ASTRO 2026

Data to Dialogue: Communicating Radiotherapy's Value to Advance Care

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Updating our ROADMAP: Understanding Current Impacts of Mentorship on Academic Productivity in Radiation Oncology

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Disclosure

- Employer: Dartmouth College

- I have no conflicts of interest to disclose.

Background

- Mentorship is key to promoting career development and increasing professional satisfaction in the field of radiation oncology.[1]
  - Across disciplines, mentorship has been suggested to promote:
    - Enhanced academic productivity
    - Accelerated rate of promotions
    - Increased compensation[2]
  - Formal mentorship programs in residency have contributed to increased satisfaction with perceived mentorship, guidance, and support[3]

Background

- In 2012, the Radiation Oncology Academic Mentorship Assessment Project (ROADMAP) sought to evaluate the role of mentorship on academic productivity.
- For this study, a mentor was defined as: “A more experienced, senior, or knowledgeable individual with whom you have/had a long-term relationship that fosters scientific/academic development.”
- Study metrics included demographic information, presence of mentorship, and productivity measures (including number of publications, number of citations, h-index, and m-index).
- Ultimately, respondents with a mentor had more publications, citations, and higher h- and m-indices.[4]

CARPE-DIEMM Objective and Hypothesis

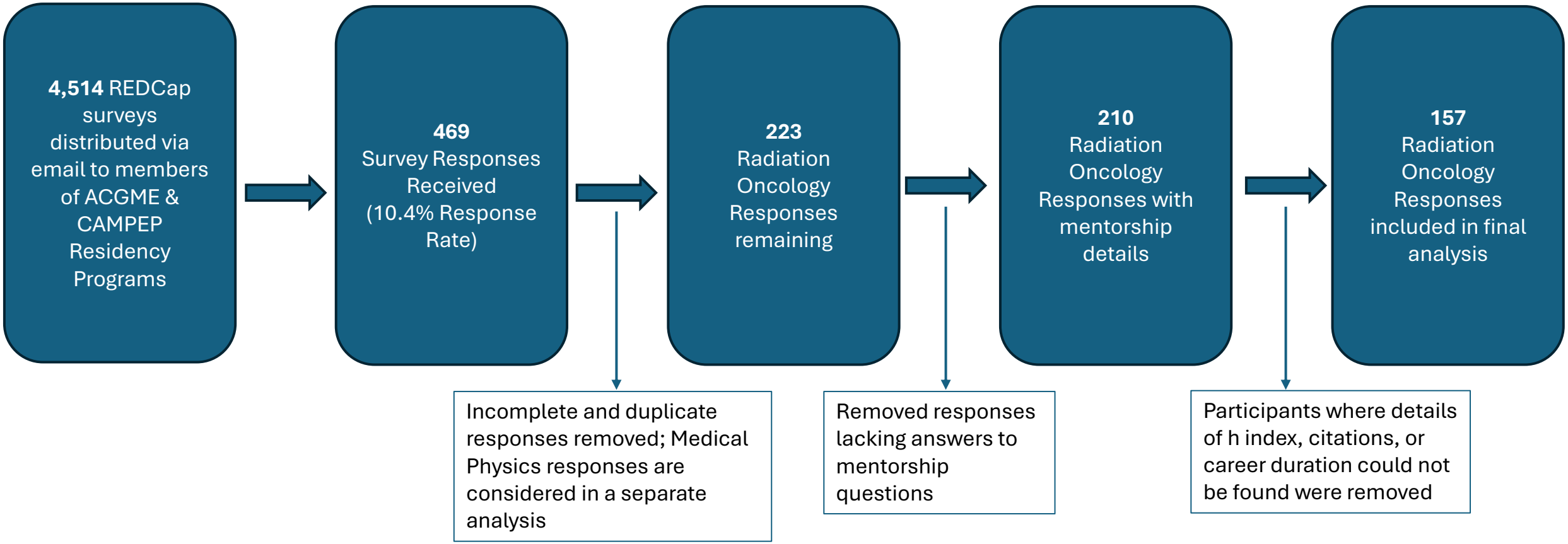
Objective:

To provide a 12-year update to the ROADMAP study, called Consortium for Academic Radiation Oncology Professional Enhancement through Development and Investigation of Educational and Mentoring Methods (CARPE-DIEMM), exploring modern correlations of mentorship with academic productivity.

