

# UNCONSCIOUS BIAS

---

*Humans...am I right?*

**THIS WILL BE UNCOMFORTABLE  
...AND THAT'S OK**



# IMPLICIT ASSOCIATION TEST

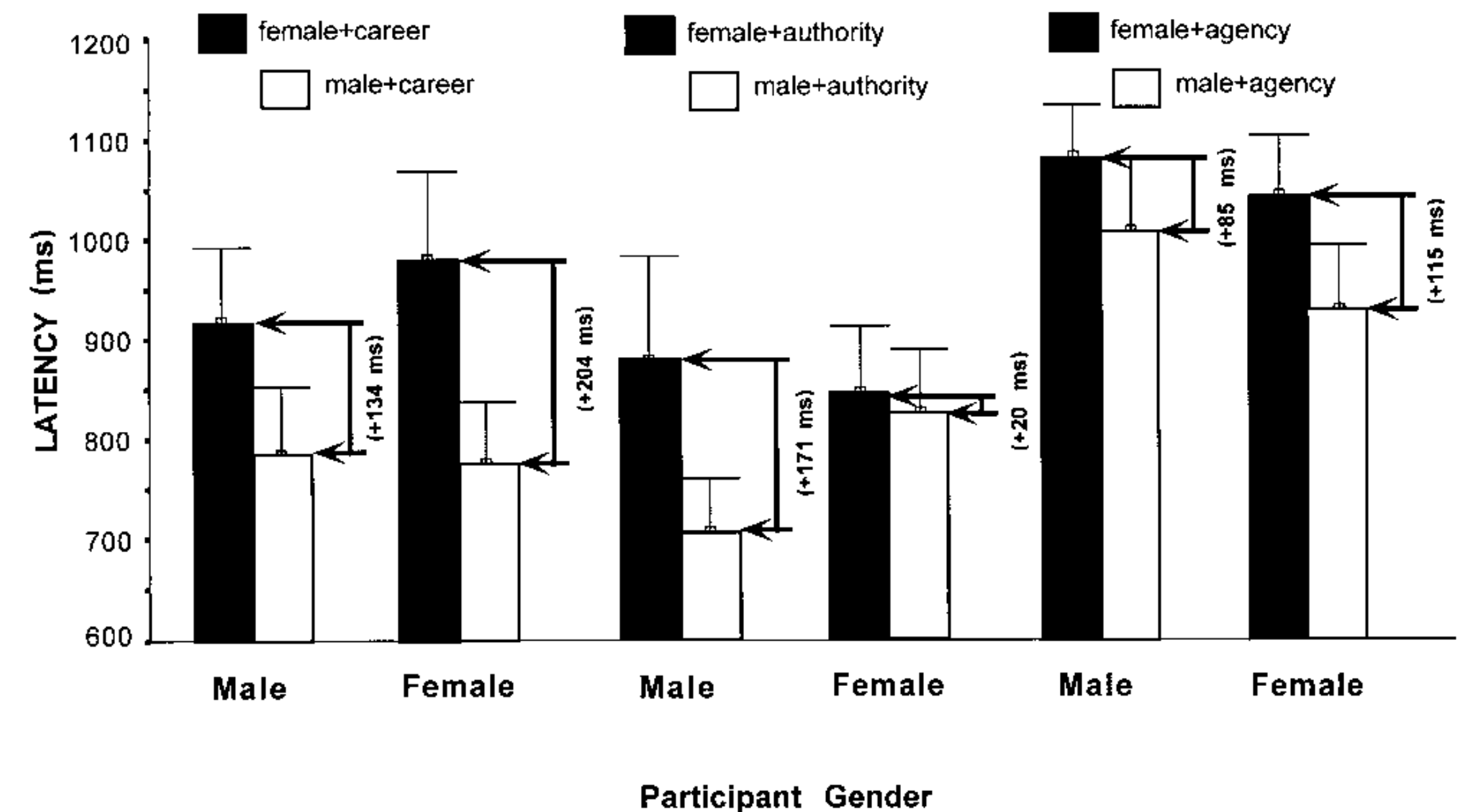
[implicit.harvard.edu/implicit](https://implicit.harvard.edu/implicit)

*then select*

**Gender-Career IAT**

# RESULTS

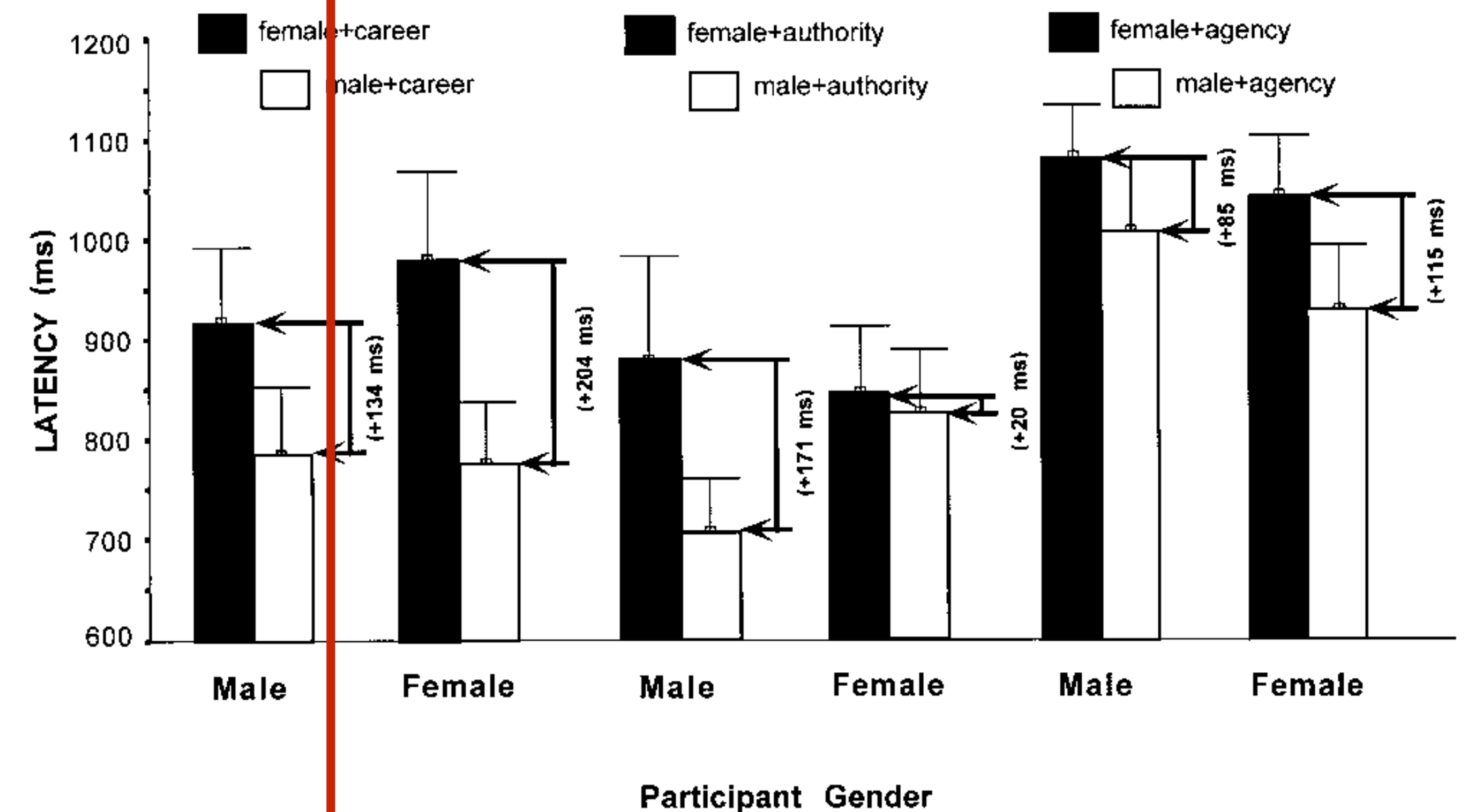
- We associate careers -> males, family -> females
- Faster response, higher accuracy higher for these associations
- Will vary to some extent each time you take the test
- Is not a measurement of your moral fiber as an individual



