AN EVIDENCE-BASED FACULTY RECRUITMENT WORKSHOP INFLUENCES HIRING PERCEPTIONS AMONG UNIVERSITY FACULTY

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Faculty Recruitment Workshop

- Evaluating effectiveness
  - Faculty feedback post-workshop
  - Hiring statistics
Faculty Recruitment Workshop

- Evaluating effectiveness
  - Faculty feedback post-workshop
  - Hiring statistics
  - Faculty attitudes and behavioral intentions
  - Belief in social science research findings
Schema Example: Gender and Race in Hiring

For an undergraduate lab manager position:

- Male and female science professors at R1 Universities each rated one application

- Male applicants were rated more competent, more hirable, more suitable for mentoring, and offered them higher salaries.

Please indicate which of the following are true for you (check all that apply):

- Read candidate’s CV
- Read candidate’s scholarship
- Read candidate’s letters of recommendation
- Other (please explain):
  
Please rate the candidate on each of the following:

<table>
<thead>
<tr>
<th>Potential for (evidence of) scholarly impact</th>
<th>excellent</th>
<th>good</th>
<th>neutral</th>
<th>fair</th>
<th>poor</th>
<th>can’t judge</th>
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</thead>
<tbody>
<tr>
<td>Potential for (evidence of) research productivity</td>
<td></td>
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<tr>
<td>Potential for (evidence of) research funding</td>
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<td>Potential for (evidence of) collaboration</td>
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<tr>
<td>Fit with department’s priorities</td>
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<tr>
<td>Ability to make positive contribution to department’s climate</td>
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<tr>
<td>Potential (demonstrated ability) to attract and supervise diverse graduate students</td>
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<tr>
<td>Potential (demonstrated ability) to teach and supervise diverse undergraduates</td>
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<tr>
<td>Potential (demonstrated ability) to be a conscientious university community member</td>
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<tr>
<td>Potential (demonstrated ability) to mentor diverse students</td>
<td></td>
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advance.umich.edu/resources/candidate-evaluation-tool.docx
Testing the effectiveness of the FRW: Two faculty survey studies

- Does attending the FRW influence faculty attitudes and behavioral intentions regarding equitable search practices?
- What causes this change?
- What is the role of attendance level of one’s departmental colleagues?
  - Can high attendance among one’s colleagues influence non-attendees?
Study 1: Fall 2012-Fall 2014

- Sample
  - 407 attended FRW, 781 did not attend FRW
  - 201 in pre-post FRW design
  - 61% male, 77% White, 76% assoc/full prof

- Surveys administered on-line via emailed link
Study 1 outcomes assessed

- Endorsement of 13 FRW recommended search practices as important to do
  - (1 = not at all important, 5 = very important)
- Sample items
  - Engage in active recruiting of specific individuals prior to the official opening of the search.
  - Focus the search on narrow content areas rather than using a broad or "open search." (reverse scored)
  - Decide and agree on specific applicant review criteria before the search begins.
  - Avoid interviewing only one candidate from a particular social group (e.g., gender or race).
  - During the visit, show we are a "family friendly" department by asking job candidates about their children and families. (reverse scored)
Study 1 outcomes assessed

- Behavioral intentions (2013-2014 only)
  
  (1 = not at all likely, 5 = very likely)

- If a fellow search committee member were to speculate that a candidate is highly unlikely to leave his or her current institution for Michigan, how likely are you to say that this type of speculation is not appropriate?

- If your search committee were to bring up a candidate's spouse or partner during the review discussion, how likely are you to say that spouses and partners should not be discussed until after an offer is made?

- If your search committee came up with a short list that did not include any women or underrepresented minorities, how likely are you to call attention to that fact?
Analyses

- Additional variables included faculty member gender, race/ethnicity, rank, and department, plus percentage of faculty in one’s department who have attended an FRW.