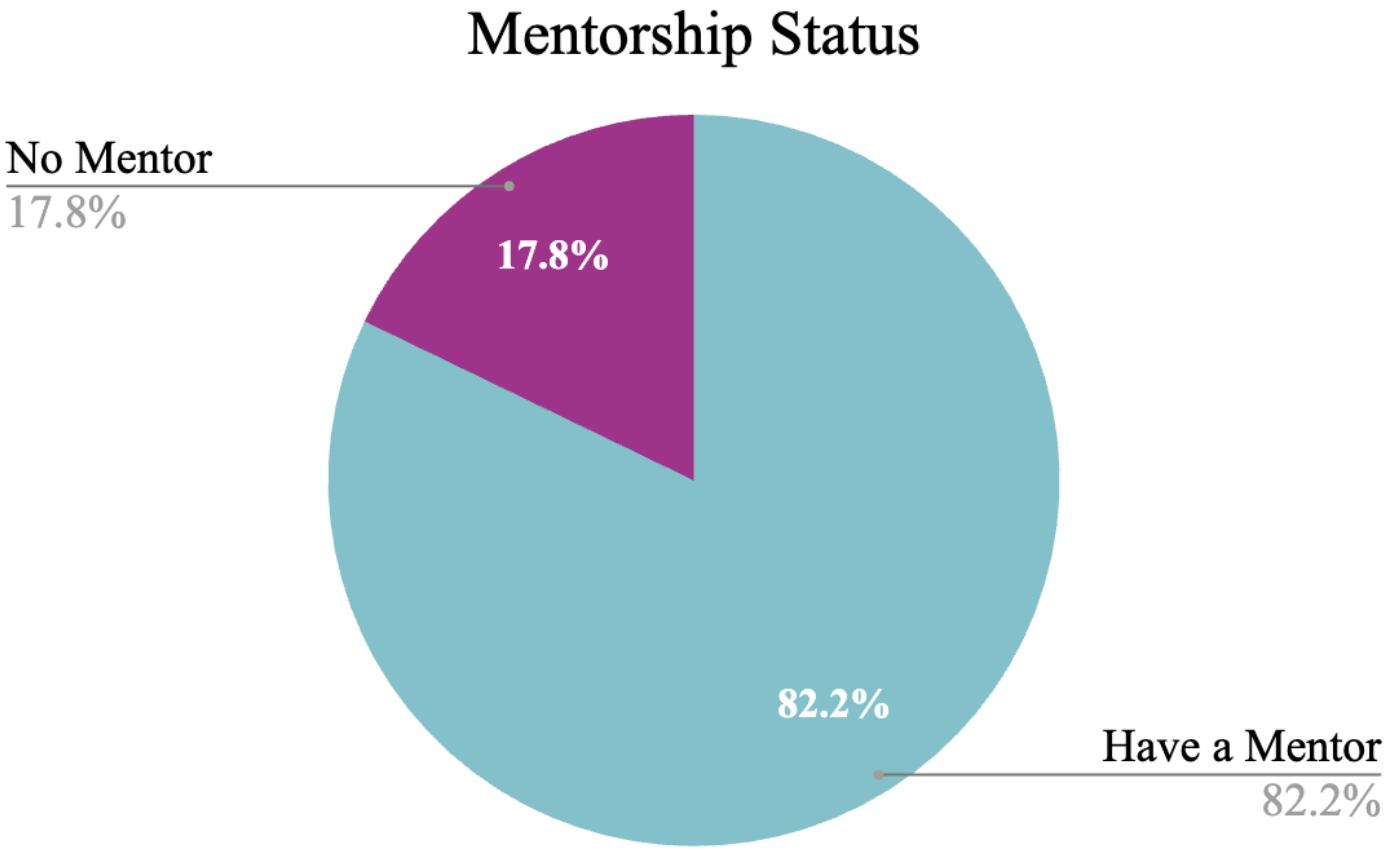
Hypothesis:

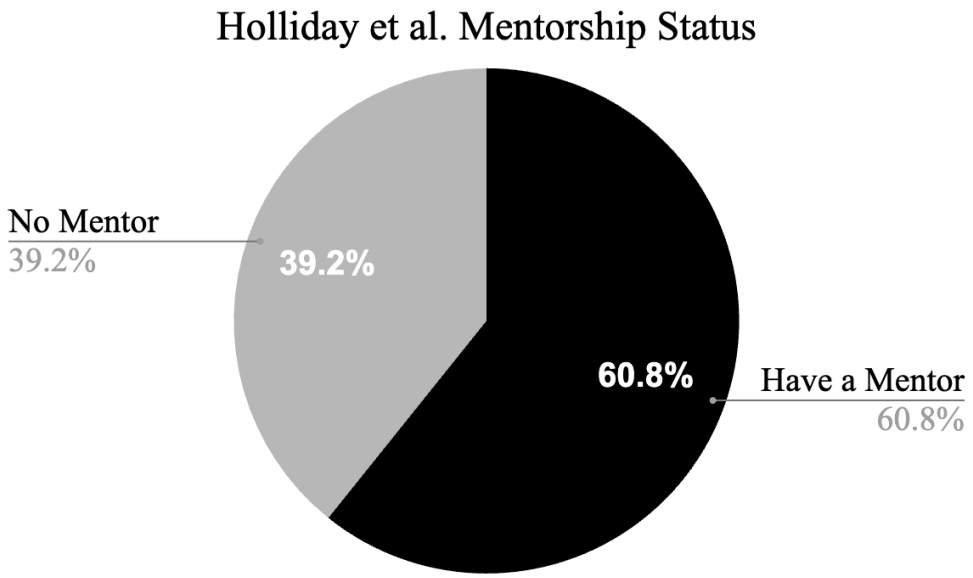
CARPE-DIEMM will demonstrate that mentorship correlates to increased academic productivity.

