Team?

Team structure?

or

Team culture?



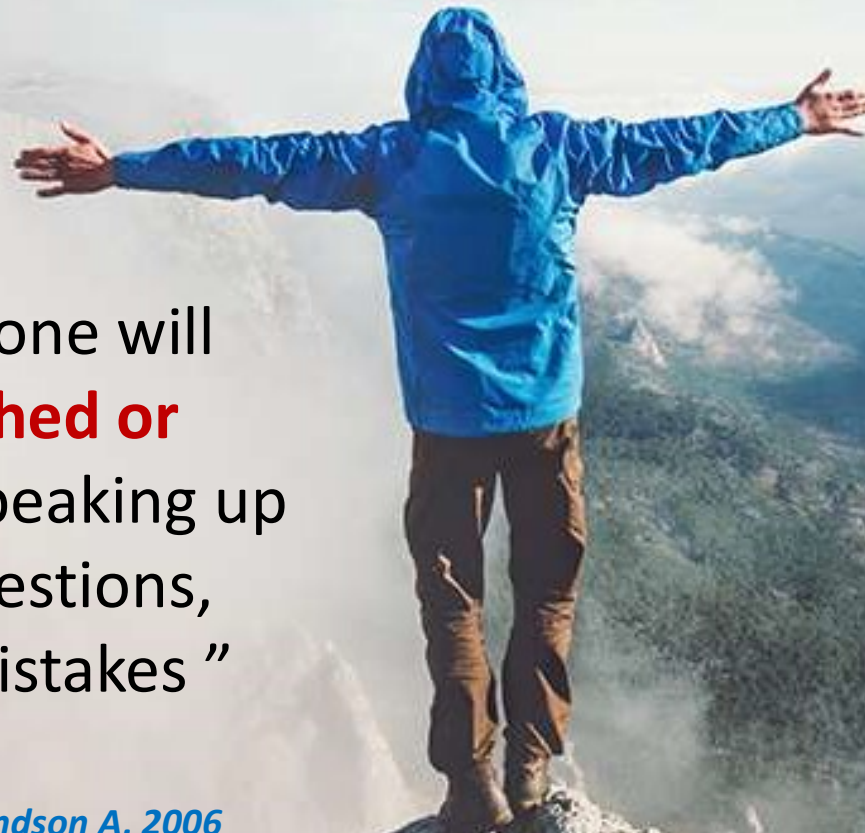
Optimal teams based on...

- Team interdependence
- Interprofessional collaboration
- **Psychological Safety**

What is Psychological Safety?

“A belief that one will **not be punished or humiliated** for speaking up with ideas, questions, concerns, or mistakes ”

Edmondson A, 2006



Psychological Safety (PS)

Team members **feel safe to take interpersonal risks** and be vulnerable in front of each other

PS **promotes team-learning behaviors** that may lead to goal achievement and improved team performance

PS fosters mutual trust, shared ideas, and **open communication**

Psychological Safety and Team Performance

“PS is one of the most powerful predictors of team success...”

Rozovsky, 2015

High PS enhances...

- Team creativity
- Team synergy
- Team efficacy
- Confidence



Low PS in health care setting associated with adverse outcomes:

- Increased medical errors
- Increased “works-arounds”
- Decreased team-learning
- Decreased team performance
- Employee disengagement
- Increased staff turnover

Psychological Safety and Accountability



Edmondson, 2006, 2021

APPs in Collaborative Practice Teams

Psychological
Safety (PS)

???



Clinician
Well-being



What factors contribute to PS among APPs in oncology?
What is the relationship between PS and clinician (APP) well-being?



