



W I S E L I

*Women in Science & Engineering Leadership Institute  
University of Wisconsin-Madison*

# Searching for Excellence & Diversity

An evidence-based approach to  
training search committees



## Outline

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- What is WISELI?
- Why focus on hiring?
- *Searching for Excellence & Diversity* workshops
  - Emphasis on research on bias and assumptions
- How's it working?



# Women in Science & Engineering Leadership Institute

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- National Science Foundation/ADVANCE Institutional Transformation award
- Mission: Promote the participation and advancement of women in academic science and engineering
- Activities
  - Workshops
  - Grants
  - Seminars
  - Research & Evaluation



## Why focus on hiring?

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- Gatekeeping role of search committees
- Shapes the “complexion” of the faculty for years to come
- Obvious disparities for women in science and engineering
- Hiring is NOT the only important thing to think about as we diversify our workplaces (e.g., climate, leadership, equity)—but it is an important place to start!



# Five Essential Elements of a Successful Search

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- Run an effective and efficient search committee
- Actively recruit an excellent and diverse pool of candidates
- Raise awareness of unconscious assumptions and their influence on evaluation of candidates
- Ensure a fair and thorough review of candidates
- Develop and implement an effective interview process



# Run an effective and efficient search committee

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- Writing the job description/ad
- Effective leadership of a search committee

*The “nuts and bolts”*



# Actively recruit an excellent and diverse pool of candidates

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- Discuss diversity up front
- Build a diverse pool of candidates
  - Dispense with assumptions that may limit the pool!
  - Personal contacts are the key
  - Actively involve all members of the search committee

*Putting the “search” back into “search and screen”*





## Have you heard these statements?

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- “I am fully in favor of diversity, but I don’t want to sacrifice quality for diversity”
- “We have to focus on hiring the *‘best’*”
- “Recruiting women and minority faculty diminishes opportunities for white male faculty”
- “There are no women/minorities in our field”
- “The scarcity of women/minorities in our field means that those who *are* available are in high demand and we can’t compete”
- “Minority candidates would not want to come to our campus”



# Raise awareness of unconscious assumptions and their influence on evaluation of candidates

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- What is “unconscious bias”?
- How might unconscious biases affect the search process?
- How can a search committee overcome these tendencies?

*Show them the data*



# What is “unconscious bias”

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- Unconscious bias and assumptions
- Schemas
- Stereotyping
- Cognitive shortcuts
- Statistical discrimination
- Implicit associations

The tendency of our minds to judge *individuals* based on characteristics (real or imagined) of *groups*



# Unconscious bias

- When shown photographs of people who are the same height, evaluators overestimated the heights of male subjects and underestimated the heights of female subjects.
- When shown photographs of men of similar athletic ability, evaluators rated the athletic ability of African American men higher than that of white men.
- When asked to rate the quality of verbal skills indicated by a short text, evaluators rated the skills as lower if they were told an African American wrote the text than if they were told a white person wrote it, and gave higher ratings when told a woman wrote it than when told a man wrote it.



# Unconscious bias in the search process

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- Applications/CVs/Résumés
- Reference Letters
- Evaluation of Leadership/Competence



# Unconscious bias in the search process: Applications/CVs/Résumés

- 238 academic psychologists sent a curricula vitae with either male or female name
  - Entry level: more likely to vote to hire man, more likely to indicate man had adequate teaching, research, and service experience
  - High level: no gender differences
  - No differences between male and female evaluators
  - More write-in comments for women



# Unconscious bias in the search process: Applications/CVs/Résumés

- Meta-analysis of studies of hiring
  - Aggregate of 1,842 subjects over 19 studies
  - Applications assigned male or female name
  - Reviewers hired male candidates more often
  - Between-subjects design showed less bias than within-subjects
  - No difference in results if study done with student subjects vs. professional subjects



# Unconscious bias in the search process: Applications/CVs/Résumés

- MBA students evaluating a woman applicant for a managerial position
  - Vary the proportion of women in the applicant pool (12.5%, 25%, 37.5%, 50%, 100%)
  - Evaluate candidate on qualifications, recommend hire, potential for advancement
  - In the 12.5% and 25% pools, women applicants rated lower on qualifications, less likely to recommend hiring, and less potential for advancement
  - **NO DIFFERENCE** in ratings of male or female evaluators!



