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Male Allies: Motivations and Barriers for Participating in Diversity Initiatives in the Technology Workplace

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ABSTRACT

In the last decade, much funding and research has focused on increasing diversity in the technology workplace; however, for the most part, these efforts have overlooked the role that men and masculinities have to play in creating inclusive work environments. In this study, we draw from interviews with 47 corporate employees who identified as men to examine how they think, talk about, and enact diversity reform in the technology workplace. Our study found support for some *potential motivators* for men advocating for gender equality that were also identified in prior research, including: 1) personal experiences; 2) the greater economic good; and 3) an ethical commitment to equity. In addition, we found that many of the *barriers* identified in the literature were also supported, especially the difficulties inherent in: 1) negotiating power and gender dynamics; 2) uncertainty as to how best to be an ally; 3) sustaining ally and advocacy work long-term; and 4) establishing legitimacy as a male advocate. We identify a continuum of factors inhibiting male-ally participation and suggest concrete measures that advocates can take to overcome these challenges and build constituency among men in the workplace.

KEYWORDS

Gender diversity; computing; industry; male advocates; gender reform, workplace; women and technology; masculinities

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INTRODUCTION

While feminist researchers have long studied technology and technology contexts, the past decade has seen a great deal of attention and government funding directed towards research into increasing women's participation in STEM broadly, and in computing and IT specifically (e.g., for a summary of some of this research, see Ashcraft & Blithe, 2010). Likewise, discussions related to these concerns increasingly permeate national and international popular discourse. These trends have resulted in a more recent wave of relatively post-positivist research and public conversations that focus almost exclusively on identifying and raising awareness about the key barriers to increasing the numbers of women in technology at all stages of the so-called pipeline. These barriers include parental, teacher, and peer influences; societal stereotypes about who does what type of work; hostile "macho" work cultures; lack of mentors and role models; unconscious biases in performance appraisals, promotion processes, and other business systems; and work-life balance issues (e.g. Ahuja, 2002; Ashcraft & Blithe, 2010; Cohoon & Aspray, 2006; Hewlett et al., 2008; Simard, Henderson, Gilmartin, Schiebinger, & Whitney, 2008). Likewise, this research has identified a number of promising practices for addressing these barriers, including pedagogical reform at the secondary and post-secondary levels; and changes in recruitment, hiring, and advancement practices in industry (DuBow, 2012; Steinpreis, Anders, & Ritzke, 1999; Waite, Jackson, Diwan, & Leonardi, 2004; Zeldin, Britner, & Pajares, 2008). Despite this research, little headway has been made in implementing these practices, and, as a result, little progress has been made in increasing the representation of women in this important and rapidly growing field. These trends continue to raise serious concerns about the future of innovation, as well as the future education and career opportunities for women.

While some of this more recent research does look at gendered norms and biases in societal, education, and workplace contexts, we contend that much of this research and practice in increasing women's participation in computing does not take into account a wealth of prior and current feminist research related to technology and is, therefore, limited in important ways that impede our ability to affect meaningful change and create more equitable conditions. Chief among these limitations is a lack of consideration of the role that men (and majority-group allies, in general) play in creating or changing technology workplace environments, as well as how relationships *between* women and men (and masculinities and femininities) affect these environments and efforts to change them. If and when men are talked about in these contexts, it is primarily anecdotally and in terms of how they contribute wittingly or unwittingly to the *existing* difficulties or hostile environments women face. Even less attention has been given to why some men choose to engage in efforts to increase women's representation, the various roles men play in facilitating these efforts, what men perceive to be the key motivations for, and barriers to, their participation in these efforts, variations in these dynamics across racial and ethnic categories of men, and how these men and masculinities themselves are

affected or changed by these efforts. Ultimately, these oversights prevent us from understanding the important part that those who identify as men have to play in shaping and altering both the technology workplace and broader gender norms. Likewise, this oversight tends to perpetuate the perception that increasing women's representation in technology is a "women's issue" rather than an issue that affects everyone and, therefore, should be of importance to all.

To address these concerns, we draw from our study of 47 employees who identified as men and who had taken part (or at least been aware of) diversity efforts in their companies. We were particularly interested in how they perceived, experienced, and participated in these efforts in technology workplaces (which for purposes of this study, we define as those companies, departments or organizational units that create and adapt digital technologies). In particular, we focus on how these men made sense of factors that both motivate and/or prevent them from being effective advocates or allies. In particular, we identify several key experiences that tended to shift men's thinking and inspire them to become involved in diversity efforts. We suggest that these experiences point to important strategies individuals and organizations might use to identify and work with more male allies. We also present a framework for understanding how men make sense of the barriers to their participation in these efforts and the implications of this framework for increasing their involvement.

