Gender Bias in Academia:
Findings from Focus Groups

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Breaking Through Glass Ceilings and Maternal Walls in Academia:
Focus Group Findings

INTRODUCTION

Women today are earning nearly half of all doctorate degrees conferred in the United States, yet they constitute only 39% of full-time faculty nationwide (West & Curtis 2006). In science and engineering fields, while women earn 40% of doctorate degrees, they make up only 28% of full-time faculty (Burrelli 2008). When we examine the most prestigious, highest rank, highest paid positions in academia, we find even fewer women. A mere 24% of full professor positions are held by women in our academic institutions nationwide (West & Curtis 2006). In science and engineering fields, this figure drops to 19% (Burrelli 2008).

In examining the factors leading to women's precipitous attrition from the academy the higher up the ranks they travel, researchers have consistently reported on a "chilly climate" (Crawford & MacLeod, 1990; Sandler, Silverberg & Hall 1996; Litzler, Lange & Brainard 2005). Yet, attempts to mitigate that chilly climate have failed to address fundamental issues of unexamined bias and gender stereotyping that continue to drive women out of the academy (Williams, Alon, & Bornstein, 2006).

This study examines women's experiences with confronting various forms of gender bias and stereotyping in their academic careers. Through these women's stories, we identify patterns and commonalities across them that inform us as to the particular types of challenges women face in the academy, particularly in male-dominated fields such as in science and engineering. Based on the challenges identified, policy recommendations are made in an effort to change that "chilly climate" in targeted ways in order to address the underlying mechanisms that perpetuate women's exodus from the academy.

A series of 9 focus groups were convened to collect data on women faculty members' experiences with a variety of different patterns of stereotyping. Most of the faculty members were from departments that have historically been male-dominated, such as in science and engineering. Groups were segmented by faculty ranking: 2 groups comprised of Assistant Professors, 4 Associate Professor groups, 1 Full Professor group. Two additional groups were conducted for women academics at a national conference for women in computing.

Each group ran for approximately 2 hours, in which women were guided through discussions pertaining to patterns of stereotypes that have been documented in the social psychological literature that create a work environment hostile to women.

RESULTS

Our findings suggest that the biases and stereotypes women in academia confront create environments in which women feel constantly scrutinized and relatively powerless. The commonalities found across focus groups centered on three main topics: 1) challenges to women's competence; 2) efforts to avoid biases associated with motherhood; and 3) the social isolation of tokenism.

CHALLENGES TO ESTABLISHING COMPETENCE: THE DOUBLE BIND

The notion of the double bind resonated strongly with the women in our focus groups and generated the most discussion, in which there were shared experiences of women being held to different and usually more stringent standards than men. Throughout much of these discussions was a tension between women wanting recognition for their accomplishments, and also not wanting to bring any attention to themselves, so as not to be perceived as requiring special treatment. While women acknowledged that they were regularly under-recognized for their contributions or otherwise treated less than equal to their male counterparts, they also shared a reticence in bringing attention to their sense of injustice, for fear of being singled out as problematic, or too aggressive. Thus, women frequently found themselves in

something of a double bind: having to work twice as hard for half the recognition men receive, but then being deemed a "troublemaker" if they "rock the boat".

Ambivalent Sexism in Teaching and Service Demands

The expectations placed on women to compete in their fields as professionals, but at the same time fall in line with traditional gender roles that would render them compliant and deferential paralyzes women academics in a no-win double bind situation. Women find they often must choose between being liked and not professionally respected, and being respected, but not liked. One way in which this ambivalent sexism manifests itself is in the heavy teaching loads and service responsibilities women faculty frequently bear that their male peers do not. In an effort to be accepted as a "team player" and liked by their department/school, women take on additional responsibilities, sometimes at a cost to their professional respect. This issue is particularly salient for women in male-dominated fields, as described by this respondent: "*In departments where there aren't many women they are always asked to be on all the committees because of that very reason. And unless they say no, they will be overcommitted*." (FG5)

> *I know in my case, if it's got the word "computer" in it, I don't care what it is, I'm on that panel, because my boss likes to see a female computer scientist,…so he likes me to be out there, …and I get stuck on a committee.* (FG2)

Women find themselves compromised by feeling compelled to accept heavy teaching loads and service commitments requested of them, only to find that respect for their professional competitiveness declines. Women in the focus groups shared experiences of feeling caught in a double bind with service demands: they are asked to be good servants to the academic community by sitting on committees, but then their professional contributions are discounted for it.

> *[T]here was a case in recent years where we don't have very many full professors who are women in the school, and there was a case where a woman was finally going to be at that point where she could be promoted and it just struck me that …that she waited an extraordinarily long time to get to this point. And it seemed that while she was in the position to wait for the promotion, other men were being promoted to full, but beyond that, she was being asked to do lots of really critical service, sitting on dean search committees, and really powerful service as the only associate professor. And I think if you asked her and if you asked others they'd say that pulled her away from what the school wanted her to do, but they were sort of having it both ways. They could ask her for her expertise and judgment, and at the same time continue to bypass her. …I'm not sure it was a deliberate kind of sexist – I think it was opportunistic – that they took advantage of her skills and then used that as a good reason not to move her forward faster.* (FG5)

There was some speculation that women become saddled with extra responsibilities that men do not have because they simply feel less able to say no. One participant recounted a conversation she had at a teaching seminar in which she wondered how it was that she ended up with a heavier teaching load than her male counterpart who was hired after her: "*I said to her, 'Well how do you think that unfolded?' And she said, 'Probably women never say no, so they're always asked to do the hard stuff first, get that out of the way. They'll say yes, and then whatever's left [goes to men].' Maybe she's right."* (FG6)

> *I came and I taught a full load my first year and that was considered normal and then, all the three men who were hired after me all got these big course reductions because "Oh they have to make this transition." It's like, oh gee, and I didn't somehow. And for a few years I'd been doing this committee and I was sick of it, and I said you know, can I just do something else? I'm tired of it and I'm not doing a good job anymore, it's time for somebody else to do it. They just said, "Oh boy well there just isn't anybody else I can ask because, you know well there's so-and-so but he's writing a book, I can't ask." I said, "He's writing a book? I'm writing a book! How come his book counts more?" And yet, you know it wouldn't occur to me to say I'm writing this book, you know, give me a break on my service work. Never would have occurred to me and I'm not sure that I would have gotten it if I asked.* (FG7)

Prior research on gender stereotyping finds that women are typically liked or respected, but not both (Cuddy, Fiske, and Glick 2004). Professional women in particular, are viewed as high status and competent, but cold and unlikable. Aware of the expectation that as women, they are expected to be warm, compliant, and agreeable, women find themselves in persistent double binds: Be compliant, or risk being perceived as difficult.

