



SUCCEED Committee

Supporting UIC's Commitment to a Community of
Excellence, Equity & Diversity

*Evaluating the Accomplishments of Faculty in
Research, Teaching and Service
for Promotion and Tenure*

College of Engineering Executive Committee
10:00 AM December 2, 2011
838 SEO

SUCCEED's Mission

Supporting UIC's Commitment to a Community of Excellence, Equity & Diversity

To support UIC's commitment to creating a community of excellence, by assisting **search committees in their charge to identify, recruit & hire talented and diverse faculty**

We educate decision makers about research on unconscious bias and its influence on evaluations

TODAY we focus on the evaluation of accomplishments in the context of **promotion and tenure decisions**



Goals of this presentation

- to learn how to identify forms of bias – unreasoned and unfair distortion of judgment – that each of us may hold unconsciously as we enter into deliberations, permitting us to guard against their influence
- to diminish the likelihood that bias could play a role in deliberations
- to suggest procedural best practices which may help

Contributors to gender inequity

- Common misperceptions
- Lack of critical mass =>
- Gender schemas =>
- Evaluation bias =>
- Accumulation of disadvantage*

Effects of these aspects on institutions and human resources are well studied in the sociological literature.

Previous SUCCEED workshops have detailed the phenomena and presented the underlying research and evidence.

*Virginia Valian Why So Slow?

copyright Cynthia J. Jameson

Unconscious bias: Gender Schemas

- ❑ Gender schemas are non-conscious hypotheses about sex differences that guide **everyone's** perceptions and behaviors
- ❑ Expectations or stereotypes that define "average" members of a group:
 - ❑ Men are instrumental, task-oriented, competent
 - ❑ Women are nurturing, emotional, and care about relationships
- ❑ Schemas are necessary and efficient adaptive function
- ❑ Both men and women have the same schemas
- ❑ Problems arise when schemas that define the group do influence the evaluation of an individual's capability and their work: **Evaluation Bias**

Schemas in Action: Evaluation Bias

- ❑ **“Blind” auditions can explain 30 to 55% of the increase in women winning orchestral jobs**

Golden, C & Rouse, C. (2000). Orchestrating impartiality: The impact of “blind” auditions on female musicians. *American Economic Review* 90, 715-741

- ❑ **Letters of recommendation for women hired at a large academic medical center differ systematically from those for men hired. They were shorter and used gender terms & stereotypic adjectives, had more grindstone adjectives and fewer standout adjectives.**

Trix and Psenka (2003). *Discourse & Soc* 14:191 2003

- ❑ **University psychology professors prefer to hire “Brian” over “Karen” even though the CVs are identical**

Steinpreis, Anders & Ritzke (1999). *Sex Roles*, 41, 509

The impact of blind auditions on selection of women in symphony orchestras



Photo: Chicago Symphony Orchestra

“BEFORE”
Chicago Symphony Orchestra, Fritz Reiner
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Photo: Chicago Symphony Orchestra

"AFTER"

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Photo: Chicago Symphony Orchestra

Schemas in Action: Evaluation Bias

“Blind” auditions can explain 30 to 55% of the increase in women winning orchestral jobs

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Schemas in Action: Evaluation Bias

Letters of recommendation for women hired at a large academic medical center differ systematically from those for men hired.

Letters for women:

- **Shorter**
- **Fewer references to content of CV**
- **Twice as many gender references**
- **More references to personal life**
- **More grindstone adjectives**
- **Twice as many hedges and irrelevancies**
- **Fewer standout adjectives**

