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Hidden curricula in academic medicine: Streamlining success for early career scholars from majority and diverse backgrounds

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Abstract

The hidden curriculum (HC), or implicit norms and values within a field or institution, affects faculty at all career stages. This study surveyed affiliates of a junior faculty training program ($n = 12$) to assess the importance of HC topics for junior faculty, mentors, and institutional leaders. For non-diverse junior faculty and their mentors, work-life balance, research logistics, and resilience were key HC topics. Coping with bias and assertive communication were emphasized for diverse junior faculty and mentors. Institutional norms and vision were essential for leaders, while networking was important for all groups. Future research should explore HC needs and potential interventions.

Introduction

Awareness of the norms of academic medicine plays a critical role in the development and success of faculty members [1]. In addition to the formal education and training required for a research career, many academic practices are unspoken or implicit and can collectively be termed “hidden” curricula. Broadly, hidden curricula are “a set of influences that function at the level of organizational structure and culture” [2]. Although the hidden curriculum has largely been explored from the perspective of students or trainees [2], evidence suggests that faculty at later career stages in academic medicine are subject to hidden curricula in their own professional development [1].

Hidden curricula relevant to faculty may range from the logistics of obtaining funding and leading research projects, to networking and capitalizing on professional opportunities, to implied institutional norms and expectations. In addition, as diversity increases among faculty in academic medicine [3], new faculty from underrepresented backgrounds may face challenges when integrating with traditional academic norms. These issues may be particularly salient for non-white or female faculty, who face persistent disparities in funding and promotion [4–6], as well as scholars who experience multiple marginalized identities. Finally, hidden curriculum topics may differ by career stage as junior faculty transition from mentee to mentor and, for many, into leadership positions.

Despite the potential importance of these and additional hidden curricula topics to career success, the role of both traditional and diversity-related hidden curricula on faculty development has not been explored. In addition, as women, racial and ethnic minorities, and individuals from other historically marginalized backgrounds are increasingly represented in academic medicine, decoding these hidden curricula is more important than ever for faculty retention and success. Notably, research has established the impact of bias and cultural dissonance on career dissatisfaction, creating a “leaky pipeline” of faculty from diverse backgrounds [7–9]. This pipeline should also extend into leadership to fulfill both career goals of these groups as well as the needs of the institutions they serve.

The purpose of this preliminary study was to characterize perceptions of hidden curriculum needs for different career groups among training program-affiliated faculty at one academic medical center. While the primary focus of our study is on the hidden curriculum as it pertains to junior research faculty, we recognize the critical roles that mentors and institutional leaders play in shaping and responding to these hidden curricula. To this end, our study aimed to characterize perceptions of hidden curriculum needs across these interconnected groups.

Methods

Participants

In March 2021, a participatory session on the hidden curriculum was held at Mayo Clinic, a large academic medical center in Rochester, MN. Participants comprised a convenience sample of current scholars, alumni, or program faculty affiliated with the Mayo Clinic Kern Health Care Delivery Scholars Program, a health services research training program for clinically trained doctoral-level fellows and junior faculty. Scholars and alumni were informed of the session via a program listserv announcement. Of note, while the session was attended mostly by current scholars and program faculty, alumni who opted to join tended to come from more diverse backgrounds than alumni overall. The session was moderated by the lead author (FTE) and contained an overview of the concept of the hidden curriculum with specific examples in academic medicine and research.

Data collection and measures

All data were collected anonymously using Poll Everywhere®. Participants were asked to report whether they had previous familiarity with the term “hidden curriculum” and then asked to rate, from a list of topics, how important each hidden curriculum topic was for five distinct groups: majority junior faculty; diverse junior faculty; mentors of majority junior faculty; mentors of diverse junior faculty; and leaders (both majority and diverse); see Enders et al. (2021) for details of hidden curriculum topic development. Participants were told to consider “majority” faculty as those from historically advantaged identities and backgrounds in academia (e.g., white, male-presenting, speaks English as a first language), while “diverse” could encompass differences in race, ethnicity, gender identity, sexual orientation, ability, parental education or socioeconomic status, and cultural background. Each participant was asked to allocate 0–3 points for each hidden curriculum topic to indicate its relative importance (i.e., its significance or relevance) for the group in reference, with more points indicating a higher importance for a given topic. Subsequently, respondents were asked to think about any *excess* challenges associated with hidden curricula for diverse junior faculty and their mentors and assign points (0–3) to each topic indicating the level of extra need participants believed these groups require for each topic. This project was classified as a quality improvement activity and was not subject to institutional review board review.

