

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/275368163>

Faculty peer networks: Role and relevance in advancing agency and gender equity

Article in *Gender and Education* · April 2015

DOI: 10.1080/09540253.2015.1027668

CITATIONS

79

READS

708

2 authors:



[KerryAnn O'Meara](#)

University of Maryland, College Park

152 PUBLICATIONS 4,262 CITATIONS

[SEE PROFILE](#)



[Nelly P. Stromquist](#)

University of Maryland, College Park

170 PUBLICATIONS 3,716 CITATIONS

[SEE PROFILE](#)



Faculty peer networks: role and relevance in advancing agency and gender equity

KerryAnn O'Meara & Nelly P. Stromquist

To cite this article: KerryAnn O'Meara & Nelly P. Stromquist (2015) Faculty peer networks: role and relevance in advancing agency and gender equity, *Gender and Education*, 27:3, 338-358, DOI: [10.1080/09540253.2015.1027668](https://doi.org/10.1080/09540253.2015.1027668)

To link to this article: <http://dx.doi.org/10.1080/09540253.2015.1027668>



Published online: 22 Apr 2015.



Submit your article to this journal [↗](#)



Article views: 188



View related articles [↗](#)



View Crossmark data [↗](#)

Faculty peer networks: role and relevance in advancing agency and gender equity

KerryAnn O'Meara* and Nelly P. Stromquist

College of Education, University of Maryland, College Park, MD 20742, USA

(Received 4 August 2014; accepted 6 March 2015)

Organisational efforts to alter gender asymmetries are relatively rare, yet they are taking place in a number of universities. In the USA, sponsored by the National Science Foundation, ADVANCE programmes implement a number of interventions to improve the recruitment, retention, and advancement of women faculty. This study focused on one common intervention, faculty peer networks, and the role they play in gender equity reform. Longitudinal and cross-sectional qualitative data indicate that such peer networks function as catalysts for women's career agency, and challenge gendered organisational practices. Two key features of the peer networks, their structure and internal dynamics, facilitate these outcomes. At the same time, peer networks are limited by design in promoting structural change and must be implemented in concert with other forms of policy and structural change to be effective mechanisms for gender equity reform.

Keywords: women faculty; peer networks; agency; ADVANCE; gender equity

Despite gains in gender equity in doctoral programmes and early career hiring (Trower 2012; Ward and Wolf-Wendel 2012), women faculty remain under-represented in the more senior ranks (Valian 1998; Trower 2012; Ward and Wolf-Wendel 2012), experience lower salaries (West and Curtis 2006), and enjoy less decision-making power in research universities (Clark and Corcoran 1986; Acker 1990; Glazer-Raymo 1999). Pre-tenure women disproportionately resign and many women feel 'stuck' at associate professor levels (Valian 1998; Glazer-Raymo 1999, 2008; Modern Language Association 2009; Misra et al. 2011; Terosky, O'Meara, and Campbell 2014). Many forces influence gender inequality in universities, including divisions of labour where women faculty complete more campus service and men spend more time on research (Winslow 2010; Misra et al. 2011; Pyke 2014), as well as the disproportionate amount of time women spend on family care and housework (Misra et al. 2011), the tendency for women to be recognised less often through awards for their accomplishments (Lincoln et al. 2014), and women's isolation in the academic workplace (Kemelgor and Etkowitz 2001; Smith and Calasanti 2005).

Government efforts to improve the conditions of women in higher education are increasing in many parts of the world. In an effort to accelerate movement towards

*Corresponding author. Email: komeara@umd.edu

greater gender parity among faculty in higher education in the USA, the National Science Foundation (NSF) created the ADVANCE Institutional Transformation (IT programme) in 2001. ADVANCE programmes have been prominent in research universities over the past 10 years (e.g. Columbia University, Purdue University, University of California, University of Michigan, and Syracuse University). Though focused on the recruitment, retention, and advancement of women in the natural and social sciences (National Science Foundation 2006; Sturm 2006; Cantor 2011), the broader goals of IT ADVANCE grants have been defined as ‘planned alterations in the core elements of the institutions: authority, goals, decision-making practices, and policies’ (Fox 2008, 83).

There is a growing literature on the implementation and outcomes of ADVANCE IT programmes (Stewart, LaVaque-Manty, and Malley 2004; Rosser and Chameau 2006; Bilimoria, Joy, and Liang 2008) and analysis of the goals, challenges, and possibility for success among feminist scholars (Bird 2011; Morimoto and Zajicek 2012; Morimoto et al. 2013). Most of this literature begins from the premise, as we do here, that higher education organisations are gendered, with organisational practices, structures, and cultures that favour men and devalue women in critical ways (Acker 1990, 2006; Dean, Bracken, and Allen 2009). Thus, any effort at improving gender equity must target core operating procedures that disadvantage women faculty and their sense of agency to succeed in their careers. ADVANCE programmes implement many different kinds of interventions, including but not limited to reform of search practices, leadership development, research seed grants, campus climate surveys, and department chair training on unconscious bias (Morimoto et al. 2013). Research has explored the larger challenges and successes of culture change through ADVANCE programmes (Stewart, LaVaque-Manty, and Malley 2004; Bilimoria and Liang 2012; Morimoto et al. 2013). However, less work has examined what occurs within specific ADVANCE IT interventions to alter the nature of gendered organisations for their participants.

In this study, we examined the role of one common ADVANCE IT intervention, peer networks, in enhancing participant agency in career advancement and in disrupting gendered organisational logics and patterns. We asked: What aspects of peer networks seemed most influential in enhancing participant agency in career advancement? Did these peer networks disrupt gendered organisational practices and logics, and if so, how?

‘Inequality regimes’ (Acker 2006), including the lesser retention, advancement, and career satisfaction of women faculty when compared to men, are complex problems; they involve ‘interlocked practices and processes’ (Acker 2006, 441). By looking inside one of the most common NSF ADVANCE interventions – peer networks – we can see the gendered logics and patterns of isolation that perpetuate inequality and, importantly, the kinds of programme structure and internal dynamics that can change gendered norms and experiences. Understanding the contributions and limitations of ADVANCE peer networks in furthering gender equity is important for women’s advancement in these settings.

The university we focused on (Progressive University, PU hereafter) is a large research-intensive institution with a budget of about \$500 million in research funds and some 38,000 students. This institution received an ADVANCE grant to focus on issues of gender equity in the retention and advancement of women faculty. Our data comprise participant observations of three ADVANCE peer networks of faculty (year-long, cross-campus programmes – involving faculty at each of three career

stages: assistant, associate, and full professor levels), programme evaluations of the peer networks, and interviews and focus groups with participants in the programmes. We examine these data to understand the contributions and limitations of faculty peer networks embedded within gendered organisations in catalysing gender equity and career advancement.

Guiding perspectives

Our study begins from the premise that all research universities are gendered organisations wherein organisational practices favour men and devalue women in critical ways (Acker 1990, 2006; Dean, Bracken, and Allen 2009). Acker's (1990, 2006) research outlined five ways in which all organisations to greater or lesser degrees have embedded gendered organisational practices. These include (1) a division of labour with low representation of women in higher positions; (2) symbols, language, and images that reinforce labour division; (3) interactions that foster dominance and submission; (4) gendered ways of thinking about work that seep into identity; and (5) organisational logic, systems of evaluation, and management that favour male preferences and characteristics. Acker's (1990, 2006) conceptualisation of gendered organisations has been applied to understand how women faculty experience barriers to success in gendered universities (Lester, Sallee, and Hart 2013), and on ideal worker norms and how they influence graduate student and faculty balance of work and family (Sallee 2011, 2013).