Methods

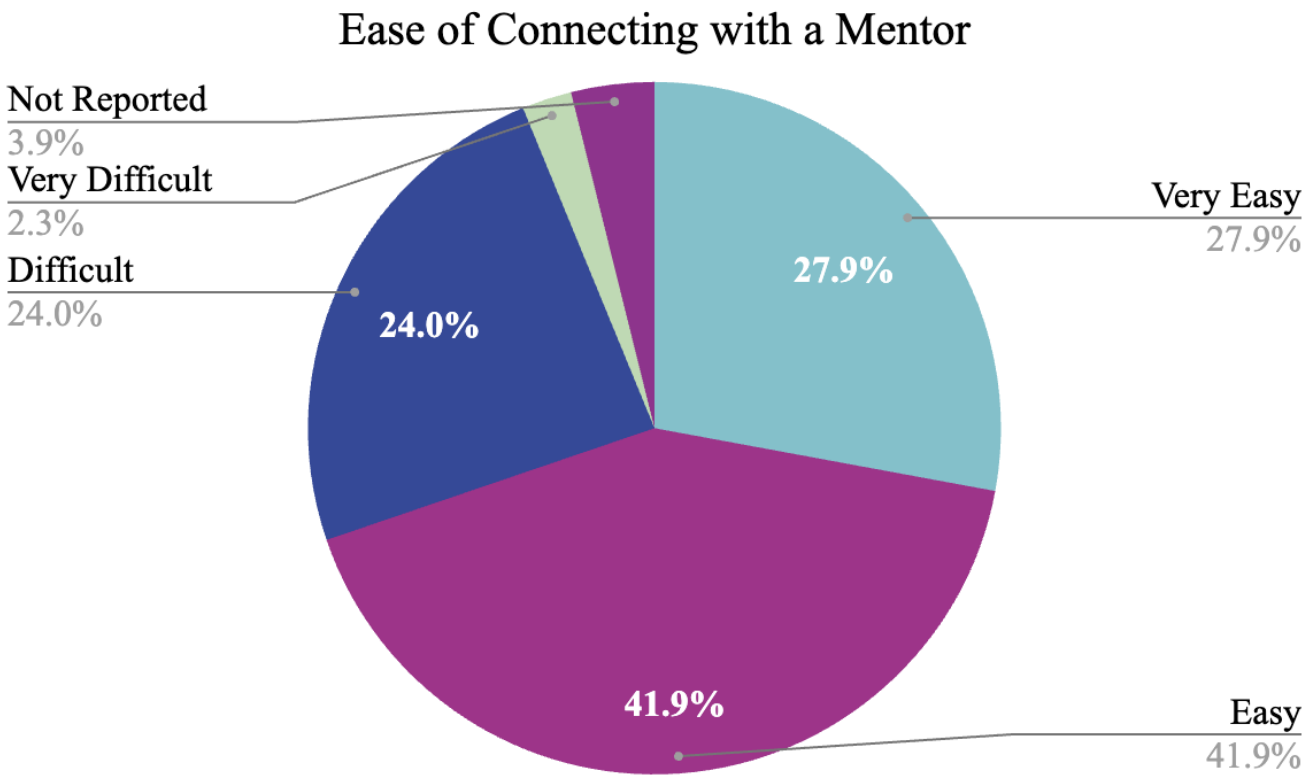

4,514 REDCap surveys distributed via email to members of ACGME & CAMPEP Residency Programs
469 Survey Responses Received (10.4% Response Rate)
223 Radiation Oncology Responses remaining
210 Radiation Oncology Responses with mentorship details
157 Radiation Oncology Responses included in final analysis
Incomplete and duplicate responses removed; Medical Physics responses are considered in a separate analysis
Removed responses lacking answers to mentorship questions
Participants where details of h index, citations, or career duration could not be found were removed

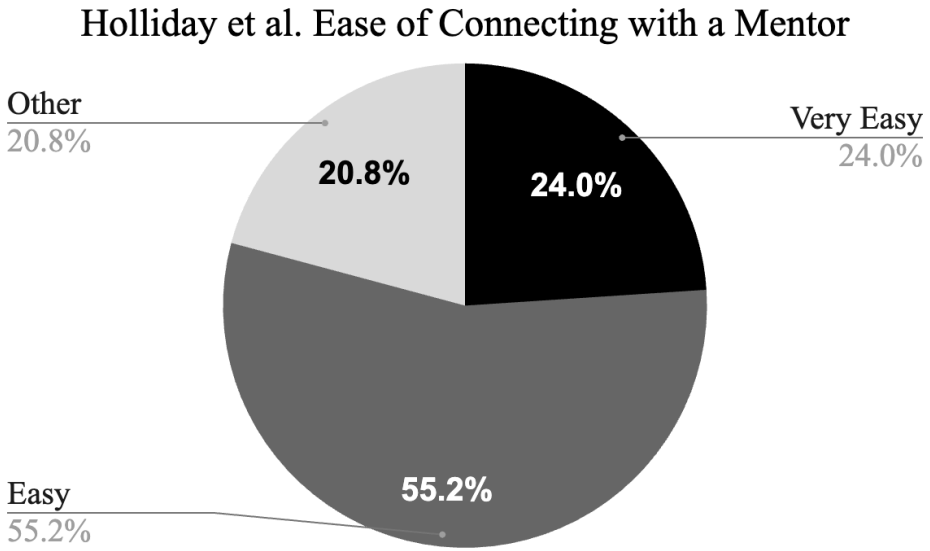
Mentorship is Common, Easy to Find, and Approachable