THEORETICAL FRAMEWORK

What Feminist, Technofeminist and Masculinity Studies Can Contribute to Research about Gender and Computing

Before turning to our findings, we first situate our study within broader feminist, technofeminist, and masculinity studies research. This research highlights the importance of several tenets that are largely ignored in more recent research or practice in the field of gender, STEM and computing. First, a great deal of feminist research calls attention to the importance of recognizing that men, not just women, are gendered beings who are affected by, and invested in, gender norms, narratives, identities, and power relations (e.g., Fenstermaker & West, 2002; Kimmel, 1993; Wajcman, J., 2004). Second, in contrast to gender and computing research which approaches gender as a fairly static, taken-for-granted demographic characteristic (Ashcraft, Eger & Friend, 2012), this research highlights the social construction of gender, examining the dialectical relationship between masculinities and femininities and how changes in femininities necessarily affect changes in masculinities. With a view rooted in the social construction of gender, it becomes important to understand how women and men shape, and are shaped by, dominant narratives of masculinity and femininity, what kind of new masculinities and femininities emerge and how these new identities challenge historical inequities or sometimes reproduce these inequities in new and subtle ways (e.g., Connell, 2005; Messner, 2004).

Along these lines, feminist research has examined myriad ways that what counts as technology has been defined in historically masculine terms (e.g., Wajcman, 2004). Likewise, this research documents how masculine norms shape business systems and leadership norms in technology workplaces, often excluding women from rising

to these ranks (e.g., Wacjman, 1998, 2004). At the same time, feminists have also examined the power of new technologies in helping women transform these traditional norms and social relations (e.g., Haraway, 2000). While such transformation is possible, often these practices also reproduce traditional power relations in new ways (Daniels, 2009; Wacjman, 2004).

Furthermore, it is also important to understand how women *and* men can or do work together to change these dominant power relations, as well as how these change efforts shape new masculinities, femininities and relations between them, ultimately reproducing or transforming local contexts, organizations, and the larger social order. While little research has investigated the role of male allies in technology workplaces, broader research has documented the fact that men do participate as allies in other contexts. This research posits several reasons that might motivate such participation (e.g. Cohen, 1991; Denborough, 1996; Kimmel & Mosmiller, 1992; Messner, 2004; Möhwald, 2002; Pease, 2002). These include the following:

Personal relationships with women. These personal relationships – with mothers, daughters, wives, friends, and so on – can serve to expand men’s ideas about and understanding of gender dynamics (Connell, 2005; Desai, Chugh, & Brief, 2014; Smiler & Kubotera, 2010).

Escaping “toxic effects” of traditional masculinity. While men have benefited historically from traditional gender relations, they also experience a number of disadvantages and stressors, including pressure to be the primary breadwinner or to live up to other traditional masculine norms (Hanlon, 2012; Burke, 2014). Carving out alternative masculinities that reduce these sorts of disadvantages can be a powerful motivator for involving more men as change agents (Harrison, 1978; Kimmel, 1993; Powell, 2009; Sabo & Gordon, 1995). Along these lines, Maier (2014) illustrates how undermining traditional “corporate masculinity”, in particular, may be seen by some corporate men as beneficial to them.

Benefits for the workplace or community. Men may also see the benefits of a diverse workforce on the communities in which they work and live. For example, flexibility and relative equality in the gender division of labor may be important for the economic health of particular communities (Breines, Connell, & Eide 2000; Cockburn, 2003; Kimmel & Mosmiller, 1992; Messner, 1997). Research also increasingly documents the benefits that diversity brings to innovation, problem solving, and even the company’s bottom line which can be a powerful rationale, especially for industry executives and leaders.

Ethical commitment. Men may participate out of a political or ethical commitment to equality and human rights. In particular, men who have suffered some form of discrimination often express more awareness about these kinds of issues (Connell, 2005; Litano, Myers, & Major, 2014).

Emerging research has begun to confirm some of these motivational factors and explored how they play out, most notably in efforts to involve men as allies in

preventing violence against women (Casey et al., 2013; Flood, 2011; Piccigallo, Lilley & Miller, 2012). While focused on a different societal concern, this research provides some interesting insights that might inform efforts to involve men as allies in other kinds of gender equity efforts. This research has documented the positive effects of these efforts on men's changing attitudes and ability to take action (Casey et al., 2013, Denny, 2007; Piccigallo, et al., 2012).

At the same time, research has also identified several important obstacles or barriers to the participation of men in these efforts (e.g., Tracy & Rivera, 2009). This research highlights the complexities and tensions inherent in "ally work" or work that aims to mobilize a socially privileged group to work toward dismantling a system that it stands to benefit from (e.g., Casey et al., 2013). Engaging men in ways that do not reproduce dominant power relations, silence or minimize women's voices, or recenter men's voices and perspectives can be difficult. Other barriers include: 1) perceptions that gendered violence is a "women's issue"; 2) experiencing an initial sense of not knowing how to help; 3) sustaining men's commitment and engagement over time; and 4) moving beyond approaches or strategies that engage individual men to more systemic, organizational change efforts.