- Two comparisons:
  1. Attended FRW in last three years or not
  2. Pre-FRW vs. Post-FRW in 2012-2014

- Linear mixed effects analysis tested role of departmental FRW attendance.
### Attended FRW in last three years or not

<table>
<thead>
<tr>
<th>1-5 scale</th>
<th>FRW No</th>
<th>FRW Yes</th>
<th>ANOVA: main effect of FRW</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 = Strongly Agree</td>
<td>$M = 4.16, SD = .51$</td>
<td>$M = 4.26, SD = .56$</td>
<td>$F(1, 1097) = 11.43, p = .001 , \eta^2_p = .010$</td>
</tr>
<tr>
<td>Endorsement of FRW search strategies</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Beh Int 1: Do not speculate on candidate’s motives</td>
<td>$M = 3.22, SD = 1.24$</td>
<td>$M = 3.49, SD = 1.34$</td>
<td>$F(1, 394) = 3.02, p = .08, \eta^2_p = .01$</td>
</tr>
<tr>
<td>Beh Int 2: Object to discussing candidate’s partner</td>
<td>$M = 3.95, SD = 1.25$</td>
<td>$M = 4.29, SD = 1.19$</td>
<td>$F(1, 390) = 4.48, p = .04, \eta^2_p = .01$</td>
</tr>
<tr>
<td>Beh Int 3: Call attention to non-diverse short list</td>
<td>$M = 3.68, SD = 1.27$</td>
<td>$M = 3.75, SD = 1.35$</td>
<td>Not significant: $F &lt; .23, p &gt; .63$</td>
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</tbody>
</table>
### Pre-Post FRW attendance

<table>
<thead>
<tr>
<th>Endorsement of FRW search strategies</th>
<th>Pre-FRW</th>
<th>Post-FRW</th>
<th>ANOVA: main effect of time</th>
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</thead>
<tbody>
<tr>
<td><strong>M = 4.19, SD = .46</strong></td>
<td><strong>M = 4.49, SD = .42</strong></td>
<td>$F(1, 199) = 116.73$, $p = .001, \eta_p^2 = .37$</td>
<td></td>
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</tbody>
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<tr>
<th>Beh Int 1: Do not speculate on candidate’s motives</th>
<th>Pre-FRW</th>
<th>Post-FRW</th>
<th>ANOVA: main effect of time</th>
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<tbody>
<tr>
<td><strong>M = 3.25, SD = 1.18</strong></td>
<td><strong>M = 3.80, SD = 1.23</strong></td>
<td>$F(1, 132) = 31.70$, $p = .001, \eta_p^2 = .19$</td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Beh Int 2: Object to discussing candidate’s partner in 2014 only; no diff in 2013</th>
<th>Pre-FRW</th>
<th>Post-FRW</th>
<th>ANOVA: main effect of time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M = 4.02, SD = 1.28</strong></td>
<td><strong>M = 4.30, SD = 1.15</strong></td>
<td>$F(1, 134) = 4.13$, $p = .044$ in 2014</td>
<td></td>
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<tr>
<th>Beh Int 3: Call attention to non-diverse short list</th>
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<tbody>
<tr>
<td><strong>M = 3.81, SD = 1.30</strong></td>
<td><strong>M = 3.73, SD = 1.25</strong></td>
<td>Not significant: $F &lt; .39$, $p &gt; .53$</td>
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</tr>
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</table>
Linear Mixed Effects Model Analyses

We used a series of linear mixed-effects models with 95% confidence intervals to test whether the percentage of faculty in each department who had attended a workshop predicted personal endorsement of these same practices among each department’s faculty respondents.

Models included department ID as the random effect to address clustering (e.g., attitudes may be more similar within than between departments due to factors unrelated to workshop attendance).
Mixed Model Analyses: Take home point

- The percentage of faculty within a department who had attended a workshop was a significant, positive predictor of individual respondents’ perceptions of departmental practices, even among those who had not attended an FRW themselves.

