Searching for a Diverse Faculty

Data-Driven Recommendations

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Searching for a Diverse Faculty: Data-Driven Recommendations

Executive Summary **2**

Introduction **7**

Methods **8**

UC Recruit system 8

Demographic data 10

The survey 12

Assessment of search practices 15

Caveats 16

Very Promising Search Practices **19**

Shaping job descriptions: three approaches 19

Tapping UC pipelines 26

Promising Search Practices **28**

Emailing or phoning selected women or URM scholars 28

Including the diversity needs of the department among its hiring priorities 29

Including women and URM faculty on search committees 30

Monitoring national resources 33

Engaging faculty equity advisors 34

Additional practices showing some promise 36

Not Clearly Promising Search Practices **40**

Practices for which we observed insufficient variation 40

Using comparative data: three practices 41

Using rubrics for assessing applications 43

Additional practices that are not clearly promising 44

Next Steps and Conclusion **51**

References **53**

EXECUTIVE SUMMARY

This study has several related goals. One is to ensure that UC Berkeley's faculty search practices do the best possible job of identifying outstanding candidates regardless of their gender or ethnicity. Another is to aid Berkeley in responding thoughtfully to a statement of values by the University of California Regents that includes this:

> *Because the core mission of the University of California is to serve the interests of the State of California, it must seek to achieve diversity among its student bodies and among its employees. The State of California has a compelling interest in making sure that people from all backgrounds perceive that access to the University is possible for talented students, staff, and faculty from all groups.*

An additional goal is to help Berkeley achieve the well-documented benefits of having a diverse faculty.[1]

An impetus for this study is the growing social-science literature that documents disparities in faculty searches. For example, a famous study[2] asked professors to read a curriculum vitae (c.v.) and indicate whether they would support hiring the individual. Some of the professors received a c.v. for "Karen Miller," others received the same c.v., but with the name "Brian Miller." Brian was more favorably evaluated than Karen by both male and female professors.

Such experimental results have prompted researchers and institutions to make a number of recommendations about search practices. We were able to study many of these: our study supports the value of some, but not all, of these practices.

Data and survey

UC Berkeley has analyzed four years of data drawn from two sources: its online search system, and a survey of search-committee chairs about the search practices they used. Information about gender and ethnicity was collected for applicants, short-listed candidates, those to whom offers were made, and those who accepted offers. In addition, the study presents national data for availability pools within the relevant disciplines or fields.

Surveys were completed for a total of 220 searches. The survey requested responses for 65 items, with 55 practices that can be grouped within several broad areas:

- Position specification
- Active recruitment

[1] For example, Hong & Page (2004) and Page (2007) find an increased capacity for problem-solving among diverse groups. In accordance with the State's adoption of Proposition 209, we do not aim in this study to identify ways to give preferential treatment to individual candidates on the basis of their gender or ethnicity.

[2] See, for example, Steinpreis, Anders & Ritzke, 1999.

- Reduction of implicit bias
- Departmental commitment to diversity.

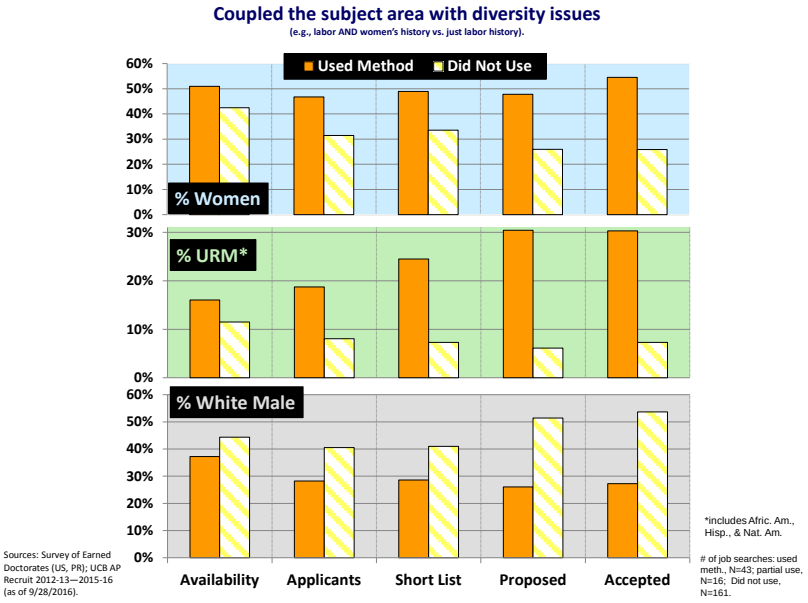
In addition, 10 questions were aimed at assessing campus-specific policies and resources.

Results

For some practices, our results were inconclusive, but for many practices, the study provides a good basis for drawing conclusions about their promise. Searches using some practices showed increased proportions of women and URM individuals at various search stages in comparison to searches that did not use the practice. At the same time, we found that some widely recommended practices did not have a positive statistical association with diversity at various search stages or were even negatively associated with diversity. We also note that some practices that show promise for increasing URM proportions do not show equal promise for increasing the proportions of women at various search stages.

Very promising practices

The general practice that yielded the strongest positive association with diversity at various search stages was the practice of describing the search area in a way that was likely to tap especially rich applicant pools of women and URMs. The results were especially striking when the search description explicitly mentioned research interests that included women or minorities:



Searches that used this practice saw significant increases in diversity at multiple stages of the search process, by comparison with searches that did not use the practice. Although this

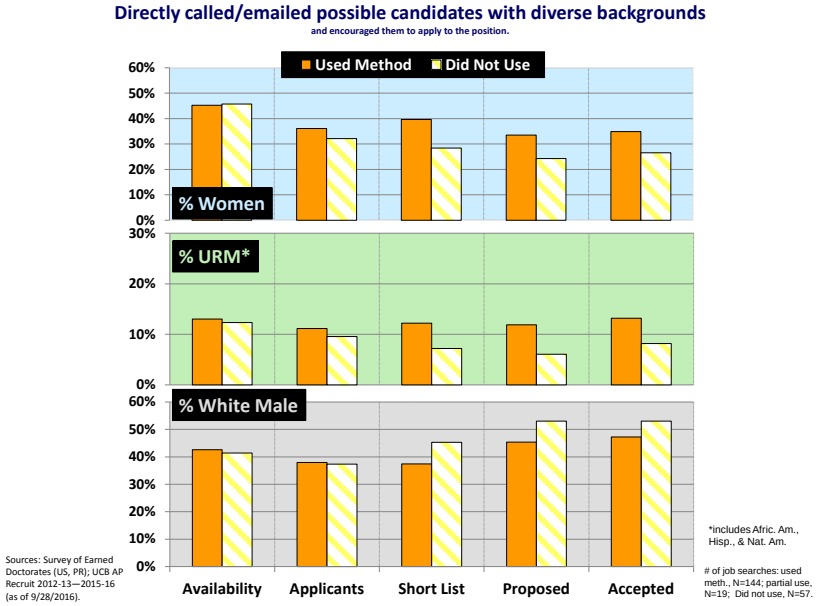
particular practice is not one that all disciplines can employ, we discuss some related practices that may be useful for wider ranges of disciplines.

Promising practices

Other kinds of practices that yielded positive statistical associations included these:

- Intensive outreach
- Departmental discussion of its diversity priorities in relation to other priorities
- Appointment of women and URM faculty to search committees.

For example, searches that encouraged especially promising women and minority-group members to apply had higher percentages of women and URM candidates at the later stages of the search process compared to searches that did not use this practice:

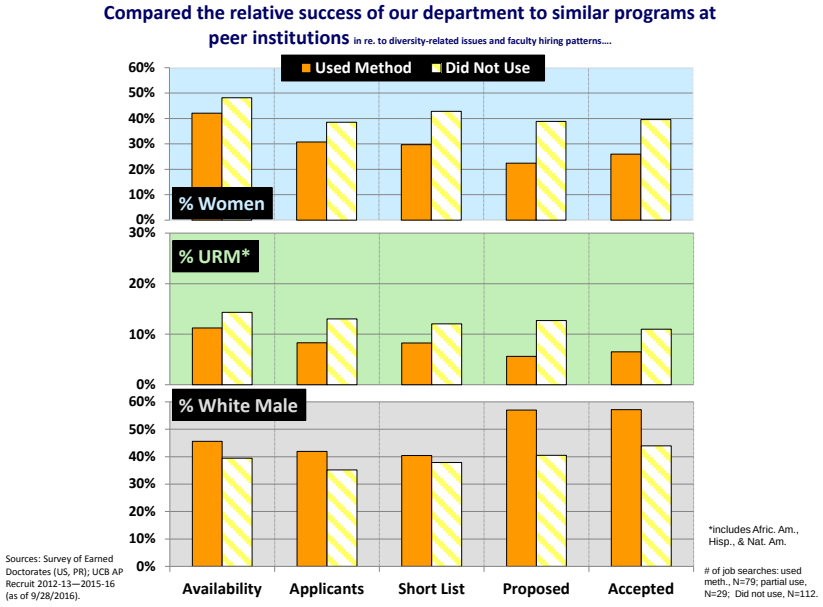


Not clearly promising search practices

While often recommended, some other practices did not show positive statistical associations with diverse hiring. These include the following:

- Using comparative data
- Using weighted rubrics for assessing applications
- Encouraging implicit-bias training
- Creating job criteria that included evidence of commitment to diversity.

For example, the study found *negative* statistical associations with diversity for departments that gathered comparative data about diverse hiring at peer universities:



Study limitations

Although we speak throughout the study of the relative "promise" of various practices, we must emphasize that studies of this kind do not establish causation. In other words, they can show positive or negative statistical associations, but they do not prove that certain practices *produce* greater or lesser diversity in hiring. We nonetheless believe that some of the associations we have found are strong enough, combined with their underlying theoretical validity, to support recommendations about practices that are likely to increase (or decrease) diversity at various stages of the search process.

Among several additional caveats, we note that the large number of practices our search committees used means that statistical associations between a single kind of practice and search outcomes are not always clear.

Next steps

The study will be continued in future years and will include additional campuses in the UC system—measures that will yield a much larger set of data. We will also simplify and focus the survey in light of current results. By taking these steps, we expect to learn much more about associations between practices and outcomes.

Conclusion

The work that members of search committees do is difficult and time-consuming, and the academic future of a department depends upon the success of that work. We hope the current and future results of our study will help search committees achieve their goals as effectively as possible. Above all, we are now confident that we can offer this advice: **conventional search practices are not enough for consistent success in hiring top women and URM faculty**.

INTRODUCTION

UC Berkeley has been eager to use faculty search practices that tap effectively the full demographic range of the availability pools for all searches, to serve its public mission, and to benefit more fully from having a diverse faculty. While a number of search practices are widely recommended in the guidelines that many universities prepare, the question of their efficacy has often not been subject to empirical review and study. With new data, we have been able to learn more about which search practices have positive statistical associations with diversity at a succession of search stages.

This report begins with a review of our **methods**, describing the nature of our data and the limitations of our study. Our data are mainly drawn from an online application system and a survey completed by the search-committee chairs about the practices they used in their searches. The primary limitation of our study is that while it can uncover positive and negative statistical associations between search practices and outcomes, it cannot establish causation.

We then discuss our findings and observations concerning several **very promising search practices**. We look first at shaping job descriptions to include areas in which under-represented potential candidates have been judged to be somewhat more likely to be pursuing their research. We discuss three ways of doing this: (1) linking the description to issues of gender, race, or ethnicity; (2) emphasizing an interest in public scholarship or translational research; and (3) drawing upon field-specific observations about demography and research interests. We also present findings for the very promising practice of tapping the academic pipeline created by the President's Postdoctoral Fellowship Program established by the University of California.

Our study also identified additional **promising search practices**: emailing or phoning selected potential applicants; including diversity needs when the hiring needs of the department are discussed; appointing women and URM faculty to search committees; monitoring national resources; and engaging faculty equity advisors. We also note some additional practices that show at least some promise: creating search plans and departmental diversity plans, and arranging meetings for finalists with individuals or groups from diverse backgrounds.

Our discussion of search practices concludes with a section on **search practices that are not clearly promising**. We offer discussion of our findings for these practices: using comparative data; using prepared rubrics for assessing applications; engaging in cluster hiring; training to counteract implicit bias; and using job criteria that include contributions to diversity.

Lastly, we describe the **next steps** that we will take as we continue and expand this research project. Some of the other UC campuses will be administering surveys to their search-committee chairs, and this will provide us with remarkable opportunities to collect and analyze further data and to refine and strengthen our conclusions.

METHODS

A number of search practices have been recommended in the academic literature and in hiring handbooks[3] as effective ways to diversify faculty applicant pools and hires. Our review of these materials suggested that few of the practices had been studied in detail, leaving us uncertain of their usefulness to Berkeley or the UC system. We thus undertook a research project that began with collecting data we could use to investigate the promise of these widely recommended practices; we also hoped to identify previously untested "best practices" that might also show promise.

Over a four-year period, we studied 241 searches at UC Berkeley for new ladder (*i.e.*, tenured or tenure-track) faculty; almost 30,000 individuals applied for these positions. The chairs of the search committees for 91% (220) of these positions responded to a survey we administered.[4] The 65-item questionnaire was designed to ascertain the extent to which each individual job search used search practices that are thought to increase diversity. The 220 searches for which we received survey responses form the basis for the analysis, and they represent 94% (27,899/29,832) of the applicants to Berkeley positions from Academic Year (AY) 2012-13 to AY 2015-16.[5] We compared the demographic profile of the applicants in searches with survey responses to those without, and they are quite similar, so although our study does not include all job searches and applicants, we have no reason to think the study population is significantly different from the total universe of recent UCB faculty search patterns.

Below, we describe the online system that was critical to this study; our demographic data; our survey instrument; and our approaches for assessing search practices. We conclude with several caveats about methodological limitations of this study.

UC Recruit system

This study has benefited from the online "UC Recruit" system and the specific Berkeley faculty hiring dataset that we were able to extract from it. UC Recruit was developed at UC Irvine and was later adopted for use by all ten of the UC campuses. Berkeley's first year of full use was AY 2012-2013. This complex system provides a detailed record of faculty searches for each UC campus, including wide-ranging data on specific job searches and on the status of each applicant in each stage of the search process. By linking the UC Recruit data for Berkeley to our survey data about search practices, we were able to examine possible associations between search practices and diversity at successive stages of the search process.

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[3] For example, see the University of Michigan's Handbook for Faculty Searches and Hiring; the University of Wisconsin's Searching for Excellence and Diversity; Harvard University's Best Practices for Conducting Faculty Searches; and the University of Washington's Handbook of Best Practices for Faculty Searches.

[4] A copy of *UCB Search Report Survey: Your Faculty Search and "Best Practices" to Diversify Faculty Applicant Pools and Hires* is provided as Appendix A.

[5] In specified circumstances, Berkeley departments may secure a search waiver to pursue a named candidate. This study does not include these targeted hiring efforts. It also does not include searches in Mathematics, which uses a nationwide search platform.

Table 1 shows five stages in the hiring process for which data are recorded within the UC Recruit system. For each applicant, these include whether she or he was long-listed (i.e., selected for further serious consideration after the search committee's review of all applications), short-listed, selected as the proposed candidate, or given a formal offer, and whether the recipient of each formal offer accepted or declined it. We have an additional campus data source that confirms whether and when the candidate became a faculty employee at Berkeley.

Table 1: UCB Faculty Hiring Levels, AY2012-13—2015-16*

Hiring Level	No	Yes	% Yes**
Made Long List	25,148	2,751	9.9%
Made Short List	26,750	1,149	4.1%
Made Proposed Cand.	27,623	276	1.0%
Offered Position	27,659	240	0.9%
Accepted Position	27,701	198	0.7%

Total Applicants	27,899	100.0%

	Declined	Accepted	% Accept.
Accepted Position	35	198	85.0%

***Only searches with responses to the search methods survey are included above and going forward (220 job searches in total).**

****% Yes=percentage of applicants among total applicants successfully advancing to specified hiring level.**

Source: UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

The data show the large number of applicants to Berkeley ladder-faculty positions over four yearly hiring cycles, and they also show the filtering that the search processes entailed. Given the highly selective nature of search processes and their significant long-term effects on Berkeley, the methods used by the search committees are of great institutional consequence.[6]

Search-committee recommendations are discussed and voted upon by the faculty within the department, and then extra-departmental reviews are carried out before an offer is formally extended to a candidate. Still, the most significant filtering takes place within the search committee. At Berkeley, the median search committee has five members.[7] Search committees review all applications, with a median applicant-pool size of 106 for each of the 220 job

[6] Most of Berkeley's tenured faculty began their careers as untenured assistant professors here; in this respect Berkeley is unlike some peer institutions. Many tenured faculty elect to stay at Berkeley well into their sixties, seventies, or even eighties.

[7] See Appendix B, Slides 2-3.