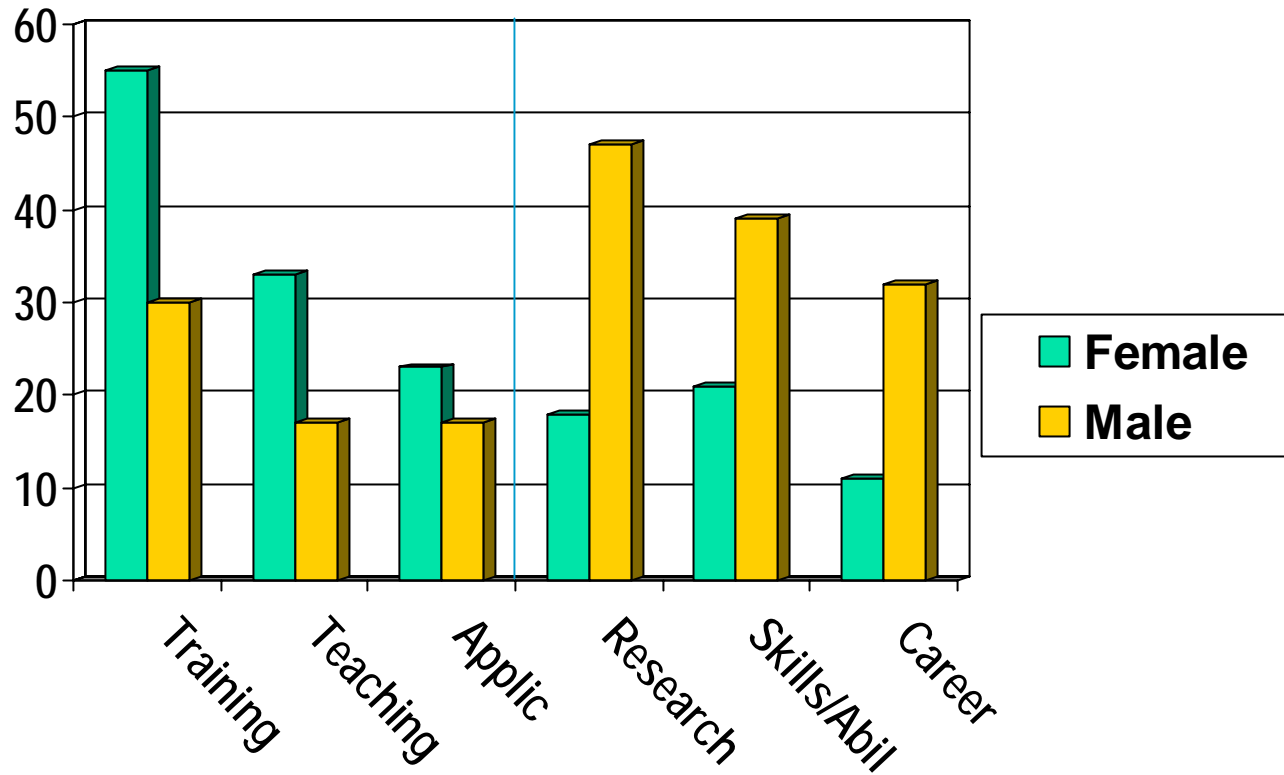


# Unconscious bias in the search process: Reference Letters

- 312 letters of recommendation for medical faculty hired at a large U.S. medical school
- Women's letters compared to men's more often:
  - Were *shorter*
  - Offered *minimal assurance*
  - Used *gender terms*
  - Contained *doubt raisers*
  - Used *stereotypic adjectives*
  - Used *grindstone adjectives*
  - Used fewer *standout adjectives*
  - Contained less *scientific terminology*



