

Women Faculty: An Analysis of Their Experiences in Academic Medicine and Their Coping Strategies

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ABSTRACT

Background: Women represent a persistently low proportion of faculty in senior and leadership roles in medical schools, despite an adequate pipeline.

Objectives: This article highlights women's concerns in the context of the academic medical culture in which they work, and considers the ways in which they cope with and resist marginalizing situations.

Methods: To explore the experiences of faculty in academic medicine, a multidisciplinary faculty research team conducted 96 open-ended interviews with faculty representing a broad set of disciplines at 4 different career stages (early career, leaders, plateaued, and left academic medicine) in 5 medical schools. Coded data from interview transcripts indicated situations in which women were marginalized. Experiences of marginality were examined through a systematic secondary analysis of a subset of 17 representative cases using qualitative analysis.

Results: Women had a sense of "not belonging" in the organization, perceiving themselves as cultural outsiders and feeling isolated and invisible. They described barriers to advancement, including bias and gender role expectations. Faculty from underrepresented minority groups and PhDs perceived a double disadvantage. Four strategies were identified that helped women cope with and resist professional barriers: self-silencing, creating microenvironments, balancing life and work, and simultaneously holding dual identities—being successful in the organization while trying to change the culture.

Conclusions: Although the sample size was small, this analysis found that many women faculty perceive themselves as outsiders within academic medicine. Because of their marginalization, minority and non-minority women are more able to see the bias and exclusion that may operate in academic medical centers as well as other problematic dimensions of the culture. As cultural outsiders, women may be better able to advance change to improve academic medical culture. A next step is to leverage women's awareness to develop a broader vision of what that culture can and should be like. (*Gend Med.* 2010;7:438–450) © 2010 Excerpta Medica Inc.

Key words: women faculty, academic medicine, gender bias, faculty development, careers.

INTRODUCTION

In 2008, female full professors constituted 4% of all faculty members in US medical schools, even though women comprised 29% of students admitted to medical schools in 1980 and this percentage has increased steadily. Since 2003, medical school admissions for men and women have been virtually equal.^{1,2} Moreover, as of 2008, women constituted 35% of clinical science faculty and 31% of basic science faculty at US medical schools. Female full professors as a proportion of all female faculty at medical schools rose from 9% in 1980 to only 12% in 2008 (compared with 30% male full professors as a proportion of all male faculty). Only 8% of clinical science department chairs and 13% of basic science department chairs are women, and many schools have never had a female department chair. About 7% of deans (not including interim deans) are women.²

The lack of women faculty in leadership roles represents underutilization of women's potential, deprives biomedical research of their perspective, and fails to provide the role models needed in training institutions where half the medical students are female.

From the women's movement of the 1970s, including public sharing of personal stories and consciousness-raising groups,³ we became aware that many women had similar experiences. Whereas our previous research on the organizational culture of academic medicine found that the adverse aspects of the culture, such as incongruent values and a lack of relational practices, affected both male and female faculty,^{4,5} it was the sense of "not belonging" that was voiced predominantly by women. By recording and analyzing narratives of the professional experience of individual women faculty in medicine, this secondary analysis sought to gain deeper understanding of the culture in medical schools, the mechanisms contributing to women faculty's feelings of marginalization, women's means of coping, and the ways in which the culture could change to support the realization of women faculty's full professional potential in medical schools.

METHODS

This study included faculty from 5 US medical schools that engaged in an action research project:

the National Initiative on Gender, Culture and Leadership in Medicine (C - Change).⁶ The overarching goal of C - Change is to foster an organizational culture in academic medicine that helps all faculty fulfill their potential.

The specific schools were selected to provide balance in geographic distribution and to be representative of different organizational characteristics of medical schools (eg, public vs private, National Institutes of Health–research intensive vs community/primary care focus). The project received Brandeis University Human Subjects Protection approval, and all participants gave written informed consent.

Sample Selection

We used purposeful and chain sampling strategies to select the sample of faculty invited to interview.⁷ We continued to invite potential interviewees until we had interviewed similar numbers of men and women in each of the career stages at each of the 5 medical schools. Respondents were stratified by gender, race/ethnicity, department/discipline, and career stage. Participation was voluntary; no incentives were provided.

Data Collection

In 2006–2007, 96 one-hour semistructured interviews (15% in person, 85% by telephone) were conducted by a 4-person multidisciplinary faculty research team. Interviews were audio recorded and transcribed verbatim. Interview questions focused on aspirations for a career in medicine, energizing aspects of work, barriers to advancement, leadership, power, values, and work–family integration. The questions were formulated to be open ended, nonleading, and unbiased in wording to permit the respondent to describe what was personally meaningful and salient.