We assumed that women participants in ADVANCE peer networks were socialised through, and were living out their academic careers in, fields and departments with explicit and implicit practices that constrain their agency in career advancement. Agency has been studied in many social science disciplines and fields including sociology, psychology, human development, organisational behaviour, cultural, standpoint, and realist. By agency we refer to perspectives and actions taken by participants to achieve meaningful goals (Campbell and O'Meara 2014; Terosky, O'Meara, and Campbell 2014; O'Meara 2015). Our definition recognises the need for both individual and collective action. Agency is area specific (e.g. agency undertaken for career advancement or for securing work–life balance) and is enacted in specific social contexts (e.g. fields, departments, and gendered universities). Agency in career advancement emerges from and is facilitated by organisational environments. Organisational structures and cultures play powerful roles in shaping agentic possibilities (Giddens 1979; Bourdieu 1985). Acker (1990, 2006) observes that in gendered organisations interactions between members display dominance and submission. This might take the form of talking over or ignoring the opinions of women faculty or crediting their ideas to others. Women faculty might not see other women faculty being successful in balancing career and family, might not find mentors and sponsors for their research, and might consider resigning. Each of these contexts constrains women's agency in career advancement. Alternatively, women faculty could experience interventions – as intended by ADVANCE – that interrupt these gendered dynamics to present strong role models, intellectual and social support, and strategies to handle interactions and situations where women's voices are not being heard.

We chose to study peer networks because they are a common ADVANCE intervention, intended to interrupt gendered organisational norms. The structure of peer networks brings together a group of faculty (such as women assistant professors) on a

regular basis (such as monthly) for knowledge sharing and peer support. The online meetings and conversations that take place between face-to-face meetings are organised around various topics relevant to their group (such as preparation for promotion, time management, and life–work balance) and typically organised by a facilitator, who herself serves as a role model and has achieved the advancement the members seek. Such groups typically involve an initial open call for participation, but then confirm a cohort to participate as regular members for one year. As scholars who study social networks have observed, ‘Relationships matter to enacting change’ (Daly 2010, 2). Peer networks that have been found to develop strong ties include those where individuals within the network have frequent interactions, mutual confiding, and sharing of information (Tenkasi and Chesmore 2003; Kilduff and Krackhardt 2008; Kezar 2014). Kezar (2014) observes that there is an embedded ‘lack of trust, conflict, autonomy, and/or disconnection of faculty and siloed units’ (109) that make the creation of on-campus peer networks a challenge. Peer networks, like the ones created in ADVANCE programmes among women faculty, can be critical to change efforts because of their ability to simultaneously support individual faculty navigating gendered work environments while also creating new norms and logics (Tenkasi and Chesmore 2003; Hart 2007, 2008; Kezar 2014). Yet little work has considered the specific programme structures or dynamics of such networks that matter to the outcome of enhanced faculty agency and gender equity reform.

Because we were interested in the structures of and dynamics inside peer networks, we turned to two conceptual approaches: critical theory and third spaces. Critical theory asserts that concepts such as justice, equality, and emancipation are nurtured through the intersubjective construction of meaning that occurs primarily through language (Habermas 1992). Although people are deeply embedded in historical contexts and may even live under democratic regimes, they constantly experience social and institutional practices that constrain their identity and autonomy. Critical theory, therefore, ‘seeks to provide a dialectical method of discovering and rediscovering “better ways” to develop people and transform society in always fluid ways’ (Abel and Sementelli 2004, 80; see also Gaventa and Tandon 2010). Dialogue among oppressed persons is indispensable to share experiences of powerlessness and injustice and to create new collective meanings. It is an important way that people strengthen their sense of agency. A critical mechanism by which peer networks might deliver on the promise of enhancing women’s agency is dialogue among peers who have experienced similar gendered challenges and their subsequent actions to advance as a result of new awareness and confidence.

Critical theorists argue that despite the pervasive oppressive power operating in society, people can emancipate themselves through new discourses and practices. On the other hand, critical theory underscores an inherent contradiction between bureaucracy and emancipation and between agencies and agency. In this respect, original thinkers, such as Marcuse (1970), argued that ‘all domination assumes the form of administration’ (1–2). Under this assumption, it would be difficult to envisage institutions that would provide spaces where they would be open to critique of their own performance. Can this ever be reversed? New contributions from the field of public administration, after considering various case studies, argue that not all administration is oppressive and that, under certain conditions and certain leaderships, ‘right kinds’ of bureaucracies can emerge and foster enabling dialogue – and subsequent practice – towards the emancipation of individuals. Abel and Sementelli (2004) call this form of critical theory ‘evolutionary critical theory’. We apply this concept to understand

how the process that occurs within peer networks (i.e. dialogue, practices, and interactions) might enhance participant sense of agency in career advancement.

The concept of third spaces posed initially by Oldenburg (1989, 1991) builds up on the notion of a space where dialogue can take place and argues that a third space (or place) separate from home and workplace was important for community building and civil society. Such an environment, which might include churches or women's knitting circles, enhances a sense of belonging and place, and becomes an anchor of community life. Key characteristics of third spaces are that they are free or inexpensive, highly accessible, involve regulars but welcome newcomers, are welcoming and comfortable, and ideally involve some connections over food and drink (Oldenburg 1991; Putnam 1995, 2000).

Cantor (2011) described the formation of third spaces for women faculty via peer networks in the Syracuse University ADVANCE programme. Cantor observed peer networks for women that were interdisciplinary and cross-campus and were:

especially good environments to nurture women faculty in STEM, as they quite naturally override the typical barriers of a chilly climate. In them, women are less isolated and less likely to feel like tokens than in their departments (as a critical mass can form from participants across departments and disciplines). They can build richer social/professional networks (with instrumental support coming from a wider variety of colleagues in differing positions), and in the process see a somewhat more flexible array of career models (such as those pursued in industry). (Cantor 2011, 9–10)

Although faculty peer networks technically occur at work, they can be built structurally as third spaces: these move faculty from their immediate work environment (the department or college) to spaces devoid of competition and evaluation, and free from any vigilance by administrators. Such spaces focus on mutual knowledge sharing, provide new role models, and initiate dialogue that challenges, defies, and transcends gendered logics (Bird 2011; Cantor 2011).

In summary, we were interested in how the creation of safe and autonomous spaces fosters dialogue to create peer networks, and how the dynamics that occur within peer networks facilitate agency in career advancement and promote gender equity by challenging and disrupting gendered organisational norms and structures.

Methods

Study context

In this article, we examine three peer networks implemented by ADVANCE at PU. These include the following:

- (1) 'Keeping Our Faculties'. This peer network (KOF hereafter) enables pre-tenure assistant professor women faculty to come together with a facilitator to gain knowledge and skills that will aid them in their career advancement. The key areas of focus are preparation of the tenure dossier and personal narrative, networking, external funding, managing large classes and research labs, work–life balance, time management, managing service obligations, strategic communications training, and personal branding.
- (2) 'Advancing Together'. This peer network makes it possible for associate professor women faculty to come together with a facilitator to gain knowledge and skills that will help them advance to full professor. The key areas of

focus are preparation of the promotion dossier and personal narrative, networking, ramping up external funding, managing large classes and research labs, work–life balance, time management, managing service obligations, strategic communications training, and personal branding.

