Examining the Effects of Peer-Mentor Leadership on Mental Health Among Medical Students

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Introduction

Medical education is a rigorous and demanding journey that requires students to constantly balance academic studies, clinical and extracurricular involvement, and personal commitments. As a result, medical students experience high levels of stress, burnout, and mental health concerns during their training.

Recent studies have uncovered alarming trends of suicidal ideation and depressive symptoms amongst medical students when compared to individuals of the same age group.[1] These findings have highlighted the crucial need to promote supportive practices to mitigate burnout and safeguard the overall wellness of future physicians.

Previous research has shown that mentors in various contexts experience positive mental health impacts when interacting with their mentees, but this phenomenon has not been thoroughly investigated among future physicians.[2] This research project hypothesizes that a promising approach to address these challenges is by providing a structured mentorship program for students to coach their fellow peers within medical schools.

This research seeks to fill this gap by providing details of a data collection plan that can be utilized to examine the impact of peer mentorship programs on the mental health and well-being of medical students.

Methods

Data Collection: We will administer a standardized survey on qualtrics open to all WSUSOM students. The first section will contain researcher-generated questions on the Likert scale, and the second section will present the WHO-5 Well-Being Index. This survey assesses various aspects of students' self reported feelings of overall mental well-being and social connectedness using a Likert scale, allowing us to quantify their experiences and perceptions.

Cohort Division: Students will be stratified based on hours of mentorship involvement per week, with the proposed control group having not have participated in any mentorship hours. Additionally, students will identify if they are a part of the structured peer mentorship program.

Analysis: Statistical analysis will be performed to compare the well being and mental health outcomes between the cohorts. We will focus on variables such as WHO-5 scores, loneliness, social connectedness, and self-efficacy to determine if there are significant differences between the groups of students.

