

UNCONSCIOUS BIAS

Humans...am I right?

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



IMPLICIT ASSOCIATION TEST

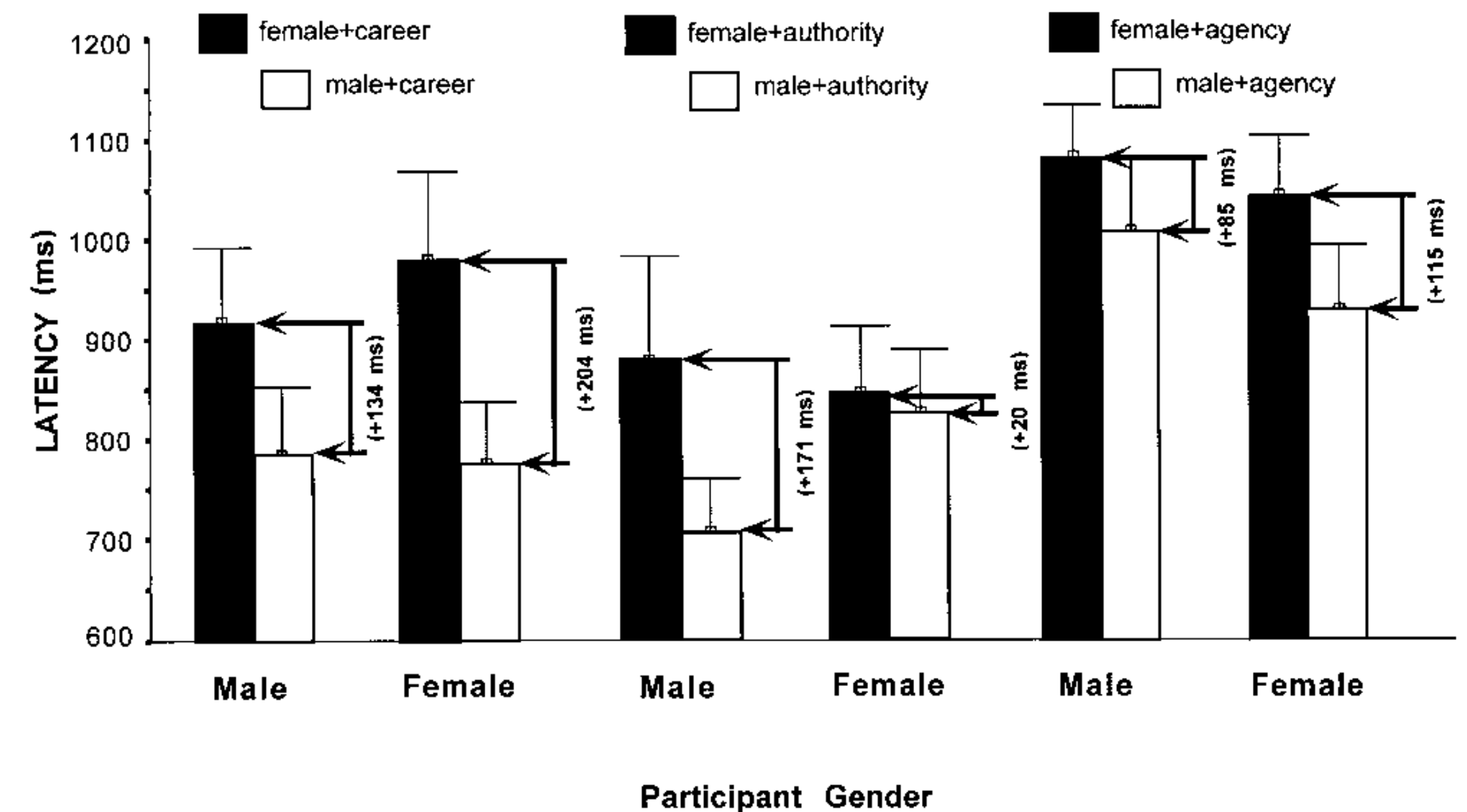
implicit.harvard.edu/implicit

then select

Gender-Career IAT

RESULTS

