

Are You My Mentor? Pediatric Residents' Conceptualization of Mentoring and Mentoring Relationships

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ABSTRACT

Introduction: Mentorship involves a multidimensional relationship between junior and senior professionals and is integral to professional development. Pediatric residents are required by the Accreditation Council for Graduate Medical Education to identify at least 1 mentor. However, it remains unclear how residents conceptualize and use mentorship. This study sought to understand how pediatric residents identify and value mentorship and to assess a workshop designed to empower residents to develop mentoring relationships.

Methods: Pediatric residents were surveyed regarding their experiences with and perceptions of mentoring. An interactive workshop was designed to facilitate the identification and utilization of mentors in professional development for pediatric residents. Preworkshop and 8-month post-workshop surveys assessed resident professional growth priorities, sources of mentorship, other advisors, satisfaction with mentorship, and confidence in cultivating mentor-mentee relationships.

Results: Twenty-nine residents completed the preworkshop survey. Residents identified clinical skills, career development, work-life balance, leadership, and research as their top priorities for growth. Nearly all residents (97%) identified advisors, though only 65% reported having a mentor. Nine residents completed the postworkshop survey. Residents reported increased confidence in initiating mentoring relationships and mentoring junior trainees following the workshop.

Conclusions: Pediatric residents identified numerous areas of personal and professional growth amenable to mentoring. While nearly all residents identified advisors, many were unable to identify a mentor, suggesting a discordance between residents' conceptualization and actualization of mentorship. Resident responses suggest that a brief workshop intervention may durably increase resident confidence in initiating mentoring relationships.

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INTRODUCTION

Mentorship is an integral component of physician professional development. It has been described as a multidimensional relationship between junior and senior professionals with the primary goal of assisting the growth and development of the junior professional.¹ Mentors influence career choices, research productivity, clinical skills, personal and professional development, and professional identity formation for clinician educators.²⁻⁷ High-quality mentorship also has direct positive effects on resident performance milestones.⁸

Given the benefits of mentorship, the Accreditation Council for Graduate Medical Education (ACGME) requires all pediatric residents to identify a formal mentor.⁹ This requirement has led residency programs to strengthen mentoring efforts, resulting in increased number of mentor per resident and greater perceived value of mentorship.^{10,11} While programs

can ensure this requirement is met by assigning each resident a specific mentor, self-selected mentorship relationships tend to yield stronger and more effective relationships than assigned ones.^{11,12}

Programs have traditionally promoted dyadic mentee/mentor relationships.^{11,13-17} Given the breadth of personal and professional development that can be supported through mentorship, however, a more comprehensive approach—in which mentees engage multiple mentors may yield greater benefit than traditional dyads. Establishing mentorship networks has become an increasingly recognized approach.^{18,19} Employing a team of mentors allows train-

ees to benefit from a range of perspectives and skill sets to meet diverse mentorship needs.^{18,19}

Despite the focus on mentoring initiatives and recognition that residents benefit from mentorship networks, there has been limited investigation into how pediatric residents conceptualize, identify, and leverage mentors. We sought to characterize pediatric residents' identification of mentorship relationships, the professional development domains they prioritize for mentoring support, and their satisfaction with existing mentorship. Additionally, we designed and evaluated a brief intervention focused on developing skills needed to identify mentors and initiate mentoring relationships.

METHODS

Participants

We recruited pediatric residents (postgraduate year [PGY]-1 through PGY-3) from a midsized program in the Midwest during the 2021-2022 and 2022-2023 academic years. Demographic information beyond training year was not collected to preserve resident anonymity. This study was determined to be exempt by the University of Wisconsin-Madison Institutional Review Board.

Assessment Tool

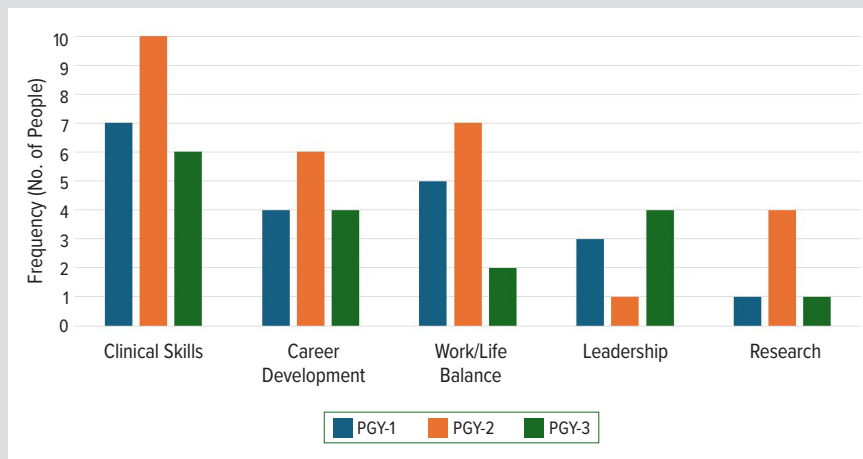
An electronic survey was delivered to all residents before and 8 months after participation in a 1-hour mentorship workshop. The preworkshop survey was administered prior to the workshop to obtain a baseline self-assessment of participants' mentoring relationships without introducing bias related to potentially unrecognized mentoring relationships.

