



Women's Leadership in Higher Education
Dr. Joya Misra, University of Massachusetts, Amherst

About the ARC Network

Funded by the National Science Foundation ADVANCE Program, Awards HRD-2121468 and HRD-1740860, the ADVANCE Resource and Coordination (ARC) Network seeks to achieve gender equity for faculty in higher education science, technology, engineering, and mathematics (STEM) disciplines. As the STEM equity brain trust, the ARC Network recognizes the achievements made so far while producing new perspectives, methods and interventions with an intersectional, intentional and inclusive lens. The leading champion in North America to propel the inclusion of women in the field of engineering, the Women in Engineering ProActive Network (WEPAN), serves as the backbone organization of the ARC Network.

About the Virtual Visiting Scholars

The Virtual Visiting Scholars (VVS) program provides a unique opportunity for select scholars across disciplines to pursue research meta-analysis, synthesis, and big data curation on topics crucial to STEM faculty equity. VVS analyze existing research and data, synthesizing different, sometimes competing, perspectives, frameworks, metrics, and outcomes to offer new insights and applications to the broader community.

About the Author

Dr. Joya Misra is currently Professor of Sociology and Public Policy at the University of Massachusetts, Amherst. She has also served as Director of the Institute for Social Science Research at the University of Massachusetts, Amherst, as Vice President of the American Sociological Association, and as Editor of *Gender & Society*. Dr. Misra's experience includes leadership on multiple NSF ADVANCE grants which focus on organizational change for gender equity in STEM. Dr. Misra's research in the areas of political sociology and labor markets explores inequality from an intersectional standpoint. Much of her research considers how gender and parenthood affect women's employment, wages, and risk of poverty. She also has studied how race, gender, nationality, and class shape the experiences of retail workers and academics. Dr. Misra published her first piece on intersectional inequality among faculty members in 1999. Her collaborative research on gender equity in STEM appears in a wide array of journals, as well as in regular contributions to *Inside Higher Education*. Dr. Misra earned her BA in Religion from Centenary College and her MA and PhD in Sociology from Emory University.

Acknowledgement

I am enormously grateful to the ARC Network for funding my work as part of the Virtual Visiting Scholar Program, including Crystal Bedley, Meredith Gibson, Heather Metcalfe, Stephani Page, and my cohort, Kimberly Scott, Ramón S. Barthelemy, and Ramon Goings, as well as the ARC Network Research Advisory Committee chaired by Joan Herbers. Also grateful for many colleagues for their comments and suggestions, including Sharla Alegria, Marta Calás, Dawn Culpepper, Lauren Hindman, Audrey Jaeger, Ember Kanelee, Jennifer Lundquist, Ethel Mickey, KerryAnn O'Meara, Linda Smircich, Laurel Smith-Doerr, and Donald Tomaskovic-Devey.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Introduction

Although there has been growth in women’s participation as students and as faculty members, there remain relatively few women in leadership positions, reflecting a lack of cultural as well as structural support for women’s leadership (Blackwood and Brown-Welty 2011; Bornstein 2009; Dean 2009; Drake 2015; Enke 2014; Farris et al. 2010; Ginsberg et al. 2019; Hill et al. 2019; Longman and Anderson 2011; Moreland and Thompson 2019; Morris and Laipple 2015; O’Connor 2019; Pasquerella and Clauss-Ehlers 2017; Statti and Torres 2019; Twombly 1998; Vongalis-Macrow 2016; Wheat and Hill 2016). Even in fields with similar numbers of or more women students as men, women are very underrepresented as leaders (Sloma-Williams et al. 2009). As Howard and Gagliardi (2018:2) argue:

Data show that women may be in some ways more prepared than men to advance to the presidency, with greater percentages having served as an interim president, earned advanced degrees, and participated in formal leadership development opportunities—yet it is reasonable to infer from their numbers in the presidency that they are less likely than men to be placed in the position.

This challenge is true not only in the North America, but in variety of other global locations, including Africa, Asia, Australia, Latin America, and Europe (Adamma 2017; Airini et al. 2011; Aiston and Yang 2017; Akubue 2016; Almaki et al. 2016; Beer 2015; Burkinshaw, Cahill, and Ford 2018; Burkinshaw and White 2017; Doerrer 2015; Ekine 2018; Gorondutse et al. 2019; Griffiths 2012; Howe-Walsh and Turnbull 2016; Kabonesa and Kaase-Bwanga 2014; Lord and Preston 2009; Malik 2011; Manfredi, Clayton-Hathway, and Cousens 2019; Maphalala and Mpfu 2017; McNae and Vali 2015; Moodly and Toni 2017, 2019; Morley 2014; Morley and Crossouard 2016; Mott 2002; Moultrie 2003; Nguyen 2013; Nyoni, He, and Yusuph 2017; O’Connor 2019; O’Connor, Carvalho, and White 2014; Odhiambo 2011; Peterson 2016, 2018, 2019; Read and Kehm 2016; Redmond et al. 2017; Sader, Odendaal, and Searle 2015; Sánchez-Moreno, López-Yáñez, and Altopiedi 2015; Twombly 1998; Wallace and Marchant 2009; Wang, Yue, and Yu 2013; Wroblewski 2017; Zhao and Jones 2017). As Gorondutse and colleagues (2019: 307) recently noted, “Throughout 27 countries in the European Union, only 13 per cent of higher education institutions are led by women.”

In the U.S., women of color, including Black, Indigenous, Latinx, and Asian women, are particularly underrepresented among leaders, particularly at predominantly white institutions (Burgh House 2001; Chen and Hune 2011; Chung 2008; Crespo 2013; Enke 2014; Everett 2014; Fitzgerald 2013; Generett and Welch 2018; Ginsberg et al. 2019; Gonyea 2019; Lloyd-Jones 2011; Logan and Dudley 2019; Montas-Hunter 2012; Moses 2009; Ngunjiri and Hernandez 2017; Owens 2020; Penny and Gaillard 2016; Roca Mella 2012; Sanchez-Zamora 2013; Sitting Crow 2013; Thompson and Dawkins 2010; Turner and Kappos 2009; Wardell 2010; Wheaton and Kezar 2019; Whitehead 2017).¹ Very little has been written about the experiences of LGBT women leaders, though this group is also underrepresented in leadership positions (Hill et al. 2019; Renn 2015). Similarly, there is little analysis of disabled women leaders (Olkin 2011).

Women leaders have been more successful at making inroads into more senior positions at historically Black colleges and universities (Commodore et al. 2020; Gasman and Perna 2011; Penny and Gaillard 2016), women’s colleges (Burgh House 2001), smaller colleges, and community colleges (Blackwood and Brown-

¹ While Asian and Pacific Islander women are not traditionally viewed as members of “underrepresented groups,” they are underrepresented relative to the larger population among full professors, as well as among academic leaders, although Asian and Pacific Islander men are overrepresented among full professors (Chen and Hune 2011; Roca Mella 2012; Roy 2019).



Welty 2011; Campo 2018; Chen and Hune 2011; Eddy 2009; Eddy and Ward 2015; Enke 2014; Gill and Jones 2013; Hill et al. 2019; Mitchell et al. 2019; Sullivan 2009); yet very senior positions still come later in life than for men (Blackwood and Brown-Welty 2011; Eddy 2009; Hill et al. 2019). Women of color leaders are more likely to be leading in minority-serving institutions, and are very rare in predominantly white institutions (Chen and Hune 2011; Enke 2014; Howard and Gagliardi 2018; Ngunjiri and Hernandez 2017). As one recent study reports, at community colleges, “33.6 percent of the presidents are women, as compared to 22.6 percent at baccalaureate colleges, 23.7 percent at master’s colleges and universities, and 21.6 percent at doctoral universities” (Pasquerella and Clauss-Ehlers 2017:8). Women leaders are less visible in the most prestigious doctoral-granting institutions (Enke 2014; Ginsberg et al. 2019; Hannum et al. 2014; Howard and Gagliardi 2018; O’Connor 2019; Wheat and Hill 2016) as well as in Christian-oriented colleges (Longman et al. 2018; Longman and Anderson 2011).

These issues also are true for women in STEM fields. Rosser (2012) argues that faculty from STEM fields are particularly well suited to becoming university leaders, because of the importance of teamwork skills and managing personnel, and large budgets. Indeed professional success and research skills often provide administrative and leadership skills (Madsen 2008). Yet since white men make up the “dominant” group in academia, their norms and values have become deeply embedded, including in terms of academic leadership, making them appear to be the best leaders (Mertz 2011). Leadership culture may further reflect a style of leadership that is less easily accessible to women (Fitzgerald 2013; Statti and Torres 2019). Yet, as “outsiders,” STEM women leaders may also bring greater creativity and effective leadership skills to higher education administration (Hodges and Welch 2018; Moreland and Thompson 2019).

In this review, I analyze the existing literature on women leaders in higher education, exploring the central findings, and what the implications are for universities who aim to diversify their leadership. Throughout the review, I pay particular attention to the experiences of women of color leader. In the first section, I analyze the pathways into leadership roles for women. Next, I explore what the literature suggests about leadership approaches taken by women leaders. Next, I consider the many challenges faced by women leaders. In the following sections, I explore the contradiction of faculty women’s greater engagement in service, and their increased visibility in middle management positions. I use these literatures to help explain why women are overrepresented in leadership at local levels, but remain underrepresented in senior leadership, arguing that it is, in part, their involvement in devalued service and administrative work, that limits opportunities for senior leadership roles.

Pathways to Leadership

Not all faculty members aspire to leadership, and leaders may choose an administrative route later in their careers. Women faculty may be less likely to view themselves as on the pathway to university leadership than men, in part because leadership often requires career success – while career opportunities for women, and particularly STEM women, may be blocked. Women may also be less likely to plan to move into leadership positions, seeing their successes as “accidental,” rather than planned. Importantly, women leaders are more likely than men to move into leadership after moving to a different institution and/or succeeding in “interim” positions and are more likely to be brought into leadership positions in a crisis. Yet women leaders also can make strategic decisions that lead them into leadership positions, with many referencing their interest in making a difference for their colleagues, university, and community. Women interested in leadership can also benefit through taking part in networking, mentoring, and training programs. In these ways, women’s routes into leadership remain somewhat different from men’s.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



One central challenge for women to attaining leadership positions reflects barriers earlier in a career. In so far that white women and women of color are less likely to be hired, tenured, and promoted due to biased processes of recruitment and promotion (particularly in STEM fields), they are not available as leaders (Aiston and Yang 2017; Burkinshaw et al. 2018; Castañeda and Hames-García 2014; Chen and Hune 2011; Eveline 2004; Ginsberg et al. 2019; Kabonesa and Kaase-Bwanga 2014; Klotz 2014; Mainah 2016; Mertz 2011; Pasquerella and Clauss-Ehlers 2017; Peterson 2018; Pirjan 2016; Rosser 2012; Wheat and Hill 2016; Wyn, Acker, and Richards 2000). While some researchers suggest that women still face a “glass ceiling” at the higher levels, such as promotion to full Professor, others critique that metaphor, pointing to the remarkable number of obstacles – a “sticky floor” – that faculty women face throughout their career (Ginsberg et al. 2019; Pasquerella and Clauss-Ehlers 2017; Redmond et al. 2017). Indeed, if women do not receive the appropriate support and mentoring regarding expectations for promotion and tenure, they have no chance to hit a glass ceiling (Rosser 2012).

For the most senior positions in higher education, such as Chancellor, President, Provost, Vice President, or Dean, attaining promotion is critical (Chen and Hune 2011; Klotz 2014; Madsen 2008; Read and Kehm 2016; Rosser 2012; Wheat and Hill 2016). Attaining full professorship can be particularly challenging for women in STEM; in most disciplines, women, and particularly women of color, remain underrepresented at senior ranks (Chen and Hune 2011; Fitzgerald 2013; Fox and Kline 2016; Fox and Xiao 2013; Ginsberg et al. 2019; Moses 2009; Schnackenberg 2019; Sloma-Williams et al. 2009; Statti and Torres 2019; Turner, González, and Wood 2008). As Ginsberg et al. (2019:226) explain, Black women may face a lack of clear guidelines, mentoring, and constructive feedback, while also experiencing higher levels of scrutiny. LGBTQ faculty members report having to walk a fine line, with the comfort of their superiors and the climate at the institution determining whether they are “out” at work (Ginsberg et al. 2019). Faculty from marginalized groups may also be more likely to research topics or use research methods, that are less valued by colleagues (Statti and Torres 2019).

This is also true for activism or community-engaged research, that brings academic knowledge to larger publics, but can be devalued (Detweiler, LaWare, and Wojahn 2017; Skachkova 2007). One of the challenges is in how “excellence,” which is often used as a standard for promotion, can be a vague enough concept so that it operates in gendered ways – moving men forward while limiting women’s mobility (O’Connor 2019).

Being successful in their academic careers, through frequent publishing and presenting their work, can propel leaders forward (Hill et al. 2019; Moodly and Toni 2017; Moses 2009; Sullivan 2009; Tiao 2006). Women leaders in top academic positions appear to be more likely than men to have come through a traditional scholar-leader pathway (Corcoran 2008; Mahady 2018). Studying higher education and leadership can prepare women for success in leadership positions, including through attending conferences, using expert consultants, and reading widely (Aschenbrenner 2006; Burgh House 2001; Madsen 2008; Moodly and Toni 2017; Sullivan 2009). Women of color leaders are more likely to have earned their degrees in education (Moses 2009) and may be more likely to have contributed to diversity programming at their universities before moving into senior leadership roles (Burgh House 2001).

Opportunities for women to voice concerns, and address issues facing the university, can help develop pathways to move into leadership positions. Where structures allow women’s voices to be heard, whether in faculty unions, chairing departments, in Dean’s or Provost’s Councils, or through Faculty Senates, women are more likely to emerge as leaders (Dominici, Fried, and Zeger 2010; Gonyea 2019; Moses 2009). Women may further

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



develop leadership skills through roles in community organizations, such as boards for nonprofits, and disciplinary organizations (Chung 2008; Corcoran 2008; Hannum et al. 2014; Moultrie 2003; Sader et al. 2015; Sanchez-Zamora 2013).

How people move into managerial positions appears to differ for men and women. Women tend to move into senior positions after succeeding in other managerial positions, while men move more swiftly up the ladder (Fitzgerald 2013; Hill et al. 2019; Howard and Gagliardi 2018; Madsen 2008; Mahady 2018; Pirjan 2016; Sullivan 2009). Women are more likely than men to have held other high-level appointments (Corcoran 2008; Hill et al. 2019). For example, women Presidents are more likely than men to have held positions as chief academic officer/provost, or vice president/chancellor for administration before being named President; not serving as a Provost may even be seen as disqualifying for women leaders (Hannum et al. 2014; Hill et al. 2019; Howard and Gagliardi 2018; Madsen 2008). Women also may be more likely to move into higher positions if they have experience in a variety of roles – particularly academic and finance, but also student affairs and information technology – than if they have focused on one particular area (Corcoran 2008; Griffiths 2012; Klotz 2014; Madsen 2008; Moultrie 2003). Women who can move to another institution may be more likely to be able to move into leadership positions, with some noting that women have to move out to move up, though men may be promoted from within (Blackwood and Brown-Welty 2011; Hill et al. 2019; Klotz 2014; Longman et al. 2018; Madsen 2008; Read and Kehm 2016; Sanchez-Zamora 2013; Webster 2020). Yet, women who have had a long-term positive history at an institution can sometimes move up (Tiao 2006).

One of the reasons women may be less likely to move into leadership is due to what is perceived as their lack of experience, although men may be less likely to face this concern (Klotz 2014). As a result, women are more likely than men to move into positions after previously “proving” their ability by holding “acting” or “interim” positions (Alfred 2011; Blackwood and Brown-Welty 2011; Fitzgerald 2013; Mahady 2018; Mott 2002; Sanchez-Zamora 2013). These interim appointments often also act as bridges, convincing women that they are well suited to leadership (Blackwood and Brown-Welty 2011; Peszek 2016). In one study of senior-level women administrators in community colleges, the majority became leaders through serving in an interim position, and half noted that they never returned to their previous position (Blackwood and Brown-Welty 2011). Women presidents are more likely than men presidents to have previously served as an interim president or chief academic officer/provost (Eddy and Ward 2015).

Women are also more likely to be put into managerial roles in times of crisis (Burkinshaw et al. 2018; Calás, Smircich, and Holvino 2014; Drake 2015; Fitzgerald 2013; Howard and Gagliardi 2018; Madden 2011; Morley 2014; Pasquerella and Clauss-Ehlers 2017; Peszek 2016; Peterson 2016), what has been called the “glass cliffs” phenomenon. As Ryan and Haslam (2007) show through a series of experiments, under many different conditions, women are more likely to be seen as right for management positions when, for example, the organization that they would lead was said to be facing a downturn in performance. Women presidents are also more likely to express than men that the search process did not realistically and accurately disclose the challenges the institution was facing (Howard and Gagliardi 2018). Ryan and Haslam (2007: 558) argue “by appearing to support women but actually giving them inferior positions with limited opportunities for development, those in power can deny charges of overt discrimination while ensuring that any change does not dramatically challenge the gender-based status hierarchy or rock the organizational boat too hard.” Women leaders are also more likely than men to be blamed when a failure occurs (Haslam and Ryan 2008; Ryan and Haslam 2007). Research also suggests that glass cliff positions may come with fewer rewards and less authority,

and women may be more willing to accept such positions than men since they have fewer opportunities (Peterson 2016).

Planning a pathway to leadership, learning skills, such as problem-solving, running meetings, communicating, and seeking leadership opportunities (Corcoran 2008; Klotz 2014; Moses 2009) can be important, although women appear to be less likely to have “planned” moving into administrative roles. Many women leaders note that they did not necessarily work in strategic ways to attain leadership positions, with some noting their reluctance to lead, or suggesting that they “accidentally” ended up in leadership positions, perhaps not fully recognizing the skills that brought them into leadership (Blackwood and Brown-Welty 2011; Burgh House 2001; Campo 2018; Chung 2008; Corcoran 2008; Generett and Welch 2018; Klotz 2014; Krause 2017; Madera 2017; Mahady 2018; Moodly and Toni 2017; Peszek 2016; Redmond et al. 2017; Roca Mella 2012; Sader et al. 2015; Webster 2020; Whitehead 2017; Zhao and Jones 2017). In other cases, women, and particularly women of color, may not be given the opportunity to pursue leadership (Hannum et al. 2014). As Madsen (2008: 142) notes in her study of women university presidents, many did not plan to become a university president, generally seeming to suggest that they “fell into” opportunities, rather than strategically making them. Women describe themselves as working hard, responding to encouragement, and learning from previous leadership experiences, but not following a linear or strategic path to their eventual posts (Campo 2018; Madsen 2008). Women, and particularly women of color, may also be less likely to promote themselves for leadership, relative to male colleagues (Klotz 2014; Roca Mella 2012)

Yet some women leaders acknowledge the role of planning, and ambition, in their success (Generett and Welch 2018; Mahady 2018; Moodly and Toni 2019; Peszek 2016; Webster 2020). One key element of planning is taking risks and saying yes to opportunities (Klotz 2014; Rosser 2012). Many women administrators recognize that they are people who enjoy seeking out new challenges and opportunities (Madsen 2008). Women leaders often have a strong motivation to accomplish new things and to make a difference by being involved with work they see as meaningful, and that enables others to grow (Everett 2014; Hannum et al. 2014; Laube 2021; Madsen 2008; Wyn et al. 2000). As Wyn and colleagues (2000: 436) emphasize, “Many [women leaders] strive to make a difference to the institution—by not simply ‘fitting in’ but by challenging discriminatory and unjust practices and creating new practices.” Thus, women leaders often aim to serve as change agents, shifting university priorities in ways that create more inclusive institutions.