# Top 3 semantic realms following the possessive for men and for women



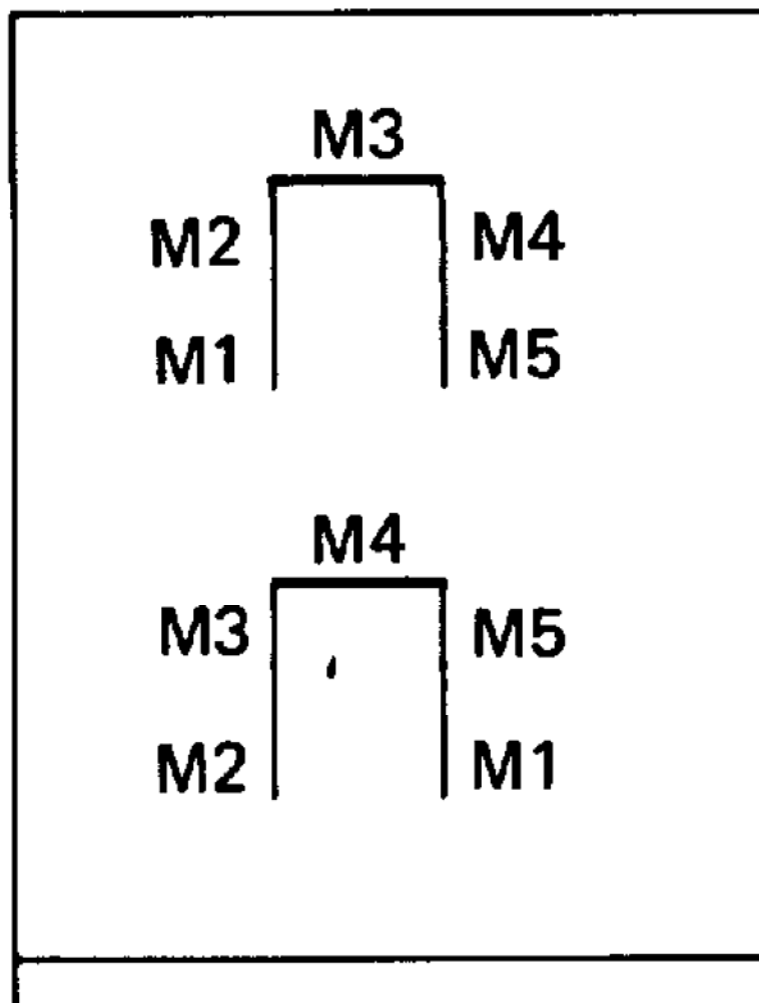


# Unconscious bias in the search process: Evaluation of Leadership/Competence

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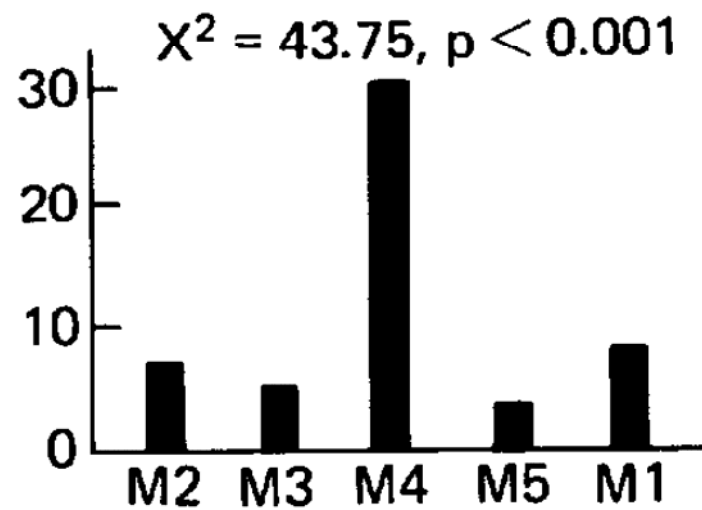
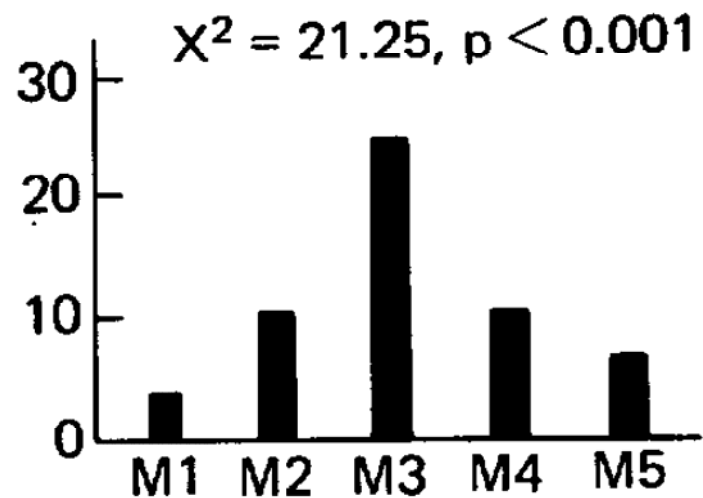
- Students seated around the table—when is the head of the table identified as the “leader?”