Theoretical Model:

Psychological Safety and Clinician Well-Being among Oncology APPs

Team Leadership Factors

- **PS Theme #1: Leadership Behavior**

Leader Inclusiveness (LI)- Nembhard & Edmondson, 2006

“Words and deeds by a leader that indicate an invitation and appreciation for others’ contributions”

- Key characteristic of transformational leadership theory
- LI promotes team engagement, team learning, and innovation

- **PS Theme #2: Network Ties**

Leader-Member Exchange (LMX)- Graen & Uhl-Bien, 1995

- Team leader may have different relationships with his or her followers
- Focus on leader-member “dyadic” relationship, including quality of interactions
 - “In Group” - expanded role relationships, more influence; higher PS
 - “Out Group” - formal job descriptions and standard benefits; lower PS

Clinician Well-Being

Clinician Well-being (WB)- Dyrbye et al., 2019, Smith et al., 2018

- Multi-factorial drivers of well-being (internal and external factors)
- Strong team climate and effective team communication promotes clinician WB

BUT, there is much more to distress than just **BURNOUT**...

Multiple dimensions of distress (Mayo Well-Being Index):

- Meaning in workplace
- Likelihood of burnout
- Severe fatigue
- Job satisfaction
- Intent of job turnover
- Work-life integration
- Quality of life
- Suicidal ideation

Well-Being Index

- High predictive validity among U.S. APPs
- High WBI Score = ↑ risk for the following adverse outcomes:
 - **9x** higher risk of **burnout**
 - **3x** higher risk of **severe fatigue**
 - **4x** risk of **poor overall quality of life**
 - **1.7x** higher risk of **recent patient care error**
 - **3x** higher risk of **below avg job performance**
 - **3x** higher risk of **intent to leave their job (for reasons other than retirement) in the next 2 years**



WELL-BEING
index

Dyrbye et al., 2019

Dependent	LR (95% CI)
Burned out	9.28 (5.97, 14.79)
High Fatigue	3.44 (2.48, 4.75)
Low QOL	4.16 (3.04, 5.62)
High Absenteeism	1.06 (0.7, 1.57)
Recent Medical Error	1.69 (0.92, 2.84)
Below avg job performance	2.9 (2.06, 4.11)
Moderate+ intent to leave*	3.12 (2.19, 4.44)

*analysis conducted excluded those with intent to retire

Research Summary

Purpose: To examine factors contributing to PS among oncology APPs, as well as explore the relationship between PS and clinician WB

Design: Non-experimental, cross-sectional, correlational survey

- Demographic professional characteristics
- Team leadership scales (LI and LMX)
- PS scale and WBI

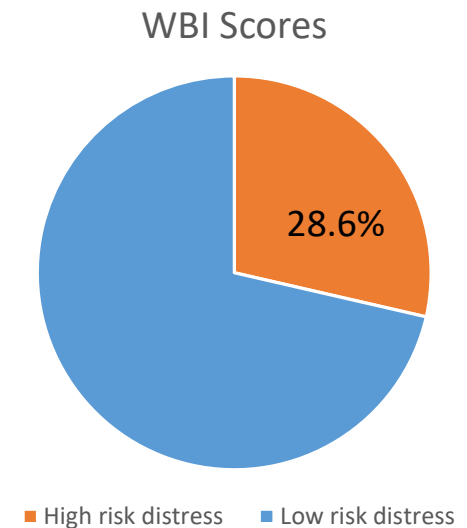
Subjects: Oncology APPs from all oncology disciplines and practice settings nationwide

- Members of the Association of Physician Assistants in Oncology (APAO)
- Members of the Advanced Practitioner Society of Hematology Oncology (APSHO)
- Final Sample (n = 84)

Setting: Participants asked to reflect upon his or her team relationships during the COVID-19 pandemic

Summary Statistics

- Final sample of 84 APPs
 - 28.6% indicate high WBI group (high risk of distress)
 - 26.2% indicate LMX “out” group
- Demographic features
 - 92.9% Female
 - 86.9% White race
- Professional characteristics
 - 48.8% NP; 46.4% PA (4.8% CNS)
 - 51.2% Medical Onc; 17.9% Surg Onc; 17.9% Heme Onc
 - 54.8% 10+ years APP experience
 - 81% predominant outpatient setting
 - 69% work in academic center or hospital setting
- Team Practice Model
 - 67.9 % independent model; 17.9% shared model; 14.3% mixed model
 - 47.6% work with btw 2-5 CPs
 - 96.5% work with same CP or same small group of CPs



