

Introduction

- The Association of American Medical Colleges (AAMC) has highlighted the increasing gender, racial, and ethnic diversity among medical student applicants, noting a significant rise in the number of underrepresented students.
- In the 2021-2022 academic year, there was an 18% increase in total applicants. The number of Black or African American applicants rose by 21%, with Black or African American students comprising 11.3% of matriculants in 2021, up from 9.5% the previous year. First-year students of Hispanic, Latino, or Spanish origin saw a 7.1% increase, making up 12.7% of matriculants. Additionally, women constituted 56.8% of applicants, 55.5% of matriculants, and 52.7% of total medical school enrollment.¹
- Despite these positive trends in medical education, the field of orthopedic trauma surgery has not experienced similar diversity advancements. The number of applicants to orthopedic surgery residency programs has remained relatively constant, but there has been limited examination of the demographics of orthopedic trauma fellows.
- A review of orthopedic surgery programs revealed that while there is an incremental increase in the number of female and underrepresented minority residents, the fellowship programs, specifically in orthopedic trauma surgery, lag in this diversity.² Furthermore, orthopedics' slow increase in female residents lags behind that of other specialties.³ A survey conducted by the American Academy of Orthopedic Surgeons (AAOS) in 2008 revealed that only approximately 4% of orthopedic surgeons responding to the survey are female.⁴

Aims and Objectives

- This study aims to assess the gender, racial, and ethnic composition of incoming orthopedic trauma surgery fellows over the past decade, providing a comprehensive analysis of trends in diversity within this specialized field.

Methods

- The data was retrieved from the Graduate Medical Education Consensus, which was published in the Journal of the American Medical Association for the years 2013-2023.
- Within this dataset, individuals self-reported their race, which was categorized into the following groups: White, Black, Asian, Native Hawaiian/Pacific Islander, American Indian/Alaskan Native, Multiracial, and other/unknown. The data was then compiled to evaluate trends over the decade for gender and ethnic identities