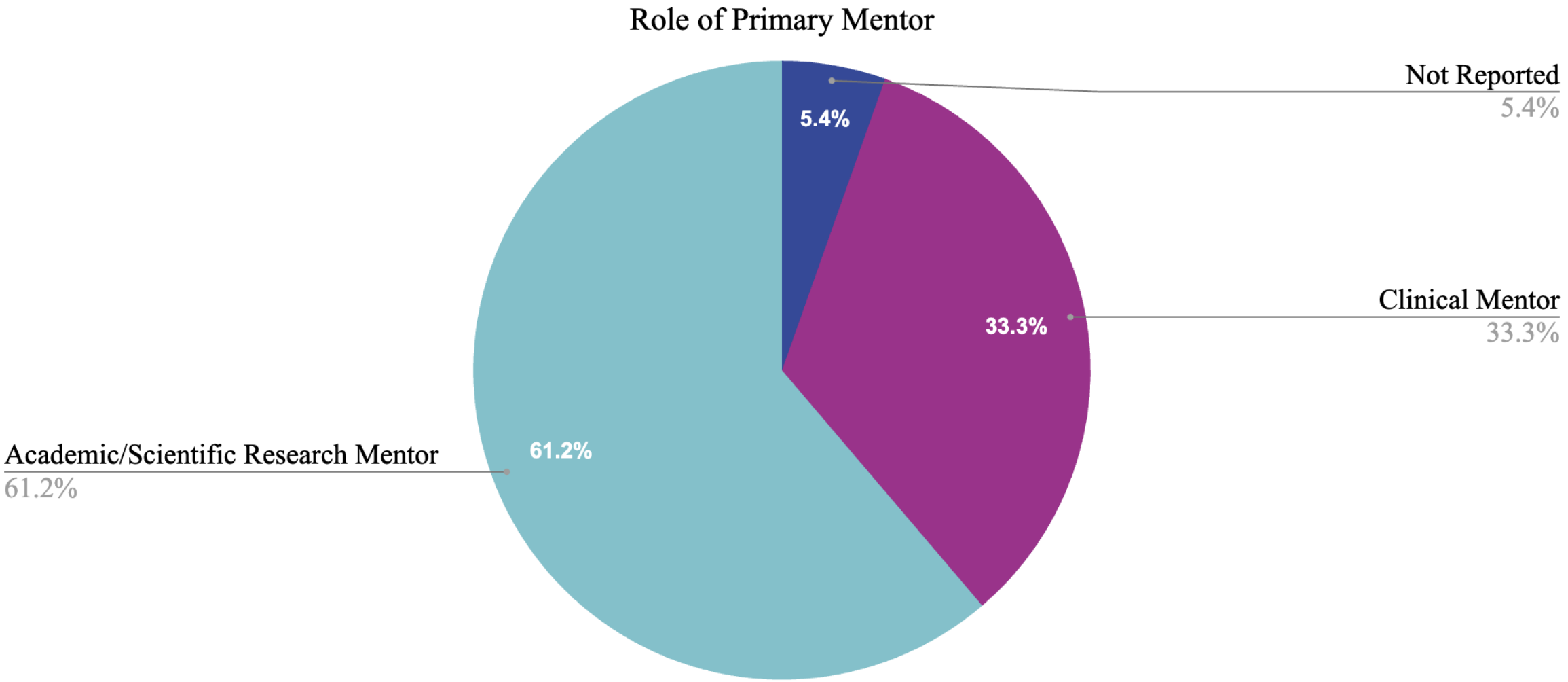


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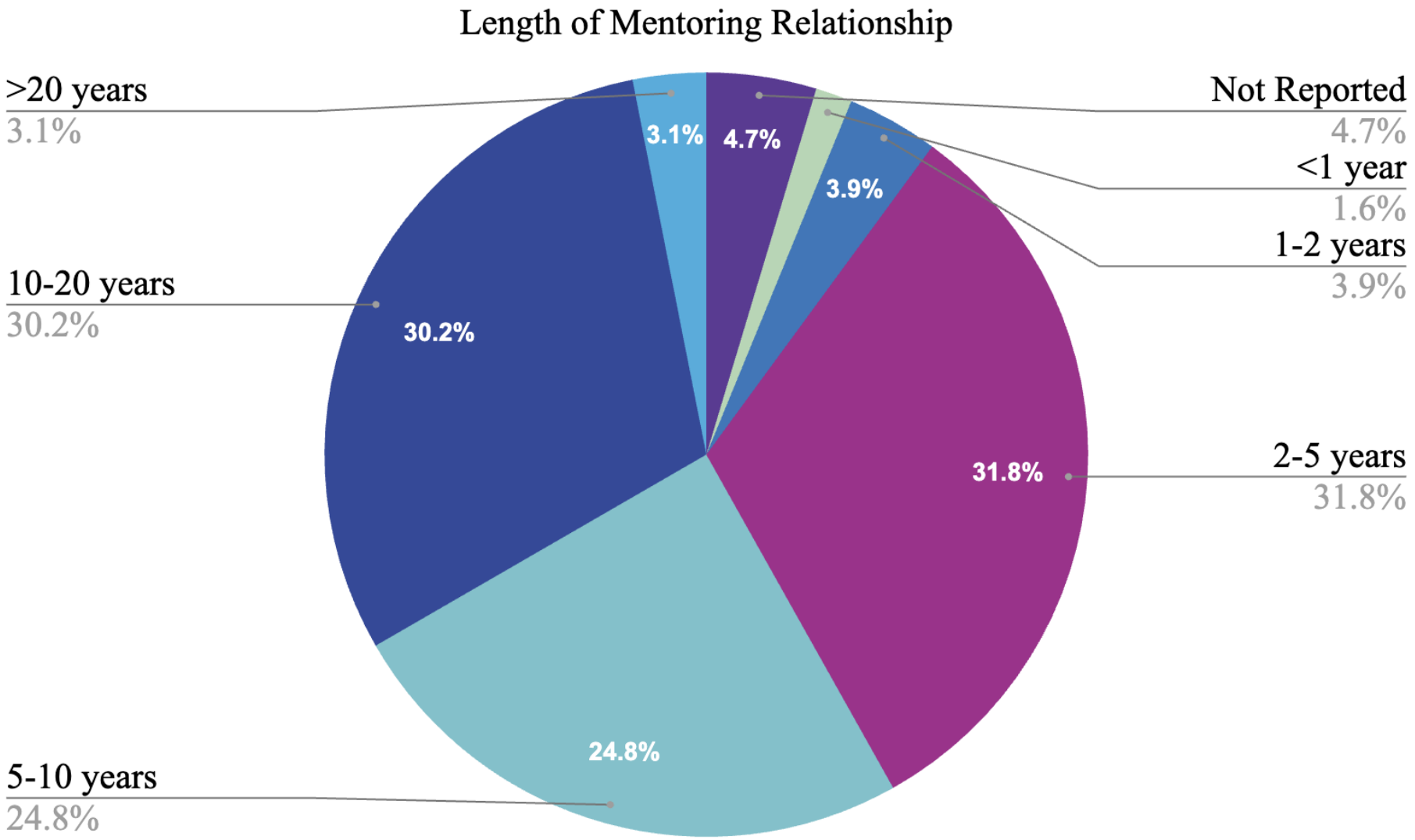