Study Analysis

All names and identifying information were removed from the transcripts. Using a coding consensus process, analytic codes were assigned to the more than 4000 pages of transcribed narrative data, which were stored and organized utilizing ATLAS.ti software (ATLAS.ti Scientific Software

Development GmbH, Berlin, Germany). Initial coding of interview transcripts suggested that women faculty harbored a sense of not belonging and felt marginalized in academic medicine. (*Marginality* refers to a social process of rendering individuals powerless by a more powerful individual or group.) As a way to deepen our understanding of this phenomenon, we reviewed the data sets with codes associated with marginality (eg, discrimination, belonging, gender, perspectives on women) and identified participant transcripts for secondary analysis. The present study drew on the coded data specifically relating to a sense of not belonging and marginality, and extends that analysis with a systematic secondary analysis of 17 female cases. This study used thematic content analysis, a standard qualitative analytic technique in which themes are identified inductively.^{8–10} The power associated with qualitative analysis derives from the richness of in-depth data. Secondary analysis involved systematic multiple readings of the interview transcripts, developing analytic codes, coding the transcripts by themes, creating files of relevant verbatim quotations, and writing analytic summaries or memos. All quotations were identified by career stage and degree; underrepresented in medicine (URM) status and specialty were not identified to protect anonymity. All names used are fictitious.

RESULTS

A total of 170 faculty were invited to participate; of these, 8 refused primarily because of time constraints, 54 never responded, and 12 others responded but were unable to be scheduled. We interviewed a total of 96 faculty, with equal numbers from each of the 5 medical schools. Participants were research scientists, medical and surgical subspecialists, and generalist faculty holding doctoral degrees (84% MD/MBBS, 16% PhD) and represented a wide diversity of disciplines (N = 26). We oversampled women (55%) and faculty from URM groups (21%). The secondary analysis reported herein included faculty across the 5 schools (3–4 at each school) so that cases represented all American Association of Medical Colleges–designated regions of the United States and both

public and private schools. Faculty were from 4 different career stages (2 early career; 7 leaders [designated as “senior” in the descriptions that follow]; 6 “plateaued” [faculty with seniority of at least 10 years and not advanced as expected]; and 2 who left academic medicine), and had different degrees (12 MDs, 5 PhDs) and racial identities (12 white, 5 URM).

Our analysis indicated ways in which women in academic medicine experienced multiple, intersecting dimensions of marginality. Dominant themes in women’s experience emerged from the interview data: isolation and invisibility; double disadvantage due to a combination of gender and PhD degree or gender and belonging to a racial minority group; feeling like a cultural outsider; being undervalued; gender role expectations; and functioning in a workcentric culture. Women faculty described 4 strategies or *stances* (particular ways in which women respond to marginality and professional barriers) they adopted to cope within the culture: self-silencing, creating microenvironments in which to work, balancing life and work, and assuming the dual identities of being successful in the current environment while trying to simultaneously change the status quo, often using their power for others. The quotes included on the following pages represent themes heard repeatedly.

Dominant Themes in Women’s Experience

Isolation and Invisibility

Women described a sense of marginality and isolation in academic medicine because they were the only woman or one of a few women in predominantly male environments: “I have never been in a position where I saw any women in power.”

Dr. Joseph: I felt very lonely...having other professional women around is validating.... I'm female in a very male specialty and male environment. Less than 10% of the [my specialty] in this country are female, and many times I am an outsider. (Senior, MD)

Others commented on how feeling invisible was difficult and demoralizing for them in the workplace:

Dr. Yalta: *It's too hard to feel invisible for a long time. How much can you take? It's very difficult to be marginalized and made to feel that you're not important...not a whole lot of people understand what that really feels like.* (Plateaued, MD)

Double Disadvantage

Two groups of women—those from minority URM groups and non-MD faculty with doctoral degrees (PhDs), especially those who conducted research in clinical departments—commented on their perception of being encumbered with “double minority” status. Dr. Ingram, a physician, discussed the difficulties women of color experience as a double minority, illustrating the complexity of intersecting identities:

Dr. Ingram: *Early on there were just no women and certainly no faculty of color...you are by yourself, and you don't have sort of the test group of reality oriented, the kind of people you can say “Listen, this happened, what do you think is going on?”, where there's a commonality of experiences. But when you're by yourself, you don't have someone else to reflect from.* (Senior, MD)

Women PhDs also described their situation as having a double disadvantage. In addition to there being few PhDs in clinical departments, the organizational structure contributed to the sense of isolation of PhDs. Running a laboratory separated scientists from ongoing interactions with other faculty: “It's just very isolated.” In clinical settings, some PhDs reported that there was little value placed on research:

