



This is a repository copy of *Search committee diversity and applicant pool representation of women and underrepresented minorities: a quasi-experimental field study*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/176226/>

Version: Accepted Version

Article:

Kazmi, M.A., Spitzmueller, C., Yu, J. et al. (4 more authors) (2021) Search committee diversity and applicant pool representation of women and underrepresented minorities: a quasi-experimental field study. *Journal of Applied Psychology*, 107 (8). pp. 1414-1427. ISSN 0021-9010

<https://doi.org/10.1037/apl0000725>

© American Psychological Association, 2021. This paper is not the copy of record and may not exactly replicate the authoritative document published in the APA journal. Please do not copy or cite without author's permission. The final article is available, upon publication, at: <https://doi.apa.org/doi/10.1037/apl0000725>

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Search Committee Diversity and Applicant Pool Representation of Women and Underrepresented Minorities: A Quasi-Experimental Field Study

Maryam A. Kazmi¹, Christiane Spitzmueller^{1*}, Jia Yu², Juan M. Madera³, Allison Tsao¹, Jeremy Dawson⁴, and Ioannis Pavlidis⁵

¹ Department of Psychology, University of Houston

² College of Business, Louisiana State University Shreveport

³ Conrad N. Hilton College of Hotel and Restaurant Management, University of Houston

⁴ Institute of Work Psychology, Sheffield University Management School; School of Health and Related Research, The University of Sheffield

⁵ Computational Physiology Laboratory, University of Houston

Acknowledgements

We received funding from the National Science Foundation in support of this research (ADVANCE Institutional Transformation Grant #1409928, 2014-2019). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Author Note

* Correspondence concerning this article should be addressed to Christiane Spitzmueller, email: cspitzmu@central.uh.edu.

RECRUITING WOMEN AND URM APPLICANTS

Abstract

The diversification of applicant pools constitutes an important step for broadening the participation of women and underrepresented minorities (URM) in the workforce. The current study focuses on recruiting diverse applicant pools in an academic setting. We test strategies grounded in homophily theory to attract a diverse set of applicants for open faculty positions. Analysis of recruitment data (13,750 job applications) showed that women search committee chairs and greater percentages of women on search committees related to more women applicants; and that URM search chairs and a greater percentage of URM members on search committees related to more URM applicants, resulting in 23% more women applicant pools with a woman chair and over 100% more URM applicants for a URM chair. Further, women and URM members actively engage in ways to reach out to a more diverse set of applicants, whereas men and non-URMs' behavior maintains the status quo. We discuss the implications and advancement of homophily theory that can ultimately increase the representation of women and URM in the workforce.

Keywords: Recruitment, Homophily Theory, Diversity, Applicant Pools, Gender and Race

Search Committee Diversity and Applicant Pool Representation of Women and Underrepresented Minorities: A Quasi-Experimental Field Study

Employers across the United States are continuing to direct efforts to recruit women and ethnic/racial minorities to increase workforce diversity. The proposition that there is ‘value-in-diversity’ (Cox & Blake, 1991) has been widely researched and acknowledged (e.g., De Dreu & West, 2001; Erhardt et al., 2003; Hartenian & Gudmundson, 2000; Hoffman & Maier, 1961; McCormick Jr & Kinloch, 1986; McLeod et al., 1996; Pugh et al., 2008; Siciliano, 1996; van Knippenberg & Schippers, 2007). Thus, over the past few years, scholars have published several handbooks and manuscripts that guide how to increase diversity at workplaces (e.g., Avery & McKay, 2006; Cole & Barber, 2003; Phillips, 2002; Roberson et al., 2017; Stewart & Valian, 2018). Yet, the underrepresentation of women and minorities persists across many industries and organizations, rendering the need to strengthen the body of research that looks to find ways organizations can increase recruitment and selection of minority employees. The present study addresses this need by focusing on diversity recruitment within an academic setting, a context where hiring minorities continues to be a challenge (Bilen-Green et al., 2008; Breagh, 2013; Lariviere et al., 2013; Shen, 2013). Despite a plethora of calls to understand and address the root causes of the continued problems of underrepresentation in the academy, practically relevant strategies and mechanisms for advancing the diversity of the academic workforce need to be rigorously tested to determine whether they can increase the representation of women and underrepresented minority (URM; Black/African American, American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, or Hispanic/Latinx) faculty. As such, this study’s overall goal is to utilize and extend homophily theory to explain how and why the demographic

RECRUITING WOMEN AND URM APPLICANTS

composition of the recruitment team can contribute to attracting more women and URM candidates, ultimately attaining more diverse pools of applicants.

The current research makes valuable contributions to understanding the utility of homophily theory within the recruitment literature. First, this study advances our understanding of how gatekeepers' demographic composition, such as search committees, can influence the attraction process (Roberson et al., 2017). Second, our research advances our understanding of how homophily can affect diversity in organizations via the attraction process, particularly from the perspective of women and URM gatekeepers (McPherson et al., 2001). Third, this study examines the mechanisms through which homophilous networks develop, specifically the active engagement of women and URM, motivated by activist choice homophily, to develop networks that include more women and URM, as compared to majority group members whose networking behaviors may inadvertently perpetuate the status quo. In doing so, we also draw upon the concepts of unequal network characteristics and network utilization (Woehler et al., 2021) to explain the underlying phenomena at play. Last, the current study focuses on the first step of diversifying an organization, namely the attraction of women and URM applicants (Arthur & Doverspike, 2005), extending the recruitment and diversity literature.

Applicant Pool Diversity

According to the National Center for Educational Statistics (NCES, 2018), in 2016-2017, 53% of the total doctoral degrees conferred were received by women and 26% by historically underrepresented minorities. However, of the total tenured and tenure-track faculty positions, only 43% were filled by women and 11% by historically underrepresented minorities in the following year. These statistics show that there is a greater percentage of women and URM in the potential candidate pool than the percentage hired into tenure and tenure-track faculty

RECRUITING WOMEN AND URM APPLICANTS

positions (King, 2005; Smith et al., 2015; Stewart & Valian, 2018), thus highlighting the need to attract and select a more diverse set of academic faculty.

Potential employees apply for a job opening if the hiring organization manages to (1) raise individuals' awareness of the opening, and (2) applicants process the job opening information content as information relevant for their careers (Breugh, 2013). We focus our attention on what Breugh (2013) identifies as the first and less understood stage of the recruitment cycle, i.e., attracting the applicants' attention. Most applicant pools (i.e., the total set of people who apply for a position) are not diverse in terms of race/ethnicity and gender (D. G. Smith et al., 2004). Search committees cannot hire individuals who do not apply. If URM and women do not apply, they cannot be hired. Further, the applicant pool's diversity affects how women and minorities are evaluated if they do apply (Sackett et al., 1991). Typically, when the representation of women and URM is low in a candidate pool, employers tend to undervalue the skill and talent of women and URM as compared to white men due to preconceived biases (regarding a demographic group's lack of fit for a job) that are confirmed by the low representation of women and URM in the applicant pool (Johnson et al., 2016; Stewart & Valian, 2018). Thus, it becomes progressively more difficult to ensure inclusivity at each subsequent stage of the selection process without increasing the applicant pools' diversity.

Homophily Theory and Networks

What factors in the recruitment process could influence whether women and minority applicants receive information about a job opening? We propose to leverage and extend homophily theory (McPherson et al., 2001) to argue that search committee composition has been a potentially overlooked lever for attaining diverse applicant pools. According to homophily theory, which builds on the similarity-attraction paradigm (Byrne, 1971), individuals develop

RECRUITING WOMEN AND URM APPLICANTS

connections with those they deem similar to themselves because they are more attracted to them. As such, people's networks contain more homogeneous ties than heterogeneous ties with regard to many individual characteristics, including but not limited to race/ethnicity and gender (Ibarra, 1992; Lawrence & Shah, 2020; McPherson et al., 2001; Tajfel & Turner, 1985). Consistent with homophily theory, in their review of the network literature, Woehler and colleagues (2021) posit that men and women have *unequal network characteristics (UNC)*, i.e., differences in network creation in terms of network structure (e.g., size, strength, etc.) and composition (e.g., gender, diversity, etc.), which at least partially accounts for gender differences in career success. In accordance, they found that men have greater proportions of same-gender contacts than women do; however, after taking the gender composition of one's workplace into account, women are at least as likely to have as many same-gender contacts in their networks as men (Woehler et al., 2021). These findings and homophily theory suggest that in the context of faculty hiring, having women (as opposed to men) or URM (as opposed to non-URM) serve as search committee chairs might relate to more diverse applicant pools (McPherson et al., 2001), as they would disseminate the job ad to more women and URM applicants that happen to be in their networks.