> *I've encountered when women ask questions in front of me troubling, because I have been told by older colleagues, who meant well, to not rock the boat. Don't, don't, don't rock the boat! Just don't go there. Don't be dumb. So it's perceived as when you ask questions or you question, that you're a troublemaker. (FG4)*

Even when women have proved their competence, their accomplishments are discounted by their gender:

> *… I worked very hard because this is my first time to become a teacher so I'm very dedicated, so I would spend every Saturday and Sunday working in my office preparing lecture notes, …and I spent a lot of time with my students, and I got a very good evaluation from my students, and then I heard my colleagues say, "Oh, because she is young and attractive, so that is why students like her."* (FG2)

Across the focus groups, it was a common experience that women were less likely to receive as many resources as men, especially teaching relief. An overwhelming sense of ambivalent sexism permeates women's disinclination to ask for things. Women often find themselves having to choose between falling in line with gendered expectations and being liked but not necessarily professionally respected, and contradicting gendered expectations by being respected as a professional, but not necessarily liked. The implication is that women simply ought to do what they are asked to do, and that "good" women are not supposed to ask for more than what they're given. This type of ambivalent sexism renders them less likely to speak up and request things that their male counterparts regularly demand, particularly for fear of bringing negative attention to themselves.

> *Women are less likely to ask to be excused, whereas men will be more aggressive about saying, "I've got this big grant proposal that I've got to get in so I don't want to teach my course this semester" or something. And a woman just would, for the most part, won't ask for that kind of thing. Just figure it's part of the job, have to do it, work around it, whatever. There are assumptions that [men] make that women don't make.* (FG8)

> *And so when we hire new faculty members, I see that the men have received significantly more start up money or years of research assistantships than the women who come in. It's so individual in terms of what's negotiated at that level it's just not fair. I feel like women are at a tremendous disadvantage because we don't know how to ask and how to negotiate.* (FG7)

> *I know for example in my department that a lot of the squeaky wheels are male faculty. But the fact of it is that a lot of women just either don't know to ask or don't like to ask or don't know to negotiate or how to negotiate well, and they're just not in there asking. (FG4)*

Although the general perception in the focus groups was that women "just don't know to ask or don't like to ask or don't know to negotiate", available empirical research suggests that women may be less likely to negotiate because they are reprimanded for doing so. A series of experimental studies finds that female job candidates who initiate salary negotiations are evaluated negatively: women's hireability, evaluators' willingness to work with them, and their likeability all suffer if they initiate salary negotiations. No such penalties were observed for men who initiated salary negotiations (Bowles, Babcock, and Lai, 2007).

Women's comments in the focus groups reflect a perceived lack of power that is pervasive. Some indicate a tacit understanding that their position is so tenuous that their behavior must be carefully monitored at all times in order to avert the specter of incompetence. The threat of negative stereotyping was something that had to be routinely navigated around.

> *One thing I've talked about with one of my female colleagues is that, in an effort not to seem different, often times we find ourselves not asking for something that normally one of our male counterparts would just walk right up and say, give me this, or I need this, I want this. So we're more cautious. I'm more cautious, she's more cautious. We think about do we really need that, and how's that going to look if I ask for it? Is it going to make it look as if I need it because I'm a woman? Or do I need it because I need it because I need it to do my science? (FG3)*

Indeed, when women do ask for the same resources men are routinely granted, they are often met with some kind of reprimand or negative reaction. This type of leniency bias, in which men are accommodated and granted leniency, while women are under constant and stringent scrutiny, is another way in which women receive the message that it is not safe to speak up and ask for things even when they are entitled to them, and even when their male colleagues are routinely accommodated for them.

> *You follow the same path in doing a particular task as the men that you've seen do it, and then you get slapped on the wrist: "Oh, this is not done. This is not the way we do it" and I just saw five men do it and they've been doing it the past six months and nothing was said!... When it comes to equipment order, we have a budget, and men just go out, make purchases, hand in the receipts and get reimbursed. But when her computer crashed, she had to haggle and go through procedures to get her one desktop replaced, even though a man in the department just bought two computers without prior protocols and was reimbursed. (FG1)*

Aware of various double binds, women acknowledged their own attempts at confronting the perception that, as women, they are less competent and/or require additional resources and support. Moreover, they find they must navigate a fine line between "good", compliant behavior that is expected of them as women, and the threat of being labeled a "bitch" if they appear "too assertive":

> *- You know, I am aware of my own attempts to try to - walk a fine line. (agreement)*
> *-Not asking for something because you feel like you're going to look like you need more, or that you're being too assertive. You don't want to look like a bitch. And I don't want to ask for help, because I don't want people to think I need help.*
> *-Yeah. Exactly. But I don't want to challenge people. (FG3)*

Especially in male-dominated fields, women may be reluctant to say no when asked to take on additional responsibilities, they avoid asking too many questions, and refrain from negotiating better deals for themselves for fear of upsetting an already fragile balance between being accepted as competent professionals and being judged as difficult or "a troublemaker". In maintaining such a delicate balance, women avoid bringing attention to themselves and "rocking the boat" by being compliant. As a result of such ambivalent sexism, women are less likely to negotiate for more: "*We're so thankful to have the job, right? …[S]o we're like, 'Oh good, we don't want to hurt anybody, have them turn against us, or whatever'" And we're afraid to ask for the kinds of things we want. We're afraid to negotiate for something bigger."* (FG7)

Tokenism and Social Isolation

A recurring theme in the focus groups, underlying much of the discussions, was a sense of not fitting in. This issue was raised in relation to women feeling on the periphery of their male-dominated departments, in having to negotiate delicate relationships with unreceptive senior female faculty, and even in managing their interactions with students. Such social isolation creates an environment in which women are left unsure how to establish themselves as competent colleagues worthy of inclusion (Williams, et al. 2006).

