

# Longitudinal Assessment of Wellness Among Cardiology Fellows: Training-Year Differences and Implications for Program Support



Health NETWORK



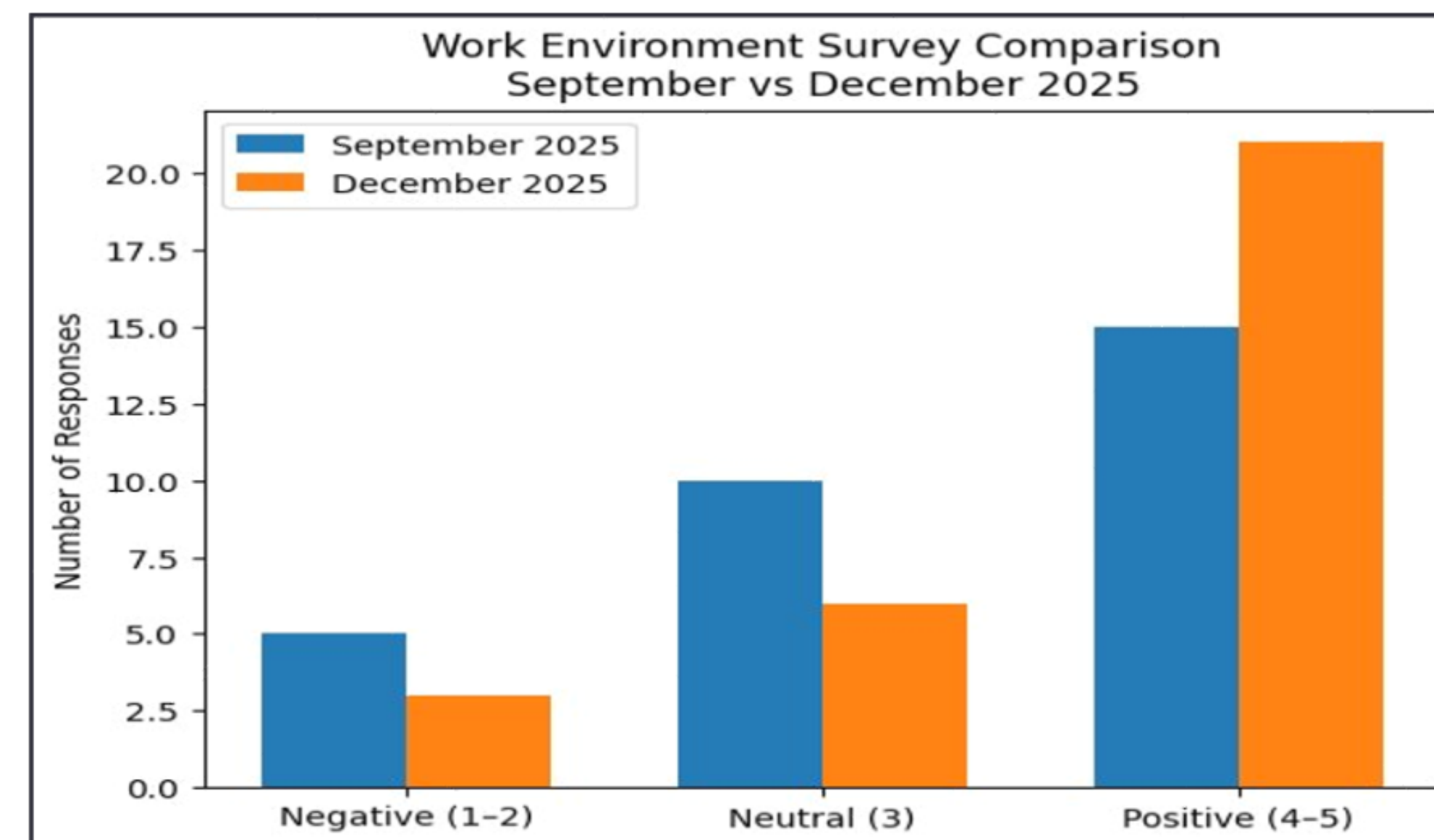
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## Background

Physician wellness has become a critical focus in cardiovascular training, given mounting evidence that burnout and poor mental health negatively affect professional development, workforce sustainability, and patient care. Cardiology fellowship is characterized by high clinical intensity, procedural demands, and increasing responsibility over time, placing trainees at heightened risk for wellness challenges. Previous studies have demonstrated high rates of burnout and psychological distress among cardiology trainees; however, most reports are cross-sectional and do not examine longitudinal trends or differences by year of training. Understanding how wellness perceptions evolve during fellowship, and which trainees are most affected, is essential for designing effective and targeted interventions. This study aimed to assess longitudinal changes in wellness perceptions among cardiology fellows across multiple domains and to evaluate differences by training year.