  Unstandardized coefficient for individual attendance = 0.15, \( p < 0.001 \)
  Unstandardized coefficient for departmental attendance = 0.30, \( p < 0.05 \)
  Unstandardized coefficient for interaction = -0.13, \( ns \)
Mixed Model Analyses: Take home point

Even faculty who had not attended the FRW themselves were more likely to endorse FRW strategies if more of their departmental colleagues had attended one, suggesting that a norm of endorsement of equitable search strategies developed and spread in departments with high departmental attendance.
Study 2: Fall 2015-Fall 2016

- Designed to test role of belief in social science principles underlying the FRW
  - E.g., gender schemas, implicit bias, and the accumulation of disadvantage

- Sample
  - 324 attended FRW since 2003, 129 did not attend FRW
  - 212 in pre-post FRW design
  - 63% male, 77% White, 80% assoc/full prof

- Surveys administered on-line via emailed link
Study 2 Outcomes assessed

- Agreement with soc sci concepts underlying the FRW
  (1 = strongly disagree, 5 = strongly agree)
  
  • Although some people make assumptions about others’ traits and abilities that are based on social group membership (such as gender or race), most people do not (reverse scored).
  
  • Our assumptions about a person’s traits and abilities can subconsciously influence hiring decisions.
  
  • Small instances of gender bias can accumulate to produce large disparities between men’s and women’s outcomes over time.
  
  • Even though stereotypes exist about gender and race, women and racial/ethnic minorities are not affected by them (reverse scored).
  
  • Institutions often sacrifice quality in their efforts to increase diversity in hiring (reverse scored).
## Endorsement of FRW strategies and belief in underlying social science concepts

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<tr>
<th>1-5 scale</th>
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<tr>
<td>5 = Strongly Agree</td>
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<tr>
<td>Endorsement of FRW search strategies</td>
<td>$M = 3.61, SD = .43$</td>
<td>$M = 4.29, SD = .50$</td>
<td>$F(1, 449) = 24.84, p &lt; .001, \eta^2 = .05$</td>
</tr>
<tr>
<td>Agreement with underlying concepts</td>
<td>$M = 3.84, SD = .78$</td>
<td>$M = 4.40, SD = .55$</td>
<td>$F(1, 445) = 5.15, p = .02, \eta^2 = .01$</td>
</tr>
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</table>
## Pre-Post FRW attendance

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<tr>
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<td>5 = Strongly Agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Endorsement of FRW search strategies</strong></td>
<td>[M = 3.98, SD = .44]</td>
<td>[M = 4.29, SD = .51]</td>
<td>[F(1, 197) = 78.56, p &lt; .001, \eta^2 = .29]</td>
</tr>
<tr>
<td><strong>Agreement with underlying concepts</strong></td>
<td>[M = 4.19, SD = .53]</td>
<td>[M = 4.40, SD = .56]</td>
<td>[F(1, 197) = 41.11, p &lt; .001, \eta^2 = .17]</td>
</tr>
</tbody>
</table>
Mediation Model (proximal FRW attendance only)

Gender
Female(.5) Male (-.5)

Belief in social science principles

FRW Attendance
Yes(.5) No(-.5)

Endorsement of equitable search strategies

Index of moderated mediation: Index = - .24, SE = .06, CI: [-.36, -.14]
Indirect effect among men: B = .49, SE = .07, CI: [.35, .63]
Indirect effect among women: B = -.11, SE = .08, CI: [-.27, .05]
Mediation model: Take home point

- Attending the FRW can educate people (especially male faculty members) about social science research principles, which in turn changes attitudes about equitable search practices.
Summary and Conclusions

- An evidence-based equitable faculty search training workshop can increase faculty members’ support of equitable search practices and their intentions to enact those practices.

- This positive influence may spread throughout a department the more that its members have attended the workshop (institutional change).

- Attending the workshop may increase endorsement of equitable search practices because attendance moves people (especially men) to accept the social science research principles on which the workshop is based.
Thank you.

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