Being "One of the Boys" or "Out of the Loop"

Many women discussed feeling left out of informal events or activities that the men in the department participate in amongst themselves. Not only do women tend to avoid such activities, but they also feel they are excluded – either intentionally or inadvertently – from participating in them.

Going out to bars figured prominently in these discussions. Women talked about not wanting to go to bars at national meetings and/or not having an interest in playing or watching sports, as many male colleagues do. In male-dominated fields such as science and engineering, women find it difficult to fit in and so tend not to participate in socializing activities. However, not participating in such activities often results in missed opportunities for networking and collaborating. Such missed opportunities often result in being kept on the periphery of the department and field and "out of the loop".

> *One of the things about me is that I'm not very visible in terms of when I go to meetings I don't go out to the bars and socialize and I don't know as many of these people intimately that are in my field. … I'm going to be getting letters of recommendation from these leaders in my field for the purposes of tenure, and so it's actually very hard for me to make that effort to go out and get to know the mostly men that are in my field so I can get these letters which our director has indicated is really important. …. And it's very hard I think for a woman to just go and join this group of men.* (FG5)

> *I know a woman in the clinical department who when she first came here specifically went …[to] Friday afternoon happy hours, not because she wanted to but because she felt compelled that that was part of what it was and at the time we had mostly men and she couldn't speak for herself. But she was very open about saying that's what you did to be part [of the network].* (FG9)

> *When I was at [another university], all the men,… every Friday night they'd go to a local bar and so much got accomplished at those meetings. They asked all the male post docs, but there were two female post docs at that time, myself and one other woman, so we just started going to that bar, getting a table near the men and sitting down. And eventually we were included once they saw that we actually could drink beer without blowing into a million pieces and it was possible. We would go there, and we would sit there and they started asking us and actually that was one of the most educational parts and one of the largest mentoring experiences that either one of us had as part of our post doc experience. But we never would have been privy to it or invited to it, and you know, I wouldn't have done it by myself; I wouldn't have gone and sat there by myself. But fortunately I had a female colleague that between the two of us we could go and do it. …[I]t's hard to break into those a little.* (FG7)

In order to be taken seriously, some women find that becoming "one of the boys" can be a useful strategy.

> *And for me personally, this whole "one of the boys" thing, that is something that has been - …I've definitely gotten farther doing that. And the moment that I stop doing that, you're isolated for a while (agreement). (FG4)*

> *When I first came to the job I'm in now years ago, everything was controlled by this one man, and I was on the faculty senate and we had meetings out of town 4 times a year, and the man that became successful stayed out with this guy and drank all night, and I'm not a drinker so I would sit there listening to his dumb jokes and the rest of them, and the others they would stay up all night drinking, and really that was part of the way that your worth was determined with them. Part of that whole "good old boy" system. And I was promoted and given tenure early. I guess I got some rewards for listening to his dumb jokes but I realize it was part of that inner group that got to move right on up the ladder. (FG2)*

The women acknowledged that their exclusion from the "boys' club" may not necessarily be intentional. Such social events and activities are usually very informal and casual, however important discussions nonetheless take place that women are often uninformed of because they are usually absent from these informal social gatherings of the predominantly male faculty in their departments.

> *My department is very cohesive, and every morning the guys in the department get together and go out for coffee, just downstairs here, and it's however many show up. And everybody's invited,*

but generally if I show up I'm the only woman. And often they talk about basketball, sports, skiing over the weekend, but … if there's some issue in the department you know, about the department head, or funding, or this, that gets discussed too, and they're all in the loop. And the women don't know. And I mean I sort of stumbled on this by accident… And so, I sat down one time…and that happened to be a morning when all this was going on about funding and we were looking for a new department head, so this is a big deal. And who's coming up and who's applied and who hasn't. And I thought, 'Wow, these are things I haven't heard anywhere else.' And it's a subtle thing, I mean they're not, they are not actively excluding anybody, but I think because the other women aren't showing up, they're all missing out on this. (FG3)

Moreover, the inadvertent exclusion of women from the male-centered activities was recognized by some focus group members as an artifact of numbers: There are simply more men in the field and/or department, so socializing with others from the same field/department usually means being the only woman socializing with men and doing things that men like to do.

-But you know, … the real issue here is not so much that men have different interests from women or that women don't like to go to bars, the real issue is that the majority of the people in our fields do those things. So if there were equal representation of women and men in biology or immunology, then there would be plenty of opportunity to interact with the other side, to sit in the sort of venues where we would feel comfortable and be found but the fact is, we're still a minority, so we just don't have those opportunities. I mean a lot of this is really numbers I think.
-Yeah, sometimes it's just that it's nothing overt, it's just that the guys are friends and they hang out together and they do things with each other and you're not there. So …I don't think it's a conscious thing, but it has consequences in the end. (FG8)

FEMMES AND TOMBOYS: WOMEN BEHAVING AS MEN TO FIT IN

Perhaps in an attempt to fit into male-dominated departments, some focus group participants made observations about senior women faculty who snubbed younger female colleagues. Some respondents felt that they lacked guidance from senior female faculty whom they thought would have been the obvious choice for mentorship, suggesting that the more senior women may have avoided identifying with other women as a survival strategy in a potentially hostile environment in departments that were even more male-dominated than they are today. Indeed, the senior female faculty members were observed to have behaved as the men in their department behaved, and shunned collaboration with fellow female colleagues.

There was some indication that younger women seem less likely to try to act like men, whereas senior women may have learned to do so as a way to survive, or as an attempt to fit in. These differences sometimes created conflict among women, yet there was a sense that women understood the challenges that their female predecessors must have had to confront.