Results

Most participants in the session ($n = 12$) identified as female (73%) or reported a cultural heritage outside the USA (55%); see Table 1. One-third indicated that the hidden curriculum was a new concept. When asked to rate the relative importance of hidden curriculum topics for majority junior faculty (see Table 2), the top answers were “networking and external visibility” (mean: 1.5 points) and “work-life balance” (1.3 points); see Fig. 1A. Additional need for *diverse* junior faculty was most identified in the areas of “networking and external visibility” (2.3 points), “coping with bias in general” (2.2 points), and “confidence” (1.8 points). For *mentors* of majority junior faculty, the most important hidden curriculum topics were “institutional norms” (1.3 points) and “work-life balance” (1.5 points); see Fig. 1B. Additional need for *mentors* of diverse

Table 1. Characteristics of participants ($n = 12$)

	<i>n</i>	%
Program affiliation^a		
Current Kern Scholar	6	24
Program alumni	5	20
Program faculty	1	4
Mentor of current scholar	2	8
Academic rank		
Assistant professor	5	20
Associate professor	4	16
Professor	2	8
Personal characteristics^a		
I present as female	8	22
My culture or heritage is outside the United States	6	17
English was not my first language	5	14
My background includes financial disadvantage	5	14
I am an underrepresented minority (Black, Hispanic, Native American or Alaska Native, or Native Hawaiian or Pacific Islander)	2	6
I am another racial minority not listed above	3	8
I am a sexual or gender minority	2	6
I live with a disability	2	6
In my family, I was in the first generation to attend college	2	6
None of the above apply to me	1	3

^aParticipants could select all that apply.

junior faculty was identified in the areas of “responding to specific biases” (2.6 points), “coping with bias in general” (2.6), and “networking and external visibility” (2.5). Finally, the most important hidden curriculum topics identified for leaders included “institutional norms” (2.0 points), “vision” (1.9), and “networking and external visibility” (1.5); see Fig. 1A.

Discussion

In this exploratory study of hidden curriculum perceptions among faculty affiliated with a health services research training program, participants rated the relative importance of hidden curriculum topics differently by 1) career stage (junior faculty vs. mentors of junior faculty vs. leaders) as well as 2) background of the junior faculty mentee (majority vs. diverse). Predictably, diversity-oriented hidden curriculum topics, such as coping with bias and confidence, were endorsed as particularly important for diverse junior scholars and their mentors to address. However, findings should be interpreted with caution, as the small size and specific composition of the sample limit their generalizability to other groups.

Previous research has demonstrated the impact of oppressive systems such as racism and sexism on the careers of diverse faculty, even after achieving tenure [8], as well as the importance of meaningful mentoring relationships and peer support in navigating the academic environment, particularly for new faculty of color

Table 2. Hidden curriculum topics, descriptions, and scores for each professional group

Hidden curriculum topic	Description	Importance of hidden curriculum topic (0–3) for each group:				
		Majority junior faculty	Diverse junior faculty	Mentors of majority junior faculty	Mentors of diverse junior faculty	Leaders
Research logistics	Project execution and key contributors	1.2	0.2	1.4	0.5	—
Research communication	Strategies for concise research description	0.9	0.9	1.3	0.6	—
Research strategy	Developing long-term research plans	0.8	0.3	1.0	0.2	—
Withstanding setbacks	Managing and adapting to research challenges	1.2	1.0	1.4	0.8	1.0
Getting things done	Balancing critical tasks with daily responsibilities through effective time management	1.2	0.3	1.2	0.5	1.3
Networking and external visibility	Building a purposeful career network	1.5	2.3	1.3	2.5	1.5
Institutional norms	Navigating cultural norms and communication styles within the institution	1.2	1.3	1.5	1.7	2.0
Work-life balance	Strategies for balancing personal and professional satisfaction	1.3	1.3	1.5	1.1	1.2
Assertive communication	Techniques for assertive yet respectful communication	0.6	1.6	0.7	1.9	1.3
Confidence	Building confidence to counteract imposter syndrome and stereotype threats	0.7	1.8	0.4	1.5	1.3
Coping with bias in general	Recognizing and addressing bias, both overt and subtle	0.3	2.2	0.6	2.6	0.5
Responding to specific biases	Addressing particular challenges scholars face and seeking solutions	0.3	1.8	0.6	2.6	0.6
Focus on research	Managing commitments while recognizing the “diversity tax”	0.5	0.5	1.1	0.6	—
Vision	Aligning career planning with personal and academic aspirations	—	—	—	—	1.7
Strategy	Developing forward-thinking plans and approaches	—	—	—	—	1.0
Dress the part	Understanding how personal presentation can impact perceptions, interactions, and opportunities within a professional environment	—	—	—	—	0.9
Administrative partnership	Identifying and leveraging key institutional collaborations	—	—	—	—	1.5
Focus on strategy	Managing research commitments while focusing on higher-level strategic concerns	—	—	—	—	0.8

