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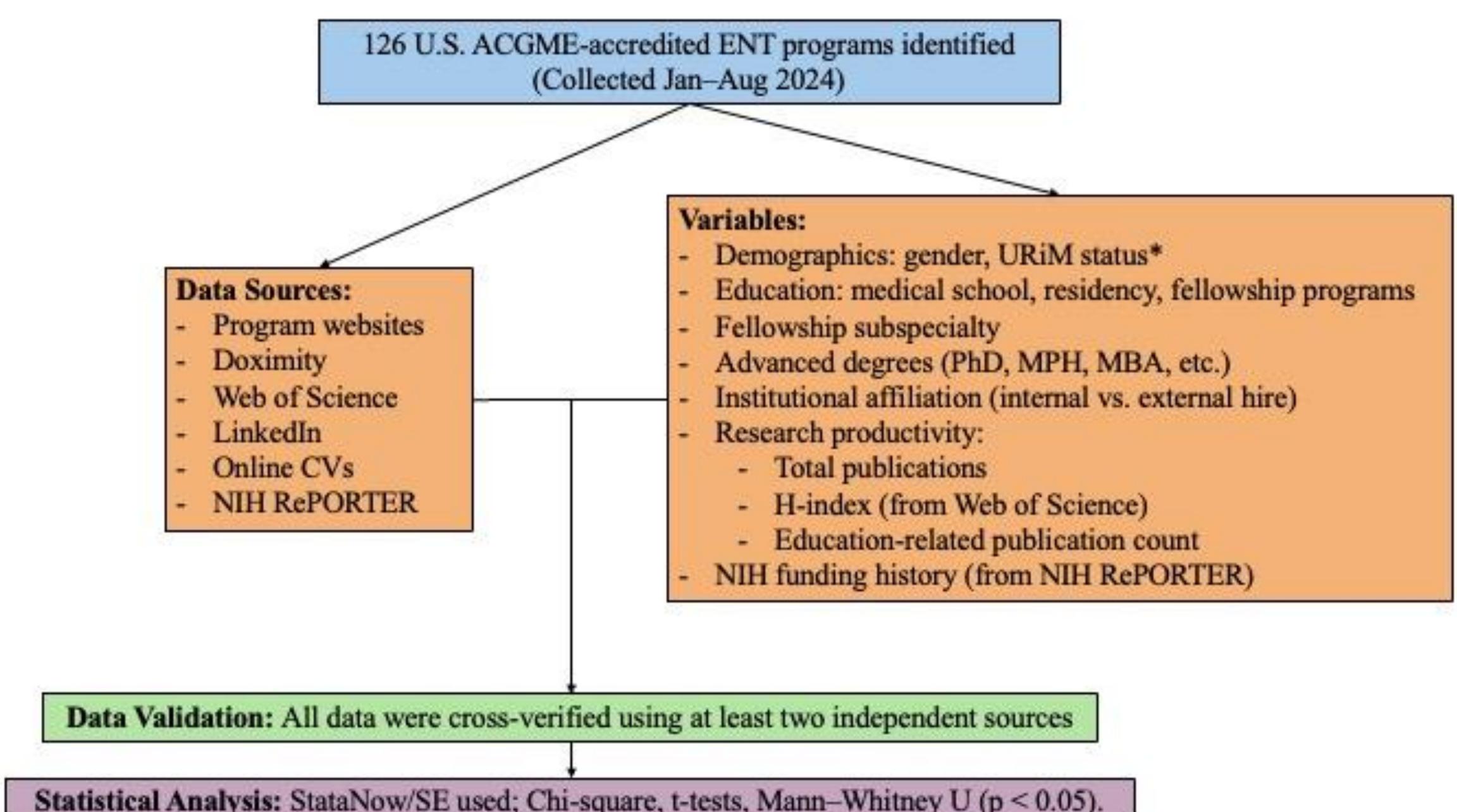
## Introduction

- ❖ Program Directors (PDs) are essential to shaping Otolaryngology—Head & Neck Surgery residency programs and resident professional identities.<sup>1,2</sup>
- ❖ Prior studies focused on residency program structure, not leadership pathways.<sup>3,4</sup>
- ❖ No longitudinal characterization of PD-specific demographics, training, and academic productivity has been performed.