I've seen lots of women, senior women, behave that way. And even not just as far as the working long hours, but even adopting male mannerisms. I don't know how to describe it, but sort of really aggressive and not putting up with any crap and almost having a chip on their shoulder and also going out of their way to not mentor young women. You would think that women above you would be the ones that would be the obvious people to really help the next generation of women and it usually turns out that they're the worst. …I mean not everyone but I've found that my best mentoring comes from men that are sensitive to the issue. (FG6)

I'd always said that women in a generation above, in order to survive in science and academia, had to be the kind of person who didn't care what other people thought. And then consequently they were dubbed as difficult people, but they needed that attribute to survive. …She had to be impervious, immune to so much of the gender bias and just keep going. (FG9)

Indeed, one woman felt that it was in behaving like a man that one signals the ability to be a leader: "*Well they say if you want to get to tenure it's how you fit in and they're older people, so of course it depends*

what it is applied to, but you need to act the man so they know that you can be top dog." (FG2). This is consistent with previous studies that find traits such as confidence, brilliance, and assertiveness are coded as "masculine" traits (Lunbeck, 2005)

However, one junior faculty member expressed her efforts at defying the expectation that she behave as men behave, suggesting potential change on the horizon:

> *[O]ne of the things that I think I'm on kind of a backlash mission almost. I purposely don't [behave as a man]. I wear dresses, I bake cookies for my group meetings, I bring my child to class with me… I guess I've just kind of really stuck it out there and said look, this is you know, this is me, I'm a woman, I'm someone's mother. And you get the whole package. Nobody's really commented on it in particular….But it is kind of a conscious choice on my part that I'm not going to compete as a boy because I'm not a boy.* (FG6)

At the same time, such comments are suggestive of conflicts between women who conform to normative gender expectations and women who do not: conflicts between women who are warm, compliant, and overtly feminine, and women who are less traditional, more masculine, and fit in as "one of the boys". Conflicts between these "tomboys" and "femmes" seemed to arise frequently, perhaps particularly in environments in which women's numbers are few, and every woman is vying to fit into environments that narrowly circumscribe their behavior.

Even students in STEM departments contribute to the policing of their female professors' performance of gender, narrowly scripting them into a non-threatening, nurturing mother figure, or a cold, unapproachable bitch. Several women participants discussed the challenges that interactions with students pose. Our respondents frequently commented on how they routinely confront sharp biases and stereotypes particularly from students. Women find that students expect them to be more warm and yielding than the male faculty:

> *I think the undergraduates are still full of sexist stuff….They expect the women teachers to be kinder and warmer and fuzzier and let them take a make-up even if they don't have a good enough reason…Students expect their female instructors to be like their mother and forgive everything...* (FG9)

> *I have a lot of students asking for special favors. You know, I specifically say that there are no exceptions, this is the day of the exam or if you want to change labs, I need to know a week ahead of time. And I have people asking for exceptions left and right. And I'm wondering if they would do that to a male professor as much. I'm sure there's some who would regardless. But I always wondered – do they push more with a woman? (FG3)*

In order to manage students' expectations that they are acquiescent, some faculty members discussed having to take particular measures to distance themselves from their students and to discourage the gendered assumption that they are "warm and fuzzy". This was a particular challenge for the younger women faculty:

> *I think the students are the worst. They have more biases than [faculty], and you would think it wouldn't be that way. …[I] make sure that they call you by professor, I make sure that when I go to class I wear something that makes me differentiate from them. I always am really conscious of the presence that I put forth and everything you know? More so than I have to be with my colleagues, or when I'm at a professional meeting, or anything. I'm still conscious of it, but there's something about the students that you really have to go the extra mile to make. Maybe it's because I'm pretty young and I'm only just starting, it's even more important for me to really show there's a disconnect between us. ….I find it really important that I'm referred to as Professor X, Doctor X, so that they know I'm not their mother, I'm not their girlfriend, I'm not their buddy. My job here is professor, and they need to expect me to act in that kind of a way*. (FG6)

Women find themselves rendered one-dimensional by their students' ambivalent sexism towards them; if they try to counter students' stereotypical assumptions that they are "warm and fuzzy" like mothers by presenting themselves in less than docile, "feminine" ways, students find them off-putting. Again, women faculty find themselves in another double bind, and their femininity regulated even by their students.

> *. … [T]he student evaluations, at least in our department, were that if we as women dressed too well, then the students find that we're unapproachable. "Unapproachable." So if we wear the same kind of suits that the men wear when they're teaching a class, then we're viewed as being someone who they can't talk to, that we're intimidating in some way to them. So it's, it really, it's a difficult thing.* (FG7)

Moreover, women shared a sense that students treat female faculty with less respect than they treat male faculty. Perhaps due to stereotype-driven expectations that female professors should be more friendly and nurturing than male professors, when women faculty do not comply with such expectations, students respond negatively: "*I was told on a teacher evaluation that I was a power grubbing woman, and that I should get off my horse. …I doubt very much if [men] would get, 'You're a power hungry man, get off your horse'." (FG3)*

> *I would say, what I have encountered is that some places in my life, at this university, I've had students lodge complaints about me, for perceived rude behavior that was nothing compared to what some of my male colleagues would do to their students. I think to some extent that might have been an expectation that I would behave differently. (FG4)*

> *Age is a factor, though. I'm very close in age to the students. Right when I started I was younger than some of the students that work for us, and so if you're stern about something, or you say no, then the immediate reaction is to call that woman a bitch, right? (Agreement). If you're a man, that's just like whatever, it's just a no.* (FG1)

DOUBLE JEOPARDY

Students' ambivalent sexism and challenges to women's authority may be even more acute for women of color, particularly in environments in which women of color are especially anomalous:

> *I'm proud of where I am now. I was the only black person that worked at this location, and I was teaching networking technologies one-on-one and communication, and I was the only black person there. It was in [a major metropolitan city in the South], it was a private university, and so when I got hired, I was there 2 years, and the entire time I was there I probably had 3 black students and maybe 5 females, so that environment in and of itself can be very hostile. The students you know, I had instances where I'd be sitting in the back of the room just wanting to hear the students comments … and then about 5 minutes after the class time to start I'd walk up to the front of the class and everybody would go, "Ugh, who is she, what is she and how did she get in here", and it was like that class after class after class because it was upper class rich people who spent all this money, and it was just an amazing feeling.* (FG1)

Despite the compounded challenges women of color face as rare tokens in their schools/departments, they are frequently asked to take on even greater responsibilities, specifically *as* token representations of their race *and* gender.