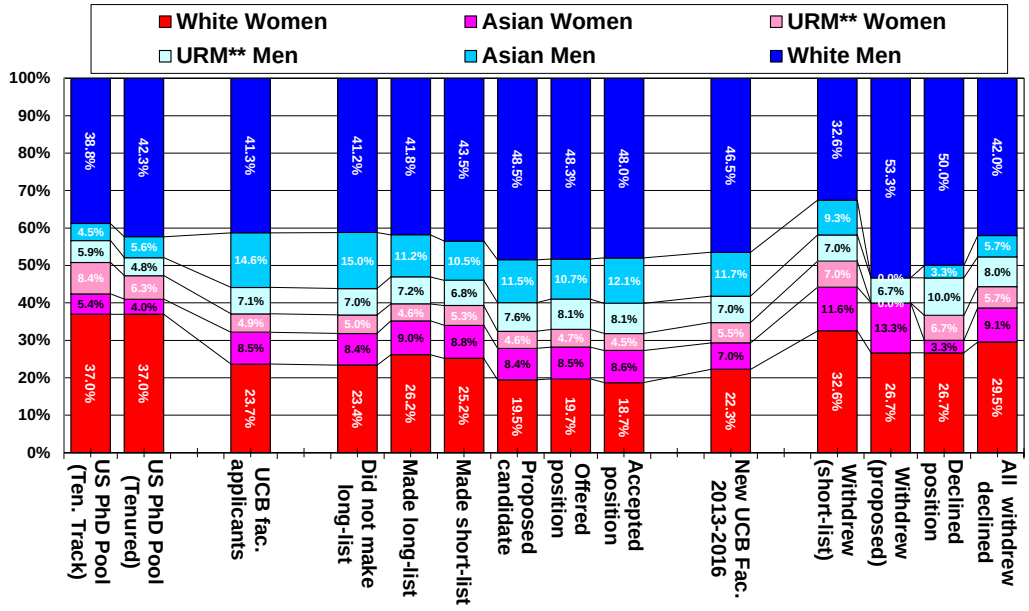
searches included in this study.[8] Eventually, most search committees develop a short list of three to six candidates who come to campus to be interviewed and to present their work.

In most cases, only one candidate is offered the position.[9] In 15% of cases, a candidate will decline Berkeley's offer (see Table 1 above); if the department decides not to pursue an alternative candidate, the search might be restarted in a later year.[10]

Demographic data

For this study, the main value of the data derived from UC Recruit lies in the way they enabled us to map applicant demographics throughout the hiring process. Figure 1 below shows selected stages of the faculty hiring process at Berkeley, displaying the proportion of selected groups at each stage of the process.

Figure 1: UCB Faculty Applicants, Diversity Pipeline, AY2012-13—2015-16*



*Only searches with responses to the search methods survey are included. Excludes missing gender or ethnicity data, decline to state, and no demographic survey response. **includes Afric. Am., Hisp., and Nat. Am.

Sources: Survey of Earned Doctorates (US, PR, 2008-2012 [TT]; 1993-2007 [TEN.]); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016); UCB Faculty Personnel Records, AY2013-14—2016-17.

[8] See App. B, Slide 4. The mean size is actually larger, at 127 applicants per search. This reflects skewing by some very large applicant groups. (Fifteen percent of searches had 200 or more applicants.)

[9] Occasionally a department would receive permission to make more than 1 offer from a single search; see App. B., Slide 6.

[10] The same is true if the search did not identify a candidate the department wished to recommend.

These demographic data were obtained from a voluntary self-identification survey that individuals completed as part of the application process. The response rate was over 90%.[11]

The two leftmost columns of Figure 1 above show the estimated availability of U.S. residents who hold PhDs; these data were produced annually for salient disciplinary fields and for the cohorts of doctoral degree recipients appropriate for the rank(s) specified for each search.[12] Unfortunately, these data do not include U.S. PhD recipients who hold temporary visas. This represents a limitation on the usefulness of the estimates, especially in engineering and the physical sciences, where half or more of those who received PhDs from U.S. institutions are neither citizens nor permanent residents of the United States. Consequently, in a number of fields, the data about availability pools may display slightly higher proportions of women and noticeably lower proportions of Asian populations than they would if international recipients of U.S. PhDs were included in the estimates.[13]

Despite this limitation, the derived data clearly depict several patterns. The most striking is that women under-applied for Berkeley positions relative to their PhD availability, and men over-applied. This demographic pattern has been noted at other universities in other studies, along with evidence that female graduate students are likely to have a negative view of research universities, particularly if they have children or hope eventually to raise a family.[14] A drop-off of women from estimated pool availability to actual application to Berkeley positions could be observed for all general disciplinary groups, for all ranks, and for both field-open and field-specified searches.[15] Another notable pattern emerges from logistic regression with controls for broad disciplinary fields, tenure status of the position, and other salient variables: women applicants are more likely than white men to be short-listed but less likely to become the department's proposed candidate.[16]

Figure 1 above also shows general patterns associated with voluntary withdrawal from the search process, which serve as a reminder that applicants may elect to withdraw at any point along the way (for example, after completing an application, being short-listed, being proposed for appointment, or being made a formal offer). Withdrawals at earlier search stages, when the total number of applicants under consideration is relatively large, probably have minimal effects on the overall demographic profile of applicants for those search stages, but withdrawals at later stages, when the total number of remaining applicants has become small, could be partly responsible for shaping overall demographic profiles at those stages. Our data

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[11] In Figure 1, we excluded cases for which the applicant did not provide information about gender or race/ethnicity of the applicant; these cases comprised less than 10% of all applicants. See App. B, Slides 7-10 for slides with and without missing demographic data.

[12] The data were initially collected as part of the Survey of Earned Doctorates conducted by the National Science Foundation and other federal agencies; the data were then tabulated and supplied by NORC. (NORC was formerly the National Opinion Research Center. It is now an independent research organization at the University of Chicago.) There is no data source for applicants whose degrees are from outside the U.S.

[13] In this connection, we note that in 2012-16, Berkeley's faculty appointments of women included 37% of U.S. citizens (74/202) and 32% of non-U.S. citizens (35/109).

[14] Sears, 2003; Mason, Goulden, & Frasch, 2009.

[15] See Appendix B, Slides 11-20 (discipline), 21-26 (rank), and 27-30 (open/specified).

[16] See App. B, Slide 32.

indicate, however, that when individuals who withdraw at any stage are excluded from analysis, the resulting demographic patterns are very similar to the patterns we observe when we include data for those who withdraw.

We note here that in addition to the demographic information about applicant pools and candidates that UC Recruit provides, we were also able to use UC Recruit's information about search committee membership, to observe demographics for the faculty on most search committees.

The survey

By reviewing the research literature and a number of faculty search handbooks,[17] we identified 55 search practices that were recommended as helping to produce greater diversity in the search process, with many of them called "best practices." We included all 55 practices in the survey instrument.

The chair of each Berkeley search committee was asked to respond to the survey on the committee's behalf when the committee submitted its final search report. For each survey item, the respondents were asked to select one of the following scaled responses: "used," "partially used," "did not use," "not applicable," or "not sure/other." A comment box was provided for each item to allow the respondent to provide additional information and explanatory notes.

Figures 2a, 2b, and 2c below show the reported use rate for each of the 55 search practices under study. Yellow highlighting indicates practices with fewer than 30 cases in the "not used" or "used" category. We do not offer discussion of these highlighted practices, given how little variation across searches they displayed.[18] We stress that this does not reflect a conclusion that these search practices are unhelpful in fostering diverse faculty hiring outcomes; rather, it reflects that fact that there is little we can determine about their relative promise given the lack of variation across our searches.

[17] See footnote 1.
[18] We did, however, analyze these practices, and we include the findings in the appendices.

	Figure 2a: UCB Faculty Job Searches (n=220): Possible hiring methods used, from most common to least	Used	Partial	Not Used*
1	Avoided improper or unlawful questions related to gender, sexual orientat., race, ethnicity, religion, family status, pregnancy, internat. status, health status, age....	98%	2%	0%
2	Established a welcoming environment for all interview finalists (i.e., sought to minimize any undue stress related to the interview process).	95%	3%	2%
3	Communicated efficiently and respectfully with all faculty candidates/ finalists throughout the entire recruitment.	95%	3%	1%
4	Took the necessary time to fully evaluate all applications, carefully reviewing all materials (e.g., handbooks suggest spending 15-20 minutes per application).	93%	5%	1%
5	Tried to make sure that the applicant pool/finalist group was as diverse as possible to support equitable evaluation of all candidates (i.e., research studies suggest...).	91%	5%	4%
6	Evaluated candidates using a broad holistic approach, focusing particularly on candidates areas of strength rather than narrowly defined areas of weakness....	91%	5%	5%
7	Used a variety of different settings/forums to evaluate/get-to-know interview finalists (e.g., from formal lectures to relaxed conversational settings...).	90%	4%	6%
8	Appointed senior reviewers or equity advisors to monitor the equity of all recruitment related processes/decisions.	90%	4%	5%
9	Developed broad hiring goals...that allowed the committee to be open to a wide range of candidates, including candidates from diverse backgrounds.	88%	5%	7%
10	Evaluated candidates based on their potential to develop a significant research program in their field (not exclusively based on their publication placement to date).	87%	10%	3%
11	Contacted colleagues from other institutions to ask for their help in identifying potential applicants from diverse backgrounds.	85%	9%	6%
12	Discussed post-hire support efforts for new faculty.	85%	6%	10%
13	Checked why candidates did not make the short list, including individuals from diverse backgrounds, explicitly identifying the reasons for de-selection.	82%	9%	9%
14	Established a search committee with individuals from diverse backgrounds.	79%	14%	7%
15	Made clear to job finalists the possibility of research collaboration across departments and disciplines...in regard to areas of pressing societal concern....	76%	6%	17%
16	Actively considered candidates with degrees from a broad range of different institutional settings (e.g., PhDs from non-top-tier programs; HBCU/Hispanic serv.).	76%	12%	12%
17	Developed standard interview questions/job presentation criteria and made sure that all finalists had an opportunity to respond to all areas of inquiry....	76%	13%	11%
18	Notified candidates about possible dual-career couple employment options and family friendly polices/resources.	72%	8%	20%
19	Advertised widely, including in diversity specific venues (e.g., The Hispanic Outlook...).	71%	11%	18%
20	Actively considered candidates with publications from less well-known journals/publishers, carefully evaluating the quality of the work....	70%	13%	17%

*includes "Did not use," "Not applicable," "Not sure/other."

Sources: UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

	Figure 2b: UCB Faculty Job Searches (n=220): Possible hiring methods used, from most common to least	Used	Partial	Not Used*
21	Specified the position at the junior level where appl. pools tend to be more diverse.	69%	21%	10%
22	Developed internal search guides and/or made sure that committee members were aware of and reviewed campus and "best practices" related to diversity....	68%	13%	19%
23	Directly called/emailed possible candidates with diverse backgrounds and encouraged them to apply to the position.	65%	9%	26%
24	Arranged to have finalists meet with campus groups/individuals from diverse backgrounds.	62%	13%	25%
25	Put out a call to the larger department...other [groups]...to help the hiring committee identify potential faculty applicants of diverse backgrounds.	60%	16%	25%
26	As a department/unit, clarified and prioritized the diversity needs of the department vs. competing needs....	58%	15%	27%
27	Specified in the job qualifications/evaluation criteria that demonstrated commitment to diversity, exp. with multicultural ed..., working w. diverse populations.	55%	11%	34%
28	Established consistent departmental mechanisms to review the equity of all faculty searches....	54%	9%	37%
29	Specified the position in a disciplinary area with relatively high diversity of degree recipients/faculty (based on examination of demographic data or personal observation).	51%	10%	40%
30	Systematically examined applicant pool and availability data throughout recent faculty recruitments...to ensure diverse applicant pools, past and future.	50%	12%	38%
31	Developed longer-term relationships with possible faculty candidates of diverse backgrounds via conferences, national organizations, faculty contacts, etc.	48%	18%	34%
32	Monitored national resources that identify possible future faculty candidates from diverse backgrounds (e.g., lists of recent fellowship recipients...).	46%	9%	45%
33	Tapped existing UC/UCB academic pipelines to diversify the applicant search pool (e.g., considered...UC Presidents Postdoctoral Fellowship recipients).	45%	9%	45%
34	Supported existing UC academic pipelines, from our undergrad to junior faculty, to develop, promote, and identify future faculty talent of diverse backgrounds.	45%	10%	45%
35	Appointed a "champion," typically a faculty member, to advocate for candidates who may have been overlooked, including individuals from diverse backgrounds....	45%	12%	43%
36	Examined and analyzed the history of departmental hiring in regard to equity issues (perhaps including an evaluation of past institutional affiliation of current faculty....).	45%	13%	42%
37	Developed in advance of reviewing applications a weighted rubric that was used in the evaluation of all candidates.	42%	13%	45%
38	Codified the departments approach to dealing with pre-existing relationships between faculty candidates and hiring committee members....	38%	9%	53%

*includes "Did not use," "Not applicable," "Not sure/other."

Sources: UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

	Figure 2c: UCB Faculty Job Searches (n=220): Possible hiring methods used, from most common to least	Used	Partial	Not Used*
39	Compared the relative success of our department to similar programs at peer institutions in re. to diversity-related issues and faculty hiring patterns….	36%	13%	51%
40	Conducted retrospective analyses of recent faculty recruitments in regard to diversity issues (e.g., Were the applicant pools/finalists appropriately diverse?...).	35%	11%	53%
41	Demonstrated a willingness to extend on-going faculty searches which have low diversity of applicant pools/finalists.	35%	6%	59%
42	Appointed a departmental point person(s) to coordinate on-going recruitment efforts in regard to possible future faculty candidates from diverse backgrounds….	34%	6%	60%
43	Developed or made use of programs/events that bring possible future faculty candidates from diverse backgrounds to campus...(e.g., visiting scholar/postdoc…).	34%	19%	48%
44	Specified degree requirements in broad ways (e.g., did not explicitly restrict the search to Ph.D. recipients, allowing for other equivalent/appropriate...degrees).	32%	10%	58%
45	Supported faculty peer presentations...and discussions with hiring committees regarding faculty diversity and mitigating implicit associations.	32%	9%	59%
46	Involved the Dean/other administrators in communicating with faculty about the importance of diversity in faculty recruitment….	31%	8%	61%
47	Promoted on-going relationships with institutions/departments/organizations known to grant PhDs to, or support research scholars from, diverse populations.	30%	15%	54%
48	Instilled a sense of institutional accountability by monitoring the effectiveness of hiring diverse candidates through the years….	30%	14%	56%
49	Encouraged search committee members to attend trainings regarding issues of "implicit associations" and how to minimize their impact.	29%	10%	60%
50	Developed multiple short-lists emphasizing different important qualifications (e.g., short-lists focused on teaching, contribution to diversity, service, research potential, etc.).	23%	16%	61%
51	Selected subject area(s) associated with "public" or "engaged scholarship"--fields focused on direct societal improvement, particularly in re. to underserved pop.	22%	11%	67%
52	Considered and/or pursued cluster hires of candidates with diverse backgrounds (multiple faculty positions that are related...e.g., research clusters…).	22%	9%	70%
53	Developed a departmental diversity plan with specific plans-of-action and benchmarks to gauge their short-term and longer-term effectiveness.	21%	15%	64%
54	Coupled the subject area with diversity issues (e.g., "labor" AND "womens history" vs. just "labor history").	20%	7%	73%
55	Set aside/secured resources to support ongoing faculty recruitment activities in regard to individuals from diverse backgrounds (e.g., course relief…).	10%	5%	85%

*includes "Did not use," "Not applicable," "Not sure/other."

Sources: UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

Figure 3 below shows practices that were used with increasing frequency over the study period, according to logistic regression analysis. In addition, each search committee used a variety of commonly recommended practices, with increases in the average number used by each search over the four-year period of the study. Survey responses indicated that on average committees used 31 of the 55 practices identified in the survey[19] and that over the four years of the study, the average number of practices used per search rose from 30 during the first two years of the study to 34 in the final year.

[19] Even the lowest quartile users reported using from 10 to 25 different practices.

Figure 3: UCB Faculty Job Searches (n=220): Hiring methods with Increasing Use by Year*		ß	p-val
Q9	Specified in the job qualifications/evaluation criteria that demonstrated commitment to diversity, exp. with multicultural ed..., working w. diverse populations.	0.4303	0.0014
Q10	Evaluated candidates based on their potential to develop a significant research program in their field (not exclusively based on their publication placement to date).	0.3980	0.0515
Q17	Monitored national resources that identify possible future faculty candidates from diverse backgrounds (e.g., lists of recent fellowship recipients...).	0.3236	0.0124
Q21	Advertised widely, including in diversity specific venues (e.g., The Hispanic Outlook...).	0.3756	0.0104
Q24	Directly called/emailed possible candidates with diverse backgrounds and encouraged them to apply to the position.	0.2973	0.0301
Q25	Tapped existing UC/UCB academic pipelines to diversify the applicant search pool (e.g., considered...UC Presidents Postdoctoral Fellowship recipients).	0.3421	0.0093
Q34	Encouraged search committee members to attend trainings regarding issues of "implicit associations" and how to minimize their impact.	0.2731	0.0576
Q35	Developed in advance of reviewing applications a weighted rubric that was used in the evaluation of all candidates.	0.2233	0.0870
Q39	Tried to make sure that the applicant pool/finalist group was as diverse as possible to support equitable evaluation of all candidates (i.e., research studies suggest...).	0.5138	0.0439
Q42	As a department/unit, clarified and prioritized the diversity needs of the department vs. competing needs....	0.3406	0.0106
Q43	Developed a departmental diversity plan with specific plans-of-action and benchmarks to gauge their short-term and longer-term effectiveness.	0.3518	0.0278
Q49	Involved the Dean/other administrators in communicating with faculty about the importance of diversity in faculty recruitment....	0.3239	0.0256
Q51	Supported faculty peer presentations...and discussions with hiring committees regarding faculty diversity and mitigating implicit associations.	0.3201	0.0220
Q52	Codified the departments approach to dealing with pre-existing relationships between faculty candidates and hiring committee members....	0.4385	0.0014
Q53	Systematically examined applicant pool and availability data throughout recent faculty recruitments...to ensure diverse applicant pools, past and future.	0.2798	0.0298
Q55	Conducted retrospective analyses of recent faculty recruitments in regard to diversity issues (e.g., Were the applicant pools/finalists appropriately diverse?...).	0.2402	0.0718

*Based on logistic regression. Dependent variable(s): 1=Used method, 0=Did not use/partial/other. Independent variables: Broad disciplinary field dummies, and linear calendar year of search; *ß* and *p-val* values refer to calendar year variable.
Dark green shading = p<.01; bright green = p<.05; light green = p<.10. Sources: UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

We interpret these increases as suggesting several points. One is that the search committees were committed to finding effective ways to increase the diversity of their applicant pools and their hires; another is that this may have led them to rely increasingly upon information in our campus faculty search guide. They may also have been affected by the survey process itself, with the survey items functioning as an abbreviated account of the range of practices that they could consider using.[20]

Assessment of search practices

In assessing whether hiring practices were very promising, promising, or not clearly promising, we examined our results from a number of perspectives. First, for each practice, we examined the percentages of women, under-represented minority group members (URMs), and white men in searches that *did* use the practice and compared those percentages to the percentages for searches that *did not* use the practice. That is, we examined associations between the use of each practice and the percentages of women, URMs, and white men. We examined these associations across the selected hiring stages, from national availability pools to reported hires.[21]

[20] Because the survey served as a report on their efforts, perhaps its administration led to an increased sense of "social accountability" (Dobbin & Kalev, 2016).
[21] For this review, we used the detailed figures in Appendix B (Slides 41-43, 54-105, 125-133).