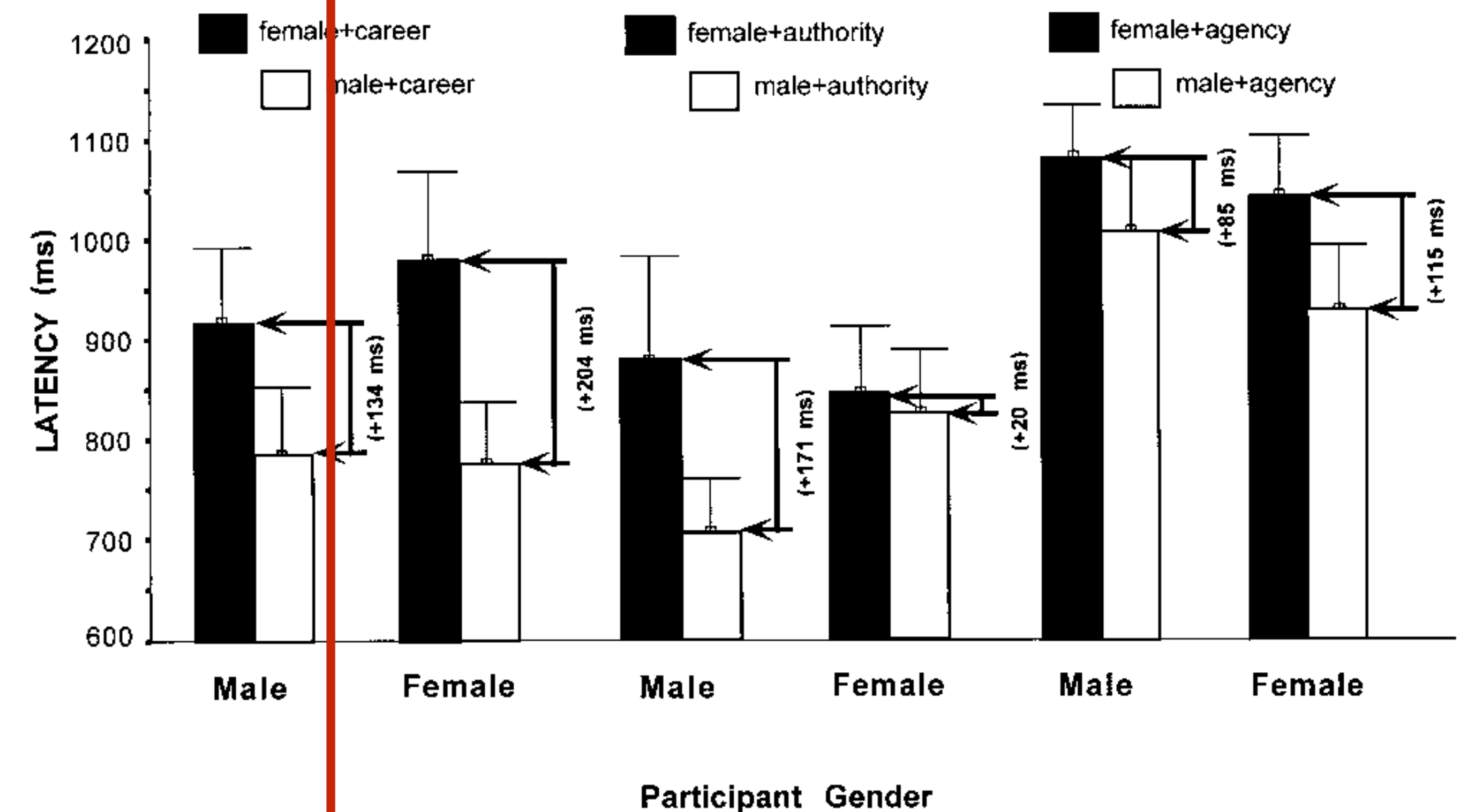
- We associate careers -> males, family -> females
- Faster response, higher accuracy higher for these associations
- Will vary to some extent each time you take the test
- Is not a measurement of your moral fiber as an individual