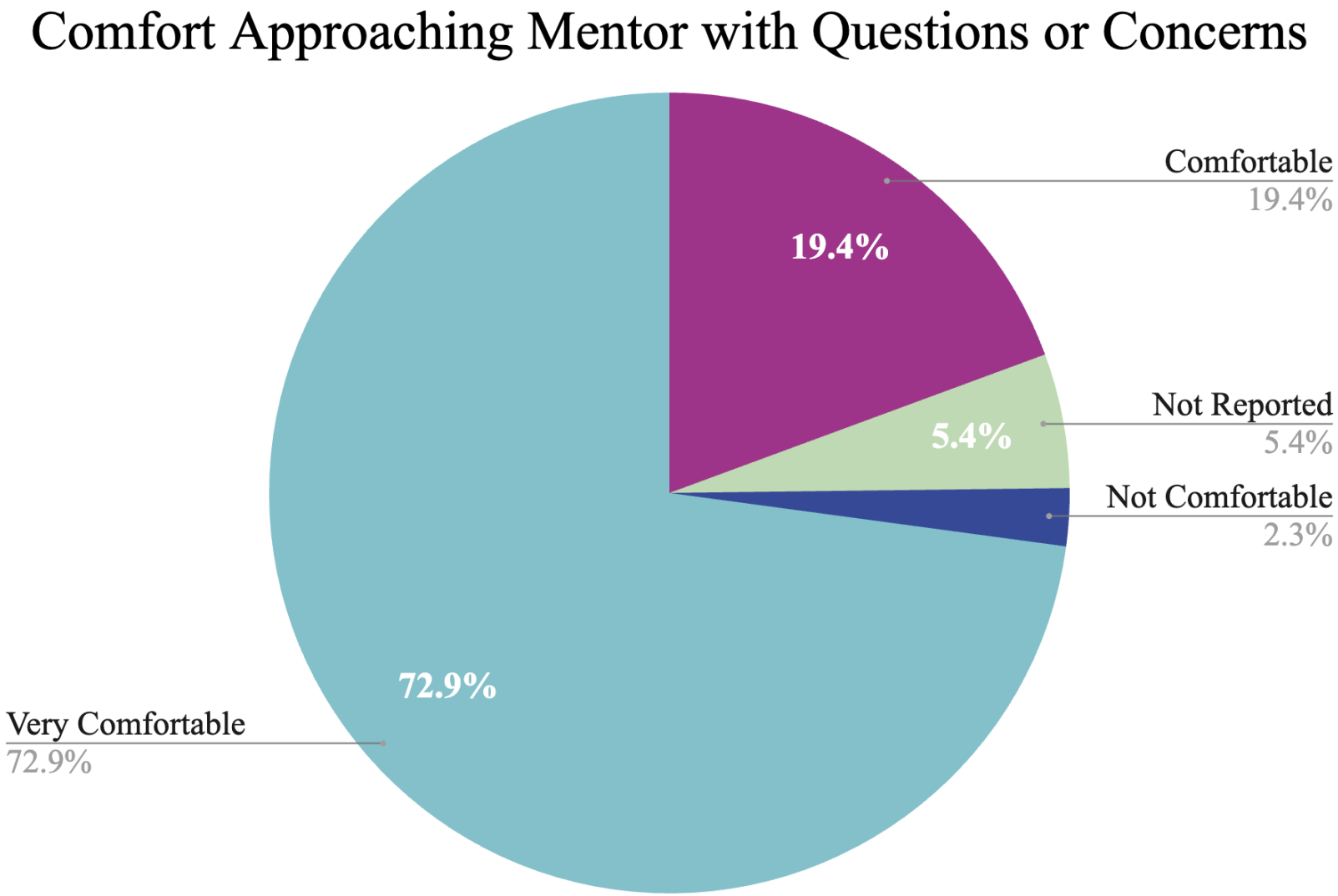
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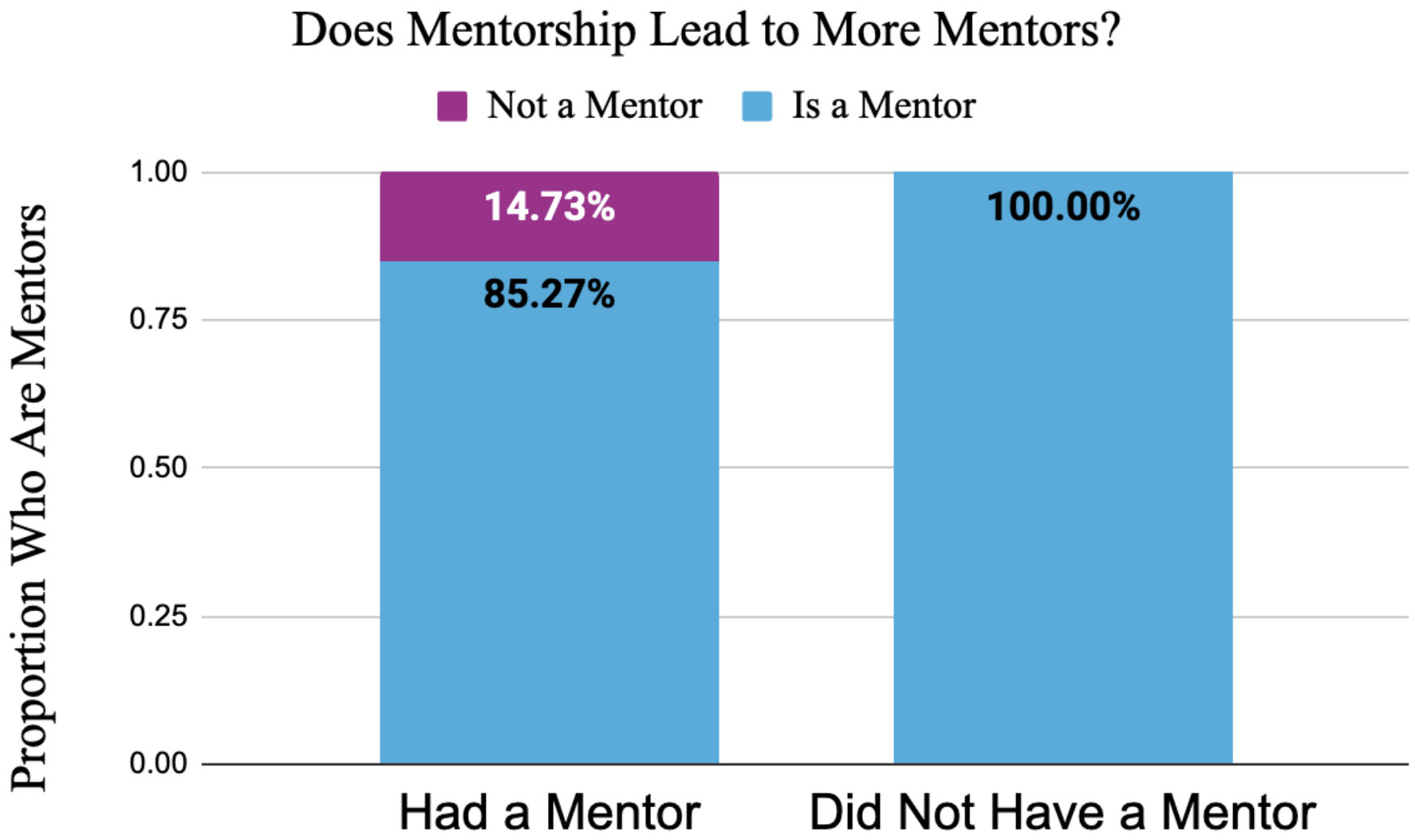
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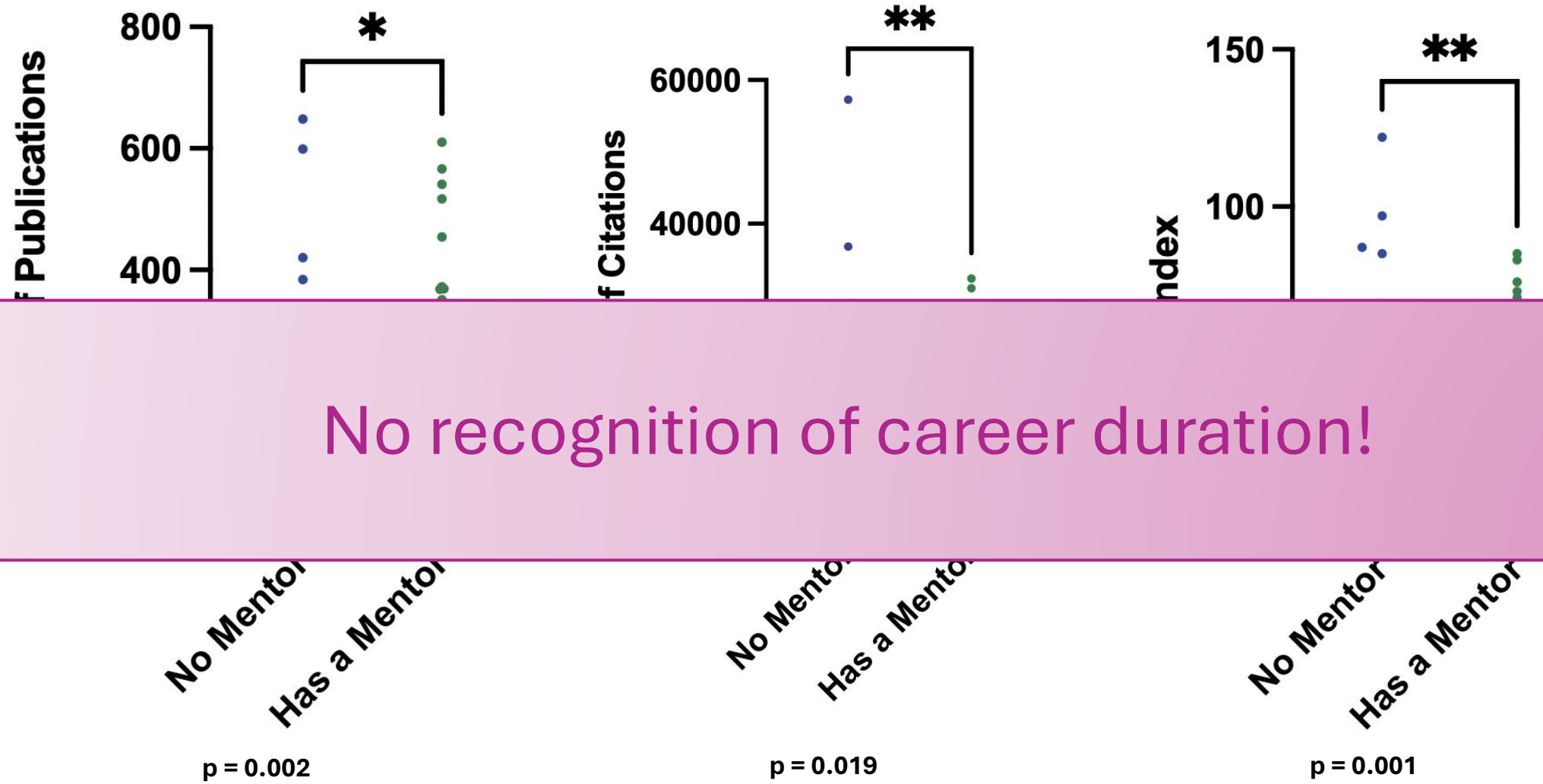
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Lack of Mentorship does not Impede someone from becoming a Mentor