- (3) ‘ADVANCE Professors’. This peer network brings together full professor women faculty who agree to mentor assistant and associate women faculty in their college. There is also a professional development aspect for the women full professors themselves. They work together as a cohort to transform college and university structures and cultures to better retain and advance women faculty. The key areas of focus are mentoring, workload, recognition, teaching, research and publishing, work–life policies and awareness, implicit bias, and management of conflict and service responsibilities.

Early on in this project, we reviewed internal and external evaluator reports on all three networks over the first three years of the PU ADVANCE programme. Evaluators concluded that these three programmes enhanced participants’ agency in career advancement. Post-evaluations showed improvements in agency in career advancement using the same survey items asked of each candidate before they began the programme. Qualitative data showed that participants themselves attributed the programme with having enhanced their sense of agency in career advancement. Thus, we approached this study with the assumption that these programmes positively influenced women’s agency in career advancement. We sought to understand *how and why* the peer networks enhanced women’s agency in career advancement. Specifically, we wanted to understand the aspects of peer networks that seemed most influential in enhancing participant agency in career advancement. Beyond individual agency in career advancement, we also wanted to understand if the ADVANCE peer networks were disrupting gendered organisational practices and logics present within PU.

Research design

The primary method used for this study was a qualitative mixed-methods design of concurrent triangulation (Creswell 2003; Johnson, Onwuegbuzie, and Turner 2007; Creswell and Plano Clark 2011). In concurrent triangulation, different kinds of data are collected simultaneously, with the goal of confirming or substantiating findings within a single study. Creswell (2003) observed that in such studies, one offsets the weakness of one method or set of data with another, and findings are integrated and interpreted together.

We engaged in participant observations of the three peer networks at PU. We also analysed programme evaluations of the same peer networks and conducted interviews with faculty who had participated in these ADVANCE programmes.

The research design of this project has several strengths. A mixed-methods approach allowed the researchers to create a panoramic view of the three peer networks, with data that could be triangulated. The fact that data were collected over three years and included multiple cohorts of several peer networks created an opportunity to study the outcomes from multiple interventions and detect the degree of consistency in outcomes. Also, the sheer number of participant observations and evaluations completed increased our ability to achieve saturation in the kinds of peer network characteristics (e.g. programme structure and internal dynamics) that were most influential in

supporting faculty agency in career advancement and in countering the negative effects of gendered organisational practices for women faculty. Table 1 provides a description of each of the three peer networks, the number of participant observations completed, the number of participants in the peer network each year, and interviews and focus group interviews conducted.

Interview and focus group questions relevant to this study focused on participant experiences in the ADVANCE peer networks. We asked what aspects of participating in the peer network were most relevant and helpful to their careers, how, and why. We asked women faculty participants if they had experienced any challenges in their careers at PU. Participants were asked to reflect on whether and how participation in the peer network changed their way of viewing certain career situations or obstacles, and/or actions that they took to advance in their career.

During participant observations, we took both descriptive and reflective notes using an observation protocol (Creswell 2007). The protocol for note-taking allowed us to listen to and observe aspects of the programme that previous research has shown to be relevant to supporting faculty agency in career advancement, but was open-ended enough to allow other themes that emerged from discussions also to be recorded. For example, our literature review suggested there might be aspects of the physical setting and structure of the programme that might influence the outcome of agency, such as a comfortable room, set aside from typical work activities and devoid of evaluation. Our literature review cued our attention to how dialogue between peers who were likely to have experienced similar challenges (as women in a research university) might reveal gendered logics and experiences of dominance and submission and at the same time provide women strategies to overcome such challenges or ameliorate their effects. Thus, observations were informed by the literature review. However, there was also an

Table 1. Peer network description and data collected.

Cohort	Number of participants	Number of observations	Programme evaluations	Interviews and focus groups
<i>KOF</i> : Programme description: year-long network of pre-tenure assistant professor women created to enhance agency in career advancement (meets monthly for 2 hours)				
2011–2012	11	5 of 8 meetings	Pre and post	12 interviews
2012–2013	18	7 of 10 meetings	Pre and post	
2013–2014	16	8 of 10 meetings	Pre and post	
<i>Advancing Together</i> : Programme description: two-day workshop for women associate professors created to enhance agency in career advancement to full professor				
Winter 2012	16	All of the workshops	Pre and post	Two focus groups, 75 minutes each. 12 total participants
2013	12	for all three runs of the programme	Pre and post	
2014	12		Pre and post	
<i>Advance Professors</i> : Programme description: year-long network of women full professors created to enhance their agency as college leaders and mentors as well as provide a set of mentors for junior faculty				
Spring 2011	13	5 of 5 meetings	Pre and post	21 interviews
2011–2012	13	6 of 9 meetings	Pre and post	
2012–2013	13	6 of 9 meetings	Pre and post	
2013–2014	10	7 of 9 meetings	Pre and post	

open-ended aspect of observations wherein additional influences, not previously considered, could be recorded and later examined.

Corbin and Strauss (2008) note that ‘observations put researchers right where the action is, in a place where they can see what is going on’ (29–30). A potential drawback of observations is that the observer will misinterpret comments. Therefore, observations are often best used alongside other data sources from the same participants (Corbin and Strauss 2008). Accordingly, we triangulated observations with interview, focus group, and programme evaluation data. Confidentiality was provided to faculty by avoiding the use of names and disciplines and masking other identifiable comments.

Data analysis

The coding process for the analysis of programme evaluations, interviews, and observation notes was iterative and involved ‘thematic memoing’ (Rossman and Rallis 2003). We went through all three peer network meeting observations, interviews, and all programme evaluation material, and used Acker’s (1990, 2006) conceptualisation of gendered organisational practices to identify gendered organisational experiences faced by women faculty at PU. We then went through and coded the same observations, interview/focus groups, and programme evaluations for aspects of peer networks that seemed to be enhancing faculty agency in career advancement. Very quickly, two themes emerged. There were aspects of the programme structure itself that were influencing the outcome of enhanced agency and there were aspects of the dynamics between individuals within the groups that were influencing agency in career advancement. Finally, we went through meeting observations, interviews, and programme evaluation material to see if there were any ways in which aspects of the peer networks were disrupting or challenging gendered organisational practices and norms at PU. Although it could be argued that if peer networks enhanced the agency of women faculty in career advancement, the networks were in fact challenging gendered organisational cultures and norms, in this last round of coding we were interested in more than individual agency. Rather, we sought evidence of collective changes in thinking, influences on operating structures, and patterns of interactions that might disrupt or challenge more systematic gendered organisational structures and cultures.

Trustworthiness was strengthened by collecting data from multiple sources (Lincoln and Guba 2000), member checking the transcripts with participants, and being transparent with participants about the purposes and reporting of results (Maxwell 2012). We engaged in member checking by sharing transcripts with participants and giving them an opportunity to correct any part of their initial comments. Only three participants responded with clarifying statements, which were added to transcripts. All participants were provided anonymity, and we further masked the identity of participants by not noting their discipline next to their name in the text.