One study of 29 organizations attempting to involve men in efforts to prevent violence offers a framework for five different kinds of barrier that persisted across contexts, communities, and organizations (Casey et al., 2012). These included barriers related to the following:

- 1) *Negotiating issues of gender and power*, or the kinds of complexities that arise in getting men (and women) to examine gendered identities, power relations, and experiences of privilege;
- 2) *Intersectionality*, or the difficulties in recognizing the fact that not all men are equally empowered or are empowered differently to be advocates or allies (e.g., when it comes to race, class, sexual orientation);
- 3) *Sustainability*, which manifests in the form of competing demands on individual men's time, difficulty nourishing momentum, a lack of tangible actions to take, and/or skill deficits related to taking action;
- 4) *Legitimacy*, or the difficulties in establishing relevance/importance as well as difficulties with validity or a perceived lack of tested, effective models for engaging men in these efforts;
- 5) *Ideological inclusivity*, or how to involve a diverse range of men (with potentially differing opinions or levels of awareness about gender relations) without diluting the organizational focus on equity.

While men advocating for gender equity in the technological workplace likely contains some important differences from efforts to involve men in preventing violence against women, some similarities likely exist as well. The above prior research provides a starting point for investigating both the factors that motivate men to participate in diversity efforts in technology contexts, and the barriers that they and those working with them may experience.

We were interested then in understanding how these motivations, barriers, and relations of power/privilege might play out in efforts to increase women's participation in technology and computing contexts. We were also interested in how men might perceive and make sense of potential barriers to their participation (or to the success of these efforts) and what, if anything, they do or suggest doing to overcome barriers.

To get at these dynamics, this study focused on the following research question: what factors do men identify as being encouraging or discouraging to them becoming advocates or allies for creating more inclusive environments? We identify several key experiences that respondents reported as being responsible for shifting their thinking and inspiring them to pay more attention to gender in the workplace. We suggest that these experiences point to important strategies that individuals and organizations might use to identify and work with male allies. We also present a framework for understanding how men make sense of the barriers to their participation in these efforts and the implications of this framework for efforts to increase the participation of women in the technology workforce.

METHODOLOGY

This study was based on 47 in-depth, semi-structured interviews with men from technology departments or technology companies. We worked with the National Center for Women & Information Technology's (NCWIT) Workforce Alliance, a coalition of 32 companies (at the time of the study) in the high-tech industry or in other industries with significant technological workforces. We coordinated with a team of Workforce Alliance members, who helped to recruit participants and offered feedback at all stages of the research design, including the creation of interview protocols and data analysis.

Identifying Participants

To address our research questions, we sought to identify men who were at various stages in their understandings of, and participation in, diversity efforts. To do so, the Workforce Alliance project team identified potential participants from their own companies using a broad set of criteria we had discussed with them, including men who had acted within the organization as visible or behind-the-scenes advocates for diversity or for individual women, ranging from: those who had set up policies or programs designed to increase women's participation in technology; those who mentored or sponsored individual women, and those who appeared to be predisposed to support diversity efforts but had not taken any visible steps toward cultivating a more diverse environment.

Profile of Participants

Because we were interested in applying our research questions to the existing power structures within companies, the men included in the study all held leadership positions in their companies, and most had technology backgrounds, in either computer science or engineering. See Table 1 for additional respondent characteristics.

Table 1. Respondent Profile

Age	Range: 36-60 years old Average: 50 years old
Race/Ethnicity	White: 68% Latino/Hispanic: 14% Asian: 5% African-American: 3% Native American: 0% Other: 11%
Marital Status	Married: 97% Single: 3%
Wife Employment Status	Stay at home: 56% Part-time: 22% Full time: 19% Declined to state: 4%
Parenting Status	Had children: 86% Had at least 1 daughter: 91%
Years in Computing/IT Field	Range: 17-40 years Median: 25 years

Interview Questions

Before beginning the interviews, the research team drafted potential interview questions and received feedback from the NCWIT Workforce Alliance to develop the final semi-structured interview protocol. The interview protocol asked respondents about what experiences informed their perspectives on diversity and equity in the workplace; what they considered key to the success of workplace diversity efforts; and what obstacles they foresaw in advocating for diversity and/or what difficulties they themselves had encountered. Follow-up questions were asked to probe further into the respondents' individual answers.

Interviews ranged from 45 to 90 minutes and took place primarily by phone, with nine conducted in person. Approximately half of the interviews were conducted by a male researcher either alone or in a mixed-gender team, and half by a female researcher or two female researchers. All interviews were audio-recorded and transcribed.

Data Analysis

Transcriptions were then analyzed with QSR NVivo software by four different researchers. To begin the analysis process, the research team established a set of *a priori* codes based on our research questions (Brooks & King, 2012; Creswell, 2012). Each researcher independently read through a subset of interviews, identifying themes and additional codes. The research team then met to discuss initial themes and to compare coding patterns, establishing inter-rater reliability (Hallgren, 2012; Moretti et al., 2011). Example code categories included: "Experiences that influenced men's thinking", "Kind of advocacy men participate in", "Reasons men think that diversity is important", "Things that make change efforts successful", and so on. Once all coding was clear and consistently used within the research team, each of the remaining transcripts was then coded by two

different researchers. Throughout the analysis process, the research team met repeatedly to compare coding and themes and to develop or refine additional codes. Periodically, preliminary insights were shared with the Workforce Alliance project team to incorporate their insider perspective.