In addition, we reviewed a range of regression findings. (See Appendix C, which includes further specification of the regression analysis.) These regressions modeled for the association between the hiring method (independent variable) and (1) the percentage of selected populations in the UCB faculty applicant pools (e.g., the percentage of women applicants as the dependent variable); (2) the likelihood of the presence of the selected populations at different hiring stages, specifically among applicants, short-list, and proposed candidates; and (3) the likelihood that selected populations were advanced to the next stage of the hiring process, specifically from applying to being on the short list, and from being on the short list to being the proposed candidate. [22] We used this third set of regression models to discover whether moderator or interaction effects[23] were at work by determining whether certain types of search practices were associated with greater advancement of women or URM candidates to the next hiring stage relative to men or non-URM candidates.

After reviewing these data patterns in aggregate, we placed the selected methods in the categories of very promising, promising, and not clearly promising. In that last category, we noted which methods lacked the variation needed to evaluate their effectiveness, either because they were used in a very large number of searches or in a very small number.

Note that within the body of the report, we elected to display data using streamlined bar charts instead of the more detailed bar charts included in Appendix B and highly detailed regression tables included in Appendix C. We did this to make the analysis easier to follow quickly.

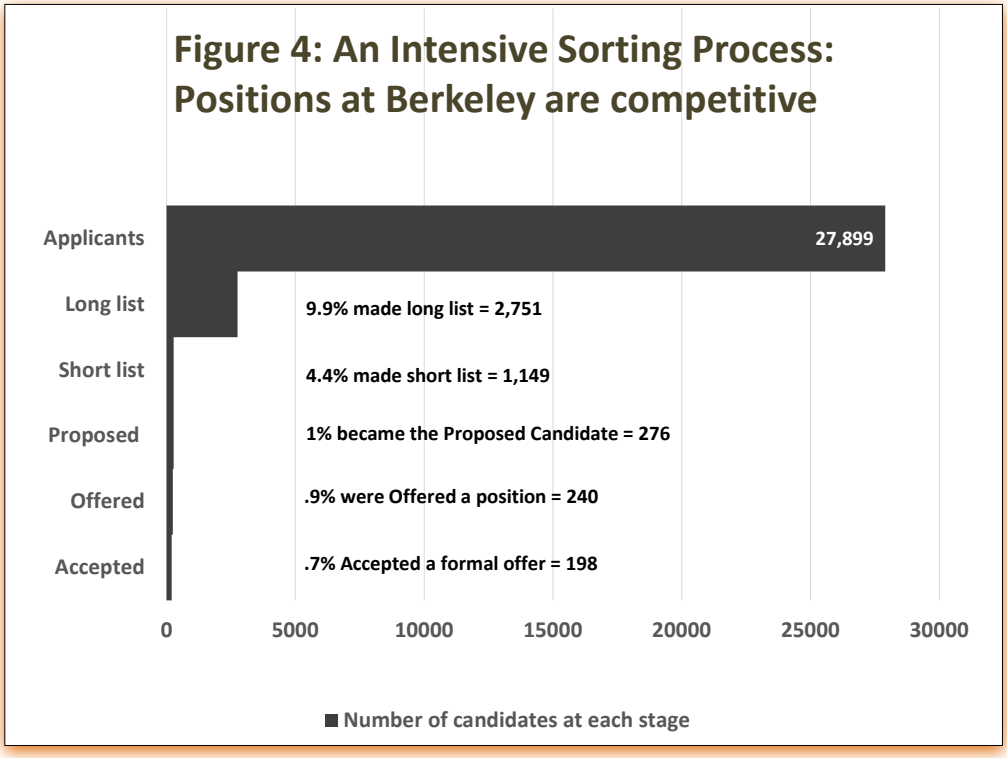
Caveats

In an ideal quasi-experimental design, a single treatment effect would be introduced into a test population, and the eventual results for this group would be compared to the results of a control group that was not subject to the intervention.[24] For the faculty search processes we studied, however, such a design was not possible. The search committees were independently and concurrently selecting multiple treatment effects. Hence, multiple treatment interference is undoubtedly at work. Accordingly, the findings described in the next sections of this report are best understood as *descriptive* and as *suggestive* of greater or lesser efficacy. The complexity of the search process and the impossibility of a quasi-experimental design with no more than a few treatment effects mean that we cannot isolate causal effects of individual practices.

We note four additional caveats. First, the selectivity of the process means there are many fewer individuals at the later stages of the process than at the earlier stages. Figure 4 below

[22] See Appendix C, Tables A1, B1a-B5a, C1a-C5a. This analysis used regression and controls for underlying demographic availability estimates, broad disciplinary field, year of hire, rank of hire, whether a position was relisted or not, whether the position was specified as field-open or field-specified (as coded by departments), and it tested for the association between the use of the individual job method and various demographic outcomes, e.g. proportion/presence of women, URM, selected race-ethnicity groups, and gender*race-ethnicity groups in the specified hiring strata.
[23] Wang & Ware, 2013.
[24] Reichardt, 2009.

presents in a different format the data we provided earlier. The very small number of individuals at the later stages of the search process means that the data are considerably less robust at those stages than at earlier stages.



Second, different search committees may have implemented the same general practice in quite different ways, and the survey respondents may have had differing understanding of the practices described. Given the nature of a survey-based study like this one, another experimental approach concerning some practices may be advisable, especially for some of the practices that we have categorized as not clearly promising.

Third, we note an issue concerning estimated availability pools. The data for these in UC Recruit are based on a series of field codes selected by the hiring committee.[25] The reasons for this approach are (1) that hiring committees are best able to select the codes, given their detailed knowledge of the job listing, and (2) that by offering the option of selecting multiple field codes, hiring committees are able to create cross-field hybrids of estimated availabilities, with controls for rank of the offered position.[26]

The UC Recruit system operates by taking all of the selected fields, summing up the total number of PhD recipients in all the selected codes, and then averaging them. When the codes

[25] The codes are generally derived from NSF's Survey of Earned Doctorate data. See pp. 6-7 of the 2015 Survey of Earned Doctorates for field codes and related taxonomy.

[26] For example, in tenure-track versus tenured hiring, we filtered using years of PhD receipt, with tenure track estimates drawing on a more recent cohort of awarded degrees.

selected by committees included relatively general designations, the number of PhD recipients associated with those codes may therefore have swamped the number of PhD recipients associated with more narrowly described fields. Compounding this problem, the committee's options were sometimes limited by the bounds of the underlying data and field code taxonomy. Ironically, one particularly challenging area is the field code for Area/Ethnic/Cultural Studies (code 652), which represents an amalgam of fields associated with geographical regions, race-ethnicity groups, and gender groups. These deficiencies are not easy to overcome, and they represent one way in which any analysis of the efficacy of search methods can be limited.

Fourth, surveys were completed at the end of the search process, and depending on the outcome of the search, committee chairs may have been predisposed to retroactive attribution bias: to highlight or recall the search practices that they took to be connected with the search outcome. To guard against such bias, we asked committee chairs to complete the survey immediately following the end of the search (as an aid in recall), and we limited them to forced-choice responses in their assessment of the practices.

Despite these cautions, however, we stress that the data and our analyses do allow us to identify a number of positive and negative associations that are strong enough—even when surprising—to be useful both to current search committees and to future research.

VERY PROMISING SEARCH PRACTICES

Among the 55 search practices that we surveyed, two kinds of practices stood out as very promising: shaping the description of the position in one of several related ways, and using the resources of an innovative post-doctoral program instituted by the University of California. We discuss each of these in this section of the report.

Shaping job descriptions

In this subsection of the report, we discuss three ways in which search committees shaped the job descriptions that appeared in advertisements for their positions. The first was to link the description to issues of gender, race, or ethnicity; the second was to emphasize an interest in public scholarship or translational research; and the third was to draw upon field-specific observations about demography and research interests. All of these serve to link job descriptions to areas in which evidence suggests potential candidates who are under-represented are more likely to be pursuing their research.[27] Shaping job descriptions was strongly associated with more diverse applicant pools and with more hiring of both women and URM faculty; indeed, this practice was more strongly associated with this outcome than any other we studied. After discussing each of the three particular approaches we studied, we turn to a wider discussion of the general practice.

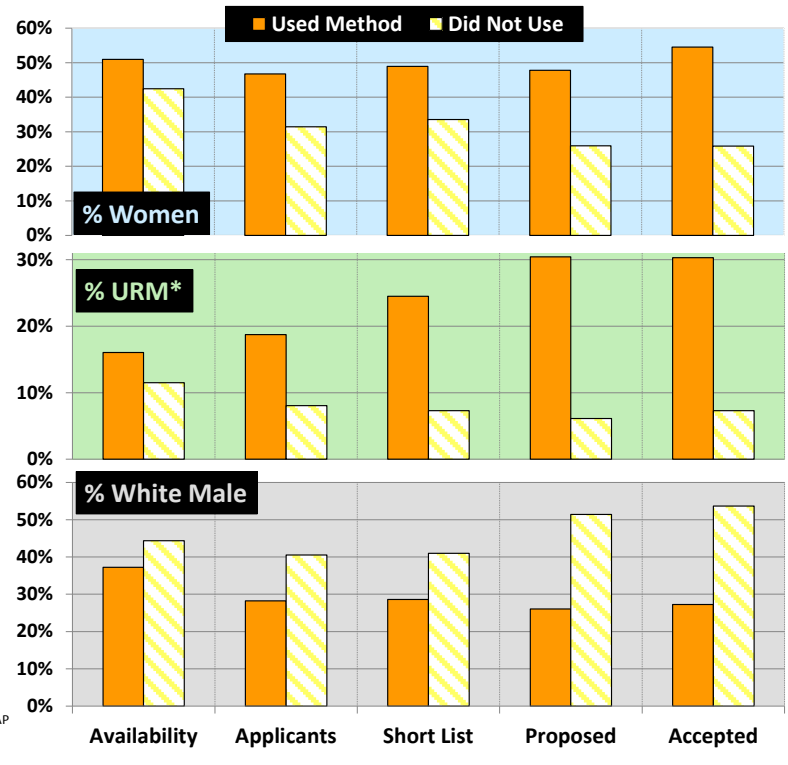
Shaping via linkage to issues of gender, race, or ethnicity

Of all the practices examined in our study, this one had the strongest positive statistical association with greater diversity. This practice is to write a job description that links an existing field taxonomy with issues of gender, race, or ethnicity. An example would be a job description reading "labor and women's history," rather than just "labor history."

[27] These practices are deemed to be effective because of their focus on diversity-related concerns (Smith et al, 2004); whereas approaches that narrowly specify job positions around thematic issues unrelated to diversity issues may well result in less diverse hiring patterns and outcomes (Testy, 2011).

As Figure 5a below indicates, the use of this approach was associated with a higher proportion of women and URMs compared with searches that did not use this approach.

Figure 5a: Coupled the subject area with diversity issues
(e.g., labor AND women's history vs. just labor history).



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=43; partial use, N=16; Did not use, N=161.

The association can be observed by comparing the relative heights of the solid orange and striped yellow bars in the top two rows of the figure, which indicate searches that did (solid orange) and did not (striped yellow) use the practice. The top two rows of bars indicate a clear association between using this method and a relatively greater and increasing proportion of women and URM candidates throughout the hiring process, in comparison to searches that did not use this method. The inverse relationship was apparent in regard to the proportion of white men at each search stage, as can be seen on the bottom row of bars in Figure 5a above: committees that *did not* use the approach showed greater and increasing proportions of white men throughout the hiring process, by comparison with the committees that *did* use the approach. The gaps between searches that used this approach and those that didn't grow wider with successive search-stages, from estimated availability pools, to actual applicants, to short-lists and proposed candidates, and finally to accepted offers. All in all, these patterns display a strong statistical association and suggest that the approach may be efficacious.

"Labor history" is a broad field, and it includes the history of women and labor, so it might be surprising that a description that mentions both the broader field and a narrower field within it would make a difference to prospective applicants. Here we note that candidates sometimes

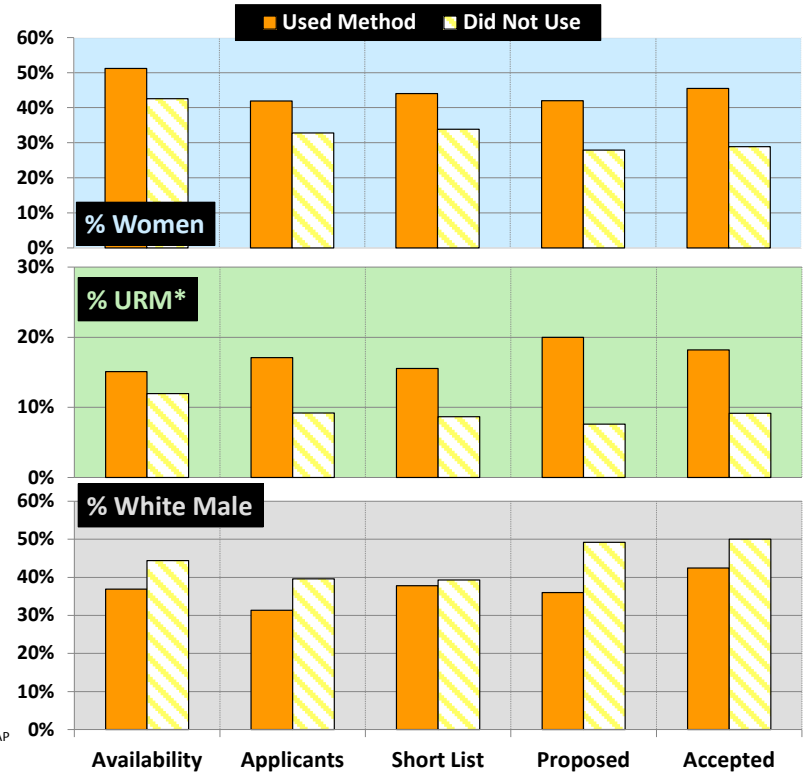
decide not to apply for positions despite the fact that their research focus is an appropriate one for the position as described. This may be because they believe that the department is looking primarily for someone in a traditional subfield within the specified field. Consequently, a candidate who works on the history of, say, women's labor, may be more likely to apply for a position that confirms the department's serious interest in that subfield as well as others. If women are especially well represented among scholars of women's labor, then the job description will tend to encourage more women to apply.

Shaping via linkage to public or engaged scholarship

Another way to shape job descriptions is to associate a subject area with public or engaged scholarship in fields that focus on direct societal improvement, particularly for underserved populations. As Figure 5b below shows, searches that *did* use this approach saw higher proportions of women and URM candidates throughout the selection process by comparison with searches that *did not* use this approach. Searches that *did not* use this approach saw higher proportions of white men at several search stages than those that *did* use it.

Figure 5b: Selected subject area(s) associated with public or engaged scholarship

--fields focused on direct societal improvement, particularly in re. to underserved pop.



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=48; partial use, N=24; Did not use, N=148.

This clear set of patterns is consistent with earlier research showing that URM and women PhD recipients are more likely than white men to select fields that include a policy-oriented or

translational-research component with particular focus on assisting traditionally underserved and disenfranchised populations.[28]

The differences associated with use of this approach were not as large as those observed with the first approach,[29] but the promise of this approach is nonetheless high relative to the promise of approaches discussed in the next section of this report. We also note that this way of shaping job descriptions has the advantage of being open to use by a broader array of disciplines, including the sciences. For example, the respondent for one hiring committee in biology noted the following as relevant to shaping a job description: "Infectious disease is intrinsically an area that affects human health directly, and via food and water security, issues of broad public concern." In the case of another position, listed in architecture, the committee aimed to diversify its applicant pools by using a job description that expressed interest in architecture and urbanism, calling particular attention to the issue of "affordable housing."