The survey consisted of multiple-choice, free-response, and 5-point Likert scale questions. Residents were asked to prioritize professional growth domains including research, teaching, career development, leadership, interpersonal skills, clinical skills, time management, work-life balance, family demands, fitness/health, and a free response "other" option. Residents were also asked to identify current mentors and advisors, including their specific areas of expertise and contributions; their satisfaction with prior mentorship; and their confidence in cultivating mentoring relationships. Notably, the institution automatically assigns a faculty mentor to each resident at the start of residency.

Mentoring Workshop

A 1-hour mentorship workshop was delivered to all pediatric residents during regularly scheduled educational time. The workshop

Figure 1. Top 5 Most-identified Personal and Professional Areas of Growth



Residents ranked the top 3 most important areas of growth from a selection of 11 options: research, teaching, career development, leadership, interpersonal skills, clinical skills, time management, work/life balance, family, personal health, and other.

Abbreviation: PGY, postgraduate year.

goals were to facilitate resident identification and use of mentors in medical professional development. Didactic, small-group, and self-reflection components were incorporated, reflecting a constructivist approach to social and experiential learning centered within a community of practice framework. Workshop topics included mentorship networks, self-reflective identification of mentoring needs, and practical strategies to engage mentors and build mentoring relationships.

Data Analysis

Study data were collected and managed using Qualtrics XM (Qualtrics, LLC). Responses were summarized using counts and percentages and categorized by respondent training year (PGY level). Data were analyzed using SPSS version 30.0.0.0 (IBM Corp). The Fisher exact test was used to detect differences between categorical responses in the preworkshop survey data. For paired preworkshop and postworkshop data, paired *t* tests were used for Likert-scale responses. A threshold of $P < .05$ was used to determine statistical significance.

RESULTS

Twenty-nine residents completed the baseline survey (60% response rate): 10 PGY-1, 12 PGY-2, and 7 PGY-3. The top 5 areas of professional growth identified by residents were clinical skills, career development, work-life balance, leadership, and research (Figure 1). Interpersonal skills, personal health, teaching, time management, and family demands were prioritized lower. The highest-priority area for growth across all training years was development of clinical skills.

Despite all residents having a mentor assigned by the residency program, more than one-third (35%) reported not having a mentor, with no significant differences by training year (Figure 2A).

Nearly all residents (97%) identified advisors, most commonly citing peers (83%) and faculty members (79%) (Figure 2B). PGY-2 residents more frequently sought advice from family members ($P=.049$) than did residents in other training years. There were no significant differences in the types of individuals from whom residents sought advice based on mentor status (Figure 2C).

Nine of the 29 residents (31%) who completed the baseline survey also completed a postworkshop survey (Figure 3). Residents reported overall satisfaction with the workshop and demonstrated increased confidence in initiating mentoring relationships ($P=.048$) and mentoring other trainees ($P=.048$) at 8-month follow-up.