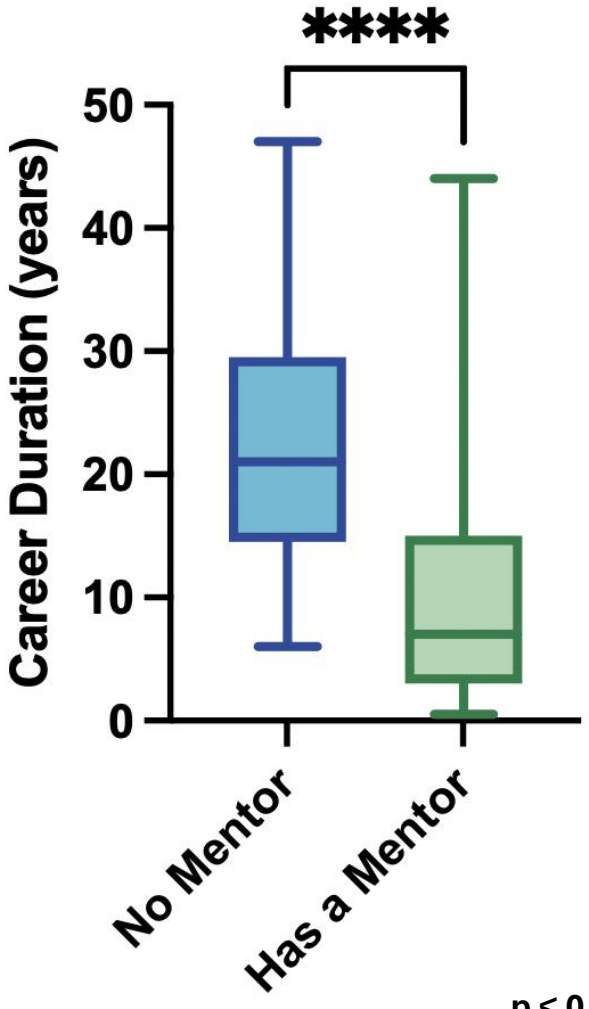


Mentorship is correlated with…lower productivity?