## Methods

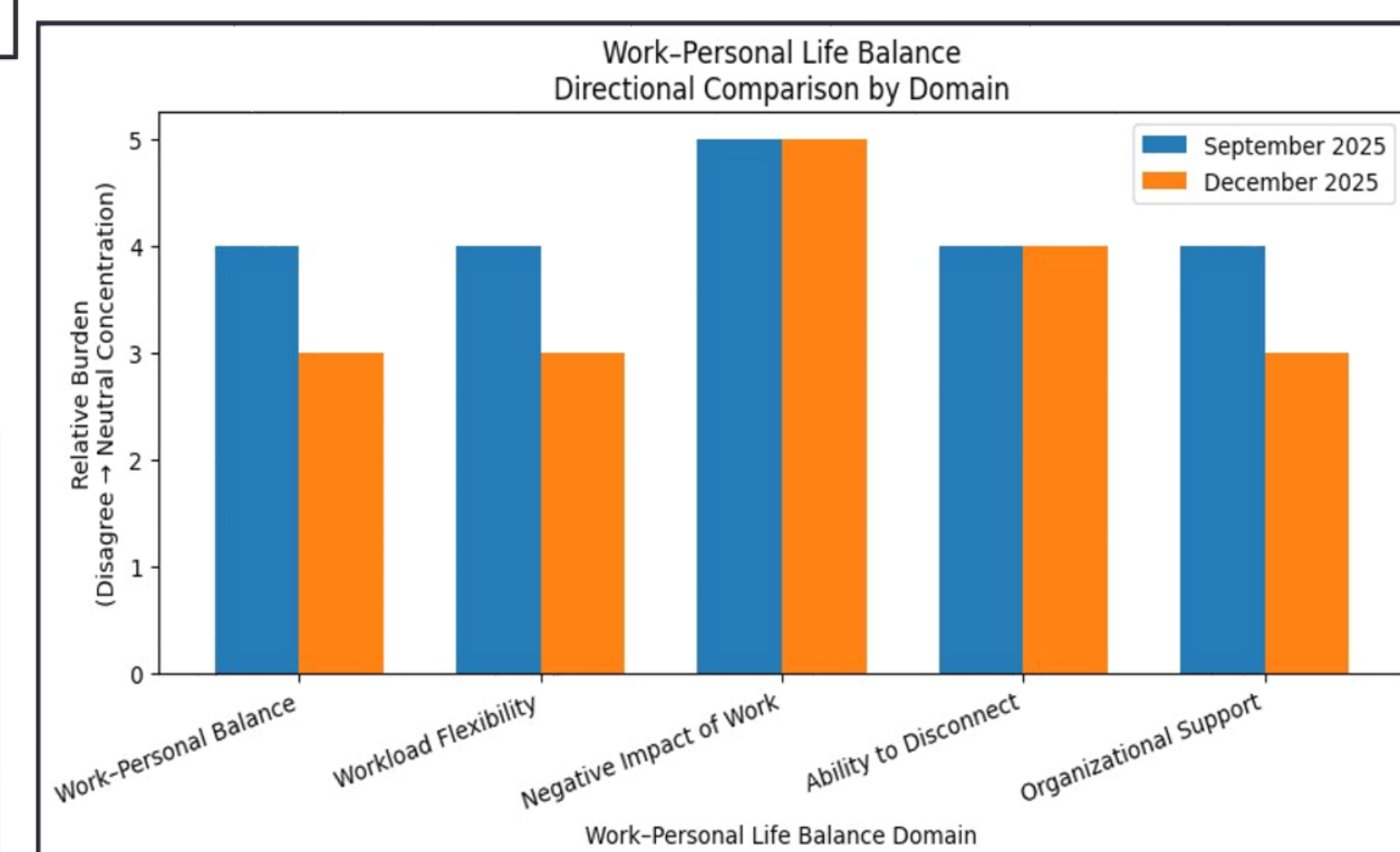
Longitudinal survey of cardiology fellows:  
 •Surveys administered September 2025 (pre-wellness activities) and December 2025 (post-wellness activities)  
 Assessed domains:  
 •Work environment  
 •Work life balance  
 •Mental health  
 •Extracurricular activities and personal growth  
 •Descriptive analysis with results stratified by training year