### MALE

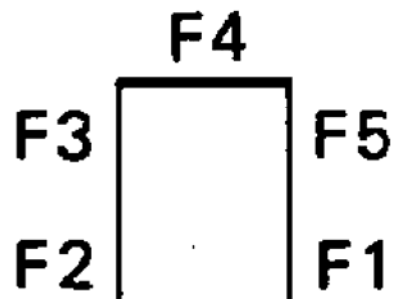
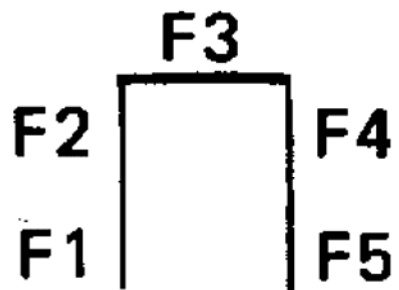


### MALE

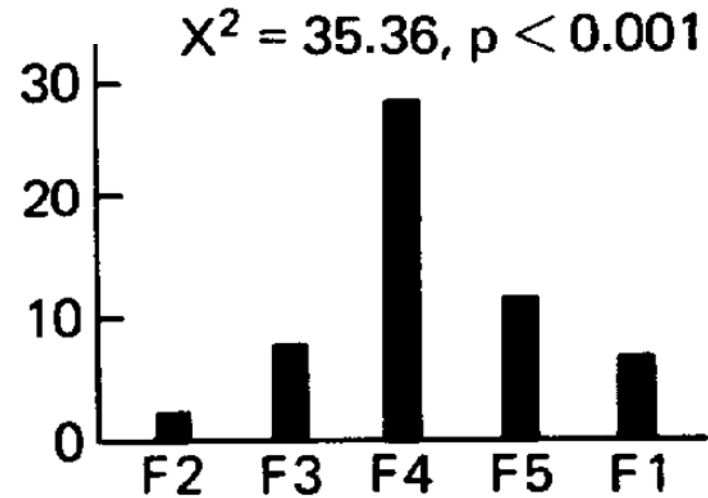
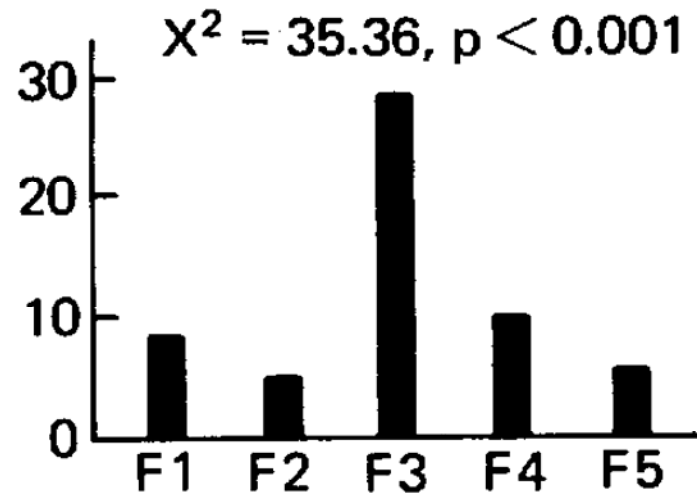
SAME-SEX STIMULUS GROUPS

