Creating an Inclusive Culture at Work—A View from Psychology

Academic institutions claim to represent core social values

- Search for truth
- Freedom to pursue all ideas
- Respect for knowledge and expertise
- Valuing of creativity and innovation
- Commitment to merit
- Access/Inclusiveness



- Problems in judging merit
- Exclusionary practices

Creating inclusion

 Access is precondition for merit; fair judgments of merit are precondition for access

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- Structural issues affect who applies/has access
 - Differential information
 - Differential preparation
 - Culturally-shared schemas

Access (part of inclusion) linked to merit via judgment

Merit hinges on accuracy of judgment



- Academy requires many judgments of merit
 - Many informal judgments
 - Formal, consequential judgments
 - Of particular work (papers, books, grant proposals)
 - Of students in course of education
 - Of scholars over course of career

Judgments of merit are intrinsically complicated

- Early on, include an element of forecast
 - Admission of students (to college, to major, to graduate school, etc.
 - Hiring of faculty
 - Tenure and promotion of faculty

- Forecasts always include uncertainty
 - Weather
 - Earthquakes
 - Elections
 - Athletic competitions
 - Feelings

Two threats to the validity of our forecasts

- Fundamental attribution error
 - Incomplete information
 - Overvaluing of some information
 - Attribution to person rather than situation
 - GPA vs. information about leniency of grading
 - Just World/Blaming the Victim
- Tendency to attribute success and failure to person

- Reliance on group based schemas/"implicit biases"
 - Resume studies demonstrate reliance on these schemas in hiring, salary setting, promotion
 - Applies to gender, race, sexuality and parental status
 - Some research on fellowships and grant applications
 - Leadership outcomes

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Probably cannot totally remove the influence of schemas

- Screens help with musical auditions
- "Blind review" may help (but so many internal cues make this difficult)
 - Evidence people search for cues even when blind
- More information does help
 - "individuating" information reduces reliance on schemas
 - schemas still have an effect



Many other irrelevant factors influence judgment: Halo effects

- Halo effects
 - Appearance/likeability affects other judgments
 - One performance influences judgments of others
 - Influence of own mood



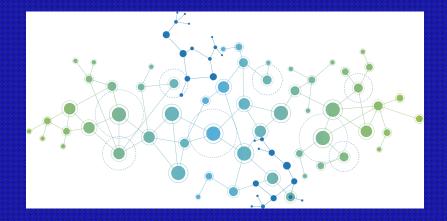
Reliance on proxies for excellence: prestige (special case of halo)

- Prestige of institution predicted fate of resubmitted papers
- Structure of faculty hiring networks
 - 461 doctoral departments in North America (history, computer science, and business)
 - 19,000 faculty in those departments
 - 86% had received doctorate at one of the sample departments
 - 25% of the institutions produced 71-86% of the faculty
 - Top 10 institutions produce 1.6 to 3 times more faculty than the next 10, etc.
 - Only 9-14% of faculty are placed at institutions more prestigious than their degree

Peters, D. P. & Ceci, S. J. 1982. Peer-Review Practices of Psychological Journals: The Fate of Published Articles, Submitted Again. *Behavioral and Brain Sciences*, 5, 187-255. Clauset, A., Arbesman, S., & Larremore, D.B. (2015, 12 February). Systematic inequality and hierarchy in faculty hiring networks. *Science Advances*.

Reliance on proxies for excellence: networks

- Networks play an important role in scholarly circles
- Homophily: "similarity breeds connection"
 - Affects nature of networks
 - Women have more women in their networks
 - Men have more men



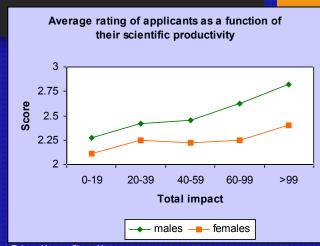
Belle, D., Smith-Doerr, L., & O'Brien, L.M. (2014). Gendered networks: Professional connections of science and engineering faculty (153-175). In V. Demos, C.W. Berheide, & M. Texler Segal (Eds.), Gender Transformations in the Academy (2014). UK: Emerald Group.

Evaluation of fellowship applications: Gender

"...the success rate of female scientists applying for postdoctoral fellowships at the [Swedish Medical Research Council] during the 1990s has been less than half that of male applicants."

Women applying for a postdoctoral fellowship had to be 2.5 times more productive to receive the same reviewer rating as the average male applicant.

"Friendship bonus": applicants affiliated with a committee member rated higher. Friendship and Gender had similar size effects.



