



# Exploring the perceptions of osteopathic medical students on the importance of research in their medical education and residency placement

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## INTRODUCTION

- In 2020, the American Osteopathic Association (AOA), the Accreditation Council for Graduate Medical Education (ACGME) and the American Association of Colleges of Osteopathic Medicine (AACOM) transitioned to a single accreditation system for graduate medical education (GME).
- The merge allows MD and DO medical students equal access to residency programs. Currently, COMLEX-USA Level 1 and USMLE Step licensure board exam reporting three-digit numeric scores are Pass/Fail. Furthermore, according to the National Resident matching program (NRMP) survey report in 2021, program directors rate the mean importance of involvement and interest in research in deciding whom to interview a 3.6/5.

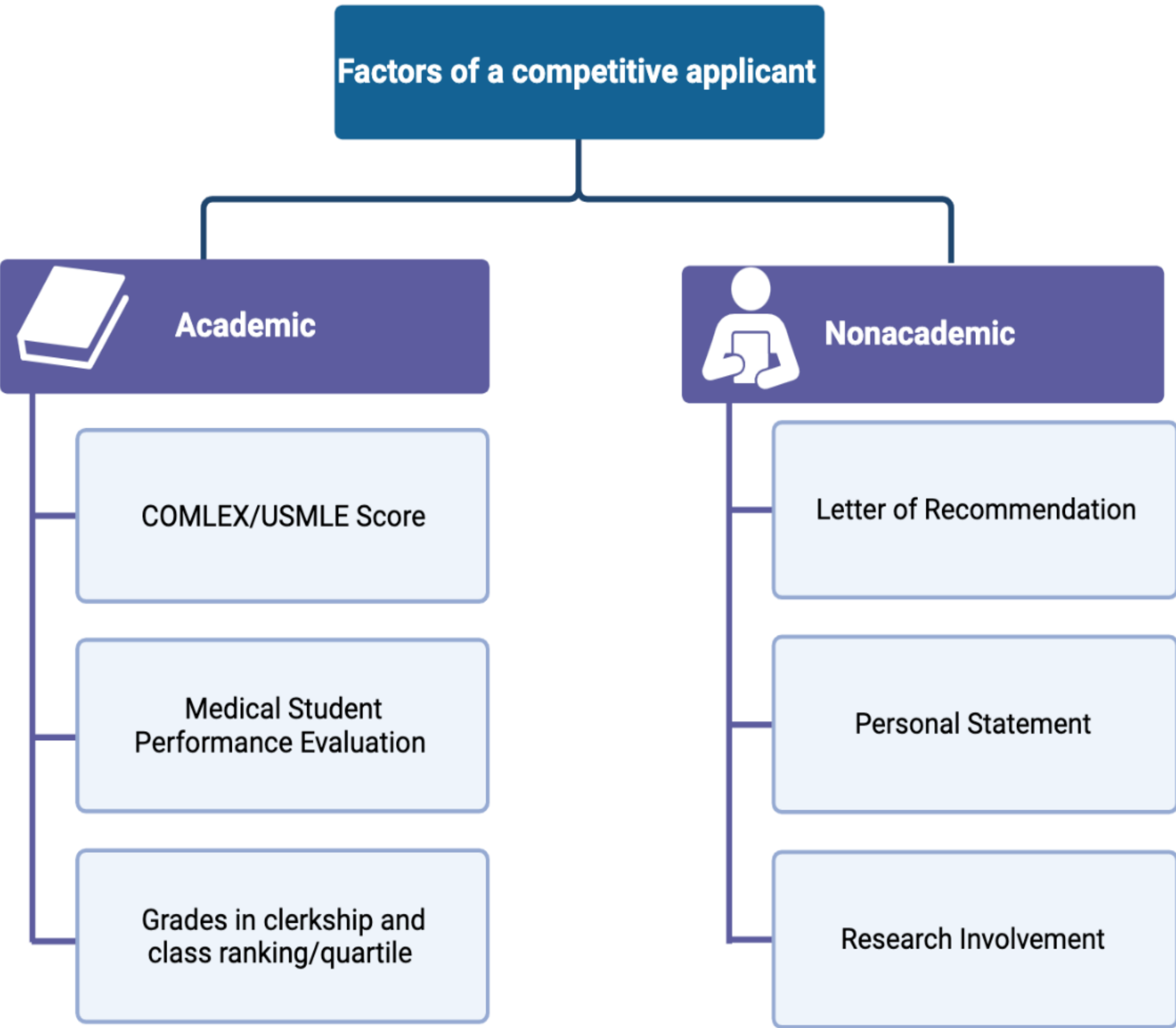


Figure 1: According to the NRMP and other research studies, applicants who successfully matched or received an interview from residency programs possess the factors listed in the diagram on their ERAS application. Factors listed are not ranked in any order and vary between residency programs.

## HYPOTHESIS

We hypothesize that medical students will seek opportunities, such as research involvement, to be a competitive applicant for residency match.

## OBJECTIVE

- In this study we aim to assess first-year medical students’ perceptions and views towards the importance of research experience in their medical education and for residency placement. Furthermore, we try to understand if the interest of residency specialty would be a factor for seeking research opportunities during their medical education.

## METHODS

- The first-year osteopathic medical students were recruited by email containing a link to an online Qualtrics questionnaire. The survey questions were aimed to explore whether the students were interested in gaining research experience.
- Participation was voluntary and data responses were collected anonymously. Statistical significance was determined using Chi-square test.

