



Supporting Students in a Non-Numerical Step World: Top Contributors of Stress and Wellness Can Inform WSUSOM Initiatives

WAYNE STATE
School of Medicine

Elizabeth Choi¹, Abigail Jaczkowski¹, Andrew Lemmen¹,
Diane Levine MD², Jason Booza PhD², Margit Chadwell MD², Eva Waineo MD²

¹ Medical student, Wayne State University School of Medicine, ² Faculty, Wayne State University School of Medicine

Introduction

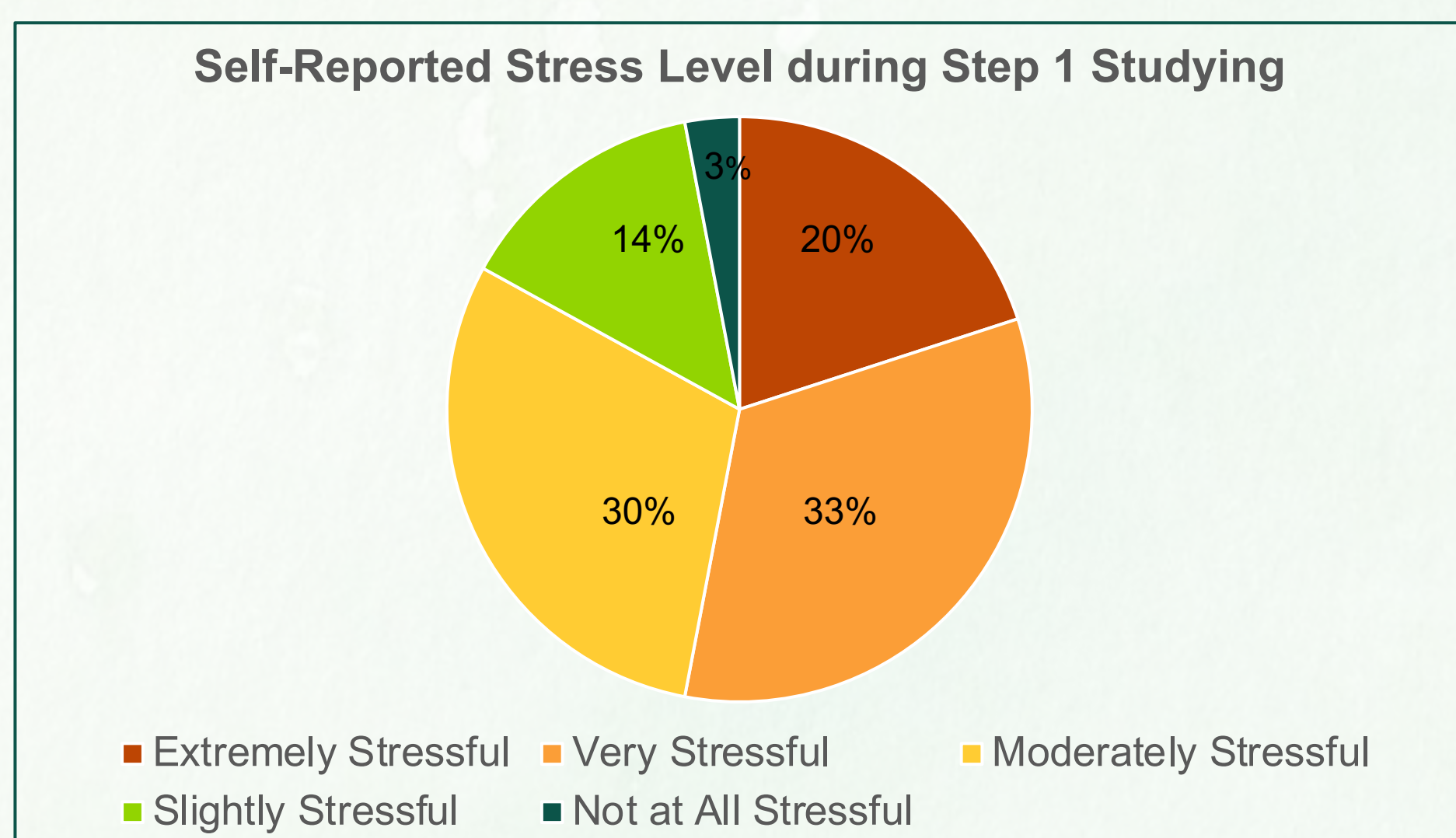
- The recent Step 1 change to a pass/fail nonnumeric outcome was expected to lead to a decrease in student stress (Baniadam 2023, Tackett 2022).
- Changing the scoring format of the exam has potentially led to multiple unintended consequences. These include altering students' preparation, ability to gauge competitiveness for future residency applications, and the nature of stress and wellness during this process (Mott 2021, Yang 2023).
- Medical schools need to understand how these changes impact current student Step 1 exam preparation, including data gleaned directly from students' diverse experiences, to inform initiatives that best support future student cohorts.
- Some institutions have had success when adopting multi-faceted programs that are aimed at serving the holistic needs of students during the dedicated period. These include near-peer academic support, free-to-use physical and mental wellness sessions, and community building initiatives (Sathe 2023, Lynch 2022).
- This study aims to develop institutional recommendations based on student feedback of contributors to both stress and wellness at Wayne State University School of Medicine during their Step 1 dedicated study period.