Trix and Psenka (2003). *Discourse & Soc* 14:191 2003

Semantic realms His vs. Her

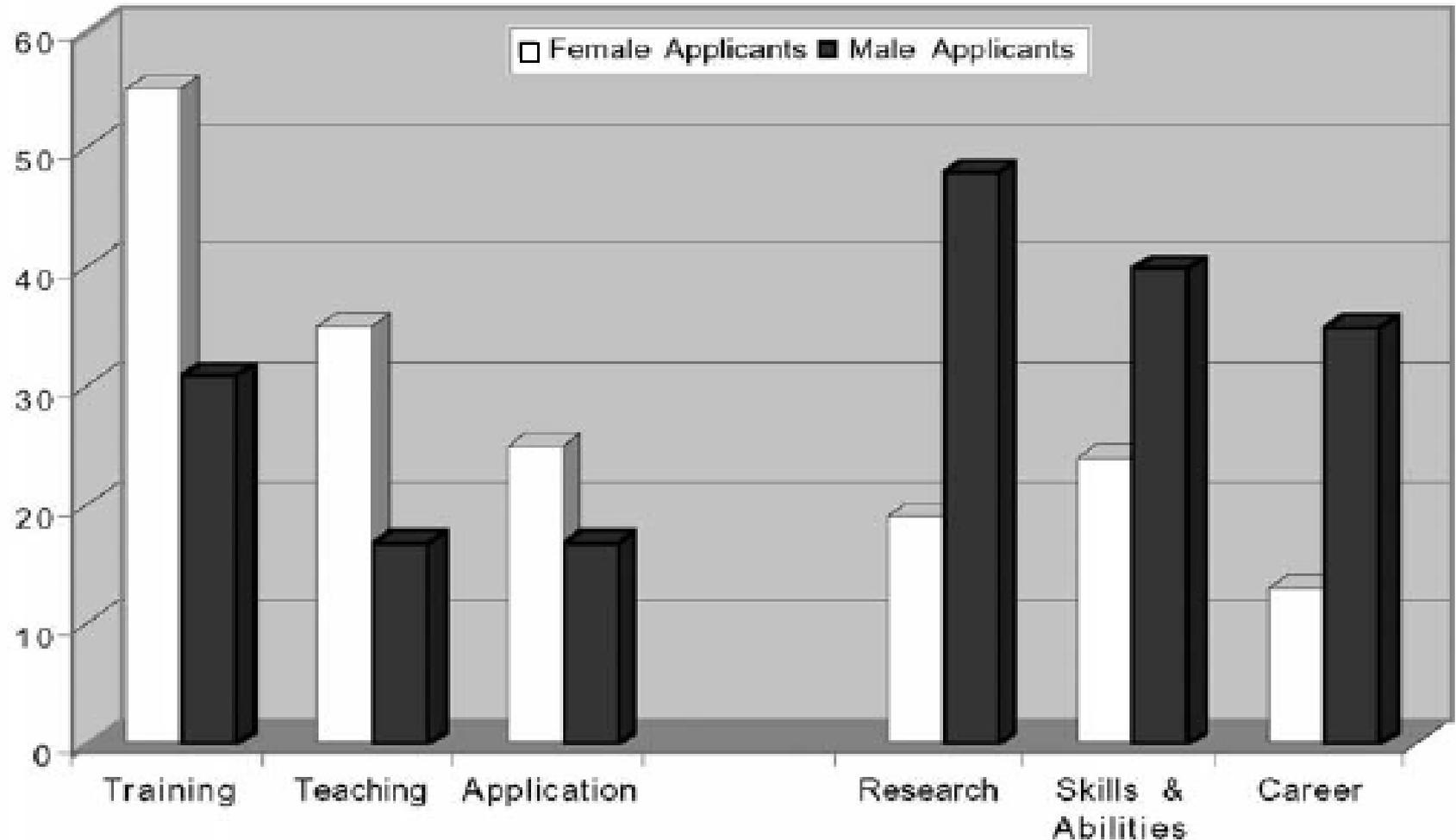


FIGURE 3. *Semantic realms following possessives. Rank-ordered within gender sets from equal numbers of letters 'her training'; 'his research'*