[HTTP://PSP.SAGEPUB.COM/CONTENT/26/11/1315](http://PSP.SAGEPUB.COM/CONTENT/26/11/1315)

# RESULTS

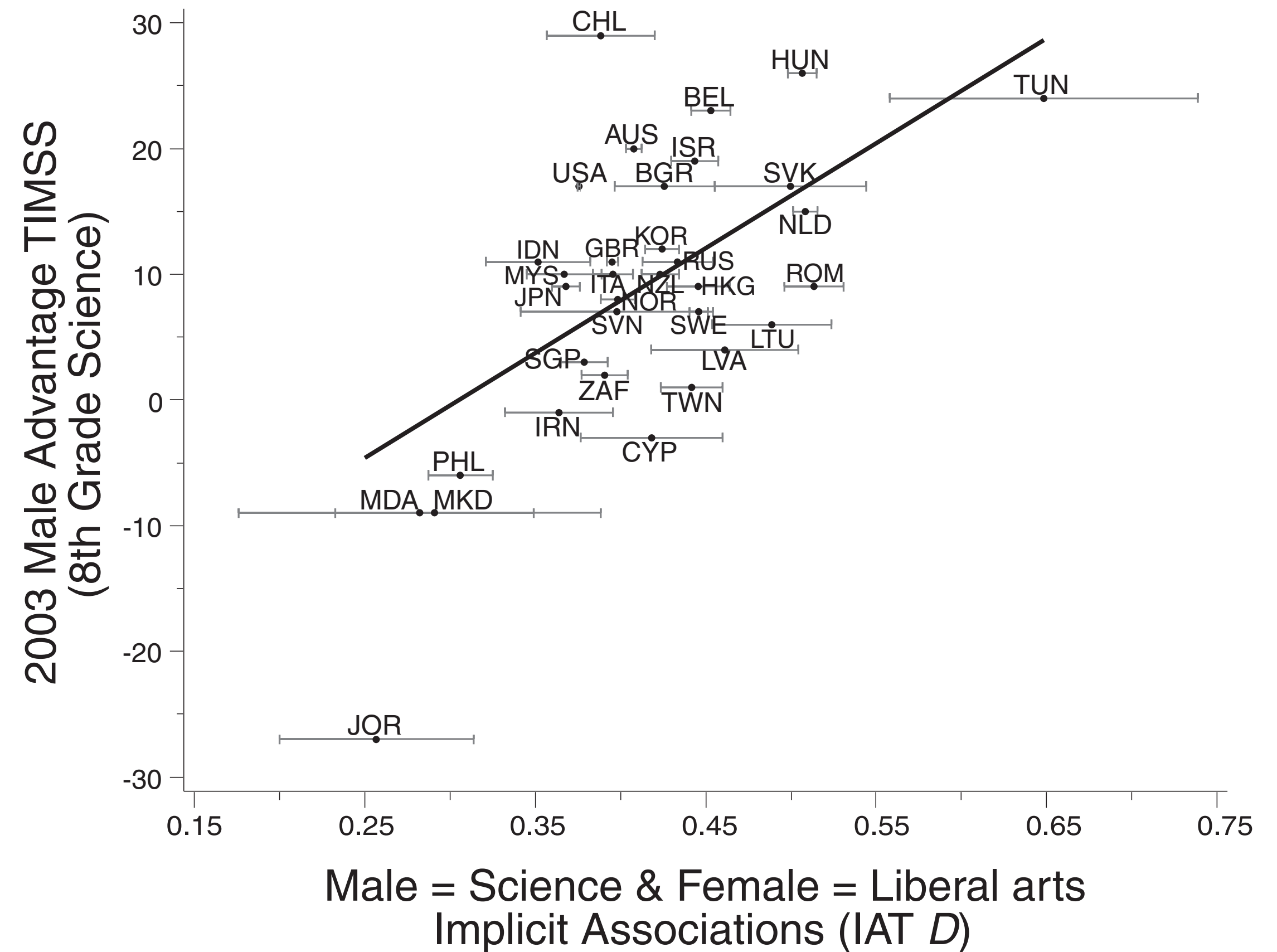
- We associate careers -> males, family -> females
- Faster response, higher accuracy higher for these associations
- Will vary to some extent each time you take the test
- Is not a measurement of your moral fiber as an individual



[HTTP://PSP.SAGEPUB.COM/CONTENT/26/11/1315](http://PSP.SAGEPUB.COM/CONTENT/26/11/1315)

# SO WHAT?

- Well the IAT is predictive of larger things
- For example: national science achievement vs gender



[HTTP://WWW.PNAS.ORG/CONTENT/106/26/10593.FULL](http://www.pnas.org/content/106/26/10593.full)

**DIVERSITY IS A HOT-BUTTON  
TOPIC IN THE TECH INDUSTRY  
RIGHT NOW**

# TEAM PERFORMANCE

- **Diverse and inclusive workforces...**
- **12% more “extra” (discretionary) effort**
- **19% greater intent to stay**
- **57% more collaboration among teams**
- **42% greater team commitment**