Methods

- Students and faculty collaborated on a survey for the Class of 2025 at WSUSOM to determine study strategies, sources of stress and support, and preparation experiences. This is the second group of students who have taken the Step 1 exam in the new pass-fail nonnumeric scoring format.
- An optional Qualtrics survey was sent to all students in the class of 2025 and responses were anonymized.
- The Institutional Review Board (IRB) was consulted prior to project initiation and determined that the project did not fall within the scope of human subject research regulation and did not require further IRB review.
- 32.5% of students (n=96) responded. 92 of responders passed the Step 1 exam. The number who did not pass is too small for separate statistical analysis.
- Results are focused on the top contributors of stress and wellness during this pivotal time in training.

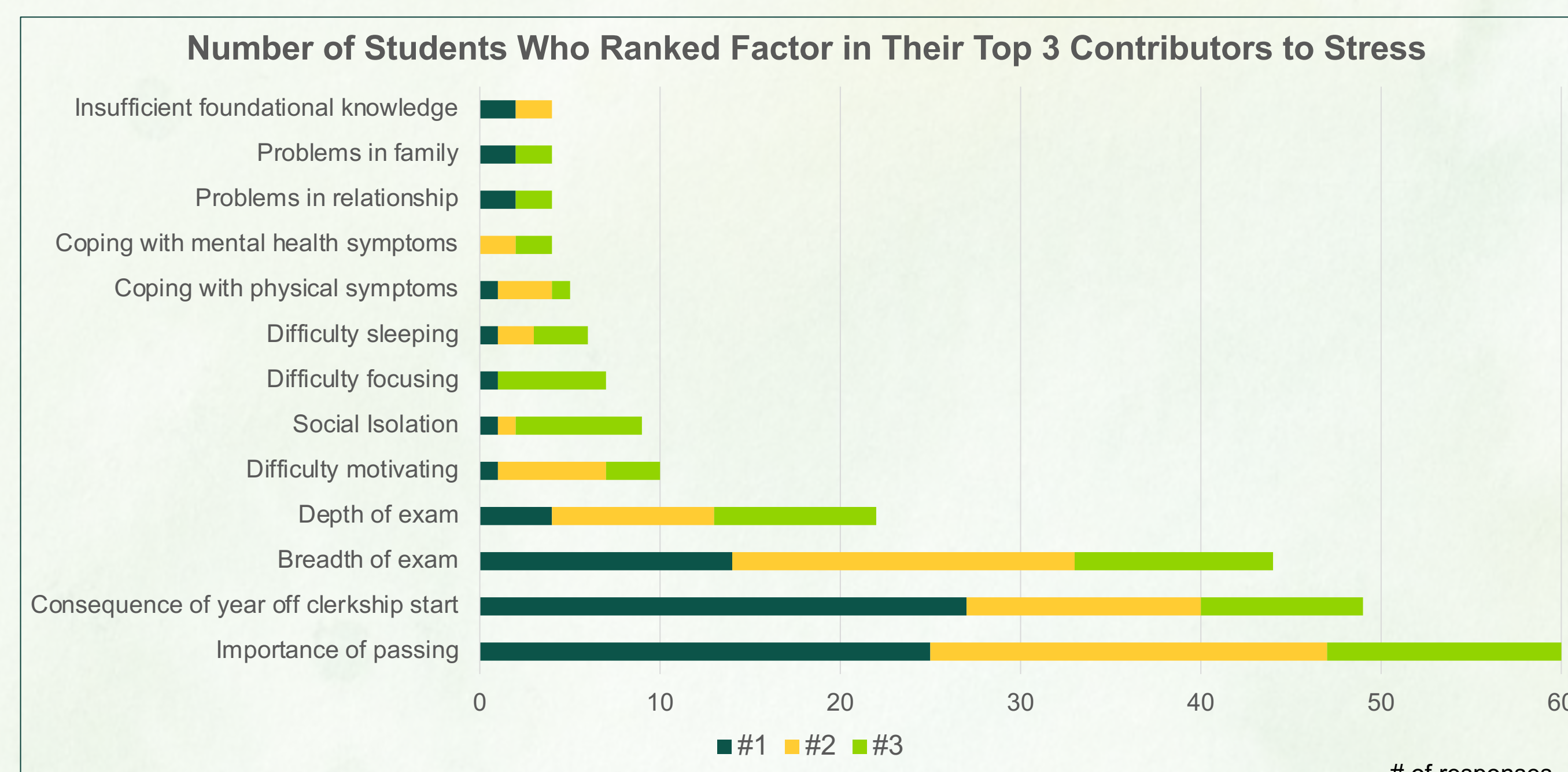
Results - Stress

- 97% of students report at least some level of stress while studying for Step 1.