Indeed, substantial research suggests that women leaders do not necessarily begin their careers assuming that they would like to lead (Fitzgerald 2013; Moreland and Thompson 2019; Moses 2009). Moving into leadership often reflects women’s hope to make a larger impact at the college or university, incorporating best practices more widely and enjoying their ability to make positive change (Fitzgerald 2013; Generett and Welch 2018; Hannum et al. 2014; Kabonesa and Kaase-Bwanga 2014; Madsen 2008; Moreland and Thompson 2019; Morley 2014; Pirjan 2016; Roca Mella 2012; Sanchez-Zamora 2013; Wyn et al. 2000). This may include creating opportunities for white women or women of color to support their communities (Campo 2018; Crespo 2013; Fitzgerald 2013; Generett and Welch 2018; Peterson 2016; Sanchez-Zamora 2013; Sitting Crow 2013).

Another pathway into leadership can come through encouragement from other leaders, although women appear to be less likely to be recruited into leadership positions, are less likely to be given feedback or coached on how to be successful as leaders (Airini et al. 2011; Blackwood and Brown-Welty 2011; Dominici et al. 2010; Hannum et al. 2014). Some research suggests that women face discouragement and sabotage when they seek leadership positions, including being told by supervisors that they should not be overly ambitious, or given poor

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



references (Hannum et al. 2014). The “mirror” or “clone” effect suggests that leaders are more likely to encourage and promote those who look like them, which, at many universities, means men are more likely to be recruited (Diehl 2014; Klotz 2014; Manfredi et al. 2019; Morley and Crossouard 2016).

Yet, moves into leadership do occur through support from other leaders, who may invite women to move into leadership positions, or recommend them for positions or higher education leadership programs (Airini et al. 2011; Blackwood and Brown-Welty 2011; Burgh House 2001; Corcoran 2008; Crespo 2013; Hannum et al. 2014; Howard and Gagliardi 2018; Madsen 2008; Moodly and Toni 2017; Moreland and Thompson 2019; Peszek 2016; Rosser 2012; Sanchez-Zamora 2013; Tiao 2006; Webster 2020; Whitehead 2017).

Encouragement, mentoring, and support from leaders can open career pathways in very important ways (Madsen 2008). Yet, this sort of encouragement can also operate in paternalistic ways, opening doors for some, but not others (Burkinshaw et al. 2018)

Networking, mentoring, and training programs are critical to women’s success in achieving academic leadership positions. Many leaders gain access to leadership positions through their networks, although white women and women of color may have less access to such opportunities due to more limited networks (Akubue 2016; Burgh House 2001; Burkinshaw and White 2020; Chung 2008; Eveline 2004; Everett 2014; Fitzgerald 2013; Gaëtane and Brooks 2011; Gonyea 2019; Howard and Gagliardi 2018; Howe-Walsh and Turnbull 2016; Kjeldal, Rindfleisch, and Sheridan 2005; Longman et al. 2018; Madden 2011; Madsen 2008; Mahady 2018; McNae and Vali 2015; Morley 2014; Moses 2009; Penny and Gaillard 2016; Peterson 2019; Read and Kehm 2016; Rosser 2012; Sanchez-Zamora 2013; Tiao 2006; Whitehead 2017). For women of color, forming coalitions and developing supportive communities, has been essential to moving into leadership positions (Everett 2014; Madden 2011; Moultrie 2003). Network colleagues may also nominate women for awards and prizes that lead to leadership opportunities (Rosser 2012).

Networking may also operate as a type of peer-mentoring. Engaging with other women leaders can allow women to share strategies and approaches, develop resilience as well as new skills, such as how to negotiate (Christman and McClellan 2012; Earley, Applegate, and Tarule 2011; Gonyea 2019; Hannum et al. 2014; Klotz 2014; Lord and Preston 2009; Madera 2017; Peszek 2016; Wilson 2011). For example, networks of women college presidents have provided substantial mentorship for some new women presidents (Corcoran 2008; Klotz 2014; Madsen 2008). Without networks, women of color or those from less advantaged class backgrounds may particularly be cut off from crucial sources of information (Everett 2014; Fitzgerald 2013; Hannum et al. 2014; Hodges and Welch 2018; Mainah 2016; Wheaton and Kezar 2019; Whitehead 2017).

Yet if (white) men control more resources and power within an organization, networks that only include women may be less effective at helping women gain leadership roles (Fitzgerald 2013; Madera 2017; Tiao 2006). For example, in one study of cabinet-level administrative leaders, a woman vice president emphasizes that her skill and success playing golf has cemented her relationships with other leaders (Tiao 2006). Indeed, Rosser (2012: 134) suggests that access to men mentors may be particularly critical, because “(m)ale mentors may have access to networks, contacts, and even information through their service on boards, professional societies, and committees that may not be available to many women.” Thus, men mentors may be important to some women leaders (Peszek 2016).

Men in higher leadership positions are more likely to report receiving mentoring into leadership, though evidence suggests that women benefit more from mentoring since they are often left out of leadership networks

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org

or what may serve as “old boys’ networks” (Dean 2009; Dominici et al. 2010; Eddy 2009; Fitzgerald 2013; Hannum et al. 2015; Howe-Walsh and Turnbull 2016; Kjeldal et al. 2005; Mott 2002; Nguyen 2013; Tiao 2006; Whitehead 2017). Informal mentoring, as well as formal mentorship programs aimed at women, can further help address the dearth of women leaders (Blackwood and Brown-Welty 2011; Chung 2008; Dean 2009; DeConcilio 2016; Dunbar and Kinnersley 2011; Everett 2014; Fitzgerald 2013; Green and King 2001; Jones and Dufor 2010; Moreland and Thompson 2019; Moses 2009; Nguyen 2013; O’Connor 2019; Peszek 2016; Pirjan 2016; Statti and Torres 2019; Tiao 2006; Webster 2020). Yet some researchers argue that focusing on mentoring is part of a “fix the women” approach, rather than a recognition that the system is set up in ways that are gender-biased (Burkinshaw and White 2017; Longman 2018; O’Connor 2019; Peterson 2019). Others suggest that one problem of this model is in how it oversimplifies what needs to happen, as when it treats the number of women trained as “success” – rather than measuring true structural change (Eveline 2004). As Peterson (2019: 137) argues, “The approach . . . does not challenge existing structures and the system that benefits men. It also tends to blame women for gender inequality in organizations.”

Mentors may, though, provide women with information about professional norms and cultures, encourage, provide feedback, offer opportunities, and facilitate career progression (Aschenbrenner 2006; Burgh House 2001; Dean 2009; Dunbar and Kinnersley 2011; Gaëtane and Brooks 2011; Gaston 2017; Howard and Gagliardi 2018; Morley 2014; Penny and Gaillard 2016; Peszek 2016; Peterson 2019; Roca Mella 2012; Rosser 2012; Sanchez-Zamora 2013; Tiao 2006; Wallace and Marchant 2009; Webster 2020). One study of women presidents suggests that formal mentoring plays a key role in their success (Howard and Gagliardi 2018), and many women leaders describe mentoring as central to their career success (Madsen 2008; Mahady 2018). Given the need for new skills as they move up the ranks, many women leaders emphasize the role that mentorship plays in growing their competencies and developing careers (Madsen 2008).

Mentoring can help leaders navigate unspoken rules and hostile terrain (Gaëtane and Brooks 2011; Whitehead 2017). Informal mentoring appears to be somewhat more effective than formal mentoring programs, requiring institutions to consider how to develop a culture that supports mentoring, including providing rewards for those engaged in informal mentoring activities (Dunbar and Kinnersley 2011; O’Connor 2019). Mentoring networks can also be critical to supporting the development of women and women of color leaders, such as “mutual mentoring” approaches (Dunbar and Kinnersley 2011; Everett 2014; Gaëtane and Brooks 2011; Sorcinelli and Yun 2007, 2009; Yun and Sorcinelli 2009). For example, mentoring from other women who have navigated care responsibilities for parents, children, or other family members can help women leaders identify how to blaze their own leadership pathways (Blackwood and Brown-Welty 2011; Hannum et al. 2014; Moreland and Thompson 2019; Schnackenberg 2019; Statti and Torres 2019). Of course, structural supports, such as care leaves, automatic tenure clock stoppages, and childcare support, also help women maintain their careers and move up into leadership positions (Airini et al. 2011; Eddy and Ward 2015; Ginsberg et al. 2019; Noble 2014; Schnackenberg 2019; Smith 2012; Tiao 2006; Whitehead 2017).²

Mentorship programs within a university can be particularly effective in terms of coaching women about their institution’s culture, politics, and leadership expectations (Akubue 2016; Ginsberg et al. 2019; Jones and Dufor 2010; Statti and Torres 2019). Some research suggests that respectful mentoring relationships with other women help women identify leadership opportunities and develop skills (Gaston 2017; Griffiths 2012; Moreland and

² Peterson (2019) warns that it is critical that along with structural change, organizational cultures must also change, as supports for care that are directed only toward women can reinforce gender inequalities.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Thompson 2019; Sanchez-Zamora 2013; Sullivan 2009). Mentoring is most effective when built on a strong relationship, offering opportunities for reflection and learning for everyone involved (Madsen 2008; Peszek 2016). In addition to mentorship, sponsorship, when a leader advocates for a person to be given greater opportunities, can play an important role in career progression for women leaders (Klotz 2014; Madsen 2008; Peszek 2016; Webster 2020), although some research suggests men are more likely to benefit from sponsorship (Morley 2013).

Women of color leaders may benefit from connecting with other women of color, including those at other institutions, who can identify the particular binds women of color face in higher education leadership (Chung 2008; Fitzgerald 2013; Gaëtane and Brooks 2011; Green and King 2001; Jones and Dufor 2010; Penny and Gaillard 2016; Roca Mella 2012; Roy 2019; Sanchez-Zamora 2013; Smith 2012; Statti and Torres 2019; Wardell 2010). This networking can help them negotiate hostile settings, although, unfortunately, those networks may themselves operate as hostile environments (Gaëtane and Brooks 2011; Mitchell and Miller 2011; Sanchez-Zamora 2013). Mentors can also play a key role in role-modeling, letting, for example, women of color know that they can achieve leadership positions (Akubue 2016; Burgh House 2001; Doerrer 2015; Eveline 2004; Hannum et al. 2014; Jordan 2014; Klotz 2014; Madsen 2008; Malik 2011; Sanchez-Zamora 2013; Whitehead 2017). Conversely, when women of color never see another woman who shares their background in leadership positions, it may make these positions feel out of reach (Chung 2008; Jordan 2014; Roca Mella 2012). Some research suggests that if white women face a “glass ceiling,” Black women face a “concrete ceiling” (Green and King 2001; Whitehead 2017). And these numbers remain fairly small: in one study of Asian and Asian American women leaders, many of the respondents, located in different fields and parts of the United States, named the same few Asian and Black women leader mentors (Chung 2008).

Outside of mentorship and professional networking, support networks can also play an important role (Campo 2018; Corcoran 2008; Gill and Jones 2013; Klotz 2014; Macdonald and Merrill 2008; Madsen 2008; Montas-Hunter 2012; Webster 2020). Spouses, friends, and family members can be critical to helping ground leaders (Akubue 2016; Almaki et al. 2016; Chung 2008; Everett 2014; Madsen 2008; Mahady 2018; Montas-Hunter 2012; O’Brien 2020; Tiao 2006; Webster 2020; Whitehead 2017). At the same time, involvement in community organizations can help build skills and develop support networks outside of the university (Chung 2008; Everett 2014; Madsen 2008). Many women of color rely on support networks of friends and colleagues, as well as communities outside of higher education, to provide support and nourishment given the hostile environment they face within the academy (Chung 2008; Crespo 2013; Everett 2014; Logan and Dudley 2019; Moses 2009; Sanchez-Zamora 2013; Sitting Crow 2013; Smith 2012). These support networks can play a key role in helping women of color leaders deal with challenges, while also promoting them and providing new opportunities.

Networks and mentoring are important in part because there is surprisingly little formal training for university leaders (Acker 2012; Doerrer 2015; Eveline 2004; Kabonesa and Kaase-Bwanga 2014; Morris and Laipple 2015; Wallace and Marchant 2009). Yet, women presidents are more likely than men to report that they had taken part in training programs before becoming president (Howard and Gagliardi 2018). Several formal programs aimed at supporting emerging women leaders have played an important role as well (Gill and Jones 2013; Read and Kehm 2016; Wallace and Marchant 2009).

Some of the key programs aimed at helping develop women leaders in the U.S. include the American Council on Education’s (ACE) Leadership Forum and Fellows, the Higher Education Resources Services (HERS), the Harvard Graduate School of Education’s Management Development Program (MDP), the Harvard Medical

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org

School's Hedwig van Ameringen Executive Academic Medicine for Women (ELAM), and the American Association of State Colleges and University's Millennium Leadership Institute (MLI) (Crespo 2013; Ginsberg et al. 2019; Howard and Gagliardi 2018; Madsen 2008; Mahady 2018; Moses 2009; Peterson 2019; Pirjan 2016; Rosser 2012; Turner and Kappos 2009).³ Most of these programs focus on members of underrepresented groups (ACE, HERS, ELAM, MLI), while HERS and MLI specifically target women; the MDP program does not have a focus on underrepresented groups.⁴ Regional programs, such as the NSF ADVANCE-funded IDEAL program in Ohio, have further targeted women's leadership (Bilimoria and Singer 2019). Similarly, the NSF ADVANCE and Sloane-funded LEAD program from the University of Washington targets department chairs, deans, and other university leaders, and has been rolled out at other higher education institutions (Yen et al. 2019). These training programs can help build potential leaders' skills and management techniques and self-efficacy, while also broadening horizons regarding other opportunities (Sloma-Williams et al. 2009). Where training programs allow women to learn how to be change agents, successfully, they may have more success (Sullivan 2009). For example, Crespo (2013) documents Latina women who note that these programs played a key role in their success and advancement as leaders. Many women leaders describe these programs as giving them greater confidence in their skills and abilities and a better understanding of how higher education institutions work, as well as broader social networks (Crespo 2013; Madsen 2008; Peterson 2019). These opportunities also allow for engaging with leaders at the same level from other universities, forming networks, and learning from colleagues' experiences. Yet others critique these programs. One concern is that these programs operate as "remedial" programs, reinforcing the idea that women are less capable of leading (Peterson 2019; Wheat and Hill 2016). Another concern is that the programs need more follow-through after the program to ensure women's long-term success, noting that although there are a wide range of programs available, the numbers of women leaders have not dramatically changed (Crespo 2013; Ginsberg et al. 2019).

Ginsberg et al. (2019) suggest that rather than focusing on women's strategies for moving into leadership, universities need to do more to change the organizational culture and structure so that they are more open to women leaders. In the United States, the National Science Foundation ADVANCE program has highlighted the importance of bringing women into leadership roles in STEM (O'Connor 2019; Rosser 2012). In the United Kingdom, the Athena Swan Charter has further created some impetus toward engaging more women in leadership roles in science, technology, engineering, mathematics, and medicine (STEMM) (Burkinshaw et al. 2018; O'Connor 2019). One study, based in Austria, shows how a university that had a strong commitment to equity goals and awareness of feminist thought, was able to create much greater gender equity for both faculty and leaders (Wroblewski 2017). These approaches focus on transforming institutions to make leadership more gender diverse, rather than teaching women leadership skills.

³ Similarly, in Sweden, Peterson (2019) describes the IDAS program.

⁴ The ACE Fellows program allows a diverse array of fellows to immerse themselves in a year-long project shadowing leaders in another institution (Crespo 2013; Eddy and Ward 2015; Jones and Dufor 2010; Klotz 2014; Longman and Anderson 2011; Madsen 2008; Mahady 2018; Turner and Kappos 2009). The HERS program, aimed only at women, provides training over nine consecutive days, or four staggered weekends, in institutional environments, budgeting and finance, strategic planning, and political, social, and economic trends (Crespo 2013; Klotz 2014; Longman and Anderson 2011; Turner and Kappos 2009). The MDP program, a two-week program aimed at all chairs and mid-level managers (including men and women), emphasizes leadership, fostering change, planning, diversity and community, financial management, institutional value, and professional renewal (Madsen 2008; Mahady 2018; Turner and Kappos 2009). The ELAM is aimed at women, with a curriculum focuses on financial, organization and systems management, emerging issues in academic medicine, and personal and professional development (Sloma-Williams et al. 2009). The MLI program focuses on those traditionally underrepresented in top leaders, and focuses on job-searching skills, effective communication, financial skills, and career planning, as well as professional development.



Overall, the existing literature identifies several key routes to leadership. Previous career success, networking, mentoring, and training all play important roles for women moving into leadership. Women also appear to be particularly motivated to serve in leadership positions due to their interests in “giving back,” and may be less likely to see themselves as strategically pursuing leadership. Yet where women’s career opportunities, such as promotion to full professor are blocked, leadership remains out of grasp for many women. At the same time, gendered differences, for example with women more likely than men to have to “prove” their worth by succeeding in an interim position, or moving to another institution, point out that pathways into leadership remain gendered. Even training programs focused on teaching women leadership skills may reinforce the notion that the dearth of women leaders in higher education is due to their deficiencies, rather than an academic culture.

Effective Approaches to Leadership

The literature further identifies several strengths that white women and women of color bring to leadership positions, although evidence is decidedly mixed on whether men and women lead differently (Eddy 2009). Notions that women lead differently can reinforce gendered understandings and straitjacket women into particular gendered roles (Fitzgerald 2013). Yet insofar that leadership is connected with qualities like authority that are associated with men, men may find it easier to advance as leaders. Thus, it may be less that men and women lead differently, and more that they are perceived as leading differently. Some research suggests that white women and women of color, perhaps as a result of their experiences of being marginalized, work more collaboratively, and less hierarchically, although other research suggests that men and women lead similarly (Eddy 2009). Yet, both men and women may use these collaborative strategies or pluralistic strategies that reflect both authority and collaboration. Finally, research also suggests that the additional challenges women leaders face may make them more resilient, and more willing to learn from their mistakes.

Leadership theories have often focused on the importance of traits that are associated with masculinity as needed for successful leadership, such as agency, strength, control, and authority (Calás et al. 2014; Eagly and Sczesny 2009; Krause 2017; Mitchell et al. 2019; Moody and Toni 2017). Eagly and colleagues find that “leadership roles defined in relatively masculine terms favored male leaders and that roles defined in relatively feminine terms favored female leaders” (1995: 137). Thus, when leadership is defined as “masculine,” women may be evaluated as less effective (and vice versa). For example, Peterson (2018: 2) points out that in Sweden, “Vice-Chancellors are described as traditionally being regarded as “lonely and strong leader,” “charismatic,” “magnificent,” and “the Vice Chancellor is king!”, making it harder for women to be considered in these roles. Even women leaders in higher education may refer to men leaders as “more strategic, confident, and less emotional about their work” (Vongalis-Macrow 2016: 95).

As a result, men may experience substantial privilege, advancing in leadership positions at the expense of more qualified women candidates, simply because men are associated with leadership (Hannum et al. 2014; Klotz 2014; Noble 2014; Pirjan 2016). Indeed, many boards of trustees that appoint university presidents remain male-dominated, and less likely to consider strong women candidates (Klotz 2014). Research also suggests that women leaders are held to different, higher standards (Calás et al. 2014; Hannum et al. 2014), and more likely to be judged on performance, while men are judged on their potential (Pasquerella and Clauss-Ehlers 2017). While in general, research finds that women are as effective as men in leadership positions, men are less likely to evaluate women as effective leaders than men, while women tend to evaluate both men and women leaders similarly, suggesting potential bias among men against women leaders (Eagly et al. 1995). Women may be, thus, less likely to be considered for leadership positions and less likely to be judged effective as leaders (Eagly

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



and Karau 2002; Eagly et al. 1995; Krause 2017; Peterson 2018; Ryan and Haslam 2007; Sanchez-Zamora 2013).