Support for this notion also comes from a survey of scientists in a university setting (Belle et al., 2014). Though similar in terms of size, resources, and opportunities for collaboration, men's and women's collegial networks were different in terms of composition: both men and women had more men in their network than women, reflecting the pre-existing male-dominant nature of the academic workforce, yet, women's networks had a greater proportion of women, and men's networks had a greater proportion of men. Similarly, due to homophily, we expect that URM and non-URM search committee chairs also have unequal network characteristics. We expect that women and URM search committee chairs have greater

RECRUITING WOMEN AND URM APPLICANTS

proportions of women and URM academic contacts than men and non-URM search committee chairs, respectively. Thus, when women and URM actively distribute a job opening within their network, we expect that they reach more women and URM potential job applicants than men and non-URM committee chairs would.

Hypothesis 1: (a) Women and (b) URM search committee chairs, as opposed to men and non-minorities, will be related to a greater number of women and URM applicants, respectively.

Even though search committee chairs play critical roles in faculty recruitment, dissemination and networking efforts are generally the shared responsibility of all search committee members. Grounded in homophily theory (McPherson et al., 2001), we also expect women and URM search committee members to possess professional network ties beyond their institution that will favor the dissemination of job postings to women and URM applicants. In a study of gender differences in colloquium speakers, men were more likely than women to be colloquium speakers, even after controlling for alternative explanations (e.g., gender and rank of available speakers; gender differences in accepting invitation). However, women's presence as colloquium chairs and committees increased women's likelihood of appearing as colloquium speakers (Nittrouer et al., 2018). Similarly, in a study of invitations for peer reviewers for publications in the STEM field, women were used less as reviewers than expected as compared to men (Lerback & Hanson, 2017). Female editors, however, recommended female reviewers at a higher rate than male editors, again. These prior works suggest a reliance on homophilous networks based on demographics. Thus, we posit,

Hypothesis 2: A greater proportion of (a) women and (b) URM on the search committee is related to a greater number of women and URM applicants, respectively.

RECRUITING WOMEN AND URM APPLICANTS

Prior research shows that homophily networks are developed because individuals meet others through existing networks (Rivera et al., 2010), suggesting a passive mechanism that creates homophily networks. We argue that women (compared to men) and URM (compared to non-URM) chairs and committee members take a more active approach to reach a more diverse set of applicants. According to social identity theory (Tajfel & Turner, 1985), women and URMs are likely to see their gender and racio-ethnicity as an identity, which is made salient when working in a context where they are a numerical minority in numbers, power, and hierarchy such as in academia (see Treviño et al., 2018; Valian, 2005). To address this disparity, women and URM chairs may be motivated to widen the social network with other women and URMs. Greenberg and Mollick (2017) call this phenomenon *activist choice homophily*; a specific type of homophily where the basis of supporting or preferring homophilous others is not based on dyadic similarity; instead, it is due to the perceptions of shared structural barriers stemming from a common group-level social identity and an underlying desire to help overcome them. We argue that women and URM search chairs are motivated to utilize their networks differently than men and non-URM chairs. In addition to network characteristics, there might also be differences in network utilization (Woehler et al., 2021). Women and URM chairs appoint more women and URM in their search committees who are likely to recruit more diverse applicant pools in turn, thereby attempting to mitigate the structural barriers typically faced by women and URM researchers.

Hypothesis 3: (a) Women and (b) URM search chairs are more likely to appoint other women and URM as members of their search committees, respectively.

Following the previously laid out logic, we argue that this active effort on the part of women and URM search committee chairs to appoint more diverse search committees is one of

RECRUITING WOMEN AND URM APPLICANTS

the mechanisms through which they broaden the diversity of the resulting applicant pools (see Figure 1 for proposed conceptual model). Specifically, we assert that women and URM utilize their networks differently, likely driven by activist choice homophily, partially explaining the relationship between search committee chair demographics and applicant pool diversity. They appoint more women and URM on search committees, respectively, which has a domino effect on the number of women and URM in the applicant pool. We therefore predict,

Hypothesis 4a: Women appointments of search committee members mediate the relationship between women search chairs and women representation in applicant pools.

Hypothesis 4b: URM appointments of search committee members mediate the relationship between URM search chairs and URM representation in applicant pools.

Method

Sample and Data Collection Procedures

The present quasi-experimental field study uses recruitment data from 14 colleges at a large, urban, R1 university in the US (see Appendix A). The final sample includes recruitment data of 156 tenure and tenure-track faculty positions for three academic years, from 2015 to 2018. As shown in Table 1, the total number of applications received for these 156 positions was 13,750, with an average of 88 applicants per position. Of the total 13,750 applicants, 1341 identified themselves as URM and 3561 as women. Further, of the 156 search committees created for each of the positions, 46 were chaired by women, and 17 by a URM faculty. On average, 39% of the search committee members were women, and 12% URM faculty.

Measures

Woman/URM chair. These were two dummy-coded variables indicating self-reported gender or URM status (Black/African American, American Indian/Alaska Native, Native

RECRUITING WOMEN AND URM APPLICANTS

Hawaiian/Other Pacific Islander, or Hispanic/Latinx) of the search committee chair where 1 = woman and 0 = man, and 1 = underrepresented minority (URM) and 0 = not URM, respectively.

Woman/URM percentage on SC. Two separate variables indicating the proportion of women or URM members on the search committee (as per self-reported gender and race).

Number of women/URM applicants. Two separate variables indicating the total number of applications received from women or URM applicants (as per self-reported gender and race).

Controls. *Dummy-coded colleges, number of women and URM in the field, dummy-coded academic year of the job posting, job post dates, and the total number of applicants* were included as controls in the relevant models to rule out alternate explanations. Refer to Appendix A for the rationale behind the inclusion of each control variable.

Results

For hypotheses 1a, 1b, 2a, 2b, 4a, and 4b, the dependent variables' underlying nature was count data; hence we used negative binomial regression to test these hypotheses. We used fractional logit analysis for hypotheses 3a and 3b because the dependent variables, percentage of women/URM search committee members, are proportions (Papke & Wooldridge, 1996). More details on statistical analyses and power analyses are included in Appendix A.

As shown in Table 2, a woman search committee chair related to more women applicants ($b = .21, p < .05$; see Model 1) and a URM search committee chair related to more URM applicants ($b = .78, p < .001$; see Model 3). We can interpret these coefficients in terms of incidence rate ratios. Specifically, when a search committee chair is a woman (versus man), the expected number of women applicants increases by 23% (i.e., $\exp(.21) = 1.23$). When a search committee chair is a URM (versus non-URM), the expected number of URM applicants

RECRUITING WOMEN AND URM APPLICANTS

increases by 118% (i.e., $\exp (.73) = 2.18$). Thus, hypotheses 1a and 1b were supported. Table 2 also shows that a higher percentage of women on the search committee related to more women applicants ($b = .01, p < .001$; see Model 2). Similarly, the relationship between the percentage of URM on the search committee and the number of URM applicants was also significant ($b = .01, p < .05$; see Model 4), supporting hypotheses 2a and 2b.

As depicted in Table 3, women search committee chairs related to a greater percentage of women on the search committee ($b = .39, p < .05$; see Model 5). Further, the relationship between URM search committee chairs and the percentage of URM members on the search committee was marginally significant ($b = 1.63, p < .10$; see Model 6). That is, hypotheses 3a is supported, and the results partially support 3b. Furthermore, after controlling for the gender of the committee chair, a higher percentage of women on the search committee related to a greater number of women applicants ($b = .01, p < .001$; see Model 7; Table 4), providing support for hypothesis 4a. Contrastingly, after controlling URM as a search committee chair, a higher percentage of URM on the search committee did not significantly relate to a greater number of URM applicants ($b = .00, p = .67$; see Model 8); thus, hypothesis 4b is not supported. These results support the notion that the relationship between having a woman search committee chair and the number of women applicants is mediated through the appointment of a greater number of women in the search committee, but not that URM committee membership explains the link between URM committee chair and URM applicants.

To rule out alternative explanations and explore potential explanations for our observed effects, we coded additional variables and collected more data to conduct supplemental tests. We found that to identify women/minority applicants, women chairs (versus men) utilize their personal network more ($t_{52.31} = 3.25, p < .01$) but that URM chairs (versus non-URM) utilize their

RECRUITING WOMEN AND URM APPLICANTS

personal network less ($t_{10.85} = -2.28, p < .05$). However, URM chairs (versus non-URM) post job ads on women/minority-specific websites ($t_{50.61} = 5.01, p < .001$) and cooperate with recruitment, retention, equity, and diversity administrative offices more ($t_{51.61} = 4.86, p < .001$). We found that women versus men and URM versus non-URM chairs did not differ in their utilization of listservs or calling women or URM colleagues for references. We also did not find support for alternate explanations, such as pre-existing demographics of the departments, diversity cues in the job ad, or visibility of gender/URM status of search chairs on the job ad as attracting a diverse applicant pool and driving our results (see Appendix B for supplemental analyses).