Results - Stress

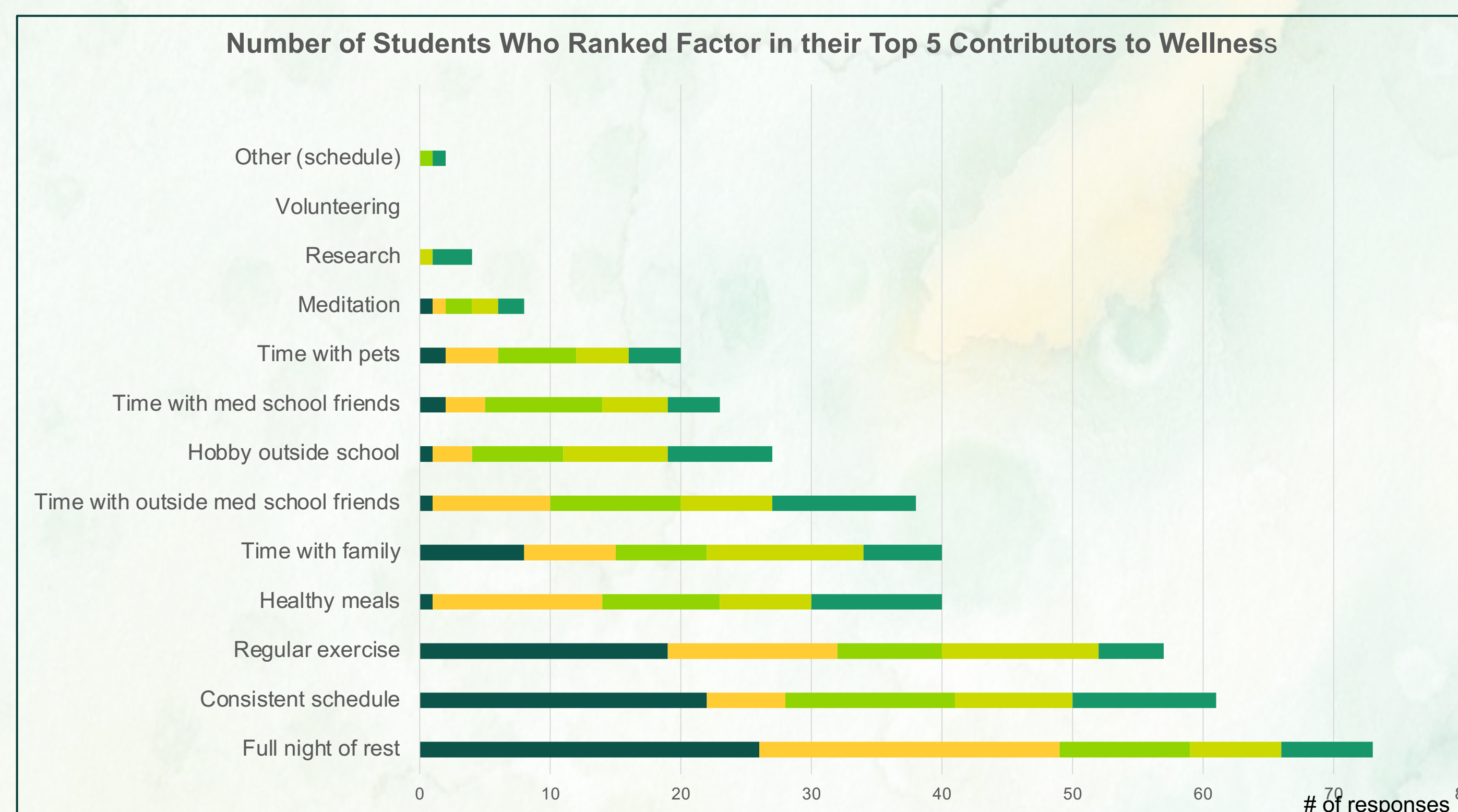
- When asked to rank the top three contributors to stress, the most common factors were breadth of information, importance of passing the exam, and the consequence of a later start to clerkships.



- Factors rated as top contributors by only 1-3 students included: need to work to make money (n=3), too many resources to study (n=3), not enough time to engage in fun activities (n=2), not enough knowledge in how to best use resources (n=2), caring for family members (n=2), coping with financial stressor (n=1), lack of developed study strategy (n=1), not enough time to study (n=1).
- Factors not rated as top contributors by any students included: need to take the CBSE, insufficient academic support, lack of study routine, not enough review of exam material on Segment 1 & 2, need to spend time on research, and not enough resources.

Results - Wellness

- When asked to rank the top 5 contributors to their wellness, a full night of rest, consistent schedule, regular exercise, healthy meals, time with family and friends outside of medical school were most often ranked.
- Additionally, a full night's rest, consistent schedule, and regular exercise were most likely to be ranked as the most important wellness contributor.



