Faculty Perceptions of Diversity Statements in STEM Faculty Job Applications

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Abstract

This research paper describes a study designed to help inform STEM faculty hiring practices at institutions of higher education in the U.S., where over the past two decades, diversity statements have become more popular components of application packages for faculty jobs. The purpose is to explore the ways and extent to which diversity statements are utilized in evaluating faculty applicants. The research questions are: (1) To what extent do universities equip search committees to evaluate applicants' diversity statements? (2) What are STEM faculty's perspectives of diversity statements in job applications?

This paper is derived from a larger two-phase sequential mixed methods study examining the factors current faculty members and administrators consider important when hiring new STEM faculty. During the first phase, we deployed a nationwide survey to STEM faculty members and administrators who have been involved in faculty searches, with 151 of 216 respondents answering questions specific to diversity statements. About 29% of survey respondents indicated their departments required diversity statements; 59% indicated their institutions did not provide guidance for evaluating them. The second phase was a phenomenological study involving interviews of 25 survey respondents. Preliminary analyses of interview data indicated that a little more than half (52%) of participants' departments required a diversity statement. Of the departments that required diversity statements, a little more than half used a rubric for evaluation, whether as part of a larger holistic rubric, or as a standalone rubric. For some departments that did not require diversity statements, applicants were required to discuss diversity within their other application materials.

Regarding faculty members' perceptions of diversity statements, some felt that diversity statements were necessary to assess candidates' beliefs and experiences. Some noted that when diversity is discussed as part of another document and is not required as a stand-alone statement, it feels like the candidate "slaps on a paragraph" about diversity. Others viewed diversity statements as a "bump" that gives candidates "bonus points." A few faculty felt that diversity statements were "redundant," and if applicants were passionate about diversity, they would organically discuss it in the other required documents. Many shared frustrations regarding the requirement and evaluation practices. Most participants indicated their postings provided applicants with little to no guidance on what search committees were looking for in submitted diversity statements; they felt it would be beneficial for both the search committee and the applicants to have this guidance.

Shared through a traditional lecture, results from this study may be used to help inform strategies for recruiting faculty who are committed to diversity - and ideally, equity and inclusion - and for addressing equity in faculty hiring.

Background and Motivation

Diversity, Equity and Inclusion in Faculty Hiring. The metaphor of the "leaky pipeline" to describe and explain the lack of students and faculty from racially and ethnically minoritized (REM) faculty's perspectives of diversity statements in job applications fails to address how they have been systematically removed from the pipeline. In fact, data shows that despite trends showing improvement in STEM doctoral degree completion among underrepresented groups, their representation in faculty ranks has not shown the same growth (Boyle et al., 2020). In other words, REM graduate students are not transitioning into the professoriate at the same rate they are graduating. Gibbs and colleagues (2017) predicted that despite the growth in the pool of underrepresented PhD graduates, the composition of faculty would remain stagnant through the year 2080.

With continued calls for increased hiring of racially/ethnically marginalized faculty, departments and institutions have been encouraged to reassess their hiring practices. In an effort to be "fair," many search committees use race neutral practices to evaluate applicants. However, ignoring racial/ethnic differences does not make the issue of bias simply go away. Instead, race neutral approaches work to uphold white supremacy and reinforce systems of inequity. For example, Sensoy and DiAngelo (2017) described an instance when a search committee chair reviewed applicant curriculum vitae (CVs) by comparing each applicant's number of publications, journal reputation, and awarded grant funds. One may consider this an "objective" approach; instead, it fails to account for the invisible labor many applicants of color experience that is not expected of their White counterparts (Social Sciences Feminist Network Research Interest Group, 2017; Turner et al., 2008). This is a good example of how objectivity reinforces the status quo; why diversity initiatives are necessary; and the need to reassess recruitment, evaluation, and hiring practices.