Discussion

This study's overarching goal was to utilize homophily theory to explain how and why the recruitment team's demographic composition can contribute to more diverse applicant pools. Using recruitment data within an academic context, we showed that when the search committee chair is a woman or URM, a higher number of applications from women and URM are received. Likewise, greater proportions of women and URM on the search committee relate with more women and URM applicants. These effects follow homophily theory (preferring similar others) and differences in network utilization. Our findings suggest that women (versus men) and URM (versus non-URM) chairs and search committee members utilize their network to attract more women and URM to apply.

Furthermore, we found that women's presence as search committee chairs relates to a higher representation of women on the search committee. In fact, the positive effect of a woman search committee chair on the number of women applicants was explained by the mediating effect of an increased proportion of women on the search committee. In line with a specific type of homophily, i.e., activist choice homophily (Greenberg & Mollick, 2017) and group

RECRUITING WOMEN AND URM APPLICANTS

differences in utilization of one's network (Woehler et al., 2021), women chairs reach out to other similar individuals (women) to serve on the search committee even when department demographics are held constant. The supplemental analyses (see Appendix B) further support these explanations by showing that women search chairs, compared to men, utilize their personal networks to a greater extent to target and identify minority applicants.

We did not find evidence to support URM search chairs' indirect effect on URM applicants through the proportion of URM search committee members, despite observing the direct effects of URM search chairs and the proportion of URM committee members on URM applicants. We found a weak effect of URM search committee chair on the proportion of URM search committee members. The supplemental analysis showed that URM search chairs are less likely to utilize personal networks than non-URM. Instead, URM search chairs utilize formal channels of reaching minority applicants, namely posting job ads to women/minority-specific websites and collaborating with the University's Recruitment, Retention, Equity, and Diversity Office. A reason for the weak effect between URM search chair and URM committee member, or lack of support for the mediating effect, could be that search chairs did not have a large pool of URM faculty to select committee members from - only 14% of all ranked faculty are of URM status at the sample university.

We found that URM and women faculty are utilizing different strategies to attain diverse applicant pools. Although both groups are likely motivated by activist choice homophily, as they appear to be making active efforts to increase diversity, each group does so by utilizing their networks differently (compared to men and non-URM). Women lean more towards using personal networks and appointing other women on search committees, and URM use formal channels of recruiting minority candidates.

Theoretical Implications

The current study advances the recruitment and diversity literature in several ways. First, much of this literature has focused on how signals of demographic similarity and other diversity-related information in organizational recruitment materials and websites affect applicants' organizational attraction (e.g., Avery, 2003; Avery et al., 2013; Goldberg, 2005; Kim & Gelfand, 2003; Madera et al., 2019; Ng & Burke, 2005; Walker et al., 2012). In contrast, little research has examined how gatekeepers' demographic composition, such as search committees, can influence the attraction process (Roberson et al., 2017). This is an unfortunate gap in the literature considering the critical role that gatekeepers, such as faculty search committees, have on individuals' careers and the demographic compositions of their fields (Rivera, 2012; Villegas et al., 2019). The current study showed that the composition of a search committee relates to the attraction of women and URM.

Second, our research advances our understanding of how homophily can affect diversity in organizations. First, most of the homophily literature focuses on existing networks within an organization (McPherson et al., 2001). We know little about how homophily can influence the attraction process, particularly from the perspective of gatekeepers. Second, there is a tendency in the diversity literature to blame the concept of homophily as a critical concept leading to in-grouping and, therefore, the partial exclusion and underrepresentation of women and minorities in the workforce (e.g., Stewart & Valian, 2018). Our research demonstrates that homophily can be leveraged to combat the very problem that it is claimed to create. We show that by ensuring that women and URM serve as search committee leaders and members in increasing numbers can positively affect the applicant pools' diversity, which could ultimately lead to more diverse hires. Third, we offer preliminary evidence that a specific type of homophily may be at play

RECRUITING WOMEN AND URM APPLICANTS

when it comes to women and URM, i.e., activist choice homophily. Activist choice homophily goes beyond attraction simply due to similarity. Instead, it gets at a disadvantaged group's shared perception of structural barriers, which works as motivation to prefer or support similar others. This is evidenced in the support we found for our mediation hypotheses pertaining to women and the supplemental analyses that showed that URM utilize formal channels to attract minority applicants.

Third, the literature on diversity and homophily networks has not examined the different mechanisms of women and URMs in comparison to men and non-URMs, nor does it address the extent to which the development of homophily in social networks is a passive or active act (Leszczensky & Pink, 2019). Research shows that homophily networks are developed because individuals meet others through existing networks (e.g., Rivera et al., 2010), suggesting a passive mechanism that creates homophily networks. However, we showed that women and URMs actively engage in ways to reach out to a more diverse set of applicants. Men and non-URM's job ad distribution efforts are not as effective at increasing woman and URM representation in the applicant pool, possibly due to having homophilous ties (with other men and non-URMs) in their respective networks. As evidenced in the supplemental analysis, non-URM chairs were more likely to use their personal networks to identify women and minority applicants. Yet, we found that they yielded applicant pools with fewer minority applicants than did URM chairs. On the other hand, women chairs effectively rely on personal networks, as suggested by homophily theory, to target women and minorities and actively appoint other women on the recruitment team, who affect the resultant applicant pool's gender diversity. Whereas URM chairs actively engage in formal organizational diversity-related activities to attract minority applicants. These findings suggest that women and URM play out activist choice homophily differently. Women

RECRUITING WOMEN AND URM APPLICANTS

support and prefer other women by selecting them for positions of authority to further their diversity-related goals, as shown by women chairs selecting more women on search committees and ultimately attaining more women applicants. Instead of utilizing personal networks, URMs rely on formal channels of identifying and targeting minority applicants, as shown by URM chairs' collaborations with the university's diversity and inclusion offices, which is still a different form of utilizing their networks. These findings are consistent with research that shows that women and URMs are more likely to be aware of and have positive reactions to diversity and inclusion programs at their workplace (Avery & McKay, 2006; Madera, 2018). Our findings expand on this effect to show that when women and URMs are gatekeepers, they take on an active role in organizational structures and programs to increase workplace diversity. Thus, the development of homophily during the attraction process—increasing women and URM applicants when the gatekeepers are women and URMs—is an active act when the gatekeepers are women or URMs.

Finally, the present study also makes valuable contributions to the recruitment literature. The focus of recruitment research has been mainly on later stages of the recruitment and selection cycle. This study adds to that body of work by focusing its attention on the first step of recruitment, raising potential applicants' awareness of a job opportunity. We shed some light on practical ways in which more women and URM could be made aware of job openings, which could then lead to more diverse applicant pools. Applicants' awareness of a job opportunity and subsequent organizational attraction is the first step in creating a diverse workplace that offers competitive advantage (Arthur & Doverspike, 2005). Our study showed that this could start with the composition of a search committee.

Practical Implications

RECRUITING WOMEN AND URM APPLICANTS

This study provides a solid evidence base for practical steps that institutions can take to increase their applicant pools' diversity. We recognize that although more diverse applicant pools constitute an important step towards broadening participation in academic careers, improved applicant pools do not serve as the sole panacea for broadening representation (Mitchneck et al., 2016). Our findings shed light on an earlier part of the recruitment process, augmenting a body of work examining the shortlisting of faculty candidates and campus interviews, such as that of Johnson and colleagues (2016). Increased diversity in applicant pools likely contributes to the likelihood of more than one minority applicant being invited for a campus visit based on being shortlisted for a position. If minority applicants are not made aware of a job posting, they will not apply; if fewer minorities apply, there is less chance that the eventual hire belongs to a minority group even if the subsequent stages of the recruitment and selection cycle follow diversity-friendly practices. Furthermore, a National Research Council (2010) task force found that when women applied for tenure-track positions at Research 1 (R1) universities, they were more likely than men to be invited to interview and offered the job. Thus, increasing the recruitment team's diversity can impact applicant pool diversity, improving the chances for women and URM individuals to be interviewed and hired for faculty positions.

Further emphasis by faculty search committees on the broad dissemination of job ads to historically underrepresented applicants and women is likely to be beneficial also. While future research is needed to shed light on the relative effectiveness of each strategy, some specific ways to increase applicant pool diversity can include: (a) posting the job ad on women/ minority-specific websites, (b) cooperating with the institution's diversity and inclusion offices to develop a diverse list of candidates to contact, (c) posting the position ad through department chair listservs, (d) calling women or colleagues from historically underrepresented backgrounds to get

RECRUITING WOMEN AND URM APPLICANTS

possible candidate names/recommendations on who to recruit, (e) using personal networks to recruit, (f) including language in the job ads promoting the diversity of the department and university to prospective candidates. The present study provides evidence of effectiveness for strategies (a), (b), and (e) within the academic context. More research in other contexts can shed light on the usefulness of other strategies as well. We also recommend the integration of homophily theory tenets in faculty search training.