## Objective

To evaluate demographic trends, research productivity, and institutional hiring patterns of U.S. Otolaryngology PDs and identify factors linked to leadership pathways.

## Methods



\*URiM = Underrepresented in Medicine; includes African American, American Indian/Alaska Native, Hawaiian/Pacific Islander, and Latino/Hispanic

## Results

Table 1. Demographics of Otolaryngology Program Directors (n=126)

	n (%)
<b>Gender</b>	
Male	80 (63.5%)
Female	46 (36.5%)
<b>Advanced Degree*</b>	23 (18.3%)
<b>Fellowship trained</b>	103 (81.7%)
<b>Graduated from U.S. Medical School</b>	125 (99.2%)
<b>History of NIH funding</b>	4 (3.2%)

\*Advanced degree other than MD or DO

NIH = National Institutes of Health

Table 2. Faculty Location and Training Prior to Appointment

	n (%)
<b>Known Hire Type (n=120)<sup>+</sup></b>	
Internal	★ 91.7% of PDs were promoted internally 110 (91.7%)
External	10 (8.3%)
<b>Known Prior Training at Current Institution (n=126)</b>	
Multiple affiliations	25 (19.8%)
Fellowship	9 (7.1%)
Residency	★ Nearly half (49.2%) completed some training at their current institution 13 (10.3%)
Medical school	15 (11.9%)
No connection	64 (50.8%)

<sup>+</sup>Hire type data is available for 120 of the 126 total program directors (PDs)

Table 3. Subspecialty Distribution by Gender

Subspecialty	All (n (%)), n=126	Male (n, (%)), n=80	Female (n, (%)), n= 46	p-value
<b>Head and neck surgery</b>	26 (20.6%)	15 (18.8%)	11 (23.9%)	0.50
<b>Laryngology</b>	11 (8.7%)	6 (7.5%)	5 (10.9%)	0.53
<b>Facial Plastics</b>	14 (11.1%)	10 (12.5%)	4 (8.7%)	0.57
<b>Neurotology</b>	15 (11.9%)	11 (13.8%)	4 (8.7%)	0.57
<b>Pediatrics</b>	16 (12.7%)	7 (8.8%)	9 (19.6%)	0.10
<b>Rhinology</b>	23 (18.3%)	18 (22.5%)	3 (6.5%)	0.15
<b>Skull base surgery</b>	18 (14.3%)	15 (18.8%)	3 (6.5%)	0.07
<b>Other</b>	2 (1.6%)	0 (0%)	2 (4.3%)	0.13

## Discussion

- Internal hiring dominates, which promotes stability but may limit diversity and innovation.
- A significant portion of PDs hold additional advanced degrees, which are associated with increased research productivity and NIH funding.
- Gender does not affect research productivity, suggesting systemic barriers rather than differences in capability.
- Fellowship training remains a key pathway to leadership, especially in Head & Neck and Pediatrics.