Diversity Statements. The recruitment and hiring process is generally as follows: a job announcement is released to several outlets, a faculty search committee reviews application materials, the committee narrows the group to a handful of candidates for phone interviews, two to three candidates are invited to a campus interview, the committee makes a recommendation, and an administrator finalizes the decision and extends the offer. At the application stage, applicants typically submit a cover letter, research statement, and CV. Some announcements may also request a teaching statement/philosophy, a writing sample, and/or a diversity statement. Over the past two decades, diversity statements have become more popular, but are still rare in comparison to the other documents (Turner et al., 2008). In a report for the American Enterprise Institute, Paul and Maranto (2021), found that out of 999 job announcements, 19% required a diversity statement submitted with application materials. Additionally, they found that about 24%, 18%, and 17% of social science, STEM, and other disciplines, respectively, required diversity statements. There is currently no universal format or focus of a diversity statement. Consequently, applicants may be asked to specifically address their experiences working with students from diverse backgrounds, how they incorporate diversity into their courses, how they contribute to diversity work within their professional and/or community service, how they

incorporate diversity into their research, and/or how their personal backgrounds have prepared them to work in diverse spaces (Schmaling et al., 2015).

Proponents of diversity statements argue that applicants may see a request for a diversity statement as the department's and institution's commitment to inclusion (Schmaling et al., 2015). Second, a diversity statement may help to recognize invisible forms of labor that many applicants of color participate in but may not be listed on a CV or cover letter (Bhalla, 2019). Third, a diversity statement can help the search committee identify candidates who may be interested in supporting and advancing diversity and inclusion efforts within the department. Namely, these applicants may help contribute to social justice and positive departmental change that would benefit students, faculty, and staff (Turner et al., 2008). Fourth, a request for a diversity statement may force applicants who have never been required to consider diversity issues within their teaching, research, and service to plan for how they will help advance diversity efforts. Finally, some search committees may feel diversity statements provide a tangible way to make sure diversity is not an afterthought in the search process (University of Delaware, 2015).

Despite the strengths, there have been some reported weaknesses to diversity statements. First, some faculty applicants consider diversity statements to be nothing more than institutional lip service. Second, international candidates may not have a solid understanding of diversity issues in the U.S. context (University of Delaware, 2015). Third, candidates who hail from a country where most of its citizens are Black or where they do not experience diversity issues in the same way may not be comfortable addressing how they would advance diversity. Fourth, because diversity statements may reveal a candidate's social identity(ies), candidates may open themselves up to bias in the search process. Research (Dovidio & Gaertner, 2000; O'Meara et al., 2020; Schmaling et al., 2014; Sensoy & DiAngelo, 2017) indicates that REM applicants are judged more harshly than White male applicants. In fact, anonymized review has been proven to reduce bias in the hiring process (Goldin & Rouse, 2000). Finally, search committees may not adequately use and evaluate diversity statements (Bhalla, 2019; Schmaling, 2014).

The purpose of this study is to explore the ways and extent to which diversity statements are utilized in evaluating faculty applicants. The research questions are: (1) To what extent do universities equip search committees to evaluate applicants' diversity statements? (2) What are STEM faculty's perspectives of diversity statements in job applications?

Study Design

This study is derived from a larger two-phase sequential mixed methods study examining the factors current faculty consider important when hiring new STEM faculty. During the first phase, we deployed a nationwide survey to current faculty members and administrators who have been involved in faculty search processes. They survey was deployed through listservs administered by divisions of the American Society for Engineering Education (ASEE), the American Association for the Advancement of Science (AAAS), and through the researchers' professional networks. A total of 216 people responded and answered a series of multiple choice, short

answer, and ranked preference questions regarding the comparative importance of a variety of potential applicant characteristics. They also answered questions about potential interventions, including applicant diversity statements, intended to promote inclusivity and equity throughout the hiring process. Of the 216 respondents, 151 responded to the items regarding diversity statements. Specifically, we asked:

- To what extent do you agree or disagree with the following statements about requiring diversity statements for applicants for faculty positions in institutions of higher education?
    - Diversity statements should be required by all institutions regardless of student demographics.
    - Diversity statements should be required only by institutions that serve a racially, ethnically, culturally, and otherwise diverse student body.
    - Diversity statements should not be required by any institutions.
    - Diversity statements should not be required for positions where research in a technical field is a primary responsibility of the position.
- Does your department require faculty applicants to submit diversity statements as part of their application packages?
- Does your institution, college/school, or department provide guidance on evaluating applicants' diversity statements?