FINDINGS

Our study found support for some of the *potential motivators* for men advocating for gender equality that were also identified in prior research and described in our theoretical framework, including: 1) personal experiences, including relationships with women (e.g., Connell, 2005; Desai, Chugh, & Brief, 2014; Smiler & Kubotera, 2010); 2) working for the greater community or economic good (e.g., Breines, Connell, & Eide 2000; Cockburn, 2003; Kimmel & Mosmiller, 1992; Messner, 1997); and 3) an ethical commitment to equity (e.g., Connell, 2005; Litano, Myers, & Major, 2014). As we elaborate below, our data also suggest some additional nuances to those findings, as well as new insights as to why men may want to participate in gender equity movements.

In addition, we found that many of the *barriers* identified in the literature, particularly regarding men's involvement in efforts to end gender violence, (e.g., Casey et al., 2013) were also supported by our study, especially the difficulties inherent in: 1) negotiating power and gender dynamics; 2) uncertainty as to what to do or how best to be an ally; 3) sustaining ally and advocacy work over the long haul, and 4) establishing legitimacy as a male advocate both with female and male peers. We also elaborate below on additional barriers we identified, along with strategies for overcoming those.

Personal Experiences Reported

Nearly all of the men (83%) identified some kind of personal experience as important in shifting their thinking about diversity, specifically in regard to women, in technology workplaces.

As suggested by prior research (Connell, 2005; Smiler & Kubotera, 2010), we found that many of the men (54%) were motivated by their relationships with their wives, daughters, and mothers, some of whom were also in technology. As one man noted, "I think one of the things that's helped me out recently [in understanding these issues] is my daughter who's just started an engineering degree at [college name]". Indeed, fathers in the study were quite vocal about wanting the work culture to be different for their daughters, even when their daughters were young. The following description illustrates this motivation: "You know, maybe another reason, on a personal note, is I have two daughters, and I certainly want them to live in a world where they can succeed".

At least one man, when pushed to think about the environment of the technology workplace relative to his own daughter, admitted he would not want her to go into technology, noting:

"The truth is, unless the demographic had shifted once she got there, it would be one of my reasons to argue that she should pick something

else...I really think that it is a disadvantage if you go into if you are 1 in 10...you are better off not”.

Similarly, men sometimes talked about the influence their wives’ experiences had had on them, as illustrated in the following comment:

“[My wife] experienced sexual harassment, and in working through that with her and understanding the impact that had on her and her job, that sort of hit me: Wow! In addition to trying to perform as an individual...you got to deal with that kind of nonsense; it’s a whole other thing that I don’t have to deal with”.

In general, these relationships with women in their families helped build empathy for situations the men had not experienced themselves, which also then served as a motivator for making change.

While these relationships with women in their lives helped to build empathy, our interviews reveal that this empathy could be built in other ways as well, and that having a wife or daughter was neither sufficient for creating male allies nor necessary. Feeling an outsider themselves, most obviously as a racial/ethnic minority, seemed to be equally as potent a mechanism for building empathy. The following comments describe other influencers:

“In college...you walk into a cowboy’s bar...somebody like me, with my skin color, has my accent, you feel out of place very quickly...same thing with women...[they] walk into a room where there’s 20 guys...so I sort of understand it”.

“I can remember distinctly where I was...in Tokyo, walking down the street for the first time, and I am like, “Whoa, I can’t hide!...I stick out of the crowd”. And I thought, “This is interesting. This is how other people must feel”.

Outsider status was a common theme when men recounted their reasons for supporting diversity efforts. One interviewee noted, “I grew up in a little town in the middle of nowhere, largely economically disadvantaged, and so I had some personal experience about what it meant to start behind the curve, and so I at least like to think I have some sympathy”. Similarly another respondent observed, “I grew up [where] it was very conservative....I have to say that I saw some things...some racial prejudices and gender prejudices...It didn’t feel right, and so somehow for me it became personal”. For these men, then, their ethical commitment and motivation to action was instigated at least in part by having experienced or witnessed biases in action.

Professional Experiences Reported

The vast majority of respondents (91%) also reported experiences at work that had influenced their perspective, including collegial and supervisory relationships with women at work. One recalled the powerful influence of a respected mentor, noting:

"I think every man needs to have a mentor as a woman once. Because that was very impactful on me—walking into her office...and seeing her there obviously dealing with something that is going on, and she would tell me, and I would go, 'What!' "

Similarly, another man recalled working in a state of ignorant bliss for years at his technology company until one day a panel presented information on workplace bias. He described both his reaction and the importance of his female colleagues' perspectives as follows:

"And just listening to some of this, I was kind of flabbergasted by the whole thing; I thought it was really quite interesting, right? [When] we got up to leave, I said to no one in particular, 'Wow, that was pretty interesting, but I don't imagine that there are any parallels like that here'. And then [laughter], *an hour* later, 20 women let me leave!...And over time all these little things ...kept pouring out... [such as] 'Here's what it's like to be in this meeting', and I was astonished, and that was what kind of really what got me in".