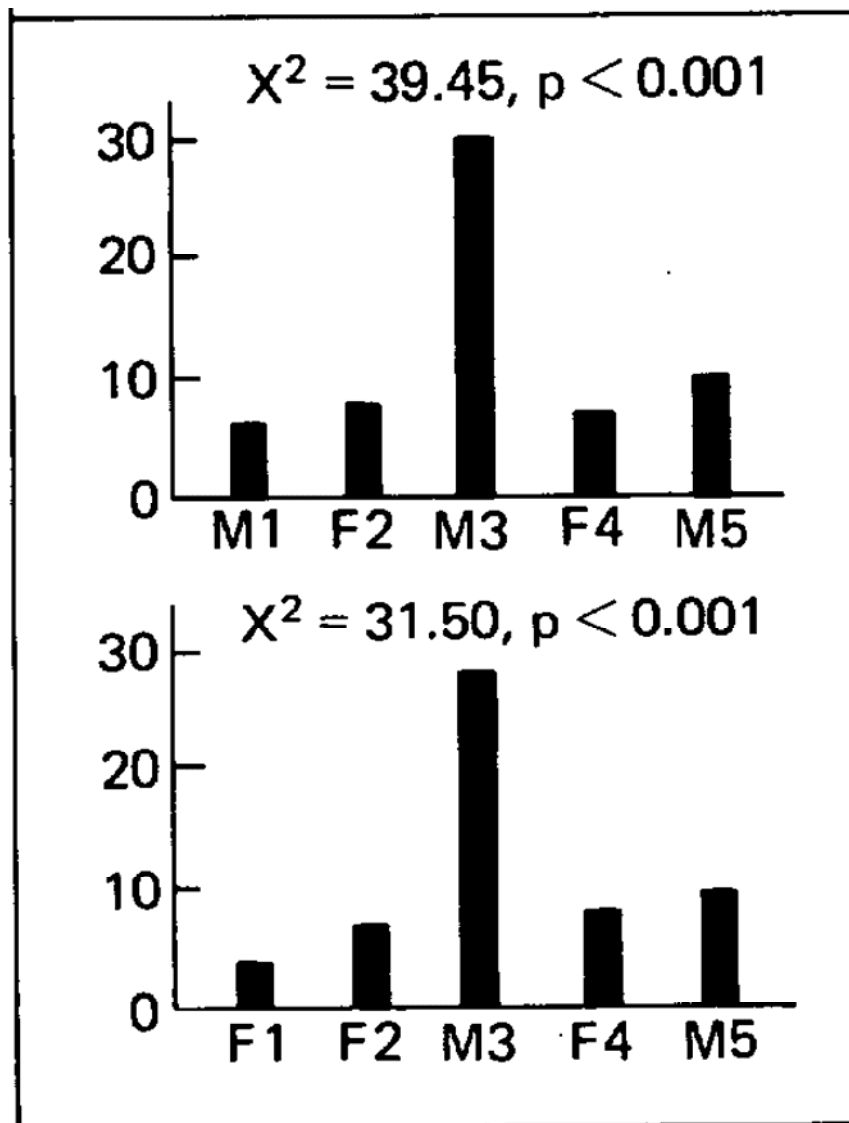
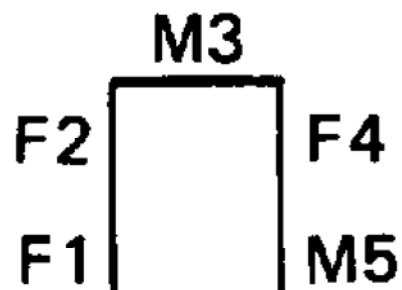
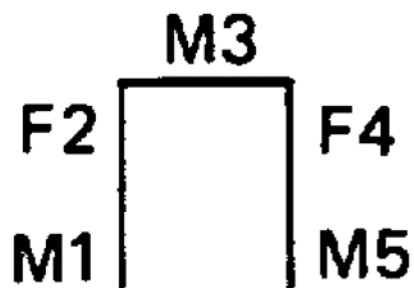


