Commentary



Otolaryngology—
Head and Neck Surgery
2018, Vol. 158(1) 21–23

© American Academy of
Otolaryngology—Head and Neck
Surgery Foundation 2017
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0194599817731754
http://otojournal.org



# Incorporating Interpersonal Skills into Otolaryngology Resident Selection and Training

Yemeng Lu-Myers, MD, MPH<sup>1</sup>\* and Christopher G. Myers, PhD<sup>2,3</sup>\*

No sponsorships or competing interests have been disclosed for this article.

#### **Abstract**

Increasing attention has been paid to the selection of otolaryngology residents, a highly competitive process but one with room for improvement. A recent commentary in this journal recommended that residency programs more thoroughly incorporate theory and evidence from personnel psychology (part of the broader field of organizational science) in the resident selection process. However, the focus of this recommendation was limited to applicants' cognitive abilities and independent work-oriented traits (eg, conscientiousness). We broaden this perspective to consider critical interpersonal skills and traits that enhance resident effectiveness in interdependent health care organizations and we expand beyond the emphasis on selection to consider how these skills can be honed during residency. We advocate for greater use of standardized team-based care simulations, which can aid in assessing and developing the key interpersonal leadership skills necessary for success as an otolaryngology resident.

#### **Keywords**

interpersonal skills, resident selection, education, training, resident development, organizational psychology, simulation, collaboration

Received July 18, 2017; accepted August 25, 2017.

recent commentary in this journal advocated for improving otolaryngology residency selection by drawing from personnel selection research, conducted in the field of organization science, to generate evidence-based, theory-driven practices. As an otolaryngology resident (Y.L.M.) and organizational behavior professor (C.G.M.), we read this article with great interest. We agree wholeheartedly with the suggestions made by Drs Bowe, Laury, and Gray for programs to adopt more rigorous selection practices (eg, structured interviews) and to attend to applicants' cognitive ability, integrity, and conscientiousness. But these elements predominantly assess prospective residents' cognitive talents and *intra*personal proclivities and are therefore necessary but

insufficient as predictors of performance in complex interdependent health care organizations. Modern medicine is a team sport; thus, *inter*personal skills and traits—social skills, knowledge of teamwork strategies, and relevant personality characteristics<sup>2</sup>—are critical elements that must be more thoroughly incorporated as part of the selection process for otolaryngology residents, as well as their ongoing training and development. Indeed, the importance of these interpersonal skills is evident in their inclusion among the Accreditation Council for Graduate Medical Education core competencies that all residents must possess.

# Importance of Interpersonal Skills for Otolaryngology Residents

Working collaboratively is a necessity in surgery and can improve patient care by synthesizing multiple perspectives and reducing the risk of missing key information.<sup>3</sup> Breakdowns in interpersonal dynamics (eg, issues of communication, hierarchy, and conflict) have been cited as causing medical error since at least the mid-1800s,<sup>4</sup> and recent research has linked these breakdowns among surgeons—captured via "unsolicited patient observations" (eg, patient complaints of surgeons' disrespectful behavior or rude interactions)—to increased complication and readmission rates.<sup>5</sup>

Assessing individuals' interpersonal skills can help identify applicants who are more likely to succeed as otolaryngology residents. These skills have been assessed among medical students via video-based situational judgment tests (watching video-recorded vignettes of interpersonal interactions and deciding on the most appropriate response), with greater interpersonal skill ratings positively predicting students' performance when practicing medicine 9 years later.<sup>6</sup>

#### **Corresponding Author:**

Christopher G. Myers, PhD, Johns Hopkins Carey Business School, 100 International Drive, Baltimore, MD 21202, USA. Email: cmyers@jhu.edu

<sup>&</sup>lt;sup>1</sup>Department of Otorhinolaryngology–Head and Neck Surgery, School of Medicine, University of Maryland, Baltimore, MD, USA

<sup>&</sup>lt;sup>2</sup>Carey Business School, Johns Hopkins University, Baltimore, Maryland,

<sup>&</sup>lt;sup>3</sup>Armstrong Institute for Patient Safety and Quality, School of Medicine, Johns Hopkins University, Baltimore, MD, USA

<sup>\*</sup>Both authors contributed equally to this work.