Another senior executive remembered the point of reckoning when his perspective was turned inside out both as a minority at a female technical conference and by listening to female executives' stories. He recounted, "The conference was a big, a big jolt...[before] I would have argued very strongly, differently! Now [meaningful pause] I know nothing....I mean that was a revelation...[It] was a big kick in the pants".

Other men were also motivated by witnessing biases on their own, though, notably, this was less frequent in our study. One interviewee offered the following:

"We saw two really viable candidates. One was a man, one was a woman...the man actually was introduced to us through somebody on the business side...and some of us viewed him as less qualified...but because of the influence from the business side, we wound up hiring him instead of the woman".

Likewise, another man talked about how he took it upon himself to collect data within his own organization, at one point, timing the performance review discussions about different candidates. He discovered much shorter discussions with female candidates.

Among influential professional experiences, it was not only women's stories or men's own observations that influenced their thinking but also other men. Respondents described male leaders directing policy or acting as role models for how to be a male advocate. Several recalled being motivated by values-based policies established by male leaders who showed strong commitment to the cause of diversity. One interviewee attributed his level of awareness to a male manager who had established very specific goals, "like 50% of all our hiring was diverse. So we had some very strong, passionate leaders who had deeply held beliefs about

how to do things". A different respondent also noticed and admired his male supervisor's approach, remembering, "I think he really was thoughtful in choosing who his leaders were going to be at the time and he got the right mix, which, to me, has exhibited itself in diversity of thought at his leadership table. Which is great. I just loved watching it".

While a few interviewees mentioned that other male role models were important in influencing their thinking, most interviewees reported having to figure out on their own how they might be advocates and encourage other men to be advocates. The men in our sample did this with varying degrees of commitment and success as they encountered obstacles, both internal and societal.

Considering Contradictions: Limitations of These Motivating or Influential Experiences

Even among many of the men who expressed strongly supportive views, interviewees revealed that their awareness or support was neither unequivocal nor uncomplicated. Their words belie tension as they give lip service to the idea of dismantling the status quo, while at the same time, they also make comments that reflect dominant societal narratives that support the status quo. Most notably, we identified two types of narratives that potentially limit the transformative power of the motivating factors these men experience: 1) gender blindness or "overcompensation" narratives and 2) gender coding or "just the way it is" narratives. This tension was most apparent when respondents elaborated on the specifics of their commitment to diversity or the difficult situations they perceived women facing in the workplace and in society.

Gender Blindness or Overcompensation Narratives

While many of the men talked quite passionately about their commitment to increasing the participation of women in technology, some of these men would also make comments that reflected a limited understanding of what counts as "gender" or "gendered". These limitations sometimes surfaced in comments rooted in "gender-blind" approaches to diversity. For example, one leader stated with confidence:

"[E]verybody on my staff knows that they are equal. And they know that I measure them based on how well they do their jobs and that's a combination of the night and day jobs and how adaptable they are and how proactive they are as to the needs of the business".

Many of the interviews contained similar statements: "I try to look past the whole women thing, I just, I want the best person for the job to be honest" and: "I always look for the person who has the best talent for the slot I am trying to fill and that's independent of female or male". The company culture was similarly seen as gender "neutral", as exemplified in this man's statement: "Whether you're a woman or man, you might be intimidated by the conversations and the personalities.... It doesn't matter what gender you are". These statements point to a limited understanding of diversity as being about the number of women and the workplace

contributions of women; they do not question the ways that gendered norms shape employees' experiences, the company environment or the field.

Moving beyond a gender-blind approach, some participants went a step further, invoking what we term overcompensation narratives, where participants gushed about the talents of their female employees. Consider this man's comments:

"I surround myself with strong women, my mom is also incredibly independent and very strong willed ... So I have been around it my whole life and I am extremely comfortable in that environment, and I, you know, some of my best clients were very senior women".

Similarly, other men talked about the "great women" they have worked for and insisted they were "as good as anyone else" they'd ever worked for. These sorts of statements also invoke a limited understanding of gender as being simply about demographics and female contributions rather than gendered norms. Although they do so in slightly different ways, both gender blindness and overcompensation narratives draw upon societal narratives of meritocracy that insist gender does not matter; as long as you are talented and work hard, you can rise to the top. A wealth of feminist and other literature has identified the limitations of these kinds of narratives for fostering equity and transforming social relations (e.g., Faulkner, 2001; Cech & Blair-Loy, 2010).

Gender Coded or "Just the Way It Is" Narratives

While on one hand, some of these men insisted that they were gender-blind, later comments revealed the specific ways that – often unbeknown to them – gendered norms did in fact shape their perceptions and evaluations in the workplace. These patterns surfaced in comments that reflected an inability to envision alternative workplace norms or practices, or comments that described workplace norms as "just the way it is". One interview in particular captured this, though many more reflected it across the topics we covered. This interviewee, after professing to be gender-blind, then went on to delineate how some women are able to be successful in the necessarily aggressive technology workplace.