> *Actually where I see it now is in minority faculty. …[They need to] learn to say no because they're giving talks all over the place, because they're being asked to be on every panel, they're being asked all these committees and it's impacting how much they publish not surprisingly. So, yeah for us I think there are enough women it still happens but not as much, it certainly used to, but we've got a Native American woman on our faculty, and boy is she spread thin.* (FG7)

Moreover, despite the fact that committee and other service contributions are often unrecognized, unrewarded, and even negatively impact the activities for which faculty members are evaluated, there

was an overwhelming sense among focus group participants that women – particularly women of color – feel obligated to serve and that they don't say no because they feel powerless to do so.

> *In my department, I am the only black woman, so every time they have something like a diversity day or something I have to be on the panel, and I always think after three years they would try to recruit more black people so I won't have to be at every meeting, but no. Sometimes I want to say no, but I'm still working for them, so…* (FG2)

As a result, women of color find themselves caught in yet another double bind: They may be liked by their department for the service they provide, but then their professional competence suffers for it. On the other hand, if they refuse the service demands placed on them, they risk jeopardizing their already fragile sense of belonging in a department they feel tokenized in, although their professional careers may benefit from it.

> *So we had actually a very explicit conversation with the associate dean recently about a woman of color on the faculty. And he said, quite clearly, 'You know affirmative action means that we give people an opportunity. Once they get to the school we have to evaluate them at tenure time just like everyone else.' But then you've saddled her with these enormous obligations as the only person of color and a faculty of a hundred. Her obligations to the students and to sit on these committees were just overwhelming and it was very difficult. So you know, I think that what I've noticed is that sometimes the deans and the chairs kind of want to have it both ways. My husband is in another department on campus and they had a mid-year, mid-term review, a third year review, and he said it was very clear that there was a white man and a woman of color, and the woman of color was part of this department but also had [a joint appointment]. So she had dual service obligations and this man did not, and in fact he sat on no committees, had no doctoral students, was just writing his books, and this woman of course had students and was asked to be on committees and so forth. And he said that when these came forward, people said that he is doing so well, [but] she needs to be counseled out she's not doing well. And my husband said, "Look at these records, this is a person who's part of our community, whom we've asked to do things." And he said some of the response back was, "She could have said no." …How many of you said "no" to a department chair when you were a junior faculty? It's just not likely.* (FG5)

Thus, on the one hand, department administrators recognize the value in the visibility of the women and especially the women of color in their departments as (token) representations of their school/department "diversity". However, on the other hand, women's actual contributions to the department are not always recognized or appropriately rewarded. Indeed, some women recounted their experiences with having to contend with their sense that their token status was sometimes valued over their actual work.

> *There was a large grant, a large multi-investigator grant that was being submitted through one of the centers on campus. And in my department was an obvious choice as P.I.(Principal Investigator) who's a leader in that field. And the center called and said would I please be P.I. because they needed a female. What the heck am I supposed to do about that? I mean, so basically it's a lose-lose right? So say we've got a one percent chance of being successful with my colleague as P.I. who obviously should be P.I. If we don't get the grant it's my fault because I wouldn't step up and be P.I. Then, if we put me on as P.I. our odds of getting the grant go up to what? One point one percent? We don't get the grant, but throughout history I'm the person who got put on as P.I. just because I'm a woman… So basically what I wrote to the center director, I said "I hope there's not a swimsuit and eveningwear competition with this also."* (FG6)

The implication these women struggle with is that they are constantly being scrutinized and judged as not as competent as their male peers, and so are evaluated as "*women* scientists", and not simply as "scientists".

> *-There's something I want to mention here that's going on in my department, and I think it overlaps a lot of this. We're having a department head search right now, and there's one female*

candidate. And a lot of the departmental gossip is that, well, we only have this person and she will get the position because she is a woman and the administration wants to have more female department heads. And it's driving me insane! (agreement).
- And there is, to be fair, I suspect some truth to it. I don't - that she may –
-But there's no discussion of her competency.
-Yeah. No, that would bug me, agreed. I agree on that one.
- None. That's what pisses me off.
-Which gives you the assumption that she's not competent.
-Right, and that is the implication. And that she will get the job simply because [she's a woman]. (FG4)

CAREGIVING BIAS AVOIDANCE: WOMEN WITH (INVISIBLE) CHILDREN

The issue of motherhood generated some lively discussion across the focus groups. Women were very cautious in their respective departments about publicly acknowledging their family responsibilities. Attempting to mirror the norm of the ideal worker, in which employees are expected to work long hours, and to be highly committed to lifelong careers (Williams 1999), women who have had children while in a university setting adopt a variety of strategies to render invisible their non-work responsibilities as mothers in order to preserve the perception of productivity and job commitment (Drago, et al. 2006), and in order to avoid negative biases or judgments against them for their failure to live up to the ideal worker expectation.

Experimental studies demonstrate the severe penalties women are confronted with in the workplace upon disclosure of their motherhood status. Mothers are perceived to be less competent, less committed to their jobs, are less likely to be hired, and are penalized by $11,000 in starting salary recommendations as compared to non-mothers (Correll, Benard, and Paik 2007; Cuddy, Fiske, and Glick 2004). However, compared to non-fathers, fathers are perceived to be significantly more committed to their jobs, are held to lower performance standards, allowed to be late more frequently, and are offered higher salaries (Correll, et al. 2007; Fuegen, Biernat, Haines, and Deaux 2004).