Semantic realms His vs. Her

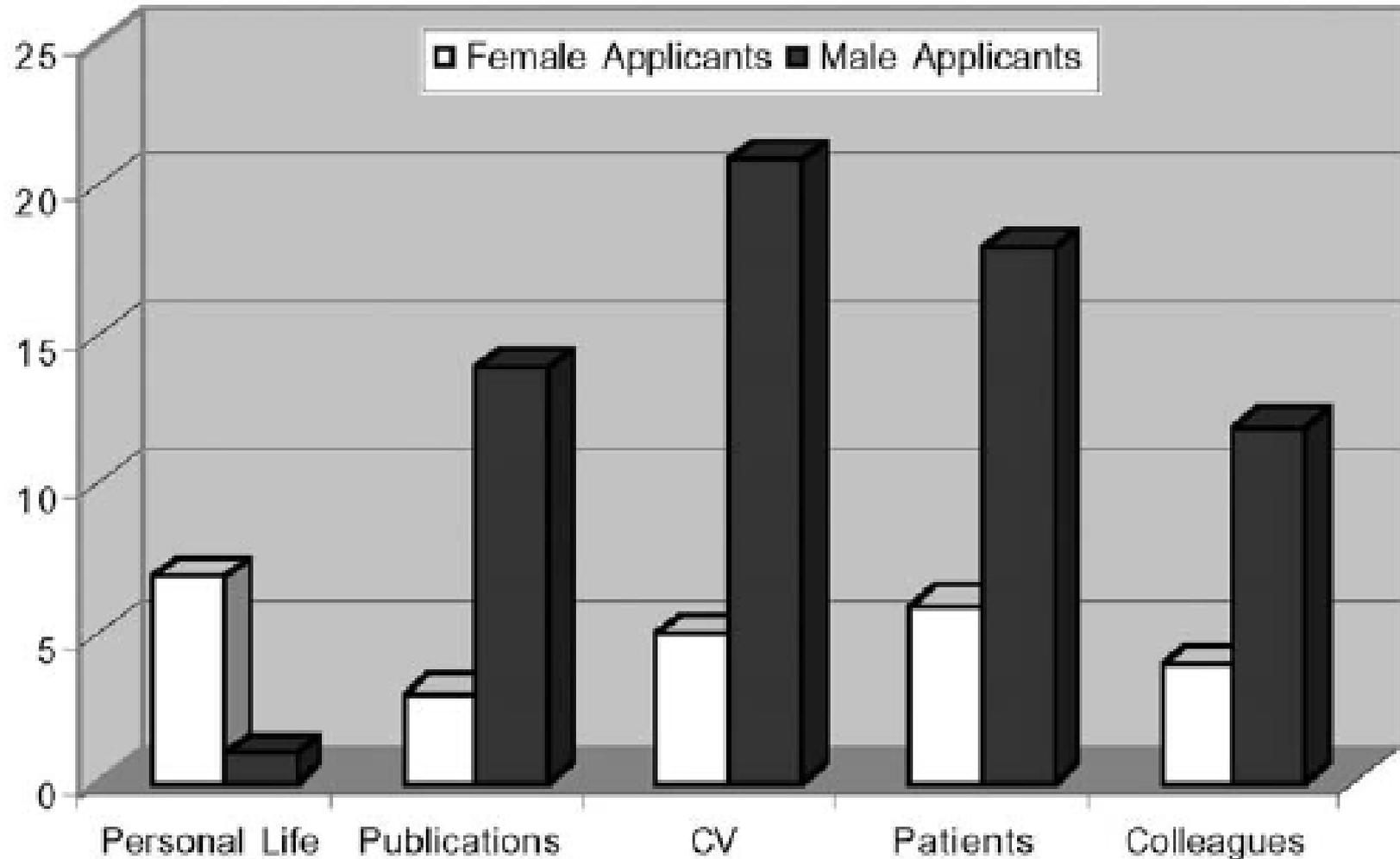
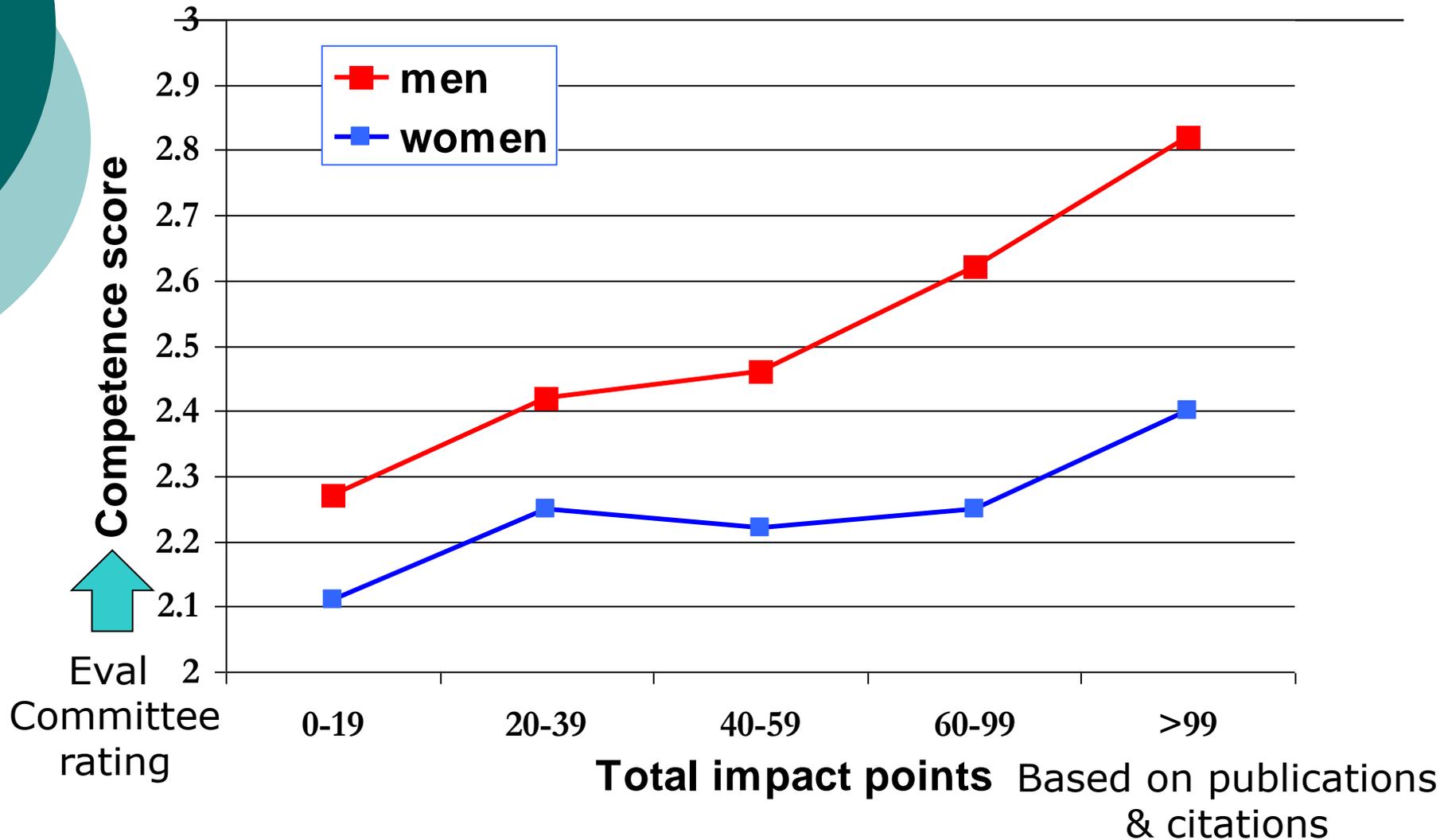