"[T]here are a couple of people that I know that even work for me today, who are very senior women in our company, who are uncomfortable with the idea that you have to be a hard charging sort of quote unquote pushy broad to be successful in the business environment. [A]s the women bankers that I know and the women insurance leaders that I know and the woman CEO I know are all pretty Type A. They all played college basketball or they all did something along those lines. I think you have to have that kind of style, I really do...You don't have to be cut throat, you can still be an honest, hardworking person with integrity, but you're going to have to be Type A, off the top, to be able to operate in those positions".

His statements reflect a perspective rooted in a narrow and gendered view of leadership as Type A, sporty, and aggressive. Such comments do not account for

the gendered dimensions of this description and stress instead that this is "just the way it is" if you want to be successful. His openness to having female leaders was clear throughout the interview, but he expected a leadership style that fit his traditional (male) model. Additionally, his and other men's pointing to a "Type A" personality functioned as a frequent code for "male". Another respondent made this connection particularly clear by saying, "We hired A+ personalities out of college. We didn't even think about hiring women". This again reflects a demographic or essentialist view of gender; while they want to increase the *number* of women in the technical workplace, they don't recognize the ways in which the workplace culture is itself gendered.

Another way that "just the way it is" narratives manifested themselves in the interviews was during discussions of work/life issues. Several interviewees could support women being in a technology career, but saw this career as incompatible to family, and implicitly or explicitly assumed that family was the woman's domain. Therefore, they could say without saying it, that a tech career was often difficult and might be unsuitable for women. One man whose daughter was a computer science major, expressed concern for how that choice would play out for her:

"She's going to graduate now, the final year. But when they get married and have kids, it's very hard to balance everything in their kids' life and still manage the work pressures which come sporadic (sic). If it is a constant flow, that you come in in the morning and you can have a set schedule, then you can plan your activities. But ... technology always has customer issues, something else pops up. So it takes a toll, so people have got to be flexible on that. And if men and women share equally then it's great, if it works. But have an understanding spouse, that's what we tell her".

He and others fantasized about a world in which men and women shared family responsibilities, but lamented the fact that this was "just the way it is" or "everyone has to make choices in life". Other men also expressed desire for these dynamics to change but felt helpless to effect change in their organization, seeing this primarily as a larger "societal problem" too big for the organization to take on. Likewise, another man's comments shows the kind of resignation sometimes expressed in these "just the way it is" narratives: "I do think that traditional gender roles and a willingness to step off the fast track, for personal reasons and family reasons, continues to tend to fall towards females. And I'm not sure that's ever going to change". This lack of ability to re-envision gender roles and leadership styles convinced them that the workplace was not going to be able to diversify.

On the other hand, some men did discuss transformations in their thinking and an ability to envision other alternatives to these "just the way it is" practices. Interestingly, this ability often stemmed from having witnessed successful programs or policies. For example, one senior leader said, "[I]n the old days men never talked [about] work-life balance. Are you kidding?...What? It was taboo. That was the perception". He then went on to describe how watching two female supervisors he'd had in his career had changed his views completely, as well as a

flexible work program his company had implemented. His shift, and that of other men in the study, demonstrate the power of stories and examples of success for shifting these “just the way it is” perspectives and helping individuals envision alternative realities.

Our data suggest that while some men may be motivated to support the increased participation of women in the technical workforce, a closer investigation of their perspectives reveal contradictions and regressive narratives that may limit the transformative potential of their ally or advocacy work. This is consistent with tensions identified in prior research around involving men as allies in preventing gendered violence – namely the difficulty in accounting for this kind of ideological diversity without diluting reform efforts (Casey et al., 2013). We address ideas for ways to address this tension in the final section.

A Continuum of Factors Inhibiting Men’s Support

In addition to the factors that motivated men to participate, we also identified eight factors that discouraged men’s participation in workplace advocacy. To illustrate how these eight factors emerged from the data, each is listed in Table 2 with a sample interview excerpt. Interviewees reported these factors as inhibiting both their own participation in activism as well as that of other men when they attempted to include other men in reform activities.

Table 2. Inhibiting Factors and Sample Quote

Factor	Sample Quote
Apathy	I think there’s, you know, a category of men who don’t understand why it matters and don’t care and want to spend no time with it.
Lack of awareness	I run into plenty [of men]...where they’re open to the conversation but they don’t feel a compelling need to do anything about it and I would say...a lack of awareness that they have the ability right now to change it. And when I talk to them about it and engage with them, many of them...start thinking about it differently.
Lack of clear rationale	What I don’t like is when [Human Resources] shows up and pulls together a bunch of managers and talks down to us and chastises us, you know...but they won’t give us any of the data why we are screwed up, or give us any advice as to how to fix it. So that’s kind of the bad side.
Belief that the root cause is a larger societal problem	I don’t believe that any of the things I’ve been exposed to are going to have any meaningful effect, because I believe the scale of the problem is massive....the way that you start getting into this field in elementary school and high school is math and science....But if ...you’re a woman, and there’s peer pressure in social groups in the math and science classes...Then I’d have to assume there’s both going to be pressure and a tendency, a natural tendency, to gravitate towards other things.