The use of this approach remains challenging, however, in fields within physical science, technology, engineering, and mathematics (PTEM), where field taxonomies often do not provide ready connections to societal relevance.[30] To employ these approaches in PTEM searches, the committee and the associated department would need to be both committed and creative (Smith et al, 2004). In some cases, discerning the evolution of a field may suggest ways to shape searches by specifying a subject area that is connected with public or engaged scholarship. For example, a 2013 report on the mathematical sciences concludes that their continued academic health depends upon their fostering deeper connections with other fields, including engineering, the life sciences, and the social sciences—broad fields within which public or engaged scholarship has an established place.[31]

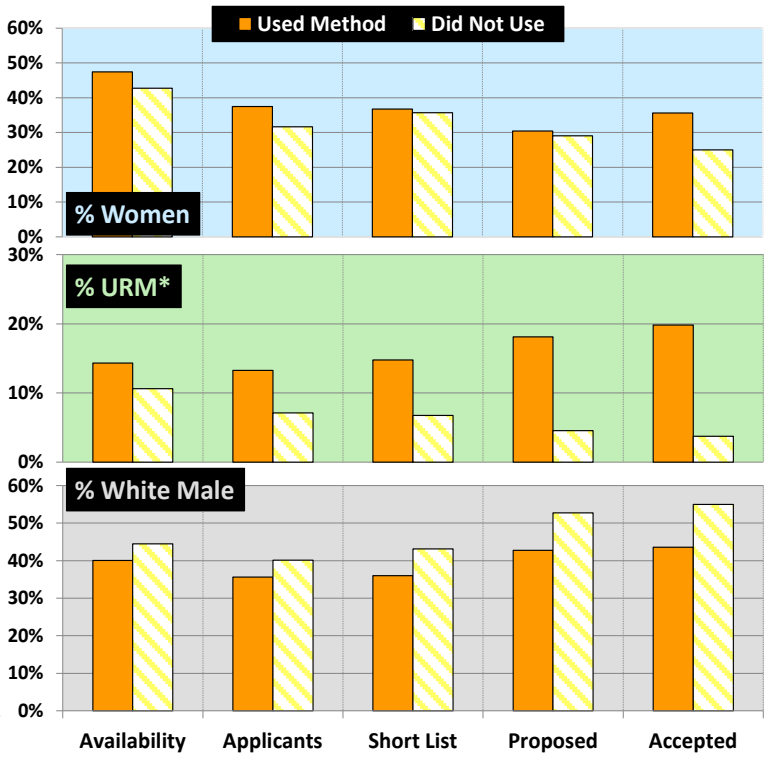
Shaping via discipline-specific observations

In many searches, faculty members had had opportunities to observe which sub-fields and disciplinary areas tend to have higher proportions of diverse scholars. This in turn provided them with an opportunity to shape a job description that indicated their interest in hiring within such sub-fields with potentially greater applicant diversity.

[28] Goulden, Stacy, & Mason, 2009.
[29] See Appendix C. We note that regressions controlling for field suggest this method has an independent association with the observed outcomes, relative to the first method, particularly in regard to URM populations as the initial applicant pool is winnowed.
[30] See App. B, Slide 36 for the observed lack of use of this approach in PTEM departments.
[31] National Research Council et al., 2013.

Figure 5c below shows data concerning this approach:

Figure 5c: Specified the position in a disciplinary area with relatively high diversity of degree recipients/faculty (based on examination of demographic data or personal observation).



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=112; partial use, N=21; Did not use, N=87.

The overall promise of this approach is similar to that of several "promising" practices discussed in the next section of this report, but we include discussion of it here because it concerns a third way of shaping job descriptions, one that provides even greater opportunities than the other two for use across a wide range of disciplines. This may partially explain why its stated use rate was considerably higher than that for the other two approaches, with over half of the committees noting they used this technique. On this point, however, we caution that survey respondents may have interpreted "diversity" in a variety of ways, which may in turn partially account for the high rate of affirmative responses to this survey question.

For example, one committee listing a position in a social-science discipline commented: "[A]ll of this depends on what you mean by diversity," going on to note that the search pool was highly diverse in terms of ethnicity and religion, with high percentages of candidates from the Middle East, Central Asia, and Eastern Mediterranean. A committee in a PTEM department sought to diversify its applicant pool by emphasizing the possibility of interdisciplinary opportunities, making clear the possibility of bridging the position to more "diverse" fields, noting that "we explicitly indicated the potential for cross-disciplinary joint appointments."

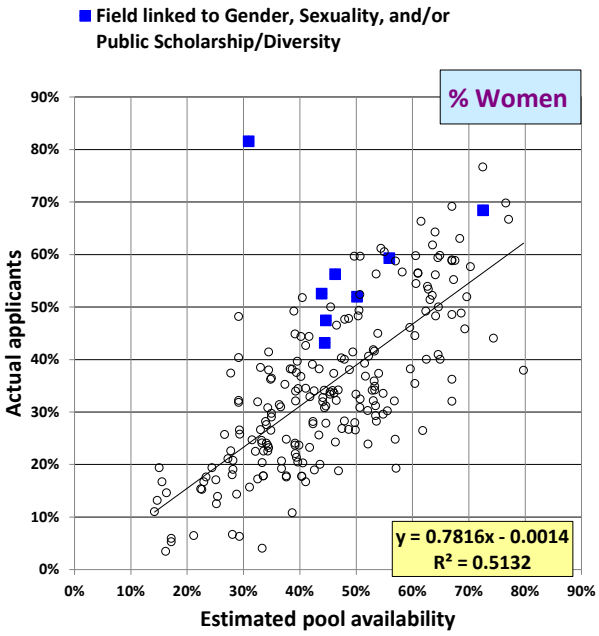
Shaping job descriptions: discussion

As already noted, these three approaches are easier to use in some kinds of fields than others. In addition, departments may have reasons for specifying search areas in other ways. For example, one search committee noted, "This was a fairly narrow search to fill an urgent need in our small department." And some departments prefer to use the widest possible job description in order to be able to review strong applicants from many subfields, in the belief that this results in a more diverse applicant pool generally.

To explore the association between shaping job descriptions and diversity further, we undertook a sub-study that did not rely upon our survey data. For each search, we examined the percentage of selected demographic groups in the estimated availability pool[32] and then compared this proportion to the actual faculty applicants for the search. We then sorted the searches into those that did and did not have job descriptions referring to issues related to URM or gender populations and/or to public scholarship with a focus on under-served groups. (We carried out the sorting by scanning the brief job descriptions supplied by the search committees.)

Figure 6a below shows the results for women:

Figure 6a: Scatterplot of UCB Fac. Job Searches, 2012-2015* (n=220): % Women, Estimated Applicant Pool by Actual Applicant Pool by Individual Job Search



Women average 45.2% of the estimated U.S. faculty labor pool (U.S., PR) and 35.2% of UCB faculty applicants across 220 UCB job searches, 2012-2015*.

***Only searches with responses to the search methods survey are included.**

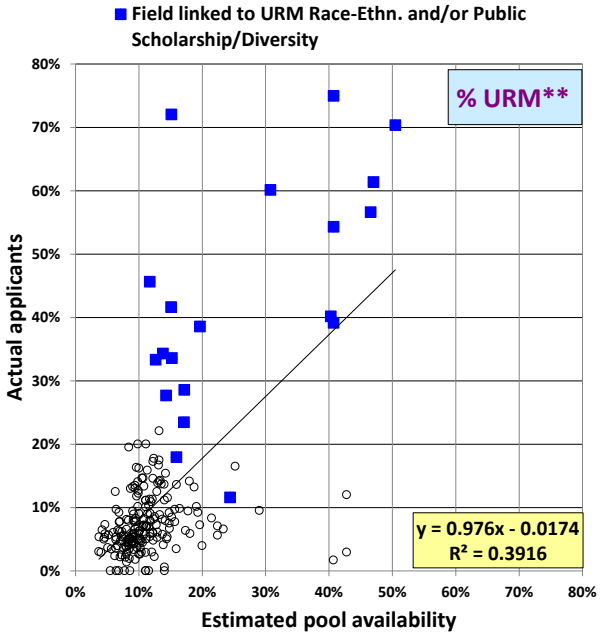
Sources: Survey of Earned Doctorates (US, PR, 2008-2012 [TT]; 1993-2007 [TEN.]); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016)

[32] For this analysis, the estimated availabilities are estimates for each of the individual job searches based on the different field taxonomies. The description of the percent of UCB applicants is the mean across all of the relevant availability pools for the 220 searches. Thus these data differ somewhat from those first presented in figure 1 and discussed elsewhere throughout this report.

Here we see that of the 220 searches studied, some yielded a proportion of women applicants substantially greater than anticipated based on estimated availabilities and some yielded a markedly lower proportion. Although a fair number clustered around the regression line, there is considerable dispersion. While the overall association between estimated pools and actual applicants is fairly high, the percentage of women in the average estimated pool is 45% and the percentage among actual applicants is only 35%, a notable difference. For purposes of the present discussion, we draw attention to the fact that searches with job descriptions linked to gender or sexuality and diversity or to public scholarship are all above the regression line for women.

Figure 6b below shows the results of this sub-study for URM availability-pools and applicants:

Figure 6b: Scatterplot of UCB Fac. Job Searches, 2012-2015* (n=220): % URM, Estimated Applicant Pool by Actual Applicant Pool by Individual Job Search**



URM** average 12.7% of the estimated U.S. faculty labor pool (U.S., PR) and 10.6% of UCB faculty applicants across 220 UCB job searches, 2012-2015*.

***Only searches with responses to the search methods survey are included.**
****includes Afric. Am., Hisp., and Nat. Am.**

Sources: Survey of Earned Doctorates (US, PR, 2008-2012 [TT]; 1993-2007 [TEN.]); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016)

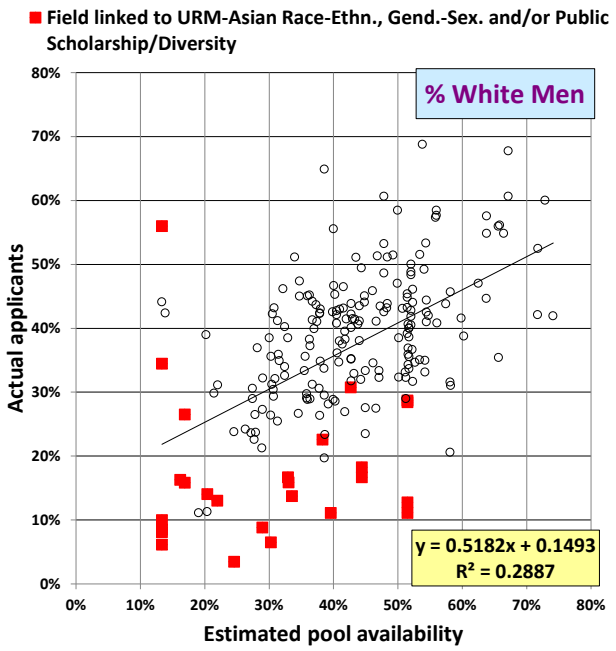
Here we see that some searches yielded a proportion of URM applicants much greater than anticipated based on estimated availabilities, some yielded a much lower proportion, and many clustered around the regression line. In general, the proportion of URM candidates among applicants for Berkeley positions is somewhat smaller than the proportion of URM PhDs in the relevant estimated national availability pools, and the overall relationship between these proportions is not particularly high.[33] It is all the more striking, then, that the searches with notably higher proportions of URM applicants than expected are almost all searches whose job descriptions referred either to URM populations or to issues related to public scholarship that

[33] Only 39% of the variance in estimates and actual pools is explained (based on the r-square value displayed on the chart).

would include a focus on under-served groups. (These are the searches indicated by blue squares.) Even so, given the fact that most of the highlighted blue-square searches lie on the high side of estimated URM availability pools, we are cautious about concluding that using this practice would produce similar benefits for searches in fields with low estimated URM pool availability.

Finally, figure 6c below provides the results for white men:

Figure 6c: Scatterplot of UCB Fac. Job Searches, 2012-2015* (n=220): % White Men, Estimated Applicant Pool by Actual Applicant Pool by Individual Job Search



White men average 42.2% of the estimated U.S. faculty labor pool (U.S., PR) and 36.8% of UCB faculty applicants across 220 UCB job searches, 2012-2015.*

*Only searches with responses to the search methods survey are included. URM = Afric. Am., Hisp., and Nat. Am.

Sources: Survey of Earned Doctorates (US, PR, 2008-2012 [TT]; 1993-2007 [TEN.]); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016)

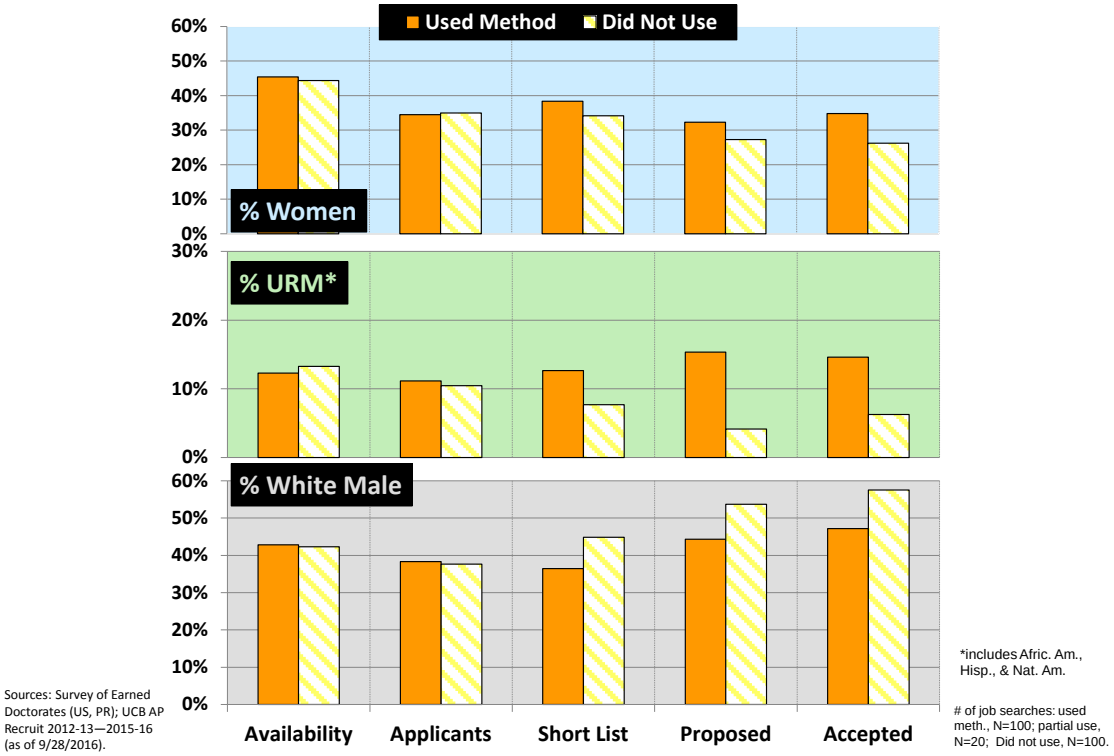
As with women, there is considerable dispersal around the regression line for white men. For most of the searches with job descriptions linked to any issues of race, ethnicity, or gender, or to public scholarship, the proportions of white men among the applicants were lower than would be expected, given the estimated availability of white men in the national applicant pools. In a number of cases, the proportions were strikingly lower.

Tapping UC pipelines

At Berkeley, departments had the opportunity to use the information and resources available through the system-wide UC President's Postdoctoral Fellowship Program (PPFP). This program provides postdoctoral fellowships to "outstanding scholars in all fields whose research, teaching, and service will contribute to diversity and equal opportunity at UC." The program has created a database of past and current fellows, and it provides some financial assistance to campuses that choose to hire past or current fellows.

Data for the practice of using information and resources available from PPFP are provided in Figure 7 below:

Figure 7: Tapped existing UC/UCB academic pipelines to diversify the applicant search pool
(e.g., considered...UC Presidents Postdoctoral Fellowship recipients).



As seen in Figure 7 above, the use of this method is associated with increased proportions of both URM and women in the later stages of the search process, compared with searches that did not use this practice. In addition, we see higher proportions of white men in those same stages for searches that *did not* use this practice, compared with those that *did*. Committees that use this practice probably focus on a small number of selected PPFP candidates who appear to have qualifications that would make them suitable for inclusion on long or short lists.

Multiple respondents referenced their awareness and use of the program, e.g., "We invited several UC President's Postdoctoral Fellowship recipients to apply." The self-studies conducted by the PPFP have shown promising outcomes,[34] and the findings from this study provide additional support for that assessment.

[34] See Sheila O'Rourke's presentation, UC Riverside, "Mentoring Faculty in an Inclusive Climate."