[HTTPS://MANAGINGBIAS.FB.COM/](https://managingbias.fb.com/)

[HTTP://WWW.DIVERSITYRESOURCES.STLRBC.ORG/WP-CONTENT/UPLOADS/2013/10/HRLC-CREATING\\_COMPETITIVE\\_ADVANTAGE\\_THROUGH\\_WORKFORCE\\_DIVERSITY.PDF](http://www.diversityresources.stlrbc.org/wp-content/uploads/2013/10/HRLC-CREATING_COMPETITIVE_ADVANTAGE_THROUGH_WORKFORCE_DIVERSITY.PDF)



# PERSONAL PERFORMANCE

- **Firms with diverse leaders, employees report...**
- **60% more likely to see their ideas developed**
- **75% more likely to see their innovation implemented**

[HTTPS://MANAGINGBIAS.FB.COM/](https://managingbias.fb.com/)

[HTTP://WWW.TALENTINNOVATION.ORG/PUBLICATION.CFM?PUBLICATION=1400](http://www.talentinnovation.org/publication.cfm?publication=1400)

# WHY FSA CARES ABOUT UNCONSCIOUS BIASES

- **Affects your experience working with your peers**
- **Affects your experience in the tech industry full-time**
- **We care about you *during* and *after* the program!**
- **FSA norms include “No ‘subtleisms’”**
  - Also no 'not-so-subtleisms'
  - Failure to observe norms:
    - probationary period
    - asked to withdraw

# UNCONSCIOUS BIAS

- **We have widely held, oversimplified ideas about particular types of people (stereotypes)**
- **We apply stereotypes automatically**
- **This affects decisions and actions unconsciously**
- **This can have (surprisingly) large effects on our culture and communities**

# UNCONSCIOUS BIAS

- We have widely held, oversimplified ideas about particular types of people (stereotypes)
- We apply stereotypes automatically
- This affects decisions and actions unconsciously
- This can have (surprisingly) large effects on our culture and communities

# WHY?!?!?

- **Survival: we have been honed to make fast decisions**
- **Too much info to process**
- **Intelligence involves intuition**
- **Intuition involves bias**





# WHO?

- **You!**
- **Me!**
- **Rated E for EVERYONE**



# THIS IS THE UNCOMFORTABLE PART

- **Realizing that you have a bias can be uncomfortable**
  - This probably goes against how you view yourself.
  - “I think I might have a bias”
  - “But that makes me a bad person”
  - “I know I’m a good person”
  - “That means I don’t have a bias”
- **Realizing that you have a bias is KEY to mitigating that bias**

# UNCONSCIOUS BIAS

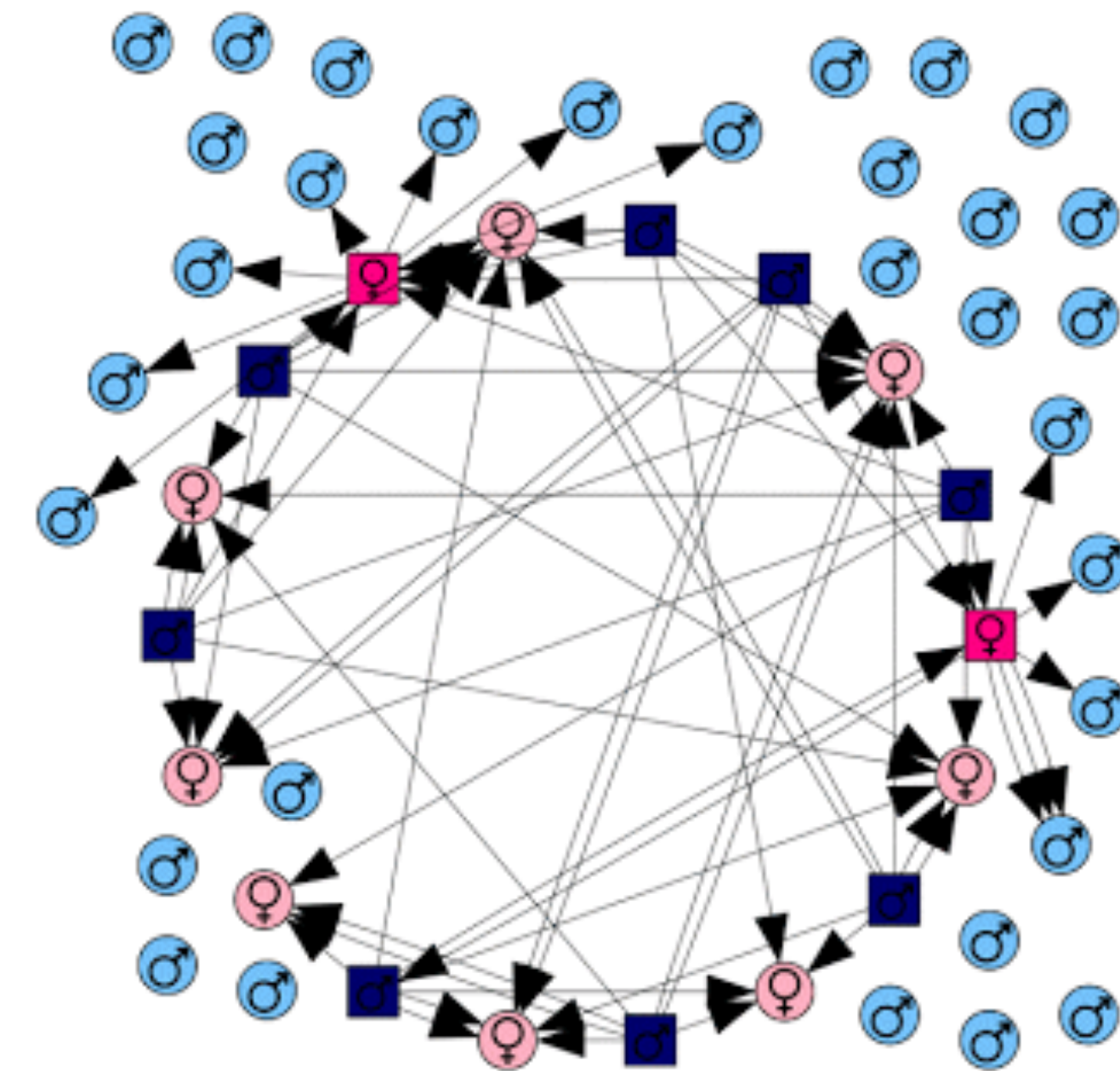
- **Not just about gender**
  - race, ethnicity, income level, age, sexuality, disability status, occupation, favorite food... EVERYTHING
- **Complex story**
  - varies from culture to culture
  - varies from person to person
  - varies for one person in different circumstances
  - “intersectional”
- **We’ll mostly be talking about the effects on unconscious biases in the workplace**