Dr. Brion: *When you talk to the administrators, you realize that they have really very little interest in research, that what they're after is clinical dollars, and they think research is not very important.* (Senior, PhD)

Dr. Kates: *I do find that as a PhD minority in a department of medicine, where most faculty are MDs, the culture is a little different. It is*

a little bit isolated for me. I'm also one of the only women, so I'm a double minority there... I'm sitting in a room full of much older men who are all MDs, with nothing in common with these people, and I really am wasting my time here sometimes...although I love it here, and I love my job. Sometimes I really feel like the people around me in my department have no idea what I do. And they really have no idea what's going on in my lab or who I am, or I just kind of feel isolated. (Plateaued, PhD)

Meetings about broader departmental issues provided a context for developing relationships outside the laboratory.

Dr. Kristensen: *I do have a sense of belonging but I only get that sense when...everyone from the department or everyone from the institute meets, then I feel like I belong and I'm involved. But on a day-to-day level, it's just very isolated, and you're sort of running your own lab, and you see people on your floor, but you don't really get the sense of integration unless you have these meetings that bring everyone together.* (Early career, PhD)

Cultural Outsiders

Women reported not feeling part of the bonhomie and mutually supportive male leadership groups in academic medical centers, even when they are physicians. Participants discussed the lack of women leaders and the persistence of predominantly white male power in academic medicine. Respondents perceived that decisions were made based on who one knew rather than on merit. They commented that such practices lacked transparency and perpetuated a system of privileged white males:

Dr. Yalta: *I see decisions being made by a group of people who are in power and sitting in a room and they say, “Who do you guys [think] would be good to do X, Y or Z,” and people's names are brought up.* (Plateaued, MD)

Dr. Joseph: *It's just sort of an exaggerated old boys' club. Things get done behind the scenes*

with relationships and power...I'm not a guy. I don't play golf. I'm not in their particular research group, our offices are in different places. I don't think I'll ever be an insider in some of those groups....We just had an issue in the lab this past year where we had a female fellow who just wasn't being given cases.... I don't think it was deliberate, it's just like, "oh my bud is right here."...There's some frustration that I need to do the power thing and the schmoozing thing and stuff like that. I think that quality should rule. (Senior, MD)

Dr. Kates: I think that definitely women are less nominated for awards, grants, etc. I think that might be because the senior people who are nominating people are mostly men. I don't think it's conscious at all. I think it's very subconscious. (Plateaued, PhD)

Respondents also inferred that in addition to doing quality work, success required some social manipulation and being present at important meetings, which they may not have access to. Although women recognized the behaviors associated with advancement, such as increasing their visibility and being part of the circle, they resisted some dimensions of wielding power. By juxtaposing "schmoozing" with "quality," Dr. Joseph suggested that engaging in conversation for the purpose of gaining favor superseded merit as the basis for advancement.

Respondents described a highly competitive individualistic culture that undermined collaborative teamwork and their sense of belonging, and contributed to distrust among faculty:

Dr. Andrews: Often the thing that makes me feel like walking away are things in which people are not being genuine, or engaging in one-upmanship...it amazes me to think that some people might feel that they belong in an academic medical center. Like this is where they belong and this is their turf, because I certainly don't. (Plateaued, MD)

Dr. O'Neill: Many women never learned—it's not so much the team stuff—it's the point

that you have to be willing to get on the field, get knocked down by some 250-pound hulk who's going to do something dirty...and then you have to be able to go out and be his chum or at least make the appearance of being his chum again. And girls don't get that training. You don't do that to somebody. You're mean to somebody, then you don't have a relationship. And to this day that's hard for me to do. It's very hard for me to deal with duplicitous people, and most people are duplicitous.... I don't count on my peers in academics as a source of friendship, because they're just too self-serving. If they can run you over and get somewhere, they'll do it. I've learned that the hard way. (Senior, MD)

Hurting people to get ahead and acting friendly to get an advantage were distressing and contrary to the personal values of respondents. As a way to survive, some women learned to adapt their behavior. However, being good at "playing the game" was unsatisfying and insufficient. As pointed out by Dr. O'Neill and others, team sports may be a metaphor used in workplaces, but sports competition reflects games between players on opposing teams rather than collaboration sought among colleagues.