Conclusion

- The recent shift from numeric to a non-numeric grading system in Step 1 has fundamentally altered the preparation process for medical students and reshaped the components of stress and wellness during this pivotal period.
- This study reveals that nearly every medical student experienced varying levels of stress during the dedicated studying period, despite the change to nonnumeric Step 1 scoring, underscoring the continued need for support mechanisms.
- To better support upcoming medical student cohorts, initiatives and recommendations should be grounded in the diverse experiences and direct feedback from students who have navigated these transformative changes.
- Although some frequent stress contributors cannot be modified by support from medical schools (ex. the most common contributor is importance of passing), schools could help students address these components through wellness initiatives where they can connect on this shared experience and help modify other factors (ex. social isolation).
- Based on the data from this study, future efforts to facilitate the well-being of students preparing for Step 1 should prioritize factors students identified as most important, such as structured study plans, facilitation of sleep, exercise and access to nutritious food options, and encouragement of connection to friends and family.
- Included for support in the next cohort of students are increased health and wellness sessions focused on the most important wellness factors described by students, virtual support for options specific to medical students, Med2Med sessions (which focus on student connection and support), skills sessions on sleep and constructing a schedule, and increased individualized support for students who have struggled academically.
- Future studies should delve deeper into the evolving needs of students and aim to gain further insight into what measures would help students feel more supported. Critical inquiries include evaluating the evolving impact of institutional actions on students' study experiences, both positive and negative.
- We intend to follow this group to understand the evolving contributors to stress and wellness during other critical phases of training such as during residency applications.
- Expanding the study to encompass broader cohorts, including multiple universities, can contribute to a more comprehensive understanding of how to effectively support medical students during this important period.

References

1. Baniadam, K., Elkadi, S., Towfighi, P., Aminpour, N., Sutariya, R., & Chen, H. C. (2023). The Impact on Medical Student Stress in Relation to a Change in USMLE Step 1 Examination Score Reporting to Pass/Fail. *Medical science educator*, 33(2), 401-407. <https://doi-org.proxy.lib.wayne.edu/10.1007/s40670-023-01749-4>
2. Lynch, T. V., Beach, I. R., Kajtezovic, S., Larkin, O. G., & Rosen, L. (2022). Step Siblings: a Novel Peer-Mentorship Program for Medical Student Wellness During USMLE Step 1 Preparation. *Medical science educator*, 32(4), 803-810. <https://doi.org/10.1007/s40670-022-01571-4>
3. Mott, N. M., Kercheval, J. B., & Daniel, M. (2021). Exploring Students' Perspectives on Well-Being and the Change of United States Medical Licensing Examination Step 1 to Pass/Fail. *Teaching and learning in medicine*, 33(4), 355-365. <https://doi-org.proxy.lib.wayne.edu/10.1080/10401334.2021.1899929>
4. Sathe, N. C., Carney, P. A., & Furnari, M. (2023). Nourish: A pilot program to support self-efficacy, learning, and wellness during USMLE step 1 preparation. *Medical education online*, 28(1), 2153781. <https://doi.org/10.1080/10872981.2022.2153781>
5. Tackett, S., Jeyaraju, M., Moore, J., Hudder, A., Yingling, S., Park, Y. S., & Grichanik, M. (2022). Student well-being during dedicated preparation for USMLE Step 1 and COMLEX Level 1 exams. *BMC medical education*, 22(1), 16. <https://doi-org.proxy.lib.wayne.edu/10.1186/s12909-021-03055-2>
6. Yang, L. C., Bonner, A., Patel, O. U., Haynes, W., Burge, K., Yadav, I., Van Wagoner, N. J., Greene, B. J., & Grayson, J. W. (2023). A Survey of Otolaryngology Residency Programs on Adapting to the United States Medical Licensing Examination (USMLE) Step 1 Transitioning to Pass/Fail. *Cureus*, 15(9), e45227. <https://doi.org/10.7759/cureus.45227>
7. Belovich, Andrea N., et al. "USMLE Step-1 Is Going to Pass/Fail, Now What Do We Do?" *Medical Science Educator*, vol. 31, no. 4, 2021, pp. 1551-1556. <https://doi.org/10.1007/s40670-021-01337-4>.
8. Chen, David R., et al. "Student Perspectives on the 'Step 1 Climate' in Preclinical Medical Education." *Academic Medicine*, vol. 94, no. 3, 2019, pp. 302-304. <https://doi.org/10.1097/acm.0000000000002565>.