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

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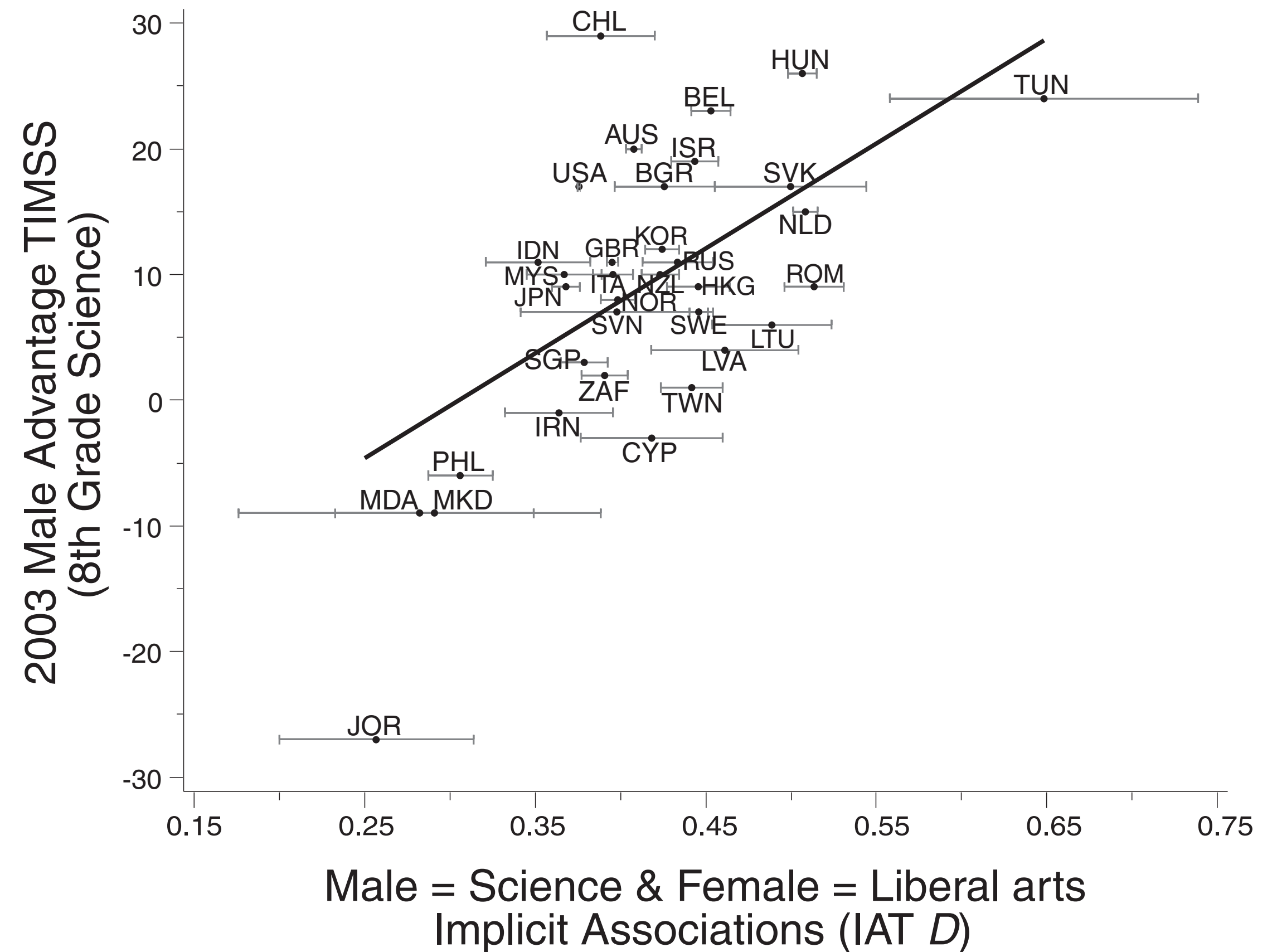
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[HTTP://PSP.SAGEPUB.COM/CONTENT/26/11/1315](http://PSP.SAGEPUB.COM/CONTENT/26/11/1315)

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 ‘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

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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