# MINOR BIASES CAN HAVE LARGE EFFECTS

- 50 people: 40 men, 10 women
- Equal ratios making bigoted remarks to the opposite gender
- Simulate 70 bigoted interactions
- Men: 0.35 (ave); Women 5.6 (ave)
- Most men: 0 remarks
- *Unluckiest* man: 3 remarks
- *Luckiest* women: 4 remarks

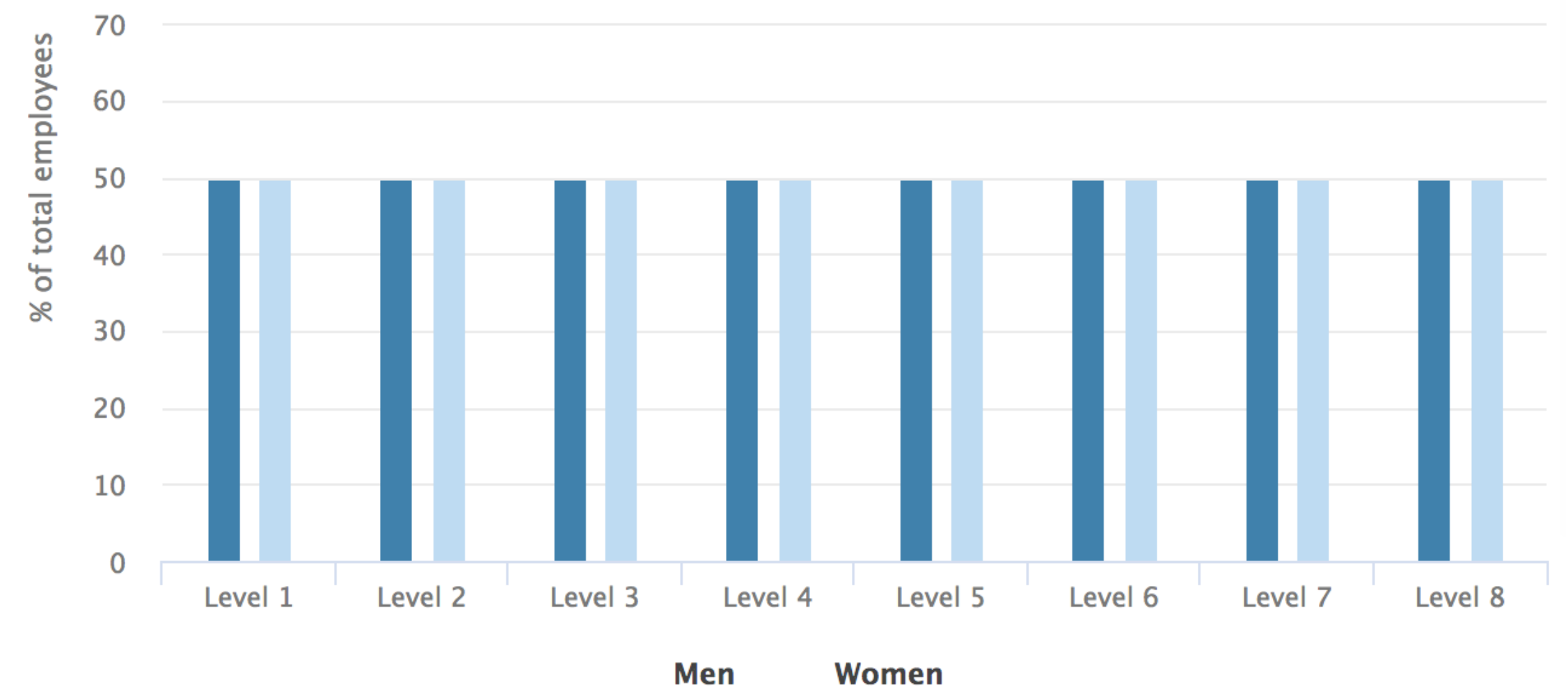
## Petrie Multiplier



[HTTP://BLOG.IAN.GENT/2013/10/THE-PETRIE-MULTIPLIER-WHY-ATTACK-ON.HTML](http://blog.ian.gent/2013/10/the-petrie-multiplier-why-attack-on.html)

# MINOR BIASES CAN HAVE LARGE EFFECTS

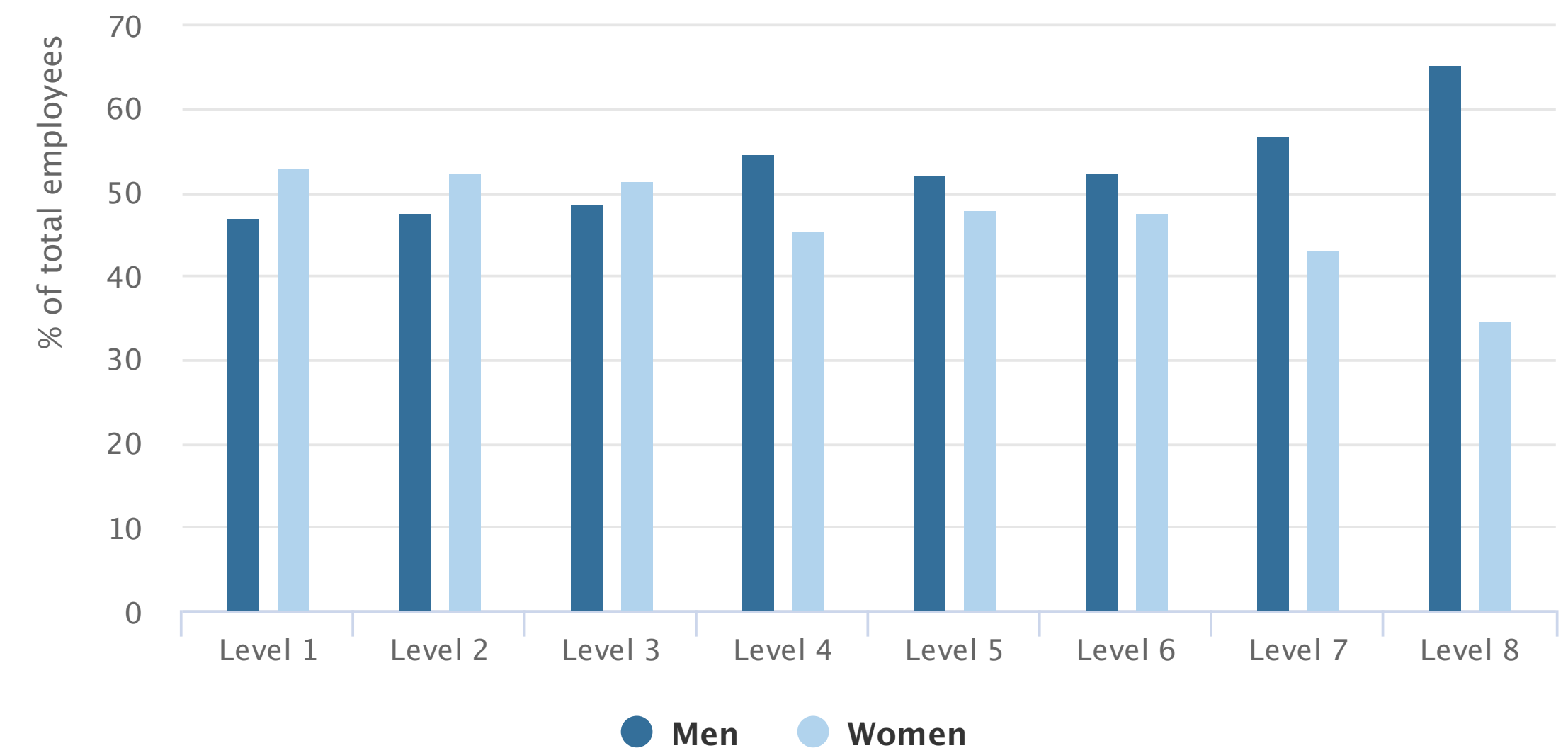
- 8-tiered company
- Simulate people leaving (15%) and others getting promoted
- Introduce 1% gender bias
- Repeat for 20 rounds