FIGURE 4. Distinctive semantic realms following possessives. Greatest contrasts across genders in equal number of letters 'her personal life'; 'his publications'

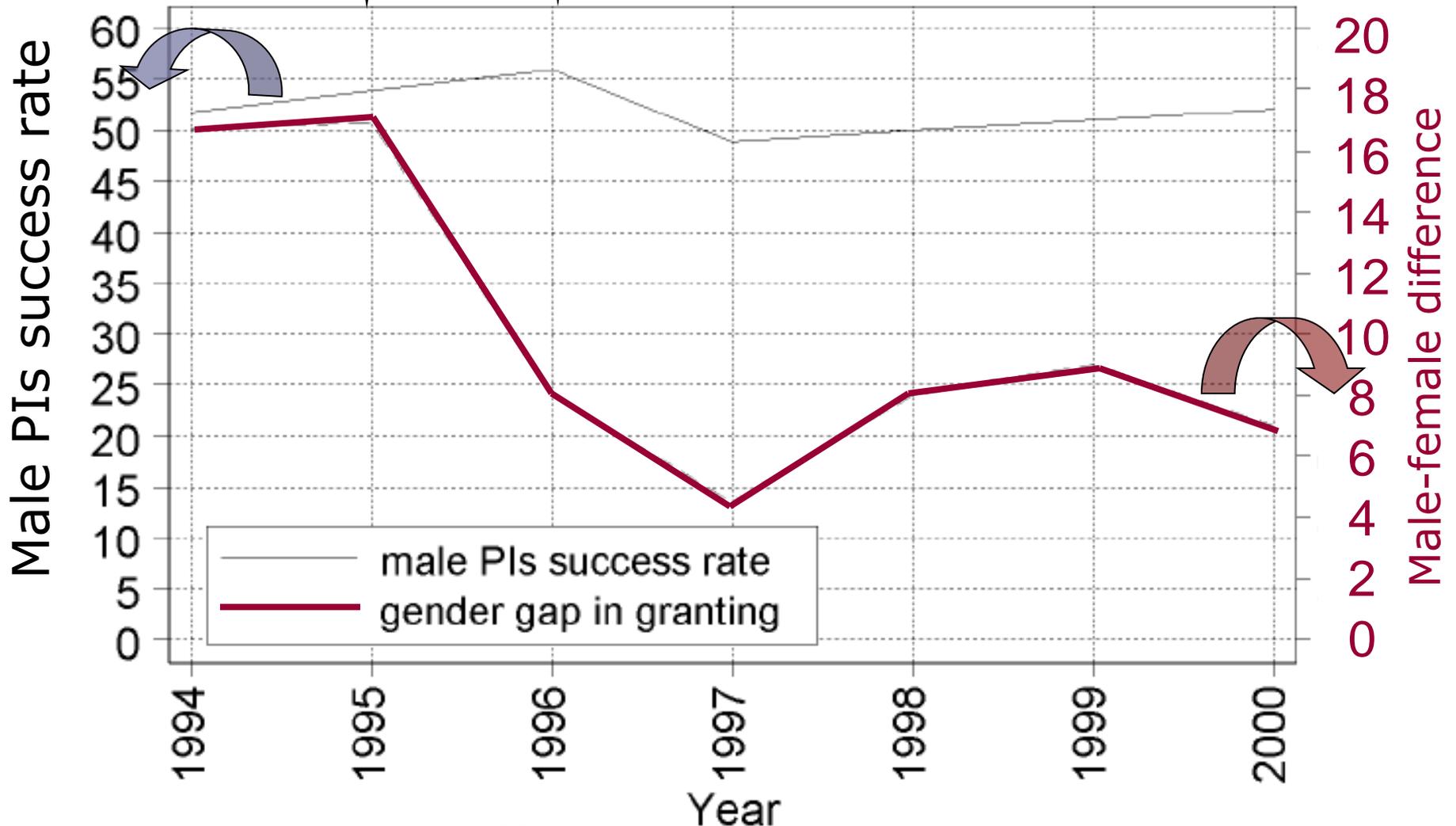
Evaluation bias

Wenneras & Wold (1997) *Nature* 387, 341



W&W publ

**Shift in policy, practices, procedures
in Swedish Medical Research Council**



“The WOLD effect on success rates in grants”