Understandings of leadership are often gendered. So, for example, men leaders may be characterized as authoritative, courageous, ambitious, decisive, and focused while women leaders may be characterized as better communicators, flexible, friendly, collaborative, collegial, cooperative, creative, and sensitive (Acker 2012; Christman and McClellan 2012; Dominici et al. 2010; Eagly and Sczesny 2009; Earley et al. 2011; Gordon, Iverson, and Allan 2010; Griffiths 2012; Kezar and Lester 2010; Montas-Hunter 2012; Moultrie 2003; Nguyen 2013; O'Connor 2019; Peterson 2015, 2018; Read and Kehm 2016; Vongalis-Macrow 2016; Wang et al. 2013; Zhao and Jones 2017). Ideas about men as agentic and women as communal predominate in gender stereotypes (Eagly and Sczesny 2009; Vongalis-Macrow 2016), and these behaviors may be seen as mutually exclusive – leaders are either agentic or communal (Gordon et al. 2010; Madden 2011). Where researchers emphasize strengths to women's leadership – for example, collaborative or relational work – this work may reinforce gender stereotypes (Hill et al. 2019). These stereotypes should not be taken as “truth,” since men and women both use a wide range of leadership strategies, and some research suggests that they lead similarly (Fitzgerald 2013; Kezar and Lester 2010; Sánchez-Moreno et al. 2015; Wheat and Hill 2016; Wyn et al. 2000). For example, Sánchez-Moreno et al. (2016) find that both men and women flexibly adapt their leadership style to the context and situation. As Peterson (2019: 137) argues, emphasizing women's (theorized) strengths as leaders, “fails to recognize oppression and diversity within the group of women and does not challenge the organizational processes that produce differences.”

These different forms of leadership have also been characterized as transactional (agentic) versus transformative (communal) leadership strategies. There has been some suggestion that favored leadership strategies have shifted to include more transformative approaches (Eagly and Sczesny 2009), including in higher education (Eveline 2004; Gordon et al. 2010; Peterson 2015, 2018; Vongalis-Macrow 2016). Thus, managers may increasingly be expected to empower and gain the trust and confidence of workers, a more communal approach to leadership (Eagly and Sczesny 2009). Yet some research further suggests that “remasculinization” is occurring, where leadership attributes previously associated with women such as collaboration, are now being coded as masculine, ensuring that men remain dominant even in transformational leadership models (Burkinshaw et al. 2018; Kezar and Lester 2010).

Research on women leaders in higher education does tend to emphasize women's leadership style as more collaborative, or more pluralistic, drawing from a variety of leadership styles (Chung 2008; Madsen 2008; Wheat and Hill 2016). A pluralistic approach includes skills that are associated with women, such as collaboration and empathy, as well as those associated with men, such as strength and decisiveness (Madsen 2008; Mahady 2018; Wheat and Hill 2016). Madsen argues that in her study of women university presidents, they often combined excellent “instrumental” leaderships skills with “expressive” leadership skills, making them both flexible and adaptive (Madsen 2008). Yet importantly, as also noted earlier, research further argues that each leader, depending on both their positionality and the context they are in, will use a variety of different leadership approaches (Gaston 2017; Kezar and Lester 2010; Sánchez-Moreno et al. 2015).

Many studies do emphasize that women higher education leaders may be more collaborative, democratic, participatory, nurturing, relational, and supportive (Akubue 2016; Bornstein 2009; Burgh House 2001; Burkinshaw and White 2020; Chung 2008; Corcoran 2008; DeConcilio 2016; Earley et al. 2011; Eddy 2009; Everett 2014; Fitzgerald 2013; Gaston 2017; Generett and Welch 2018; Gordon et al. 2010; Green and King

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



2001; Kezar and Lester 2010; Krause 2017; Madden 2011; Madsen 2008; Mahady 2018; Mainah 2016; Moody and Toni 2017; Morley and Crossouard 2016; Parker 2001; Peterson 2015, 2016; Sader et al. 2015; Wardell 2010; Wheat and Hill 2016). Even in studies that emphasize similarity in leadership styles by gender, there are some findings that suggest women are more attuned to relational matters and the well-being of the group than men (Sánchez-Moreno et al. 2015). Yet, Kezar and Lester (2010) caution scholars to avoid essentialism, assuming that all women are “naturally” collaborative, or that collaborative models are inherently the most effective. As they (2010: 165) argue, we should not replace “one dominant view of leadership with another, rather than understanding the multiple ways that leadership can be successfully enacted according to various cultural and social contexts.” Acker (2012) also cautions that ideas of women as “naturally” more consensual and democratic tends to assume that women leaders are not skilled leaders.

One strength of collaborative approaches is that they tend to rely more on a web of relationships, rather than a traditional hierarchical approach (Eddy 2009; Sanchez-Zamora 2013; Wheat and Hill 2016). For example, women leaders may appreciate that being in leadership positions allows them to be in contact with and develop solidarities with more colleagues (O’Connor et al. 2014). Women may also, as leaders, be more committed to using their power to promote gender and racial equity, shifting the culture of the organization, given their experiences (Madden 2011; Moultrie 2003; Sader et al. 2015; Wilson 2011; Wyn et al. 2000). Yet, collaborative approaches may also be read as “weak” or “indecisive” (Burgh House 2001; Eddy and Ward 2015). In addition, insofar that collaborative approaches are read as “feminine,” women may be held to higher expectations to be collaborative and supportive and may be less able than men to expect allegiance without first building relationships with their staff (Sanchez-Zamora 2013).

Yet, collaborative decision-making, where the leader works with other stakeholders to determine the best course of action, given the various potential costs and benefits, may be more effective than the leader making a less-informed top-down decision (Burgh House 2001; Gaston 2017; Generett and Welch 2018; Gill and Jones 2013; Kezar and Lester 2010; Mahady 2018; Parker 2001; Peterson 2016; Wardell 2010). Collaborative leadership may also be empowering for others, helping create opportunities for leadership development (Madsen 2008; Moody and Toni 2017). Such leaders may be thought of as akin to a “coach” as opposed to an autocrat (Peterson 2015, 2016). Some leaders emphasize the importance of hiring the right people, and empowering those around them to do their best work, rather than micromanaging (Madsen 2008),

The literature on higher education leadership also describes a particular form of collaborative leadership as “leading from behind,” which is attributed to Nelson Mandel’s description of leadership drawn from herding cattle. The idea is to listen to what others say, and then create consensus. Some research suggests that women of color may choose to strategically draw from this team-building or servant approach to leadership, in part because they may be more motivated to bring a social justice agenda into their leadership, including listening to the voices of a wide number of stakeholders (Alfred 2011; Everett 2014; Gaston 2017; Gill and Jones 2013; Jordan 2014; Madden 2011; Moultrie 2003; Redmond et al. 2017; Wardell 2010; Wheat and Hill 2016; Whitehead 2017). Such an approach does require that leaders listen to those around them, tolerating both ambiguity and disagreement, while also taking less credit for what is accomplished (Hodges and Welch 2018). Yet, again, it is important not to take an essentialist view of how women of color lead, as women of color also draw from a range of different leadership styles, depending on their context and power (Kezar and Lester 2010).

A “leading from behind” strategy is credited with being particularly effective for higher education leaders who hope to create positive change, as it recognizes that change may create uncertainty for those entrenched in

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



existing practices (Generett and Welch 2018; Hill 2010; Hodges and Welch 2018). Faculty and other administrators may be more likely to support and buy into change projects if they are engaged in debating and crafting new visions (Generett and Welch 2018). Thus, a leading from behind approach allows for more substantive engagement and real change. Yet, this strategy also requires leaders to give up some of their power, while also using their skills to mediate discussions, refine ideas, and ensure fair decision-making (Generett and Welch 2018; Hill 2010; Hodges and Welch 2018; Whitehead 2017). Unfortunately, such approaches, while effective, tend to be less recognized and rewarded, since positive outcomes reflect well on the unit (for example, the College), but not necessarily the leader (for example, the Dean) (Hill 2010; Hodges and Welch 2018).

Research on women leaders in higher education suggests that many women are motivated by the idea that they can use their role to provide opportunities, mentor, and engage in career development for colleagues (Acker 2012; Gaston 2017; Hannum et al. 2014; Madsen 2008; Redmond et al. 2017; Webster 2020). The literature also suggests that women of color leaders may also be more intentional about promoting the professional development and career goals of their staff (Hodges and Welch 2018). Showing commitment to colleagues' development, negotiating between the needs of workers and the organization may help build more reciprocal and trusting relationships (Parker 2001). More broadly, research also emphasizes that higher education leaders who come from among underrepresented groups may lead differently due to their different perspectives. For example, women may be more conscious of their positionality, rather than assuming that their perspective aligns with how others see any given issue. This means that they may be more likely to listen to and recognize multiple perspectives on the same issue and negotiate between these perspectives (Corcoran 2008; Madsen 2008; Wardell 2010; Wheat and Hill 2016; Wyn et al. 2000). Carolyn Hodges and Olga Welch (2018) discuss how looking at a problem from all sides, not only from a leadership perspective but a variety of standpoints, opens up new vantage points.

Women may, due to the challenges they have faced, also be more adaptable in their approach to management (Shain 2000). For example, women of color deans might not have the same access to information, making them more open to hearing from those who are normally ignored. This may make them more likely to invite feedback, and explore dissent, identifying good ideas from a wider range of institutional actors, as well as considering the perspectives of the larger community (Hodges and Welch 2018; Parker 2001). Some research also suggests that women of color are more likely to rely on data and evidence, while also conveying how they are using this data to inform decision-making (Generett and Welch 2018; Hodges and Welch 2018; Wheat and Hill 2016). These strategies reflect how leaders from groups that are often underrepresented may be more likely to look for feedback and evidence from a variety of standpoints, rather than assuming that one perspective is shared by all.

Finally, research also points to how white women and women of color leaders in higher education may be somewhat more resilient, given that they may have experienced more challenges on their pathway to leadership. Given the discrimination and other hurdles they have navigated, some women leaders explain that these make them stronger and more resilient (Redmond et al. 2017; Sangho-Rico 2020; Tiao 2006). Resilience may be defined as adapting and learning from adversity (Christman and McClellan 2012). Research suggests that women administrators describe seeking out new challenges to stretch themselves, and learning from their missteps, without allowing mistakes or problems to define them (Madsen 2008; Mahady 2018). Such leaders may also be more willing to acknowledge missteps, which allows them to become better leaders in the future (Chung 2008; Madsen 2008; Mahady 2018). Many women also note the importance of courage (Mahady 2018)

Overall, this section of the review has aimed to identify some of the leadership strategies attributed to women leaders, while recognizing that leaders often use a variety of approaches and that there are no essential differences between men and women leaders (Fitzgerald 2013; Madsen 2008; Wheat and Hill 2016). There are certain strategies also attributed to women of color leaders, due to their experiences of marginalization, which lead to great consultation and consideration of different perspectives.

Challenges to Women’s Leadership

In previous sections, this review has explored the pathways to leadership for women leaders in higher education, and some of the strategies that leaders may take. This section describes the challenges faced by women leaders, working to unpack why women leaders remain so underrepresented in higher education. As Tanya Fitzgerald (2013) argues, too many analyses treat the problem as one that there are too few women, or too few women with the requisite skills when the problem is structural inequalities that make it difficult for women to succeed. This section summarizes these structural inequalities, including the gendered and racialized organization of higher education, gendered and racialized stereotypes, expectations, microaggressions, and discrimination and how these lead to impostor syndrome, and finally, gendered care responsibilities.

Conceptually, it is important to recognize that the organization of higher education reflects gendered and racialized assumptions, including both structural policies and practices and cultural norms (Acker 1990, 2006; Burkinshaw et al. 2018; Herbst 2020; Madden 2011; Moodly and Toni 2017; Morley 2014; O’Connor 2019; Peterson 2019; Ray 2019a, 2019b). Institutional practices often reflect and reinforce gendered hierarchies, while norms and customs can hide gendered practices and processes (Burkinsaw et al. 2018). For example, if universities promote mentoring, but type mentoring as feminine and devalue it, rather than addressing gender inequalities, mentoring may serve to reinforce gender inequalities. O’Connor (2019:30) argues that part of the challenge is that the gendered organization of higher education emphasizes “masculinist constructions of credentialised knowledge,” which necessarily benefit men, and disadvantage women. Indeed, ambiguous evaluation procedures may play a key role in why women are underrepresented in higher education leadership (O’Connor 2019).

The structure of opportunity within gendered organizations may further lead women to be less likely to aspire to move up into leadership positions or to succeed to do so when they try (Acker 2012; Airini et al. 2011; Akubue 2016; Blackmore and Sawers 2015; Corcoran 2008; Eveline 2004; Kanter 2008; Longman et al. 2018; Morley 2014; Read and Kehm 2016; Twombly 1998; Webster 2020). Women often have fewer role models than men, fewer examples of leaders who share similar traits with them (Campo 2018; Corcoran 2008; Eveline 2004; Griffiths 2012; Hannum et al. 2014; Howe-Walsh and Turnbull 2016; Moodly and Toni 2017; Pirjan 2016). Many women leaders face discrimination throughout their careers, and are often perceived as “outsiders,” given limited information about the rules of the game; this is doubly true for women of color, who can be isolated from other leaders (Aschenbrenner 2006; Burgh House 2001; Burkinshaw et al. 2018; Chung 2008; Diehl 2014; Eveline 2004; Fitzgerald 2013; Ginsberg et al. 2019; Hannum et al. 2014; Jordan 2014; Mainah 2016; Mitchell and Miller 2011; Moultrie 2003; Sanchez-Zamora 2013; Smith 2012; Tiao 2006; Turner 2011; Whitehead 2017). Especially where there are few white women or women of color in senior leadership roles, these women may be highly scrutinized, and treated as tokens or invisible (Burkinshaw et al. 2018; Fitzgerald 2013; Generett and Welch 2018; Griffiths 2012; Hannum et al. 2014; Mertz 2011; O’Connor et al. 2014; Rubery, Horrell, and Burchell 1994; Tiao 2006; Wilson 2011). Colleagues may belittle, ignore, exclude or assume that women leaders are incompetent (Fitzgerald 2013; Ngunjiri and Hernandez 2017).

Universities often have an organizational culture that suggests that the “ideal worker” is a person who can work long hours and prioritize work, with no other responsibilities outside of the workplace, such as caregiving; this idea can be exacerbated for leaders (Acker 2006, 2012; Burkinshaw et al. 2018; Burkinshaw and White 2017; Drake 2015; Eddy and Ward 2015; Eveline 2004; Hill et al. 2019; Howe-Walsh and Turnbull 2016; Kezar and Lester 2010; Longman et al. 2018; Longman and Anderson 2011; Madera 2017; Morley 2014; Peterson 2018; Shain 2000; Tiao 2006; Webster 2020; Wheat and Hill 2016; Williams 2004). While this principle was developed when most faculty members were upper-class white men with few care responsibilities, even as the faculty has become more diverse, the ideal has remained (Wolf-Wendel and Ward 2006). Ideal worker norms further tend to assume that “great men” or “heroes” make better leaders (Burgh House 2001; Eagly and Karau 2002; Gordon et al. 2010; Kezar and Lester 2010; Madden 2011; Mitchell et al. 2019; Nguyen 2013; Peterson 2015; Wheat and Hill 2016). These factors also tend to “rule out” leaders who have health issues or disabilities (Olkin 2011).

Assumptions about women as leaders often reflect gendered and racialized stereotypes of their groups (Ridgeway 2011; Ridgeway and Correll 2004). Gendered stereotypes affect women’s careers even before they become leaders. For example, stereotypes assume that men are more likely to be “brilliant” leading to gendered outcomes in fields that rely on notions of the importance of creative genius (Leslie et al. 2015; Pasquerella and Clauss-Ehlers 2017), such as differences in promotion to full. Gender stereotypes lead men to have more influence in teams and receive more credit for their ideas (Correll 2017; Ridgeway and Correll 2004).

Stereotypes reflect people’s beliefs and expectations about status, such as the idea that university leaders are likely to be white men. These stereotypes are then used in judging and interacting with co-workers and are most likely to be activated when individuals do not have clear evaluation criteria or when performance information is unclear or missing (Calás et al. 2014; Correll 2017; Ridgeway 2011, 2014). Since information about performance and evaluation are often less clear for university leaders than even for university faculty members, status expectations can be particularly pernicious for women leaders. Stereotypes lead women to be held to a higher bar than men and receive extra scrutiny as well as shifting standards (Correll 2017). Thus gender serves as a powerful cultural frame that limits opportunities for women (Ridgeway 2011).

Stereotypes may be used as a justification for discriminating against women leaders, including by search firms, which more and more frequently run searches for university leaders as well as senior leaders who serve as hiring authorities (Manfredi et al. 2019; Mitchell et al. 2019; Wyn et al. 2000). One study suggests that search firms can recreate “new boys” networks by relying on existing leaders to identify potential leaders, defining ideal candidates in gendered ways, and emphasizing notions of social matching “where candidates are being assessed against nebulous concepts of ‘cultural fit’ and ‘chemistry’ and this can be fraught with bias.” (Manfredi et al. 2019: 168). Coded language such as “lack of fit” can also be used to discriminate against hiring women of color as leaders (Everett 2014). Advertisements generally use descriptors associated with men, asking for leaders who are “strong” and “command respect”, although, in more recent searches, a subset of ads considers more relational descriptors such as “collaboration” and “shared vision” (Mitchell et al. 2019; O’Connor 2019; Peterson 2018).

As noted earlier, notions of leadership as gendered tend to reinforce stereotypes of, for example, women as collaborative and men as authoritative. (Christman and McClellan 2012; Eagly and Sczesny 2009; Hill et al. 2019; Madden 2011; Nguyen 2013; O’Connor 2019; Peterson 2015, 2018). Stereotypes might include the notion that women are not good leaders because they are weak, less assertive, less persuasive, less intellectual,

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



overly caring, bad decision-makers, or simply incompetent (Almaki et al. 2016; Bornstein 2009; Fitzgerald 2013; Gordon et al. 2010; Herbst 2020; Hill et al. 2019; Hodges and Welch 2018; Madera 2017; Ryan and Haslam 2007; Sanchez-Zamora 2013; Sullivan 2009; Twombly 1998; Wheaton and Kezar 2019). Role congruity theory suggests that because people are more likely to see men as competent, men are more likely to be considered for leadership and given leadership opportunities (Madden 2011).

Stereotypes tend to emphasize women as “supportive,” rather than active leaders (Hill et al. 2019), and expected to use more relational forms of leadership, acting in ways that are communal and nurturing, rather than assertive and directive, although this may lead them to be perceived as weaker leaders (Corcoran 2008; Gill and Jones 2013; Klotz 2014; Mitchell et al. 2019; Pasquerella and Clauss-Ehlers 2017). For example, in one study, a woman university President was read as a “cheerleader,” rather than a “leader” (Klotz 2014). Women who use more relational forms of leadership may also find that they face strong expectations to use more hierarchical relations as they move up in ranks, distancing themselves from colleagues, staff, and students (Bornstein 2009; Fitzgerald 2013; Hannum et al. 2014; Krause 2017; Wheaton and Kezar 2019).