Internal validity was strengthened by each of the author’s separate analysis of transcripts to develop themes, and then joining them to compare these conclusions.

As with all research, there were limitations to this research design. Although the data for this study were collected over three years, this is not long enough to know if the peer networks achieved their long-term goals of influencing faculty retention and advancement. Also, our data collection was only able to capture interactions within meetings and not the many connections that occurred outside as participants connected by email, over lunch, or at committee meetings.

Findings

ADVANCE peer networks supported women's agency in career advancement. Specifically, peer networks enhanced women faculty's sense that they could be successful at PU in earning tenure, promotion, and advancement to leadership positions. Likewise, ADVANCE peer networks encouraged women faculty to take actions that helped them advance in their careers. ADVANCE peer networks also challenged gendered organisational logics and practices.

Two key aspects of peer networks facilitated these outcomes. First, the structure and design of peer networks as third spaces supported agentic perspectives and actions towards career advancement. Second, internal dynamics within peer networks, wherein participants engaged in dialogue, shared challenges, brainstormed solutions, and affirmed and recognised members, supported career agency and challenged gendered organisational logics. In this section, we describe how the structure and internal dynamics of the peer networks (a) enhanced agentic actions and agentic perspectives of individual women faculty and (b) challenged gendered logics. We also consider the strengths and limitations of peer networks in disrupting the gendered nature of universities.

How peer networks influenced women's career agency

The structure of ADVANCE peer networks as women-only, third spaces and the interactions that occurred within the networks fostered agentic perspectives and agentic actions in women's career advancement. The design of the peer networks and internal dynamics had this effect because they disrupted at least three gendered organisational practices that constrained agency in career advancement: isolation within gendered divisions of labour, interactions of dominance and submission, and gendered evaluation logics. As noted earlier, the gendered division of labour in most research universities means that there is a low representation of women in higher ranked faculty positions, and in some fields, only one woman, or woman of colour, in a department or college. The design of the peer networks as including women of similar rank, from all different departments across the university, decreased the isolation women faculty experienced inside departments. Also, this design expanded women's networks and connected them to a potential set of allies.

Within network sessions, the internal dynamics of women of similar rank sharing similar experiences and offering resonance, affirmation, strategies, and support further strengthened women's career agency. For example, for associate professors, the peer network was most helpful in finding women colleagues dealing with similar career constraints and affirming that these conditions were unfair but could be overcome. As one associate professor noted, 'It was comforting to be in an environment of women facing the same struggles and challenges that I face'. Another associate professor said, 'This job, while surrounded by people, can be very isolating, so knowing that I am not alone and that other people have the same concerns/issues as my own [was useful]'. Another associate professor noted that the ADVANCE programme was helpful in order to:

talk to some people about this without getting anyone in trouble or hearing people's stories about when someone grabs onto you and publishes over you and being a sidekick. I don't want to be a sidekick; that is not going to help me become full.

Finally, an associate professor new to the university explained: 'Coming from an agency where all my mentors were senior women, women of colour, this [coming to

Progressive University] was a big change. ADVANCE has been instrumental in helping me adjust. Has helped me feel like I fit in' (Advancing Together participant).

In each of these reflections, women faculty noted that being in a group with women of similar rank, sharing common challenges and ways in which they might overcome these challenges, changed the way they felt and thought about their own career possibilities. The structure and dynamics of peer networks made women feel less isolated, and caused them to adopt perspectives for new pathways to tenure and promotion, and that collaborative working relationships were possible. In other words, the peer networks facilitated agentic perspectives towards career advancement.

Women full professors also felt that the design of peer networks and the interactions within them made them feel less isolated and encouraged them to think and act in agentic ways. Because of ADVANCE, women full professors noted they felt that they now had an 'inner circle' of professional relationships. One full professor said the ADVANCE programme has 'put me in contact with women across campus who I definitely would never have encountered before. Certainly having a professional community of senior faculty women is something new for me completely'. Women full professors felt they had more power by virtue of their connections, similar to Hart's (2007, 2008) findings related to women's groups organising to create gender equity. One full professor noted that an ADVANCE colleague had asked her to be on the university senate to which she replied, 'I want no part of walking down the [campus] hill and sitting at a table with 20 other people, 18 of them being men and acting like it isn't a problem – which has happened to me in previous years. And she said to me, "I guarantee that won't happen here and if it does I will help you out." And I like the power of that. Whereas before I wouldn't have known, you know?' Another ADVANCE professor noted that because of her new network of senior colleagues she did not need to go alone to the ombudsmen again for problems she was having with colleagues. Instead she could get well-informed, savvy advice from other ADVANCE professors who had been through similar situations. ADVANCE professors also mentioned advice and support they had received from each other on salary negotiations, chairing major committees, and mentoring junior faculty in difficult departments. They also described actions they took to advance in career as a result of this strategic advice and information. Thus, the design of bringing women full professors together in a third space devoid of hierarchy and evaluation, but full of insider information and allies, facilitated women full professors' sense of control over gendered challenges.

While full professors emphasised the importance of allies and the relief of being in a group of women full professors, assistant professor women stressed the importance of receiving critical career information in an environment that was non-threatening. For example, one assistant professor explained:

Before I attended the KOF program, I only heard how hard the tenure process is from my senior colleagues, which makes me worry about it a lot. After attending these sessions offered by the KOF program, I started to figure out what I should do to pass the tenure process. Right now, I know what I should work hard for, so the pressure accumulated in my mind releases a lot. (KOF participant)

This faculty member felt as if the way career information had been delivered before was threatening and inaccessible. Both the information provided and its delivery constrained her sense that she could succeed. However, the structure of ADVANCE sessions, which always occurred in the same room, around a large, round table over

coffee and bagels or lunch, with similar-rank women faculty, felt intimate. In fact, it was striking how often women participants in ADVANCE programmes discussed sessions as 'comfortable' and 'a relief', and observed that they felt like they could ask questions in ways they could not in other venues.

Likewise, another assistant professor noted that her ADVANCE sessions were helpful and informative:

For example, we had one about grant writing, and I was so inspired by the workshop that I applied for a seed grant shortly after that and got the grant! It also gives us an opportunity to get to know our colleagues outside of our area of research. (KOF participant)

Another assistant professor learned skills related to negotiation and followed up her ADVANCE session with a request to her department chair for space for her research. In both cases, women faculty received information in a way that felt accessible, and left the session feeling greater possibility (i.e. agentic perspective) for negotiation or grant-writing; they then followed up with an agentic action to advance in career. Although topics of grant-writing or negotiation are career issues faced by all faculty, not just women faculty, during observations we also heard many issues raised that would likely not have been raised if men were present: bias in teaching evaluations, work-life conflict, chilly climates for collaboration, and unequal pay. For example, a KOF participant noted that she appreciated the chance to discuss teaching strategies and graduate students who did not treat her with the same respect as they did male colleagues. Regardless of topic though, ADVANCE peer networks enhanced agency in career advancement by creating rooms of allies, norms of open communication and exchange, and examples of how challenges might be overcome.