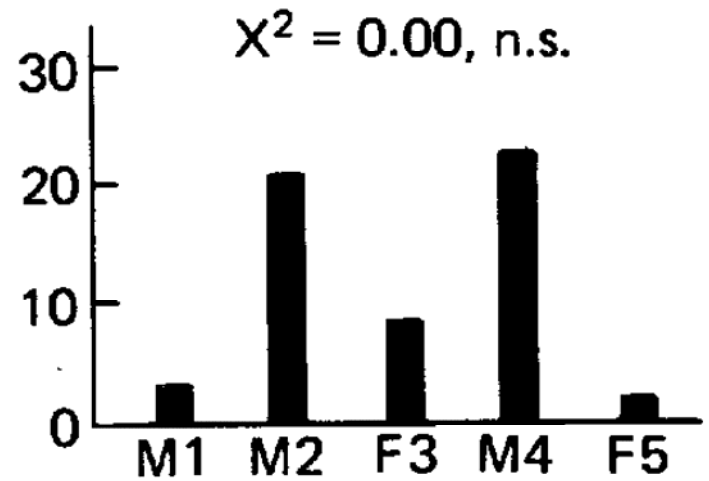
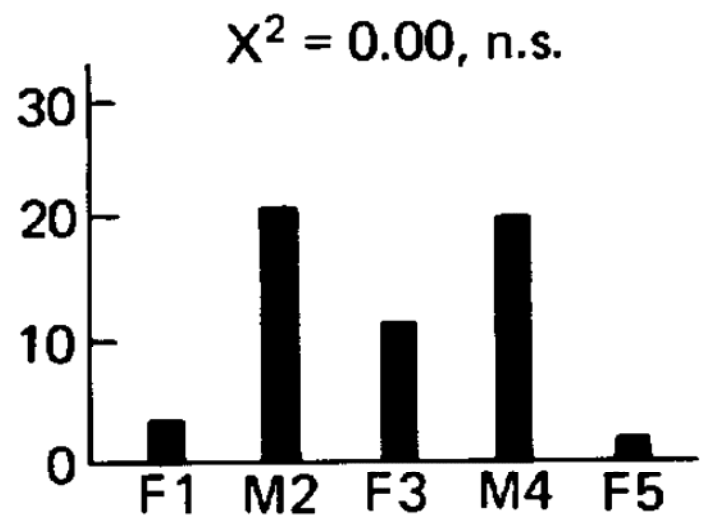
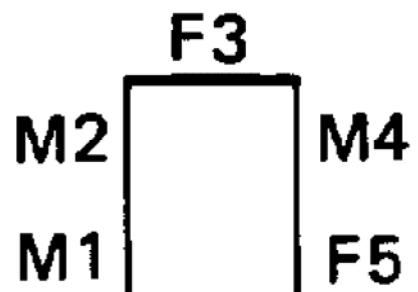
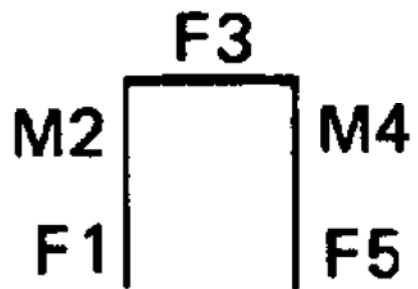
# FEMALE



# FEMALE









## Unconscious bias in the search process: Evaluation of Leadership/Competence

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- Finding not affected by conscious beliefs
- For female leaders, “warmth” negatively correlated with leadership





# Unconscious bias in the search process: Evaluation of Leadership/Competence

## *Prescriptive Gender Norms*

### ■ Men

- Strong
- Decisive
- Assertive
- Tough
- Authoritative
- Independent



### ■ Women

- Nurturing
- Communal
- Nice
- Supportive
- Helpful
- Sympathetic



# Unconscious bias in the search process: Evaluation of Leadership/Competence

- Evaluate fictional Assistant Vice Presidents
  - Male-assumed job—company makes engine products and other AVPs are men
  - Rated under two conditions: performance clear and performance ambiguous
  - Characteristics rated:
    - Competence, personality, likeability, interpersonal hostility



# Unconscious bias in the search process: Evaluation of Leadership/Competence

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- Competence
  - Performance clear—no gender difference
  - Performance ambiguous—women less competent
- Likeability
  - Performance clear—women less likeable
  - Performance ambiguous—no gender difference

*Only women were “unlikable” for being competent at their jobs!*



# Overcoming unconscious bias—best practices

- Learn about research on biases and assumptions—consciously strive to minimize influence of unconscious tendencies on your evaluations Kruglanski and Freund 1983
- Spend sufficient time evaluating each applicant Martell 1991
- Reach out to applicants from under-represented groups individually Wenneras & Wold 1997



# Overcoming unconscious bias—best practices

- Do not depend too heavily on any one element of a portfolio  
Trix and Psenka 2003
- Develop evaluation criteria prior to evaluating candidates and stick to the criteria. Periodically review evaluation decisions and ensure that criteria continue to guide the selection of candidates.  
Biernat and Fuegen 2001
- Switch the gender/race “thought experiment”  
Valian 1998



# Ensure a fair and thorough review of candidates

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- Evaluation criteria
- Conduct review in stages
- Communicate with applicants

*More "nuts and bolts"*



# Develop and implement an effective interview process

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- Plan for an effective interview process
  - Articulate interview goals
  - Avoid inappropriate questions
  - Provide candidates with information
- Ensure that unconscious bias and assumptions do not enter the interview process

*Do not underestimate the damage a candidate's bad interview experience can do to your department*



# Delivering the message to search committees

- Active learning
  - Literature on teaching and learning shows that people learn best when *engaged*
  - Faculty take the message more seriously when they are hearing it from a peer than from somebody “outside”
- Presentation of data
  - Firmly-held beliefs can only change when data are presented to counter those beliefs
- Variety of formats, venues, styles