Fear, discomfort	Everyone who becomes an advocate had to go through that door where they take the first risk and realize, "Oh, that wasn't so bad"....So I would share and talk about the risk-taking...and how, all of a sudden, it is no longer risk-taking.
Lack of time	People will say, "Right, but I have six other things on my plate"...and they'll either be sympathetic...and they may even be willing to go help, but they won't initiate anything.
Lack of team consistency	I served my duty for like, two or three years....I guess this is kind of like a service, you do it for some period of time, and you take some effort, some time, and then boom boom, people move on....You take kind of a volunteer role besides our so-called "day job," and that's something that kind of rotates.
Lack of authentic leadership support	The leadership was...willing to listen, and we had programs that we were starting to put in place — there were actual things that we were starting to go do....So we were on this kind of nice ramp...we were making the progress locally, but I had no luck really doing very much globally...the connection to the corporate end of this was cordial, but not helpful.

Interestingly, when men talked about these barriers, certain barriers tended to be more salient at different times in their journey as an ally. We suggest that these eight barriers for male allies can be laid on a continuum of inactive to active support, as shown in Figure 1. While we label these as different "stages" in a continuum, we stress that these are tendencies and a useful way to think about men's journey as allies; however, we do not mean to indicate rigid boundaries between these stages or suggest that these stages play out in a strictly linear fashion.

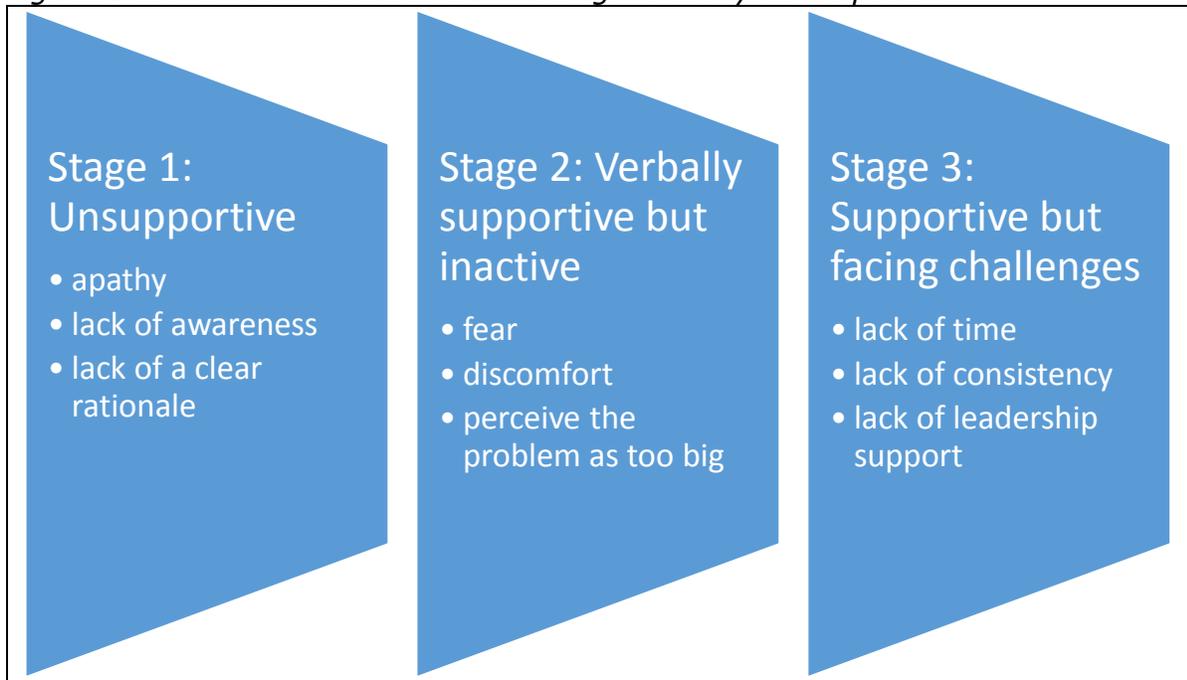
The first three barriers on Table 2 tended to be mentioned most when interviewees were asked about what challenges they encounter when trying to invite other men to support their efforts (or when reflecting on their very early views before becoming allies). They described encountering a general apathy and/or lack of awareness about the issue of women's underrepresentation in the technology sector. Our interviewees had different reactions to these mindsets, sometimes moving on to men who might be more motivated and sometimes ultimately persuading resisters to join the cause. Several noted that offering a clear rationale for why the issue is important was critical to involving initially unsupportive men – this was key for distinguishing between men who were truly apathetic from those who were apathetic primarily because of a lack of awareness.

Once men are theoretically on board, several key barriers to action remain. Interviewees identified two barriers that they felt other men (and at one time, they themselves) experienced at this stage: 1) the conviction that the problem is too large or so much a part of the larger society that any efforts they might make

would be ineffective and 2) the fear of either making themselves vulnerable in a professional setting, or of saying or doing the wrong thing. These two concerns frequently stifled any action they might consider taking.