Results

Distribution of Fellows by Gender

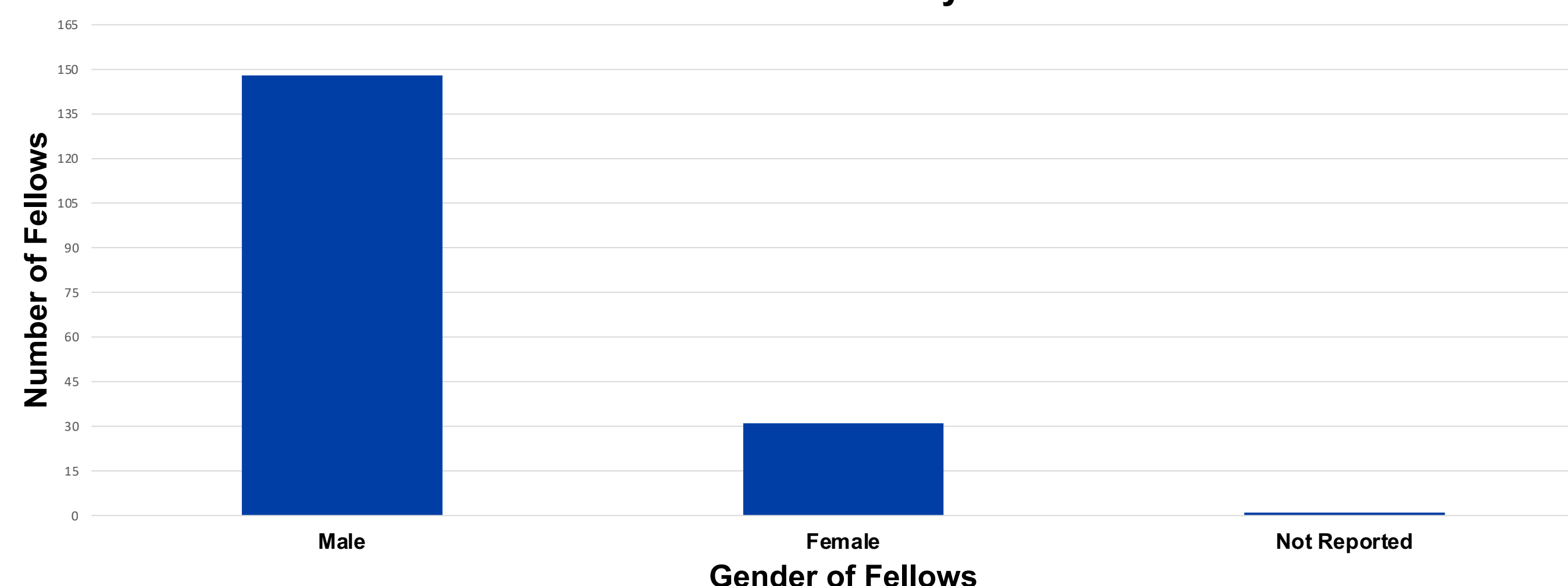


Figure 1: Among the 180 fellows, 82.2% identified as male (n = 148), 17.2% identified as female (n = 31), and 0.5% did not report their gender (n = 1).

Racial/Ethnic Distribution of Fellows

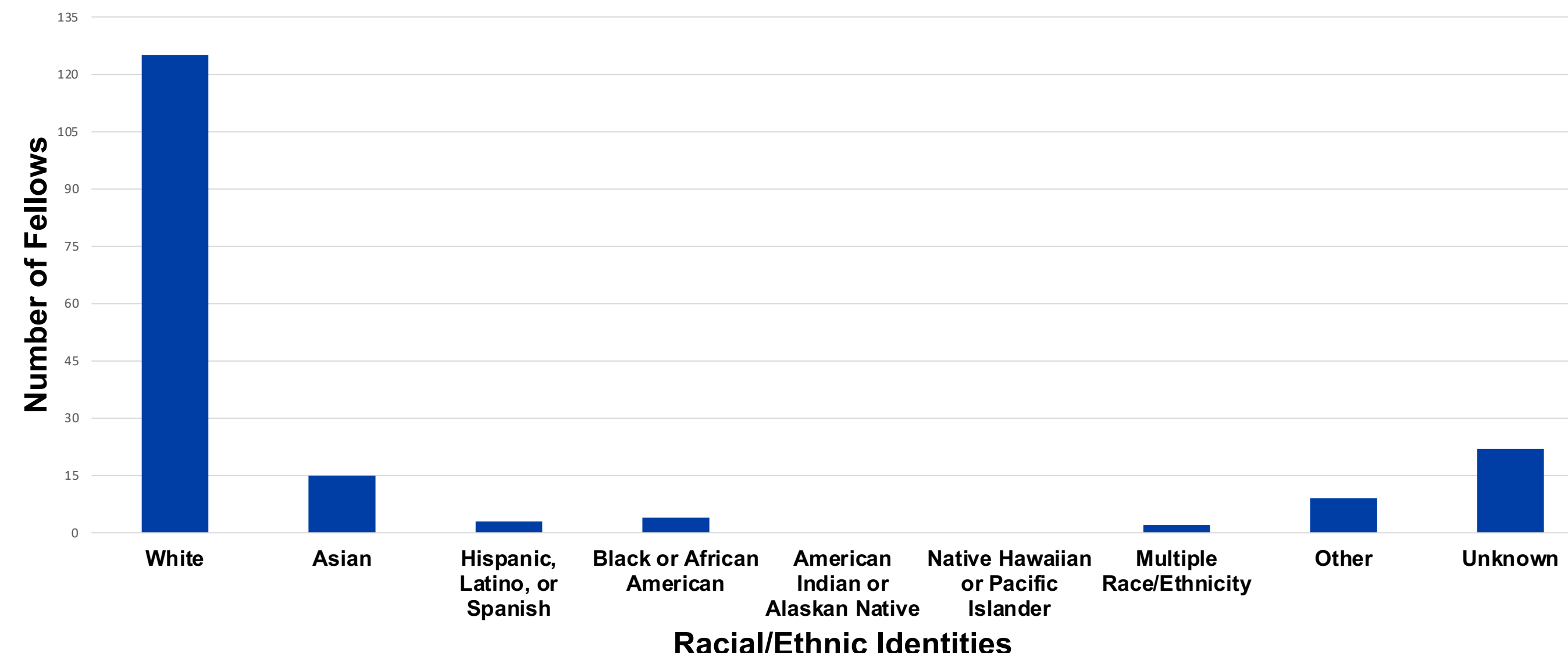


Figure 2: Among the 180 fellows, 69.4% identified as White (n = 125), 8.3% as Asian (n = 15), 1.7% as Hispanic, Latino, or Spanish (n = 3), 2.2% as Black or African American (n = 4), 0% as American Indian or Alaskan Native (n = 0), 0% as Native Hawaiian or Pacific Islander (n = 0), 1.1% as Multiple Race/Ethnicity (n = 2), 5% as Other (n = 9), and 12.2% were Unknown (n = 22).