## RESULTS

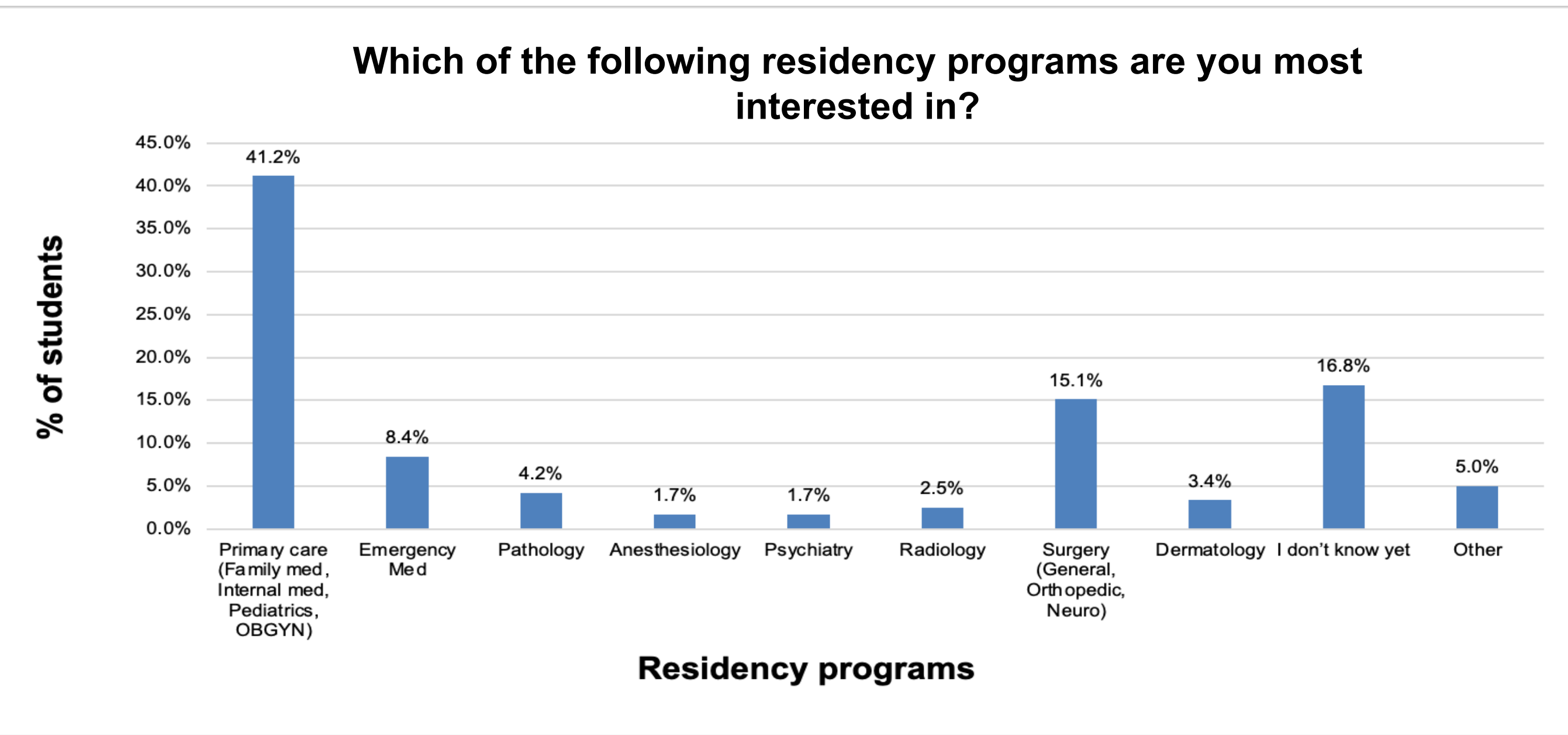


Figure 2: Residency programs first year medical students are most interested. Students were then asked if they agree or disagree that understanding, and experience of research is important to their success in residency placement. Of the students interested in primary care, 27.9% of students agree that understanding and experience of research is important to their success in residency placement. Of the students interested in surgery, 14.8% agree with the statement. There is a strong statistically significant relationship between question set.