Stereotypes also create a double bind for women leaders, because if, for example, women are perceived as assertive, they may lose support for acting in ways that are not perceived as feminine, even as men are rewarded for being tough (Acker 2012; Brower, Schwartz, and Bertrand Jones 2019; Burkinshaw et al. 2018; Burkinshaw and White 2017; Calás et al. 2014; Carnes et al. 2015; Carnes and Merz 2017; Christman and McClellan 2012; Cikara and Fiske 2009; Commodore et al. 2020; Correll 2017; DeConcilio 2016; Eagly and Karau 2002; Eagly et al. 1995; Eddy 2009; Eddy and Ward 2015; Fitzgerald 2013; Gill and Jones 2013; Gordon et al. 2010; Hannum et al. 2014; Herbst 2020; Madden 2011; Mason 2009; Mitchell et al. 2019; Montas-Hunter 2012; Morley and Crossouard 2016; Nguyen 2013; O’Connor 2019; Pasquerella and Clauss-Ehlers 2017; Peterson 2015; Pirjan 2016; Ridgeway 2001; Ryan and Haslam 2007; Sader et al. 2015; Sangho-Rico 2020; Tiao 2006; Webster 2020; Wheat and Hill 2016; Wilson 2011; Wyn et al. 2000). As Ryan and Haslan (2007: 551) argue:

In this way, women leaders are often in a lose-lose situation. If their behavior confirms the gender stereotype, they are not thought to be acting as a proper leader, but if their behavior is consistent with the leader stereotype, they are not thought to be acting as a proper woman. Violating either of these stereotypes can then lead to negative evaluations of them and their performance. . .

Emotional labor is central to leadership for all genders, yet all forms of emotional labor can be a liability for women (Fitzgerald 2013; Mayer et al. 2018). While men are valued for acting both assertive and caring in leadership roles, women are critiqued when enacting either trait (Fitzgerald 2013; Pasquerella and Clauss-Ehlers 2017; Tiao 2006; Wyn et al. 2000). Women also have to manage many negative emotions, suppressing any show of hurt, anger, fear, and stress, keeping a calm exterior, to maintain their credibility and authority (Acker 2012; Burkinshaw and White 2017; Campo 2018; Drake 2015; Fitzgerald 2013; Mayer et al. 2018; Peszek 2016; Vongalis-Macrow 2016; Zhao and Jones 2017).

The “hidden curriculum” of university leadership promotes “the use of competitive self promotion, the careful selection of leadership tasks and responsibilities, high visibility in decision-making committees, an unrelenting commitment to the university and access to extensive networks of power, sponsorship, and influence” (Fitzgerald, 2013: 99). Yet women who engage in competitive self-promotion may be viewed as problematic because such strategies are not seen as gendered normative. At the same time, women rarely have access to networks of power and influence. As a result, women are caught in this web of expectations, that make it

difficult for women to win given the rules of a gendered game (Burkinshaw et al. 2018; Fitzgerald 2013; Odhiambo 2011; Sullivan 2009).

While white women may face stereotypes about their lack of leadership skills, women of color may further face stereotypes tied to their racial and ethnic identities, including assumptions that they benefit from affirmative action rather than their competence (Commodore et al. 2020; Correll 2017; Eveline 2004; Everett 2014; Generett and Welch 2018; Gonyea 2019; Hannum et al. 2014; Jordan 2014; Lloyd-Jones 2011; Logan and Dudley 2019; Madden 2011; Mainah 2016; Mitchell and Miller 2011; Montas-Hunter 2012; Ngunjiri and Hernandez 2017; Roy 2019; Sader et al. 2015; Sanchez-Zamora 2013; Smith 2012; Wheat and Hill 2016; Whitehead 2017). Women of color may not have the same networks as other leaders, and may thus be cut off from crucial sources of information (Chung 2008; Fitzgerald 2013; Hodges and Welch 2018). Women of color leaders are given no benefit of the doubt, with each decision scrutinized, and little feeling of security in their positions (Everett 2014; Hodges and Welch 2018). Gender and sexual minorities also experience stereotypes as being poor leaders or otherwise excluded from consideration for leadership (Wheaton and Kezar 2019).

Women of color often face particular stereotypes that suggest that they would not be good leaders, such as Latinas being stereotyped as long-suffering caregivers, Asian or Middle Eastern women being stereotyped as passive, or Black women being stereotyped as too outspoken or “angry” (Chen and Hune 2011; Chung 2008; Everett 2014; Ginsberg et al. 2019; Hodges and Welch 2018; Lloyd-Jones 2011; Mainah 2016; Ngunjiri and Hernandez 2017; Owens 2020; Parker 2001; Penny and Gaillard 2016; Roca Mella 2012; Roy 2019; Twombly 1998; Wheaton and Kezar 2019; Whitehead 2017). For example, one study of media reports found that these reports frame Black women’s presidents in historically Black colleges and universities as emasculating, angry, Black women (Commodore et al. 2020). As a result, women of color leaders may often find their competence, background, and skills questioned, including by those they are expected to lead (Generett and Welch 2018).

Women of color may also find themselves caught in complex double binds that reflect both racialized and gendered stereotypes. For example, expectations that Black women are supposed to be strong might mean that they cannot show stress, even if that would be more accepted by white women. At the same time, as noted by Owens (2020: 242):

If we use passionate or other expressive vocal inflections, then other negative stereotypes apply: “sassy,” “loud,” using a hostile “tone,” being the “angry Black woman.” The life of a Black woman faculty member is often lived in an attempt to navigate the perilous norms of Whiteness and maleness with no visible show of emotion.

Even as Black and Latina women exceed co-ethnic men in educational attainment, they tend to face “racialized sexism” in leadership positions, especially in predominantly white institutions (Lloyd-Jones 2011; Mainah 2016; Whitehead 2017).

While Asian women may also be stereotyped positively as diligent and smart, they may further be negatively stereotyped as exotic, quiet, not fluent in English, submissive, and not managerial; these limitations have been referred to as the “bamboo ceiling” (Chen and Hune 2011; Chung 2008; Lloyd-Jones 2011; Roca Mella 2012; Roy 2019). Even “positive” stereotypes can work against Asians, who may be positioned as “model minorities,” as if they do not struggle or experience discrimination (Chung 2008; Roca Mella 2012; Roy 2019). Asian faculty are generally less involved in leadership and administration, and indeed, may be overlooked for leadership opportunities (Chen and Hune 2011; Mamiseishvili and Rosser 2010; Roca Mella 2012; Roy 2019;

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Skachkova 2007). Asian American and Pacific Islander women may also face the experience of being encouraged to try for higher-level positions but then bounced back, which can be referenced as a “plexiglass ceiling” (Chen and Hune 2011).

Intersecting inequalities come together to shape women leaders’ experiences (Everett 2014; Logan and Dudley 2019; Wheaton and Kezar 2019). Navigating these stereotypes makes it substantially harder for women of color to establish their legitimacy as leaders (Bass and Faircloth 2011; Chung 2008; Mertz 2011; Montas-Hunter 2012; Ngunjiri and Hernandez 2017; Sangho-Rico 2020; Whitehead 2017). Many women of color are given tasks that are valued less, and have less power and influence within departmental decision-making, making it more difficult to emerge as a leader (Bass and Faircloth 2011; Chung 2008). Olga Welch (2018: 1116), a Black woman Dean, describes how she regularly heard her ideas brought up by colleagues:

Those lessons included accepting, although not liking, the reality that sometimes my observations/recommendations would be heard and then accepted, but only after they had been attributed to one of my white male colleagues. To make this reality bearable meant weighing quickly when to claim and when to let go of ownership. I admit that the decision was never without cost.

She further notes that if she claimed ownership, she would be seen as “the angry Black woman,” while if she allowed appropriation, she became “visibly invisible,” not fully accepted as a participant. To establish legitimacy, women of color also must identify and accommodate the culture and norms of the university, succeeding through systems with multiple barriers (Jordan 2014; Mertz 2011).

Research suggests that women work harder, prove themselves more often than men, while always being held to higher standards (Hannum et al. 2014; Mahady 2018). These inequalities lead white women and women of color to be judged as leaders not on their performance, but based on gendered and racialized stereotypes. Thus, Black women may face greater “opposition, devaluation, and alienation,” as a result of both racism and sexism, which may keep them from achieving – or wanting to achieve – leadership roles (Logan & Dudley, 2019: 85).

Stereotypes also inform expectations for how women leaders look and act in the workplace. Women must also do substantial aesthetic labor, curating their dress, makeup, jewelry, comportment, and styling to fit with assumptions of how women leaders should look (Acker 2012; Bornstein 2009; Corcoran 2008; Deem, Ozga, and Prichard 2000; Eddy and Ward 2015; Enke 2014; Eveline 2004; Fitzgerald 2013; Hannum et al. 2015; Klotz 2014; Mahady 2018; O’Connor 2019; Pasquerella and Clauss-Ehlers 2017; Read and Kehm 2016; Wilson 2011; Wyn et al. 2000). Acker (2012: 420) refers to how senior women leaders have incorporated aspects of traditional femininity into their dress: while they might wear suits, they softened the edges with lighter colours, jewelry, scarves and designer shoes. In doing so, they contrasted not simply with men managers in suits, but with the casual attire characteristic of both male and female academics in many quarters of the university.

Women may have to create a particularly “professional” appearance, relative to men, who will be judged as professionally appropriate even if they dress outside of the norm (Klotz 2014; Mahady 2018). Even short physical stature can lead women to be perceived as less capable as leaders (Klotz 2014).

Women may also find that they must always act friendly (but not sexually available) and are more likely to be critiqued for their “tone and volume” than men leaders, asked to navigate a very narrow band of “appropriate” behaviors (Klotz 2014; Mason 2009; Pasquerella and Clauss-Ehlers 2017). One study recounts the story of a

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



woman candidate for a college presidency who was told by the headhunter that she should smile less since smiling makes her look less serious (Corcoran 2008). In the role, women presidents may be asked questions that men presidents would not receive, such as what the fax number is, or asked to do “emotional labor” that appears more maternal than presidential (Howard and Gagliardi 2018).

Women of color, particularly Black women, often face harsh scrutiny, for their physical appearance, emotional labor, and communication style (Durr and Wingfield 2011; Ginsberg et al. 2019; Logan and Dudley 2019; Sangho-Rico 2020; Wingfield and Chavez 2020). Enke (2014) also describes how women of color may be evaluated differently in different settings, using an example of a Latina woman who was viewed as representing women of color on campus, but viewed as representing whiteness among the Latinx community due to her lack of an accent. Thus, white women and women of color are not only judged based on gendered and racialized stereotypes of leaders but expected to perform racialized and classed femininity in particular ways.

Many studies point to the challenges that women face in leadership positions, particular in terms of microaggressions, hostility, bullying, and/or harassment (Airini et al. 2011; Burkinshaw et al. 2018; Eveline 2004; Generett and Welch 2018; Gonyea 2019; Howe-Walsh and Turnbull 2016; Longman et al. 2018; Mitchell et al. 2019; Moses 2009; Roy 2019; Sangho-Rico 2020; Tiao 2006; Webster 2020). Women in higher education leadership may also face “gender-based attributional ambiguity,” where they note differences in how men and women are treated and suspect that these differences are gender-based but do not have direct proof (Brower et al. 2019). One common microaggression is men repackaging women leaders’ ideas as their own (Hannum et al. 2014; Webster 2020). Some work further points to continued discrimination, arguing that discrimination worsens as women move up into higher administrative posts (Mott 2002). This research makes clearer how the masculine culture of organizations may be maintained, even as women become leaders (Burkinshaw et al. 2018).

Women of color often face harassment and microaggressions as well as racist and sexist discrimination (Aschenbrenner 2006; Chung 2008; Eveline 2004; Everett 2014; Generett and Welch 2018; Gonyea 2019; Mayer et al. 2018; Mitchell et al. 2019; Moses 2009; Owens 2020; Redmond et al. 2017; Roy 2019; Wheaton and Kezar 2019). Disabled women leaders also face increased microaggressions related to their differences (Eveline 2004; Olkin 2011). In addition to sexual harassment, women leaders often experience gender harassment, being devalued and disrespected as a result of their gender (Campo 2018; Earley et al. 2011; Peszek 2016; Sangho-Rico 2020; Wheaton and Kezar 2019). As Lord and Preston (2009: 774) describe, women leaders experience “a range of organisational practices including sabotage, manipulation, bullying, harassment and spite, which can be seen as gendered power processes.” When facing discrimination women leaders have to know when to respond and resist, though they must also navigate stereotypes in doing so, not appearing driven by emotion (Campo 2018; Sangho-Rico 2020; Wilson 2011). These challenges are often exacerbated for women of color, leading to feelings of isolation, stress, and invisibility (Chung 2008; Diehl 2014; Everett 2014; Hannum et al. 2014; Hodges and Welch 2018; Logan and Dudley 2019; Mitchell and Miller 2011; Sangho-Rico 2020; Whitehead 2017).

Women leaders, particularly women leaders of color, describe having to constantly be “hypervigilant” in the face of stereotyping and microaggressions from coworkers (Chung 2008; Everett 2014; Gonyea 2019; Logan and Dudley 2019; Sangho-Rico 2020; Tiao 2006). Many women leaders identify that they experience intense scrutiny and criticism, which is heightened for women of color (Earley et al. 2011; Hannum et al. 2014). Professional development training that addresses microaggressions and implicit bias against women and women

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



of color, as well as bystander training to help colleagues act as allies when bias occurs, can counter these trends (Gonyea 2019). It is also critical to ensure that women of color have access to a range of leadership opportunities, and not just those focused on diversity and inclusion (Logan and Dudley 2019; Moses 2009).

An outgrowth of racialized and gendered stereotypes, harassment, and microaggression is impostor syndrome, as women internalize the discrimination that they face, believing that they do not belong or are impostors, not deserving of their positions. This may make women academics less likely to pursue leadership opportunities (Bornstein 2009; Gaston 2017; Gonyea 2019; Moody and Toni 2017; Nguyen 2013). Because women leaders may experience particularly challenging discrimination, this may induce doubt in themselves later in their careers (Madera 2017). In one study where higher education leaders and their co-workers rated their effectiveness on several different dimensions of leadership, although men and women's effectiveness, as judged by their co-workers, was not statistically different, women rate themselves significantly lower than their co-workers rate them, while men rate themselves significantly higher (Herbst 2020). Thus, women have significantly less confidence in their leadership abilities than men (and men are overconfident), even though their leadership appears equally effective (Herbst 2020).

Impostor syndrome is both gendered and racialized; women are more likely to see themselves as impostors, and this effect is magnified for women of color (Gonyea 2019; Whitehead 2017). For example, women of color rate themselves lower on leadership growth and ability than their colleagues (Wheaton and Kezar 2019). Yet it is important to recognize that impostor syndrome reflects the many additional challenges women face from those around them due to gender and racialized stereotypes. It is these challenges that lead them to have less confidence themselves (Correll 2017; Diehl 2014).

The flip side of impostor syndrome is self-efficacy, feeling positive about their abilities to do what is necessary to meet their goals, and self-confidence, or self-belief more generally (Herbst 2020; Klotz 2014; Malik 2011; Montas-Hunter 2012; Moses 2009; Sloma-Williams et al. 2009; Webster 2020). Developing self-efficacy can occur through experiences of mastery, vicarious experiences, positive feedback, and persuasion from others (Campo 2018; Sloma-Williams et al. 2009). Some women describe developing confidence because of the challenges they have had to navigate (Diehl 2014; Malik 2011). Self-confidence can also come through leadership activities in professional organizations (Chung 2008; Madsen 2008). Women who move into higher administrative positions take calculated risks, in part because they have confidence in themselves (Corcoran 2008; Klotz 2014; Madsen 2008). Yet men may be more likely to put themselves forward for jobs, because of their greater confidence in their abilities (Klotz 2014).

As mentioned earlier in this section, the “ideal worker” in universities tends to assume a worker without care responsibilities, which can be magnified in leadership positions (Acker 2006; Burkinshaw et al. 2018; Drake 2015; Eddy and Ward 2015; Hill et al. 2019; Longman and Anderson 2011; Peterson 2018; Shain 2000; Wheat and Hill 2016; Williams 2004). Women who ascend to higher ranks and leadership positions are more likely than men to be unmarried, divorced, or childless (Chung 2008; DeConcilio 2016; Fitzgerald 2013; Hill et al. 2019; Madsen 2008; Mason 2009; Mason, Wolfinger, and Goulden 2013; Schnackenberg 2019; Statti and Torres 2019). Indeed, 89% and 90% of men presidents are married and have children, respectively, compared to 63% and 72% of women presidents (Mason 2009; Pasquerella and Clauss-Ehlers 2017). Women of color leaders are even less likely than white women to be partnered and have children, due to the challenges and isolation they face professionally (Mitchell and Miller 2011).

Leadership positions in many universities require long hours, work on weekends, substantial travel, and as leaders move up in ranks, as well as frequent relocation (Aschenbrenner 2006; Blackmore and Sawers 2015; Burgh House 2001; Chung 2008; Corcoran 2008; Eddy 2009; Eddy and Ward 2015; Eveline 2004; Fitzgerald 2013; Gaston 2017; Hannum et al. 2014; Hill et al. 2019; Howe-Walsh and Turnbull 2016; Kabonesa and Kaase-Bwanga 2014; Klotz 2014; Logan and Dudley 2019; Madsen 2008; Moses 2009; Nguyen 2013; Noble 2014; O'Connor et al. 2014; Peszek 2016; Peterson 2016; Pirjan 2016; Redmond et al. 2017; Sanchez-Zamora 2013; Smith 2012; Statti and Torres 2019). While any parent might find these conditions difficult, straight women tend to be more engaged in caregiving, less likely to have partners who take primary responsibility for care, and more likely to be constrained to a particular area due to their partners' careers or children's schooling (Dominici et al. 2010; Hill et al. 2019; Howe-Walsh and Turnbull 2016; Klotz 2014). Clearly, these are gendered processes – not due to essential gender differences but different gendered expectations of men and women.

Women leaders who are married emphasize the support they receive from partners, including partners who alter their career plans (Burgh House 2001; Campo 2018; Gill and Jones 2013; Hill et al. 2019; Howard and Gagliardi 2018; Klotz, Claussnitzer, and Longhurst 2009; Madsen 2008; Malik 2011; Nguyen 2013; Redmond et al. 2017; Rosser 2012; Sader et al. 2015; Tiao 2006; Webster 2020; Whitehead 2017). Yet, men spouses of, for example, women university Presidents, are more likely to remain engaged in their careers than other Presidents' spouses, and are less likely to be host dinners, plan events, or play the roles that women spouses often play (Hannum et al. 2014; Hill et al. 2019; Klotz 2014; Mahady 2018). Yet, expectations play a key role in how perceived care responsibilities shape women's leadership opportunities. In one study of college presidents, respondents describe not being offered jobs as a college president if their husbands would not move with them (Mahady 2018).

Women's care responsibilities also shape opportunities, with some waiting until their children are older before taking on leadership positions, more likely to take non-linear paths to leadership (Blackwood and Brown-Welty 2011; Chen and Hune 2011; Corcoran 2008; Eveline 2004; Gaston 2017; Hannum et al. 2014; Hill et al. 2019; Klotz 2014; Madsen 2008; Moodly and Toni 2017; Nguyen 2013; Pasquerella and Clauss-Ehlers 2017; Peszek 2016; Rosser 2012; Sader et al. 2015; Smith 2012; Statti and Torres 2019; Webster 2020). Mary Ann Mason (2009) refers to how these missed opportunities, as well as gendered bias, means that women see their career progress more slowly than men. Yet leaders who are also mothers refer to a variety of skills that have helped them in their leadership roles that developed through parenting (Madsen 2008).