Men who had surmounted these barriers and had actually begun taking action, reported facing the three remaining barriers in the continuum: too little time, a lack of consistency among the team addressing these issues, and a lack of high-level leadership support or a shift in leadership or leader priorities. Many of the men in our study who were active and visible in their pursuit of gender equity in their companies found it difficult to stay the course when they were pulled in different directions, or the people they counted on to work with them changed priorities or left the company. This is consistent with the gender violence research that found similar barriers (Casey et al., 2012).

Figure 1. Continuum of Factors Inhibiting Male Ally Participation



CONCLUSION: IMPLICATIONS FOR PRACTICE AND FUTURE RESEARCH

Based on the stories of the men who had been persuaded that there is a diversity issue in technology and that they can take meaningful action, we concluded that there are several concrete steps advocates can take to build constituency in the workplace among men. We suggest that the continuum of barriers we identify above can provide a nuanced way of thinking about diversity efforts and where they might be most effectively implemented.

Recreating Motivating Personal and Professional Experiences

Our research suggests that, especially for men at the first stage of the continuum, “unsupportive”, there is a pattern of experiences that can lead them to be supportive, and sometimes activist, in the pursuit of gender equity in the tech workplace. Recreating these experiences can engender even more male allies and

advocates. Some of the men in our study realized this and purposely set up situations where men were mentored by senior women, where men were put in situations where they were in the minority, and where men and women had the opportunity to work side by side as equals on a team.

Listening to Stories and Having Conversations

The data suggest that conversations between men and women at home and in the workplace, as well as conversations between men at work, can shift recalcitrant perspectives and ultimately perhaps shift the environment for both men and women at work. Most of the men recounted stories or conversations with female peers, mentors, or women in their lives that had shifted their perspectives. It became clear that conversations are important for building empathy and increasing awareness, key ways to overcome barriers at the first two stages of the continuum ("unsupportive" or "verbally supportive but inactive").

Persistence

One unsurprising finding was that activists of whatever gender do not face a simple path in calling for, or bringing about, reforms in the workplace. Of those who had sought to raise awareness or enact reforms, they described both successes and failures while they learned how to be an advocate, raising awareness in others, and building constituency. One man who had tried the conversational approach, repeated a theme we heard from others, that awareness raising and constituency building was an iterative process. When he talked with them repeatedly, he saw a gradual opening of perspective.

Our data suggest that this "openness" is a process that can eventually lead to activism, despite the potential risks involved, including loss of privilege and loss of credibility among their male peers. One man recalled vividly how hard it was to take that first step, but once he did, he felt liberated and became a visible advocate from then on. Risk-taking and persistence in learning how to be an advocate were important ways to get past the second stage of the continuum ("verbally supportive but inactive").

Real-world Examples

We found that when men had heard about other successes in diversity, they were more inspired to make change themselves. Knowing about the successes of other individual advocates and programs expanded what these industry professionals saw as possible. This positive motivation might be particularly appealing to those who consider the problem too big or who have fear or discomfort about proceeding into uncharted territory, in the second stage of the continuum ("verbally supportive but inactive").

The most effective influencers to emerge from the data were: educating the majority about the ways that women and other minorities might experience workplace environments differently than they do; establishing a culture where mistakes can be made, as individuals and organizations struggle to find the best ways to enact reform, and sharing reform successes from other companies. Our data did not suggest concrete solutions to the third stage of the continuum, though

some of the men suggested that policies and practices implemented company-wide by top leadership, followed by accountability measures, might help alleviate issues in Stage 3.

It is the authors' hope that understanding the factors that inhibit some men's participation in efforts to achieve gender equity, and recognizing these factors within a continuum, will help practitioners enlist more men to become involved in inclusivity efforts in the workplace.

Our study both confirms previous studies in this area, and shares unique findings and a new structure for thinking about the issues. The continuum of barriers we have proposed may be useful not only in practice, but also in future research. Exploring these barriers in depth and identifying solutions to them would benefit the field. Only a few participants in the study were inactive in the contemplation or pursuit of equity, but their perspectives were among the most instructive for diversity initiatives and advocates. Their comments suggested the many obstacles to men's participation, while highlighting possible routes for conversion. Interviewing more unsympathetic men, therefore, would be a useful path for further investigation. A potentially instructive investigation could examine how intersectionality factors might also impede men's participation.

While this study was limited to a sample of men whose names were given to the authors by employees from 14 companies, the sample was representative of leadership in technology companies in terms of age, race and sexuality, so understanding their perspectives yields valuable insights for practical application to reforming the field. Still, expanding the interview sample to include more homosexual, or unpartnered heterosexual, men, as well as more men below the mean age of 50 would deepen our understanding of the forces at play.

In addition, the rich qualitative data collected in this study will allow for further exploration into other, different questions related to creating more inclusive work environments. These include questions about: men's perspectives on their social context and how that influences their own personal actions in the workplace and in the home; how their construction of masculinity and femininity prescribe their own roles and those of the women they work with; their own observations of their philosophical transformation over time and the reasons they attribute change to, and the role played by organizational culture, as opposed to personal disposition, or personal identity. The field would also benefit from a deeper understanding of how to overcome the issues wrought by the third stage of the continuum, those who are supportive but face challenges.

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