DISCUSSION

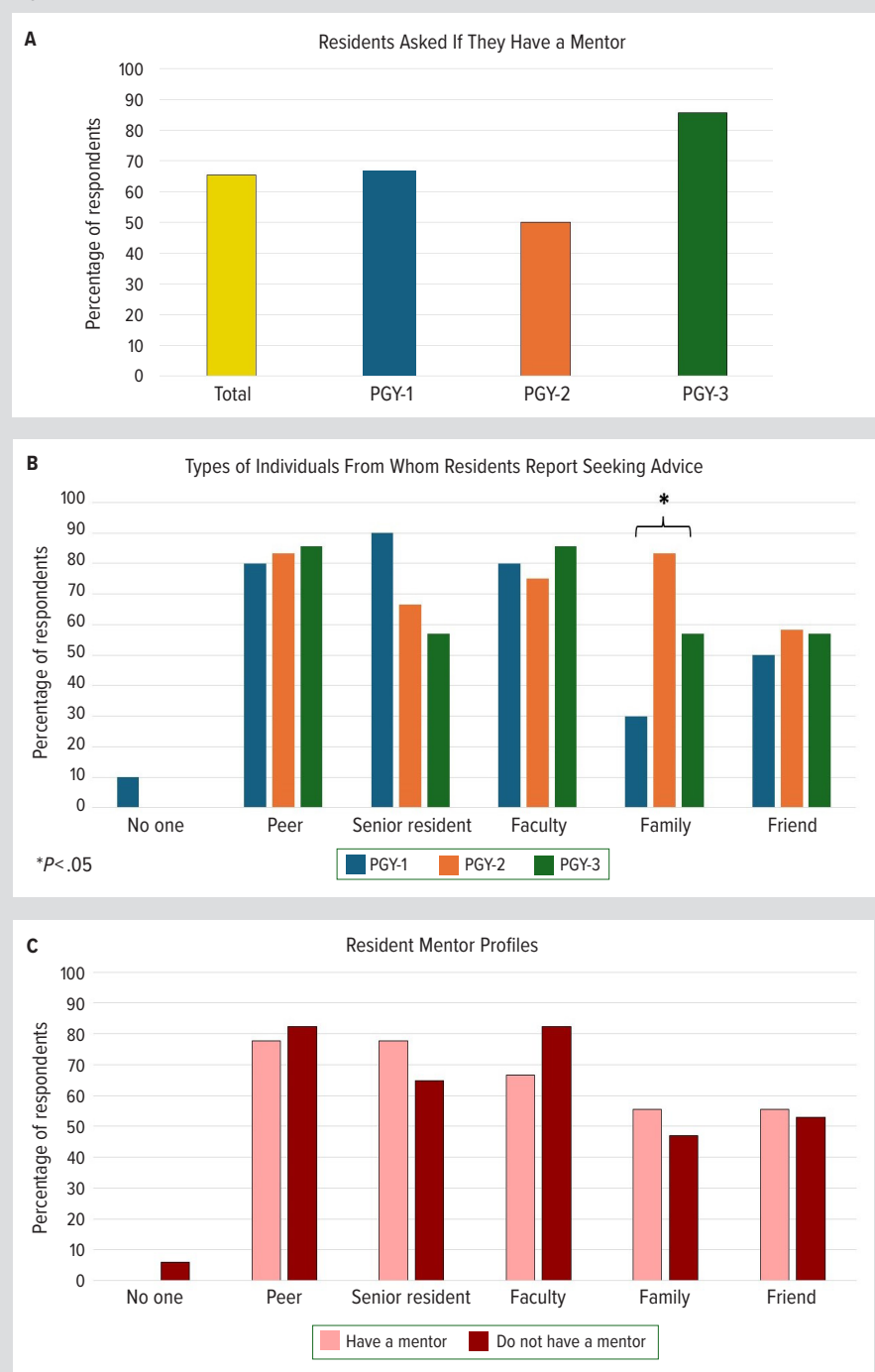
This study evaluated how residents prioritize and conceptualize mentorship and assessed the efficacy of a workshop designed to educate and empower residents to form and benefit from mentoring relationships. Residents identified several shared areas of personal and professional growth that they perceived as amenable to mentorship.

Although most residents could identify advisors across various domains, a substantial minority could not identify a mentor, despite all residents being assigned mentors by the program in accordance with ACGME requirements. This finding suggests a discordance between resident and program conceptualizations of mentorship. Several factors may contribute to this discrepancy. At this institution, all residents are assigned a mentor at the start of training and have regularly scheduled meetings with that mentor. However, faculty and resident expectations of mentorship may differ, resulting in a suboptimal mentorship. Such misalignment may lead residents to not perceive assigned faculty as mentors. As previously described, mentee-identified mentors are associated with stronger mentoring relationships.^{11,17} It is also possible that program-assigned mentors do not meet residents' individual standards or needs for mentorship and therefore are not recognized as such.

Residents may also receive mentorship from peers, family

members, or friends. The data suggest that these relationships are not perceived as mentorship by residents. This may be because residents do not view individuals with whom they have close personal relationships as mentors. Given that residents with and without identified mentors sought advice from similar groups of individuals, additional factors likely influence whom residents perceive as mentors. It also remains unclear whether self-identification of a mentor is necessary to achieve the documented benefits of mentorship.

Figure 2. Residents' Mentor Profile



Abbreviation: PGY, postgraduate year.