Women at the highest administrative levels are more likely than men to discuss the detours they took in their career as a result of care responsibilities, or hold off on such positions until after the end of their partner's career, describing their careers as non-linear (Berheide 2016; Blackwood and Brown-Welty 2011; Bornstein 2009; Eddy 2009; Fitzgerald 2013; Howard and Gagliardi 2018; Klotz 2014; Madsen 2008; Moodly and Toni 2017; Peszek 2016; Shain 2000). Yet these decisions also mean that many women in high-level administrative positions feel that they are limited in their opportunities to spend time with their children and grandchildren, given the pressures of their jobs (Hill et al. 2019).

In this section, the review has analyzed the many obstacles that make leadership challenging for women. These include the gendered and racialized organization of the academy, which assumes a particular type of worker, as well as the gendered and racialized stereotypes and expectations that women leaders must navigate. These stereotypes are not harmless, and turn feed into both microaggressions and overt discrimination against women

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



leaders, as well as internalized feeling that women leaders are “imposters.” Finally, another barrier is gendered care responsibilities, which can shift the timing of or opportunities for leadership positions.

Gendered Workload Inequities and the Puzzle of Women’s Higher Service Loads

Although as this review documents, white women and women of color are less likely to be leaders in colleges and universities, they are also more likely to be engaged in high levels of academic leadership at departmental levels. “Service” or academic leadership usually refers to work that benefits the university but doesn’t fall into the categories of teaching and research (Thompson and Dawkins 2010). This phenomenon, a high service workload for white women and women of color, has been frequently recognized by the literature (Bird 2011; Guarino and Borden 2017; Hanasono et al. 2019; Hirshfield and Joseph 2012; Joseph and Hirshfield 2011; Link, Swann, and Bozeman 2008; Misra et al. 2021; Misra, Lundquist, and Templer 2012; O’Meara et al. 2019; O’Meara, Lounder, and Campbell 2014; O’Meara, Kuvaeva, Nyunt, et al. 2017; O’Meara 2016; O’Meara et al. 2018; Winslow 2010). In this section of the review, I summarize the literature on gendered and racialized workload inequities and explain how this higher level of engagement in service work is, paradoxically, related to women’s lower level of representation among senior leaders on campus.

Most faculty members are expected to carry out a mix of research and scholarship, teaching, advising and mentoring, and leadership or service to the institution, as well as to their discipline and community (Guarino and Borden 2017; Jacobs 2004; Jacobs and Winslow 2004; Kyvik 2013; Mamiseishvili, Miller, and Lee 2016; Misra et al. 2012; O’Meara and Jaeger 2016; Seaberg 2019; Thompson and Dawkins 2010; Wilborn et al. 2013; Winslow 2010). How this workload is distributed varies. At some colleges, teaching may be given the greatest weight; at others, it is a mix of research and teaching; at others still, research and scholarship are particularly highly valued.

While teaching students or conducting research are often central to faculty jobs, many faculty members spend substantial time carrying out “service,” while this work is less likely to be valued or rewarded in the same way. Yet this work – ensuring that courses are scheduled and taught, that faculty are evaluated, that hiring occurs, that curricula are updated, that the institution works toward diversity goals, etc. – is critical to the university’s effectiveness and continued work. Similarly, mentoring students is central to their success as college or graduate students, yet tends to be invisible and less recognized. This mismatch between the work that is necessary for colleges and universities to succeed and the work that is rewarded in faculty evaluations leads to workload inequities – with some faculty focusing on the “rewarded” work, and others taking up the necessary unrewarded work. These workload inequities reflect gendered and racialized biases (Gibbs et al. 2014; O’Meara, Kuvaeva, Nyunt, et al. 2017).

Substantial research points out that there are important faculty workload differences by gender. This research shows that men tend to allocate more time to research, while women spend more time mentoring and advising students, and carrying out service (Babcock et al. 2017; Bellas 1999; Bird, Litt, and Wang 2004; El-Alayli, Hansen-Brown, and Ceynar 2018; Guarino and Borden 2017; Hanasono et al. 2019; Jacobs and Winslow 2004; Link et al. 2008; Misra et al. 2012; O’Meara 2016; O’Meara, Kuvaeva, and Nyunt 2017; Pyke 2011, 2015; Seaberg 2019; Toutkoushian and Bellas 1999; Winslow 2010). Importantly, it appears that leaders, colleagues, and students may have gendered expectations for women to spend more time on these undervalued forms of work (El-Alayli et al. 2018; Hanasono et al. 2019; O’Meara 2016; O’Meara, Kuvaeva, Nyunt, et al. 2017). In one experimental study, the researchers find “students reported a greater likelihood of requesting the favors, reacting negatively to request denial, and pleading further upon request denial when the professor was female

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



than when the professor was male” (El-Alayli et al. 2018: 143). Carrying out this work may further leave women too busy to pursue research publications – which then limits their upward mobility (Klotz 2014; Misra et al. 2011; Rosser 2012).

Some research suggests that there are different kinds of service – more visible and higher leadership positions – that is more frequently carried out by men, yet everyday departmental service work tends to be carried out by women (Bird 2011; Bird et al. 2004; Eveline 2004; Guarino and Borden 2017; Hanasono et al. 2019; Valian 2004). For example, some “service” may be coded as masculine and valorized – chairing a review committee, editing a journal – while other is coded as feminine and devalued – mentoring faculty, writing letters of recommendation (Hanasono et al. 2019). Unfortunately, this devalued service also is rarely noted in reviews or included on faculty curriculum vitae and may appear to be “secret service” (Hanasono et al. 2019).⁵ Indeed, some scholars refer to this everyday service as academic or institutional housekeeping” (Bird et al. 2004; Castañeda and Hames-García 2014; Thorne and Hochschild 1997). On the other hand, the more valorized work may be more likely to lead to leadership opportunities.

Women are asked more often to carry out service work that is less valued in promotions (Detweiler et al. 2017; Eveline 2004; Ginsberg et al. 2019; Hogan 2005; Misra et al. 2012; O’Meara, Kuvaeva, Nyunt, et al. 2017; Thompson and Dawkins 2010; Wroblewski 2017). For example, though women may be involved in service work in their departments, they may be involved in decision-making (Noble 2014). At times, women may also be discouraged from service on important committees that may have positive career consequences, such as serving on a university promotion and tenure committee (Owens 2020). This may keep women from moving forward in their careers, and into leadership roles (Detweiler et al. 2017; Ginsberg et al. 2019; Noble 2014). As Hogan (2005: 109) argues, “We need to take seriously the idea of “service,” not as silent and unregulated labor, but as a nexus of fundamental issues involving gender, class, labor, and the politics of the profession. Most important, we need to change the way we conceive and reward it.”

Research does not suggest that these gendered differences exist because women *like* carrying out low-level service, for example, more than men. Both men and women faculty members recognize that service – the everyday bureaucracy of the university – is less valued, and also view the work as less fulfilling. Research also finds that white women and women of color recognize that they are disadvantaged by workload inequalities (Hanasono et al. 2019; Misra et al. 2021; O’Meara et al. 2018, 2019). If women understand these challenges and do not enjoy service more, why are they more likely to do it? Some research points out that women are responding to gendered expectations for service work, fearing penalties or actively experiencing penalties if they do not agree to carry it out (Babcock et al. 2017; El-Alayli et al. 2018; Mamiseishvili and Lee 2018; O’Meara, Kuvaeva, Nyunt, et al. 2017; Pyke 2015).

These processes may be explicitly gendered. In one field experiment, researchers document that women are more likely to volunteer for service positions (serving on a Faculty Senate committee) with low promotability (Babcock et al. 2017). In a further laboratory experiment, they show that while women are more likely to volunteer when in a mixed-gender group, men and women volunteer at the same rates in single-gender groups, which suggests that women volunteer in mixed-gender groups because they feel that they may be expected to do

⁵ For example, Marcia Owens (2020) describes how women mentors can be asked to be the “closet chair, carrying out the work of chairing a student committee, without being recognized as chair, or “committee side pieces,” asked to provide mentoring and support without serving on student committees.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



so (Babcock et al. 2017). The research team’s experimental work further shows that women are asked more often to engage in work, by both men and women requestors, that women do not agree more due to their preferences, and that women are expected to say yes more frequently (Babcock et al. 2017). It appears that many women feel pressured to work more, doing a “good job” on service, even though this work may undercut their career advancement (Burkinshaw and White 2017; O’Meara, Kuvaeva, Nyunt, et al. 2017). This again speaks to the bind felt by many women faculty members – hemmed in by gender stereotypes that expect them to be agreeable, which leads to less time spent on valued activities, limiting their career mobility, or punishing them if they protect their time the way men do. Many women, thus, face a no-win situation.

At the same time, faculty of color, particularly Black, Latinx, and Indigenous faculty, often also engage in more time spent mentoring students and carrying out service, which can reduce their time spent on research (Bhatt 2018; Espino and Zambrana 2019; Gibbs et al. 2014; Griffin and Reddick 2011; Hanasono et al. 2019; Harley 2008; Hirshfield and Joseph 2012; Jones, Hwang, and Bustamante 2015; Joseph and Hirshfield 2011; Seaberg 2019; Turner 2002, 2011; Turner et al. 2011; Wood, Hilton, and Nevarez 2015). Faculty of color may face expectations that they will do more diversity work for the institution (Hanasono et al. 2019; Hirshfield and Joseph 2012; Joseph and Hirshfield 2011), which has been referred to as an “identity tax.” Students of color often rely on mentoring and support from faculty of color – who may also value “giving back” (Griffin and Reddick 2011; Harley 2008; Jones et al. 2015). Faculty women of color, then, face increased expectations for mentoring based on both their race and their gender, and often carry out substantial mentoring that is informal and unrecognized by colleges and universities (Gibbs et al. 2014; Griffin and Reddick 2011; Hanasono et al. 2019; Turner 2002).

Women of color also face higher expectations for service, in part because universities and colleges are eager to showcase how diverse their faculty is (even when the university is not). Thus, women of color may serve on many more committees than their white colleagues, while also being expected to engage in diversity work for the campus, even though this work is often undervalued or underrecognized by many rewards systems (Bhatt 2018; Griffin and Reddick 2011; Hirshfield and Joseph 2012; Joseph and Hirshfield 2011; Misra et al. 2021; Turner 2011). This work, can, even if undervalued by the institution, be meaningful to faculty members (Bird et al. 2004; Castañeda and Hames-García 2014; Turner 2002). However, it may still have negative material effects on the retention and promotion of women of color if it remains undervalued by colleges and universities (Griffin and Reddick 2011). It can also be challenging insofar that it reinforces that those doing the work do not have the same sense of belonging as other faculty members (O’Brien 2020). Gendered and racialized ideologies are reflected in actual workload differences in ways that appear to punish or limit the career opportunities of women of color.

These workload inequities – particularly women’s increased time spent on “service”) paradoxically has a direct impact on women’s ascension into leadership, since spending more time on less valued activities, such as service, can limit opportunities for promotion and career growth. Given the increased mentoring and service expectations for women, and particularly women of color, attaining promotion is particularly difficult (Berheide 2016; Bird et al. 2004; Eddy and Ward 2015; Hogan 2005; Logan and Dudley 2019; Mertz 2011; Owens 2020). Thus, while women’s pathways to leadership can be blocked because they are not promoted to higher ranks – this blockage often reflects their everyday leadership at more local levels. In addition, workload inequities can be frustrating for faculty members, who have higher levels of career dissatisfaction, lower levels of career progression, and are more likely to leave the university when they perceive workload inequities (Bhatt 2018; Bird 2011; Britton 2017; Jacobs and Winslow 2004; Misra et al. 2011, 2012; Yedia et al. 2015). Women have

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



unusually high levels of dissatisfaction with workload and burnout due to high workloads (Jacobs 2004; Lackritz 2004).

Thus, this puzzle – women appear to do more “academic service” and leadership, particularly at local levels, but are less likely to be represented at higher levels of university leadership – appears to be two sides of the same coin. Women are involved in more leadership work, particularly at departmental and college levels. They are involved in this work in part because they face greater pressure from students, colleagues, and leaders to be “good citizens” (El-Alayli et al. 2018; Hanasono et al. 2019; O’Meara 2016; O’Meara, Kuvaeva, Nyunt, et al. 2017). Yet, this very work tends to make it more difficult for them to progress in their careers, which then limits their opportunities to move into higher-level leadership positions. Yet, there is still more to this story; women’s engagement in administrative service also reflects the ascension of the neoliberal approach in higher education.

Neoliberalism & Women’s Administrative Work in Higher Education

Another paradox is that while women remain underrepresented at the highest levels of university leadership, just as they are overrepresented in time spent on service, they also appear to be increasingly visible in administrative work in colleges and universities. This administrative work, perhaps chairing departments, serving as Associate Deans or Associate Provosts, could serve as a channel, pushing women up into higher leadership positions. Yet, it often does not. In this final section of the review, I suggest that as colleges and universities absorb and promote neoliberal governance strategies, there is a need for a larger and larger array of middle managers, carrying out lower-level administrative maintenance, but not given access to opportunities for decision-making or resources that might lead them to be tapped for higher ranks. At the same time, white women and women of color are drawn into “diversity work” in ways that allow institutions to perform inclusion, without actually creating inclusivity.

Neoliberal governance strategies in higher education have tended to focus on emphasizing revenue generation, for example through research grants with high overhead, or online programs taught by low-paid adjunct faculty, rather than on support for the core missions of educational programming and research (Aronowitz 2000; Kezar and Lester 2011; Saunders 2010; Slaughter and Rhoades 2004). Institutions of higher education have been restructured in ways that privatize universities and make them more similar to corporations than educational institutions (Acker and Wagner 2019; Aronowitz 2000; Blackmore and Sawers 2015; Drake 2015; Kezar and Lester 2011; Morley and Crossouard 2016; Sader et al. 2015; Saunders 2010; Slaughter and Rhoades 2004). As Blackmore and Sawers (2015: 321) argue:

New regulative regimes opened universities up to greater market competition, corporatised universities through managerialism and marketisation, introduced greater industry influence through partnerships, and intensified focus on outcomes in terms of performance management, quality assurance and research assessment as emerging measures of national and international reputation.

The emphasis may appear to be in “producing” workers for changing economies efficiently, treating students as “customers,” and losing the goal of education as part of informed citizenship more broadly (Sader et al. 2015; Saunders 2010). As Saunders (2010: 60) argues, “The neoliberal university emphasizes the role of the faculty not as educators, researchers, or members of a larger community, but as entrepreneurs.”

These strategies, which have also been embraced by the federal and state governments, further emphasize the importance of accountability metrics – data collection and analysis, around issues like citations, grant funding dollars, entrepreneurial partnerships with industry, and the like (Acker 2012; Sader et al. 2015). Financial cuts,

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



particularly to public higher education from state governments, have been widespread, while universities have been driven toward strategies that emphasize revenue-generation, such as through commercializing research (Aronowitz 2000; Blackmore and Sawers 2015; Sader et al. 2015; Saunders 2010; Slaughter and Rhoades 2004). At the same time, there has been a greater push toward benchmarks and accountability around diversity goals. White women and women of color have been brought into administrative positions, as part of the university’s managerial strategy, to help document institutional commitments to these issues, yet generally without the power or resources needed to create true change (Ahmed 2012; Eveline 2004; Longman 2018).

Importantly, some research suggests that these new neoliberal and managerial strategies are connected to women’s moving into middle management positions (Blackmore and Sawers 2015). Joan Eveline (2004: 60) suggests that, along with relational skills, women’s “ambiguous authority status made them better at handling the insecurities and resistances that the promised changes would bring.” She (2004) posits that men leaders serve in the “ivory tower,” while women leaders are in the “ivory basement.” In these jobs, women may have fewer opportunities to lead the university – and spend more time simply meeting the reporting requirements – more engaged in “compliance” than “strategy” (Fitzgerald 2013). As a result, women in these roles may be doing “academic housekeeping,” keeping things running, but given fairly little opportunity to vision and pursue new approaches, “simultaneously part of the managerial fabric of the organization yet marginalized” (Fitzgerald 2013: 9). Even after achieving leadership positions, women often are less influential than colleagues at the same, or even lower, levels who are men, although it may be difficult for observers to recognize that women have little power as they bear substantial responsibility for compliance (Blackmore and Sawers 2015; Fitzgerald 2013).

Thus, with increased managerialism (Blackmore and Sawers 2015; Burkinshaw and White 2020; Morley 2013; Peterson 2015), women are more likely to be viewed as potential leaders, but under challenging conditions, as noted by Tanya Fitzgerald (2013:5):

In a devolved system where risk and responsibility are located at a school/department level this is a dangerous terrain for women as they bear the burden for ensuring that performance indicators are met, compliance secured, financial viability and profitability enhanced and the student experience improved. In these roles women are required to act as change agents as well as managers of the increasingly corporate culture of the university (Fitzgerald, 2013: 5)

The move of women into administrative roles has tended to be into these middle management positions, rather than more senior positions, with some studies suggesting that women are “stuck” in lower or middle management (Aiston and Yang 2017; Blackmore and Sawers 2015; Blackwood and Brown-Welty 2011; Fitzgerald 2013; Moodly and Toni 2019; O’Brien 2020; Shain 2000; Webster 2020).⁶ Glover (2010) argues that Black women are more likely to be in administrative positions where they implement policy, rather than make policy. These approaches may mean women are invited to the table, but do not have the same power as others in the conversation, and cannot do the transformational work they hope to do (O’Brien 2020). As Eddy and Ward (2015: 9) argue, “Mid-level managers may keep the trains running on time, but they do not get to choose the destination of the train.”

⁶ On the other hand, some researchers see middle management as the pipeline to more senior management roles (Wallace and Marchant 2009)

One study conducted in Sweden by Helen Peterson (2016), where women make up a larger proportion of higher education leaders, suggests that “middle managers” are increasingly sought out due to their administrative and bureaucratic skills. Yet these middle management jobs appear to be combined with less collegiality and a higher workload, with these workers emphasizing in interviews that taking up this sort of administrative work is both “drudgery” as well as professionally “risky” (Peterson 2016). As one interview respondent argues, “A management role is easily transformed into a servant role. Especially if many women hold the position” (Peterson 2016: 122). These positions may also create conflict between the manager’s values and scholarship and neoliberal managerial imperatives (Deem 2006; Morley and Crossouard 2016). Indeed, women leaders may be less engaged in wanting to lead when assessment is focused on performance indicators, as opposed to creating a meaningful community (Morley 2014). Some research further suggests that insofar that middle management is viewed as highly bureaucratized, it may serve to discourage women from moving into more senior positions (Madden 2011).

There may also be a gender division of labor in these jobs, with women carrying out administrative work that is given less value and offers less opportunity for upward mobility. For example, Morley (2013: 121), suggests that women are placed in “velvet ghettos,” such as communications and human resources management, which do not provide opportunities for promotion (Morley 2013: 121). Others note that there is a gendered division of labor between women’s internal management (e.g., teaching and learning, mentorship) and men’s external management (e.g., research, finance, partnerships) (Aiston and Yang 2017; Blackmore and Sawers 2015). In one study in Hong Kong, the researchers examined particularly types of what they called “third-tier” leadership positions (Aiston and Yang 2017). For example, these might include general managerial positions, such as being associate chair of a department, research managerial positions, such as being director of a research center, or teaching managerial positions, such as directing a curricular program. They find that while men are equally allocated across these “third-tier” leadership positions, women are primarily allocated to teaching rather than research managerial positions (Aiston and Yang 2017). Blackmore and Sawyer’s (2015: 333) study of Vice Chancellors in Australia similarly find that the highly valued research-oriented positions are primarily filled by men, while women are more engaged in less valued positions focused around teaching, arguing: “Despite the increased presence of women in executive positions, the subtext of the old science/humanities binaries and vertical division of labour between ‘hard’ and ‘soft’ executive leadership domains remains.”