Distribution of Fellows Showing White and Non-White

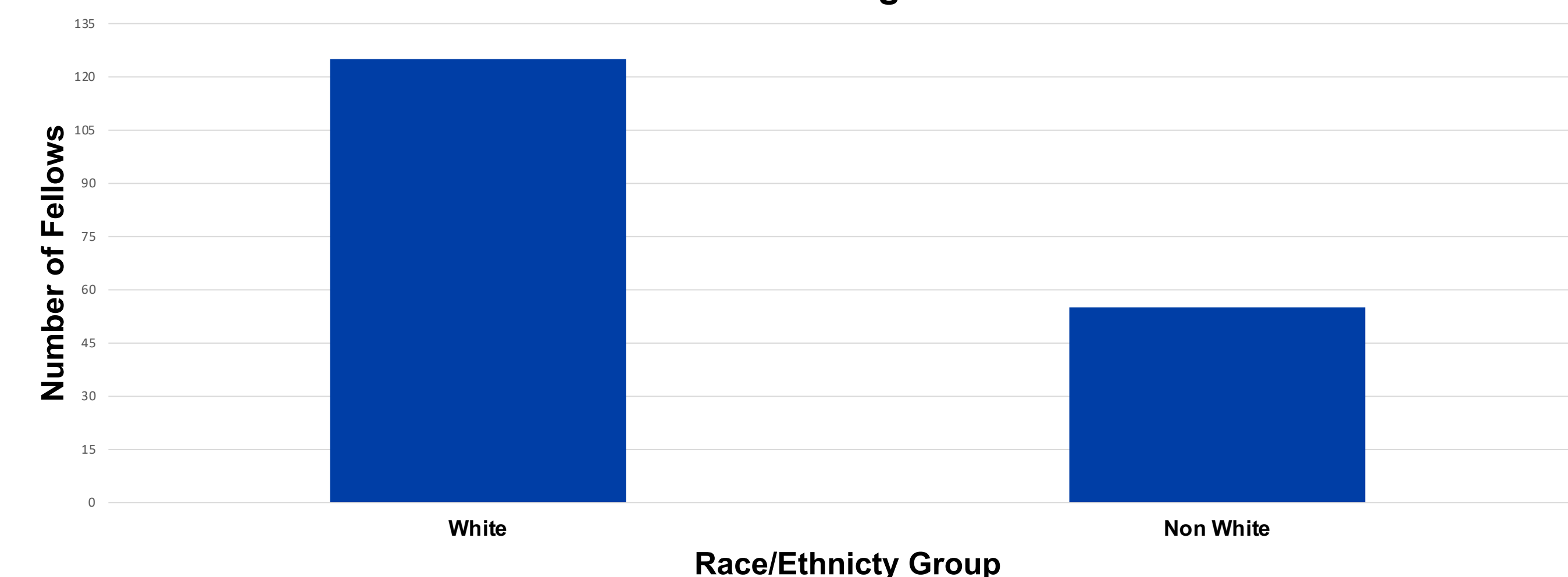


Figure 3: Among the 180 fellows, 69.4% (n=125) are White, and 30.6% (n=55) are Non-White.

Conclusions

- This study highlights the lack of diversity among incoming orthopedic trauma fellows over the past decade, with significant underrepresentation of women and minority groups.
- Despite some incremental progress, the demographics of orthopedic trauma fellows do not reflect the broader trends in medical student diversity.¹
- These findings call attention to the need for targeted efforts to enhance diversity within orthopedic trauma programs. By implementing structured diversity initiatives, mentorship programs, and institutional support, the field can work towards a more inclusive and representative workforce, ultimately improving patient care and fostering innovation.
- The lack of diversity in orthopedic trauma has implications for both patient care and the professional development of underrepresented groups. Diverse teams are known to provide more culturally competent care and innovative solutions, leading to better patient outcomes. Underrepresented minority physician scientist trainees often face barriers that influence their career choices, suggesting that enhanced mentorship and support systems are crucial for fostering diversity in specialized fields like orthopedic trauma.⁵

References

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