Practically important challenges around increasing women and URM faculty's representation as search chairs and search committee members include already high service loads for minority faculty (Kwok, 2015). Thus, we recommend institutions provide women and URM faculty serving on search committees with adequate credit for their service in the institution's performance appraisal system. We also recommend universities commence the routine tracking of search committee demographics and search practices and systematically link them to applicant pools to understand underlying dynamics better.

Limitations and Future Research

There were several limitations of the present study that can be addressed by future research. First, the recruitment data analyzed in this study pertained to a single large urban research university. Although utilizing real-world data allows for a real-world social context and thus greater confidence in the generalizability of results, it comes with the difficulty of typically rendering a small sample size of a specific context, as was the case in this study. Although our power analyses support that given our sample, we would have been able to identify results. Future research would benefit from conducting similar studies using a larger sample if available and data from multi-institution consortia, allowing for even greater generalizability and confidence in the direction of effects detected here.

RECRUITING WOMEN AND URM APPLICANTS

Second, due to the sample size related to the proportion of URM search chairs, we could not examine distinct URM categories or intersectional identities. Prior research has shown differences in homophilous connections between members of URM categories (Leonard et al., 2008), and there is mounting evidence regarding the importance of intersectional identities. Therefore, we recommend future research to examine the relationships tested in the present study for each URM category and URM women. Again, multi-institutional or multi-organization collaborative research and data sharing will be necessary to achieve the required sample sizes for this purpose.

Conclusion

Women and URM continue to be underrepresented in workplaces. The diversification of applicant pools constitutes an important step for broadening the participation of women and URM in the workforce. Utilizing recruitment data from a higher education institution, we test strategies grounded in homophily theory to show that when women or URM faculty serve as search committee chairs or members, a higher number of women and URM apply, respectively. Furthermore, women and URM faculty's presence as search committee chairs relates to a higher representation of women and URM faculty members in the search committee. In fact, results support the notion that the positive effect of having a woman/URM chair on the number of women/URM applicants can be explained by an increased proportion of women search committee members, increased utilization of minority/women specific job portals, and increased collaboration with administrative teams focused on diversity and inclusion. Thus, this study provides evidence of practical steps that organizations can take to increase their applicant pool diversity.

References

- Arthur, W., & Doverspike, D. (2005). Achieving diversity and reducing discrimination in the workplace through human resource management practices: Implications of research and theory for staffing, training and rewarding performance. In R. Daboye & A. Colella (Eds.), *Discrimination at work: The psychological and organizational bases* (pp. 305–327). Erlbaum.
- Avery, D. R. (2003). Reactions to diversity in recruitment advertising—Are differences black and white? *Journal of Applied Psychology*, 88(4), 672–679. <https://doi.org/10.1037/0021-9010.88.4.672>
- Avery, D. R., & McKay, P. F. (2006). Target Practice: An Organizational Impression Management Approach to Attracting Minority and Female Job Applicants. *Personnel Psychology*, 59(1), 157–187. <https://doi.org/10.1111/j.1744-6570.2006.00807.x>
- Avery, D. R., Volpone, S. D., Stewart, R. W., Luksyte, A., Hernandez, M., McKay, P. F., & Hebl, M. M. R. (2013). Examining the Draw of Diversity: How Diversity Climate Perceptions Affect Job-Pursuit Intentions. *Human Resource Management*, 52(2), 175–193. <https://doi.org/10.1002/hrm.21524>
- Belle, D., Smith-Doerr, L., & O'Brien, L. M. (2014). Gendered networks: Professional connections of science and engineering faculty. In V. Demos, C. W. Berheide, & M. T. Segal (Eds.), *Gender transformation in the academy (Advances in gender research, Volume 19)* (pp. 153–175). Emerald Group Publishing Limited.
- Bernerth, J. B., & Aguinis, H. (2016). A Critical Review and Best-Practice Recommendations for Control Variable Usage. *Personnel Psychology*, 69(1), 229–283. <https://doi.org/10.1111/peps.12103>

RECRUITING WOMEN AND URM APPLICANTS

- Bilen-Green, C., Froelich, K. A., & Jacobson, S. W. (2008). *The Prevalence of Women in Academic Leadership Positions, and Potential Impact on Prevalence of Women in the Professorial Ranks*. 11.
- Breaugh, J. A. (2013). Employee Recruitment. *Annual Review of Psychology*, *64*(1), 389–416. <https://doi.org/10.1146/annurev-psych-113011-143757>
- Byrne, D. (1971). *The Attraction Paradigm*. Academic Press.
- Cole, S., & Barber, E. G. (2003). *Increasing faculty diversity: The occupational choices of high-achieving minority students*. Harvard University Press.
- Cox, T. H., & Blake, S. (1991). Managing Cultural Diversity: Implications for Organizational Competitiveness. *The Executive*, *5*(3), 45–56.
- De Dreu, C. K. W., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology*, *86*(6), 1191–1201. <https://doi.org/10.1037/0021-9010.86.6.1191>
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of Director Diversity and Firm Financial Performance. *Corporate Governance*, *11*(2), 102–111. <https://doi.org/10.1111/1467-8683.00011>
- Gardner, W., Mulvey, E. P., & Shaw, E. C. (1995). Regression Analyses of Counts and Rates: Poisson, Overdispersed Poisson, and Negative Binomial Models. *Psychological Bulletin*, *118*(3), 392–404. <https://doi.org/10.1037/0033-2909.118.3.392>
- Goldberg, C. B. (2005). Relational Demography and Similarity-Attraction in Interview Assessments and Subsequent Offer Decisions: Are we Missing Something? *Group & Organization Management*, *30*(6), 597–624. <https://doi.org/10.1177/1059601104267661>
- Greenberg, J., & Mollick, E. (2017). Activist Choice Homophily and the Crowdfunding of

RECRUITING WOMEN AND URM APPLICANTS

- Female Founders. *Administrative Science Quarterly*, 62(2), 341–374.
<https://doi.org/10.1177/0001839216678847>
- Hartenian, L. S., & Gudmundson, D. E. (2000). Cultural diversity in small business: Implications for firm performance. *Journal of Developmental Entrepreneurship; Norfolk*, 5(3), 209–219.
- Hoffman, L. R., & Maier, N. R. F. (1961). Quality and acceptance of problem solutions by members of homogeneous and heterogeneous groups. *The Journal of Abnormal and Social Psychology*, 62(2), 401–407. <https://doi.org/10.1037/h0044025>
- Ibarra, H. (1992). Homophily and Differential Returns: Sex Differences in Network Structure and Access in an Advertising Firm. *Administrative Science Quarterly*, 37(3), 422.
<https://doi.org/10.2307/2393451>
- Johnson, S. K., Hekman, D. R., & Chan, E. T. (2016). If There's Only One Woman in Your Candidate Pool, There's Statistically No Chance She'll Be Hired. *Harvard Business Review*.
- Kim, S. S., & Gelfand, M. J. (2003). The influence of ethnic identity on perceptions of organizational recruitment. *Journal of Vocational Behavior*, 63(3), 396–416.
[https://doi.org/10.1016/S0001-8791\(02\)00043-X](https://doi.org/10.1016/S0001-8791(02)00043-X)
- King, J. (2005). Benefits of Women in Science. *Science*, 308(5722), 601–601.
<https://doi.org/10.1126/science.1112550>
- Kwok, R. (2015). When committees come knocking, scientists need to know which requests will benefit them and which will only steal their time—And how to tell the difference. *Nature*, 523(7562), 627–629. <https://doi.org/10.1038/nj7562-627a>
- Lariviere, V., Ni, C., Gingras, Y., Cronin, B., & Sugimoto, C. R. (2013). Global gender