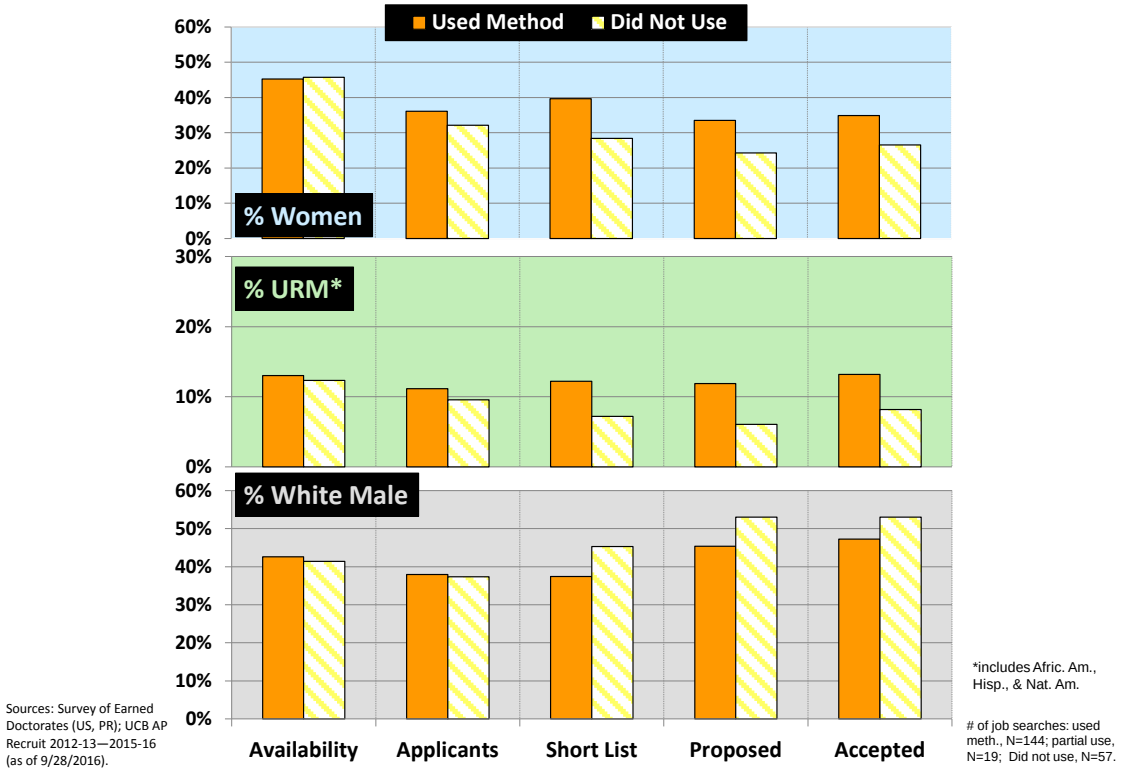
PROMISING SEARCH PRACTICES

In this section of the report, we describe and discuss practices that emerged as promising ones in our analyses of the data. The generally positive statistical associations between these search practices and greater diversity in various search stages support the conclusion that the practices show promise. We examine a number of practices in some detail and conclude with a list of additional practices that show at least some promise. We note that some of these practices were associated with increased proportions of women but not URMs, or vice versa.

Emailing or phoning selected women or URM scholars

Figure 8 below provides data concerning searches that did and did not include emails or phone calls from departmental faculty to possible women and URM candidates encouraging them to apply.

Figure 8: Directly called/emailed possible candidates with diverse backgrounds
and encouraged them to apply to the position.



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=144; partial use, N=19; Did not use, N=57.

Searches that *did* use this practice obtained somewhat higher percentages of women in their applicant pools than those that *did not* use this practice; differences for URMs in applicant pools were negligible. In later stages of the search process, however, clear positive statistical associations with higher proportions of both women and URM candidates appeared. At those

same stages, searches that *did not* use this practice had higher proportions of white male candidates, compared to searches that *did* use this practice.

Several factors may explain why the positive associations appeared in later search-stages. First, the number of direct contacts per search was probably not large, and so we would not expect to see much change in the percentages of women or URMs in the applicant pools. Second, as with use of the PPFP (discussed above), these contacts were probably undertaken only when the search committee had reason to think the contacted individual had strong qualifications and might well make the short list.

Recent academic scholarship has stressed the importance of directly recruiting faculty who have underrepresented backgrounds.[35] Accordingly, Berkeley's Office of Faculty Equity and Welfare (OFEW) encourages search committees to engage in active recruitment strategies, including the strategy of directly contacting candidates from diverse backgrounds and encouraging them to apply. One survey respondent whose committee used this method detailed its approach: "We asked search committee members and other faculty to provide possible candidates with a diversity background and the equity advisor sent out e-mails to invite them to apply." Another committee chair noted how effective it had been: "This was a remarkably successful exercise, most people we mailed applied."

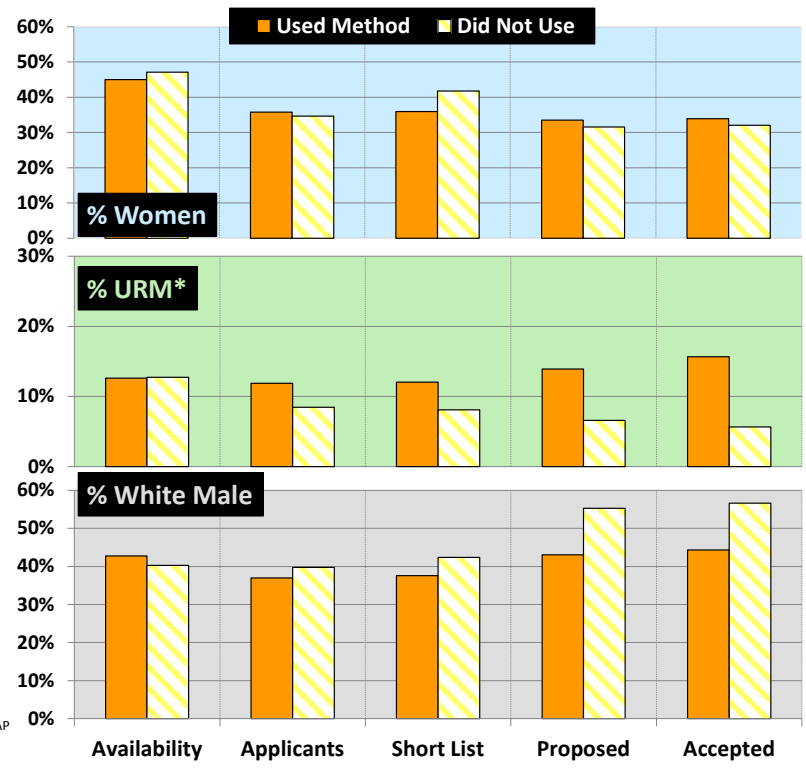
Including the diversity needs of the department among its hiring priorities

This practice is for the department's faculty explicitly to include its diversity needs when it identifies, discusses, and prioritizes the most pressing needs it will aim to meet in its future hiring. Examples of needs that departments might discuss and prioritize include subfields needed for the department's research or teaching programs; the ranks at which to hire; and needs for a more diverse faculty. Departments that implement this practice probably do so independently from specific searches, for example, as part of a departmental self-study.

[35] Vardaman et al, 2013.

Figure 9 below shows comparisons between searches that did and did not include the diversity needs of the department among those it discussed and prioritized.

Figure 9: As a department/unit, clarified and prioritized the diversity needs of the department vs. competing needs....



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=128; partial use, N=32; Did not use, N=60.

These data display a pattern for URM candidates that suggests the practice is promising. Furthermore, searches that *did not* use the practice had higher percentages of white men in the later search stages, compared with searches that *did* use the practice. Still, we note that the pattern for women did not show a clear statistical association with using the practice. The best general conclusion may be that a department's strong commitment to including diversity needs as a priority shows promise as a way to help increase diversity in search outcomes.[36]

Including women and URM faculty on search committees

The academic literature[37] stresses the importance of diversifying search committees by gender and race/ethnicity, as well as other factors. Our data suggest that this is a promising practice, and that additional future investigation is warranted.[38] We caution that the demographic data for some of the searches we studied were incomplete. We exclude these searches in the

[36] The current academic literature often stresses that prioritizing diversity concerns is *necessary* for more diverse hiring (Turner, 2002; Testy, 2011; Bilimoria & Buch, 2010). Our conclusion is somewhat more cautious.

[37] Turner, 2002; Bilimoria & Buch, 2010; Vardaman et al, 2013.

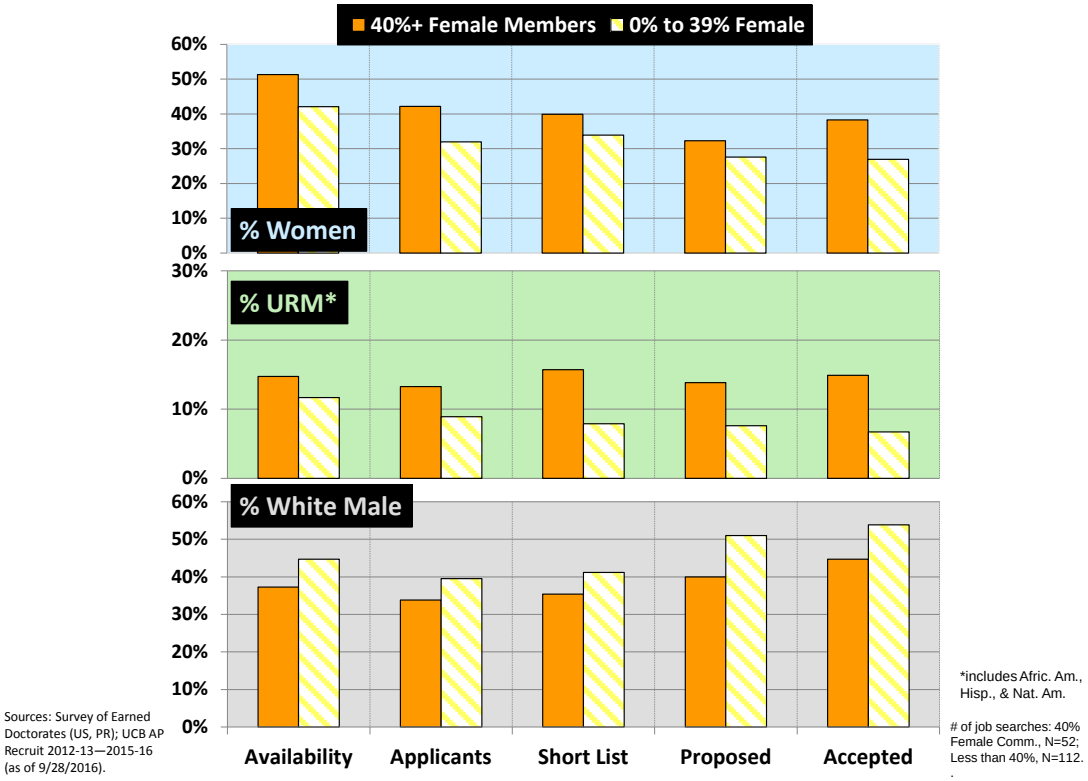
[38] We note that in this subsection we do not draw upon our survey data. Instead, we draw upon data in UC Recruit about search committee members' demographic characteristics.

analyses below; the subset of searches for these practices is thus only 164 out of the 220 included in the study as a whole. Our data were nonetheless rich enough to allow us to provide an analysis of such practices.[39]

Women faculty on search committees

Figure 10a below shows patterns for committees whose membership was at least 40% women faculty and those whose membership was less than 40%.

Figure 10a: Search Committee Demography: 40% or More Female Committee (yes/no)



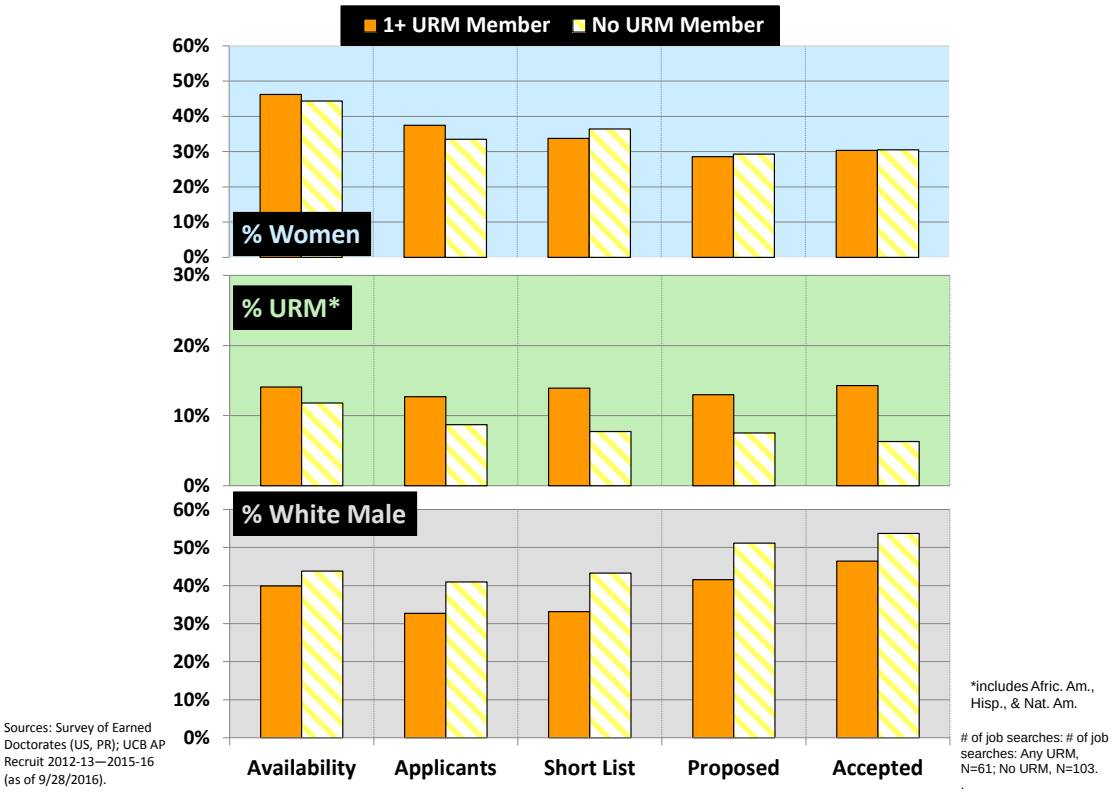
Compared with searches that did not engage in this practice, those that did were more likely to have higher percentages of women and URMs under consideration at each search-stage. Searches that *did not* use this practice were more likely than those that *did* use it to have higher percentages of white men at every search stage. These observations suggest that this practice is a promising one. Further study would be needed, however, before this practice could be identified as *very* promising. In particular, we would need to assess whether controls for field and estimated availabilities are reliable enough to rule out the hypothesis that (a) gender diversity for hiring committees and (b) search outcomes are both simply reflections of disciplinary variation in gender representation.

[39] Including some information provided in Appendix B, Slides 131-134.

URM faculty on search committees

Figure 10b below shows how the percentage of URM, women, and white male applicants varied through the search process when the search committee included at least one faculty member who was identified as a URM, as compared with searches that had no URM faculty listed as belonging to the search committee.

Figure 10b: Search Committee Demography: Any URM* Committee Member (yes/no)



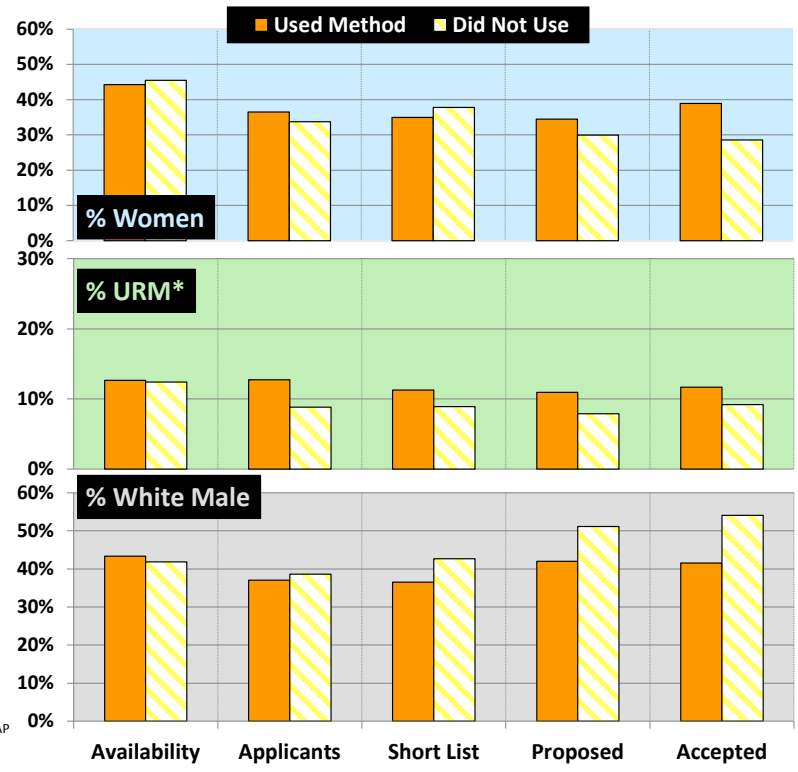
Two patterns are notable here. One is that we see a greater percentage of URM candidates considered at the later stages of searches whose committees included at least one URM faculty member, by comparison with those that did not. The other is that searches that *did not* use this practice saw higher percentages of white-male applicants throughout their searches, by comparison with searches that *did* include a URM faculty member. Past research has been "suggestive that diversity on the search committee may increase the likelihood of a diverse hire."[40] In regard to the percentage of women applicants, however, the statistical association for inclusion of at least one URM faculty member on the search committee is weak or possibly non-existent. As with the practice of including women on search committees, additional assessment of this practice would require determining whether controls for field and estimated availabilities are reliable enough to rule out the hypothesis that (a) URM diversity for hiring committees and (b) search outcomes are both simply reflections of disciplinary variation in URM representation.

[40] Smith et al (2004), p. 146.

Monitoring national resources

As the data in Figure 11 below suggest, there is some promise in the practice of monitoring national resources to identify diverse candidates.

Figure 11: Monitored national resources that identify possible future faculty candidates
from diverse backgrounds (e.g., lists of recent fellowship recipients…).