In a similar vein, Acker (2006) observes that interactions in gendered organisations tend to enact dominance and submission. Being spoken over in meetings, asked by a senior colleague to do more than one's fair share of work, or being discouraged from sharing one's opinion are all forms of domination. The third space nature of ADVANCE networks, wherein women faculty were not at home, not in their primary workplaces, but in a space where hierarchy and the threat of evaluation did not silence their voices, facilitated women faculty sharing experiences of bullying, and vulnerability based on rank. Facilitators, and women faculty themselves, provided resources for their peers to respond to sexist, racist, bullying behaviours; they gave people strategies for how to resist, navigate around, and ignore such behaviours. Many women faculty reported in programme evaluations that they used these suggestions to avoid or challenge situations where they previously felt constrained and dominated by colleagues.

Dialogue between participants in peer networks also helped participants see how their own agency in career advancement might have been constrained by the internalised ideal worker, or 'I can't' narratives. Through exchange of experiences, women identified gendered evaluation logics and ideal worker norms and discussed strategies and it choices to change or ignore those norms. For example, women associate professors shared stories of department colleagues who convinced them that they did not have 'the right stuff' to go up for promotion in their department. An associate professor said, 'I came to the ADVANCE workshop and I ended up talking to people involved in the ADVANCE program or related to it in my discipline who said, "You should really consider going forward. You've got a case". And my department is kind of like, "No, no, you need 150–200 papers. And you're not publishing in

Science ...”, despite the fact that is not an easy place period, but I’m [also] not doing something that necessarily fits in there very well.’ When participants heard stories from other women faculty who had found other ways out of the same situation in which they had felt stuck, they saw more choices and strategies than they had originally realised. Feeling that one has choices and control in a situation is a form of agency (O’Meara, Campbell, and Terosky 2011). This associate professor followed up after participation in the Advancing Together peer network by preparing her case materials. In other words, she began taking agentic actions towards her goal of career advancement.

In sum, the design of these networks as women-only, with faculty from across the campus but of the same rank decreased a sense of isolation that had constrained women’s agency before. Furthermore, the quality of dialogue, resonance, affirmation, information, and strategies exchanged between women in ADVANCE peer networks disrupted gendered organisational logics that had constrained women’s sense of agency in career advancement. This logic conveyed that the gendered organisational practices they had experienced were not (a) something that happened just to them or (b) the way it is for everyone and (c) nothing could be done about it. Participation in ADVANCE peer networks allowed women to see gendered situations as a pattern and assume agency in perspective, and in action, to overcome these patterns, at least in their own careers.

How peer networks challenged gendered organisational practices and contributed to gender equity reform

Before examining how the structure and internal dynamics of these three peer networks contributed to gender equity reform, it is necessary to consider two important contexts. First, these three networks are nested inside an overall ADVANCE programme at PU, which has many other structural and policy-related components. For example, the PU ADVANCE programme was a major catalyst behind PU’s adoption of parental leave for men and women academic parents in 2012, and it created a Dashboard project to make salary, career, and faculty workload data more transparent. The Dashboard project developed data tables that showed tenure track and tenured faculty whether their salary was in the 25th, 50th, 75th, or 100th percentile for their rank in their respective college. The same Dashboard also provided the average number of years between promotion to associate and full professor and the demographics of faculty within the college by rank as well as provided average campus service commitments.

Elsewhere in the ADVANCE programme, there were efforts to increase department chair awareness of implicit bias, provide seed grants to junior women faculty for interdisciplinary (two or more disciplines collaborating) and engaged research (research aligned with public good projects), and examine teaching and service workloads for gender equity. Thus, the three peer networks examined in this study were not the only efforts underway to disrupt gendered organisational practices and supports; moreover, their emphasis was on individual career agency and support. Many participants in the three peer networks discussed here were also benefitting from other ADVANCE programmes (e.g. a participant could be receiving a seed grant for research, be in one of our three peer networks, and have access to Dashboard data).

Second, the three programmes run annually for about 15 faculty members in each network, so their overall impact towards gender equity reform must be considered for scale, in comparison to the size of the institution (over 1200 tenure-line faculty, roughly 33% women faculty). Within that context, we found several ways in which the structure

and internal dynamics of the peer networks worked towards collective action and structural or cultural gender equity reform.

As noted by Acker (2006), symbols, language, and images reinforce divisions of labour in gendered universities. The structure of the peer networks challenged the gendered organisation and everyday practices of PU in several ways. First, women were brought into a third space where they were no longer in the minority as women, and/or were no longer in the minority at their rank – which was true in their departments and colleges for two-thirds of participants. This is stated recognising they still could have been in the minority by another identity such as race or sexual orientation. Second, the design of the peer networks brought women faculty into spaces not organised by disciplinary expertise and hierarchy. Membership in each peer network was not contingent on performance and involved no surveillance. Third, the ADVANCE professors not only served as a peer network among themselves, but also served in a structural role of mentor to other women in their colleges, thus formalising an ongoing role for recognition of gender issues and strategic sharing of information.

To build on this last point, ADVANCE professors were in visible, recognised positions. In this way, ADVANCE provided role models of successful women countering the norm of full professors and leaders as white men, with traditional male behaviours. The establishment of senior women talking to each other about gendered practices and interacting with leadership about such practices in their colleges meant the establishment of a key piece in the structure at the college level to promote change in the university. This type of established leadership role with clear responsibilities attached to a prestigious person who had the specific assignment to support assistant and associate professors opened an unprecedented space for interaction and support.

These positions, embedded in organisational structures, provided concrete support and mentoring in an ongoing way to women faculty – and often in ways that challenged structural norms and realities. For example, one participant said:

I wanted to let you know that the data on the Advance [Dashboard] site helped me successfully make a case about the inequity of my salary. After making my case and also hearing from other colleagues (especially my ADVANCE Professor) that this was an issue, [my dean] chose to request an equity raise on my behalf from [the president of the university]. I was awarded almost a 10% equity raise in addition to a merit raise I received for being in the top one-third tier of productive faculty in the school. My salary is still not quite where it should be but this is a big improvement. (Advancing Together participant)

Additionally, the internal dynamics of peer networks, the dialogues, and interactions were at times revelatory enough to provoke subsequent collective action and structural change. For example, an ADVANCE professor said:

We discussed a wide variety of challenges faced by women faculty and faculty of colour, and we considered various strategies for responding to those challenges. There was a strong consensus in favour of creating a Dean's ADVANCE Advisory Council to investigate the widespread feeling that women and faculty of colour bear a heavier burden of service. The Dean was very supportive of this idea, and we are currently working to make it happen.

New understandings gained through dialogue and through sharing of experiences also challenged previous assumptions and practices, such as tendencies on the part of women participants in the networks not to ask for or negotiate for lab space, course

release for major service assignments, Teaching Assistants, and peer reviews of teaching. By virtue of participation in ADVANCE network programmes, women began taking steps in their departments to ask for more support and negotiate in different ways, which changed some of those procedures for themselves and others in the future. The high academic reputation enjoyed by the ADVANCE professors enabled them to attract other women faculty to engage in peer networks. In turn, participation in peer networks enabled the junior faculty to make connections across campus, breaking down previous experiences of isolation.