RECRUITING WOMEN AND URM APPLICANTS

- disparities in science. *Nature News*, 504(7479), 11. <https://doi.org/10.1038/504211a>
- Lawrence, B. S., & Shah, N. P. (2020). Homophily: Measures and Meaning. *Academy of Management Annals*, 14(2), 513–597. <https://doi.org/10.5465/annals.2018.0147>
- Leonard, A. S., Mehra, A., & Katerberg, R. (2008). The social identity and social networks of ethnic minority groups in organizations: A crucial test of distinctiveness theory. *Journal of Organizational Behavior*, 29(5), 573–589. <https://doi.org/10.1002/job.488>
- Lerback, J., & Hanson, B. (2017). Journals invite too few women to referee. *Nature*, 541(7638), 455–457. <https://doi.org/10.1038/541455a>
- Leszczensky, L., & Pink, S. (2019). What Drives Ethnic Homophily? A Relational Approach on How Ethnic Identification Moderates Preferences for Same-Ethnic Friends. *American Sociological Review*, 84(3), 394–419. <https://doi.org/10.1177/0003122419846849>
- Madera, J. M. (2018). Situational Perspective Taking as an Intervention for Improving Attitudes Toward Organizations that Invest in Diversity Management Programs. *Journal of Business and Psychology*, 33(3), 423–442. <https://doi.org/10.1007/s10869-017-9502-0>
- Madera, J. M., Ng, L., Sundermann, J. M., & Hebl, M. (2019). Top management gender diversity and organizational attraction: When and why it matters. *Archives of Scientific Psychology*, 7(1), 90. <https://doi.org/10.1037/arc0000060>
- McCormick Jr, A. E., & Kinloch, G. C. (1986). Interracial Contact in the Customer-Clerk Situation. *The Journal of Social Psychology*, 126(4), 551–553. <https://doi.org/10.1080/00224545.1986.9713624>
- McLeod, P. L., Lobel, S. A., & Cox, T. H. (1996). Ethnic Diversity and Creativity in Small Groups. *Small Group Research*, 27(2), 248–264. <https://doi.org/10.1177/1046496496272003>

RECRUITING WOMEN AND URM APPLICANTS

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a Feather: Homophily in Social Networks. *Annual Review of Sociology*, 27(1), 415–444.

<https://doi.org/10.1146/annurev.soc.27.1.415>

Mitchneck, B., Smith, J. L., & Latimer, M. (2016). A recipe for change: Creating a more inclusive academy. *Science*, 352(6282), 148–149.

<https://doi.org/10.1126/science.aad8493>

National Research Council. (2010). *Gender differences at critical transitions in the careers of science, engineering, and mathematics faculty*. National Academies Press.

NCES. (2018). *NCES, Digest of Education Statistics*.

https://nces.ed.gov/programs/digest/d18/tables/dt18_315.20.asp?current=yes

Newcombe, N. S. (2003). Some Controls Control Too Much. *Child Development*, 74(4), 1050–1052. <https://doi.org/10.1111/1467-8624.00588>

Ng, E. S. W., & Burke, R. J. (2005). Person–organization fit and the war for talent: Does diversity management make a difference? *The International Journal of Human Resource Management*, 16(7), 1195–1210. <https://doi.org/10.1080/09585190500144038>

Nittrouer, C. L., Hebl, M. R., Ashburn-Nardo, L., Trump-Steele, R. C. E., Lane, D. M., & Valian, V. (2018). Gender disparities in colloquium speakers at top universities.

Proceedings of the National Academy of Sciences, 115(1), 104–108.

<https://doi.org/10.1073/pnas.1708414115>

Papke, L. E., & Wooldridge, J. M. (1996). Econometric methods for fractional response variables with an application to 401(k) plan participation rates. *Journal of Applied Econometrics*, 11(6), 619–632. [https://doi.org/10.1002/\(SICI\)1099-1255\(199611\)11:6<619::AID-JAE418>3.0.CO;2-1](https://doi.org/10.1002/(SICI)1099-1255(199611)11:6<619::AID-JAE418>3.0.CO;2-1)

RECRUITING WOMEN AND URM APPLICANTS

- Phillips, R. (2002). Recruiting and Retaining a Diverse Faculty. *Planning for Higher Education*, 30(4), 32–39.
- Pugh, S. D., Dietz, J., Brief, A. P., & Wiley, J. W. (2008). Looking inside and out: The impact of employee and community demographic composition on organizational diversity climate. *Journal of Applied Psychology*, 93(6), 1422–1428. <https://doi.org/10.1037/a0012696>
- Rivera, L. A. (2012). Diversity within Reach: Recruitment versus Hiring in Elite Firms. *The ANNALS of the American Academy of Political and Social Science*, 639(1), 71–90. <https://doi.org/10.1177/0002716211421112>
- Rivera, M. T., Soderstrom, S. B., & Uzzi, B. (2010). Dynamics of Dyads in Social Networks: Assortative, Relational, and Proximity Mechanisms. *Annual Review of Sociology*, 36(1), 91–115. <https://doi.org/10.1146/annurev.soc.34.040507.134743>
- Roberson, Q., Ryan, A. M., & Ragins, B. R. (2017). The evolution and future of diversity at work. *Journal of Applied Psychology*, 102(3), 483–499. <https://doi.org/10.1037/apl0000161>
- Sackett, P. R., DuBois, C. L., & Noe, A. W. (1991). Tokenism in performance evaluation: The effects of work group representation on male-female and White-Black differences in performance ratings. *Journal of Applied Psychology*, 76(2), 263–267. <https://doi.org/10.1037/0021-9010.76.2.263>
- Shen, H. (2013). Inequality Quantified: Mind the Gender Gap. *Nature News*, 495, 22–24. <https://doi.org/10.1038/495022a>
- Siciliano, J. I. (1996). The relationship of board member diversity to organizational performance. *Journal of Business Ethics*, 15(12), 1313–1320. <https://doi.org/10.1007/BF00411816>
- Smith, D. G., Turner, C. S., Osei-Kofi, N., & Richards, S. (2004). Interrupting the Usual:

RECRUITING WOMEN AND URM APPLICANTS

- Successful Strategies for Hiring Diverse Faculty. *The Journal of Higher Education*, 75(2), 133–160.
- Smith, J. L., Handley, I. M., Zale, A. V., Rushing, S., & Potvin, M. A. (2015). Now Hiring! Empirically Testing a Three-Step Intervention to Increase Faculty Gender Diversity in STEM. *BioScience*, 65(11), 1084–1087. <https://doi.org/10.1093/biosci/biv138>
- Stewart, A. J., & Valian, V. (2018). *An inclusive academy: Achieving diversity and excellence*. Mit Press.
- Tajfel, H., & Turner, J. C. (1985). The Social Identity Theory of Intergroup Behavior. In *Psychology of Intergroup Relations* (pp. 7–24). Nelson-Hall.
- Treviño, L. J., Gomez-Mejia, L. R., Balkin, D. B., & Mixon, F. G. (2018). Meritocracies or Masculinities? The Differential Allocation of Named Professorships by Gender in the Academy. *Journal of Management*, 44(3), 972–1000. <https://doi.org/10.1177/0149206315599216>
- Valian, V. (2005). Beyond Gender Schemas: Improving the Advancement of Women in Academia. *Hypatia*, 20(3), 198–213. JSTOR.
- van Knippenberg, D., & Schippers, M. C. (2007). Work Group Diversity. *Annual Review of Psychology*, 58(1), 515–541. <https://doi.org/10.1146/annurev.psych.58.110405.085546>
- Villegas, S., Lloyd, R. A., Tritt, A., & Vengrouskie, E. F. (2019). Human Resources as Ethical Gatekeepers: Hiring Ethics and Employee Selection. *Journal of Leadership, Accountability and Ethics*, 16(2), Article 2. <https://doi.org/10.33423/jlae.v16i2.2024>
- Walker, H. J., Feild, H. S., Bernerth, J. B., & Becton, J. B. (2012). Diversity cues on recruitment websites: Investigating the effects on job seekers' information processing. *Journal of Applied Psychology*, 97(1), 214–224. <https://doi.org/10.1037/a0025847>

RECRUITING WOMEN AND URM APPLICANTS

Woehler, M. L., Cullen-Lester, K. L., Porter, C. M., & Frear, K. A. (2021). Whether, How, and Why Networks Influence Men's and Women's Career Success: Review and Research Agenda. *Journal of Management*, 47(1), 207–236.

<https://doi.org/10.1177/0149206320960529>

RECRUITING WOMEN AND URM APPLICANTS

Table 1
Descriptive Statistics

	Sum	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
Variables														
1. Woman chair	46													
2. URM chair	17			-.14										
3. No. of women applicants	3561	22.83	82.38	.05	.06									
4. No. of URM applicants	1341	8.6	24.53	-.02	.14	.72**								
5. Total Applicants	13750	88.14	82.38	-.15	-.04	.77**	.52**							
6. Woman percent on SC		38.94%	23.08%	.40**	-.06	.14	.20*	-.20*						
7. URM percent on SC		11.93%	16.13%	.16	.38**	.07	.16*	-.06	.16					
8. Women in field		6600	12890	.12	.15	-.18*	-.10	-.25**	.10	.04				
9. URM in field		1781	3106	.16	.14	-.15	-.03	-.27**	.16*	.06	.97**			
10. Women faculty in department		7.21	4.72	.12	.08	.11	-.02	-.20*	.21**	.14	.11	.17*		
11. URM faculty in department		2.28	2.74	.15	.14	.09	.21**	-.12	.28**	.45**	-.03	.06	.48**	
12. Job Post Date				.00	-.08	-.14	-.11	-.09	.08	.11	-.09	-.09	-.01	-.02

Note. N = 156. URM = Underrepresented minority, SC = Search committee.