[HTTP://DOESGENDERBIASMATTER.COM/](http://DOESGENDERBIASMATTER.COM/)

# MINOR BIASES CAN HAVE LARGE EFFECTS

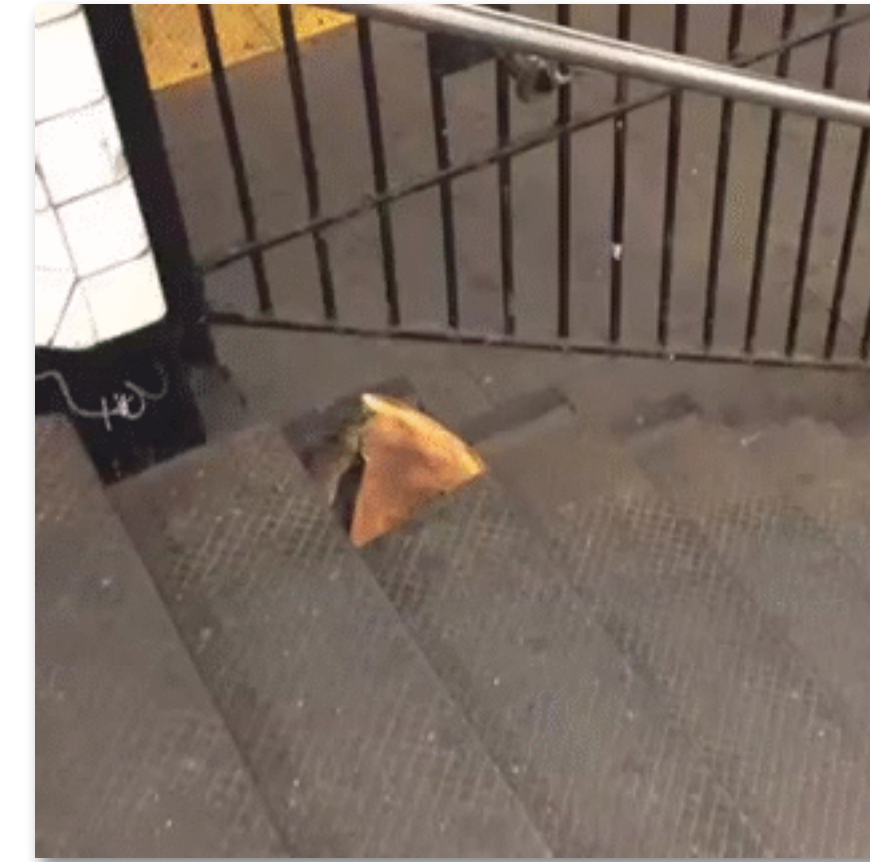
- 8-tiered company
  - Simulate people leaving (15%) and others getting promoted
  - Introduce 1% gender bias
  - Repeat for 20 rounds
- 
- Top: 66% men, 34% women
  - Two times as many men!



[HTTP://DOESGENDERBIASMATTER.COM/](http://DOESGENDERBIASMATTER.COM/)

# MINOR BIASES CAN HAVE LARGE EFFECTS

- Students test rats
- Rats labeled
  - “maze bright”
  - “maze dull”
- Rats in reality were standard lab rats and not specially bred
- Results: students unconsciously influenced the performance of rats in order to fit expected results
- Similar expectations with teachers and students