I have a colleague who had a baby and I talked to her, saying, "Oh so it's exciting to have a baby." [She said] "Oh that nonsense, let's not even talk about it" And I was shocked. (FG5)

I know that I from the start coming here, have been very conscious about being very concerned if I have to run and get my son from childcare or whatever, you know that that is going to be frowned upon, and trying to the best of my ability to make that all look like it doesn't exist. (FG3)

In grad school, I felt that even though I had little kids, that it was up to me to make sure that it wasn't an issue. My husband is also a professor, and he changed the time of his research meeting because one of his new students had children, and I said, "Why did you change your meeting time?", and he said, "Well, because we had to accommodate so-and-so", and then I thought of myself in grad school, and I would have been- I would have shot myself before I ever made my children an issue. (FG2)

So in my interview, I didn't tell anyone I have a step daughter, and still hardly anybody in my department knows… [D]uring my interview here, I went out to lunch with some faculty and we were sitting at the table and one of the guys says to me, …he must have directly asked me if I wanted to have kids. I guess I said yeah…. And he told me, "Well, you know, I hope you really thought about it, because if you do have children, it will change you."… And so then he preceded to tell me about how when his wife had a kid, she changed and she didn't want to go to work anymore and she wanted to stay home with the kids and I was just like, 'Is he saying this because he thinks that if I have kids I won't be able to be productive?' So now I know I was right not to even mention that I had… a step daughter. (FG6)

In addition to avoiding bias by trying to make their motherhood status invisible, some women shared stories of how they or other female colleagues went to extraordinary lengths to prove they didn't require any special treatment due to their motherhood status.

> *One woman, one woman gave a lecture the same day she gave birth, which I felt was completely ridiculous and her department chair should not have allowed.* (FG6)

Despite their practiced ability to render their personal lives invisible, the astonishing lengths some women went through sometimes remained unnoticed and unappreciated. The fact of motherhood in and of itself appears to be enough to trigger caregiver biases.

> *I was on my second child, and I worked right up until twenty minutes before I went and had my C-section and I worked the second I came home and I was back at work when my son was two weeks old and I brought him into a work function and my boss, who I thought was very supportive of women, came up to me and said, "You're not going to have another one are you?" I mean my infant was less than a month old, I was back at work, I was keeping up with all of my other commitments, I hadn't stopped doing anything and I don't think he realized what he was saying.* (FG7)

Moreover, family responsibility bias is illegal and responses to women's caregiving status such as in the example above are in fact illegal. Such comments discourage women from taking the leave they are entitled to and for which their jobs are protected.

On the other hand, even when women don't have child-care responsibilities, it is often assumed that simply because they are women, they have children to tend to:

> *A few years ago we were setting up a meeting of several faculty and several students and for reasons that had nothing to do with my family, I said, "That's fine but I need to be able to leave at five o'clock." I don't know what I had that evening. And he said, "Yeah it's always the women who have to leave at five o'clock." The only reason I fought back was that there were students, female students there so I said, "Actually I'm going to a whatever." But I was stunned that this person made that comment.* (FG8)

> *[There was this] situation where there was a position open that she really wanted, and she wasn't considered for it and therefore someone else got the job, so she went and talked to the hiring manager and let him know that [she] was very much interested in this, and the manager said, "I didn't know that you were interested, but even if you were this position requires quite a bit of time and work and this may have been an issue for you with your children", so she said to him, "Well thank you very much for your concern, but I have no children."* (FG2)

Setting the Biological Clock to the Tenure Clock

Consistent with prior research, our study finds that women engage in "productive" bias avoidance behaviors by minimizing actual caregiving responsibilities in order to facilitate career success (Drago et al., 2006). Productive caregiving bias avoidance was practiced by our focus group participants such that women timed and limited their childbearing so as to minimize its potential impact on their ability to be the ideal worker in the academy. Many women discussed challenges they and their female colleagues have faced in deciding when or whether to have children at all, based on the difficulties they perceive in balancing their academic careers with starting a family.

> *One woman in particular came here with a small child and waited the entire six years of tenure to have the next one. But it's because she felt that, she said, "I can't do this". You know, whether the impact would be on the perception of her, or she just didn't feel like she could get the work done, or what. But I also know many other faculty mothers who say, "I am choosing to have a child, but it's only going to be one because I just can't, I can't do this". You know, not that they couldn't actually do it, but more that they couldn't do it and deal with all of the other crap that you get from colleagues and do it. (FG4)*

However, the challenge of balancing work and family was understood as not unique to academia: "*I don't think we should say that this is something that's unique to us. I think in many ways there are a lot of people, a lot of women, working that are saying, "You know I just can't do this job and have as many children as I'd like."* (FG4)

What is unique to academia however, is the notion of timing childbearing by the tenure clock, which is often in direct conflict with the biological clock. Upon completion of the PhD degree in their late 20s to early 30s, women enter full-time tenure-track positions and must establish a robust research agenda, secure funding, and demonstrate a strong publishing record in order to secure tenure. The tenure review usually occurs by the faculty member's sixth year, by which time, the woman is in her mid-to late 30s and her fertility is precipitously declining. Thus, some women are faced with having to make a choice between starting a family despite the demands of the tenure timeline, or to "productively" avoid caregiving bias by delaying or forgoing childbearing in order to maintain productivity on the tenure track (e.g., Drago, et al., 2006). As a result, as Mason and Goulden (2005) conclude, "the majority of women who achieve tenure have no children in the household at any point in time after the Ph.D." The following quotes underscore the sensitivity of this topic for some women who feel particularly challenged by trying to have a family within the time constraints and demands of academia:

> *[W]e spend years and years working at a hundred percent effort to get to this faculty position and to work at a place like [this], and it isn't clear to me that if I have a kid, obviously I can't spend a hundred percent anymore on that effort, am I going to be able to stay at the same level? And therefore get tenure? I don't know, and that's the conflict I have right now, is when to have the kid, right? …And then I said to my husband last night, "What if we want two kids? I don't think we can have two kids." And he turned to me and said, "Why should your male colleagues be allowed to have four kids and you aren't allowed to have two?" And I said, "Well I have to have them pre-tenure because I'm already so old…"So it really is a big issue that junior faculty just don't know how to figure out.* (FG6)

Like other highly qualified, professional women, women academics often find themselves without a choice in childbearing decisions, as professional demands require them to continually delay childbearing until suddenly, one day it becomes too late to conceive (e.g., Hewlett 2002).