As is the case for a number of practices, gains also accrued to actors providing and receiving services. The ADVANCE professor position gave women in the ADVANCE professor role knowledge about major policy developments on campus. While ADVANCE professors saw themselves making a difference, many of the tasks they engaged in led to eye-opening experiences. Being an ADVANCE professor gave the women in that role an enormous opportunity to develop contacts with 'like-minded women'. The ADVANCE professor learned many details about the university, an institution often characterised by a concentration of research and teaching efforts in one's own field and thus with limited communication across colleges and disciplines. One ADVANCE professor made remarks widely shared by other peers in the same role:

A couple of the junior faculty in my school who never thought about writing for grants came to the workshop; they wrote a grant, and they got it and they were so delighted. So you see you have these little wins and there's been a lot of enthusiasm for what ADVANCE is doing in my school so that's very encouraging to see. I love getting together with the ADVANCE professors and finding out what's happening, what issues they are facing, because I would never [have] had the opportunity to do it if it wasn't for the ADVANCE initiative.

In addition to providing a structural position and creating a communication network among ADVANCE professors, all three ADVANCE networks hosted many visitors who provided alternative models of success, beyond normative models. This was particularly important in disrupting dominant expectations about excellent faculty and their work as in the following examples:

It was great to get a chance to ask these three successful women how they run their very successful labs! (KOF participant)

The two scholars with kids that presented after the lunch break were great. I liked how they talked about squeezing in stuff like answering emails on their smartphones while waiting for appointments or reading a paper while waiting to pick up their kids at an activity. That was really useful. (KOF participant)

In these cases, high-profile women full professors acted as role models in a very accessible way to more junior women faculty, revealing the strategies they had and were using to succeed. Related to this, women associate professors who had not been on the fast-track since promotion to associate professor adopted an agency outlook after hearing very successful women full professors who also had not followed very traditional trajectories, as in these examples:

After hearing what [well-known successful STEM woman faculty member] went through and didn't get [promoted], but went back again and did, I thought I am going to go back and see. I thought her speaking was just inspirational, a nontraditional trajectory. (Advancing Together participant)

As noted by Acker (2006), a key gendered practice is that organisational logic and systems of evaluation and management favour male preferences and characteristics. Participation in ADVANCE peer networks, especially at the associate and full levels, countered organisational logics about what one must do to be promoted, obtain resources, get a higher salary, or get a fairer workload. Women in these networks were from all across campus and things were done very differently in different colleges. They shared how they had shifted their thinking on promotion, requested resources, and otherwise overcame challenges in ways that challenged dominant narratives and gendered understandings that there was nothing they could do. Thus, the structure and design of the ADVANCE peer networks as third spaces, and ADVANCE professors as alternative role models and intermediaries challenged gendered organisational norms and practices. Interactions of resonance, shared experiences and strategies, affirmation, and increased awareness challenged gendered organisational practices by creating spaces where collective action could be imagined, considered, and initiated.

There was also a strong sense among ADVANCE network participants that simply the presence of the networks and the discussion of gender issues on campus were creating greater accountability on campus around them. One full professor said ADVANCE has built a 'cohort of women who know each other and are thinking hard about problems at the University'. An associate professor remarked that ADVANCE is 'opening the eyes of women or giving them connections and in-roads they wouldn't have had'. One full professor who had been on the campus a long time said, 'I think that people will get that they cannot do things unnoticed and, yes, there will be a bunch of women that may end up making life crazy and a little more difficult [laughs] because, sorry, somebody is watching'. Another full professor observed that the ADVANCE programme was acting as a sort of 'sidewalk cut-out' system for women in the research university who did not quite fit:

Like you cut out the sidewalk [curb] so people with wheelchairs can get up on the sidewalks, but you also have able-bodied people pushing strollers, that are biking, that use the sidewalk cut-outs too. I think that's what the ADVANCE Program could be, is sidewalk cut-outs for all of us.

In this way, peer networks encouraged gender equity by increasing awareness and sense of accountability that there were actors interested in and trying to reform gendered organisational practices and norms.

The limitations of women-only peer networks to gender equity reform

Now we consider ways in which the design and internal dynamics of peer networks were limited and might not facilitate gender equity reform. The key finding here was that while peer networks enhanced awareness of structural problems, they were often not the right place to address them. For example, the ADVANCE networks created a safe space for women faculty to discuss gendered organisational practices such as unfair workloads, develop skills to negotiate better workloads, and prioritise service requests. However, this did not change gendered practices within departments wherein many women faculty continued to feel that they were asked more often to engage in service than men faculty, did more than their fair share, or held more time-consuming teaching and advising assignments. For example, one ADVANCE professor discovered that in her college 20 male faculty were mentoring 20 Ph.D.

students, while 10 women faculty were mentoring 60 Ph.D. students. This is an example where recognition of the need for a critical service was also contrasted with unequal burdens carried out by women professors. The ADVANCE professor reporting on this remarked, '[Mentoring] for many of us is the most satisfying part of the job but also tends to be one of the unrewarded parts of the job'. The ADVANCE networks offered greater awareness of these structural problems and even agentic career strategies to confront them, but not long-term structural solutions to lessening them. Both cultural and structural interventions with department chairs and department cultures on transparent, equitable workload practices would establish more lasting and targeted change for these issues. An example of such a strategy would be an analysis of faculty activity reports to reveal gender and race differences if they exist, and then constructing solutions together through department faculty consensus; in other words, by separating women faculty from the specific spaces where many of the gendered organisational practices were happening, and placing them in an environment with only other women – the peer networks removed them from many of the spaces where structural problems needed to be fixed.

In a second example, ADVANCE peer networks created a forum to share information about available work–life policies such as parental leave and stop-the-tenure-clock. In peer network meetings, participants discussed strategies they were using to balance work and life demands. However, discussion of policy options and strategies did not significantly reduce the stress women faculty felt in balancing work and life priorities, or provide long-term solutions to 'ideal worker norms' in their departments. In one observation of a network meeting for assistant professors, the stress women faculty expressed was palpable. There were tears as three assistant professors described their stress over rising expectations for productivity, and spouses who did not understand why they worked all of the time.

As participants in the workshops shared experiences, it became obvious that most women faced similar problems; the recognition of common problems gave them confidence to act to secure better conditions to balance work–life issues and to demand more transparency through a better dissemination of family and leave policies. However, this did not do much to change the overall work ethic and normative ideal worker culture of their departments and colleges which had expectations that made the balance of work and life challenging, especially with children. There were times when women faculty affirmed each other's concerns in meetings, noting their need to sometimes prioritize family over work, and carve out time for exercise and loved ones. However, the cultural narrative of working as hard as one could was strong (especially for pre-tenure faculty) and difficult to disrupt, especially since many of the senior role model women brought into the ADVANCE peer networks as role models admitted they themselves worked countless hours to advance.

Finally, participants in each of the ADVANCE peer networks found allies and peer support within networks. However, as women helped each other brainstorm solutions to gendered practices and specific problems women faced within their departments, the focus was more often overcoming a specific instance or problem. Rarely did the conversation turn to systemic problems and collective strategies that the group of women together might instigate for institutional change. One exception to this was collective action taken on the part of ADVANCE professors (full professor women) to recommend a change to the instructions external reviewers for promotion applications receive regarding how to evaluate candidates who had taken a parental leave or a stop-the-tenure-clock year. Here, they advocated together for an institutional policy

that might be applied to all faculty so as to reduce the stigma and bias associated with individuals adding a year to their tenure clock. However, more often, women faculty discussed creative solutions for getting around, ignoring, or side-stepping bullying colleagues or unfair practices, rather than confronting them in any collective way. There were a number of reasons for this, not the least of which was that two of the three networks studied here were focused on the women's own professional career advancement and agency – not collective organising or change. There were other programmes within ADVANCE focused on structural change – such as policy reform, transparent data, and awareness of unconscious bias. However, it was striking that most of the women in the peer networks discussed how to overcome problems individually – with the help of colleagues – rather than as patterns to be addressed collectively. The peer networks served as excellent forums to increase awareness that there were global problems, provide affirmation and resonance of experience, and devise individual strategies, but rarely did discussions turn towards collective change, and when they did, they were more often among the more senior women professors, and out of their concern as mentors of other women.