Table 1. Dimensions of the "Big Five" Model of Personality.

Dimension	Common Traits Associated with Dimension <sup>a</sup>
Extraversion	"Sociable, gregarious, assertive, talkative, and active"
Neuroticism <sup>b</sup>	"Anxious, depressed, angry, embarrassed, emotional, worried, and insecure"
Agreeableness	"Courteous, flexible, trusting, good-natured, cooperative, forgiving, soft-hearted, and tolerant"
Conscientiousness	"Careful, thorough, responsible, organized, and planful hardworking, achievement-oriented, and persevering"
Openness to experience	"Imaginative, cultured, curious, original, broad-minded, intelligent, and artistically sensitive"
about the state of	

<sup>&</sup>lt;sup>a</sup>Descriptions of common traits are quoted with permission from: Barrick MR, Mount MK. The Big Five personality dimensions and job performance: a meta-analysis. Personnel Psychology. 1991;44(1):3-5.

Residency programs can also improve their selection methods by assessing interpersonally relevant personality characteristics. Bowe and colleagues advocate selection based on conscientiousness, 1 a key personality characteristic that reliably predicts performance in a variety of settings. However, overprioritizing this aspect of personality may result in ineffective resident selection, as conscientiousness has been shown to be unrelated to clinical skills ratings among medical students, only predicting their preclinical knowledge on early-year exams and actually negatively predicting clinical knowledge in later years of their program.<sup>7</sup> Other personality traits (eg, the other 4 dimensions of the "Big Five" model of personality; **Table 1)** have been proven relevant for predicting performance in team-based work,<sup>2</sup> with extraversion, for instance, predicting performance in socially interactive occupations<sup>8</sup> and medical students' interpersonal clinical skills (ie, communication, patient rapport, team rapport, and patient care).

# **Selecting and Training for Interpersonal Skills**

Beyond just selecting for individuals with stronger, naturally occurring social/teamwork skills and personality characteristics, ongoing efforts to train residents in interpersonal skills are needed as well. Skills and strategies for managing interpersonal dynamics and working in teams are seldom, if ever, taught in medical education (and when they are, they are rarely grounded in organizational science or theory). Selecting for these important interpersonal leadership skills therefore represents only half the dual processes of assessment and development that contribute to residents' knowledge, skills, and abilities (see **Figure 1**).

Ongoing education regarding interpersonal skills is needed from the outset of otolaryngology residency, as residents are asked to step into roles that involve managing and coordinating patient care among teams representing multiple specialties and backgrounds. Even individuals with strong preexisting social skills are likely to be unprepared for these sorts of leadership roles in the complex, time-sensitive environment of surgical residency.

## A Path Forward

How might these interpersonal skills be better incorporated into the selection and training of otolaryngology residents? In addition to the tools mentioned so far, residency programs

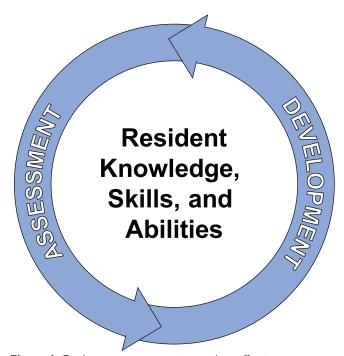


Figure 1. Dual processes promoting resident effectiveness.

would benefit from the increased adoption of interpersonal simulations. Bowe and colleagues call for greater use of work samples—for instance, examples of past performance provided by writers of recommendation letters. However, as a complement to these retrospective samples of work, "live" work samples can be created through the systematic use of simulations. These simulations can be designed to assess interpersonal competencies as individuals work through a team-based clinical scenario. Similar, interpersonally focused simulations have been utilized as selection tools for department chair candidates—with applicants conducting a difficult conversation with a (simulated) faculty member—revealing useful information about interpersonal style not identified via traditional methods. 10