Table 1 summarizes the demographics of the 151 participants who responded to these items.

The second phase was a phenomenological study. We invited survey participants who indicated interest in answering follow-up questions to participate in individual interviews. We reached out to all participants who were interested, and filtered interview participation by availability. In the current study, we use survey and interview data specific to the submission and evaluation of applicant diversity statements in faculty hiring. Of the 24 interviewees, 80% were White, 12% were Hispanic/Latinx, 8% were Black, and 4% were Asian. Regarding gender, 56% were men and 44% were women. In terms of institution type, 28% of respondents were employed at R1 institutions.

For phase one, we ran descriptive statistics for a snapshot of demographics and response frequencies regarding diversity statements by Carnegie Classification, MSI status, and discipline. Further statistical analyses and hypothesis testing are in progress. We are currently analyzing the qualitative diversity statement data from phase two. We will conduct two cycles of coding. During initial coding, we will read interview transcripts line by line for familiarity with the data (Saldaña, 2013). During the second cycle of coding, we will use focused coding to organize the data around the most salient categories, then use those categories and codes to develop themes (Saldaña, 2013).

Table 1. Demographic Characteristics of the Participants

Sample Characteristics	n	%
Total	151	100
Gender*		
Man	68	45
Woman	77	51
A gender identity not listed here	1	1
I prefer not to answer	8	5
Race		
White	89	59
Black or African American	27	18
Asian	6	4
American Indian or Alaska Native	1	1
Native Hawaiian/Pacific Islander	1	1
A race not listed here	2	1
I prefer not to answer	11	7
Ethnicity		
Hispanic or Latinx	15	10
Not Hispanic or Latinx	136	90
Minority Serving Institutions (MSIs)		
All MSIs	68	45
HSIs	33	22
HBCUs	24	16
Other MSIs (ANNH, AANAPISI, PBI)	11	7
Not MSI	83	55
Current Institution's Carnegie Classification		
Doctoral Universities: Very High Research Activity	69	46
Doctoral Universities: High Research Activity	27	18
Doctoral/Professional Universities	6	4
Master's Colleges & Universities	25	16
Baccalaureate Colleges and Associate's Colleges	24	16

*Respondents were asked to check all that apply; thus, totals may exceed 100%.

Results and Discussion

Research Question 1. We were interested in learning the extent to which universities equipped search committees to evaluate applicants' diversity statements. We began by asking survey respondents whether or not their departments required faculty applicants to submit diversity statements. As shown in Figure 1, from phase one, we found that 29% (44/151) of respondents' departments required diversity statements. Doctoral/Professional Universities and Master's Colleges/Universities required diversity statements at a rate that was, on average, twice as high as institutions with other Carnegie classifications (47% versus 23%, respectively). Non-MSIs were 1.7 times more likely to require diversity statements than MSIs (36% versus 21%, respectively). While most respondents (65%) strongly agreed that diversity statements should be required for positions that were primarily research focused, we found that MSI faculty were more than twice as likely than non-MSI faculty to somewhat/strongly agree that diversity statements **should not** be required for positions that were primarily research focused. Regarding

the evaluation of diversity statements, we found that the majority of institutions (59%) did not provide guidance for evaluating them. Of the 25% that did provide guidance, R1 and R2 institutions were nearly five times more likely than other institutions to provide guidance on diversity statements.

