NDEW 2019



Barriers to Diversity and Inclusion

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Diversity Training - Positive or negative impact?

Addressing Barriers

"Hundreds of studies have now challenged the received wisdom that *antibias training* is the first step employers should take in promoting diversity."



Prof. of Sociology Harvard University "A review of those studies shows that anti-bias educational efforts produce *negligible change in attitudes,* and have **never** been shown to diminish workplace discrimination."

"Overall....Mandatory diversity training has a *negative effect.*"

Like NDEWs, D&I conversations have to be Peer-To-Peer, not "Training" by "experts."

Dobbin, Frank, and Alexandra Kalev. 2014. "Why Firms Need Diversity Managers and Task Forces". Pp. 170-198 in How Global
Migration Changes the Workforce Diversity Equation, edited by M. Pilati, H. Sheikh, C. Tilly, and F. Sperotti. Newcastle: Cambridge Scholars Publishing.



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Color Blindness: A strategy to address Diversity Equity?

Treat all individuals the <u>same</u> regardless of any visible or invisible differentiators such as membership in a particular URG - to ignore or minimize diversity differences

- Implementing a colorblind approach is "easy" avoid talking about URG status and don't risk saying something wrong!
- The consequences of Color Blindness tend to be ironic:*
 - Explicit and implicit biases tend to increase
 - Participants in a colorblind setting felt isolated
- Hiring the "best" with a color blindness lens not only negates an individual's color it also negates their qualities thus diminishing the inclusive excellence we seek.

We need to be color-aware, not colorblind

- * Apfelbaum, EP *et. al.*(2008), Impression management strategy to avoid being seen as prejudiced, Journal of Personality and Social Psychology, 95, 4, 918-932
- * Knowles, (2009), On the malleability of ideology: motivated construals of color blindness, J. Pers. Soc. Psychol., 96, 4, 857-869
- * Plaut, V. C.; Thomas, K. M.; Goren, M. J. Is Multiculturalism or Color Blindness Better for Minorities? Psychol. Sci. 2009, 20, 444–446.



Schemas

Hypotheses used to make sense of the world which can be positive, neutral or

negative*

E.g. Faculty beliefs about intelligence predict racial achievement gaps in STEM classes+ This suggests Growth Mindset vs Fixed Mindset as a better Schema



*V. Valian, "Beyond Gender Schemes," NWSA 16, 1 (2004).

+E. Canning, K Muenks, D.J. Green, M.C. Murphy "STEM faculty who believe ability is fixed have larger racial achievement gaps and inspire less strident motivation in their lasses", Science Advances Vol.5, no. 2 (2019).



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Schemas

Examples in chemistry

Evaluation and Hiring:

- Two possible schemas: Did you hire *Professor Star* and *Professor Maybe* as and assistant professor?
- How did you decided whether your hired *Professor Star* and *Professor Maybe*
 - Did you use pedigree (as a surrogate for excellence)?
 - Did you weigh their choice of research area or discipline as a surrogate for their quality?
 - Did you use Gender & Racial Schemas?
 - E.g. did you hire one of them as an "opportunity hire", and only because you got an extra line for it?
- How do you corresponding treat *Professor Star* and *Professor Maybe* differently, if at all?
 - Do you ask them to prove themselves by not providing any additional support?
 - Do you go out of your way to champion them everywhere you can?



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Microaggressions

Reminds an out-group member ("them") that he/she/they is not fully embraced by the in-group ("us")



Daniel Solorzano, University of California, Los Angeles, "pointed out that students and faculty of Color experience and *respond to the university climate* very differently from the *perceptions of their majority counterparts*. His research shows that many of the interactions URM have with majority group members

Very <u>small differences</u> in treatment can, as they **accumulate**, have <u>major consequences</u> in salary, promotion, and prestige, including advancement to leadership positions. [Not that accumulation of bias is itself a barrier]

Constantine, M. G. (2007). Racial microaggressions against African American clients in cross-racial counseling relationships. Journal of Counseling Psychology, 54(1), 1-16.

*"Workshop on Excellence Empowered by a Diverse Academic Workforce: Achieving Racial & Ethnic Equity in Chemistry" (DOE/NSF/NIH Report) http://chemchairs.uoregon.edu



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Microaggressions

Examples in chemistry

- Example 1: In a committee or faculty meeting, a senior faculty member identifies another as junior to them
 - This negates their view on the subject and diminishes their ability to contribute towards other discussions.
- Example 2: During faculty deliberations, a URG professor is asked to speak on behalf of their under-represented group, and not as a professor
 - This undermines their contributions as a peer and not recognizing the challenge of being held accountable as a representative of a group

Language matters



Solo Status

Impact of performance and outcome of being the only representative of a social category present*

Study on the effects of high and low status

- The lower your social status the more negatively impacted you are by solo status*
 - Women vs. Men
 - Black vs. White
 - White Female vs. Black Female vs.