> *- If you take a look, there's a lot of families that don't get started until that [tenure] notice has been given out.*
> *-Which makes sense. I mean for goodness sakes, let's face it, it's sensible. If you don't know what you're going to do when you're going to have an income the next year.*
> *-No, it's not that simple. There are age related things to consider. It's not that simple.*
> *-Well, yes, I'm aware of that too. But it also depends on whether you're prepared to accept - I don't think it's necessarily the best job in the world, there are other things one could do. So I think it would depend on ones attitude towards it. Which is not an age related thing, but.*
> *-But I think age has a lot to do with it. I would say that I don't have children because, it just, time had passed by the time I got there.*
> *-And by the time you get through a Ph.D. program and you're in the tenure process, and if you haven't had children by that point, the clock is ticking.*
> *-My clock, you know, my body is. I wasn't exactly the person who wanted to have a child at 45 either, you know. And certainly not now that I'm 53! (laughter)* (FG4)

Gendered Parenthood

While balancing work and family may be a challenge to both men and women, it is women who are particularly taxed by it. And for women in male-dominated fields such as in the STEM fields, the challenge is particularly acute when their peers are predominantly men who often have full-time stay-at-home wives to balance their work and family lives for them, as these quotes demonstrate: "*I have a colleague who has two kids. …He travels probably four months out of the year, his wife stays home and takes care of the kids." (FG4)* One female department chair observes, "*In my department whenever a child's out sick, … I*

never see the man walk out and stay home. And I have that quite a bit with the women, which is fine with me. But you just don't see that from the men." (FG2)

> *-You know, my male counterparts when they started, they could work long hours in the lab, their wives could have babies and tend to the children, and go to the school functions, and stay at home with the kids when the kids were sick. They just kept working, whereas I don't have those same luxuries. And, they just, I think they're just unaware.*
> *-[T]here's a really lopsided statistic, I don't know what it is, it was something like, if you took a look at the number of professional men and looked at who they were married to, versus the number of professional women and who they were married to, there was just a huge number of women professionals who are also married to professional men. (FG3)*

Indeed, a recent NSF report on women in science and engineering faculty positions finds that while more than 83% of male scientists and engineers in academic positions are married, less than 67% of their female peers are. While only 7% of male S&E faculty have never been married, over 14% of female S&E faculty have never married. Moreover, half of all male S&E faculty have children in the household, while only 42% of female S&E faculty have children in the household (Burelli, 2008). These statistics strongly suggest that in the academy, men are at greater leisure to pursue personal lives than women are. Comments from our focus group participants corroborate this.

While women appear to expend considerable energy negotiating motherhood within the academy (usually by trying to hide it), men seem to feel free to flaunt their fatherhood status. Men seem unaware, unconcerned, or perhaps immune to any negative repercussions that may be associated with their fatherhood status.

> *-[O]ver and over again I get CVs from males where they list their wives and children as their accomplishments. (laughter) And our current department chair, when he was being interviewed, he did that and I tried to politely say to him that a woman can't even put those things on her CV because it would be judged negatively, and he said, "Well I'm proud of my wife and children and I'm going to put them there." It's irrelevant to your professional attributes and accomplishments.*
> *-Mod: And you're saying that a lot of women don't put their family situation on paper?*
> *-Nobody does. I can't think of anybody.*
> *-No.*
> *-I think we only see it on men's.*
> *-Yeah, you want to convey that you have seventy hours a week to work, so you can't possibly have a family, or if you do you hide them.* (FG9)

> *-So one thing I do notice is when young, male faculty have babies, they send out announcements and they celebrate it and everyone celebrates it with them and stuff like that. When I had my kid, I was so embarrassed. I didn't, nobody mentioned it, I didn't mention it to anyone else. It's sort of like I was embarrassed. …*
> *-Mod: Why were you embarrassed?*
> *-I sort of wanted people to know, but I was, "Oh god I better not make a fuss." You know because they'll think I'm one of those women having kids.* (FG5)

Indeed, Cuddy, et al. (2004) find that when female workers become mothers, evaluations of their competence suffer for it, although they gain in evaluations of their warmth. In contrast, when working men become fathers, their competence is not compromised, yet they too, gain in evaluations of their warmth. Other research similarly finds that women are held to higher performance and time commitment standards when they are mothers as compared to non-mothers, while fathers are held to lower performance and time commitment standards than their non-father peers, and are also held to lower standards compared to mothers (Fuegen, et al. 2004).

Thus, the women in our focus groups seem acutely aware that they suffer losses in perceptions of their competence, performance, and commitment when they have children. Likewise, the men our focus group

participants refer to in the quotes above seem to have a tacit understanding that having children results in a net gain in positive evaluations of them.

The upswing is that as men have been taking on more child-rearing responsibilities, and are doing so visibly and vocally, some departments have responded by acknowledging their family needs. This, in turn, has come as great relief to the mothers who have worked so hard at rendering their family responsibilities invisible. Indeed, the increasing visibility of working fathers may auger well for a future that is more family-friendly for both men and women.

> *I'm beginning to see more and more men saying, "I have to leave - my child has a soccer game", etc, and that does not appear to be an issue for them, particularly younger fathers, you know, relatively younger, they really want to be active in their children's lives.* (FG2)

> *Well one thing, this is sort of more general, but I've seen this happen in two different departments. Seminars used to be later in the afternoon, seminars used to be 5 to 6 or 8 to later. And it wasn't until men said, "I have to pick up the kids at 5 o'clock" that the seminars all moved earlier. And explicitly I knew women who didn't want to bring that up because they didn't want to be criticized for that, so it wasn't until some of the men who were sharing childcare, or sharing the picking up of the kids, or whatever it was, said that that actually happened in two different departments I know of.* (FG5)

Although our focus group participants agree that their male colleagues seem to get a "pass" for their family status, some research suggests that men are penalized for transgressing the normative expectation of the ideal worker if they take time off from work for family needs. Workplace cultures present barriers to men's family caregiving, as when an employee's superiors are not supportive of fathering and when the organizational culture fosters a norm of long working hours (Haas, Allard, & Hwang 2002), such as is the case in academia.