Predicted Survey Results

Sample Likert Scale Prompts

01 Mentoring M1 students throughout the year has made me feel more connected to the WSUSOM community.

02 Mentoring M1 students has allowed me to create strong friendships.

03 Mentoring M1 students has increased my self confidence.

04 Mentoring M1 students makes me more aware of my own self growth.

05 Mentoring M1 students increases feelings of social isolation.
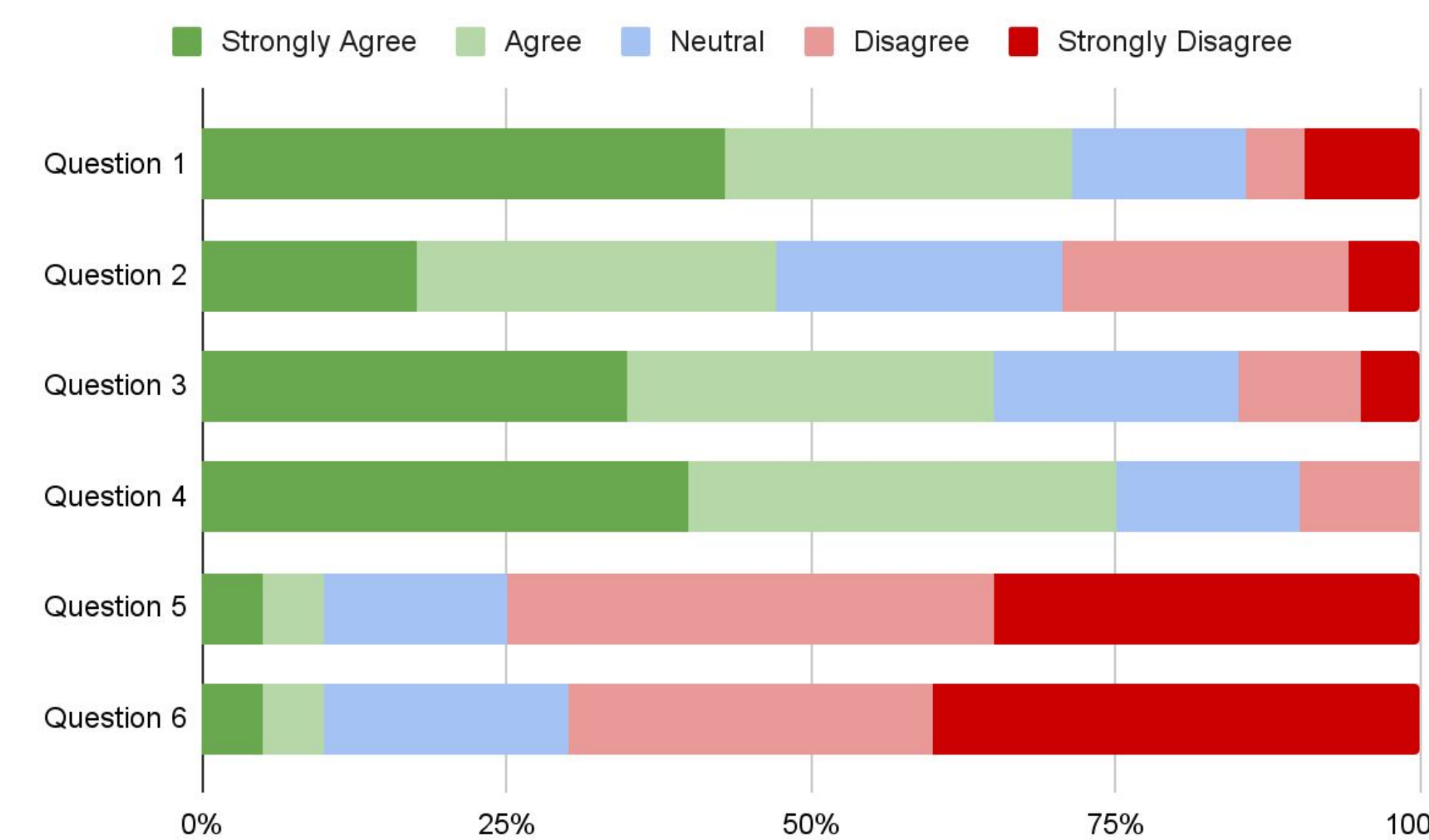
06 Mentoring M1 students makes me feel unhappy.