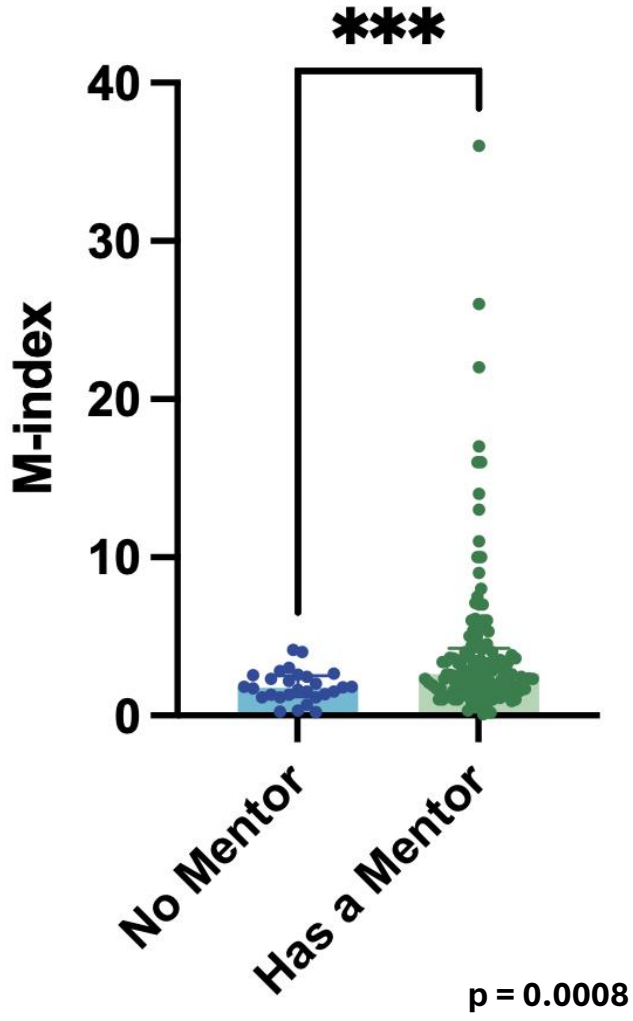
No recognition of career duration!