Similar findings:

- USA/GAO report on *Peer Review in*Federal Agency Grant Selection (1994)
- European Molecular Biology Organization Reports (2001)
- NIH Pioneer Awards: Journal of Women's Health (2005) & Nature (August 2006)

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

Persistent impact of "nepotism" in peer review (homophily? proxy for excellence?)

- 10 years later estimated impact of gender and reviewer affiliation on research grants in Medicine
 - Gender no longer significant after practices altered
 - Reviewer affiliation equally significant

Sandström, U. & Hällsten, M. (2008). Persistent nepotism in peer-review. *Scientometrics*, 74(2), 175-189.

Belief in our own expertise at decision-making

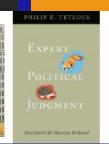
- Tetlock study of expert political pundits' predictions
 - Worse than chance
 - Specialists worse than non-specialists
 - Resisted admitting wrong
- Kahneman
 - Experts rely on ("fast") intuition more than "slow" (deliberate) process and have high confidence
 - · Intuition is reliable when based on
 - An environment that is regular and predictable (a "high-validity" environment)
 - Opportunity for prolonged practice
 - Fields differ
 - Compare Anesthesiology vs Radiology



THINKING.

Kahneman, D. (2011). Thinking, fast and slow. NY: Farrar, Straus and Giroux.





Some internal factors help some

- Recognition of uncertainty
- Commitment to consider role of situation in producing outcomes
 - Access to resources (human, time, and material)
 - Accumulation of advantage and disadvantage
- Examination of own process of developing opinions
 - Acknowledgment of irrelevant reactions/interpretations
 - Explicit consideration of alternative interpretations
 - Search for evidence to help decide
- Lower confidence in judgments

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Thorngate, W., Dawes, R.M., & Foddy, M. (2009). Judging merit. NY: Psychology Press.
Ross, H.J. (2014). Everyday bias. NY: Rowman & Littlefield.
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Our judgments can be improved

- Some situational factors help
 - Comparative pool (haloes very likely when no comparisons)
 - Enough information
 - · Avoidance of "evidence" that is likely to include bias
 - Avoidance of proxies for excellence
- Some situational constraints help
 - · Establishment a priori of detailed criteria that can be observed
 - Reliance on specific evidence in judging each criterion
 - Avoidance of halos, intuition, and global judgments
 - Disciplined evaluation of criteria across individuals
 - If a group process
 - Diversity in group membership
 - Enough time
 - Explicit process for correcting inaccuracies

Thorngate, W., Dawes, R.M., & Foddy, M. 2009). Judging merit. NY: Psychology Press.

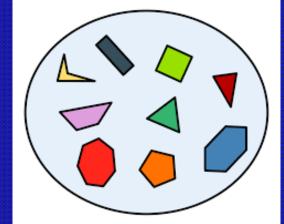
Can adopt practices that enhance equal access

- Development of fuller information and careful distribution of it
 - For admissions
 - For applications for all positions (more careful directions to applicants)
- Education of faculty about the importance of adopting careful practices to enhance fair judgment
 - Assess practices that may introduce biases
 - Include more reliance on good evidence
- Adoption of practices that enhance fair judgment
 - One thing leads to another: bystander education

Creating Inclusion

Once have access, success depends on additional factors

- Capacity for fair judgments within institution
 - Practices that increase likelihood
- Others' expectations (implicit biases)
 - Patronizing feedback vs. "wise" feedback
 - Absence of stereotype threat
 - About performance
 - About potential racism/sexism/homophobia, etc.
- Sense of belonging



Practices that Create Inclusion

Capacity for fair judgments

· Practices that increase likelihood

Others' expectations (implicit biases)

- Patronizing feedback vs. "wise" feedback
- Absence of stereotype threat
 - About performance
 - About potential racism/ sexism/homophobia, etc.

Sense of belonging

- Adopt fair evaluation practices
 - Explicit transparent criteria
 - Multiple performance opportunities
- Educate faculty and graduate students on how to give wise feedback and danger of patronization
- Reduce ambient cues of not belonging
- Increase ambient cues linking success with people with many different social identities'
- Normalize anxiety about performance

Optimal feedback: "wise" mentoring

 Black and White students both reported enhanced identification with skills and careers, when mentors:

- Provide critical feedback, and at same time:
 - Invoke high standards
 - Express confidence student can meet them

Cohen, Steele & Ross, 1999



Making Changes Stick

- Focus on policies and practices.
- Adopt changes widely, provide educational and informational support widely and quickly.

 Increase chances of living up to academic ideals and having institutions that reflect them

An Inclusive Academy

Achieving Diversity and Excellence

Abigail J. Stewart and Virginia Valian

MIT Press, 2019