Wold effect...Nevertheless, scrutiny of scores versus measures of productivity reveals that bias remains

- *Number of publications*: The good news: rating scores increase with number of publications to a similar extent for male and female PIs.
- *Journal quality*: Male PI scores have smooth correlation against a measure of journal quality, but in the highest fraction of the impact score, female PIs are scored much lower than males.
- *Citations per paper*: The awarded score increases with this productivity measure for male PIs but not for female PIs. Instead, female PIs are awarded the same score regardless of this productivity measure.

Steinpries et al. The Impact of Gender on the Review of the CVs of Job Applicants & Tenure Candidates: A National Empirical Study

238 randomly selected faculty in depts of psychology divided into 4 , each with equal numbers of male and female faculty.

Used CV of highly successful (early promotion/tenured) psychologist and her earlier CV at time of hire.

Received Real CV of starting faculty named **Brian** Miller

Received Real CV of starting faculty named **Karen** Miller

Received Real CV of (tenured) faculty named **Brian** Miller

Received Real CV of (tenured) faculty named **Karen** Miller

Schemas in Action: Evaluation Bias

Would you hire this individual?

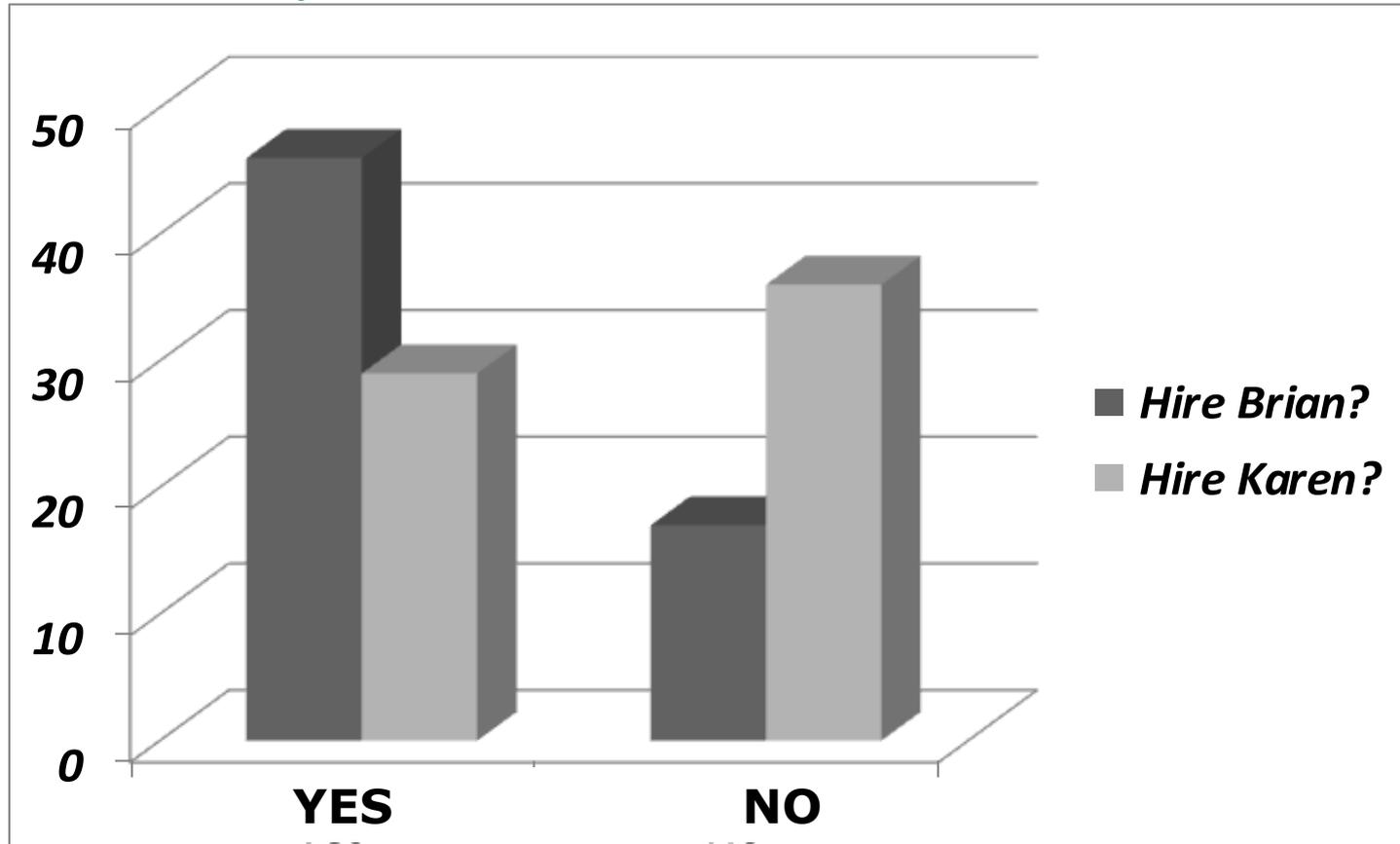
Actual starting faculty CV, doctored, changing only the name to either Brian or Karen