Women may further be drawn into managerial positions at times that limit their opportunities for promotion and leadership advancement (Airini et al. 2011; Castañeda and Hames-García 2014). For example, some research points out that women at the associate level position are much more likely to be drawn into service in roles like department chair, undergraduate program chair, or graduate program chair (Airini et al. 2011; Berheide 2016; Eddy and Ward 2015; Ginsberg et al. 2019; Misra et al. 2011; MLA 2009; Moodly and Toni 2017; Rosser 2012). These processes may be exacerbated for women of color, as Sue Rosser (2012: 137) argues, “women of color stand as particularly vulnerable to getting sidetracked into administration before becoming full professors. Ultimately, this decision to enter administration prematurely not only impedes research advancement but it also places a ceiling on the level of administrative position that the woman can attain.” Researchers also point out that engaging in this work, which often not only goes unrewarded but also may damage faculty careers, further leads to burnout, which also hinders later opportunities for leadership roles (Castañeda and Hames-García 2014). Thus, this managerial emphasis may not be improving women’s opportunities for positions in senior leadership roles.

Some literature refers to these managerial changes as the “feminization of management,” suggesting that as these administrative roles are more likely to be held by women, they are also deskilled and devalued (Deem et al. 2000; Peterson 2016; Shain 2000). Rather than viewing increasing numbers of women as a sign that women have succeeded, this literature draws attention to how these processes tend to replace highly paid men managers with less highly paid women (Deem et al. 2000). These findings appear to reflect similar trends in other fields, such as financial services, where women managers tend to have less authority and to receive fewer tangible rewards (Lyness and Thompson 2000; Ryan and Haslam 2007). Indeed, it appears even outside of academia that women may be tracked into administrative jobs that reflect a “gender division of managerial labor” and do not allow them to move upward (Lyness and Thompson 2000; Ryan and Haslam 2007).

At the same time, U.S. universities face increased pressure to market themselves as supportive environments, able to attract women and diverse students in a competitive field of universities vying for top students in a country with a rapidly diversifying population (Ahmed 2012; Eveline 2004; Warikoo 2019). Women and faculty of color may be “brought into” administrative roles as part of a process to project a more “caring” presence, while also making the university leadership appear more diverse than it actually is (Ahmed 2012; Fitzgerald 2013). Often, the goal of diversity work appears to be to *project* an image that the university is a diverse space, even though more universities have made little progress toward this goal (Ahmed 2012).

Indeed, diversity work can become an effort to neutralize inequality, rather than address inequality (Ahmed 2012; O’Brien 2020). Jodi O’Brien (2020: 98) argues:

Rather than transforming institutions, the logic of diversity work too often requires individuals to transform themselves to fit the rhetoric of repair and hospitality, to serve as correct subjects whose presence and involvement indicate that the institution is, indeed, doing its part to undo oppression by incorporating us.

Thus, this research points to how diversity work, itself, works to coopt women and women of color, asking them to address structural inequalities through their interpersonal work and the optics of having members of marginalized groups in visible (but not powerful) roles (Ahmed 2012). Thus, higher education institutions seek to absolve themselves of responsibility for their lack of inclusion by highlighting the “diversity work,” often carried out by women of color (Ahmed 2012; O’Brien 2020). Sara Ahmed (2012: 26) effectively describes diversity work as a “banging-your-head-on-the-brick-wall job,” as workers feel resentment and frustration because they cannot, without true institutional support, make progress toward their goals.

One critical step toward solving the problem of the underrepresentation of women in senior leadership positions might be in recognizing administrative work as leadership, rather than seeing it as “maintenance” (Detweiler et al. 2017). As long as universities primarily emphasize scholarship or disciplinary service above “administering programs and launching student initiatives” (Detweiler et al. 2017: 452), these inequalities will remain. As Detweiler and colleagues argue (2017: 456), “Without critical interventions, this invisible service work continues to function as domestic ‘women’s work’ that has been invisible, devalued, unpaid, disadvantaged.” This may be particularly true for administrators doing diversity work (O’Brien 2020), who are generating substantial good press for the university, even while the work goes unrewarded. At the same time, diversity work itself must be re-framed and recognized as central to institutional goals, with budgets to match its importance, and that have the potential to address the larger structural inequalities to lead to exclusion and inequality of outcomes by race, gender, sexuality, and other factors. Valuing this work can play an important role in diversifying the institution (Detweiler et al. 2017; Ginsberg et al. 2019; Thompson and Dawkins 2010).

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org

Overall, the literature reviewed in this section points out that although it appears that white women and women of color are moving into more administrative jobs in colleges and universities, this does not necessarily represent true progress. Many of these positions are part of a neoliberal push towards revenue-generation and accountability, and emphasize these leaders' roles in assuring institutional compliance rather than strategy. These middle-management positions also may reflect a gender division of labor, with women more likely to be tapped for positions focused on more devalued tasks. Finally, women, particularly women of color, may be brought into leadership positions as window-dressing, to manage toothless diversity programming, and project an image of the university as inclusive and supportive of diversity.

Conclusions

This review has aimed to address what appears to be a paradox. On the one hand, the literature consistently shows that women are underrepresented in senior leadership positions in colleges and universities. On the other hand, women are overrepresented in local leadership, managing programs, and doing diversity work, which does not appear to lead to career mobility. Even as there have been increases in women's formal appointment into administrative work, it appears that this work tends to be primarily middle management work and diversity work that also reflects a gendered and racialized division of labor that devalues many of the positions that women and faculty of color take.

In this review, I first analyzed the literature that explores pathways into senior leadership positions, approaches to leadership, and barriers to leadership. By reviewing a wide array of literature, I was able to consider how these processes operate writ large. The existing literature has primarily focused on interview studies, often based on interviews with a fairly small number of women leaders; yet because these studies, many of them dissertations, included diverse women leaders, a comprehensive review allowed me to recognize the overall patterns and trends.

In the following section, I explored the literature on faculty workload, focusing on the major inequities in faculty workload. There is no doubt that white women and women of color are overrepresented in service – or what might be understood as leadership work at more local levels. Yet this work tends to be unrecognized and undervalued and can serve as a barrier to promotion, as it can take away from spent on activities more valued in promotion.

In the final section, I analyzed the literature that explores the growing number of women in middle management positions in colleges and universities. Again, it might appear that these positions should lead to breakthroughs in women's representation in senior leadership positions. Yet, here, by engaging with the literature that recognizes how the restructuring of universities reflects neoliberal principles, I can show that the roles women take tend to also reflect a gender division of labor that devalues women's work, including their diversity work, in ways that may create barriers to opportunities in senior leadership positions.

As a result, this review clarifies what might seem to be a puzzling contradiction. Women's higher levels of engagement in service, and even their increased integration into middle management roles, don't lead them to senior leadership positions in the way that they might – because the very administrative roles that they are playing are undervalued, and do not have the same potential for upward mobility. Thus, the gendered organization of the university re-asserts itself again and again. Work that is done by women, and particularly women of color, is almost necessarily work that is devalued. The game remains rigged.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



References

- Acker, Joan. 2006. "Inequality Regimes: Gender, Class, and Race in Organizations." *Gender & Society* 20(4):441–64.
- Acker, Joan 1990. 1990. "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations." *Gender & Society* 4(2):139–58.
- Acker, Sandra. 2012. "Chairing and Caring: Gendered Dimensions of Leadership in Academe." *Gender and Education* 24(4):411–28.
- Acker, Sandra and Anne Wagner. 2019. "Feminist Scholars Working around the Neoliberal University." *Gender and Education* 31(1):62–81.
- Adamma, Anya Chidimma. 2017. "Gender Inequality and Appointment to Leadership Positions in Nigerian Tertiary Institutions." *Gender & Behaviour* 15(1):8341.
- Ahmed, S. 2012. *On Being Included: Racism and Diversity in Institutional Life*. Duke University Press.
- Airini, Sunny Collings, Lindsey Conner, Kathryn McPherson, Brenda Midson, and Cheryl Wilson. 2011. "Learning to Be Leaders in Higher Education: What Helps or Hinders Women's Advancement as Leaders in Universities." *Educational Management Administration and Leadership* 39(1):44–62.
- Aiston, Sarah Jane and Zi Yang. 2017. "“Absent Data, Absent Women”: Gender and Higher Education Leadership." *Policy Futures in Education* 15(3):262–74.
- Akubue, Mary-Thecla Ebelechukwu. 2016. "Exploring Women's Advancement in Top Management Positions in Higher Education in Southeast Nigeria." Grand Canyon University.
- Alfred, Mary V. 2011. "Chapter 14 Poised to Shatter the Glass Ceiling in the Ivory Tower." Pp. 303–24 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.
- Almaki, Samah Hatem, Abu Daud Silong, Khairuddin Idris, and Nor Wahiza Abd. Wahat. 2016. "Challenges
As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Faced Muslim Women Leaders in Higher Education.” *Journal of Educational and Social Research* 6(3):75–86.
- Aronowitz, Stanley. 2000. *The Knowledge Factory: Dismantling the Corporate University and Creating True Higher Learning*. Boston, MA: Beacon Press.
- Aschenbrenner, Lyvier Leffler. 2006. “Rising to the Top: The Personal and Professional Journeys of Four Hispanic Women Leaders in Higher Education.” Iowa State University.
- Babcock, Linda, Maria P. Recalde, Lise Vesterlund, and Laurie Weingart. 2017. “Gender Differences in Accepting and Receiving Requests for Tasks with Low Promotability.” *American Economic Review* 107(3):714–47.
- Bass, Lisa R. and Susan C. Faircloth. 2011. “Chapter 10 Female Faculty of Color: Successful Strategies in Academia.” Pp. 219–39 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.
- Beer, Janet. 2015. “Diversity in Leadership.” *Perspectives: Policy and Practice in Higher Education* 19(2):40–42.
- Bellas, Marcia L. 1999. “Emotional Labor in Academia: The Case of Professors.” *The Annals of the American Academy of Political and Social Science* 561(1):96–110.
- Berheide, Catherine White. 2016. “Potholes and Detours on the Road to Full Professor: A Tale of Two Liberal Arts Colleges.” Pp. 75–92 in *Pathways, Potholes, and the Persistence of Women in Science*, edited by E. H. Branch. Lanham, Maryland: Lexington Books.
- Bhatt, Amy. 2018. “The Butterfly Effect of Women’s Studies.” *Feminist Studies* 44(2):379–95.
- Bilimoria, Diana and Lynn T. Singer. 2019. “Institutions Developing Excellence in Academic Leadership (IDEAL): A Partnership to Advance Gender Equity, Diversity, and Inclusion in Academic STEM.”

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Equality, Diversity and Inclusion 38(3):362–81.

Bird, Sharon R. 2011. “Unsettling Universities’ Incongruous, Gendered Bureaucratic Structures: A Case-Study Approach.” *Gender, Work & Organization* 18(2):202–30.

Bird, Sharon R., Jacquelyn Litt, and Yong Wang. 2004. “Creating Status of Women Reports : Institutional Housekeeping as ‘Women’s Work.’” *NWSA Journal* 16(1):194–206.

Blackmore, Jill and Naarah Sawers. 2015. “Executive Power and Scaled-up Gender Subtexts in Australian Entrepreneurial Universities.” *Gender and Education* 27(3):320–37.

Blackwood, Jothany and Sharon Brown-Welty. 2011. “Chapter 6 Mentoring and Interim Positions: Pathways to Leadership for Women of Color.” Pp. 109–33 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.

Bornstein, Rita. 2009. “Women and the Quest for Presidential Legitimacy.” Pp. 208–37 in *Women in Academic Leadership: Professional Strategies, Personal Choice*, edited by D. R. Dean, S. J. Bracken, and J. K. Allen. Sterling, VA.

Britton, Dana M. 2017. “Beyond the Chilly Climate: The Salience of Gender in Women’s Academic Careers.” *Gender & Society* 31(1):5–27.

Brower, Rebecca L., Robert A. Schwartz, and Tamara Bertrand Jones. 2019. “‘Is It Because I’m a Woman?’ Gender-Based Attributional Ambiguity in Higher Education Administration.” *Gender and Education* 31(1):117–35.

Burgh House, Patricia. 2001. “Women in Higher Education Administration: A Synthesis of the Literature 1970 To 1999.” Seton Hall University.

Burkinshaw, Paula, Jane Cahill, and Jacqueline Ford. 2018. “Empirical Evidence Illuminating Gendered Regimes in UK Higher Education: Developing a New Conceptual Framework.” *Education Sciences* 8(2).

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Burkinshaw, Paula and Kate White. 2017. “Fixing the Women or Fixing Universities: Women in HE Leadership.” *Administrative Sciences* 7(3):30.
- Burkinshaw, Paula and Kate White. 2020. “Generation, Gender, and Leadership: Metaphors and Images.” *Frontiers in Education* 5(October).
- Calás, Marta, Linda Smircich, and Evangelina Holvino. 2014. “Theorizing Gender and Organizations.” Pp. 17–52 in *Handbook of Gender in Organizations*, edited by S. Kumra, R. Simpson, and R. J. Burke. New York, New York: Oxford University Press.
- Campo, Peggy Ann. 2018. “Overcoming Gender-Based Barriers: Experiences of Women Presidents in Higher Education.” Northcentral University.
- Carnes, Molly, Christie M. Bartels, Anna Kaatz, and Christine Kolehmainen. 2015. “Why Is John More Likely to Become Department Chair Than Jennifer?” *Transactions of the American Clinical and Climatological Association* 126:197–214.
- Carnes, Molly and C. Noel Bairey Merz. 2017. “Women Are Less Likely Than Men to Be Full Professors in Cardiology: Why Does This Happen and How Can We Fix It?” *Circulation* 135(6):518–20.
- Castañeda, Mari and Michael Hames-García. 2014. “Breaking Through the Associate Professor Glass Ceiling.” Pp. 265–92 in *The Truly Diverse Faculty: New Dialogues in American Higher Education*, edited by S. A. Fryberg and E. J. Martínez. New York: Palgrave Macmillan US.
- Chen, Edith Wen-Chu and Shirley Hune. 2011. “Chapter 8 Asian American Pacific Islander Women from Ph.D. to Campus President: Gains and Leaks in the Pipeline.” Pp. 163–90 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.
- Christman, Dana E. and Rhonda L. McClellan. 2012. “Discovering Middle Space: Distinctions of Sex and Gender in Resilient Leadership.” *Journal of Higher Education* 83(5):648–70.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Chung, Jiah “Rhea.” 2008. “The Journey: Asian American Females In Higher Education Administration.” University of Southern California.
- Cikara, Mina and Susan T. Fiske. 2009. “Warmth, Competence, and Ambivalent Sexism: Vertical Assault and Collateral Damage.” in *The Glass Ceiling in the 21st Century: Understanding Barriers to Gender Equality*, edited by M. Barreto, M. K. Ryan, and M. T. Schmitt. American Psychological Association.
- Commodore, Felecia, Amanda Washington Lockett, A. C. Johnson, Cheleah Googe, and Megan Covington. 2020. “Controlling Images, Comments, and Online Communities: A Critical Discourse Analysis of Conversations about Black Women HBCU Presidents.” *Women’s Studies International Forum* 78(December 2019):102330.
- Corcoran, Cathy. 2008. “Women College Presidents: Leading with Authenticity.” University of San Francisco.
- Correll, Shelley J. 2017. “SWS 2016 Feminist Lecture: Reducing Gender Biases In Modern Workplaces: A Small Wins Approach to Organizational Change.” *Gender and Society* 31(6):725–50.
- Crespo, Noemi. 2013. “Latina Women: How They Succeed Factors That Influence the Career Advancement of Latina Women in Higher Education.” University of Pennsylvania.
- Dean, Diane R. 2009. “Resources, Role Models, and Opportunity Makers: Mentoring Women in Academic Leadership.” Pp. 128–48 in *Women in Academic Leadership: Professional Strategies, Personal Choice*, edited by D. R. Dean, S. J. Bracken, and J. K. Allen. Sterling, VA: Stylus Publishing.
- DeConcilio, Danielle. 2016. “Limiting Factors in Women’s Attainment of Leadership Positions in Higher Education Administration.” Florida Southern University.
- Deem, Rosemary. 2006. “Changing Research Perspectives on the Management of Higher Education: Can Research Permeate the Activities of Manager-Academics?” *Higher Education Quarterly* 60(3):203–28.
- Deem, Rosemary, Jennifer T. Ozga, and Craig Prichard. 2000. “Managing Further Education: Is It Still Men’s Work Too?” *Journal of Further and Higher Education* 24(2):231–50.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Detweiler, Jane, Margaret LaWare, and Patti Wojahn. 2017. “Academic Leadership and Advocacy: On Not Leaning In.” *College English* 79(5):451–65.
- Diehl, Amy B. 2014. “Making Meaning of Barriers and Adversity: Experiences of Women Leaders in Higher Education.” *Advancing Women in Leadership* 34:54–63.
- Doerr, Sarah. 2015. “Gender Equity Requires Higher Education Equity: A Discussion with African Women about the Barriers They Face to Participation as Students, Faculty, and in Academic Leadership Roles.” *Planning and Changing* 46(3):294–310.
- Dominici, By Francesca, Linda P. Fried, and Scott L. Zeger. 2010. “So Few Women Leaders: It’s No Longer a Pipeline Problem, so What Are the Root Causes?” *Academe* 95(4):25–27.
- Drake, Pat. 2015. “Becoming Known through Email: A Case of Woman, Leadership, and an Awfully Familiar Strange Land.” *Gender and Education* 27(2):148–63.
- Dunbar, Denise R. and Ruth T. Kinnersley. 2011. “Mentoring Female Administrators Toward Leadership Success.” *Delta Kappa Gamma Bulletin* 77(3):17–24.
- Durr, Marlese and Adia M. Wingfield. 2011. “Keep Your ‘N’ in Check: African American Women and the Interactive Effects of Etiquette and Emotional Labor.” *Critical Sociology* 37(5):557–71.
- Eagly, Alice H. and Steven J. Karau. 2002. “Role Congruity Theory of Prejudice toward Female Leaders.” *Psychological Review* 109(3):573–98.
- Eagly, Alice H., Steven J. Karau, and Mona G. Makhijani. 1995. “Gender and the Effectiveness of Leaders: A Meta-Analysis.” *Psychological Bulletin* 117(1):125–45.
- Eagly, Alice H. and Sabine Sczesny. 2009. “Stereotypes about Women, Men, and Leaders: Have Times Changed?” in *The Glass Ceiling in the 21st Century: Understanding Barriers to Gender Equality*, edited by M. Barreto, M. K. Ryan, and M. T. Schmitt. American Psychological Association.
- Earley, Penelope M., Jane H. Applegate, and Jill M. Tarule. 2011. “Relationship Building and Higher Education
As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Women: Stories and Observations.” Pp. 241–62 in *Women as leaders in education : Succeeding despite inequity, discrimination, and other challenges*, edited by J. L. Martin. ABC-CLIO.
- Eddy, Pamela L. 2009. “Leading Gracefully: Gendered Leadership in Community Colleges.” Pp. 8–30 in *Women in Academic Leadership: Professional Strategies, Personal Choice*, edited by D. R. Dean, S. J. Bracken, and J. K. Allen. Sterling, VA: Stylus Publishing.
- Eddy, Pamela L. and Kelly Ward. 2015. “Lean In or Opt Out: Career Pathways of Academic Women.” *Change: The Magazine of Higher Learning* 47(2):6–13.
- Ekine, Adefunke O. 2018. “Women in Academic Arena: Struggles, Strategies and Personal Choices.” *Gender Issues* 35(4):318–29.
- El-Alayli, Amani, Ashley A. Hansen-Brown, and Michelle Ceynar. 2018. “Dancing Backwards in High Heels: Female Professors Experience More Work Demands and Special Favor Requests, Particularly from Academically Entitled Students.” *Sex Roles* 79(3–4):136–50.
- Enke, Kathryn. 2014. “Conceptions of Power among Senior Women Administrators at Liberal Arts Colleges in the Upper Midwestern United States.” *NASPA Journal About Women in Higher Education* 7(2):199–225.
- Espino, Michelle M. and Ruth E. Zambrana. 2019. “‘How Do You Advance Here? How Do You Survive?’ An Exploration of Underrepresented Minority Faculty Perceptions of Mentoring Modalities.” *Review of Higher Education* 42(2):457–84.
- Eveline, Joan. 2004. *Ivory Basement Leadership*. Crawley, Western Australia: University of Western Australia Press.
- Everett, Shirley Jeanette. 2014. “Rising To The Top: Experiences Of African American Women In Us Higher Education.” St. Mary’s College of California.
- Farris, Paul W., Neal T. Bendle, Phillip E. Pfeifer, and David J. Reibstein. 2010. *Marketing Metrics: The Definitive Guide to Measuring Marketing Performance*. Pearson Education.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Fitzgerald, Tanya. 2013. *Women Leaders in Higher Education: Shattering the Myths*. London: Routledge Press.
- Fox, Mary Frank and Kathryn Kline. 2016. “Women Faculty in Computing.” Pp. 41–55 in *Pathways, Potholes, and the Persistence of Women in Science*, edited by E. H. Branch. Lanham, Maryland: Lexington Books.
- Fox, Mary Frank and Wenbin Xiao. 2013. “Perceived Chances for Promotion among Women Associate Professors in Computing: Individual, Departmental, and Entrepreneurial Factors.” *Journal of Technology Transfer* 38(2).
- Gaëtane, Jean-Marie and Jeffrey S. Brooks. 2011. “Chapter 5 Mentoring and Supportive Networks for Women of Color in Academe.” Pp. 91–108 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.
- Gasman, Marybeth and Laura W. Perna. 2011. “Chapter 4 Promoting Attainment of African American Women in the STEM Fields: Lessons from Historically Black Colleges and Universities.” Pp. 73–88 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.
- Gaston, Keva. 2017. “By Any Means Necessary: An Examination of the Career Trajectories of Women Community College Presidents.” Chicago State University.
- Generett, Gretchen Givens and Olga M. Welch. 2018. “Transformative Leadership: Lessons Learned Through Intergenerational Dialogue.” *Urban Education* 53(9):1102–25.
- Gibbs, Kenneth D. Jr., John McGready, Jessica C. Bennett, and Kimberly Griffin. 2014. “Biomedical Science Ph.D. Career Interest Patterns by Race / Ethnicity and Gender.” *PLoS ONE* 9(12):e114736.
- Gill, Kristina and Stephanie J. Jones. 2013. “Fitting in: Community College Female Executive Leaders Share Their Experiences—a Study in West Texas.” *NASPA Journal About Women in Higher Education* 6(1):48–70.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Ginsberg, Freda, Julia Davis, Andrea Simms, and Lauren T. Gonyea. 2019. “Women in Higher Education Leadership.” Pp. 219–37 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- Gonyea, Lauren T. 2019. “Women in Higher Education Leadership.” Pp. 44–60 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- Gordon, Suzanne, Susan V. Iverson, and Elizabeth J. Allan. 2010. “The Discursive Framing of Women Leaders in Higher Education.” Pp. 81-105. in *Reconstructing policy in higher education: Feminist poststructural perspectives*. New York: Routledge.
- Gorondutse, Abdullahi Hassan, Haim Hilman, Maruf Gbadebo Salimon, Rajeh Alajmi, Faye Hamed Al Shdaifat, and Vikniswari Vija Kumaran. 2019. “Establishing the Effect of Government Support on the Relationship between Gender Egalitarian and Women Leadership Effectiveness among Public Universities in KSA.” *Gender in Management* 34(4):306–25.
- Green, Cheryl Evans and Valarie Greene King. 2001. “Sisters Mentoring Sisters: Africentric Leadership Development for Black Women in the Academy.” *The Journal of Negro Education* 70(3):156.
- Griffin, Kimberly A. and Richard J. Reddick. 2011. “Surveillance and Sacrifice: Gender Differences in the Mentoring Patterns of Black Professors at Predominantly White Research Universities.” *American Educational Research Journal* 48(5):1032–57.
- Griffiths, Vivienne. 2012. “Women Leaders in Higher Education: Organizational Cultures and Personal Resilience.” *Géneros* 1(1):70–94.
- Guarino, Cassandra M. and Victor M. H. Borden. 2017. “Faculty Service Loads and Gender: Are Women Taking Care of the Academic Family?” *Research in Higher Education* 58(6):672–94.
- Hanasono, Lisa K., Ellen M. Broido, Margaret M. Yacobucci, Karen V. Root, Susana Peña, and Deborah A.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- O’Neil. 2019. “Secret Service: Revealing Gender Biases in the Visibility and Value of Faculty Service.” *Journal of Diversity in Higher Education* 12(1):85–98.
- Hannum, K., S. Muhly, P. Shockley-Zalabak, and J. S. White. 2014. *Stories from the Summit Trail: Leadership Journeys of Senior Women in Higher Education*. Denver CO.
- Hannum, Kelly M., Shannon M. Muhly, Pamela S. Shockley-zalabak, and Judith S. White. 2015. “Women Leaders within Higher Education in the United States: Supports, Barriers, and Experiences of Being a Senior Leader.” *Women Leaders within Higher Education in the United States: Supports, Barriers, and Experiences of Being a Senior Leader* 35:65–75.
- Harley, Debra A. 2008. “Maids of Academe: African American Women Faculty at Predominately White Institutions.” *Journal of African American Studies* 12(1):19–36.
- Haslam, S. Alexander and Michelle K. Ryan. 2008. “The Road to the Glass Cliff: Differences in the Perceived Suitability of Men and Women for Leadership Positions in Succeeding and Failing Organizations.” *Leadership Quarterly* 19(5):530–46.
- Herbst, Tessie H. H. 2020. “Gender Differences in Self-Perception Accuracy: The Confidence Gap and Women Leaders’ Underrepresentation in Academia.” *SA Journal of Industrial Psychology* 46:1–9.
- Hill, Lilian H., Celeste A. Wheat, Tanyaradzwa C. Mandishona, and Andrea E. Blake. 2019. “Women’s Leadership Aspirations and Career Paths in Higher Education.” Pp. 176–98 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- Hill, Linda A. 2010. “Leading from Behind.” *Harvard Business Review*.
- Hirshfield, Laura E. and Tiffany D. Joseph. 2012. “‘We Need a Woman, We Need a Black Woman’: Gender, Race, and Identity Taxation in the Academy.” *Gender and Education* 24(2):213–27.
- Hodges, C. R. and O. M. Welch. 2018. *Truth Without Tears: African American Women Deans Share Lessons in*
- As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Leadership. Harvard Education Press.