Dr. Krasnow: I had never dealt with male group behavior. I was used to saying what I thought. I was used to people arguing on the basis of the issues, not having all kinds of political subagendas. I was very naive and I didn't have a mentor. I didn't have anyone—my own chairman was terribly good at that kind of game playing. I ended up being pretty good at it, but I hated it. And because I was often the only woman or one of only a couple of women, the men were willing to take liberties in terms of ad hominem attacks that they would never take with each other. (Former faculty, MD)

Being Undervalued and Barriers to Professional Advancement

Women experienced an accumulation of disadvantage through closed-door practices that affect-

ed their professional development. Similar situations arose with promotions. Dr. Kates was bringing in the majority of her salary through grants when the department chair refused to put her up for promotion to associate professor. She felt that this undermining of her advancement was due to a combination of marginalized identities and the assumption that she would not stand up for herself:

Dr. Kates: They would not put me up. So I felt the need to go and get another job somewhere else. So I went and interviewed and got a job offer. And then, all of a sudden they were like, "Well, we need to put you up." So sometimes I feel because I'm a woman, because I'm a PhD—I'm pretty quiet; I'm pretty easygoing; I'm a pretty nice person—I felt like...(they said) she'll just be happy. It really did hurt my feelings that I had to go and spend all this time, look for a job, interview...do all this game playing for them to put me up. (Plateaued, PhD)

Dr. Kates felt that the refusal to recommend her for promotion was because she was a woman, a PhD, and easygoing. It contributed to not feeling valued, even though she knew that game playing was common practice. Gender-biased nominating perpetuated the peripheral participation of women faculty regardless of their contributions and potential. The necessity of getting a job offer as a way to then get a promotion is not specific to women. What differentiates the experience for women is the way in which it contributes to an accumulation of disadvantage.

Other women were also not receiving appropriate compensation for their work:

Dr. Valerian: I wasn't paid as well as other people at my level....That was irritating, but eventually I got a decent raise....Why were our salaries so much lower and it took my getting this raise and telling others to get people's salaries up to where they should have been? (Plateaued, MD)

Dr. Valerian reviewed public records of salaries and saw that women in her institution were not

paid as well as were men. It took more than 3 months of negotiations, going through several levels of management, to resolve pay inequity. After she got a raise, she told other women what she was earning, and the department subsequently raised their salaries.

In contrast, one participant noted positive examples of mentoring for advancement/leadership:

Dr. Flowers: The most positive, really acute turning point in the advancement of my career was an annual performance review with my Chair many years ago. And she asked me, "What do you want to do in 5 years? Do you want to be a department chair, a dean, what is it you want to do?" And she not only asked me the question but she actually meant it, to the point where she made suggestions over time and gave me responsibilities, and asked me if I would do certain things that forced me to build my experience and credentials in a variety of leadership roles. (Senior, MD)

The department chair's support enabled Dr. Flowers to achieve her career goals and helped her by assigning her responsibilities that built her credentials. In contrast to this example, participants described some forms of assigned activities that delayed their advancement, such as committee work.

Gender Role Expectations

Women, especially those early in their careers, frequently commented on the burden of being "token women" on committees. Additionally, women were overloaded with having to guide students, particularly students with problems:

Dr. Brion: Because I was female and I was junior, I got put on a lot of committees, where they needed a junior person or a female. And I didn't get protected as much as I should have if I had wanted a really kind of hotshot career....Around here, when you need somebody to teach or you've got a kid with a problem, I think they tend to send you to a junior female...we'll just give those students to Dr.

Brion...they just dumped them on me. They said, "She can take care of them." They knew that I wouldn't let those students flounder. (Senior, PhD)

Traditional gender role expectations not only influenced teaching and mentoring assignments, but were used as a rationale for limiting women's careers:

Dr. Wade: In my interviews, one of the other division directors, whom I had known forever, told me, "This position is not good for you because you're a mother."...That was the kind of resistance I was encountering before I got the position. (Senior, MD)

Workcentric Culture

Participants discussed the difficulty of living a balanced life that included a rewarding career and family. They challenged gender stereotypes and the notion that being a mother or having interests outside of work should limit their career potential. From the vantage point of a young woman, Dr. Kristensen saw a fundamental flaw in the rigid workcentric culture:

Dr. Kristensen: There's something fundamentally wrong with the system of academic medicine, and it's not just for women; it's not for people who want to have a family and a life. It's a very rigid workcentric situation. (Early career, PhD)

Workcentric culture is not particular to academic medicine, and it affects the quality of life for men as well as women. Although this article does not focus on work-family issues, we included a few quotes that informed our understanding of how mothering interacts with women's sense of marginality:

Dr. Krasnow: If I had been one of the guys and played golf with them and not insisted on periodically having to leave before 8 because I had children at home, I might have been able to forge relationships of a different sort

that might have helped me. (Former faculty, MD)

Dr. O'Neill: The person who suffers when Mommy works outside the home is Mommy. My kids didn't suffer, I did. Not a minute's spare time. I didn't play the piano for 10 years ...there was no time. (Senior, MD)