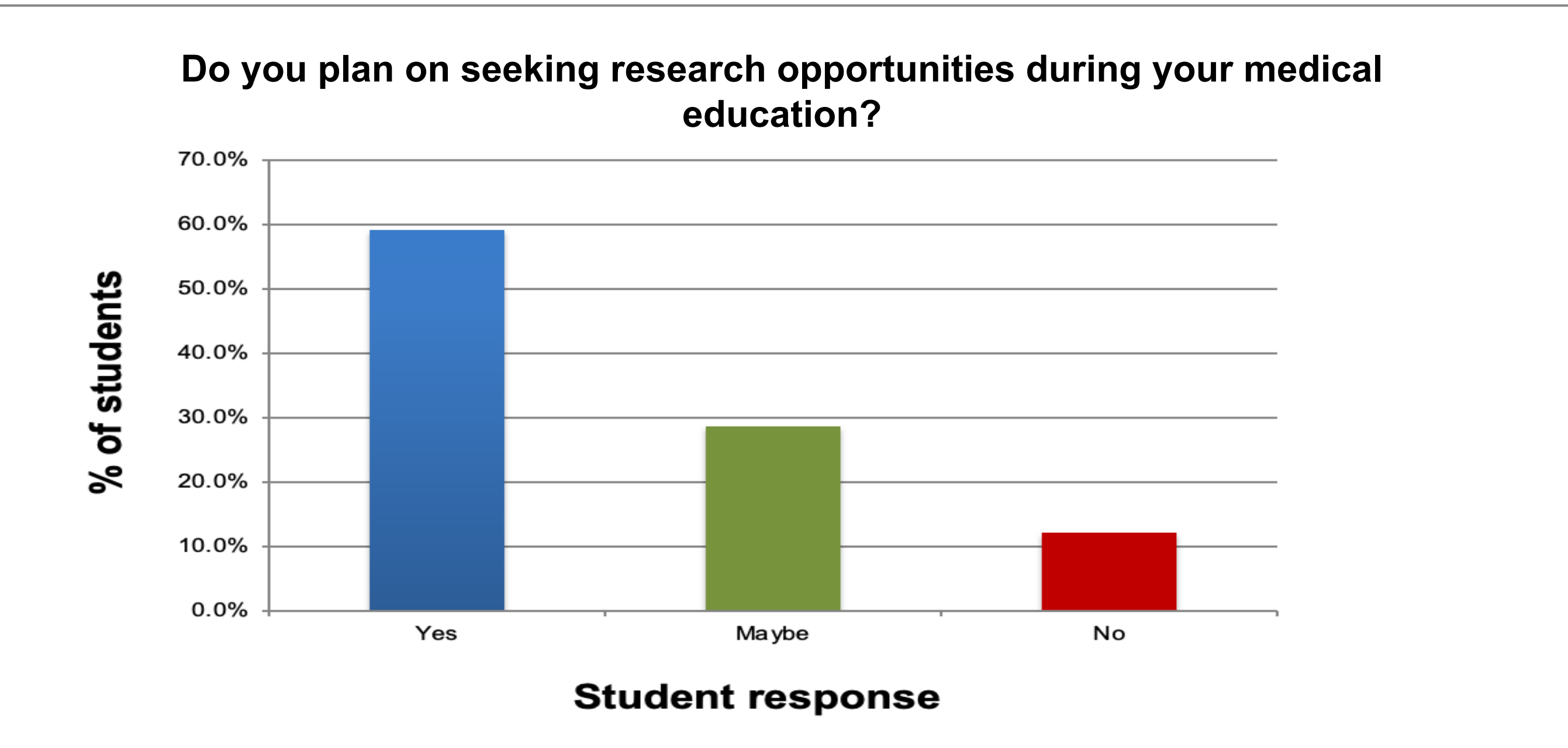


Figure 3: % of first year medical students who plan on seeking research opportunities during medical education. Students were then asked if they agree or disagree that understanding, and experience in research is important to their success during residency training. Of the students who said yes, they do plan on seeking research during medical education, 49.5% also agree that understanding and experience in research is important to their success during residency training. There is a strong statistically significant relationship between question set.