Discussion and implications

We found two key features of peer networks, their structure and design, and the internal dynamics promoted within them, essential to promoting women's career agency and challenging gendered organisational practices. These findings are consistent with those of previous studies that found that women-focused social networks and organising groups can be important spaces of self-awareness, agency, and collective efforts at gender equity reform (Hart 2007, 2008). Likewise, our findings are consistent with those of Kiyama, Lee, and Rhoades (2012) and Kezar (2014) that emphasise the role of personal and professional relationships in enacting organisational change and inspiring critical agency, especially around equity.

The ingredients in these peer networks were critical to their success in achieving identified outcomes. That is, their design as cross-campus networks of women of similar rank, with no performance or evaluation component, mattered to their ability to enhance women's agency. Likewise, the fact that the structure and internal dynamics within the sessions were non-hierarchical and set outside everyday department organisational practices provided relief from gendered organisational norms and empowerment. In addition, as critical theory suggests (Abel and Sementelli 2004), the dialogues within sessions promoted sharing of information, awareness, examples, role models, resonance, and a sense of allies, all of which worked against the constraints placed on women's careers by gendered organisational cultures and practices.

At the same time, the design of these activities limited their utility in long-term gender equity reform. Women faculty conducted most of their academic work inside their departments and in their disciplinary fields. Participation in the network was thereby structured to help women navigate department and field challenges better, but did not directly change the structural challenges in their departments and fields that they would have to face. It could be argued that if these networks are successful, and retain and promote an increasing percentage of women, organisational change will occur by virtue of the changing division of labour and norms of faculty work life. For example, each time a woman full professor is appointed and each time an assistant professor renegotiates her lab space or workload for equity reasons, gendered

organisational norms are challenged and shift. However, these programmes are small and, while critically important, will usually not serve the majority of the women faculty at any one research university. Compared to the strength of norms they are facing, impact will be limited. For this reason, it is important that peer networks be one part of institutional efforts at gender equity reform, but not the only one. Ideally there needs to be greater integration between peer networks and other structural efforts at change.

ADVANCE programmes might consider merging individual professional growth and advancement programmes such as those explored here with action-oriented, collective efforts used by many women activists, women's commissions, and women's equity legislation programmes. For example, early career assistant professor women might be encouraged not only to meet to support each other's individual career advancement, but also to collectively consider the culture of impediments to women's advancement and retention and publish their concerns in a white paper or blog, authored by the collective group but without any one name on the author line. Such efforts could inform administration and policy change.

Women full professors meeting together in a peer network might work with administrators and ADVANCE programmes to develop unconscious bias trainings for their colleges and improve university-wide awareness of gender bias in student evaluations, workload allocation, and pay. There is untapped potential in the design of peer networks as a collective voice. Rather than individuals fighting battles alone, these groups could utilise shared experiences and advocate together as a stronger voice for campus-level awareness, policy reform, transparency, and accountability for gender equity outcomes.

This account of the achievements of ADVANCE peer networks at a research-intensive university gives hope for considerable improvement of women's conditions, even in highly competitive and individualistic environments, such as the twenty-first century university. At the same time, analyses of peer networks as mechanisms for gender equity reform reveal the need for coordination of individual support and structural reform. Such strategies will need to focus on persons trying to navigate gendered organisational environments, and on their successes, as well as on changing those environments structurally, so they will enable inclusive excellence.

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

This article is based upon work supported by the National Science Foundation under Grant No. HRD-1008117.

References

- Abel, C., and A. Sementelli. 2004. *Evolutionary Critical Theory and Its Role in Public Affairs*. Armonk, NJ: M.E. Sharpe.
- Acker, J. 1990. "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations." *Gender and Society* 4 (2): 139–158.
- Acker, J. 2006. "Inequality Regimes, Gender, Class and Race in Organizations." *Gender and Society* 20 (4): 441–464.

- Bilimoria, D., Joy, S., and Liang, X. F. 2008. "Breaking Barriers and Creating Inclusiveness: Lessons of Organizational Transformation to Advance Women Faculty in Academic Science and Engineering." *Human Resource Management* 47 (3): 423–441.
- Bilimoria, D., and X. Liang. 2012. *Gender Equity in Science and Engineering: Advancing Change in Higher Education*. New York: Routledge.
- Bird, S. R. 2011. "Unsettling Universities' Incongruous, Gendered, Bureaucratic Structures: A Case-Study Approach." *Gender, Work and Organization* 18: 202–230.
- Bourdieu, P. 1985. "The Genesis of the Concepts of Habitus and Field." *Socio-criticism* 2 (2): 11–24.
- Campbell, C. M., and K. O'Meara. 2014. "Faculty Agency: Departmental Contexts that Matter in Faculty Careers." *Research in Higher Education* 55 (1): 49–74.
- Cantor, N. 2011. *Gender Equity in the Sciences: Forging a 'Third Space'*. Office of the Chancellor, Paper 42. Syracuse, NY: Syracuse University. <http://surface.syr.edu/cgi/viewcontent.cgi?article=1044&context=chancellor>.
- Clark, S. M., and M. Corcoran. 1986. "Perspectives on the Professional Socialization of Women Faculty: A Case of Accumulative Disadvantage?" *The Journal of Higher Education* 57 (1): 20–43.
- Corbin, J., and A. Strauss. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage.
- Creswell, J. W. 2003. *Research Design. Qualitative, Quantitative and Mixed Methods Approaches*. 2nd ed. Thousand Oaks, CA: Sage.
- Creswell, J. 2007. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 2nd ed. Thousand Oaks, CA: Sage.
- Creswell, J. W., and V. L. Plano Clark. 2011. *Designing and Conducting Mixed Methods Research*. 2nd ed. Thousand Oaks, CA: Sage.
- Daly, A. 2010. "Mapping the Terrain: Social Network Theory and Educational Change." In *Social Network Theory*, edited by A. Daly, 1–17. Cambridge, MA: Harvard Education Press.
- Dean, D., S. Bracken, and J. Allen, eds. 2009. *Women in Academic Leadership: Professional Strategies, Personal Choices*. Sterling, VA: Stylus Publishing.
- Fox, M. F. 2008. "Institutional Transformation in the Advancement of Women Faculty: The Case of Academic Science and Engineering." In *Higher Education: Handbook of Theory and Research*, Vol. 23, edited by J. C. Smart, 73–103. New York: Springer.
- Gaventa, J., and R. Tandon, eds. 2010. *Globalizing Citizens: New Dynamics of Inclusion and Exclusion*. London: Zed Books.
- Giddens, A. 1979. *Central Problems in Social Theory: Action, Structure and Contradictions in Social Analysis*. Berkeley: University of California Press.
- Glazer-Raymo, J. 1999. *Shattering the Myths: Women in Academe*. Baltimore, MD: Johns Hopkins University Press.
- Glazer-Raymo, J. 2008. "The Feminist Agenda: A Work in Progress." In *Unfinished Agendas: New and Continuing Gender Challenges in Higher Education*, edited by J. Glazer-Raymo, 1–34. Baltimore, MD: Johns Hopkins University Press.
- Habermas, J. 1992. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge: Polity.
- Hart, J. 2007. "Creating Networks as an Activist Strategy: Differing Approaches Among Academic Feminist Organizations." *Journal of the Professoriate* 2 (1): 33–52.
- Hart, J. 2008. "Mobilization Among Women Academics: The Interplay Between Feminism and Professionalization." *National Women's Studies Association (NWSA) Journal* 20 (1): 184–208.
- Johnson, R. B., A. J. Onwuegbuzie, and L. A. Turner. 2007. "Toward a Definition of Mixed Methods Research." *Journal of Mixed Methods Research* 1 (2): 112–133.
- Kemelgor, C., and H. Etkowitz. 2001. "Overcoming Isolation: Women's Dilemmas in American Academic Science." *Minerva* 39: 239–257.
- Kezar, A. 2014. "Higher Education Change and Social Networks: A Review of Research." *The Journal of Higher Education* 85 (1): 91–124.
- Kilduff, M., and D. Krackhardt. 2008. *Interpersonal Networks in Organizations: Cognition, Personality, Dynamics, and Culture*. Cambridge: Cambridge University Press.
- Kiyama, J. M., J. J. Lee, and G. Rhoades. 2012. "A Critical Agency Network Model for Building an Integrated Outreach Program." *The Journal of Higher Education* 83 (2): 276–303.