*Higher scores indicate higher perceived importance.

[10,11]. However, mentors of diverse early-career scholars are often not themselves diverse and may be unaware of specific needs related to hidden curricula. This gap in understanding may create a mismatch between guidance provided and the actual needs of underrepresented scholars, potentially affecting their career progression and satisfaction. In addition, formalizing mentorship and peer support for junior faculty from diverse backgrounds will require more intentionality from institutions and their leadership [12]. The importance of an organizational culture that embraces a diversity of experiences and backgrounds cannot be overstated, and academic institutions might benefit from lessons in cross-cultural management learned in the private and governmental sectors [13].

Interestingly, hidden curriculum topics rated as most important for both majority and diverse junior faculty, as well as leaders, tended to be those traditionally considered “softer” (e.g., work-life

balance, networking, and external visibility) and potentially less valued than research skills (with the exception of “research logistics,” which was rated highly across groups). Notably, studies of early-career faculty socialization have established that these skills are expected of scholars but not formally taught, leaving junior academics to take it upon themselves to observe the norms and values of their department, institution, and field without formal assistance or mentorship [14].

“Networking and external visibility” was consistently rated as an important hidden curriculum topic for all groups, a finding consistent with our previous work among health sciences doctoral trainees [15]. Given the prominent role of Twitter and other social media in modern networking and knowledge exchange, institutions might encourage and incentivize their use as a means of professional development. In addition, given the importance of peer support in faculty satisfaction and success (particularly for