For otolaryngology residents, this kind of live work sample might take the form of a simulated airway case with unhelpful staff and/or other interpersonal challenges (eg, an anxious parent). In line with the dual-process model (**Figure 1**), these simulations could be utilized as part of the residency interview

bNeuroticism is also referred to as "emotional stability," with lower levels of the associated traits representing greater emotional stability.

Lu-Myers and Myers 23

process but also conducted recurrently for residents to hone their interpersonal skills (as well as their clinical skills, by varying scenarios as they advance through residency).

The tools highlighted by Bowe and colleagues represent important steps for applying findings from the organizational sciences to otolaryngology resident selection. But we encourage residency directors and faculty to think more broadly, in terms of necessary qualities for successful residents, and on a longer time-horizon, in terms of both assessing and developing these qualities. The goal should be not only to select intelligent, conscientious future surgeons, but also to develop capable leaders and collaborators who will succeed in dynamic health care organizations.

# **Acknowledgments**

We thank David Eisenman, MD, Elizabeth Guardiani, MD (both University of Maryland), and Kathleen M. Sutcliffe, PhD (Johns Hopkins University), for their advice and feedback on this work.

#### **Author Contributions**

Yemeng Lu-Myers, substantial contributions to conception and design; drafting and critical revision; final approval; accountability for all aspects of the work; Christopher G. Myers, substantial contributions to conception and design; drafting and critical revision; final approval; accountability for all aspects of the work.

## **Disclosures**

Competing interests: None.

**Sponsorships:** None. **Funding source:** None.

### References

 Bowe SN, Laury AM, Gray ST. Improving otolaryngology residency selection using principles from personnel psychology. *Otolaryngol Head Neck Surg*. 2017;156:981-984.

- Morgeson FP, Reider MH, Campion MA. Selecting individuals in team settings: the importance of social skills, personality characteristics, and teamwork knowledge. *Pers Psychol*. 2005; 58:583-611
- Frimpong JA, Myers CG, Sutcliffe KM, Lu-Myers Y. When health care providers look at problems from multiple perspectives, patients benefit. *Harvard Business Review*. https://hbr.org/ 2017/06/when-health-care-providers-look-at-problems-frommultiple-perspectives-patients-benefit. Published June 2017.
- Myers CG, Pronovost PJ. Making management skills a core component of medical education. Acad Med. 2017;92:582-584.
- Cooper WO, Guillamondegui O, Hines OJ, et al. Use of unsolicited patient observations to identify surgeons with increased risk for postoperative complications. *JAMA Surg.* 2017;152: 522-529.
- Lievens F, Sackett PR. The validity of interpersonal skills assessment via situational judgment tests for predicting academic success and job performance. *J Appl Psychol*. 2012;97: 460-468.
- Ferguson E, Semper H, Yates J, Fitzgerald JE, Skatova A, James D. The "dark side" and "bright side" of personality: when too much conscientiousness and too little anxiety are detrimental with respect to the acquisition of medical knowledge and skill. *PLoS ONE*. 2014;9:e88606.
- Barrick MR, Mount MK. The Big Five personality dimensions and job performance: a meta-analysis. *Pers Psychol*. 1991;44: 1-26.
- Haight SJ, Chibnall JT, Schindler DL, Slavin SJ. Associations
  of medical student personality and health/wellness characteristics with their medical school performance across the curriculum. *Acad Med.* 2012;87:476-485.
- Shapiro DE, Abbott LM, Wolpaw DR, Green MJ, Levi BH. Using a simulation of a frustrated faculty member during department chair searches [published online June 20, 2017]. Acad Med. doi: 10.1097/ACM.0000000000001788.