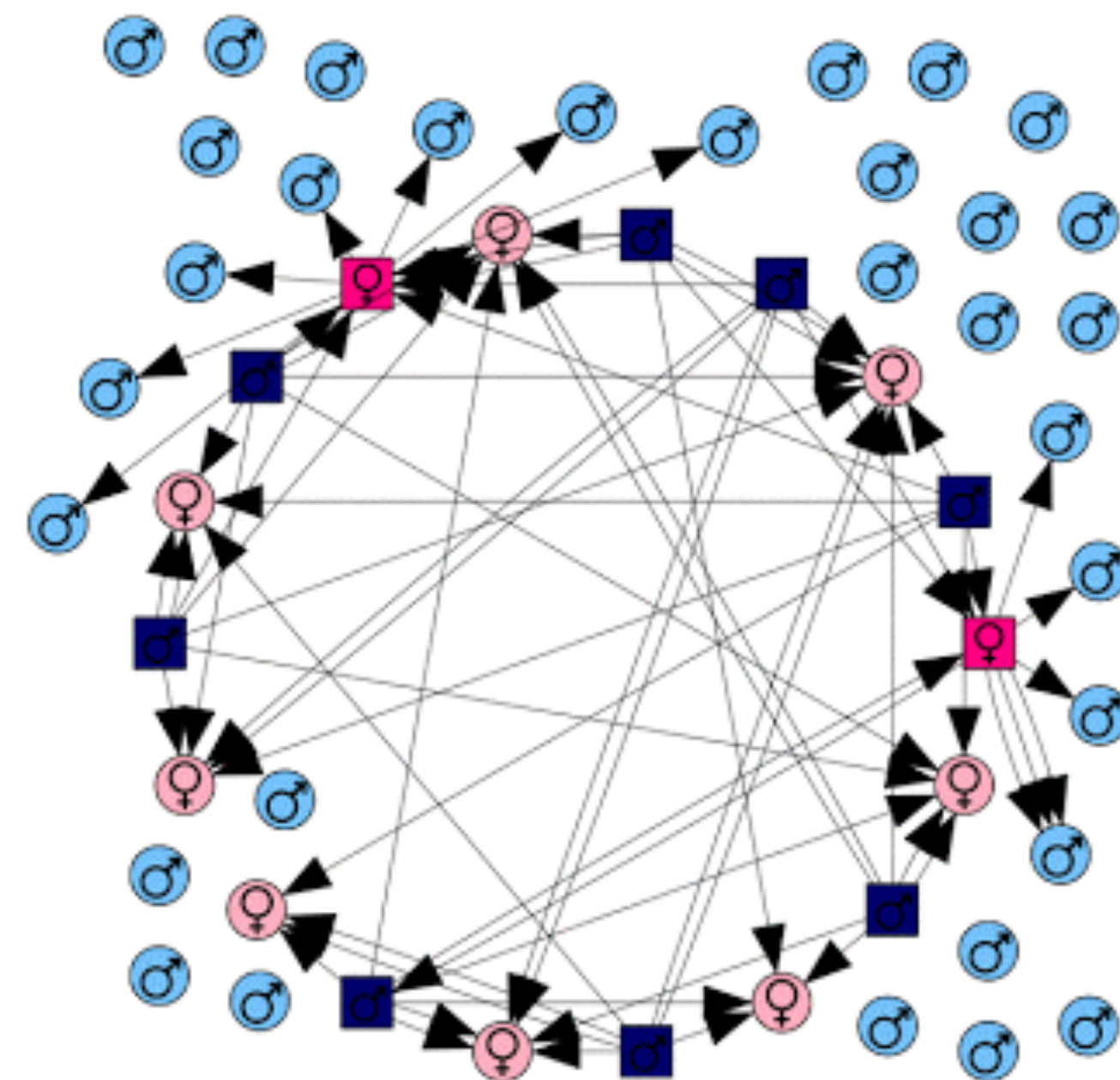
- **Not just about gender**
 - race, ethnicity, income level, age, sexuality, disability status, occupation, ...EVERYTHING
- **Complex story**
 - varies from culture to culture
 - varies from person to person
 - varies for one person in different circumstances
 - “intersectional”
- **We’ll mostly be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