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=101; partial use, N=20; Did not use, N=99.

The patterns here are not entirely clear and consistent across search-stages. Generally, however, although there are not notable positive statistical associations for URM candidates, the percentages of women at several search stages are higher for searches that *did* use the practice than they are for those that *did not*, and the percentage of white men was generally higher for searches that *did not* use the practice, compared to those that *did*. In addition, regression analyses suggested that this practice should be included among those that can be regarded as promising. It is possible that the differing results for women and URM candidates reflect different national resources that are available in various fields.

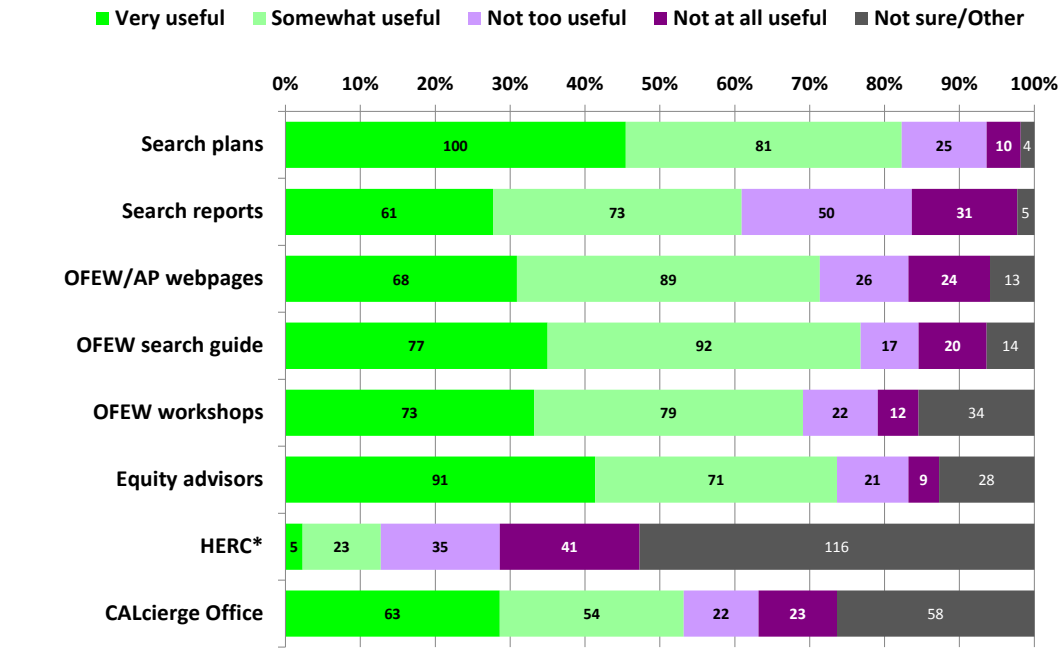
Engaging faculty equity advisors

We begin this discussion with an explanation of the kind of analysis we undertook for this practice (and for the practice of creating a search plan; see the next section below). This explanation is important because all searches must designate a faculty member as an equity advisor and create a search plan at Berkeley, which means there is no variation across searches for the use of this practice. We were able, however, to use a different aspect of our survey to undertake an analysis, despite the saturation of this practice across searches.

The final portion of our survey instrument invited search-committee chairs to assess existing hiring mechanisms and resources at Berkeley as very useful, somewhat useful, not too useful, and not at all useful in promoting diverse faculty pools and hiring outcomes. Some of these items concern handbooks, workshops, services, and compliance documentation overseen by the Office for Faculty Equity & Welfare (OFEW). Several of these items, however, can be understood as concerning search practices, and among those, two stood out as especially highly rated. One was engaging faculty equity advisors in the search process, which we assess as promising; the other was creating search plans, which we assess as showing some promise. We discuss equity advisors here and search plans in the next subsection.

Figure 12 below shows the chairs' assessments of existing hiring mechanisms and resources.

Figure 12: Usefulness of Existing Mechanisms Designed to Promote Diverse Faculty Pools and Hires at UC Berkeley



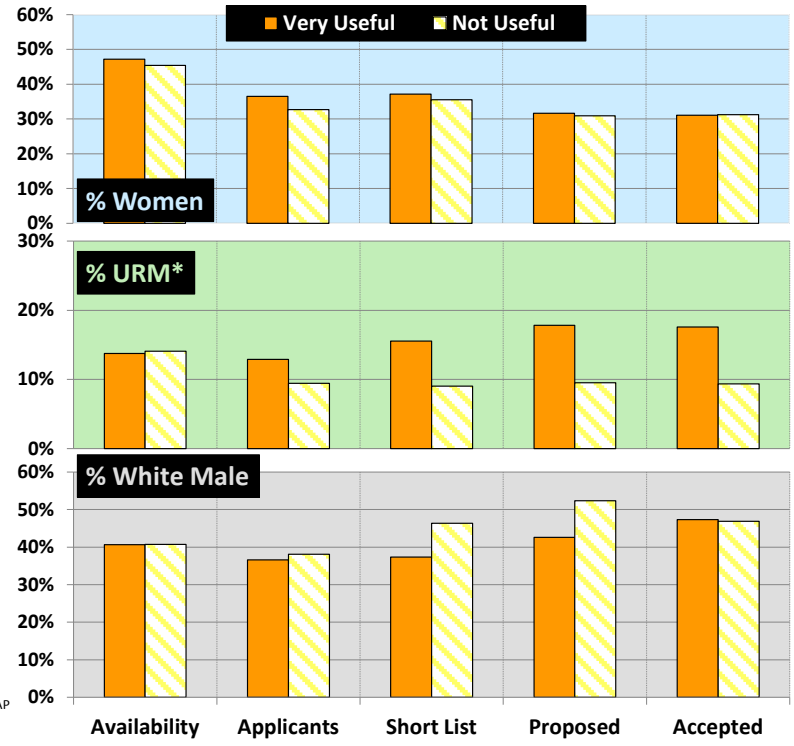
*Northern California Higher Education Recruitment Consortium (HERC)

Sources: UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

To explore the survey information about equity advisors and search plans further, we compared data for the hiring committees that indicated each practice was "very useful" to the data for the hiring committees that indicated the practices were "not too" or "not at all useful." Again, we proceeded in this way because both practices are mandatory for searches at Berkeley, and thus we could not compare data for searches that used them to data for searches that did not use them.

For each search, UC Berkeley requires the designation of a faculty member who will serve as an equity advisor. This faculty member plays an advisory role during the search process, with special responsibilities for ensuring that the process is fair and equitable, and for supporting the use of active efforts to achieve a broad and diverse pool of candidates. Figure 13 below provides data concerning the practice of using an equity advisor.

Figure 13: Usefulness of Mechanisms Designed to Promote Diversity: Faculty Equity Advisors



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: very useful, N=91; somewhat, N=71; not useful, N=30.

Committees that rated equity advisors as very useful saw higher percentages of URMs at each search stage, compared with committees that rated equity advisors as not useful. Those that rated equity advisors as not useful saw higher percentages of white men at the short-list and offer stages of the process than those that rated equity advisors as very useful. The differences for women, however, were negligible.

Some research has suggested that the presence and active input of equity advisors may increase the social accountability of hiring committees and might result in net positive results.[41] Our findings provide some support for this hypothesis.

Additional practices showing some promise

Three additional practices appear to show promise, though the data for them are somewhat more difficult to interpret than the data for the practices discussed above. These three are creating a written search plan before beginning search activities, creating a departmental diversity plan, and arranging meetings for finalists with individuals or groups from diverse backgrounds.

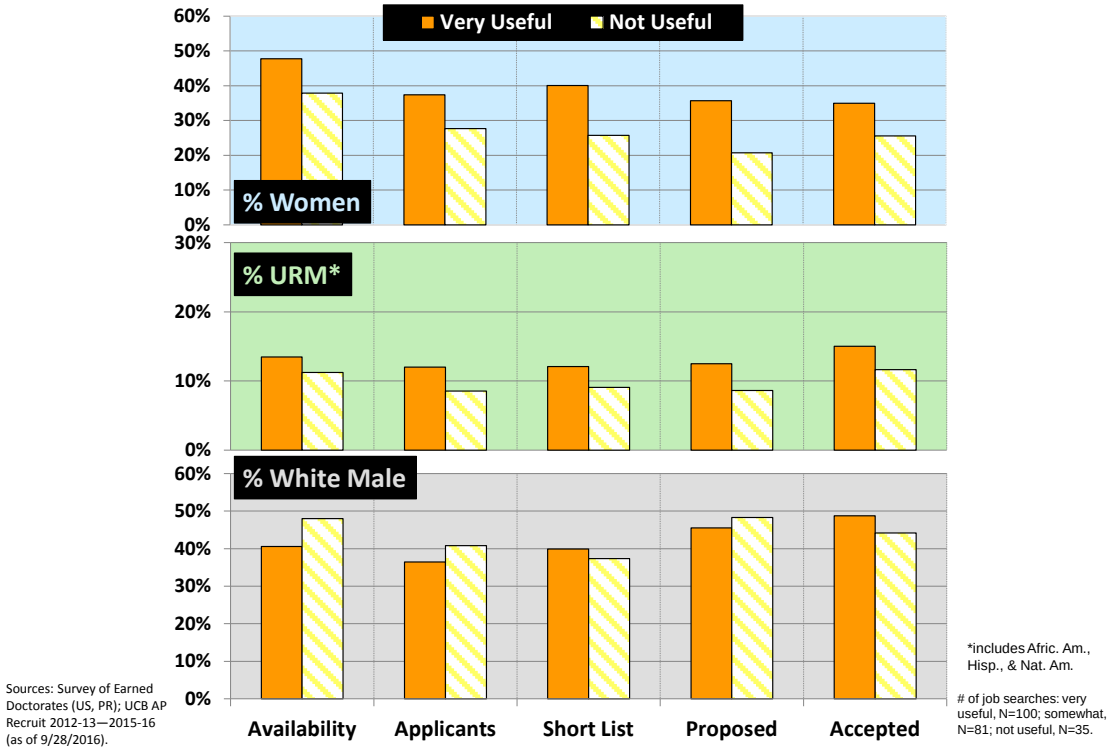
Creating search plans

Before beginning any search activities, search committees at Berkeley must prepare written search plans that include information about diversity benchmarks and goals, applicant qualifications, planned search and recruitment efforts, advertisement, and the selection process. The data for the practice of drawing up search plans were generated from the chairs' assessments of a range of practices that are mandatory at Berkeley. (More information about these data may be found at the beginning of the section immediately above concerning equity advisors.)

[41] Dobbin & Kalev, 2016.

Figure 14 below shows the results for search plans.

Figure 14: Usefulness of Mechanisms Designed to Promote Diversity: Faculty Search Plans



The percentages of women and URMs at all steps of the process, from availability pools to hires, were higher for search committees that indicated that search plans were "very useful" by comparison with committees that indicated they were "not too" or "not at all useful." There is no clear pattern of percentages for white men.

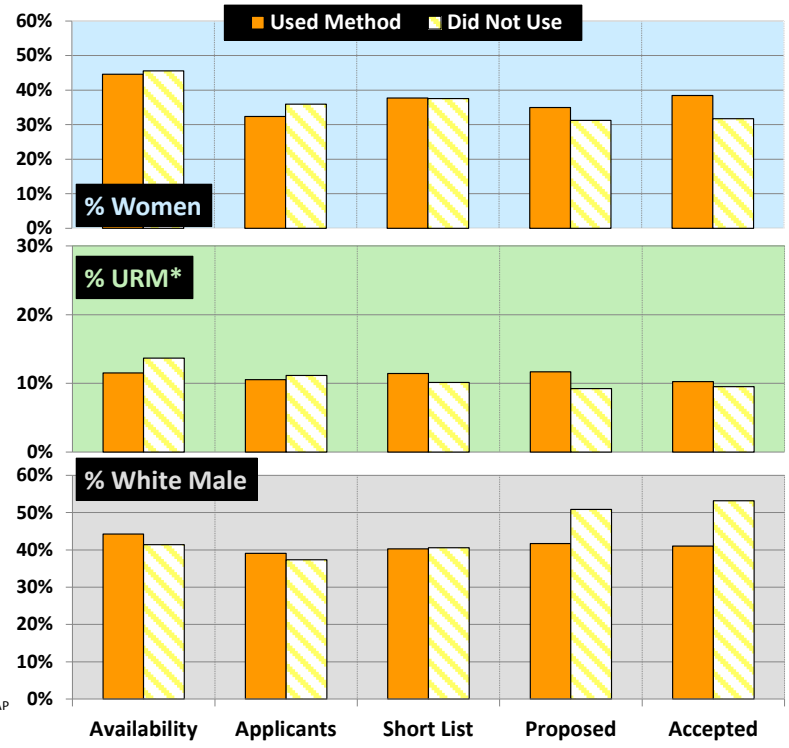
It is difficult to interpret these results, particularly given the availability pool patterns, but because preparing search plans directly engages the committee in thinking about how to diversify applicant pools, this practice might have a net positive effect as participants begin to envision themselves as "diversity champions."[42] On balance, we regard the creation of a search plan as a promising practice, especially if the committee takes ownership of implementation.

Creating departmental diversity plans

Some departments create a departmental diversity plan with specific actions and benchmarks. Figure 15 below shows the data for this practice:

[42] Dobbin & Kalev, 2016.

Figure 15: Developed a departmental diversity plan with specific plans-of-action and benchmarks to gauge their short-term and longer-term effectiveness.



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

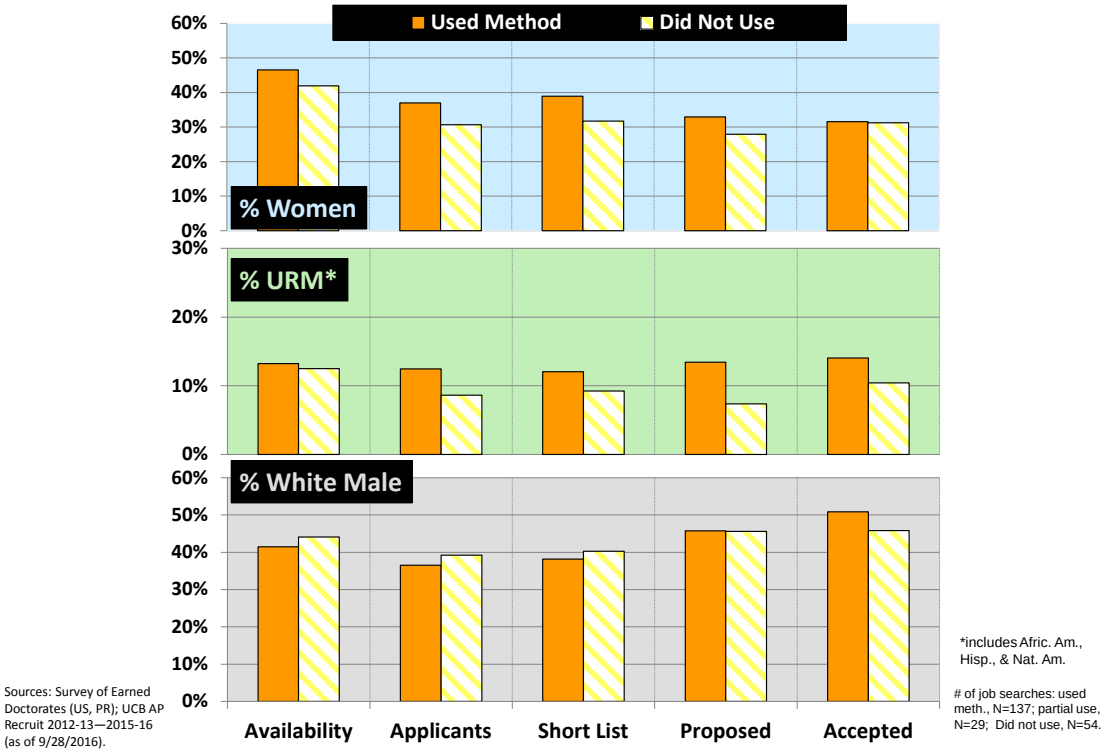
# of job searches: used meth., N=46; partial use, N=34; Did not use, N=140.

Searches that *did* use this practice saw modest increases in the percentages of women at the final search stages, compared with searches that *did not* use this practice. The data for URMs do not show any notable patterns. For departments that *did not* use the practice, the percentage of white men was larger at those same two stages, compared with departments that *did* use it. We conclude that the practice shows some promise.

Meetings for finalists with campus groups or individuals from diverse backgrounds

Figure 16 below shows data for this practice:

Figure 16: Arranged to have finalists meet with campus groups/individuals from diverse backgrounds.



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=137; partial use, N=29; Did not use, N=54.

Our regression analyses flag the practice as a promising, but the patterns we observe in Figure 16 above are not easy to interpret. Still, searches that *did use* this practice saw higher percentages of URM candidates at each search stage, compared with searches that *did not* use this practice, and they saw somewhat higher percentages of women at some search stages.

NOT CLEARLY PROMISING SEARCH PRACTICES

"Not clearly promising" practices include those for which we observed one of the following conditions:

- Insufficient variation among responses to permit adequate modeling
- Negative associations with the practice
- No clear pattern of negative or positive associations.

While a little awkward, the phrase "not clearly promising" is intended to convey a particular tentativeness about any conclusions about these practices. We want to stress that some of these practices are clearly valuable for reasons unconnected with diversifying the faculty. In addition, we believe that further data concerning many of these practices would be needed before any conclusions about them could be drawn.