* Sekaquaptewa & Thompson (2002) *Pers Soc Psychol Bull*, 28, 5, 694. + Shih, Pittinsky & Ambady (1999) *Psychological Science*, 10, 1, 80.



https://serc.carleton.edu/

"in spheres that have traditionally been male dominated, women may be evaluated more negatively simply because of their lower representation"



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Solo Status

Examples in chemistry

- Example 1: During the interview process interviewing a URG candidate in a room where the panel comprises of demographically homogenous majority senior faculty.
- Example 2: Singling out and being critical of a colleagues's performance and correlating it to the under-represented group they belong to.
 - [This uses a stereotype threat to identify their solo status and further reduces their ability to contribute.]

9 * Sekaquaptewa & Thompson (2002) Pers Soc Psychol Bull, 28, 5, 694.



Think-Pair-Share

Barriers: Retention URM

A junior URM professor is chosen for seven committees on your campus, with a mix of appointments within your department and across the university. All other junior faculty are on two committees.

Which of the following barriers does the faculty member face

- A. Schemas
- B. Microaggression
- C. Overburdening
- D. Solo Status



Tokenism

Refers to individuals (usually URGs) who are hired, admitted or appointed to a group because of their difference from other members (majority) as a "proof" that the group does not discriminate.*

- **Examples in chemistry** Female Faculty or URMs expected to host prospective faculty because of their URG background.
- Recommending and expecting a URG faculty to be a part of multiple committees besides • Diversity committees to show representation, but not necessarily placing them on the "important" committees



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Overburdening through Tokenism

Individuals are placed as tokens in multiple committees/ groups which adds additional service burden along with professional expectations.**



** Sackett, P. R.; DuBois, C. L.; Noe, A. W. Tokenism in performance evaluation: The effects of work group representation on male-female and White-Black differences in performance ratings, *J. Appl. Psychol.* **1991**, *76*, 263-267.



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Stereotype Threat

A disruptive concern that one will be treated, judged, or evaluated through the lens of negative group stereotypes in a particular setting

- Black and White students studied rare words*
 - nonthreatening conditions
 - threatening conditions.
- Participants recalled word definitions
 - half in a nonthreatening "warm-up"
 - half in a threatening "test."
- Black students performed worse on the test than on the warm-up.
- Black students who had studied in the threatening rather than nonthreatening environment performed worse even on the warm-up.
- White students were unaffected.

Example in chemistry



Example 1: Great White Wall

Nearly every department has a wall like this celebrating the past. How do we celebrate the past without jeopardizing the future?

C. M. Steelle, "Stereotype Threat and the Intellectual Performance of African Americans," *J. Pers. Soc. Psychol* **69**, 5 (1995).

*Taylor and Walton (2011), Pers Soc Psychol Bull, 37, 8,1055.



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Inclusive (Universal) Design

- Americans with Disabilities Act (ADA)
 - A physical or mental impairment that substantially limits one or more of the major life activities
- Is a design principle that entails creating products and environments that are usable by all people to the greatest extent possible without the need for accommodation or modification



www.istockphoto.com http://www.hamiltonbeach.com



4/8/2019

Opportunities for Inclusive Design

Examples in chemistry

- Example 1: Hard of Hearing
 - Faculty lectures that do not utilize microphones
- Example 2: Uniquely Abled
 - Limited handicap accessibility in buildings and laboratory



Implicit Bias

Prof. Frank Dobbin

"Implicit biases come from the culture. I think of them as the thumbprint of the culture on our minds. Human beings have the ability to learn to associate two things together very quickly— that is innate."*



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*Dr. Mahzarin R. Banaji, quoted in Hill, Corbett, & Rose, 2010

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Implicit Bias

Examples in chemistry

- Implicit bias expresses itself under non-ideal circumstances:
 - Time pressure
 - Ambiguous criteria or concept (e.g., "leadership", "competence")
 - Incomplete data
 - Competing tasks
 - Stress
 - Lack of critical mass prevents distinguishing as individuals
- Note that this conditions are typical of paper, grant and RPT review conditions.



Barriers to Diversity and Inclusion

Conclusion

- To advance Diversity & Inclusion, you need to know the barriers that individual and groups encounter
- We've listed a number of them that you can consider in creating policies and procedures moving forward
- At NDEW 2019, we will hear about additional barriers and nuances that we have not heard before

Implicit or Unconscious Bias Color Blind Schemas Accumulation of Bias Lack of Universal Design Insufficient Mentoring Insufficient/Unequal "Family Friendly" Policies **Overburdening the Few** Unwelcoming/Non-Accommodating Climate Unwelcoming/Non-Accommodating Professional Cultures Qualitative vs. Quantitative Assessment **Solo Status Stereotype Threat Minimizing Differences/Colorblindness** Depoliticization and Meritocratic Ideology

8 Hernandez and Watt, "A Top-Down Approach for Diversity and Inclusion in Chemistry Departments," in Career Challenges and Opportunities in the Global Chemistry Enterprise; ACS Symposium Series, Vol 1169, edited by H. N. Cheng, S. Shah, and M.L. Wu, Chapter. 19, pp. 207-214 (2014).