University psychology professors prefer to hire “Brian” over “Karen” even though the CVs are identical

Steinpreis, Anders, Ritzke (1999) *Sex Roles* 41, 509

Steinpreis, Anders, Ritzke(1999) *Sex Roles* 41, 509

Would you hire this candidate?

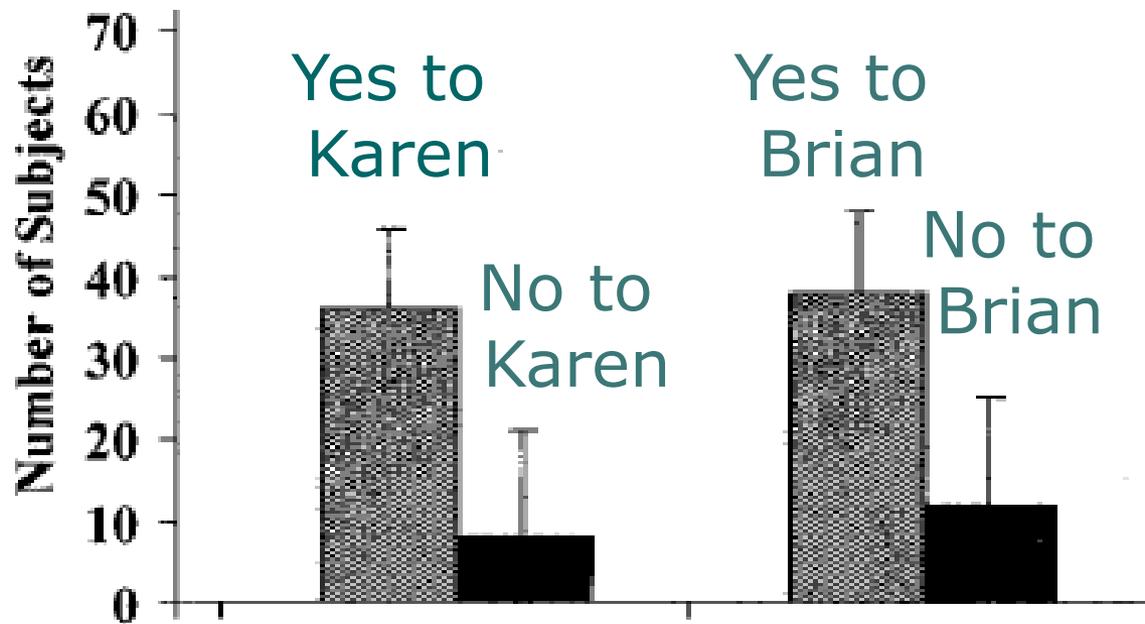


University psychology professors (50% male 50% female) prefer to hire "Brian" over "Karen", are twice as likely to reject Karen as Brian even though the CVs are identical

Steinpries et al. The Impact of Gender on the Review of the CVs of Job Applicants & Tenure Candidates: A National Empirical Study

- When university psychology professors examined the highly competitive CV of the real-life scientist who had gotten early tenure, they were **equally likely to tenure 'Brian' and 'Karen'**; no difference in their ratings of their teaching, research, and service.

Would you tenure this candidate?



Steinpries et al. The Impact of Gender on the Review of the CVs of Job Applicants & Tenure Candidates: A National Empirical Study

- ***But*** participants were **four times as likely to write cautionary comments** in the margins of their questionnaire if they had reviewed a 'female' tenure candidate than if they had reviewed the 'male' tenure candidate. These cautionary comments include such comments as, "We would have to see her job talk"; "It is impossible to make such a judgment without teaching evaluations"; "I would need to see evidence that she had gotten these grants and publications on her own". **Such cautionary comments on the male tenure candidate's vitae were quite rare.**

Hiring, Promotion and Tenure decisions: a Matter of Trust

- Subjective nature
- Confidential nature
- Unwritten nature of deliberations
- Secret ballot

The subjective nature of the hiring, promotion and tenure processes

- is likely to yield rationales for adverse decisions which on their face may seem legitimate, even when motivated by or influenced by bias

The objective evaluation of the quality of intellectual achievement is absolutely fundamental to each P&T case.

The confidential nature of the hiring, promotion and tenure processes

- does not permit possibility of outside neutral observers

The correction of inappropriate behavior by any member of the committee is therefore the responsibility of the other members

The unwritten nature of the deliberations and influence of committee dynamics

- no written record of verbal discussions within committees
- attribution of the decision to specific issues raised and how these issues were addressed in the discussion is sometimes not possible

Committee members should act honorably and with dignity, as if every single word is being recorded and attributed for posterity.