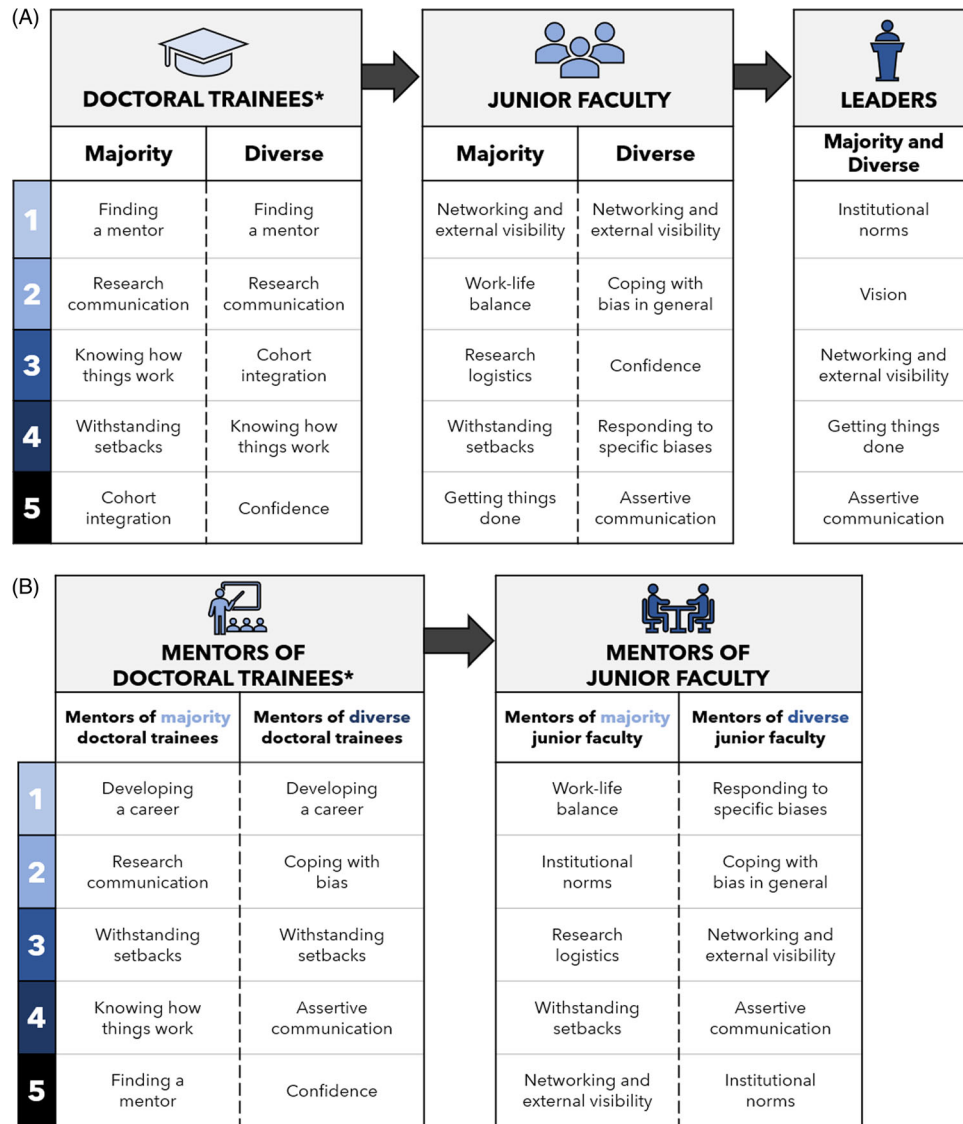


Figure 1. Most important hidden curriculum topics for doctoral trainees, junior faculty, and leaders (A) and most important hidden curriculum topics for mentors of doctoral trainees and mentors of junior faculty (B). *Data on hidden curriculum needs for doctoral trainees were collected separately.

faculty from marginalized backgrounds), social media represents another way for early-career faculty to exchange experiences, augment their personal and professional networks, and create a community of support [9], though it is beyond the scope of the current paper to suggest specific means of doing so.

By contrasting these findings with data collected previously from health services research doctoral trainees (Fig. 1) [15], we demonstrate the shift in professional development priorities that occurs as scholars transition from doctoral training through leadership. Majority doctoral trainees placed emphasis on career- and research-building skills, while diverse trainees noted an additional need for establishing a sense of community through “cohort integration” and building confidence in themselves and in their work. Along the career-span, increased emphasis is placed on “confidence,” where its absence in leadership denotes that confidence must be fully instilled for a diverse scholar to successfully enter leadership positions.

Diverse scholars across the career-span, including junior faculty, must go beyond the traditional scope of training to succeed in academia. If institutions disseminate formal mechanisms of learning

these hidden curricula, it may remove the onus on, and encourage the retention and promotion, of diverse junior faculty. Although this small study was limited to evaluating the perceived importance of various hidden curriculum topics, we hope to see this framework replicated in a bigger sample size and used to develop actionable steps. By understanding the varying priorities across different faculty demographics, institutions can refine development initiatives to be more inclusive and effective. Notably, nearly one-third of our sample indicated a lack of familiarity with the concept of “hidden curriculum” itself, indicating that awareness of the phenomenon may be a necessary component of future interventions. These insights call for a shift in current practices, advocating for strategies that acknowledge and cater to the diverse challenges faced by faculty, thereby fostering a more supportive and equitable academic environment.

Conclusion

In this convenience sample of clinical junior faculty and their mentors, we found that the perceived importance of hidden

curriculum topics differed by stage of career and personal identity of the faculty member (majority vs. diverse). Future work in this area should further explore hidden curriculum experiences, needs, and intervention approaches.

Author contributions. Conception of the work (FE), collected data (FE, AM, CK), conducted and interpreted analysis (EG, KD), drafted manuscript (EG, KD), edited and approved final manuscript (FE, EG, KD, AM, CK). Author FE takes responsibility for the manuscript as a whole.

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