Dr. Wood: I have aging parents and their health is not great, and they don't live in town....Several times in the last 2 years my mother has been hospitalized, and there's a logistical problem with how to juggle her needs with my career needs and life. (Early career, PhD)

Participants with children stressed the need for child care and housekeeping resources. Some women limited their travel and work hours, which slowed their advancement. Differences in economic resources led to different strategies; some women were able to afford extensive paid help:

Dr. Nape: I always had a full-time housekeeper, and I did not have to worry about taking kids to day care and picking them up, and if they were sick, that there was nobody to look after them. (Senior, MD)

Women with fewer material resources, such as first-generation college/professional women, relied on extended family:

Dr. Yalta: It was hard. It was hard for them. It was hard for me...either you have support systems by virtue of your family...or you have enough money to buy support....Fortunately for me, I did have a wonderful family support system...I certainly didn't have the money to buy it. (Plateaued, MD)

Women faculty developed ways to cope with isolation, invisibility, and feeling as if they were cultural outsiders, as well as to resist the barriers to advancement and the workcentric culture. The next section describes the ways in which women

positioned themselves and the stances they adopted to cope.

Stances of Women Medical Faculty Coping With Marginality

Self-Silencing (“Keeping your nose clean”)

Participants described situations in which leaders did not tolerate dissent. Some authoritarian leaders created a climate of fear by taking punitive actions against members who disagreed with them and by advancing the careers of those who supported their point of view:

Dr. Valerian: It was so stressful for me to participate and risk what I didn't want to risk....It's not that I kept my mouth shut 100 percent, but I didn't, for example, bring up difficult questions at faculty meetings.... There were people in our department who lost their jobs over their being expressive. (Plateaued, MD)

Early-career women felt particularly vulnerable:

Dr. Kristensen: I'm young and I'm new.... I don't want to stick my neck out until I feel like I have the financial support....I do feel that until I make a name for myself here, I shouldn't. I just don't feel comfortable making any kinds of suggestions or changes in the policies. (Early career, PhD)

For some, self-silencing was a strategy for gaining acceptance and a position of power from which to make institutional change:

Dr. Krasnow: One of the errors that women make is that we don't understand that you need to aspire to certain roles to get certain authority...particularly as a woman. Until you got way, way, way, way, way at the top, much higher than a man would need to get, you were wise to just keep your nose clean.... Put in more hours than almost anybody else so that people sort of saw you as one of the boys, and that meant traveling to meetings that you don't really need to go to....Spend

the first 10 years or so doing research, bringing in grants, publishing and not rocking anybody's boat, not threatening anybody's fiefdom. (Former faculty, MD)

Proactively choosing silence and staying below the radar was a strategic way to advance one's career and gain influence when feeling vulnerable.

Microenvironments (“Carving a niche”)

A stance adopted by some was to create a supportive work microenvironment within academic medicine:

Dr. Valerian: I've been pretty lucky. I have carved a niche for myself where, frankly, I've been given...a lot of flexibility because I was able to get a grant early on. It allowed me to set up my own hours....I'm a happier camper...because I managed to set up this little position. (Plateaued, MD)

Dr. Wade: As we were trying to build this department, recruiting new people, etc, we've tried to change the atmosphere and we've tried to make it supportive....Someone has a clinic that's about to start but they're having difficulty with certain procedures...“I'll do the procedures and you go to clinic.” You don't need to be stressed about it. And so, after that would happen, then another faculty would do it for me....I like the little environment that we've been able to create. (Senior, MD)

Carving a niche is an adaptive strategy that may or may not influence the institution more broadly.

Balancing Life and Work

The necessity of creating balance between work and outside interests (including but not limited to family) was raised by several participants. Early in her career, Dr. Goodman decided to consciously develop a balanced life, which included a 50- to 60-hour workweek:

Dr. Goodman: I made some conscious decisions early on about finding little ways to

make the department not the center of my universe, not having it eat my life....I realized I was going to need a physical outlet...that really got me out of the intellectual realm.... I needed to build balance into my life, otherwise I'd make myself crazy. You really can do it in a 50–60 hour week...and your productivity doesn't suffer. That was one mentality, the whole macho science mentality...18 hours a day in the lab crap. (Former faculty, PhD)

Dr. Valerian: *Balancing everything has been the hardest...how aggressive to be to advance my career versus other things in my life....It's hard because I often feel I'm never in the right place at the right time. (Plateaued, MD)*