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

RECRUITING WOMEN AND URM APPLICANTS

Table 2
Negative Binomial Regression (H1a-2b)

	Number of Women Applicants				Number of URM Applicants			
	Model 1 H 1a		Model 2 H 2a		Model 3 H 1b		Model 4 H 2b	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>Control variables</i>								
Year 2	-.27 [†]	.16	-.30 [*]	.15	-.00	.22	-.11	.23
Year 3	-.11	.12	-.19	.12	.41 [*]	.18	.31 [†]	.18
College 2	.39 [†]	.22	.24	.22	.74 [*]	.32	.61 [†]	.34
College 3	-.68 ^{***}	.13	-.57 ^{***}	.13	-.09	.19	-.16	.20
College 4	-.44 ^{**}	.14	-.28 [†]	.14	-.15	.20	-.16	.21
College 5	-.42 [*]	.19	-.25	.19	.08	.28	.07	.29
College 6	-.36	.25	-.22	.24	.12	.35	-.10	.37
College 7	-.18	.18	-.01	.18	.25	.26	.17	.27
College 8	.07	.20	.13	.19	-.06	.29	-.08	.31
College 9	.66 [*]	.27	.37	.27	1.04 ^{**}	.39	.66	.40
College 10	.09	.24	.18	.23	-.90 [*]	.39	-.47	.38
College 11	-.28	.40	-.31	.40	-.03	.57	-.05	.59
College 12	-1.58	.99	-1.43	.99	-3.90 ^{***}	1.08	-3.41 ^{**}	1.08
College 13	-1.01	.97	-.99	.97	-.91	.79	-1.06	.83
College 14	.10	1.01	-.48	1.00	-.92	.88	-.91	.91
Job Post Date	-.00 [*]	.00	-.00 ^{**}	.00	.00	.00	.00	.00
Total applicants	.01 ^{***}	.00	.01 ^{***}	.00	.01 ^{***}	.00	.01 ^{***}	.00
Women in field	.00	.00	.00	.00				
URM in field					.00	.00	.00	.00
<i>Predictors</i>								
Woman chair	.21 [*]	.10						
URM chair					.78 ^{***}	.22		
Woman percent on SC			.01 ^{***}	.00				
URM percent on SC							.01 [*]	.00

Note. N = 156. [†] p < .10, * p < .05, ** p < .01, *** p < .001

RECRUITING WOMEN AND URM APPLICANTS

Table 3
Fractional Logit Analysis (H 3a & 3b)

	Percentage of Women Search Committee Members Model 5 H 3a		Percentage of URM Search Committee Members Model 6 H 3b	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>Control variables</i>				
Year 2	.03	.16	-.73	.50
Year 3	.45*	.18	.26	.56
College 2	1.07**	.40	22.33***	1.39
College 3	-.56**	.21	1.45*	.64
College 4	-.85***	.23	-1.15 [†]	.70
College 5	-.71*	.29	-1.62 [†]	.93
College 6	-.54	.40	-2.51*	1.20
College 7	-1.04***	.31	-2.89**	.95
College 8	-.26	.31	-.55	.97
College 9	1.39**	.49	2.28	1.50
College 10	-.55	.39	3.58**	1.29
College 11	.49	.72	39.25***	2.48
College 12	-.19	1.77	60.75***	3.56
College 13	.84	1.78	61.22***	3.50
College 14	19.83***	1.84	-3.10	3.75
Women in field	-.00	.00		
URM in field			-.01***	.00
<i>Predictors</i>				
Woman chair	.39*	.16		
URM chair			1.46 [†]	.80

Note. *N* = 156. [†] *p* < .10, * *p* < .05, ** *p* < .01, *** *p* < .001

RECRUITING WOMEN AND URM APPLICANTS

Table 4
Negative Binomial Regression – Mediation Analyses (H 4a-4b)

	Number of Women Applicants Model 7 H 4a		Number of URM Applicants Model 8 H 4b	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>Control variables</i>				
Year 2	-.29 [†]	.15	-.01	.22
Year 3	-.18	.12	.41 [†]	.18
College 2	.18	.22	.70*	.33
College 3	-.55***	.13	-.07	.19
College 4	-.25 [†]	.14	-.12	.21
College 5	-.25	.19	.10	.28
College 6	-.23	.24	.15	.36
College 7	.02	.18	.27	.26
College 8	.15	.19	-.04	.30
College 9	.42	.27	.99*	.40
College 10	.24	.23	-.87*	.40
College 11	-.34	.40	-.05	.57
College 12	-1.52	.98	-3.92***	1.08
College 13	-1.16	.96	-.98	.81
College 14	-.66	1.00	-.95	.88
Job Post Date	-.00	.00	-.00	.00
Total applicants	.01***	.00	.01***	.00
Women in field	.00	.00		
URM in field			.00	.00
<i>Predictors</i>				
Woman chair	.15	.09		
URM chair			.72**	.25
<i>Mediators</i>				
Woman percent on SC	.01***	.00		
URM percent on SC			.00	.00

Note. *N* = 156. [†] *p* < .10, * *p* < .05, ** *p* < .01, *** *p* < .001

RECRUITING WOMEN AND URM APPLICANTS

Table 5
Sample University Ranked Faculty by Race/Gender

	Female		Male		All	
	Number	Percent	Number	Percent	Number	Percent
African American	26	7.0	28	3.9	54	5.0
Asian American	72	19.5	163	23.0	235	21.8
Hispanic	42	11.4	47	6.6	89	8.3
International	22	6.0	41	5.8	63	5.8
Multiracial	2	0.5	5	0.7	7	0.6
Native American	0	0	1	0.1	1	0.1
Unknown	1	0.3	1	0.1	2	0.2
White	204	55.3	423	59.7	627	58.2
Total	369	100	709	100	1,078	100

RECRUITING WOMEN AND URM APPLICANTS

Table 6
Sample University Student by Race/Gender

	Female		Male		All	
	Number	Percent	Number	Percent	Number	Percent
African American	2,600	11.1	1,962	8.6	4,562	9.9
Asian American	4,840	20.6	4,902	21.6	9,742	21.1
Hawaiian/Pacific Islander	20	0.1	16	0.1	36	0.1
Hispanic	7,955	33.9	7,008	30.9	14,963	32.4
International	1,492	6.4	1,972	8.7	3,464	7.5
Multiracial	701	3.0	665	2.9	1,366	3.0
Native American	35	0.1	32	0.1	67	0.1
Unknown	554	2.4	470	2.1	1,024	2.2
White	5,268	22.5	5,656	24.9	10,924	23.7
Total	23,465	100	22,683	100	46,148	100

RECRUITING WOMEN AND URM APPLICANTS

Table 7
Sample City Race/Gender Percentage

	Percent
<i>Race</i>	
African American	22.5
American Indian and Alaska Native	0.3
Asian	6.9
Hawaiian/Pacific Islander	0.1
Hispanic or Latino	44.8
Multiracial	2.1
White, not Hispanic or Latino	24.6
<i>Gender</i>	
Female	50.0
Male	50.0

RECRUITING WOMEN AND URM APPLICANTS

Table 8
One-Sample Kolmogorov-Smirnov Test

		No. of Woman Applicants	No. of URM Applicants
Total Sample Size (<i>N</i>)		156	156
Poisson Parameter ^{a,b}	Mean	22.83	8.60
Most Extreme Differences	Absolute	.46	.31
	Positive	.46	.31
	Negative	-.18	-.10
Kolmogorov-Smirnov Z		5.71	3.93
Asymp. Sig. (2-tailed)		.00	.00

^aTest distribution is Poisson.

^bCalculated from data.