## Success?

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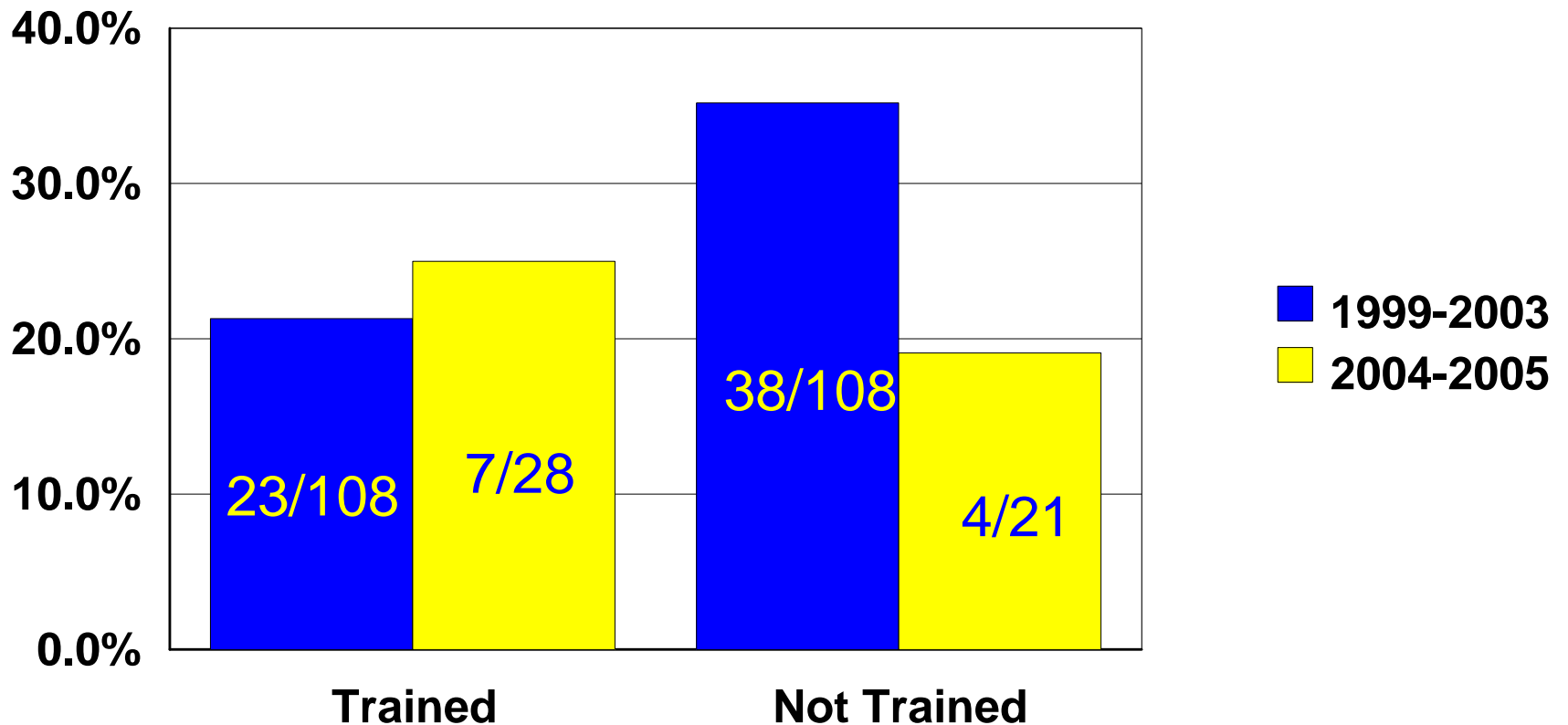
- Run approximately 17 sessions for over 90 individuals per year
- Evaluation results:
  - ~60% of attendees report being "attentive to possible biases implicit in the criteria used to review candidates"
  - ~60% of attendees report "sharing information about research on biases and assumptions with their search committees"
  - 90% of attendees reported feeling "prepared to address diversity hiring assumptions" after participating in the workshop

# Percent Female, Offers Made to Assistant Professors Biological & Physical Sciences



NOTE: "Trained" departments sent at least one faculty member to a WISELI hiring workshop or meeting.

# Percent Female, New Assistant Professors Biological & Physical Sciences



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