In what follows, we first list the practices for which our data simply did not allow us to provide adequate modeling. Then we present and discuss data concerning practices for which we found some negative associations: using comparative data and preparing weighted rubrics for assessing candidates. We also discuss our data for three additional practices: training to counter implicit bias, cluster hiring, and using job criteria that require evidence of commitment to diversity. We conclude this section by listing the additional practices that we are, for now, categorizing as not clearly promising.

Practices for which we observed insufficient variation

We are unable to provide an assessment for the practices listed below because they were so frequently (or infrequently) used that meaningful analysis was not possible (see Figures 2a-2c above). Again, we stress that many of these practices are, or could be, valuable for reasons unrelated to the achievement of greater diversity in the search process.

- Avoided improper or unlawful questions
- Established a welcoming environment
- Communicated efficiently and respectfully
- Carefully evaluated all applications
- Worked to make applicant pool and finalist group as diverse as possible
- Evaluated applications holistically
- Used varied campus settings and forums for assessing finalists
- Appointed senior faculty reviewers to monitor equity
- Developed broad hiring goals
- Considered potential in evaluating candidates
- Contacted colleagues at other institutions
- Discussed post-hire support efforts for new faculty

- Checked on reasons for deselection
- Appointed a diverse search committee
- Considered candidates with degrees from a broad range of institutional settings
- Developed standard interview questions/job presentation criteria
- Specified the position at the junior level
- Set aside/secured resources to support ongoing faculty recruitment activities.

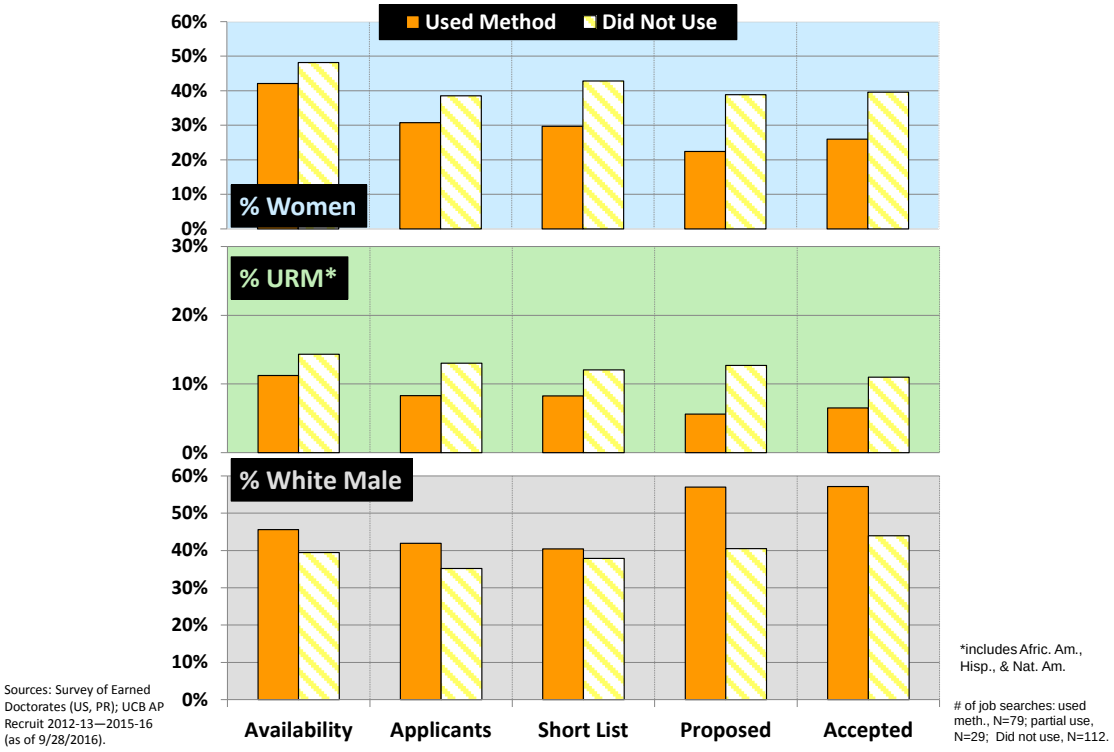
Using comparative data: Three practices

Several practices involved the use of comparative data by the department or search committee, and we discuss three of them here. We are not able to conclude that these are practices that have promise in relation to diversifying the faculty.

Comparing Berkeley departments to peers elsewhere

A department engaging in this practice would compare its own demographic hiring patterns with those of non-Berkeley peer departments in the same field. Figure 17a below shows the data for this practice:

Figure 17a: Compared the relative success of our department to similar programs at peer institutions in re. to diversity-related issues and faculty hiring patterns....

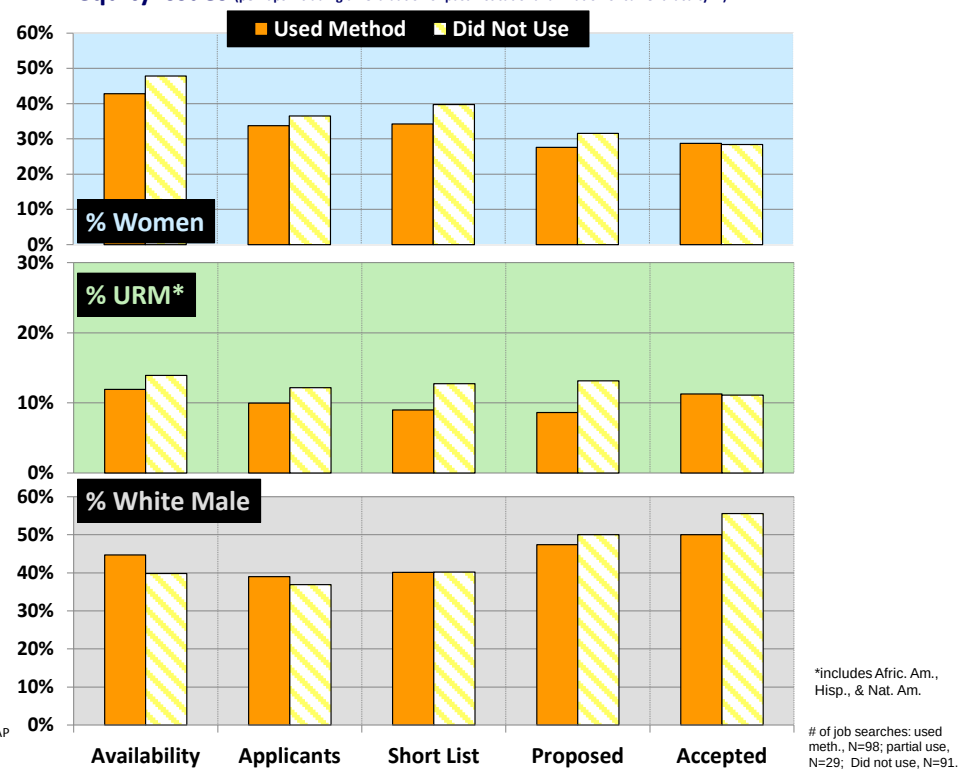


These data show a negative statistical association between use of the practice and diverse outcomes, especially at the short-list, selection, and hiring stages. This is perhaps the most striking set of negative associations we found in our study. In speculating about the reasons for this result, we note that this practice might sometimes lead committees to feel that their own department is doing about as well as their peers, prompting fewer efforts to diversify the applicant pool and short list.

Assessing departmental hiring over time

Departments using this practice analyzed and assessed their hiring history, with attention to equity and diversity. They were thus comparing search outcomes at different times. Figure 17b below shows the data for use of this practice.

Figure 17b: Examined and analyzed the history of departmental hiring in regard to equity issues (perhaps including an evaluation of past institutional affiliation of current faculty....).



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=98; partial use, N=29; Did not use, N=91.

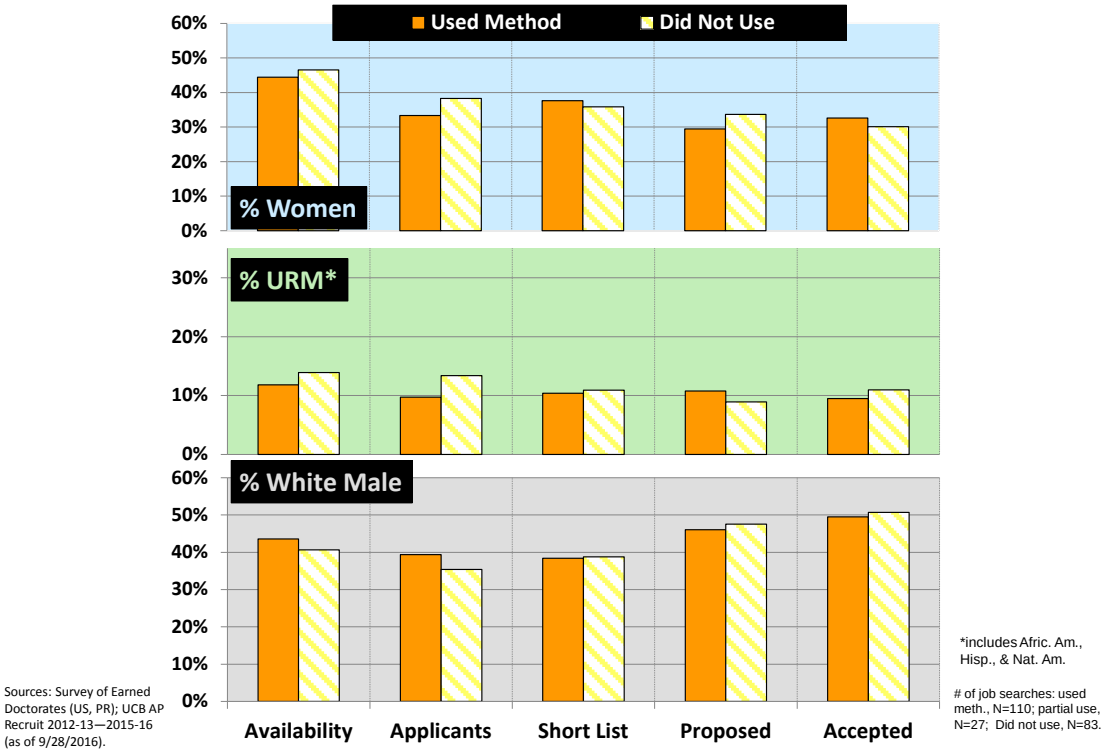
Here, we see modest negative statistical associations with diversity at several search stages and no clear positive associations at any stages. This pattern is difficult to interpret, and it leaves us unable to conclude that this is a practice showing promise.

Comparing past and present availability and applicant pool data

The Office of Faculty Equity and Welfare provides departments with data about the national availability pools for their fields, and search committees can track the data for their applicant

pool by using the UC Recruit online system. Departments can use these data for past and current searches to inform themselves about these metrics. Figure 17c below presents the data for this practice:

Figure 17c: Systematically examined applicant pool and availability data throughout recent faculty recruitments...to ensure diverse applicant pools, past and future.



Here, no clear patterns emerge from comparing departments that used this practice with those that did not use it. Regression analysis suggests that the promise of this practice is about the same as the promise of the practice of reviewing departmental hiring history (discussed in the subsection immediately above). Again, it is difficult to interpret these data, and we are unable to conclude that this is a promising practice.

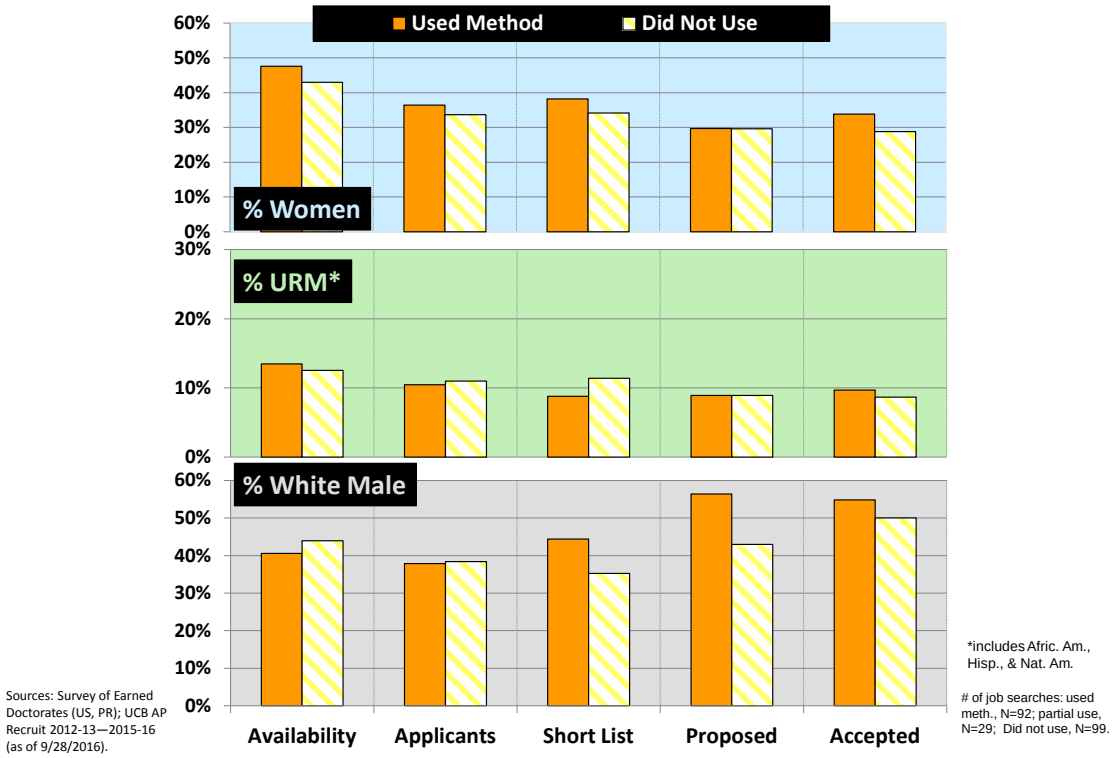
Using rubrics for assessing applications

A number of departments developed a weighted assessment rubric in advance of reviewing applications, and the use of rubrics is widely recommended in college and university search handbooks. [43]

[43] For example, see UNC Charlotte ADVANCE's Resources for Search Committees including Evaluation Rubrics.

Figure 18 below shows the data for this practice:

Figure 18: Developed in advance of reviewing applications a weighted rubric
that was used in the evaluation of all candidates.



Compared with searches that *did not* use this practice, those that *did* saw somewhat higher percentages of white men among those who were short-listed and proposed for appointment, and among those who accepted Berkeley's offer. The results for women and URMs at those same search stages did not show notable differences between searches that used the practice and those that did not.

We note that our survey asked about a related practice that some departments used in later stages of their searches. These departments developed standard interview questions or job-presentation assessment criteria. This practice was used, or partially used, by 89% of the searches studied, which is why it is included in the list of items with insufficient variation.[44]

Additional practices that are not clearly promising

Cluster hiring

Initially, we regarded this as a very promising practice, but further exploration of our data subsequently led us to believe we are not in a position to assess the practice. In the discussion

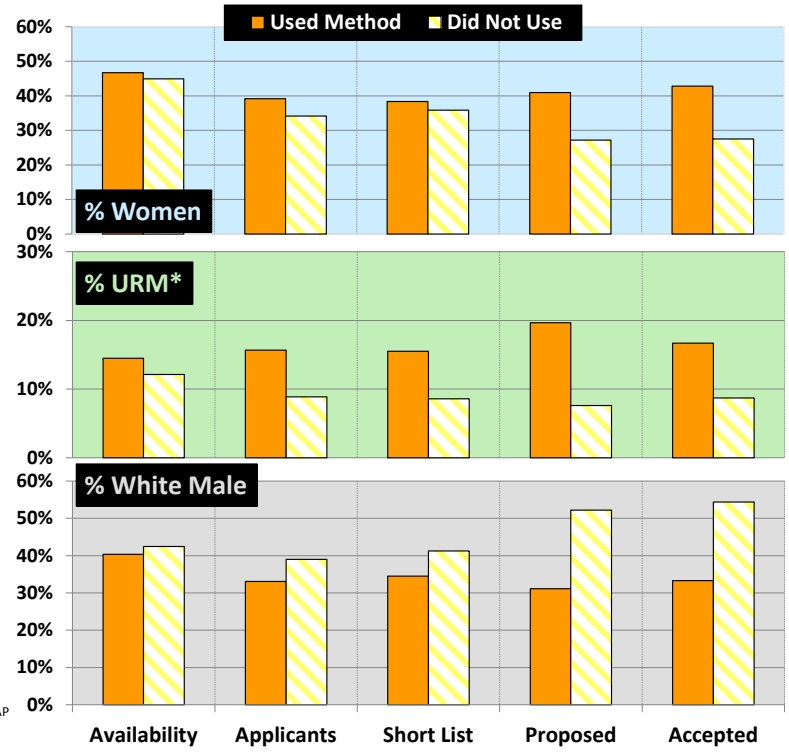
[44] See above and Appendix B, slide 75.

below, we first present the data we originally considered and then explain our grounds for caution in using them.

Cluster hiring is a practice that has been identified in past literature as potentially effective for diverse hiring and as helpful in creating a critical mass to support the retention of scholars from diverse backgrounds.[45] In this literature, the term is taken to refer to searches that aim at hiring multiple faculty in related fields, especially when the positions may be especially attractive to diverse candidates.

Figure 19 below shows the data patterns for Berkeley's cluster hiring:

Figure 19: Considered and/or pursued cluster hires of candidates with diverse backgrounds
(multiple faculty positions that are related...e.g., research clusters...).