Study Findings

1. What are the factors that contribute to PS among APPs in oncology?

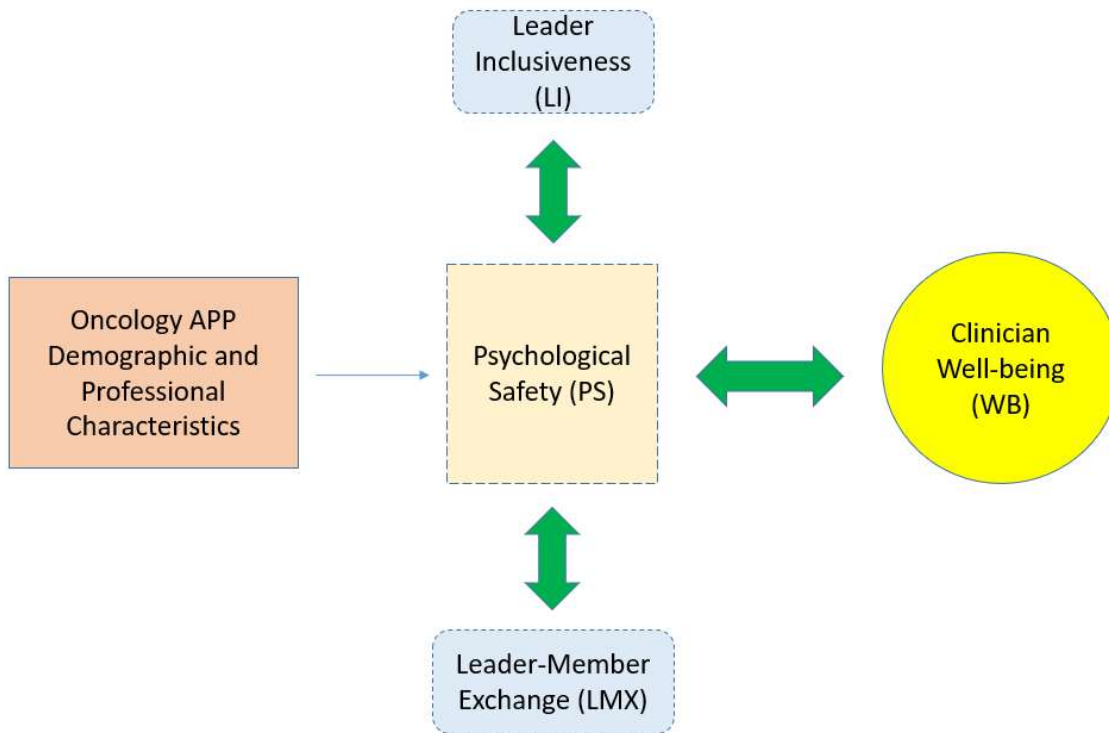
- ✓ **Leader inclusiveness (LI)** - high LI associated with high PS
- ✓ **Leader-member exchange (LMX)** - high LMX (“in-group”) associated with high PS
- ✓ **Clinician well-being (WB)** - low distress associated with high PS

Bi-variate only: Low PS associated with >50% in-direct patient care, shared practice model, and non-surgical oncology

2. What is the relationship between PS and clinician well-being (WB) among APPs in oncology?

- ✓ **Low PS is associated with high risk of clinician distress (high WBI)**

✓ *Significant relationship on multivariate analysis*



First known study...

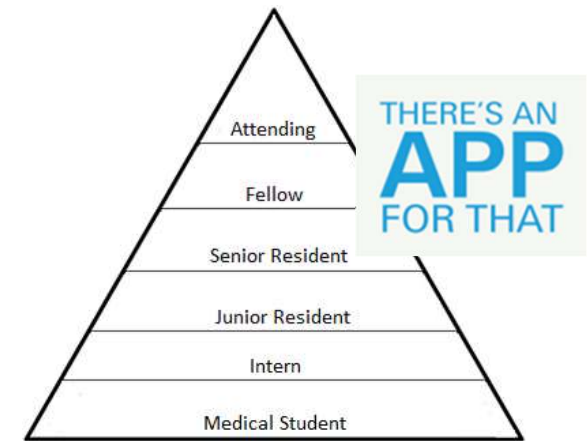
- PS among APPs
- LI and LMX among APPs
- Link between PS and clinician well-being (WB)

Study limitations

- APP sample and recruitment
- Survey limitations (self report bias)
- Team leader identification
- Clinician distress and WBI
- COVID-19 pandemic setting
- Cross-sectional study design

A Closer look at Team Leadership and PS...