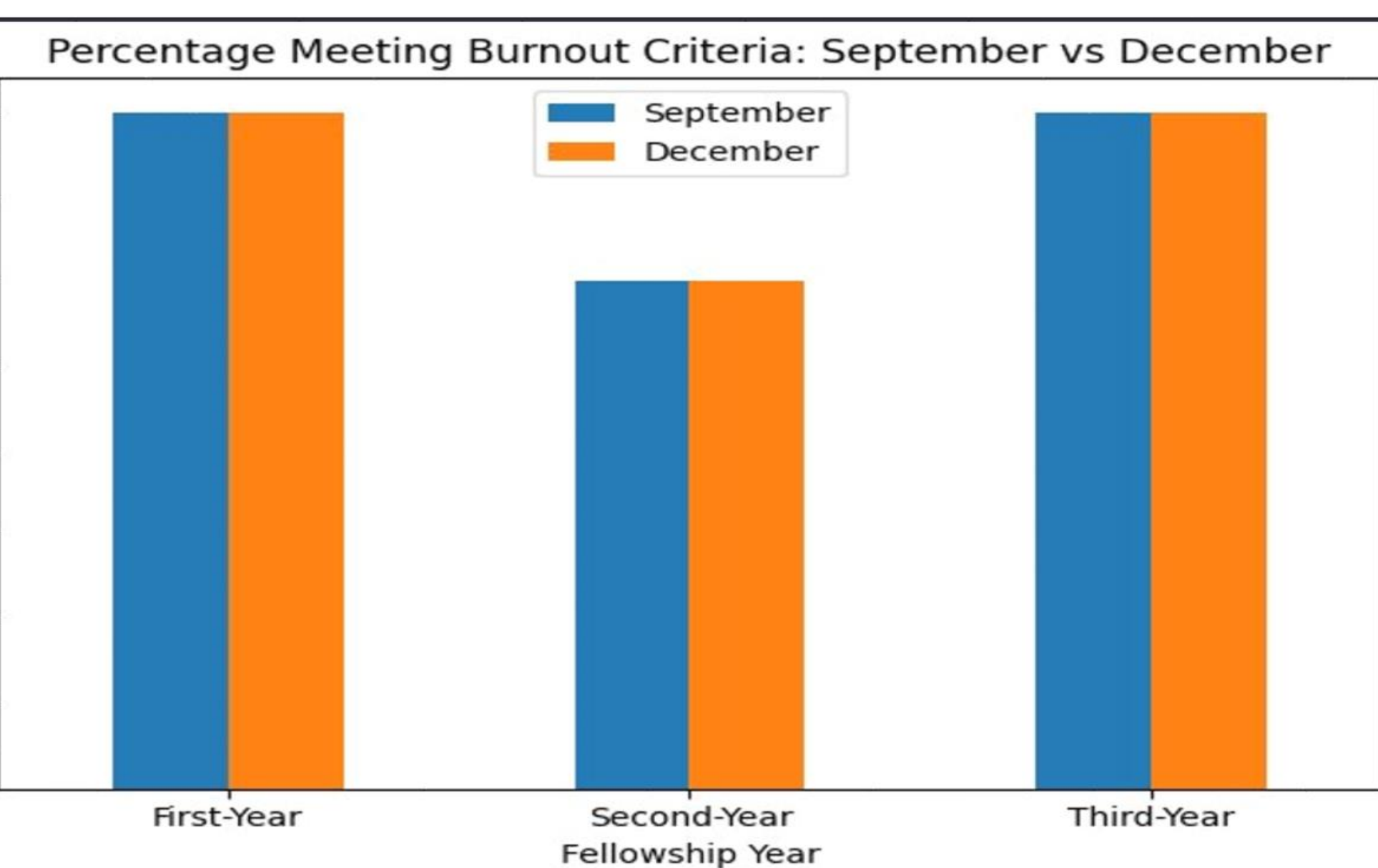
**Figure 3.** Between September and December 2025, trainee perceptions of the work environment demonstrated encouraging progress, reflected by a greater proportion of positive responses and a meaningful reduction in neutral and negative perceptions across all domains.