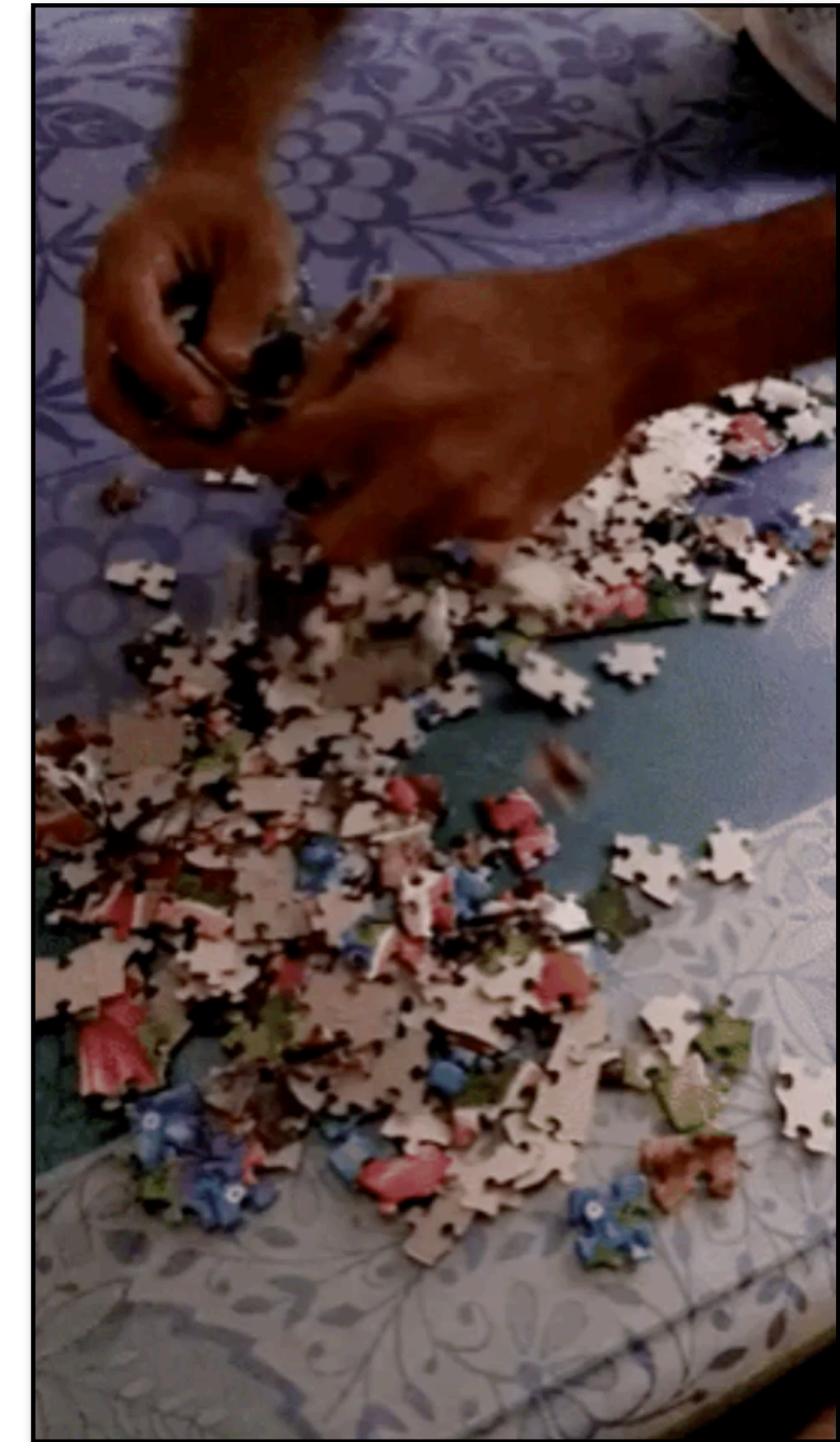


[HTTP://PSYCH.WISC.EDU/BRAUN/281/INTELLIGENCE/LABELLINGEFFECTS.HTM](http://psych.wisc.edu/braun/281/intelligence/labellingeffects.htm)



# MINOR BIASES CAN HAVE LARGE EFFECTS

- **Effects compound in unintuitive ways**
- **Aggregate bias in a group can lead to systemic oppression**
- **Unconscious bias is just one puzzle piece**



# WHAT YOU CAN DO

- **Become aware of biases within and around yourself**
- **Know that you can do things to mitigate the effect of those biases, whether you're a source, target, or bystander**
- **Take steps to mitigate the effects!**

# QUICK EXERCISE

- **What's a skill that didn't come easily, but that you mastered through intentional practice?**

# BREAK



**LEARNING TO ADDRESS  
UNCONSCIOUS BIASES IS A SKILL YOU  
CAN DEVELOP THROUGH PRACTICE**

# 5 TYPES OF BIASES

- **Performance bias:** granting of implicit doubt or implicit endorsement based on unconscious bias
- **Attribution bias:** when credit is given unfairly based on unconscious bias
- **Competence-likability Tradeoff:** The more competent you are as a woman, the less likable you become (women, not men, face this tradeoff; other groups face different tradeoffs)
- **Stereotype Threat:** Self-fulfilling prophecy; targets of negative stereotypes reminded of them will underperform
- **Microaggressions:** Subtle, indirect, unintentional discrimination against a marginalized group
- **Reminder that these are unconscious**

# CASE STUDY: PERFORMANCE BIAS

- Sent out 5000 different resumes, varying info
- Names made to seem “White-sounding” or “African-American-sounding”

*“White names receive 50 percent more callbacks for interview” (991)*

*“A White name yields as many more callbacks as an additional eight years of experience on a resume” (992)*

[HTTP://WWW.JSTOR.ORG/STABLE/3592802](http://www.jstor.org/stable/3592802)

# CASE STUDY: ATTRIBUTION BIAS

- **People asked to give feedback about male and female team members working on a project**
- **Be specific, provide individualized details**

Dependent variable	Individual feedback		Group feedback	
	Male target	Female target	Male target	Female target
Competence	8.13 <sub>a</sub> (0.76)	8.22 <sub>a</sub> (0.89)	7.29 <sub>a</sub> (1.59)	5.64 <sub>b</sub> (2.01)
Influence	7.33 <sub>a</sub> (0.84)	7.57 <sub>a</sub> (0.92)	6.50 <sub>b</sub> (1.15)	5.33 <sub>c</sub> (0.84)
Leadership	7.20 <sub>a</sub> (1.08)	6.40 <sub>a</sub> (2.26)	6.53 <sub>a</sub> (1.73)	4.73 <sub>b</sub> (1.22)

[HTTPS://WWW.CSUEASTBAY.EDU/PROGRAMS/DSJ/FILES/PDFS/DSJGUIDE-JOURNAL-WOMEN-COMPETENCY.PDF](https://www.csueastbay.edu/programs/dsj/files/pdfs/dsjguide-journal-women-competency.pdf)