- Traditional hierarchy in medicine
 - Medical (e.g., attending, fellow, resident, intern, student)
 - Professional (e.g., MD, APP, RN, RT, MA...)
 - Hospital/ Institutional (e.g., BOD, CMO, CNO, Head, Chair...)
- Power distance and PS
 - Status hierarchy is good predictor of PS
 - Power Distance (PD) = status-induced gaps
 - “Steep” PD, lower PS
 - “Flatter” PD, better outcomes (18% better M&M)
- Inclusive leadership (high LI scores)
 - Invite others to contribute; safe to share ideas
 - Team interdependence and engagement
 - Stronger relationships and collaborative learning



*“Leadership is a choice...
not a rank” - Sinek, S.*

Nembhard & Edmondson, 2006;
Appelbaum et al, 2016

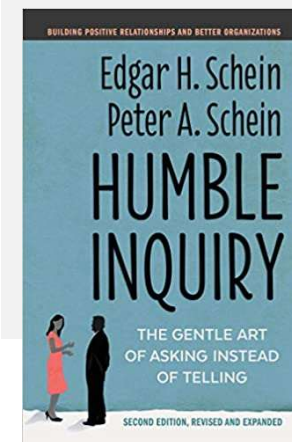


Do you and your team
feel **safe**?

How do you know??

Cultivating PS within Teams

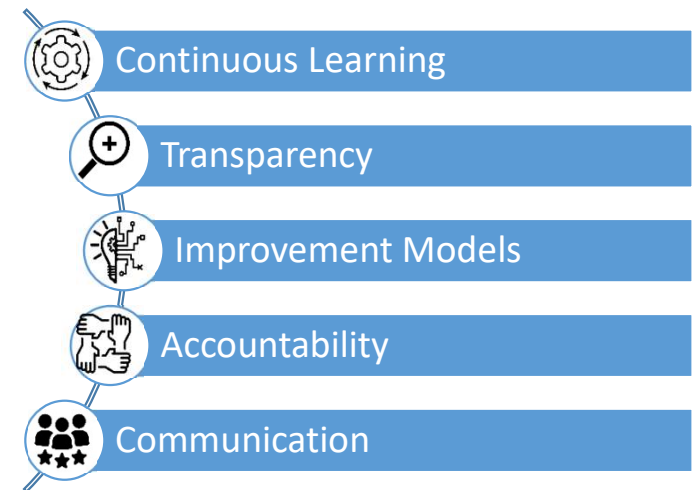
- Reframe failure as learning problem
- Acknowledge one's fallibility
- Emphasize team-learning
- Get to know your team members individually
- Model curiosity
- Promote team-building



