

Gender and Race Perceptions in Otolaryngology Training and Mentorship

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Abstract

Background: There is a paucity of otolaryngology-specific research focusing on the impact of gender and race on role model identification and program perception of otolaryngology applicants.

Learning Objective: To understand the impact of gender and race on mentorship and program perspectives of otolaryngology applicants.

Design Type: Survey study of otolaryngology applicants from the 2021-2022 application cycle.

Methods: The survey was distributed to otolaryngology applicants nationwide for the 2021-2022 cycle. Descriptive statistics were calculated. ANOVA tests were used to determine differences between groups.

Results: 75 applicants responded (41.30% women, 58.70% men). The majority of applicants were White/Caucasian (70.67%). Women were less likely to have identified a same-gendered role model ($F(1,73) = 5.172, p = 0.026$), but more likely to agree that identifying a same-gender role model is important ($F(1,73) = 50.700, p < 0.001$). Women more highly prioritized gender-representation among residents ($F(1,73) = 66.831, p < 0.001$) and faculty ($F(1,73) = 84.991, p < 0.001$). With regards to race, non-White applicants were more likely to agree with the statement that a same-race role model/mentor is important ($F(1,73) = 5.416, p = 0.023$), but were less likely to have identified one ($F(1,73) = 8.961, p = 0.004$). Non-White applicants were more likely to note that racial representation was an important factor when ranking ($F(1,73) = 4.081, p = 0.047$).

Conclusions: Understanding priorities and perceptions of applicants with regards to mentorship and residency programs will promote diversity and inclusion in otolaryngology as a field.

Introduction

- Diversity in medicine positively impacts patient care as well as an economic viewpoint.
- Diversity can be both in terms of race/ethnicity and gender
- Residency is the bottle neck into a specialty's workforce, therefore it is important to understand factors promoting diversity and inclusion at the entry level
- ACGME-led efforts to increase residency diversity include strategic visibility and special mentorship efforts towards for women and underrepresented minorities
- Under-represented minorities are present at less than expected proportions in ENT compared to other medical fields
- A persistent gender gaps remain for representation in otolaryngology, specifically among positions of leadership and fellowship positions
- The current study sought to understand views on diversity in otolaryngology from the applicant standpoint in order to determine the importance of mentorship and diversity/inclusion programs

Methods and Materials

- A 15 question survey study was sent to residency applicants for the 2021-2022 residency application cycle (**Figure 1**).
- Subjects self-identified both gender and race. Under-represented minorities were defined as Black/African American and Hispanic/Latin.
- Statements pertaining to the importance of gender and racial role model identification and perceptions applicants had regarding the residency interview process. Responses to each statement were assessed either by "Yes/No" answers or via a 5-point Likert Scale from 1 = Strongly Disagree, to 5 = Strongly Agree.
- Inclusion criteria: 4th year medical students or post-graduate applicants applying into ENT residencies for the 2021-2022 cycle
- Survey Planet was utilized; responses were collected anonymously
- Survey distribution was online via OtoMatch Forum and via email to 128 program coordinators for distribute to their incoming PGY1 residents and graduating 4th year medical students.

Results

- 75 subjects
- 31 subjects identified as women (58.70%) and 44 identified as men (41.30%).
- The racial breakdown of subjects is demonstrated in **Figure 2**; Only 6 respondents identified as either black/African American or Hispanic/Latinx.
- 95.60% of subjects were between the ages of 25-30
- 71 subjects (95.60%) identified a role model within ENT.
 - 59/75 (79.79%) identified a same gendered role model
 - 49/75 (65.30%) identified a same race role model
- Gender stratification:
 - Men were more likely to identify a role model in ENT than women (100% vs. 87.10%, $p = 0.014$)
 - Men were more likely to identify a same gender role model (88.64% vs. 67.74%, $p = 0.026$)
 - Women assigned greater importance to same-gendered role model (average score 4.26 vs. 2.5, $p < 0.001$)
 - Women more likely to identify resident gender diversity as a factor in program ranking (3.9 vs. 1.98, $p < 0.001$). The same trend was observed with regards to gender diversity among faculty (3.94 vs. 1.86, $p < 0.001$).
 - Both genders averaged a neutral score surrounding a lack of women represented within ENT (2.9 vs. 2.95, $p = 0.845$)
- Race stratification:
 - White applicants identified a higher rate of same race role models compared to non-white respondents (1.54 vs. 1.25, $p = 0.04$)
 - Non-white applicants were more likely to agree with the importance of identifying a role model of a similar racial background (3.36 vs. 2.64, $p = 0.023$)
 - Non-white applicants more strongly agreed that racial diversity among current residents at a program as an important factor in their ranking decision (3.86 vs. 3.16 $p = 0.047$)
 - Under-represented minorities:
 - Strongly agreed on the importance of a same race role model (4.5 vs. 2.62, $p < 0.001$)
 - Were more likely to consider racial diversity among residents a strong factor in their rank decisions (4.00 vs 3.13, $p = 0.045$)
 - Were less likely to agree that the interview process allowed for identification of a culture promoting racial diversity at a program (3 vs. 3.71, $p = 0.016$).