- Lester, J., M. Sallee, and J. Hart. 2013, May. "Beyond Gendered Universities? Implications for Research on Gender in Organizations." Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.
- Lincoln, Y. S., and E. G. Guba. 2000. "Paradigmatic Controversies, Contradictions, and Emerging Confluences." In *Handbook of Qualitative Research*. 2nd ed., edited by N. K. Denzin and Y. S. Lincoln, 163–188. Thousand Oaks, CA: Sage.
- Lincoln, A. E., S. Pincus, J. Bandows Koster, and P. S. Leboy. 2014. "The Matilda Effect in Science: Awards and Prizes in the US, 1990s and 2000s." *Social Studies of Science* 42 (2): 302–320.
- Marcuse, H. 1970. *Five Lectures*. Boston, MA: Beacon Press.
- Maxwell, J. A. 2012. *A Realist Approach for Qualitative Research*. Thousand Oaks, CA: Sage.
- Misra, J., J. H. Lundquist, E. Holmes, and S. Agiomavritis. 2011, January/February. "The Ivory Ceiling of Service Work." *Academe* 97 (1): 22–26. <http://www.aaup.org/aaup/pubsres/academe/2011/jf/feat/misr.htm>.
- Modern Language Association. 2009. *Standing Still: The Associate Professor Survey*. New York: MLA. http://www.mla.org/assocprof_survey.
- Morimoto, S. A., and A. Zajicek. 2012. "Dismantling the 'Master's House': Feminist Reflections on Institutional Transformation." *Critical Sociology*: 1–16. doi:10.1177/0896920512460063
- Morimoto, S. A., A. M. Zajicek, V. B. Hunt, and R. Lisnic. 2013. "Beyond Binders Full of Women: NSF ADVANCE and Initiatives for Institutional Transformation." *Sociological Spectrum: Mid-South Sociological Association* 33 (5): 397–415. doi:10.1080/02732173.2013.818505
- National Science Foundation. 2006. *ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers*. Arlington, VA: National Science Foundation. http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383.
- Oldenburg, R. 1989. *The Great Good Place*. New York: Marlowe & Company.
- Oldenburg, R. 1991. *The Great Good Place*. Berkeley: University of California Press.
- O'Meara, K. A. 2015. "A Career with a View: Agentic Perspectives of Women Faculty." *Journal of Higher Education* 86 (3): 1–26.
- O'Meara, K. A., C. M. Campbell, and A. Terosky. 2011, November. "Living Agency in the Academy: A Conceptual Framework for Research and Action." Paper presented at the annual meeting of the Association for the Study of Higher Education, Charlotte, NC.
- Putnam, R. 1995. "Bowling Alone: America's Declining Social Capital." *The Journal of Democracy* 6 (1): 65–78.
- Putnam, R. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York, NY: Simon and Schuster.
- Pyke, K. 2014. "Faculty Gender Inequity and the 'Just Say No to Service' Fairytale." In *Disrupting the Culture of Silence: Confronting Gender Inequality and Making Change in Higher Education*, edited by Kris De Welde and Andi Stepnick, 83–95. Sterling, VA: Stylus Publishing.
- Rosser, S. V., and J. L. Chameau. 2006. "Institutionalization, Sustainability, and Repeatability of ADVANCE for Institutional Transformation." *Journal of Technology Transfer* 31: 335–344.
- Rossmann, G. B., and S. F. Rallis. 2003. *Learning in the Field: An Introduction to Qualitative Research*. Thousand Oaks, CA: Sage.
- Sallee, M. W. 2013. "Gender Norms and Institutional Culture: The Family-Friendly Versus the Father-Friendly University." *The Journal of Higher Education* 84 (3): 363–396.
- Sallee, M. W. 2011. "Performing Masculinity: Considering Gender in Doctoral Student Socialization." *The Journal of Higher Education* 82 (2): 187–216.
- Smith, J. W., and T. Calasanti. 2005. "The Influences of Gender, Race, and Ethnicity on Workplace Experiences of Institutional and Social Isolation: An Exploratory Study of University Faculty." *Sociological Spectrum* 25 (3): 307–334.
- Stewart, A., D. LaVaque-Manty, and J. Malley. 2004. "Recruiting Female Faculty Members in Science and Engineering: Preliminary Evaluation of One Intervention Model." *Journal of Women and Minorities in Science and Engineering* 10: 361–375.
- Sturm, S. 2006. "The Architecture of Inclusion: Advancing Workplace Equity in Higher Education." *Harvard Journal of Law and Gender* 29 (2): 248–333.

- Tenkasi, R., and M. Chesmore. 2003. "Social Networks and Planned Change: The Impact of Strong Ties on Effective Change Implementation and Use." *Journal of Applied Behavioral Science* 39 (3): 281–300.
- Terosky, A. L., K. O'Meara, and C. Campbell. 2014. "Enabling Possibility: Women Associate Professors Sense of Agency in Career Advancement." *Journal of Diversity in Higher Education* 7 (1): 58–76.
- Trower, C. A. 2012. *Success on the Tenure Track: Five Keys to Faculty Job Satisfaction*. Baltimore, MD: Johns Hopkins University Press.
- Valian, V. 1998. *Why So Slow? The Advancement of Women*. Cambridge, MA: MIT Press.
- Ward, K., and L. Wolf-Wendel. 2012. *Academic Motherhood: How Faculty Manage Work and Family*. New Brunswick, NJ: Rutgers University Press.
- West, M. S., and J. W. Curtis. 2006. *AAUP Faculty Gender Equity Indicators 2006*. Washington, DC: American Association of University Professors.
- Winslow, S. 2010. "Gender Inequality and Time Allocations Among Academic Faculty." *Gender & Society* 24 (6): 769–793.