Outsiders Within: Dual Identities

Some women held onto the possibility of systemic change while being successful within the prevailing system, even though they expressed ambivalence about the status quo. With an outsider's perspective, they described their dual vision and were able to envision possibilities that were outside the mainstream. These women often described using their success and power to help other women, while being careful (or tempered) in their approach to change:

Dr. Flowers: *I can use the privilege that I have now to get things done for other people. I'm in the midst of one of those discussions right now in which I don't think a Chair is treating a faculty member very well, and I'm tempering it to not push his buttons too much. But I do believe the power of my position and the power of my experience will get it worked out OK for the faculty member. (Senior, MD)*

Dr. Kristensen: *The fact that there are no women here just keeps me staying here because I feel like I just have to show the younger generation that there are women here. It's tough. (Early career, PhD)*

Dr. Krasnow: *We got a negotiated agreement that women who were tenure track but went*

off tenure track temporarily for childbearing could be readmitted to the tenure track without having to start from scratch. But every time I achieved something like that, it was like it stuck in someone's craw. (Former faculty, MD)

Having experienced isolation and barriers to advancement, women who moved into positions of institutional power may use their influence to improve working conditions and opportunities for others. Dr. Flowers indicated the need to “temper” her actions to avoid reactions that would undermine her objectives and create hostility. The necessity for careful action is also suggested by Dr. Krasnow, whose achievements on behalf of women had provoked negative reactions.

DISCUSSION

This article explores the experiences of women faculty, many of whom perceive themselves as outsiders within academic medicine. These women experience marginality due to isolation and invisibility, find their work to be undervalued, are subject to gender role expectations, and have to function in a workcentric culture. The effects of marginalization accumulate over time, are detrimental to professional development, and may contribute to attrition. Women have developed coping stances to counteract their sense of not belonging: they self-silence, create supportive microenvironments in which to work, and seek some balance between their personal life and work. Reflecting their dual identities, when women faculty do advance and achieve change within the organization, they may resist the survival practices their colleagues have used and prefer to change the status quo as they move into leadership positions. These women often use their power to improve conditions for others.

Outsiders Within

Many women faculty were typical examples of the “tempered radicals” masterfully described by Meyerson and Scully¹¹ in 1995. Members of this group have dual vision: they are able to see from both an insider and outsider point of view and are

able to envision possibilities that are outside the mainstream, eg, Drs. Flowers and Krasnow. They negotiate an ongoing ambivalence as outsiders within the system, an ambivalence that enables them to step back and critically analyze the workplace. “Outsiders within”¹² may be committed to their institutions but also to an ethos or set of ideas that puts them at odds with the organization’s dominant culture. Thus, they have a goal to create change within the organization, but they go about it in a moderate, “tempered” way. The word *tempered* also takes on a second meaning in this context: that these women are strengthened, as metal is tempered, through the experience of operating in such challenging environments.

When outsiders express opinions intemperately, they are likely to alienate those in power and threaten their professional identity. Tempered radicals have learned to recognize this vulnerability and therefore to “play the game” to get ahead, while they avoid becoming fully co-opted. In this way they preserve their personal identities, values, and beliefs, while biding their time until they achieve the credibility and position that will allow them to effect change. Such individuals may be labeled as dissenters and be drawn to areas of work that are not highly valued by those in positions of power, such as generalism or community-focused medicine. Tempered radicals combine strong personal and professional identities. However, the disconnect between the two may engender feelings of ambivalence, guilt, and self-doubt. Often, they feel they must keep their non-traditional feelings and opinions to themselves for fear of undermining their own credibility or even avoiding retaliation or punishment. As a result, they often feel lonely and isolated, as expressed by Drs. Joseph and Yalta. However, outsiders who are attached to the organization can become a valuable inside asset to institutions open to transformation. Tempered radicals transcend the barriers of tokenism as described by Laws¹³ and are a potent force for positive change in the system.

Critical Mass and Networking

Although the representation of women in academic medicine has increased overall, women are

concentrated in particular specialties, so the actual number of women across departments is very uneven. Working in predominantly male groups and confronting the scarcity of women in positions of power limits women’s contributions. An isolated person without identity-group peers is at a disadvantage in terms of understanding and validating experiences. Studies recount women’s relative inability to make use of the networks for career advancement provided by men for other men.^{14–17} Women tend not to move into their own (and different) style of working until there is a “critical mass.”¹⁸ Achieving a critical mass of women in leadership positions in academic medicine may be essential before women can be fully included and realize their full potential and contributions.