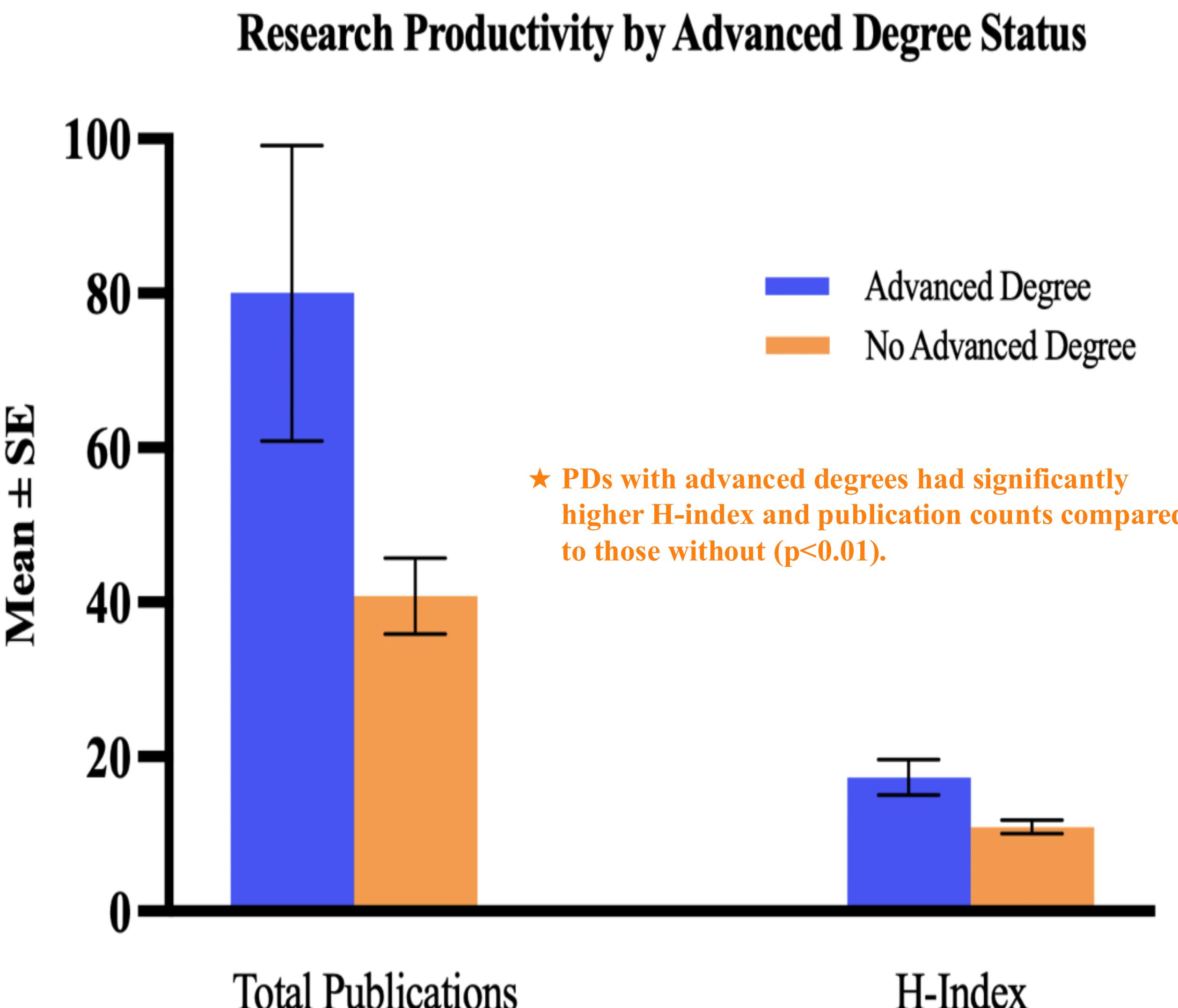


Figure 1. Research productivity by advanced degree status. Mean ± standard error (SE) of total publications and H-index shown. p-value &lt;0.05 for both comparisons.

## Contact

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## References

1. Arora TK, Kaplan BJ. Who Are Surgery Program Directors and What Do They Need? *J Surg Educ*. 2008;65(6):504-511. doi:10.1016/j.jsurg.2008.04.010
2. Bowe SN. Quality Improvement in Otolaryngology Residency: Survey of Program Directors. *Otolaryngol Neck Surg*. 2016;154(2):349-354. doi:10.1177/0194599815616110
3. Villwock JA, Hamill CS, Nicholas BD, Ryan JT. Otolaryngology Residency Program Research Resources and Scholarly Productivity. *Otolaryngol-Head Neck Surg Off J Am Acad Otolaryngol-Head Neck Surg*. 2017;156(6):1119-1123. doi:10.1177/0194599817704396
4. Mansi A, Karam WN, Chaaban MR. Attitudes of Residents and Program Directors Towards Research in Otolaryngology Residency. *Ann Otol Rhinol Laryngol*. 2019;128(1):28-35. doi:10.1177/0003489418804565