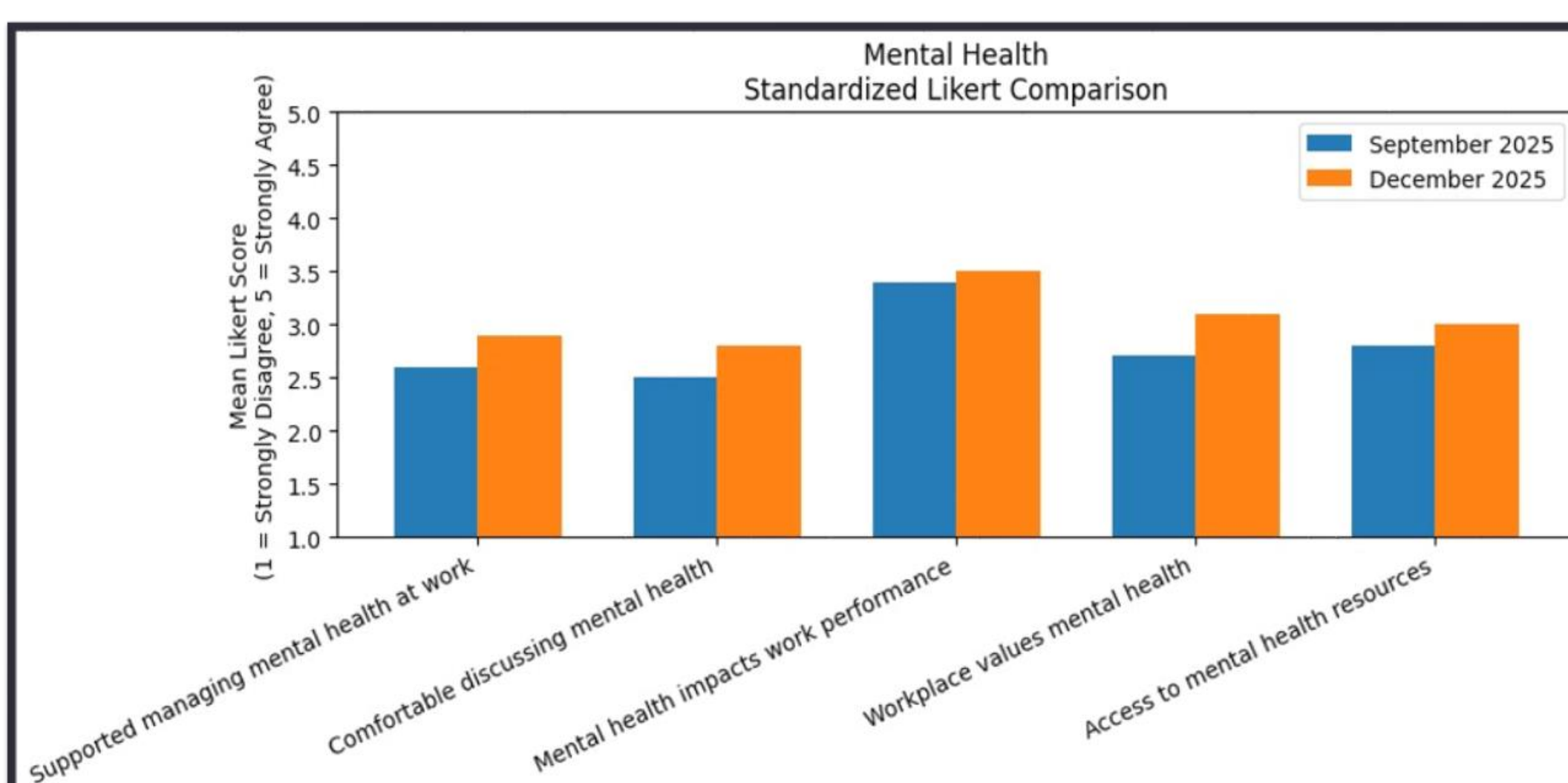
**Figure 4.** This image reflects fellow wellness through team bonding and shared recreational activity. Time spent together outside the clinical environment promotes stress relief, strengthens camaraderie, and supports resilience and overall trainee well-being.



**Figure 5.** Comparison of work-personal life balance domains between September and December 2025 demonstrates gradual improvement over time, with responses showing encouraging movement toward more balanced perceptions. Although many responses remained within the disagree-to-neutral range, the observed positive shifts suggest early progress in fellows' perceived work-life integration. These findings highlight meaningful opportunities for ongoing programmatic initiatives to further strengthen workload support, boundary management, and overall fellow well-being.