The utility of women’s networking and sharing experiences was reported by the Committee on Women Faculty¹⁹ in their study on the status of women faculty in science at the Massachusetts Institute of Technology:

“Women...all gifted scientists themselves, were convinced that gender had nothing to do with their careers; if they succeeded it was on the basis of their competence, and recognition would certainly follow; if they did not it was based on something else they lacked and rewards were not warranted. During their earlier years, this belief was continuously reinforced, but then something seemed to change. It was only when they came together, and with persistence and ingenuity, that they saw that as their careers advanced something else besides competence came into play, which for them meant an accumulation of slight disadvantage with just the opposite for their male colleagues.”

Tokenism

Tokenism is likely to be found wherever a dominant group is under pressure to share privilege and power with a group that is excluded. In her landmark article, Laws¹³ described American society as a gender class system with tokenism defined as a form of interclass mobility. The comments of

women faculty, such as Drs. Wade and Kates, recall this schema in which the women often feel that they are operating on the turf of the dominant group and that their mobility is restricted. Aligned with Laws' observations, among the women recruited to medical schools, there are many "false positives," that is, women who fit the selection criteria for entrance, but who will not in fact fulfill their expected token role. This may be because of ingrained idealism or meritocratic beliefs. At times, they may become disillusioned and express their cynicism about the prevailing system and its leadership.

Gender Socialization

The importance of gender socialization rather than biology in producing differences in customary ways of behaving has been studied since the 1970s.²⁰ An example of a theme exemplifying gender socialization in the data was the debilitating effects of male sports as a model of interaction. Team sports may be a metaphor used in workplaces, but sports competition reflects games between players on opposing teams rather than collaboration sought among colleagues, as pointed out by Dr. O'Neill and others. The stances women adopted also related to gender socialization, such as creating microenvironments, self-silencing, and becoming tempered radicals.¹¹ Discomfort at self-aggrandizing practices similarly fit with gender role expectations²¹ and contributed to feelings of marginality. The literature describes negative reaction to women in leadership positions, particularly in male-dominated contexts, as an additional factor in the nonprogression of women's careers.^{22,23}

Change and Improvement

Change often comes from those on the margins¹¹ who see oppressive patterns of interaction and possibilities for transformative change from a distinctive point of view.²⁴⁻²⁶ Like Meyerson and Scully's tempered radicals,¹¹ our interviewees such as Drs. Flowers and Krasnow were simultaneously trying to master the "norms" of the profession to advance professionally while recognizing that these same norms might perpetuate systemic inequity. They developed dual identities: they were successful within the medical school culture and fully

understood the norms of behavior and what it took to succeed, but at the same time they maintained an outsider's perspective. However, the values and beliefs of their professional/organizational identity conflicted with the values and beliefs of their personal/extraorganizational identity. Again, like the tempered radicals described by Meyerson and Scully, some medical faculty used their power and understanding to stand up for others (eg, Drs. Kristensen, Krasnow, and Flowers).

This article adds to the literature on medical faculty by applying scholarship from the business and management domains as well as the psychology of gender and feminism.²⁷⁻³⁰ Academic medicine has been squeamish about drawing on feminism and learning from other sectors.

Limitations and Future Directions

The analysis presented in this article represents a small sample (17) of interview transcripts drawn from a large interview study of 96 participants; we found the data to be consistent with the larger study. We focused on the experiences of women in academic medicine and did not analyze either the experience of marginality by male faculty or the differences in the experience of marginality between men and women. However, in the initial hypothesis-generating analysis, a sense of not belonging was predominantly expressed by women and not by men.

This work is a study of women faculty rather than an analysis of gender differences. In addition, it introduces the concept of stances, which are adaptive, contextual positionings, not static or fixed categories. Longitudinal research following the careers of women faculty is needed to develop a theory of women's stances in academic medicine. Although our small sample represented a spectrum of career stages and institutions, we did not analyze the relationship between stances, career stages, and institutions. However, our results do suggest that a period of self-silencing is more likely associated with early career stage.

CONCLUSIONS

The intransigence of the difficulties women describe is sobering. However, there is hope that

these “outsiders within” will, sooner rather than later, be able to combine the knowledge and thoughts of the insider with the critical attitude of the outsider, questioning the validity of the status quo and developing new bodies of knowledge beyond existing paradigms. Therein lies a real benefit that women, as well as other underrepresented groups, can bring to the medical school system and to health care generally.

Because of their marginalization, minority and nonminority women (and underrepresented minority male faculty as well) are more able to see the bias and exclusion that may operate in academic medical centers, as well as other problematic dimensions of the culture. In our previous work on cultural identity with medical faculty, we found that when different groups of people are asked to describe their own culture, the group least readily able to do so is the dominant majority. This article therefore has looked closely at women’s experiences in academic medicine so as to illuminate that culture as a whole. A next step is to use their awareness (and that of minority groups) to develop a broader vision of what that culture can and should be like. This is one reason why we urgently need more diversity in medical school leadership. Women and people of color can drive crucial changes in education, research, and patient care, because their own experience clearly shows them how current practices are not meeting the needs of faculty, students, patients, and the population as a whole. Providing this critical consciousness and clarity of vision, followed by action for change, is the potential gift of these groups.