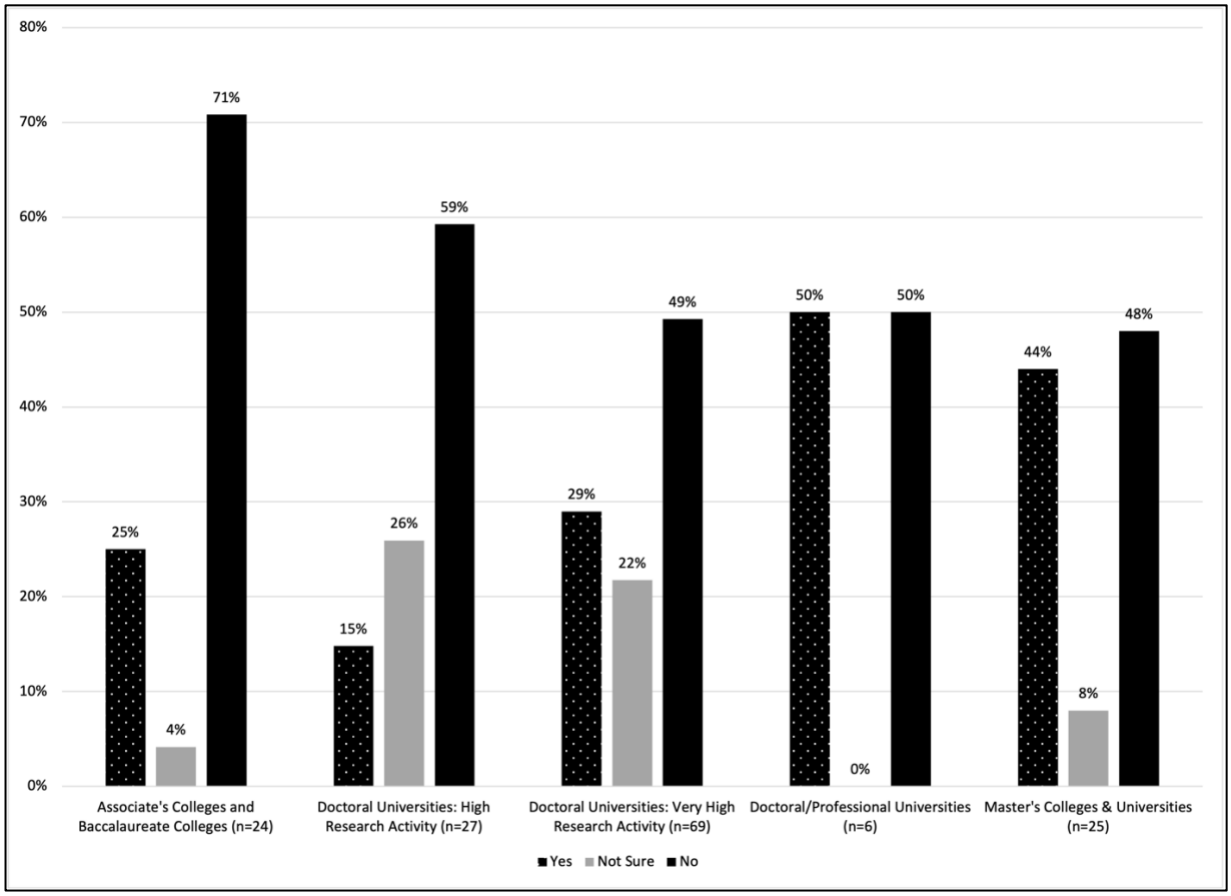

Figure 1. Percentage of Respondents whose Departments Require Diversity Statements by Institution Carnegie Classification

Research Question 2. In phase two, we took a deeper dive to understand faculty members' perspectives about diversity statements in job applications more fully. Preliminary analyses of our interview data indicated that a little over half (52%) of the participants' departments required a diversity statement. We believe interviewees' self-selection contributed to this overrepresentation when compared to our larger population of survey respondents. For the departments that required diversity statements, most started requiring them within the past five years. About half of them used a rubric for evaluation, whether as part of a larger holistic rubric, or as a standalone rubric. For a few of the departments that did not require diversity statements, applicants were required to discuss diversity within their cover letter, teaching philosophy, or research statement.

Regarding faculty's perceptions of diversity statements, some felt that diversity statements were necessary to assess candidates' beliefs and experiences. Tim noted that when diversity is

discussed as part of another document and is not required as a stand-alone statement, it feels like the candidate "slaps on a paragraph" about diversity. Some departments view diversity statements as a "bump" or that it gives candidates "bonus points." To that point, Pam commented that "a great diversity statement is not going to overcome a weak research plan. But a really poor diversity statement is going to pull a great research plan out of contention." A few faculty members felt that diversity statements were "redundant," and if applicants were passionate about diversity, they would discuss it organically in the other required documents.