Career Duration Differs Drastically in Mentored and Unmentored Groups

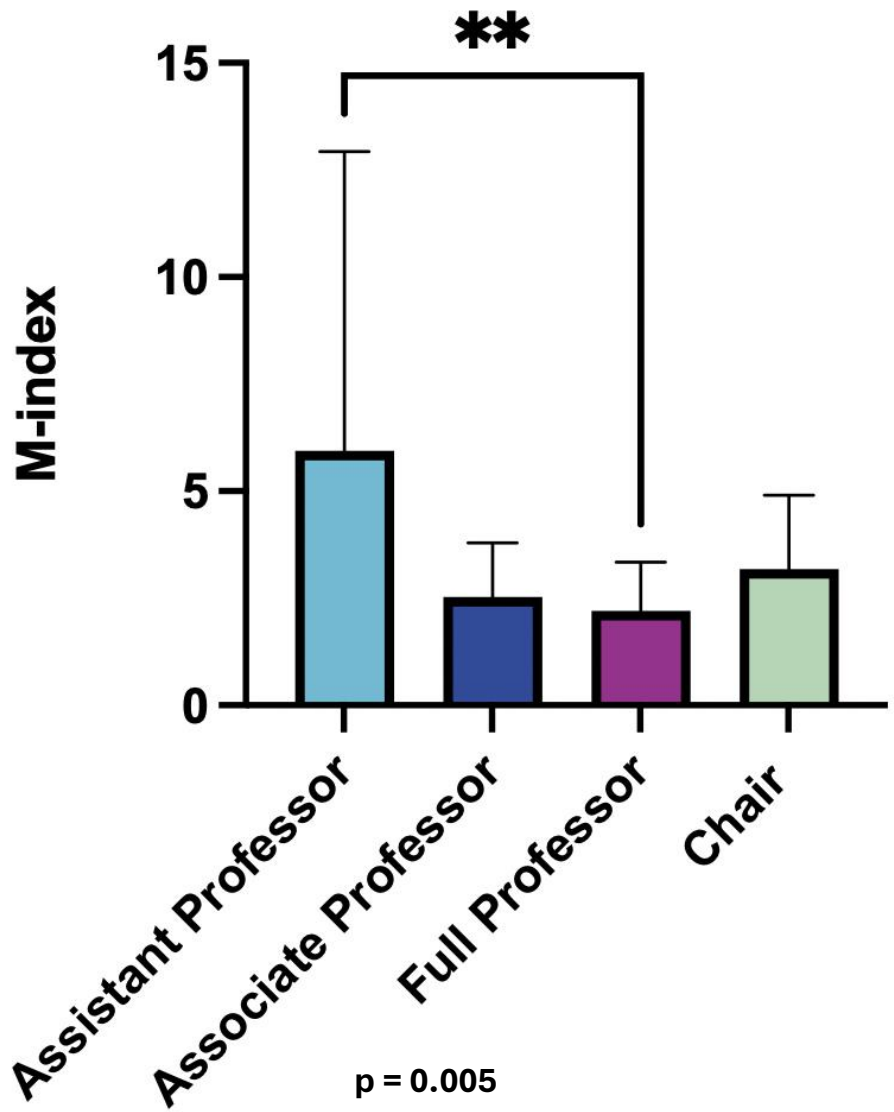


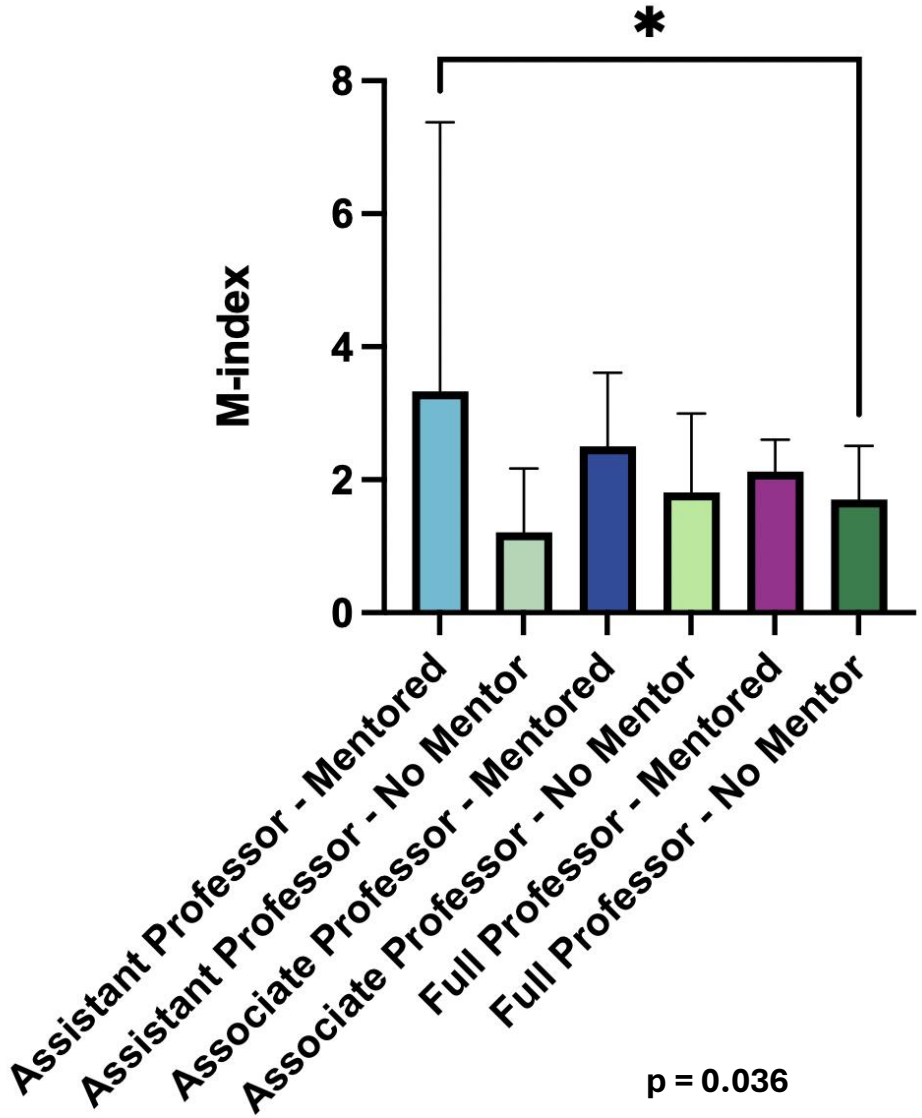
$p < 0.0001$

Accounting for Career Duration via M-index demonstrates a positive correlation between mentorship and productivity

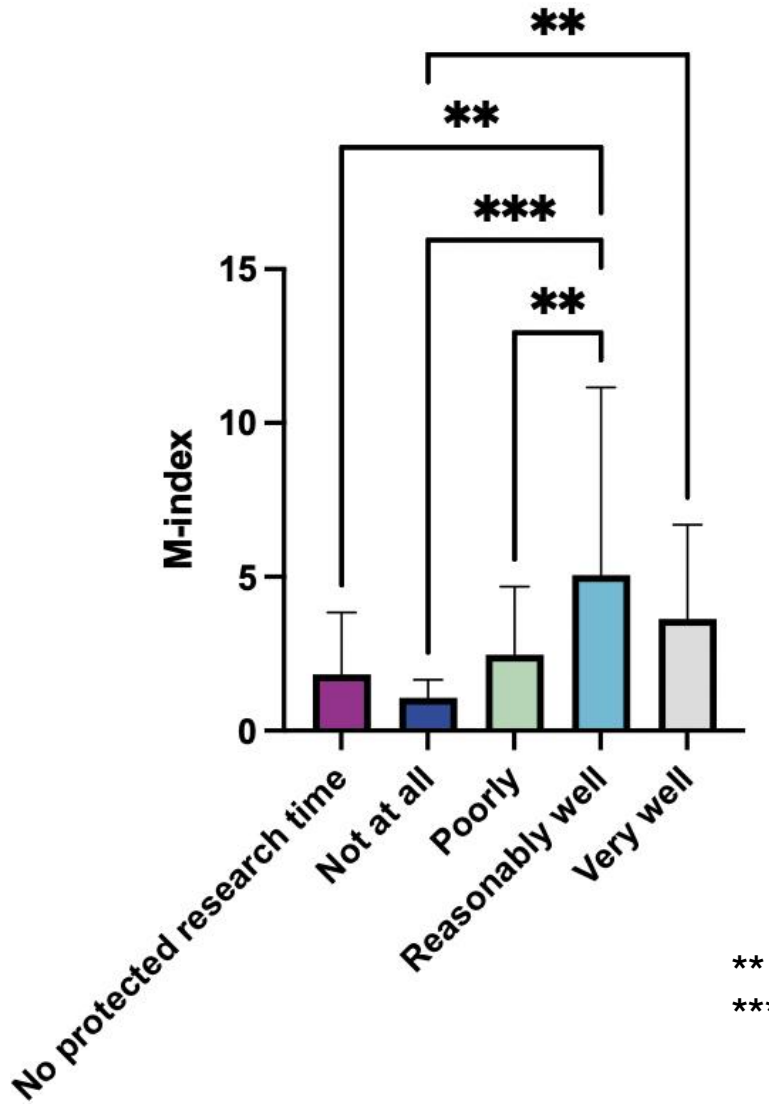


M-index varies by rank and Mentorship





M-index varies by Quality of Protected Time



** p < 0.01
*** p < 0.001

Conclusions

- Mentorship is present, accessible, and often is an long-lasting partnership
- Critical to use appropriate and representative productivity metrics
- When career duration was accounted for, mentorship promoted increased academic productivity as measured by the m-index
- Well-protected research time also correlated with increased productivity

Limitations and Future Directions

Limitations

- Only publicly available Scopus information used for h index when not self reported
- Selection bias of who completed the survey
- Cross-sectional study design so cannot assess if mentorship is causative

Future Directions

- Further multivariable analysis of survey data
- Continue to generate new, representative measures of academic productivity
- Support academic productivity through mentorship initiatives and protected research time

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