Multiple barriers to effective resident mentorship have been described. Among these, resident buy-in has consistently been identified as necessary to successful mentorship.²⁰⁻²³ Aligning mentoring relationships with resident-defined goals may improve buy-in. This study identified several common areas of personal and professional development that residents prioritized, consistent with prior survey data from medical trainees.²⁴ Although resident priorities may vary by program, these findings provide guidance for mentorship program development.

Prior initiatives have emphasized research as a core focus of mentorship programs.^{11,15,16} While research was identified as important by residents in this study, other domains were prioritized more frequently, suggesting a potential mismatch between academic mentoring priorities and resident values. This misalignment may contribute to lower satisfaction with mentorship. By targeting areas of importance to residents, programs may more readily foster resident buy-in and have greater success with their mentorship programs.

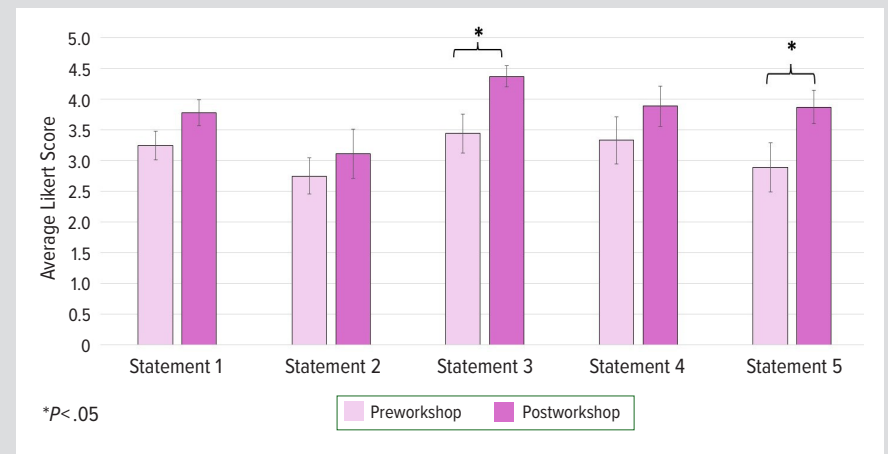
Medical trainees face numerous demands, including clinical responsibilities, research expectations, and professional development. It is unlikely that a single mentor can adequately support all aspects of a trainee's development. Comprehensive support therefore requires multiple mentors, each contributing distinct expertise and perspectives.^{18,19} Accordingly, residents must feel confident in establishing new mentoring relationships and expanding their mentorship networks to meet evolving developmental needs. This workshop may serve as a practical intervention to increase resident confidence in building such networks.

Limitations

This study has several limitations. The small sample size limits both generalizability and the ability to detect differences across training years. The small sample size in the longitudinal follow-up further limits the generalizability postworkshop findings. Shorter follow-up periods may improve response rates in future studies.

This study was conducted at a single institution, and mentorship strategies may vary between programs, potentially influencing resident's perception of mentorship. Additionally, the absence of an immediate postworkshop survey makes it unclear if the changes observed over time were due to the intervention or the natural evolution of mentoring relationships. The study also lacked a control group and did not use a validated measure of mentorship engagement. Inclusion of a control group in future studies would

Figure 3. Preworkshop and Postworkshop Assessment of Mentoring and Mentoring Relationships



Residents were asked to rate their satisfaction or confidence in 5 statements on 5-point Likert scale: "How satisfied are you with: (1) the mentoring you have received during residency, (2) the training you received about how to mentor/be mentored," and "How confident do you feel about your ability to (3) initiate a mentoring relationship, (4) build a strong relationship with a mentor, (5) mentor other medical trainees."

allow for more nuanced assessment of workshop efficacy, though this may be challenging due to cross-contamination between resident cohorts and concerns about equitable access to professional development.

Future studies can address these limitations through multisite designs and inclusion of control groups. Further investigation into the factors that influence how residents define and recognize mentors may provide additional insight into strategies for effectively aligning mentors and mentees.

CONCLUSIONS

Pediatric residents identified numerous areas of personal and professional growth amenable to mentorship. While many residents were unable to identify a mentor, nearly all identified advisors, suggesting a discordance between residents' conceptualization and actualization of mentorship. No significant differences were observed in the number of mentors or mentor characteristics before and after the workshop. However, residents demonstrated a significant increase in confidence to initiate mentoring relationships following participation in the workshop, suggesting that this intervention may provide value in supporting residents as they develop and expand mentorship networks. Future efforts should focus on strengthening mentoring connections and evaluating this intervention across multiple residency programs.

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