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REFERENCES

1. Association of American Medical Colleges (AAMC). 2007 AAMC data book: Medical schools and teaching hospitals by the numbers. <http://www.aamc.org/data/databook/start.htm>. Accessed June 17, 2010.
2. Association of American Medical Colleges (AAMC). Faculty roster. <http://www.aamc.org/data/faculty-roster>. Accessed June 17, 2010.
3. Braun Rosenthal N. Consciousness raising: From revolution to re-evaluation. *Psychol Women Q.* 1984; 8:309–326.
4. Pololi L, Conrad P, Knight S, Carr P. A study of the relational aspects of the culture of academic medicine. *Acad Med.* 2009;84:106–114.
5. Pololi L, Kern DE, Carr P, et al. The culture of academic medicine: Faculty perceptions of the lack of alignment between individual and institutional values. *J Gen Intern Med.* 2009;24:1289–1295.
6. National Initiative on Gender, Culture and Leadership in Medicine. C-Change. <http://www.brandeis.edu/cchange/>. Accessed June 17, 2010.
7. Biernacki P, Waldorf D. Snowball sampling: Problems and techniques of chain referral sampling. *Soc Methods Res.* 1981;10:141–163.
8. Glaser BG, Strauss AL. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* London, UK: Weidenfeld and Nicolson; 1968.

9. Charmaz K. *Constructing Grounded Theory*. Thousand Oaks, Calif: Sage Publications; 2006.
10. Hammersley M, Atkinson P. *Ethnography: Principles in Practice*. New York, NY: Tavistock; 1983.
11. Meyerson DE, Scully MA. Crossroads: Tempered radicalism and the politics of ambivalence and change. *Organization Sci.* 1995;6:585–600.
12. Stonequist EV. *The Marginal Man; a Study in Personality and Culture Conflict*. New York, NY: Russell & Russell; 1961.
13. Laws JL. The psychology of tokenism: An analysis. *Sex Roles.* 1975;1:51–67.
14. Ibarra H. Personal networks of women and minorities in management: A conceptual framework. *Acad Manag Rev.* 1993;18:56–87.
15. Patnoe S. *A Narrative History of Experimental Social Psychology: The Lewin Tradition*. New York, NY: Springer-Verlag; 1988.
16. Rodrigues A, Levine RV, eds. *Reflections on 100 Years of Experimental Social Psychology*. Boulder, Colo: Westview Press; 1999.
17. Schor SM. Separate and unequal: The nature of women's and men's career-building relationships. *Business Horizons.* 1997;40:51–58.
18. Etzkowitz H, Kemelgor C, Neuschatz M, et al. The paradox of critical mass for women in science [published correction appears in *Science*. 1994; 266:1308]. *Science.* 1994;266:51–54.
19. Committee on Women Faculty. A study on the status of women faculty in science at MIT. *MIT Faculty Newsltr.* 1999;11:1–17.
20. Block JH. Debatable conclusions about sex differences. *Contemp Psychol.* 1976;21:517–522.
21. Pololi LH. *Changing the Culture of Academic Medicine: Perspectives of Women Faculty*. Hanover, NH: Dartmouth College Press; 2010.
22. Heilman ME. Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *J Soc Issues.* 2001;57:657–674.
23. Eagly AH, Karau SJ. Role congruity theory of prejudice toward female leaders. *Psychol Rev.* 2002;109: 573–598
24. Collins PH. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Boston, Mass: Unwin Hyman; 1990.
25. Hooks B. Choosing the margin as a space of radical openness. In: *Yearning: Race, Gender, and Cultural Politics*. Boston, Mass: South End Press; 1990:145–153.
26. Unger RK. Positive marginality: Antecedents and consequences. *J Adult Develop.* 1998;5:163–170.
27. Reinharz S. *Feminist Methods in Social Research*. New York, NY: Oxford University Press; 1992.
28. Kanter RM. The impact of hierarchical structures on the work behavior of women and men. *Soc Probl.* 1976;23:415–430.
29. Valian V. *Why So Slow? The Advancement of Women*. Cambridge, Mass: MIT Press; 1998.
30. Stewart AJ, Malley JE, LaVaque-Manty D, eds. *Transforming Science and Engineering: Advancing Academic Women*. 4th ed. Ann Arbor, Mich: University of Michigan Press; 2007.

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