# CASE STUDY: COMPETENCY-LIKABILITY TRADEOFF

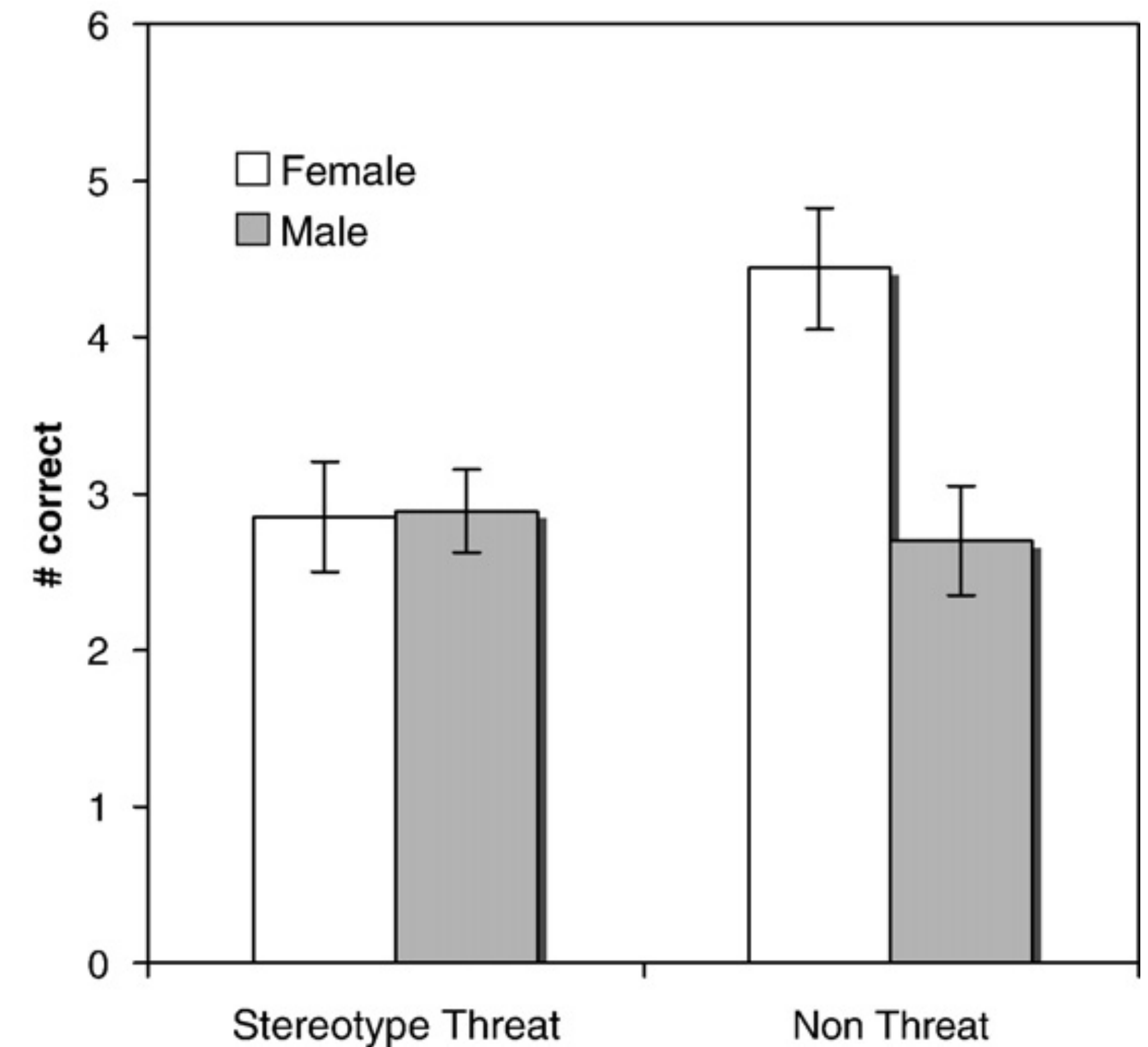
- Heidi Roizen's bio
- Howard Roizen's bio
- Same bio, people's reactions...

*“Howard came across as a more appealing colleague. Heidi, on the other hand, was seen as selfish and not ‘the type of person you would want to hire or work for.’ The same data with a single difference—gender—created vastly different impressions.”*

[HTTPS://WWW.THEATLANTIC.COM/SEXES/ARCHIVE/2013/03/ARE-SUCCESSFUL-WOMEN-REALY-LESS-LIKABLE-THAN-SUCCESSFUL-MEN/273926/](https://www.theatlantic.com/sexes/archive/2013/03/are-successful-women-really-less-likable-than-successful-men/273926/)

# CASE STUDY: STEREOTYPE THREAT

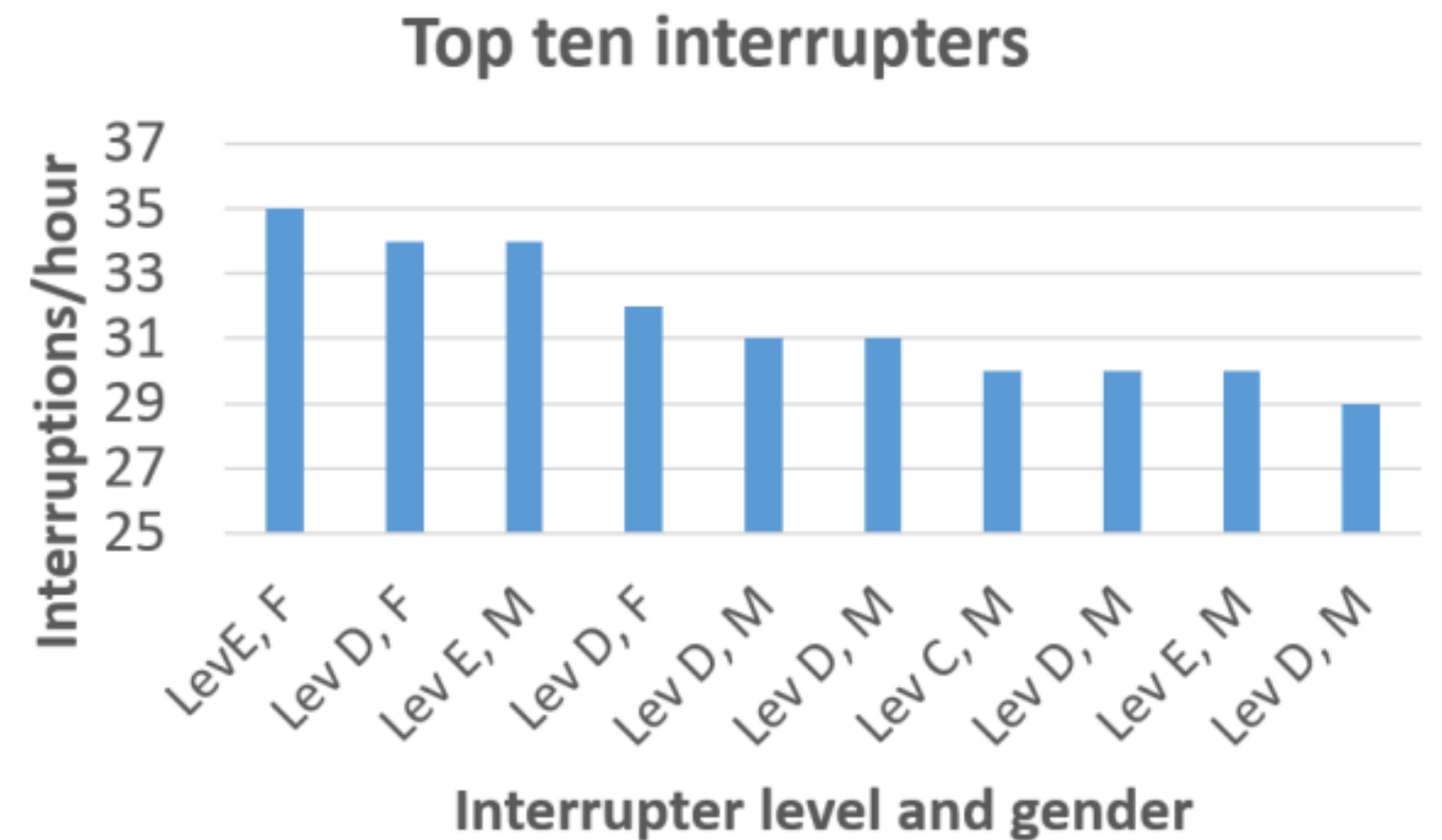
- **Students taking a math test**
- **Half being told no difference in gender performance previously**
- **Women in the other condition underperformed**