**Figure 1.** Aggregate burnout outcomes are displayed according to fellowship training year. Overall, most fellows demonstrated burnout levels within the low-to-moderate range across all stages of training. Second-year fellows showed the most favorable burnout profile, suggesting a period of relative adaptation and stability during training. While first- and third-year fellows exhibited comparatively higher burnout prevalence, severity remained predominantly mild to moderate, and notably, no fellows met criteria for severe burnout. These findings highlight overall resilience within the fellowship cohort while identifying opportunities to further support trainees during transitional training periods.



**Figure 2.** Comparison of mental health survey responses between September and December 2025 demonstrates modest improvement across several domains over time. Although overall perceptions remained within the moderate range, the observed positive trend suggests gradual progress in fellows' mental health and well-being, while also highlighting ongoing opportunities to further strengthen supportive interventions.

Survey Item	Sept 2025	Dec 2025
Extracurricular activities contribute to	Neutral → Agree	Slight shift toward agreement
Workplace encourages participation	Primarily neutral	Shift toward agree
Activities increase collegial connection	Neutral	Small increase in agreement
Activities improve overall well-being	Neutral → Agree	Largely positive
Wellness activities are meaningful	Neutral range	Modest shift toward agreement
Mental/emotional well-being improved	Primarily neutral	Shift toward agree
Connection through shared wellness	Neutral	Slight improvement
Scheduling is convenient	Primarily neutral	Remained neutral
Desire for more wellness offerings	Agree → Strongly agree	High agreement persisted
Recommend expanding via social media	Primarily neutral	Shift toward agree

**Figure 6.** This table summarizes changes in cardiology fellows' perceptions of the work environment before and after implementation of wellness activities. Responses from September 2025 (pre-intervention) and December 2025 (post-intervention) demonstrate a favorable shift, with fewer negative and neutral responses and a greater proportion of positive responses over time, reflecting encouraging improvements in overall trainee perceptions.



**Figure 7.** Fellows participate in a team-building wellness activity, engaging in a pumpkin-carving session that promotes relaxation, creativity, and social connection outside of clinical responsibilities, supporting camaraderie and overall trainee well-being.

## Summary Key Points

•Implementation of wellness activities was associated with overall improvement in fellows' perceptions of the work environment and work-life balance.

•Survey results demonstrated a shift toward more positive responses, suggesting early benefits of structured wellness interventions.

•Shared activities promoted team connection, peer support, and opportunities for stress relief outside clinical responsibilities.

•Although challenges related to workload and balance remained, findings highlight meaningful progress and areas for continued growth.

•Ongoing initiatives may further enhance fellow well-being, resilience, and a supportive training culture.

## Key contribution

### ACGME-Aligned Proposed Changes (All Training Years)

#### Increase Attending Coverage to Protect Fellow Wellness

- Expand attending-led clinical responsibilities during peak service demands.
- Utilize attending physicians to provide coverage during protected educational time, post-call recovery, and wellness activities.

#### Implement Program-Wide Protected Wellness Days

- Establish scheduled wellness days during which no fellows are assigned clinical duties, allowing full participation without competing obligations.
- Align wellness days with institutional fatigue mitigation and well-being standards.

#### Reduce Third-Year (Senior Fellow) Burden

- Adjust call schedules and service expectations for senior fellows.
- Provide targeted support during periods of increased procedural, leadership, and transition-to-practice responsibilities.

#### Protect Time for Learning and Recovery

- Guarantee protected post-call time off for all fellows.
- Embed dedicated study and educational time within fellowship schedules.
- Ensure access to quiet, well-equipped study environments that support learning.

#### Promote Sustainable Work-Life Balance

- Clarify expectations regarding after-hours availability and boundaries.
- Monitor workload distribution across training years and implement proactive adjustments when needed.

#### Embed Wellness as a Structural Program Responsibility

- Emphasize system-level solutions rather than optional wellness activities.
- Integrate well-being initiatives into program structure in alignment with ACGME Common Program Requirements.

## Conclusion

This study demonstrates that implementation of structured wellness initiatives was associated with encouraging improvements in cardiology fellows' perceptions of the work environment and work-life balance over time. While most responses remained within the neutral range, reductions in negative perceptions and increases in positive responses suggest early progress toward a more supportive training environment. Persistent challenges related to workload, boundary management, and senior fellow responsibilities highlight important opportunities for continued programmatic refinement. Overall, these findings support the value of sustained, systems-based wellness strategies that promote connection, protected time for recovery and learning, and equitable workload distribution, with the goal of fostering fellow well-being, resilience, and a healthier training culture.

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## Acknowledgements

We thank the Program Director, Associate Program Directors, and Program Coordinator for their support, and the cardiology fellows for their participation and valuable contributions to this wellness initiative.