RECRUITING WOMEN AND URM APPLICANTS

Table 9
Negative Binomial Regression (H1a-2b with different control variables)

	Number of Women Applicants				Number of URM Applicants			
	Model 9		Model 10		Model 11		Model 12	
	H 1a		H 2a		H 1b		H 2b	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>Control variables</i>								
Year 1	-.23	.15	-.26 [†]	.15	.04	.22	-.04	.23
Year 2	-.08	.12	-.16	.12	.46 ^{**}	.17	.37 [*]	.18
College 2	-.40 [*]	.16	.26 [†]	.16	1.02 ^{***}	.23	.92 ^{***}	.23
College 3	-.55 ^{***}	.14	-.44 ^{**}	.14	-.07	.20	-.14	.20
College 4	-.41 ^{**}	.14	-.25 [†]	.14	-.12	.21	-.14	.22
College 5	-.33 [†]	.19	-.17	.19	.08	.26	.06	.27
College 6	-.28	.25	-.14	.24	.05	.35	-.01	.36
College 7	-.07	.19	.10	.19	.30	.27	.22	.28
College 8	.03	.19	.09	.19	-.12	.29	-.16	.30
College 9	.75 ^{**}	.27	.47 [†]	.27	1.02 ^{**}	.39	.80 [†]	.42
College 10	.11	.23	.21	.23	-.74 [†]	.41	-.34	.39
College 11	-.25	.24	-.26	.23	.58 [†]	.33	.46	.35
College 12	-1.42 ^{***}	.32	-1.21 ^{***}	.32	-2.70 ^{***}	.79	-2.26 ^{**}	.77
College 13	-.70 ^{**}	.24	-.63 ^{**}	.23	.13	.33	-.01	.33
College 14	.23	.36	-.09	.36	.18	.53	.18	.55
Job Post Date	-.00 [*]	.00	-.00 ^{**}	.00	.00	.00	-.00	.00
Total applicants	.01 ^{***}	.00	.01 ^{***}	.00	.01 ^{***}	.00	.01 ^{***}	.00
Women faculty in department	.02 [†]	.01	.02 [*]	.01				
URM faculty in department					.02	.03	.04	.03
<i>Predictors</i>								
Woman chair	.19 [*]	.09						
URM chair					.65 ^{**}	.24		
Woman percent on SC			.01 ^{***}	.00				
URM percent on SC							.00	.00

Note. *N* = 156. [†] *p* < .10, * *p* < .05, ** *p* < .01, *** *p* < .001

RECRUITING WOMEN AND URM APPLICANTS

Table 10
Fractional Logit Analysis (H 3a & 3b with different control variables)

	Percentage of Women Search Committee Members Model 13 H 3a		Percentage of URM Search Committee Members Model 14 H 3b	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
	<i>Control variables</i>			
Year 1	.04	.16	-.61	.38
Year 2	.46**	.18	-.22	.41
College 2	.90**	.30	1.06	.68
College 3	-.43 [†]	.24	-.24	.52
College 4	-.79***	.23	-.89	.56
College 5	-.57 [†]	.29	.08	.66
College 6	-.40	.40	-.99	.90
College 7	-.94**	.33	-1.13	.75
College 8	-.23	.31	.22	.72
College 9	1.52**	.50	2.00 [†]	1.14
College 10	-.50	.39	-.25	.99
College 11	.14	.39	-1.91*	.92
College 12	-1.10**	.37	.64	.95
College 13	.06	.38	.65	.84
College 14	21.07***	.61	-28.17***	1.39
Women faculty in department	.02	.02		
URM faculty in department			.16*	.07
<i>Predictors</i>				
Woman chair	.39*	.16		
URM chair			1.34*	.62

Note. $N = 156$. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

RECRUITING WOMEN AND URM APPLICANTS

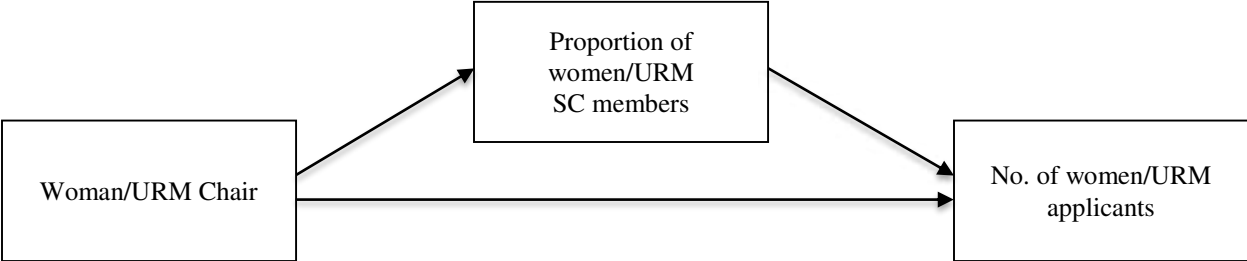
Table 11
Negative Binomial Regression – Mediation Analyses (H 4a-4b with different control variables)

	Number of Women Applicants Model 15 H 4a		Number of URM Applicants Model 16 H 4b	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>Control variables</i>				
Year 1	-.26 [†]	.15	.05	.22
Year 2	-.16	.12	.46 ^{**}	.17
College 2	.23 [*]	.16	1.03 ^{***}	.23
College 3	-.44 ^{**}	.14	-.08	.20
College 4	-.22 [†]	.14	-.13	.21
College 5	-.19	.19	.07	.26
College 6	-.16	.24	.03	.35
College 7	.11	.19	.30	.27
College 8	.11	.19	-.13	.29
College 9	.50 [†]	.27	1.07 ^{**}	.41
College 10	.25	.23	-.75 [†]	.41
College 11	-.24	.23	.55 [†]	.34
College 12	-1.17 ^{***}	.32	-2.71 ^{***}	.79
College 13	-.66 ^{**}	.23	.14	.33
College 14	-.23	.35	.18	.53
Job Post Date	-.00 ^{**}	.00	.00	.00
Total applicants	.01 ^{***}	.00	.01 ^{***}	.00
Women faculty in department	.02	.01		
URM faculty in department			.03 [*]	.03
<i>Predictors</i>				
Woman chair	.13 [†]	.09		
URM chair			.68 ^{**}	.25
<i>Mediators</i>				
Woman percent on SC	.01 ^{***}	.00		
URM percent on SC			-.00	.00

Note. *N* = 156. [†] *p* < .10, ^{*} *p* < .05, ^{**} *p* < .01, ^{***} *p* < .001

RECRUITING WOMEN AND URM APPLICANTS

Figure 1
The Conceptual Model



Appendix A

Method - Supplemental Information

Data

The data were obtained from 14 colleges at a large, urban, R1 university in the US. R1 universities are doctoral-granting universities with very high research activity as per the Carnegie Classifications of Institutions of Higher Education. The university is located in the South-Central Region of the United States. To provide more information on the sample context, we specify the university's racial and gender demographics in Tables 5-7. To obtain the data, we partnered with the Provost's office to access faculty recruitment databases. The partnership was created because the university was a recipient of an NSF ADVANCE institutional transformation grant. The Provost serves as one of the PIs on the grant and hence provided the research team with access to multiple years of recruitment data housed in Academic Affairs. In terms of the database systems we accessed, we received data to look at job postings and job applications through a comprehensive online application management system. All applicants had to submit their applications, including self-reported demographic information through this application management system. The entire applicant review and selection process was also managed through this system. The system further contains names for all search committee members. Utilizing these databases, we obtained gender and self-reported ethnicity data for each search committee chair, committee member, and applicant.

Control Variables

We applied fixed-effects models to control for unobserved college-level differences in the number of total women or URM applicants in all estimations. Controlling for *dummy-coded colleges* is particularly critical when there are systematic differences across fields. We also

RECRUITING WOMEN AND URM APPLICANTS

controlled for the *number of women/URM in the field* to account for differing levels of women and URM representation in each field (NCES, 2018). This was done to rule out alternative explanations that might be driving the results. For instance, potential women or URM applicants are more likely to apply for jobs in fields with more women or URM members regardless of the specific university's search committee chair or members' gender or racio-ethnicity. Similarly, fields with greater percentages of women and URM are also likely to have departments (and hence search committees) with more women and URM. Specifically, we utilized NCES databases that break down the statistics by field, gender, and race to get the number of women and URM that could apply for a particular job (i.e., number of women and URM that completed a doctoral degree in the US) for the year 2016-2017, the middle of the three years of job post data that was included in our sample.

We also controlled for the *number of women/URM in the field* to account for differing levels of women and URM representation in each field (NCES, 2018). This was done to rule out alternative explanations that might be driving the results, i.e., women or URM potential applicants are more likely to apply for jobs in fields with more women or URM members regardless of the specific university's search committee chair or members' gender or racio-ethnicity, or that fields with greater percentages of women and URM are also likely to have departments (and hence search committees) with more women and URM. Thus, we utilized NCES databases that break down the statistics by field, gender, and race to get the general number of women and URM that could potentially apply for a particular job, i.e., the number of women and URM that completed a doctoral degree in the US for the year 2016-2017, the middle year from the three years of job post data that was included in our sample. Further, we controlled for the yearly shock effects by *dummy-coding the three academic years* and controlled for the

RECRUITING WOMEN AND URM APPLICANTS

dates of year when positions were initially posted to rule out the possible effects of posting timing on applicant pools (e.g., earlier posting may attract more applicants during an academic year). The time of job posting was not included as a control when testing hypotheses 3a and 3b. The outcome variables in these instances were the percentage of women and the percentage of URM on the search committee, as there was no theoretical rationale for the date of the job posting to be related to these variables. When testing hypotheses 1a, 1b, 2a, 2b, 4a, and 4b, we also controlled for the number of *total applicants* to obtain the net effects of the predictors of interest on the number of women or URM applicants. Additionally, we re-ran all hypothesis tests but replaced the controls of the *number of women* and *URM in the field* with the *number of women* and *URM in the department* to control for the effect of varying representation of women and URM across departments without over-controlling within the same model following the advice of Bernerth & Aguinis (2016) - refer to Appendix B for these results.