Hogan, Katie. 2005. "Superserviceable Feminism." *The Minnesota Review* 63–64(October):95–111.

Howard, Elizabeth and Jonathan Gagliardi. 2018. "Leading the Way to Parity: Preparation, Persistence, and the Role of Women Presidents."

Howe-Walsh, Liza and Sarah Turnbull. 2016. "Barriers to Women Leaders in Academia: Tales from Science and Technology." *Studies in Higher Education* 41(3).

Jacobs, Jerry a. 2004. "The Faculty Time Divide." *Sociological Forum* 19(1):3–27.

Jacobs, Jerry A. and Sarah E. Winslow. 2004. "Overworked Faculty: Job Stresses and Family Demands." *Annals of the American Academy of Political and Social Science* 596(1):104–29.

Jones, Brandolyn, Eunjin Hwang, and Rebecca M. Bustamante. 2015. "African American Female Professors' Strategies for Successful Attainment of Tenure and Promotion at Predominately White Institutions: It Can Happen." *Education, Citizenship and Social Justice* 10(2):133–51.

Jones, Tamara Bertrand and Waltrina Dufor. 2010. "Direction along the Path: Mentoring and Black Female Administrators." Pp. 2–7 in *Pathways to Higher Education Administration for African American Women*, edited by T. B. Jones, L. S. Dawkins, M. H. Glover, M. M. McClinton, and J. C. Brazzell. Stylus.

Jordan, Shawntel N. 2014. "African American Women In Higher Education: Their Leadership Preparation, Career Paths, And Perceived Obstacles." Capella University.

Joseph, Tiffany D. and Laura E. Hirshfield. 2011. "'why Don't You Get Somebody New to Do It?' Race and Cultural Taxation in the Academy." *Ethnic and Racial Studies* 34(1):121–41.

Kabonesa, Consolata and Elizabeth Kaase-Bwanga. 2014. "Rethinking Leadership, Management and Career Advancement for 21stCentury Deans in the Social Sciences and Humanities at Makerere University." *Journal of Higher Education in Africa / Revue de l'enseignement Supérieur En Afrique VO - 12* 12(1):27–52.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Kanter, Rosabeth Moss. 2008. *Men and Women of the Corporation: New Edition*. Basic books.
- Kezar, Adrianna J. and Jaime Lester. 2011. “Grassroots Leadership: Making the Invisible Visible.” Pp. 3–28 in *Enhancing Campus Capacity for Leadership: An Examination of Grassroots Leaders in Higher Education*. Redwood City, CA: Stanford University Press.
- Kezar, Adrianna J. and Jaime L. Lester. 2010. “Breaking the Barriers of Essentialism in Leadership Research: Positionality as a Promising Approach.” *Feminist Formations* 22(1):163–85.
- Kjeldal, Sue Ellen, Jennifer Rindfleish, and Alison Sheridan. 2005. “Deal-Making and Rule-Breaking: Behind the Façade of Equity in Academia.” *Gender and Education* 17(4):431–47.
- Klotz, Ann Marie. 2014. “The Journey to the Top: Women’s Paths to the University Presidency.” DePaul University.
- Klotz, Bryan, Courtenay Claussnitzer, and Don Longhurst. 2009. “TXI, Oro Grande Plant Modernization Raw Meal Production with a High Pressure Grinding Roll.” *IEEE Cement Industry Technical Conference (Paper)*.
- Krause, Susan Faye. 2017. “Leadership: Underrepresentation of Women in Higher Education.” Northcentral University.
- Kyvik, Svein. 2013. “Academic Workload and Working Time: Retrospective Perceptions Versus Time-Series Data.” *Higher Education Quarterly* 67(1):2–14.
- Lackritz, James R. 2004. “Exploring Burnout among University Faculty: Incidence, Performance, and Demographic Issues.” *Teaching and Teacher Education* 20(7):713–29.
- Laube, Heather. 2021. “Outsiders Within Transforming the Academy: The Unique Positionality of Feminist Sociologists.” *Gender and Society* XX(X):1–25.
- Leslie, Sarah Jane, Andrei Cimpian, Meredith Meyer, and Edward Freeland. 2015. “Expectations of Brilliance Underlie Gender Distributions across Academic Disciplines.” *Science* 347(6219).

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Link, Albert N., Christopher A. Swann, and Barry Bozeman. 2008. “A Time Allocation Study of University Faculty.” *Economics of Education Review* 27(4):363–74.
- Lloyd-Jones, Brenda. 2011. “Chapter 1 Diversification in Higher Education Administration: Leadership Paradigms Reconsidered.” Pp. 3–18 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.
- Logan, Stephanie R. and Harriette Scott Dudley. 2019. “The ‘Double-Whammy’ of Being Black and a Woman in Higher Education Leadership.” Pp. 84–104 in *Challenges and Opportunities for Women in Higher Education Leadership*. Vol. 2, edited by H. L. Schnackenberg and D. A. Simard.
- Longman, Karen. 2018. “Perspectives on Women’s Higher Education Leadership from Around the World.” *Administrative Sciences* 8(3):35.
- Longman, Karen A. and Patricia S. Anderson. 2011. “Gender Trends in Senior-Level Leadership: A 12-Year Analysis of the CCCU U.S. Member Institutions.” *Christian Higher Education* 10(5):422–43.
- Longman, Karen, Jessica Daniels, Debbie Lamm Bray, and Wendy Liddell. 2018. “How Organizational Culture Shapes Women’s Leadership Experiences.” *Administrative Sciences* 8(2):8.
- Lord, Linley Anne and Alison Preston. 2009. “Understanding Leadership Experiences: The Need for Story Sharing and Feminist Literature as a Survival Manual for Leadership.” *Gender and Education* 21(6):769–77.
- Lyness, Karen S. and Donna E. Thompson. 2000. “Climbing the Corporate Ladder: Do Female and Male Executives Follow the Same Route?” *Journal of Applied Psychology* 85(1):86–101.
- Macdonald, Cameron Lynne and David Merrill. 2008. “Intersectionality in the Emotional Proletariat: A New Lens on Employment Discrimination in Service Work.” Pp. 113–33 in *Service Work: Critical Perspectives*, edited by C. L. Macdonald and M. Korczynski. New York, NY: Routledge.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Madden, Margaret. 2011. "Gender Stereotypes of Leaders: Do They Influence Leadership in Higher Education." *Wagadu* 9(Fall):55–88.
- Madera, Merilee. 2017. "Pursuing Leadership Positions in Higher Education: A Phenomenological Exploration of Female Administrators' Experience with Gender Inequality." Northeastern University.
- Madsen, Susan R. 2008. "On Becoming a Woman Leader: Learning from the Experiences of University Presidents." xxiv, 321 p.
- Mahady, Christine. 2018. "Voices of Women College Presidents: Women's Perceptions of Career Navigation into the College Presidency." University of Pennsylvania.
- Mainah, Fredah. 2016. "The Rising of Black Women in Academic Leadership Positions in USA: Lived Experiences of Black Female Faculty." Chicago School of Professional Psychology.
- Malik, Samina. 2011. "A Portrayal of Women Educational Leadership in Pakistan." *Journal on Educational Psychology* 5(2):37–44.
- Mamiseishvili, Ketevan and Donghun Lee. 2018. "International Faculty Perceptions of Departmental Climate and Workplace Satisfaction." *Innovative Higher Education* 43(5):323–38.
- Mamiseishvili, Ketevan, Michael T. Miller, and Donghun Lee. 2016. "Beyond Teaching and Research: Faculty Perceptions of Service Roles at Research Universities." *Innovative Higher Education* 41(4):273–85.
- Mamiseishvili, Ketevan and Vicki J. Rosser. 2010. "International and Citizen Faculty in the United States: An Examination of Their Productivity at Research Universities." *Research in Higher Education* 51(1):88–107.
- Manfredi, Simonetta, Kate Clayton-Hathway, and Emily Cousens. 2019. "Increasing Gender Diversity in Higher Education Leadership: The Role of Executive Search Firms." *Social Sciences* 8(6).
- Maphalala, Mncedisi and Nhlanhla Mpofo. 2017. "Are We There yet? A Literature Study of the Challenges of Women Academics in Institutions of Higher Education." *Gender & Behaviour* 2017 15(3):9245–53.
- Mason, Mary Ann. 2009. "How the ' Snow-Woman Effect ' Slows Women ' s Progress." *Chronicle of Higher Education* 34(17):A16.
- As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Education 56(6):4–6.

Mason, Mary Ann, Nicholas H. Wolfinger, and Marc Goulden. 2013. *Do Babies Matter?: Gender and Family in the Ivory Tower*. Rutgers University Press.

Mayer, Claude Helene, Louise Tonelli, Rudolf M. Oosthuizen, and Sabie Surtee. 2018. “‘You Have to Keep Your Head on Your Shoulders’: A Systems Psychodynamic Perspective on Women Leaders.” *SA Journal of Industrial Psychology* 44:1–16.

McNae, Rachel and Kerren Vali. 2015. “Diverse Experiences of Women Leading in Higher Education: Locating Networks and Agency for Leadership within a University Context in Papua New Guinea.” *Gender and Education* 27(3):288–303.

Mertz, Norma T. 2011. “Chapter 3 Women of Color Faculty: Recruitment, Hiring, and Retention.” Pp. 41–71 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.

Misra, Joya, Alexandra Kuvaeva, Kerry Ann O’Meara, Dawn Kiyoe Culpepper, and Audrey Jaeger. 2021. “Gendered And Racialized Perceptions of Faculty Workloads.” *Gender & Society* 35(3):358–94.

Misra, Joya, Jennifer Hicke Lundquist, Elissa Dahlberg Holmes, and Stephanie Agiomavritis. 2011. “The Ivory Ceiling of Service Work.” *Academe* 97(1):22–26.

Misra, Joya, Jennifer Hicke Lundquist, and Abby Templer. 2012. “Gender, Work Time, and Care Responsibilities Among Faculty.” *Sociological Forum* 27(2):300–323.

Mitchell, Natasha and Jaronda J. Miller. 2011. “Chapter 9 The Unwritten Rules of the Academy: A Balancing Act for Women of Color.” Pp. 193–218 in *Women of Color in Higher Education: Changing Directions and New Perspectives*. Vol. 10, *Diversity in Higher Education*, edited by G. Jean-Marie and B. Lloyd-Jones. Emerald Group Publishing Limited.

Mitchell, Regina L. Garza, Erika A. Carr, Lisa R. Garcia, Luke E. Steinman, Marlene Kowalski-Braun, and

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Andrea L. Beach. 2019. “Holding Out for a Hero.” Pp. 156–75 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- MLA, Modern Language Association. 2009. *Standing Still: The Associate Professor Survey*. New York, New York.
- Montas-Hunter, Sonja S. 2012. “Self-Efficacy and Latina Leaders in Higher Education.” *Journal of Hispanic Higher Education* 11(4):315–35.
- Moodly, Adèle L. and Noluthando M. Toni. 2017. “Re-Imagining Higher Education Leadership – in Conversation with South African Female Deputy Vice-Chancellors.” *Perspectives in Education* 35(2):155–68.
- Moodly, Adele and Noluthando Toni. 2019. “Intrinsic and Extrinsic Factors in Empowerment of Women Towards Leadership: A Study in Higher Education (South Africa).” *Proceedings of the 2Nd International Conference on Gender Research (Icgr 2019)* 407–16.
- Moreland, Meagan and Tobi Thompson. 2019. “Mentoring Female Leaders at Multiple Levels in One Higher Education Institution.” Pp. 20–28 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- Morley, Louise. 2013. “The Rules of the Game: Women and the Leaderist Turn in Higher Education.” *Gender and Education* 25(1):116–31.
- Morley, Louise. 2014. “Lost Leaders: Women in the Global Academy.” *Higher Education Research and Development* 33(1):114–28.
- Morley, Louise and Barbara Crossouard. 2016. “Gender in the Neoliberalised Global Academy: The Affective Economy of Women and Leadership in South Asia.” *British Journal of Sociology of Education* 37(1):149–68.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org

- Morris, Tracy L. and Joseph S. Laipple. 2015. “How Prepared Are Academic Administrators? Leadership and Job Satisfaction within US Research Universities.” *Journal of Higher Education Policy and Management* 37(2):241–51.
- Moses, Yolanda T. 2009. “Advice from the Field: Guiding Women of Color to Academic Leadership.” Pp. 181–207 in *Women in Academic Leadership: Professional Strategies, Personal Choice*, edited by D. R. Dean, S. J. Bracken, and J. K. Allen. Sterling, VA: Stylus Publishing.
- Mott, Maxine C. 2002. “Women on Campus: Mosaic Myth or Melting Pot Reality ?” Pp. 178–82 in *Women in the Canadian Academic Tundra: Challenging the Chill*, edited by E. Hannah, L. J. Paul, and S. Vethamany-Globus. Montreal: Mc Gill-Queen’s University Press.
- Moultrie, Alison. 2003. “South African Women Leaders in Higher Education: Professional Development Needs in a Changing Context.” *McGill Journal of Education / Revue Des Sciences de l’éducation de McGill* 38(003):407–20.
- Ngunjiri, Faith Wambura and Kathy Ann C. Hernandez. 2017. “Problematizing Authentic Leadership: A Collaborative Autoethnography of Immigrant Women of Color Leaders in Higher Education.” *Advances in Developing Human Resources* 19(4):393–406.
- Nguyen, Thi Lan Huong. 2013. “Barriers to and Facilitators of Female Deans’ Career Advancement in Higher Education: An Exploratory Study in Vietnam.” *Higher Education* 66(1):123–38.
- Noble, Carolyn. 2014. “Gender Equity in Australian Universities: The Many Paradoxes of Securing Senior Leadership Positions.” *Forum on Public Policy: A Journal of the Oxford Round Table*.
- Nyoni, Watende Pius, Chen He, and Mashala Lameck Yusuph. 2017. “Sustainable Interventions in Enhancing Gender Parity in Senior Leadership Positions in Higher Education in Tanzania.” *Journal of Education and Practice* 8(13):44–54.
- O’Brien, Jodi. 2020. “Can I Charge My Therapy to the University?” Pp. 95–105 in *Presumed Incompetent II: As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org*



Race, Class, Power, and Resistance of Women in Academia, edited by Y. F. Niemann, G. Gutiérrez y Muhs, and C. G. Gonzalez. University of Colorado/Utah State University Press.