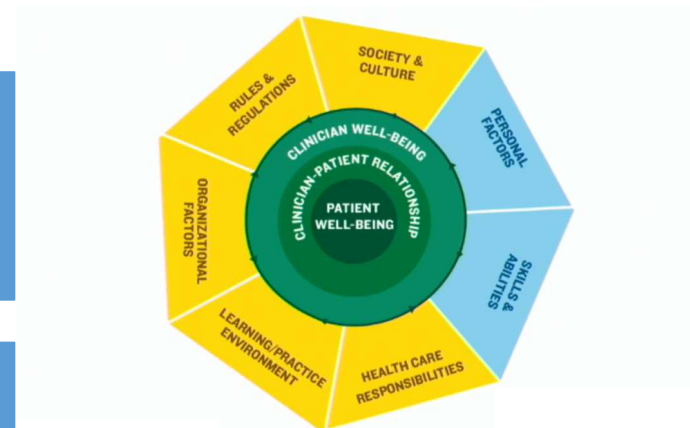
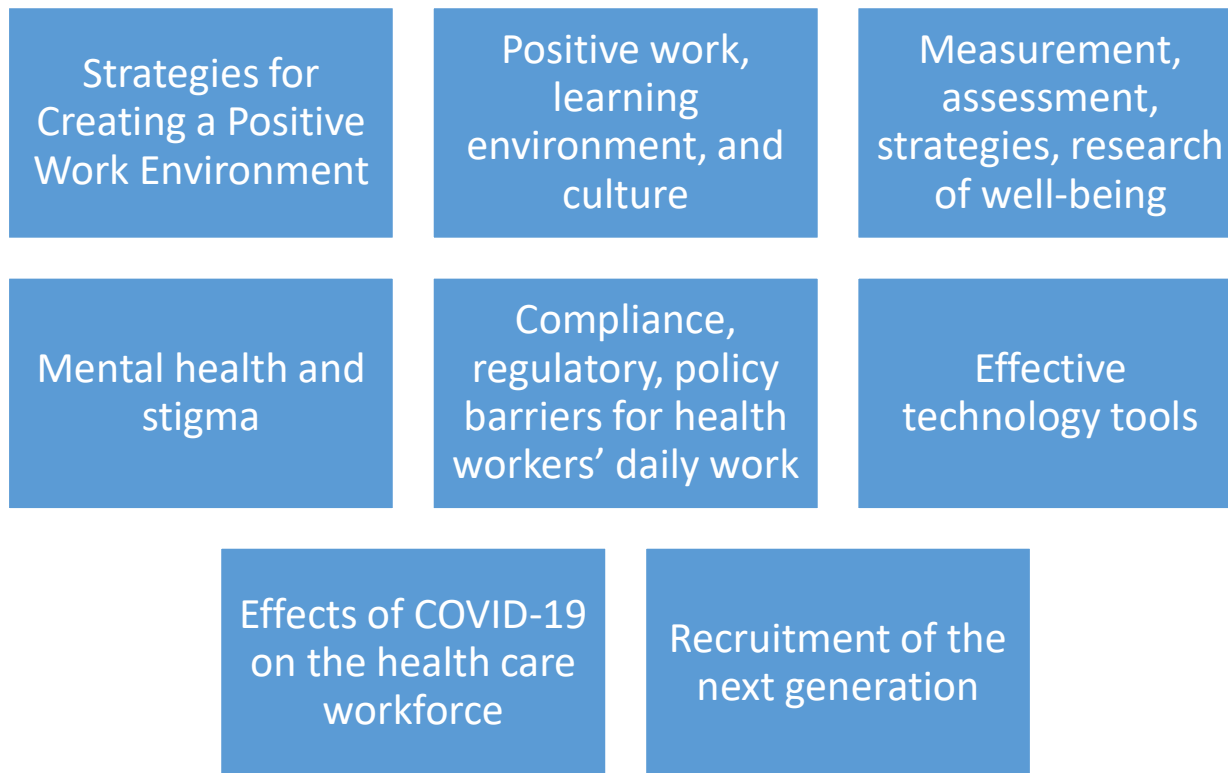
How to raise PS in the workplace?

- Leadership matters (not just at the top)
- Teach about PS (raise awareness)
- Talk about our problems (high-reliability)
- Develop team members (know thyself & others)
- Integrate PS into well-being strategies

Five Pillars of HRO



Align with Well-Being Strategies



Model a Culture of Well-Being

Do you feel valued? Is your voice heard?