## RESULTS CONTINUED

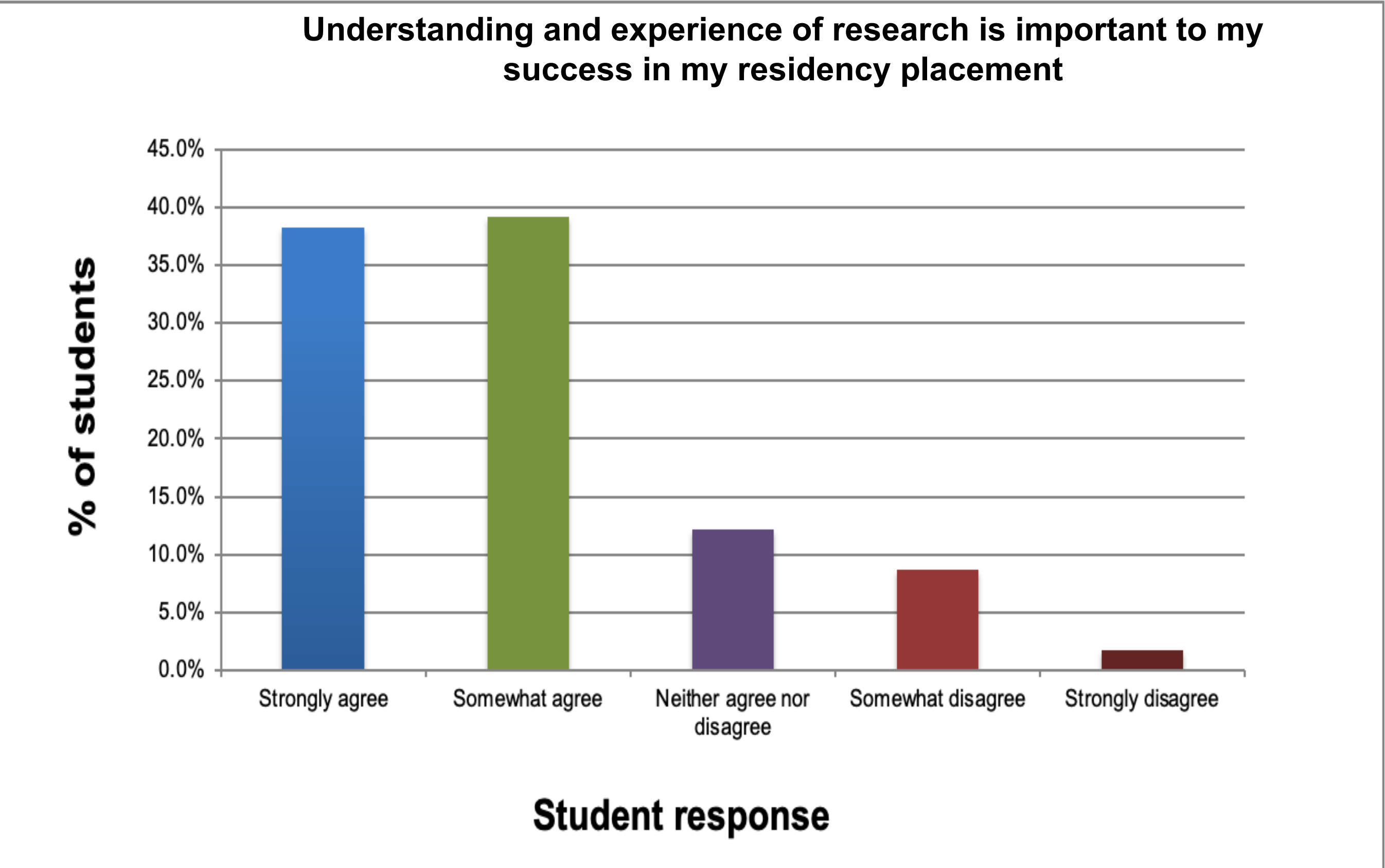


Figure 4: Our survey results revealed about 80% of students who took the survey reported that research experience is an important factor for residency placement. These respondents plan on seeking research during the summer between first and second year of medical education. Interestingly, respondents who disagreed with the statement were among the group who reported an interest in primary care fields of family medicine, internal medicine, pediatrics and OBGYN.

## CONCLUSION

- Our data suggest that students who would like to be a competitive applicant for residency placement seek research opportunities.
- Our results suggest students believe that involvement or understanding of research is important for residency placement and majority plan on seeking research during medical education.
- Further research should be conducted to determine if medical students’ perspectives will change in third and fourth year for the residency application cycle.

## REFERENCES

1. Kortz, Michael W, et al. “National Resident Matching Program Performance among US MD and DO Seniors in the Early Single Accreditation Graduate Medical Education Era.” *Cureus*, 2021, <https://doi.org/10.7759/cureus.17319>.
2. Matthews, Christopher N., et al. “Evaluating the Influence of Research on Match Success for Osteopathic and Allopathic Applicants to Residency Programs.” *Journal of Osteopathic Medicine*, vol. 119, no. 9, 2019, pp. 588–596., <https://doi.org/10.7556/jaoa.2019.102>.
3. Nasser, Jacob S, et al. “Matching into Competitive Surgical Residencies: Predictors of Success.” *Medical Education Online*, vol. 28, no. 1, 2023, <https://doi.org/10.1080/10872981.2023.2189558>.
4. National Resident Matching Program, Data Release and Research Committee: Results of the 2021 NRMP Program Director Survey. National Resident Matching Program, Washington, DC. 2021.