Statistical Analysis

Models. In all but two hypotheses (H 3a and 3b), the underlying nature of the dependent variables was count data. Hence, we used negative binomial regression to test hypotheses 1a, 1b, 2a, 2b, 4a, and 4b. Both Poisson and negative binomial regression can be appropriate for count data outcome variables. Specifically, underlying Poisson distribution assumptions entail that the mean equals the variance. If a count variable is over-dispersed, i.e., the variance is greater than the mean, negative binomial regression should be used (Bernerth & Aguinis, 2016). To assess whether the distributions of the count dependent variables in our data follow a Poisson distribution, we ran a One-Sample Kolmogorov-Smirnov test. The results show that our data violate the assumptions (Gardner et al., 1995) for Poisson regression. That is, neither of our dependent variables (number of women applicants and number of URM applicants) follow a

RECRUITING WOMEN AND URM APPLICANTS

Poisson distribution ($p < .001$, see Table 8). We further checked the means and variances of the dependent variables to check whether the count variables were over-dispersed. The results show that both count variables were over-dispersed, i.e., their variances were greater than their means. We thus used negative binomial regression to test the hypotheses with count dependent variables.

We used fractional logit analysis to test hypotheses 3a and 3b because the dependent variables, percentage of women search committee members and percentage of URM search committee members are proportions (Papke & Wooldridge, 1996). Fractional logit is a quasi-log likelihood method that is appropriate to use when dependent variables are proportions (Newcombe, 2003).

Power Analysis. Power analysis for our negative binomial regression was conducted using the R function `power.nb.test`. Using an overdispersion parameter from the data and an expected ratio of the rates of 1.2, we found we had sufficient power to detect effects. That is, the power to detect a 20% increase in female applicants (H1a) was 92.1% and 84.1% for URM applicants (H1b). The power to detect a 20% increase in female applicants as it relates to an increase in the proportion of women on the search committee was 93.9% (H2a), and a 20% increase for URM applicants as it relates to an increase in the proportion of URM on the search committee was 77.4% (H2b). Lastly, the power to detect a 20% increase in women in search committees as it relates to woman (as opposed to a male chair) was 99.9% (H3a), and the power to detect a 20% increase in URM members in search committees as it relates to a URM chair (as opposed to a non-URM chair) is 92.9% (H3b).

Appendix B

Supplemental Analyses

Additional Variables and Data

We conducted supplemental analyses to examine and explore other potential explanations for our observed results. For this purpose, we coded additional variables and collected more data using three resources: the university's institutional research databases, the text used in the job ads in our sample, and search committee chairs. First, we used the university's institutional research databases to extract the total number of women and URM faculty in each of the departments included in our sample.

Second, we conducted interviews with 56 search committee chairs to report their efforts to distribute the job ad. The chairs were asked to quantify the extent (1= not at all - 10 = a lot) to which they used the following tools/actions to identify and target potential women and under-represented minority applicants for their respective faculty searches: (a) *Post your job ad on women/minority-specific websites*, (b) *Cooperate with the Office for Recruitment, Retention, Equity, and Diversity or Advance to develop a diverse list of candidates you then contacted*, (c) *Post your position ad to department chair listservs*, (d) *Call women or colleagues from historically underrepresented backgrounds to get possible candidate names/ recommendations on who to recruit*, (e) *Use your personal network to recruit*, (f) *include language in your job ads promoting the diversity of your department to prospective candidates*, and (g) *include language in your ads promoting the diversity of the university to prospective candidates*.

Third and last, we coded the job ad text for all 156 jobs in our sample on three dimensions *search chair visibility*, *any diversity language*, and *total diversity-related ad effort*. *Search chair visibility* was coded as a binary variable such that it was coded (1 = yes, 0 = no)

RECRUITING WOMEN AND URM APPLICANTS

depending on whether the search chair's name and/or contact information was included in the job ad. *Any diversity language* was coded (1 = yes, 0 = no) based on whether there were any statements, beyond that which is the legal requirement, that emphasized the importance of diversity as a value, or described the university as a diverse/diversity-friendly institution, and/or encouraged women/minorities to apply. *Total diversity-related ad effort* was coded and computed as an aggregate score (0-18), based on the number of diversity-related statements (from a suggested list of diversity-related statements provided to search committee chairs during recruitment/search training) that were included in the job ad.

Results of Supplemental Analyses

First, we tested all our hypotheses again using the same methodology as outlined in the main manuscript, with the exception of control variables. We replaced the controls of the number of women and URM in the field with the number of women and URM in the department to control for the effect of varying representation of women and URM across departments on applicant pool diversity. Following the recommendations of Bernerth and Aguinis (2016) on the risks of over-controlling, we refrained from including both sets of controls in the same model. The results remained largely consistent, strengthening our confidence in the findings (see Tables 9-11). The only change in results when including department-level controls as opposed to field-level controls was that the marginally significant effect of URM chair on the proportion of URM on the search committee became significant, and the significant effect of the proportion of URM search committee members on the number of applicants became non-significant. All other results remained the same. In other words, holding the number of URM faculty in a department constant, having greater proportions of URM faculty on search committees may not increase the number of URM applicants. This may be in part because of the low representation of URM in the

RECRUITING WOMEN AND URM APPLICANTS

departments (only 14% of all faculty at this university identified as URM), or it could be reflective of the differential ways in which URM search chairs advance diverse recruitment and hiring, as found in supplemental analyses discussed below.

Second, we conducted two sets of independent samples t-tests utilizing *chairs' self-reported ad distribution efforts*, *any diversity language*, and *total diversity-related ad effort* variables to compare women with men search committee chairs and URM with non-URM search committee chairs, to assess whether there were systematic differences across groups in the extent of effort that was made to encourage/target women and underrepresented minorities to apply. There was no significant effect for gender or URM when it came to self-reported utilization of (c) department chair listservs, (d) calling women or URM colleagues for references, (f) job ad language that promoted department diversity, or (g) job ad language that promoted university diversity. Nor was there a significant effect for gender or URM when it came to the inclusion of *any diversity language* or *total diversity-related ad effort* in the actual job ad as coded by the research team.

However, we did find support for the notion that there are some differences between what women search chairs are doing to recruit more women as compared to men, as well as what URM search committee chairs are doing to recruit more minorities as compared to non-URM chairs that can be explained by the tenets of homophily theory, as postulated in the main body of this paper. Women indeed reported utilizing their personal network ($M = 9.53$, $SD = .85$) more so than men ($M = 7.63$, $SD = 3.86$); that is, there was a significant effect of gender ($t_{52.31} = 3.25$, $p < .01$) on use of personal networks to identify women and minority applicants. Interestingly, URM chairs ($M = 5.60$, $SD = 4.03$) utilize their personal network less than non-URM search chairs ($M = 8.65$, $SD = 2.78$) to recruit minorities ($t_{10.85} = -2.28$, $p < .05$).

RECRUITING WOMEN AND URM APPLICANTS

Furthermore, URM search chairs reported posting job ads on women/minority-specific websites ($M = 9.60$, $SD = .52$) more so than non-URM search chairs ($M = 6.84$, $SD = 3.52$), that is there was a significant effect of chair minority status ($t_{50.61} = 5.01$, $p < .001$) on use of women/minority-specific websites to post job ads. Additionally, URM search chairs also cooperated with the university's administrative offices dedicated to working toward faculty recruitment, retention, equity, and diversity to develop a diverse list of candidates to target ($M = 9.60$, $SD = .52$) more so than non-URM search chairs ($M = 6.84$, $SD = 3.52$), that is there was a significant effect of chair minority status ($t_{51.61} = 4.86$, $p < .001$) on use of women/minority-specific websites to post job ads. The implications of these observed effects are discussed in the main body of the manuscript.

Third and last, we also used negative binomial regressions with interaction terms to test the moderating effect of *search chair visibility* on the relationship between search chairs' gender and URM status on the number of women and URM applicants, respectively. The moderation was not significant in either case, which suggests that it wasn't the search chair demographics, by virtue of being a signal of diversity or similarity, that seemed to be attracting a more diverse pool of applicants, rather, in line with the main arguments of our manuscript, the differential behavior of women and URM chairs was affecting applicant pool diversity.