# CASE STUDY: MICRO AGGRESSIONS

- Men interrupt twice as often as women
- Men interrupt women 3x more than interrupting men
- Women interrupt each other more frequently than men
  - 87% of women interruptions were targeted at women
- Senior speakers interrupt more



[HTTP://WWW.SLATE.COM/ARTICLES/PODCASTS/LEXICON VALLEY/2017/07/  
JOHN\\_MCWHORTER\\_ON\\_WHY\\_LANGUAGES\\_HAVE\\_CONTRACTIONS.HTML](http://www.slate.com/articles/podcasts/lexicon_valley/2017/07/john_mcwhorter_on_why_languages_have_contractions.html)

# STRATEGIES



# IMPORTANT TERMS

- **Source:** person who says or does something that's underpinned by an unconscious bias
- **Target:** person who is on the receiving end of some behavior that's influenced by an unconscious bias
- **Bystander:** person who observes a biased interaction

# SOURCE

- ◉ **Be receptive to critical feedback (consider seeking it out proactively)**
- ◉ **At the organizational level:**
  - Come up with standards / criteria beforehand (especially when hiring or evaluating performance)...
  - ... and hold yourself to them
- ◉ **On an interpersonal level:**
  - Give ALL people the benefit of the doubt
  - Question your actions/consider unconscious bias
- ◉ **If you know you have specific issues, take steps to mitigate them**
  - e.g. If you know you interrupt — be particular about who is speaking (passing an object can help with this)

# TARGET

- **Anonymous recruiting exists out there**
- **Be specific when describing skills and projects; provide individualized details**
- **Self affirmation — write down your success and be proud / love yourself!**
- **Find community and friends that you can talk to about this**
- **Calling attention to the issue**
  - Think the dental hygiene approach
  - Consider a 1-1 conversation if it's a particular person
- **Look for cultures that are receptive to you caring about this**

# BYSTANDER

- ◉ **Call it out! This is especially potent coming from the in-group.**
- ◉ **Strategies for doing so constructively...**
  - *Consider* talking to people 1-1
  - In a neutral environment
  - The [“you’ve got something stuck in your teeth”](#) approach
- ◉ **Try to make processes in your institution that will help mitigate bias (hiring, performance evaluations, etc.)**
- ◉ **Amplify others’ contributions**
  - Echo
  - “Excuse me [source], but I’d like to finish hearing what [target] had to say”
  - Go out of your way to assign credit
  - Be specific
- ◉ **Contribute to humanizing people when talking about them**

# SUMMARY

# IMPACT

- **Bias informs decisions on hiring, performance evaluations and promoting**
- **Bias impacts perceptions about competence and ability**
- **Unchecked bias can result in less diversity in tech, engineering and management roles**
  - (more barriers/impediments for non-dominant groups)
- **Imposter Syndrome & Stereotype Threat can have a big affect on individuals' experiences**

# OPPORTUNITY

- Personal and team performance increases; competitive advantage
- Being conscientious means more doors open, not less (networking)
- **Source:** getting called out is uncomfortable, but is also an opportunity to improve
- **Target:** awareness can help you navigate the professional world more effectively
- **Bystander:** hone your communication skills, demonstrate allyship



# STRATEGIES

**Learning to address unconscious biases is a learnable and valuable skill!**

- **Source:**

- Organizational level:
  - determine hiring and performance evaluation criteria **ahead** of time
  - require specific attribution in evaluation
  - remove identifying information when possible (name, etc)
- Interpersonal level: be receptive to critical feedback, question your actions / consider unconscious bias, take steps to mitigate specific biases



# STRATEGIES

- **Target:**

- Be specific when describing skills/accomplishments
- Self affirmation - celebrate your successes and be proud!
- Find an organization/community that supports you

- **Bystander**

- Practice the “constructive call-out” (consider 1-1s, the “you’ve got something in your teeth” approach)
- Amplify others’ contributions
- Contribute to humanizing people when talking about them

# NEXT STEPS

- **FSA norms include “no ‘subtleisms’”**
  - norm violations result in
    - probationary period
    - asked to withdraw
- **Instructors and Student Experience Specialists would love to talk about this with you 1-1 — please feel free to reach out!**

# NEXT STEPS

- **Pick a way in which you you are going to starting working to mitigate an unconscious bias:**
  - “I am going to focus on not interrupting during pairing or group discussions”
  - “I am going to focus on amplifying/properly giving credit for my cohort mates’ contributions”
- **Let’s keep talking about this!**

# FURTHER RESOURCES

- ◉ [Outstanding \(and quick\) video on reframing discussions about racism the way we discuss dental hygiene](#)
- ◉ [A simulation of being outnumbered, and how -isms can compound in a group setting with skewed representation \(plus a good follow-up\)](#)
- ◉ [A simulation of gender bias in a tiered organization](#)
- ◉ [A well-research answer to the question: ok so if I am subject to stereotype threat, how do I escape that self-fulfilling prophecy](#)
- ◉ [A great video about seeing people as complex individuals](#)
- ◉ [Really solid overview of bias, from Google's people operations department](#)
- ◉ [Really solid overview of bias, from Facebook \(with resources \[here\]\(#\) and \[here\]\(#\)\)](#)
- ◉ [Intelligent essay about keeping our goals really in mind, and not letting our social goals become so narrow they're meaningless](#)
- ◉ [Candid essay about privilege in the tech world, coming from an Asian man](#)
- ◉ [Candid essay about being a minority in a mostly homogeneous workplace, coming from a black woman](#)
- ◉ [A short piece about men interrupting women, and another well-written piece about that](#)
- ◉ [An online article about Robert Rosenthal's work on the "Pygmalion Effect" and the impact of biases in schools and other settings](#)
- ◉ [Another article about Robert Rosenthal's studies in San Francisco schools in the 1960s](#)