- Show appreciation and gratitude
- Take time out to check on your colleagues
- Focus on self-care (yourself then others)
- Start small (team-building) and be persistent
- Encourage professional development and growth
- Respect time and boundaries



*What is the most
meaningful
part of your work?*

Implications for Education and Training

- Awareness, education, and training on PS and clinician WB
- Setting the stage (i.e. “what is at stake?”) and reframing failure
- Interprofessional education (IPE) and training on team member roles and collaborative practice
- Faculty development, 360 feedback, and team leadership training
- Periodic survey assessment on team-leadership, PS, well-being, etc.
- Mobilize well-being resources to prevent risk of distress and burnout

Implications for Future Research

- Literature is scarce on APP's role in collaborative team practice & culture
- Further examine PS with other team-leadership factors involving surgical APPs
 - Team structure
 - Professional status
 - Power distance
- Further examine PS and its relationship with WB in other settings
 - Longitudinal study or experimental design with WB intervention
 - PS and other specific areas of distress (e.g., burnout, job satisfaction, turnover, etc.)
 - PS and WB after the COVID-19 pandemic
 - Expand to other health care groups or industries



Psychological Safety

is not the goal ...

but a means towards
excellence in
team-based patient care

Summary

- Effective team collaboration improves patient care outcomes
- Teamwork and positive team culture is associated with lower risk of burnout and clinician distress
- Psychological safety (PS) is associated with team-leadership behaviors and is related to clinician well-being
- Inclusive leadership and well-being strategies may enhance team PS and improve team performance
- Future studies are needed to investigate team functioning and effectiveness and how PS may affect the workplace and impact clinician well-being



Thank You!

Any Question?

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References

- Appelbaum, N. P., Dow, A., Mazmanian, P.E., Jundt, D. K., Appelbaum, E.N. (2016). The effects of power, leadership and psychological safety on resident event reporting. *Medical Education*, 50(3), 343-350.
- Aranzamendez, G., James, D. & Toms, R. (2014). Finding antecedents of psychological safety: A step toward quality improvement. *Nursing Forum*, 50(3): 171-178.
- Bourdeanu, L, Zhou, Q., DeSamper, M, Percicak, K.A., & Pericak, A. (2020). Burnout, workplace factors, and intent to leave among hematology/ oncology nurse practitioners. *Journal of Advanced Practitioners in Oncology* 11(2): 141-148.
- Dyrbye, L. N., Johnson, P.O., Johnson, L. M., Halasy, M. P., Gossard, A. A., Satele, D, Shanafelt, T. (2019). Efficacy of the well-being index to identify distress and stratify well-being in nurse practitioners and physician assistants. *Journal of the American Association of Nurse Practitioners*, 31 (7):403-412.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44, 350-383.
- Edmondson, A. C. (2019). *The fearless organization*. John Wiley & Sons.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level, multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.
- Mitchell, P., Wynia, M., Golden, R., McNellis, B., Okun, S., Webb, C. E., Rohrbach, V., & Kohorn, I. V. (2012). Core principles & values of effective team-based health care. *NAM Perspectives*, 2(10). <https://doi.org/10.31478/201210c>
- National Academy of Medicine (2022, August). Retrieved from <https://nam.edu/initiatives/clinician-resilience-and-well-being/>
- National Academies of Sciences, Engineering, and Medicine (2019). *Taking action against clinician burnout: A systems approach to professional well-being*. National Academies Press. <https://doi.org/10.17226/25521>
- Nembhard I, Edmondson A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior* 27, 941-966.
- Rozovsky, J. (2015, November). The five keys to a successful Google team. Re: Work Blog. Retrieved from <https://rework.withgoogle.com/blog/five-keys-to-a-successful-google-team/>
- Smith C. D, Balatbat C, Corbridge S, et al. (2018). Implementing optimal team-based care to reduce clinician burnout. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. <https://nam.edu/implementing-optimal-team-based-care-to-reduce-clinician-burnout.doi:10.31478/201809c>
- Tetzlaff, E. D., Hylton, H. M, DeMora, L., Ruth, K. J, Wong, Y. N. (2018). National study of burnout and career satisfaction among physician assistants in oncology: Implications for team-based care. *Journal of Oncology Practice*, 14(1),e11-e22.
- Tetzlaff, E. D., Hylton, H. M., Ruth, K. J., Hasse, Z., Hall, M. J. (2021). Changes in burnout among oncology physician assistants between 2015 and 2019. *JCO Oncology Practice*, OP.21.0051

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