Promotion and Tenure Evaluations

- How may **unconscious** bias play a role?
- Our objective is to alert P&T committees to the possible difficulties in rendering fair evaluations of scholars who are “**not like us**”, as a more general concept of fair evaluation of women in fields dominated by men.

Areas where bias may come into play in the process of P&T evaluations

- Assigning credit in collaborative work
- “Tenure hold/rollback” or “personal leaves for family or medical reasons”
- Non-traditional scholar/field
- Inter-disciplinary work
- Interpreting split departmental votes
- Student evaluations of teaching
- External letters of evaluation
- Differential impact of service
- Two-body situations

Collaborative work, how to judge?

- Nowadays, collaborative work is the norm in many fields. When collaborations involve other investigators, ***ambiguity*** arises in assigning credit: who is responsible for the success of an excellent piece of work?

Research on evaluation of performance of male-female teams:

- When the successful performance information was about **joint work**, female team members were regarded by evaluators more negatively—as being less competent and as having less influence and having taken less of a leadership role—than their male counterparts.
- It was only when feedback based on **individual performance** was provided to evaluators that there was no differential evaluation of female and male members of the successful teams.

Heilman and Haynes, "No credit where credit is due: Attributional rationalization of women's success in male-female teams," *J. Appl. Psych.* 2005

How are you counting the papers (how much credit?)

Individual contributions statements now required in all Nature journals

- Example: 'All authors contributed equally to this work. A.C. and J.H.H. conducted the observations. A.C. reduced the data, and P.W.L. performed the Monte Carlo modeling. A.C. wrote the paper, and P.W.L. wrote the Supplementary Information. All authors discussed the results and implications, and commented on the manuscript at all stages.'

Candidate & external experts must clearly delineate what part of the work the candidate carried out and how significant a contribution this was to the overall work.

How are you counting the papers (how much credit?)

Collaboration with a spouse

- Collaboration with a spouse is more common for women than for men for statistical reasons (83% of women scientists in academic couples are partnered with another scientist, compared to 54% of men*)

Should view such collaborations the same as collaborations with unrelated peers

*Clayman Institute, Stanford University, 2006
Dual-Career Academic Couples: What Universities Need to Know.

“tenure hold”, “tenure rollback” “personal leaves for family or medical reasons”

- Do we accept such leaves or do we view them as indicators that the individual might not be committed and focused as a scientist, engineer, or scholar?
- Do we genuinely understand that stopping the tenure clock means that year(s) should not be counted, or do we unconsciously increase our expectations and add another year(s) to the denominator when calculating the quantity of publications since the last personnel action?

Staying of the provisional tenure period is intended to ensure equity in the tenure system and should not, in any way, penalize or adversely affect the faculty member during a tenure review

Early decisions before tenure code 6

- Do we expect much higher achievements from a candidate coming up for an “early” tenure decision?
- Or do we use the same bar for all?

Judge achievements as to whether or not they reach a level of academic standards that merit promotion and tenure, **with no penalty for getting there in a shorter time.**

What are the norms for the subdiscipline of the candidate?

- Peer-reviewed journal articles, or high-profile conference presentations rather than a book?
- Is the level of funding above or below average for the discipline?
- Working in teams or independent investigation?
- Engaging in design or synthesis –oriented research rather than hypothesis-driven research?
- Engaging in entrepreneurial activities?

Judge according to the expectations and the norms for the subdiscipline of the candidate

Pitfalls and biases in evaluating interdisciplinary work:

- To their critics, interdisciplines are often regarded as an escape from the scientific rigors of core disciplines.
- The number and variety of faculty working on a single project further increases the difficulty of delineating individual contributions.
- P&T process may not properly review and value contributions at the intersections of well-established, traditional fields. **As long as the default thinking is *departmental and disciplinary*, interdisciplinary scholarship will be disadvantaged.**

Still demand excellence, but respect differences between disciplinary and interdisciplinary scholarship.

Interpreting split votes

Summary from the department head becomes particularly important when:

- *traditional metrics do not apply*, for example in non-traditional scholarship.
- *departmental votes are split*

Do not speculate about the reasons for the split votes. **Look with a fresh eye at the P&T document and make your own judgment.** As reviews make their way upward through the levels of the process, **both the written text and vote at a lower level should be considered as a form of advisement, not a license to rubber stamp the earlier conclusion.**

Measuring teaching effectiveness

- Ideally we should measure the ability of the student to do the next stage that the course was intended to prepare him for, e.g., how well did the students do in the next course for which this one was the prerequisite? how well did the students do in graduate school? upon employment?
- SET questionnaires

Student evaluations of teaching: should not be taken at face value

- An objective measure of "good teaching" (viz., a student's performance on a calculus test) **anticorrelates** with a subjective measure of "good teaching" (viz., a student's evaluation of the professor), holding constant the student's initial ability in calculus*
- Research studies document that irrelevant factors can greatly affect SET results**

*Student evaluations of teaching: are they related to what students learn? Clayson, 2009, *J Marketing Educ* 31, 116-30;
Student evaluations of teachers, Rodin & Rodin, 1972, *Science*, 177, 1164-1166.