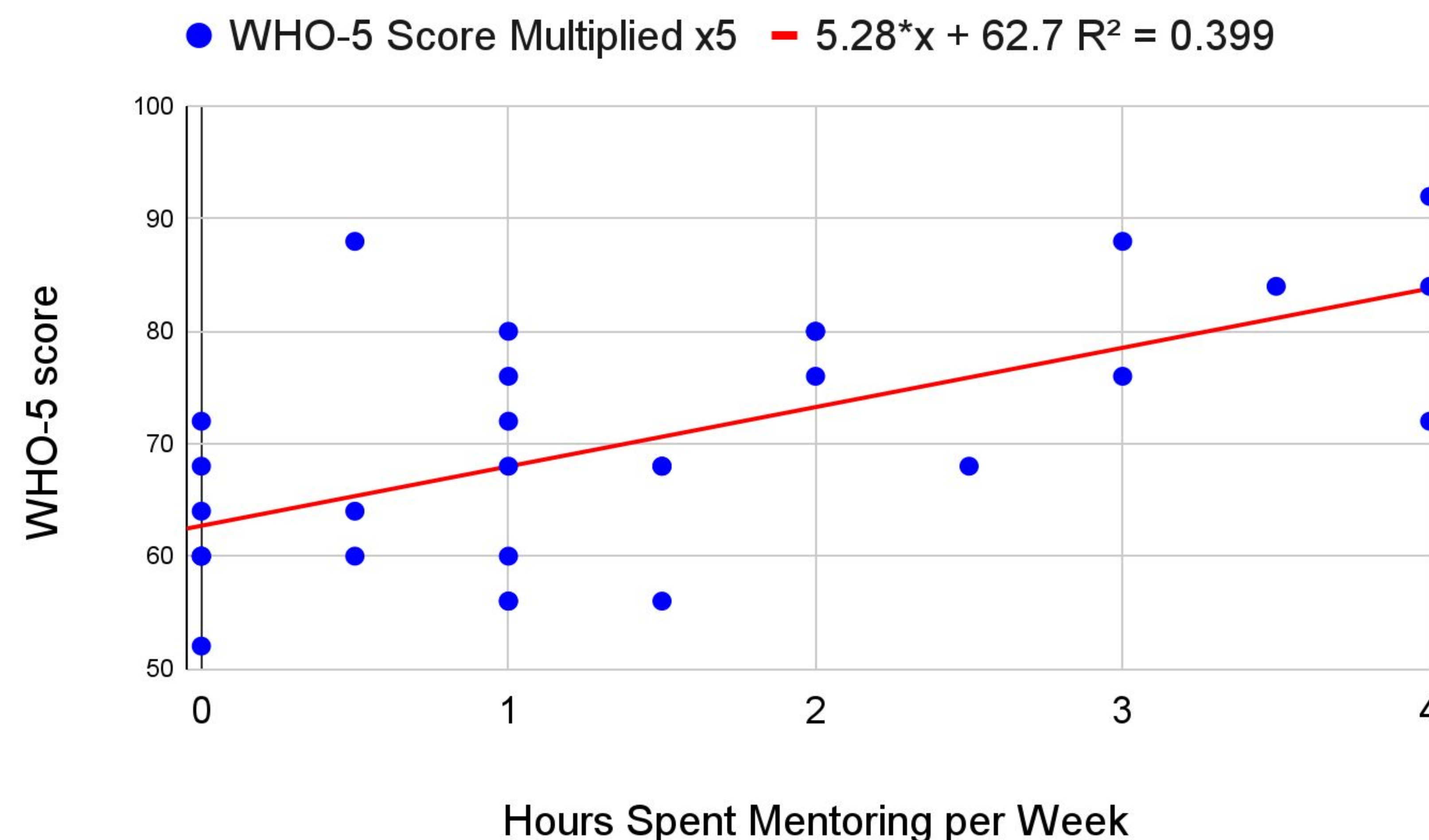Figure 1: Stacked Bar Chart Representing Predicted Likert Scale Survey Responses. n=30

Figure 2: WHO-5 score vs. Hours Spent Mentoring per Week. Predicted Results Shown, n=30

Conclusion

Given that medical school can be a challenging endeavor in which several students deal with issues surrounding their mental health, having a way in which they can provide guidance to incoming students while simultaneously cultivating their own mental health can create a positive feedback loop that perpetually increases the overall well-being of the student body. If the well-being of the student body is improved, the educational experience will be greater, and the peer mentors will become better physicians as a result.

Discussion

If the survey shows improvements in peer mentors' mental health, stress, and overall reduction in burnout, these results would be a promising means to reduce the feelings of distress that medical students face.

A reduced incidence of anxiety and depression in the medical student body can benefit the morale of the students. An improvement in stress can improve the performance and overall learning experience of students. Lower rates of burnout can ensure that students can have sustainable success throughout their medical school careers and beyond.

The study has some limitations. The sample size is relatively small so there may be issues with generalizability to other medical school programs. Furthermore, there could be a degree of selection bias, as students accepted to serve as mentors could share similar characteristics that gravitated them to more positive mental health outcomes. Lastly, there could be issues with the percentage of completed survey responses. Issues with attrition could further augment the issues of low sample size that are present in the study's design.

Potential solutions for the above issues are as follows. The small sample size can be mitigated by repeating the study at other universities that have mentorship opportunities and combining the results into a meta-analysis. With regards to selection bias, we plan to have a control group of non-peer mentor students to standardize our results. For attrition, we may consider adding incentives for survey completion.

References

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2. Michael J. Gill, Thomas J. Roulet, Stephen P. Kerridge. Mentoring for mental health: A mixed-method study of the benefits of formal mentoring programmes in the English police force. Journal of Vocational Behavior, Volume 108, 2018, Pages 201-213, ISSN 0001-8791. https://doi.org/10.1016/j.jvb.2018.08.005.