Even when workplace and federal policies provide for job-protected family leave, men are far less likely than women to take family leave, for fear of employer reprisal (Cantor et al 2001). Indeed, a study of assistant professors at Ohio State finds that despite an expressed interest in reducing working hours and the provision of policies for part-time work, only 23% of faculty members have ever used the policy (Bombardieri 2005). Another study finds that between 1992 and 1999, 500 faculty members became new parents, yet only 7 parental leaves were taken, and none by men (Drago, Crouter, Wardell, & Willits 2001). Such low participation rates suggest a strong cultural norm in academia that does not support reduced or part-time work (Williams, et al. 2006).

CONCLUSIONS

Underlying the focus group discussions is an overwhelming sense of insecurity that women experience in STEM fields in academia. Constantly having to negotiate their place in their (usually male-dominated) departments *as women* – confronting double binds, ambivalent sexism, receiving fewer resources, being saddled with service commitments – casts a tenuousness on their sense of belonging in their departments, and indeed, on their sense of belonging in their fields.

Particularly for women of color, the insecure sense of belonging is often two-fold and double-edged: women of color are frequently tapped to perform various service functions in the department and/or university (i.e., mentor advisees, serve on committees, panels, etc.) not only as a representative member of their gender, but also as a representative member of their race/ethnicity. While their representation on campus is important for the recruitment and retention of other women and minority students and faculty, departments' and universities' reliance on these women not only tokenizes them, thereby rendering them even more alien, but it also over-commits them to participate in activities for which they are seldom rewarded. As a result, women are frequently left unrecognized and undercompensated for the important service functions they are asked to (over)commit to and feel compelled – due to their tenuous sense of belonging – to provide.

Despite the lengths that women have gone to in order to minimize the difference and social distance between them and their predominantly (white) male colleagues – by rendering their children and family lives invisible, and by emulating men's appearance and behavior – the women in our focus groups frequently find themselves questioning whether they are being fairly evaluated on the basis of their work and accomplishments, or if they are being treated differently based on their gender, and for some, on their race as well. The women in our groups reported on various ways in which their competence is routinely questioned and challenged, which serve to reinforce their sense of insecurity in their careers.

The well-documented chilly climate in academia is bolstered and reproduced by the underlying biases and stereotypes outlined in this report, and these ultimately reproduce gender inequalities in outcomes. Stereotyping occurs in observable patterns, some of which are described here, such as caregiving biases, ambivalent sexism, and tokenism. Through understanding these patterns, academic administrators and faculty members alike might become more astute at identifying, and eventually stopping them. Coupled with increasingly serious legal ramifications that accompany unexamined gender biases, academic institutions would be best served by educating themselves and preparing for a new academic landscape in which the climate has finally warmed to all.

POLICY RECOMMENDATIONS

The findings from our focus groups point to several policy solutions that are recommended to address the various ways in which women confront double standards and mixed messages in academia.

With respect to service demands that women faculty are particularly overcommitted to that consume precious time, but for which women are left unrewarded and even penalized for when it comes time for tenure review, policies can be developed to specifically acknowledge and reward the contribution to the department, school, and university that such service bestows.

An example of a positive step toward a policy supporting and rewarding service contributions can be found in the University of Washington's Faculty Retention Toolkit, which states that departments should acknowledge excellence in various arenas, including teaching, service, and outreach. The Toolkit suggests that encouraging such a balance between traditional and nontraditional faculty work will ultimately strengthen the department (Advance Center for Institutional Change 2005). Such values should be communicated throughout the department, but should also be communicated to external reviewers when tenure decisions are made.

Moreover, universities must recognize that women are under particular and acute pressure to say "yes" to service requests that men are not confronted with. As such, institutions should build mechanisms whereby such obligations are shared among men and women faculty in a fair and equitable fashion.

In order to address women's insecurity with respect to "rocking the boat", universities are encouraged to adopt policies that make the hiring process transparent, especially with respect to what can be negotiated. Some department chairs at the University of Michigan have adopted a practice in which they ask new hires to submit a list of requests for the department to consider. In this manner, final offer "packages" are not as sensitive to individual ability to negotiate and the process is standardized for all new hires.

Faculty members who feel pressured to hide their personal family lives can be relieved of some of that burden if pregnancy disability is treated the same as any other disability. As one of a number of best practices identified on the Center for WorkLife Law's web site devoted to educating the academic community on best practices to promote gender equity, treating pregnancy disability the same as other disabilities avoids potential violations of the Pregnancy Discrimination Act. Moreover, given the fact that men are increasingly assuming child-care roles, parental leave policies that focus on caretaking status rather than on gender would not only take the pressure off of women faculty, but would make parental leave available and visible to fathers as well.

And finally, policy-driven solutions alone cannot address the underlying biases and stereotypes that can affect the behavior of even the most well-intentioned faculty and/or administrators, to the detriment of women's careers. Unexamined biases can now exact hefty consequences in terms of legal liabilities. Employees are increasingly bringing – and winning gender discrimination and family responsibilities discrimination law suits (Still, 2006; Williams et al. 2006). Department chairs must be well trained in the various subtle, and not-so-subtle forms of gender bias and stereotyping – some of which are blatantly illegal – in order that such biases can be recognized, addressed, and eliminated.

Current programs such as those offered by the ADVANCE STRIDE committee on Strategies and Tactics for Recruiting to Improve Diversity and Excellence provide information and advice about practices that will maximize the likelihood that a campus recruits and retains high-quality faculty members from diverse backgrounds, including those with family responsibilities. In addition, the Center for WorkLife Law offers training and online resources designed to assist employers in preventing family responsibilities discrimination and other types of unexamined biases in the workplace that can lead to time- and resource-consuming law suits.

Taken together, our findings suggest that policy steps must be taken so that universities might identify and prevent the patterns of bias and stereotype we observe in order to ensure that women scholars might be increasingly and successfully recruited, retained, and developed in academia.

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