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=48; partial use, N=19; Did not use, N=153.

We can observe here that at all search stages, the percentages of women and URM candidates were higher in searches that were aimed at cluster hiring than they were in searches that were not, while for white men, the percentages at each stage were higher in searches that *did not* use this practice than in those that *did*.

In considering how to interpret these data, however, we generated a list of the specific searches that were conducted by the committees that stated they used the practice of cluster hiring. This led us to realize that in a large number of instances, the practice that was actually

[45] Smith et al, 2004; Turner, 2002; Thompson & Sekaquaptewa, 2002.

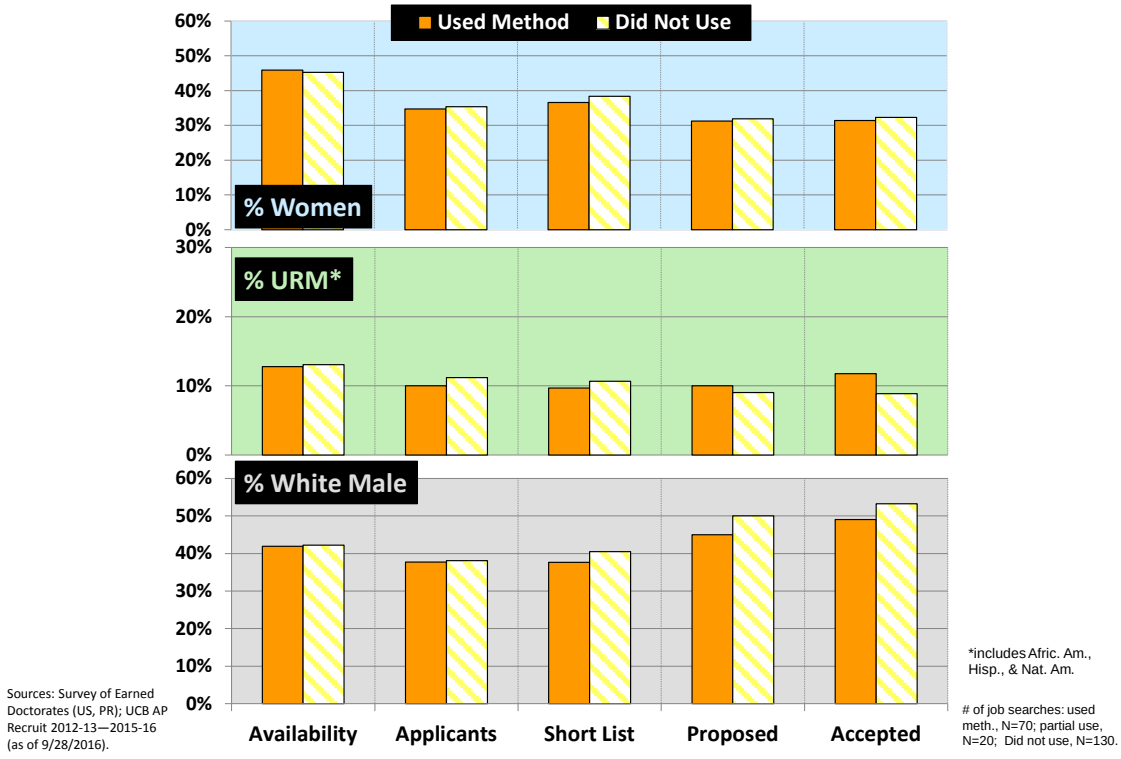
used was to request authorization to make a second offer from a regular, non-clustered search. What is missing in such instances is the intentional structuring of multiple authorized positions in advance of launching searches.

We note that at Berkeley, cluster hiring, *sensu stricto*, did occur during the time of the study, most notably through the commitment of search-lines associated with the Haas Institute for a Fair and Inclusive Society (HIFIS), which was created to advance the campus toward its goals for teaching and research that concern the requisites of a fair and inclusive society. Until we can derive a better measure of cluster hiring, however, we believe it is best to group it with other not clearly promising practices.

Training to counter implicit bias

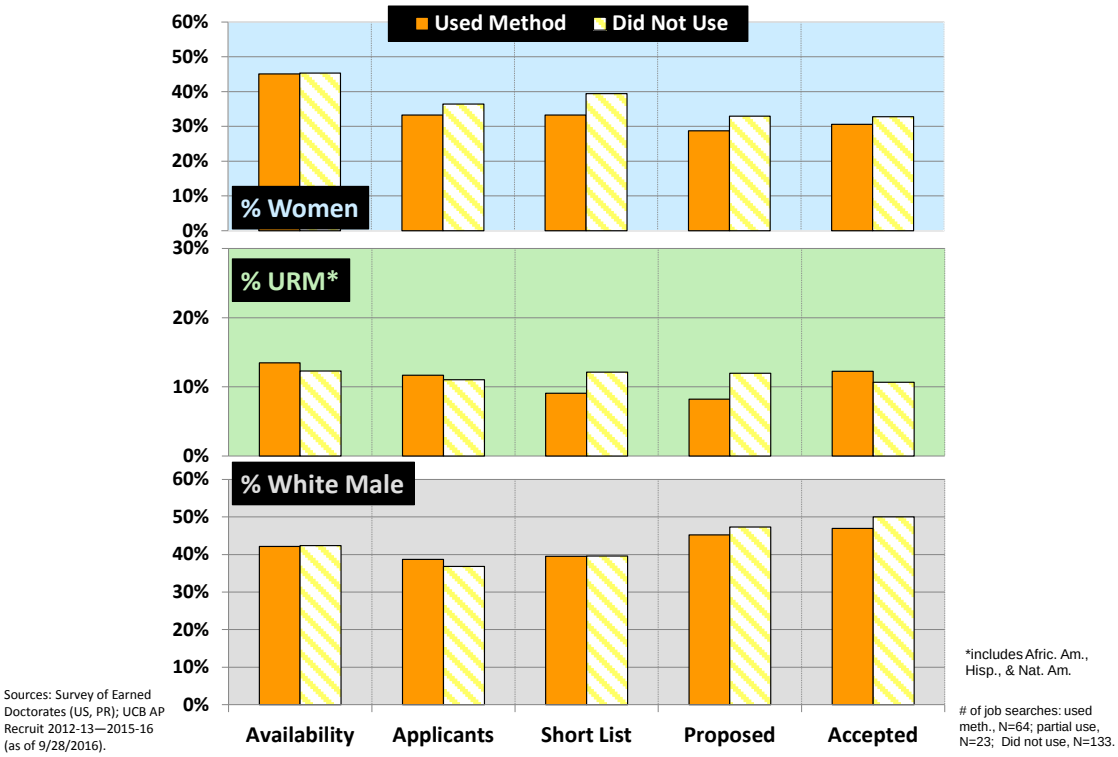
Recent academic literature has advocated for the importance of implicit bias training,[46] and efforts of this type appear to be proliferating. Figures 20a and 20b below provide the data for this practice:

Figure 20a: Supported faculty peer presentations...and discussions with hiring committees regarding faculty diversity and mitigating implicit associations.



[46] Stewart et al, 2004; Isaac, Lee, & Carnes, 2009; Bilimoria & Buch, 2010; Sheridan et al, 2010; Goltz & Sotirin, 2014.

Figure 20b: Encouraged search committee members to attend trainings regarding issues of implicit associations and how to minimize their impact.



We observe that these data do not show notable differences between searches that did and did not discuss implicit bias or encourage committee members to take training to counter implicit bias. The patterns displayed by these data point to the conclusion that these practices, at least as they were carried out during the four-year period of this study, are not clearly promising.

The research literature to date has not converged on a set of conclusions about implicit bias, training designed to counteract it, and impacts on diverse hiring. Concerning the existence of implicit bias in faculty hiring processes, some studies have cited evidence of systemic bias against women, particularly in the sciences and in male sex-typed jobs,[47] with a specific bias against mothers relative to fathers when parents apply for job positions.[48] Others have suggested that if there is a bias, it favors women over men in fields such as STEM.[49]

Some researchers have found positive statistical associations between implicit-bias training and faculty behavior or diverse hiring, but others have found potentially negative associations.[50] Fine et al (2014) found that implicit bias training increased the likelihood of STEM-field departments making an offer to women at one institution. Faculty at another institution who

[47] Isaac, Lee, & Carnes, 2009; Sheltzer & Smith, 2014.
[48] Correll, Benard, & Paik, 2007.
[49] Williams & Ceci, 2015; Ceci & Williams, 2011.
[50] Positive: Fine et al, 2014; Stewart et al, 2004; Sheridan et al, 2010. Potentially negative: Dobbin & Kalev, 2016; Goltz & Sotirin ,2014.

received a workshop on reducing gender biases reported increases in actions to increase gender equity several months after the program (Sheridan et al, 2010). On the other hand, Dobbin and Kalev (2016), for example, find that traditional diversity training activities can have unintended negative consequences, incurring employee and managerial resentment and possibly even "activat[ing] bias rather than stamp[ing] it out." Similarly, Goltz and Sotirin (2014) describe the negative responses they received when implementing a bias training program at their university in this way: "the resentment among faculty about [other] changes [increased work-loads, stagnant salaries, and the corporatization of academia] was already felt and our own change effort became a ready target for venting."

Different kinds of training are currently being offered at campuses across the UC system and across the United States, and when they can be classified and studied separately, it may emerge that some are promising, even though others are not. For example, some anecdotal evidence suggests that peer training is more likely to be associated with greater diversity at various search stages.

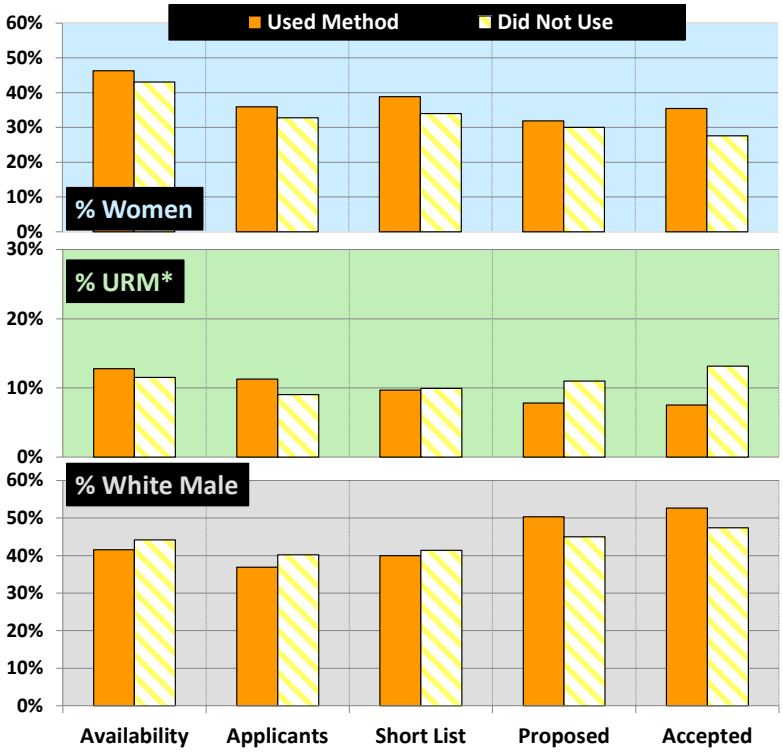
Specified job criteria reflecting commitment to diversity

This practice is to include in the criteria for a position the candidate's promise or accomplishment in making contributions to diversity. It is being increasingly recommended and adopted nationwide, and most UC campuses have now made versions of this practice mandatory by requiring "diversity statements" from candidates.[51] For these reasons, we decided that it could be helpful to include a discussion of it in this report.

[51] For example, see campus-wide requirements at UC Davis, UC Santa Cruz, UC Merced, UC San Diego and UC Irvine.

Figure 21 below shows our data for this practice.

Figure 21: Specified in the job qualifications/evaluation criteria that demonstrated commitment to diversity, exp. with multicultural ed..., working w. diverse populations.



Sources: Survey of Earned Doctorates (US, PR); UCB AP Recruit 2012-13—2015-16 (as of 9/28/2016).

*includes Afric. Am., Hisp., & Nat. Am.

# of job searches: used meth., N=120; partial use, N=25; Did not use, N=75.

These data show some differences for at the application stage of the process. Searches that *did* use the practice saw slightly higher percentages of women and URM in their applicant pools than those that *did not*, and searches that *did not* use the practice saw slightly higher percentages of white men among applicants than those that *did*. In addition, regression analysis provides some reason to regard this practice as one with some promise at the applicant stage.

Beyond the applicant stage, however, no clear and consistent patterns in the data emerged that would suggest a positive statistical correlation between this practice and diversity. We suspect there may be considerable variation in how search committees implemented this practice, and we speculate that these differences may have obscured the potential value of some forms of implementation. In addition, different institutions may use information about candidates' commitment to diversity in different ways, and when these can be studied separately, some may emerge as considerably more promising than others. Anecdotal evidence from other UC campuses suggests that much may depend on the extent to which strong or weak "diversity statements" are used as potential deciding factors during the search deliberations. On the basis of our data and analyses to date, however, we do not think we can conclude that this is a practice showing clear promise.

Additional practices that are not clearly promising. Here we simply list the practices that have not been covered in earlier discussions. In general, for these practices, our data and analysis

did not exhibit clear patterns of positive or negative statistical associations between the practices and the relevant demographic information.

- Specified degree requirements in broad ways
- Considered candidates with publications from less well-known journals/publishers
- Developed multiple short-lists emphasizing different important qualifications
- Developed long-term relationships with faculty candidates of diverse backgrounds
- Used programs/events to bring possible faculty candidates from diverse backgrounds to campus
- Promoted on-going relationships with institutions/departments/organizations known to grant PhDs to, or support research scholars from, diverse populations
- Supported existing UC academic pipelines, from our undergrad to junior faculty
- Appointed a departmental point person(s) to coordinate on-going recruitment efforts
- Advertised widely, including in diversity specific venues
- Put out a call to the larger department...other [groups]
- Appointed a champion, typically a faculty member, to advocate for candidates who may have been overlooked
- Made clear to job finalists the possibility of research collaboration across departments and disciplines
- Notified candidates about possible dual-career couple employment options
- Established consistent departmental mechanisms to review the equity of all faculty searches
- Demonstrated a willingness to extend on-going faculty searches
- Involved the Dean/other administrators in communicating with faculty
- Developed internal search guides
- Codified the departments approach to dealing with pre-existing relationships.
- Instilled a sense of institutional accountability
- Conducted retrospective analyses of recent faculty recruitments.

NEXT STEPS AND CONCLUSION

NEXT STEPS

We are very pleased that this study will be extended into future years, and we will be taking several steps to make the continued study as useful as possible.

More data

Looking ahead, the study will of course include an accumulation of more data as information about future years becomes available. In addition, more campuses in the UC system will participate by using a survey instrument, which will also increase the data available for further study.

These two measures will in time yield a much larger set of data, and we expect that this will later allow us to draw more confident conclusions about the practices that ought to be used to fulfill the UC Regents' expectations concerning diversity in a public university; to enjoy the benefits of a more diverse faculty; and to ensure that outstanding candidates are identified regardless of their gender or ethnicity. We would not be surprised to find that, in light of further data, some of our current conclusions about which practices are and are not promising will need to be revised. We are especially eager to study additional data concerning the later stages of the search process, given the much smaller populations for these later stages. We also hope to gain a better understanding of practices that appear to be associated with increased proportions of some under-represented groups but not of others.

The UC system has also modified the UC Recruit system so it is now collects data about faculty recruitment and hiring efforts that proceed with a search waiver. This is important for two reasons. First, it will allow us to understand the extent to which the practice of providing search waivers is correlated with diverse hiring. Past scholarship concerning higher education has found that women and URM faculty are more likely than white men to be hired using such processes.[52] Second, tracking data for waivered searches will help us better to understand how the UC campuses are using the search-waiver option, which can be granted in a variety of special circumstances.

We would like to be able to use code in the UC Recruit system for the use of faculty equity advisors. Although their use is mandatory at Berkeley, it is not mandatory at all UC campuses, which provides an opportunity to compare data for searches that do and do not use this practice. We would also welcome an opportunity to collect data concerning practices that are mandatory at some campuses but not at others.

Finally, we will undertake measures to include more data from searches that use a discipline-specific national online system instead of UC Recruit.

[52] Smith et al, 2004.

Revised survey instrument

We have simplified and focused the survey in light of results to date. In particular, we have eliminated or significantly revised questions about practices that were used so frequently or infrequently that we could not perform satisfactory analyses of their potential promise. We have also made revisions where we had feedback from respondents suggesting they were uncertain what counted as using the practice in question. Finally, we have found additional opportunities to streamline and clarify. We hope that these changes will not just produce better analyses but will also shrink the burden on those who complete the survey. It is critical to the future of the study that the participation rates remain high.

Conclusion

The work that members of search committees do is time-consuming and difficult, and the stakes are high. Faculty members are committed to their service on search committees because they know the continued excellence of the university's research and teaching programs depends upon the way they carry out their work.

Our search committees take very seriously the tasks of ensuring rich applicant pools; reviewing all applications fairly; and thoughtfully selecting candidates for further consideration who will excel in contributing to the university's missions. In this work, they need and deserve to have guidance that is based on empirical evidence wherever possible.

We hope the current and future results of our study will help search committees achieve their diversity goals as effectively as possible. Above all, we are now confident that we can offer this advice: **conventional search practices are not enough for consistent success in hiring top women and URM faculty**.

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