O'Connor, Pat. 2019. "Gender Imbalance in Senior Positions in Higher Education: What Is the Problem? What Can Be Done?" *Policy Reviews in Higher Education* 3(1):28–50.

O'Connor, Pat, Teresa Carvalho, and Kate White. 2014. "The Experiences of Senior Positional Leaders in Australian, Irish and Portuguese Universities: Universal or Contingent?" *Higher Education Research and Development* 33(1):5–18.

O'Meara, Kerry Ann and Audrey J. Jaeger. 2016. "Preparing Future Faculty for Community Engagement: Barriers, Facilitators, Models, and Recommendations." *Journal of Higher Education Outreach and Engagement* 20(1):127–50.

O'Meara, Kerry Ann, Audrey Jaeger, Joya Misra, Courtney Lennartz, and Alexandra Kuvaeva. 2018. "Undoing Disparities in Faculty Workloads: A Randomized Trial Experiment." *PLoS ONE* 13(12):1–15.

O'Meara, Kerry Ann, Alexandra Kuvaeva, and Gudrun Nyunt. 2017. "Constrained Choices: A View of Campus Service Inequality From Annual Faculty Reports." *Journal of Higher Education* 88(5):672–700.

O'Meara, Kerry Ann, Alexandra Kuvaeva, Gudrun Nyunt, Chelsea Waugaman, and Rose Jackson. 2017. "Asked More Often: Gender Differences in Faculty Workload in Research Universities and the Work Interactions That Shape Them." *American Educational Research Journal* 54(6):1154–86.

O'Meara, Kerry Ann, Courtney Jo Lennartz, Alexandra Kuvaeva, Audrey Jaeger, and Joya Misra. 2019. "Department Conditions and Practices Associated with Faculty Workload Satisfaction and Perceptions of Equity." *Journal of Higher Education* 90(5):744–72.

O'Meara, Kerry Ann, Andrew Louder, and Corbin M. Campbell. 2014. "To Heaven or Hell: Sensemaking about Why Faculty Leave." *Journal of Higher Education* 85(5):603–32.

O'Meara, KerryAnn. 2016. "Whose Problem Is It? Gender Differences in Faculty Thinking About Campus

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Service.” *Teachers College Record* 118(August):1–38.

Odhiambo, George. 2011. “Women and Higher Education Leadership in Kenya: A Critical Analysis.” *Journal of Higher Education Policy and Management* 33(6):667–78.

Olkin, Rhoda. 2011. “Academic Leaders with Disabilities: How Do We Know If We Are Winning When No One Is Keeping Score?” Pp. 201–18 in *Women as leaders in education : Succeeding despite inequity, discrimination, and other challenges*, edited by J. L. Martin. ABC-CLIO.

Owens, Marcia Allen. 2020. “Closet Chair and Committee Side Piece: Black Women STEM Faculty at HBCUs.” Pp. 233–44 in *Presumed Incompetent II: Race, Class, Power, and Resistance of Women in Academia*, edited by Y. F. Niemann, G. Gutiérrez y Muhs, and C. G. Gonzalez. University Press of Colorado/Utah State University Press.

Parker, Patricia S. 2001. “African American Women Executives’ Leadership Communication within Dominant-Culture Organizations: (Re) Conceptualizing Notions of Collaboration and Instrumentality.” *Management Communication Quarterly* 15(1):42–82.

Pasquerella, Lynn and Caroline Clauss-Ehlers. 2017. “Glass Cliffs, Queen Bees, and the Snow-Woman Effect: Persistent Barriers to Women’s Leadership in the Academy.” *Liberal Education* 103(2).

Penny, John and Laurie Gaillard. 2016. “Mentoring African American Women in Higher Education Administration.” *Race, Gender, & Class* 13(1):191–200.

Peszek, Pamela Ann. 2016. “Women Presidents in Higher Education: A Narrative Inquiry of Successes and Challenges.” Concordia University-Chicago.

Peterson, Helen. 2015. “Exit the King. Enter the Maid: Changing Discourses on Gendered Management Ideals in Swedish Higher Education.” *Gender in Management* 30(5):343–57.

Peterson, Helen. 2016. “Is Managing Academics ‘Women’s Work’? Exploring the Glass Cliff in Higher Education Management.” *Educational Management Administration and Leadership* 44(1):112–27.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org

- Peterson, Helen. 2018. "From 'Goal-Orientated, Strong and Decisive Leader' to 'Collaborative and Communicative Listener'. Gendered Shifts in Vice-Chancellor Ideals, 1990–2018." *Education Sciences* 8(2).
- Peterson, Helen. 2019. "A Women-Only Leadership Development Program: Facilitating Access to Authority for Women in Swedish Higher Education?" *Social Sciences* 8(5).
- Pirjan, Sevetlana S. 2016. "Making History and Overcoming Challenges: The Career Pathways and Career Advancement Experiences of Female Provosts in the California State University System A." Pepperdine University.
- Pyke, Karen. 2011. "Service and Gender Inequity among Faculty." *PS - Political Science and Politics* 44(1):85–87.
- Pyke, Karen. 2015. "Faculty Gender Inequity and the 'Just Say No to Service' Fairy Tale." Pp. 83–95 in *Disrupting the Culture of Silence: Confronting Gender Inequality and Making Change in Higher Education*, edited by K. De Welde and A. Stepnick. Sterline, VA: Stylus Publishing.
- Ray, Victor. 2019a. "A Theory of Racialized Organizations." *American Sociological Review* 84(1):26–53.
- Ray, Victor. 2019b. "Why So Many Organizations Stay White." *Harvard Business Review* 1–11.
- Read, Barbara and Barbara M. Kehm. 2016. "Women as Leaders of Higher Education Institutions: A British-German Comparison In." *Studies in Higher Education* 41(5):815–27.
- Redmond, Petrea, Hannah Gutke, Linda Galligan, Angela Howard, and Tara Newman. 2017. "Becoming a Female Leader in Higher Education: Investigations from a Regional University." *Gender and Education* 29(3):332–51.
- Renn, Kristen A. 2015. "Higher Education." in *LGBTQ Issues in Education: Advancing a Research Agenda*, edited by G. Wimberly. American Educational Research Association.
- Ridgeway, Cecilia L. 2001. "Gender, Status, and Leadership." *Journal of Social Issues* 57(4):637–55.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Ridgeway, Cecilia L. 2011. *Framed By Gender*. New York, NY: Oxford University Press.
- Ridgeway, Cecilia L. 2014. “Why Status Matters for Inequality.” *American Sociological Review* 79(1):1–16.
- Ridgeway, Cecilia L. and Shelley J. Correll. 2004. “Unpacking the Gender System a Theoretical Perspective on Gender Beliefs and Social Relations.” *Gender and Society* 18(4):510–31.
- Roca Mella, Hazel. 2012. “Exploratory Study of Asian Pacific American Female Leaders in Higher Education.” Capella University.
- Rosser, Sue. 2012. “Advancing Women Scientists to Senior Leadership Positions.” in *Breaking into the Lab: Engineering Progress for Women in Science*, edited by S. Rosser. NYU Press.
- Roy, Sayani. 2019. “Challenges for Asian American and Immigrant Asian Women in the U.S. Higher Education Administration.” Pp. 105–24 in *Challenges and Opportunities for Women in Higher Education Leadership*. Vol. 200, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- Rubery, Jill, Sara Horrell, and Brendan Burchell. 1994. “Part-Time Work and Gender Inequality in the Labour Market.” in *Gender segregation and social change*, edited by A. M. Scott. Oxford University Press.
- Ryan, Michelle K. and S. Alexander Haslam. 2007. “The Glass Cliff: Exploring the Dynamics Surrounding the Appointment of Women to Precarious Leadership Positions.” *Academy of Management Review* 32(2):549–72.
- Sader, Saajidha B., Marie Odendaal, and Ruth Searle. 2015. “Globalisation, Higher Education Restructuring and Women in Leadership: Opportunities or Threats?” (65):58–74.
- Sánchez-Moreno, Marita, Julián López-Yáñez, and Mariana Altopiedi. 2015. “Leadership Characteristics and Training Needs of Women and Men in Charge of Spanish Universities.” *Gender and Education* 27(3):255–72.
- Sanchez-Zamora, Sabrina Suzanne. 2013. “La Administradora: A Mixed Methods Study of the Resilience of Mexican American Women Administrators at Hispanic Serving Institutions.” New Mexico State.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org

- Sangho-Rico, Ruby. 2020. “Disrupting Patriarchy: Women Educational Leaders and Their Gendered and Racialized Experiences.” California State University, Fresno.
- Saunders, Daniel B. 2010. “Neoliberal Ideology and Public Higher Education in the United States.” *Journal for Critical Education Policy Studies* 8(1):41–77.
- Schnackenberg, Heidi L. 2019. “Motherscholar.” Pp. 29–43 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- Seaberg, James R. 2019. “Faculty Reports of Workload: Results of a National Survey.” *Journal of Social Work Education* 34(1):7–19.
- Shain, Farzana. 2000. “Managing to Lead: Women Managers in the Further Education Sector.” *Journal of Further and Higher Education* 24(2):217–30.
- Sitting Crow, Karen Paetz. 2013. “Tribal Colleges and Universities in the 21st Century: Native American Female Leadership in Tribal Higher Education.” Capella University.
- Skachkova, Penka. 2007. “Academic Careers of Immigrant Women Professors in the U.S.” *Higher Education* 53(6):697–738.
- Slaughter, Sheila and Gary Rhoades. 2004. *Academic Capitalism and the New Economy: Markets, State, and Higher Education*. Johns Hopkins University Press.
- Sloma-Williams, Lorraine, Sharon A. McDade, Rosalyn C. Richman, and Page S. Morahan. 2009. “The Role of Self Efficacy in Developing Women Leaders.” Pp. 50–73 in *Women in Academic Leadership: Professional Strategies, Personal Choice*, edited by D. R. Dean, S. J. Bracken, and J. K. Allen. Stylus Publishing.
- Smith, LaVonia. 2012. “Women of Color in Higher Education Administration: An Exploration of Barriers to Advancement.” Capella.
- Sorcinelli, Mary Deane and Jung Yun. 2007. “From Mentor to Mentoring Networks: Mentoring in the New Academy.” *Change* 31(2):55–58.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Sorcinelli, Mary Deane and Jung H. Yun. 2009. "Finding a Mentor." *NEA Higher Education Advocate* 26(5):5–8.

Statti, Aubrey LeeAnne Coy and Kelly M. Torres. 2019. "Innovative Approaches to Traditional Mentoring Practices of Women in Higher Education." Pp. 1–19 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.

Sullivan, Leila Gonzalez. 2009. "Informal Learning among Women Community College Presidents." Pp. 95–127 in *Women in Academic Leadership: Professional Strategies, Personal Choice*, edited by D. R. Dean, S. Bracken, and J. K. Allen. Sterline, VA: Stylus Publishing.

Thompson, Lisa K. and Lekita Scott Dawkins. 2010. "Service on the Administrative Pathway." Pp. 37–43 in *Pathways to Higher Education Administration for African American Women*, edited by T. B. Jones, LeKita Scott Dawkins, M. H. Glover, M. M. McClinton, and J. C. Brazzell. Stylus Publishing.

Thorne, Barrie and Arlie Russell Hochschild. 1997. "Feeling at Home at Work: Life in Academic Departments." *Qualitative Sociology* 20(4):517–20.

Tiao, Nan-Chi. 2006. "Senior Women Leaders in Higher Education Overcoming Barriers to Success." Eastern Michigan University.

Toutkoushian, Robert Kevin and Marcia L. Bellas. 1999. "Faculty Time Allocations and Research Productivity: Gender, Race and Family Effects." *The Review of Higher Education* 22(4):367–90.

Turner, Caroline Sotello Viernes. 2002. "Women of Color in Academe." *The Journal of Higher Education* 73(1):74–93.

Turner, Caroline Sotello Viernes. 2011. "Women of Color in Academe Living with Multiple Marginality." *Educational Leadership* 73(1):74–93.

Turner, Caroline Sotello Viernes, Juan Carlos González, Kathleen Wong, and Kathleen Wong (Lau). 2011. "Faculty Women of Color: The Critical Nexus of Race and Gender." *Journal of Diversity in Higher Education*

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



Education 4(4):199–211.

- Turner, Caroline Sotello Viernes, Juan Carlos González, and J. Luke Wood. 2008. “Faculty of Color in Academe: What 20 Years of Literature Tells Us.” *Journal of Diversity in Higher Education* 1(3):139–68.
- Turner, Caroline Sotello Viernes and Janelle Kappos. 2009. “Preparing Women of Color for Leadership: Perspectives on the American Council of Education Fellows Program.” Pp. 149–80 in *Women in Academic Leadership: Professional Strategies, Personal Choice*, edited by D. R. Dean, S. J. Bracken, and J. K. Allen. Sterling, VA: Stylus Publishing.
- Twombly, Susan B. 1998. “Women Academic Leaders in a Latin American University: Reconciling the Paradoxes of Professional Lives.” *Higher Education* 35(4):367–97.
- Valian, Virginia. 2004. “Beyond Gender Schemas: Improving the Advancement of Women in Academia.” *NWSA Journal* 16(1):207–20.
- Vongalis-Macrow, Athena. 2016. “It’s about the Leadership: The Importance of Women Leaders Doing Leadership for Women.” *NASPA Journal About Women in Higher Education* 9(1):90–103.
- Wallace, Michelle and Teresa Marchant. 2009. “Developing Female Middle-Managers in Australian Universities.” *Higher Education* 58(6):781–97.
- Wang, Yinhan, Qi Yue, and Kai Yu. 2013. “Women Leaders of Higher Education : Female Executives in Leading Universities in China.” *Cross-Cultural Communication* 9(6):40–45.
- Wardell, Mary J. Lomax. 2010. “Leadership Behaviors and Practices among Executive Women of Color in Higher Education.” Pepperdine University.
- Warikoo, N. 2019. *The Diversity Bargain: And Other Dilemmas of Race, Admissions, and Meritocracy at Elite Universities*. University of Chicago Press.
- Webster, Natasha M. 2020. “Advancement and Persistence in Higher Education Leadership: A Narrative Study of Women Deans in Business Schools.” Eastern University.

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



- Wheat, Celeste and Lilian Hill. 2016. “Leadership Identities, Styles, and Practices of Women University Administrators and Presidents.” *Research in the Schools* 23(2):1–16.
- Wheaton, Marissiko M. and Adrianna Kezar. 2019. “Interlocking Systems of Oppression.” Pp. 61–83 in *Challenges and Opportunities for Women in Higher Education Leadership*, edited by H. L. Schnackenberg and D. A. Simard. IGI Global.
- Whitehead, Marquia V. 2017. “A Phenomenological Study Of Barriers and Challenges Presented to African American Women in Leadership Roles at Four-Year Higher Education Institutions.” University of Louisiana at Lafayette.
- Wilborn, Teresa W., Erin M. Timpe, Susanna Wu-Pong, Michael L. Manolakis, James A. Karboski, David R. Clark, and Ralph J. Altieri. 2013. “Factors Influencing Faculty Perceptions of Teaching Workload.” *Currents in Pharmacy Teaching and Learning* 5(1):9–13.
- Williams, Joan C. 2004. “The Maternal Wall.” *Harvard Business Review*.
- Wilson, Tanisca M. 2011. “Complexities of Female Leadership for the Novice Leader in Higher Education Settings.” Pp. 263–74 in *Women as leaders in education : Succeeding despite inequity, discrimination, and other challenges*, edited by J. L. Martin. ABC-CLIO.
- Wingfield, Adia Harvey and Koji Chavez. 2020. “Getting In, Getting Hired, Getting Sideways Looks: Organizational Hierarchy and Perceptions of Racial Discrimination.” *American Sociological Review*.
- Winslow, Sarah. 2010. “Gender Inequality and Time Allocations among Academic Faculty.” *Gender and Society* 24(6):769–93.
- Wolf-Wendel, Lisa Ellen and Kelly Ward. 2006. “Academic Life and Motherhood: Variations by Institutional Type.” *Higher Education* 52(3):487–521.
- Wood, J., Adriel Hilton, and Carlos Nevarez. 2015. “Faculty of Color and White Faculty: An Analysis of Service in Colleges of Education in the Arizona Public University System.” *Journal of the Professoriate*

As the STEM equity brain trust, the ARC Network promotes systemic change by producing new perspectives, methods, and interventions with an intersectional, intentional, and inclusive lens. More at EquityInSTEM.org



8(1):85–109.

Wroblewski, Angela. 2017. “Feminist University Management: Precondition or Indicator for Success? A Case Study from Austria.” Pp. 49–70 in *Gendered Success in Higher Education: Global Perspectives*, edited by K. White and P. O’Connor.

Wyn, Johanna, Sandra Acker, and Elisabeth Richards. 2000. “Making a Difference: Women in Management in Australian and Canadian Faculties of Education.” *Gender and Education* 12(4):435–47.

Yedidia, Michael J., Jolene Chou, Susan Brownlee, Linda Flynn, and Christine A. Tanner. 2015. “Association of Faculty Perceptions of Work–Life with Emotional Exhaustion and Intent to Leave Academic Nursing: Report on a National Survey of Nurse Faculty.” *Journal of Nursing Education* 53(10):569–79.

Yen, Joyce, Eve A. Riskin, Cara Margherio, Jan H. Spyridakis, Coleen M. Carrigan, and Ana Mari Cauce. 2019. “Promoting Gender Diversity in STEM Faculty through Leadership Development: From Local and National Leadership Workshops to the Online LEAD-It-Yourself! Toolkit.” *Equality, Diversity and Inclusion* 38(3):382–98.

Yun, Jung H. and Mary Deane Sorcinelli. 2009. “When Mentoring Is the Medium: Lessons Learned from a Faculty Development Initiative.” *To Improve the Academy: A Journal of Educational Development* 27(January):365–84.

Zhao, Jiayi and Karen Jones. 2017. “Women and Leadership in Higher Education in China: Discourse and the Discursive Construction of Identity.” *Administrative Sciences* 7(3):21.