A few faculty members who saw diversity statements as lip service from the candidate, noting that applicants were giving "canned responses." Respondents indicated looking for a deeper knowledge of diversity in candidates' statements; instead, diversity statements have become more of a checklist item with statements sounding similar. Harry stated, "Some people give it lip service. They say it's important but don't have experience…its' one thing to count someone's publications. It's a whole other thing to try to gauge how they're thinking about DEI."

Many shared frustrations regarding requirement and evaluation practices. The majority of interview participants indicated their departments and institutions provided applicants with little to no guidance on what search committees were looking for in submitted diversity statements. Participants felt it would be beneficial for the search committee and the applicants to provide guidance apart from the general "please provide a statement detailing your commitment to diversity, equity, and inclusion" request for diversity statements. For example, when asked if her department provided guidance to applicants on how to write diversity statements, Ashley stated, "it [job announcement] would not say what we are looking for, I can guarantee you. That would be nice to be transparent and communicative." "How do we provide some sort of direction but not too much?" Landry's question is one some of our interview participants seemed to be grappling with. Like some previous respondents, Landry felt that diversity statements are "largely the same." To combat this, he suggested that search committees should provide information or prompts for applicants regarding what they are looking for in a good diversity statement.

Conclusions, Recommendations, and Implications

While the practice of requiring diversity statements as a part of faculty application packages is becoming increasingly popular, it is being met with mixed results. Many institutions and departments are not providing guidance on what the statements should include; therefore, applicants are not equipped with information they need to craft solid statements, nor are search committee members equipped to evaluate them. Some interview participants noted that diversity statements were simply a "checklist item," and that publications and research money remained most important. Diversity statements also have the potential to further marginalize those who are already experiencing marginalization.

To evaluate how an applicant has – or will – apply principles of diversity, equity, and inclusion in the way they do their work (i.e., teaching, advising, and mentoring students from a range of identities), we recommend that institutions consider how this can be evaluated in the context of

the job requirements, as opposed to requiring diversity statements. For example, in evaluating teaching statements, what characteristics are important to the department as indicators that the applicant will serve its student population well? The same holds true for the areas of research and service. When those factors are decided, they should be communicated in the job announcements as part of the job requirements (Boyle et al, 2020) so applicants are clear about qualifications. Further, search committees should be educated to understand and effectively utilize rubrics to evaluate applicants on all the criteria specified in the job announcements. The rubrics should carefully attend to all job requirements so they help mitigate biases that erroneously dissociate excellence from diversity, equity, and inclusion in areas like teaching and research and that undervalue service. These strategies can be accomplished by engaging subject matter experts in offices of diversity, equity and inclusion working collaboratively with staff who are responsible for compliance with equal opportunity-related laws and regulations and with the academic affairs unit responsible for faculty hiring. Central to the strategies are the input from faculty members involved in searches and a combination of asynchronous and hands-on synchronous learning along with the necessary tools for search committee members to use in their work rather than a cursory training on "unconscious bias". Critical to success is the commitment of institutional leaders and to investing the time and resources into robust processes that include accountability of academic units.

Results from our study can help inform strategies for recruiting faculty from all identities who are committed to diversity, and ideally, equity and inclusion. It also has the potential to lead to policies that address inequitable hiring practices. This includes but is not limited to increased recruiting and hiring of faculty from minoritized and/or marginalized identities in STEM disciplines. Doing so may improve opportunities to create cultures of inclusion and support for minoritized students and postdoctoral scholars. Centering equity in standard evaluation procedures is necessary to help mitigate bias during the hiring process. This not only applies to the evaluation of diversity statements, should the practice persist, but also to the evaluation of candidates' overall application packages. Future research should examine the impact diversity statements have on the structural diversity at institutions as well as how the requirement of diversity statements has affected (or not) inclusion and equity at institutions.

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