Discussion

- Diversity demonstrates improved culture competency, access to care, and also broadens clinical and research agendas.
- The ACGME emphasizes diverse physician workforces through:
 - Strategic visibility during interview days
 - Dedicated mentorship for women and underrepresented minorities
- Mentorship, especially same-gendered, may improve gender diversity and increase female applicants.
- Prior studies demonstrate that programs highlighting diversity of chairs, residents, or faculty along with specifically detailed diversity and inclusion initiatives have a higher proportion of female residents
- Efforts to promote visibility of gender diversity within a program may increase diversity and interest in otolaryngology.
- Identifying a role model of a similar racial background is important, particularly for non-white and under-represented minorities.
- Purposeful efforts are needed not only for mentoring, recruiting, and retaining underrepresented minorities at all levels.
- Promotion of both gender and race diversity can be achieved via hiring and recruiting tactics, retention efforts, and by increasing awareness of diversity and inclusion programs via word of mouth, social media, and active advertising.
- Promotion of diversity and inclusion programs may help to draw awareness, especially in the current era where many interview processes are being conducted virtually.

<p>1. What gender do you identify as? Woman Man Transgender Non-Binary Prefer not to answer Other</p>	<p>9. Having faculty who identified as the same gender as you within a program was a factor in your ranking decision. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>
<p>2. What race do you identify as? White/Caucasian Black/African American East Asian/Pacific Islander Hispanic/Latin Native American or Alaskan Native South/Southeast Asian Multiracial Other</p>	<p>10. The residency interview process allowed for identification and assessment of the culture of inclusion for women at programs. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>
<p>3. What is your age? 20-24 25-30 31-35 36-40 41+</p>	<p>11. Have you identified a role model who identified as the same race as you within otolaryngology? Yes No</p>
<p>4. Have you identified a role model within otolaryngology? Yes No</p>	<p>12. It is important to have a role model who identified as the same race as you within otolaryngology. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>
<p>5. Have you identified a role model who identifies as the same gender as you within otolaryngology? Yes No</p>	<p>13. Racial and ethnic diversity among the residents at a program was a factor in your ranking decision. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>
<p>6. It is important to have a role model who identifies as the same gender as you within otolaryngology. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>	<p>14. Racial and ethnic diversity among the faculty at a program was a factor in your ranking decision. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>
<p>7. There is a lack of women role models within otolaryngology. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>	<p>15. The residency interview process allowed identification and assessment of the culture of diversity, inclusion, and belonging at a program. Strongly Disagree Disagree Neutral Agree Strongly Agree</p>

Figure 1: Survey Questions

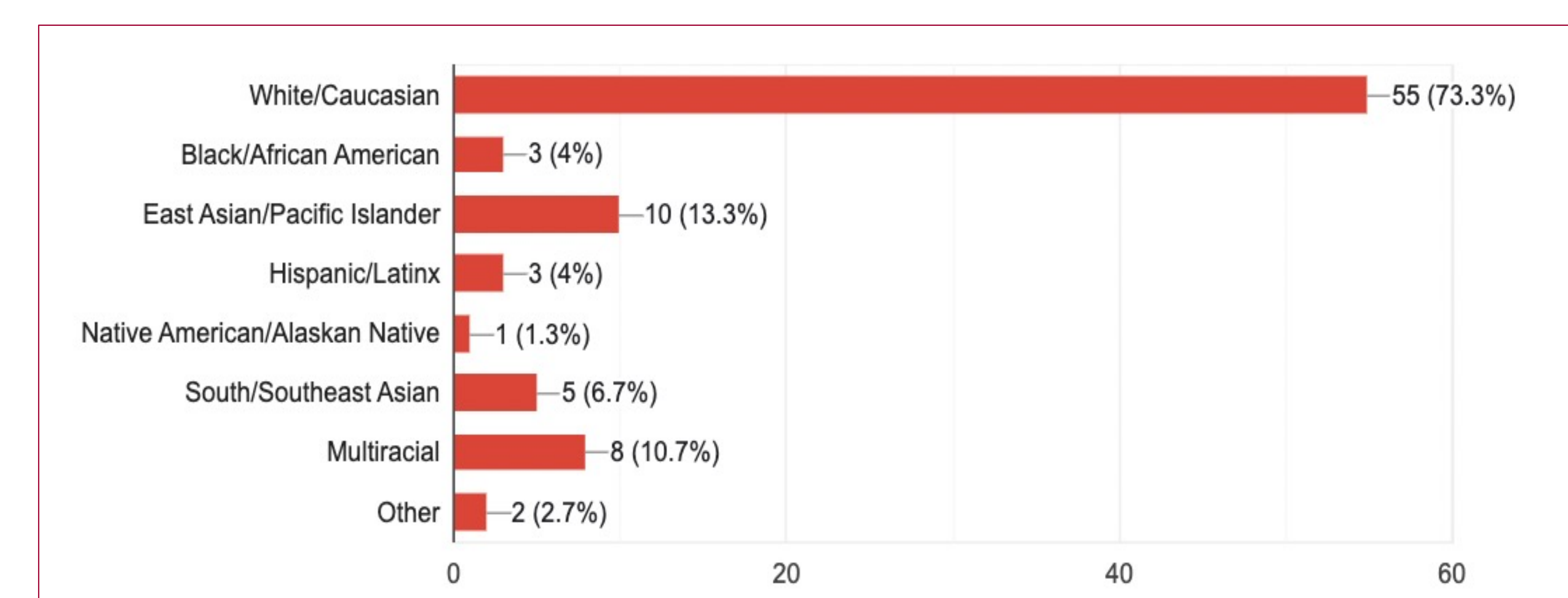


Figure 2: Racial Breakdown of Survey Respondents

Conclusions

- Diversity in health care benefits patients as well as the providers that care for them.
- Purposeful efforts and promoting diversity and inclusion are valued to increase gender and racial balance within otolaryngology
- Women and under-represented minority applicants into otolaryngology find mentorship to be an important factor in selecting a program, along with diversity within a program.
- A focus on mentorship and inclusion programs can help to shape the demographics of the field of otolaryngology in a positive way.