** Bias, the brain, and student evaluations, D. J. Merritt, 2008, *St. John's Law Review* 82, 235-287.

Gendered expectations may play a role in student-teacher interactions

- Challenges to female professor's mastery of the subject during lectures, esp. in fields where women are underrepresented*
- Expectations of extensive nurturing (tutoring beyond office hours, deadline extensions,...) from female compared to male faculty
- Study showed student descriptives for disliked female teachers are personal attack words: *bitch, feminazi, witch*, with no counterparts for disliked male profs **

**Gender Stereotyping: Student-Faculty Interactions* Feb 18, 2010 UIC Town Hall vignettes; Bernice R. Sandier, *Women faculty at work in the classroom*, Commun. Ed. 40, 1991

**Sprague & Massoni, *Student Evaluations and Gendered Expectations: What We Can't Count Can Hurt Us*, Sex Roles, 2005, 53, 779-793

... not only gender

- Professors of color have published poignant accounts of harshly negative student evaluations
- *"The complaints are never-ending, voluminous, and contradictory. I talk too loud or not loud enough. I walk too close to people and make them nervous. If I look at students, they are nervous. If I do not look at them they are angry. If I call on them, I am picking on them. If I do not call on them, I have a personal vendetta against them"**

Pamela J. Smith, *Teaching the Retrenchment Generation: When Sapphire Meets Socrates at the Intersection of Race, Gender, and Authority*, Wm. & Mary J. Women & L. 53, 162–63 (1999).

Student evaluations should not be the only basis for P&T evaluation of teaching

- “Overall rating of teaching effectiveness” is **ambiguous** in comparison to specific attributes (fairness of grading policies, text quality, professor organization, course goals, professor accessibility, ...), yet this overall number is the single number often reported from SETs.
- Use of **single number**=“overall rating of teaching effectiveness”, without taking into account the many factors which influence SETs, can be seriously misleading. *Ambiguity* and short response time permits stereotypic schemas to affect evaluations by students

Use all the information in the P&T document

Outside letters of evaluation

- Examine the professional relationship between letter writer and candidate
- When expert reviewers present a balanced evaluation of both strengths and weaknesses, do not focus on the one “damning” phrase
- Remember the Trix & Psenka findings about gendered letters of evaluation
- Outside letters are provided as a professional courtesy; refusal to perform this service should **not** be taken as a negative statement about the candidate
- Outside letters provide some experts’ views of the significance and impact of the candidate’s scholarship, to be balanced with other evidence

Differential impact: service

- Assignment of committee and other service duties can be a heavy burden for the woman or minority expected ***to provide diversity to committees, to provide diversity to the university/college image in recruitment of faculty and students***
- ***This is generally where women and minority faculty are unfairly taken to task for not saying “no” to excess service, when saying “no” is not a real option for them.***
- Advising and helping students (not only women/minority students) can be a heavier burden for underrepresented faculty, particularly women, because gendered expectations of students create **increased demands on women faculty.**

Academic roles of the faculty in **research, teaching and service** are all important to the institution. **Consider the entire package!**



Two-body situations

- Information related to the performance of the companion **should not affect** the deliberations of tenure and/or promotion of the other.

Is it ever permissible to use information external to the P&T documents?

- As a matter of principle, information that cannot be confirmed by other individuals on the committee based on *independent sources* of the information, should be considered as **rumor** and should not be woven into the tapestry of P&T discussions
- Examples of information that can be confirmed:
 - citation frequency [ISI or Google Scholar or Scopus citations]
 - A*, A, B, or C rating of conferences of computer scientists
 - Impact factor of a journal
- No-no: “I heard his Ph.D. student said (uncomplimentary..)

When inappropriate information is brought up, it is the obligation of all the other committee members to point this out and redirect the discussion.

What Can P&T Committees Do?

- ❑ Spend sufficient time evaluating each applicant; schemas have less power when more time is spent with a candidate
- ❑ Use objective criteria for scholarship quality
- ❑ Judge collaborative work fairly
- ❑ Tenure hold or family leaves during probationary period should not be considered as negative factors or as evidence of lower commitment to academic career
- ❑ Respect the differences between disparate disciplines
- ❑ **Look at the entirety of the package rather than concentrating on one or two details**

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- We are tenured faculty members committed to the same goal as all of you: for UIC to hire, **retain and advance the best faculty**
-

THANK YOU!!
SUCCEED Committee

Supporting UIC's Commitment to a Community of Excellence, Equity & Diversity