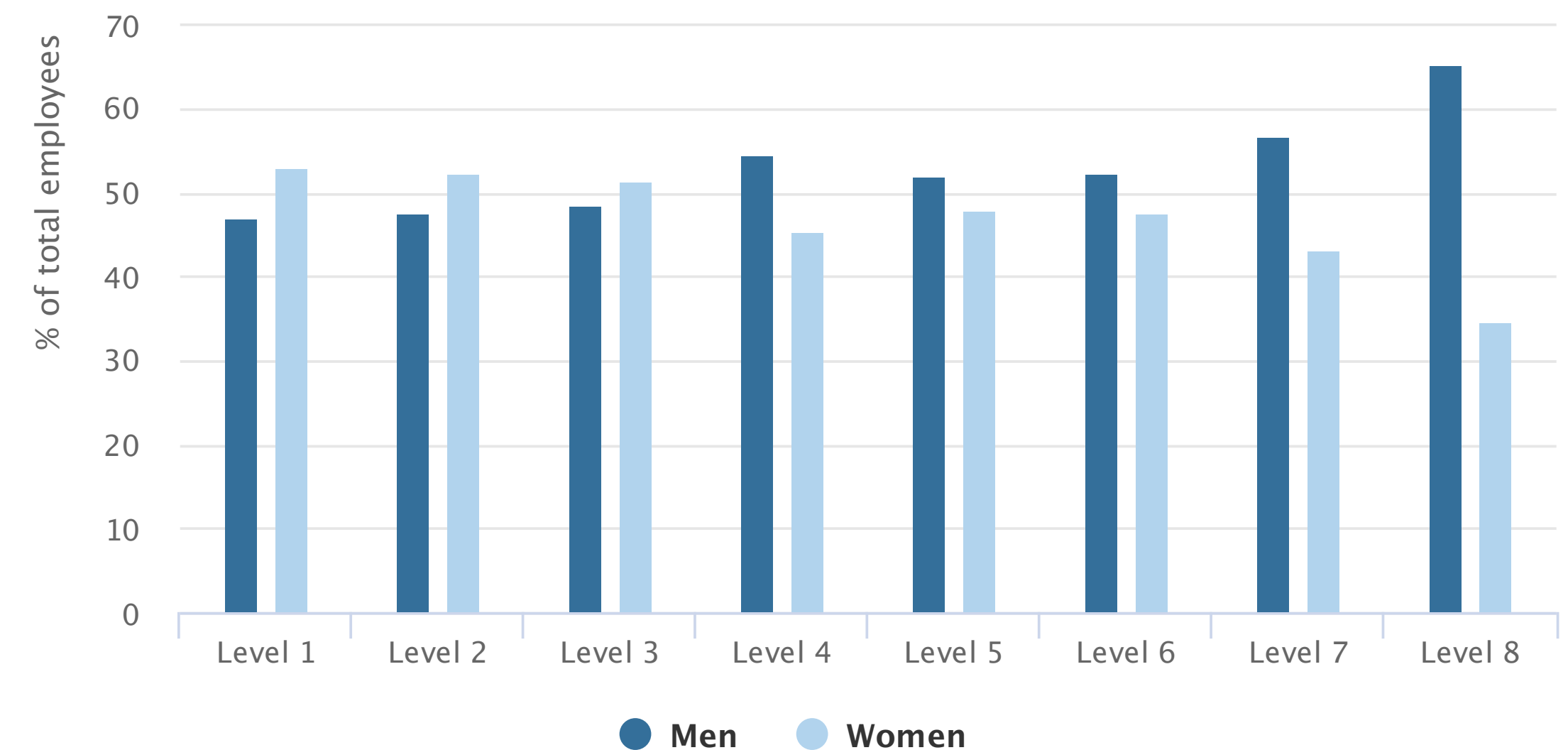


[HTTP://DOESGENDERBIASMATTER.COM/](http://doesgenderbiasmatter.com/)



MINOR BIASES CAN HAVE LARGE EFFECTS

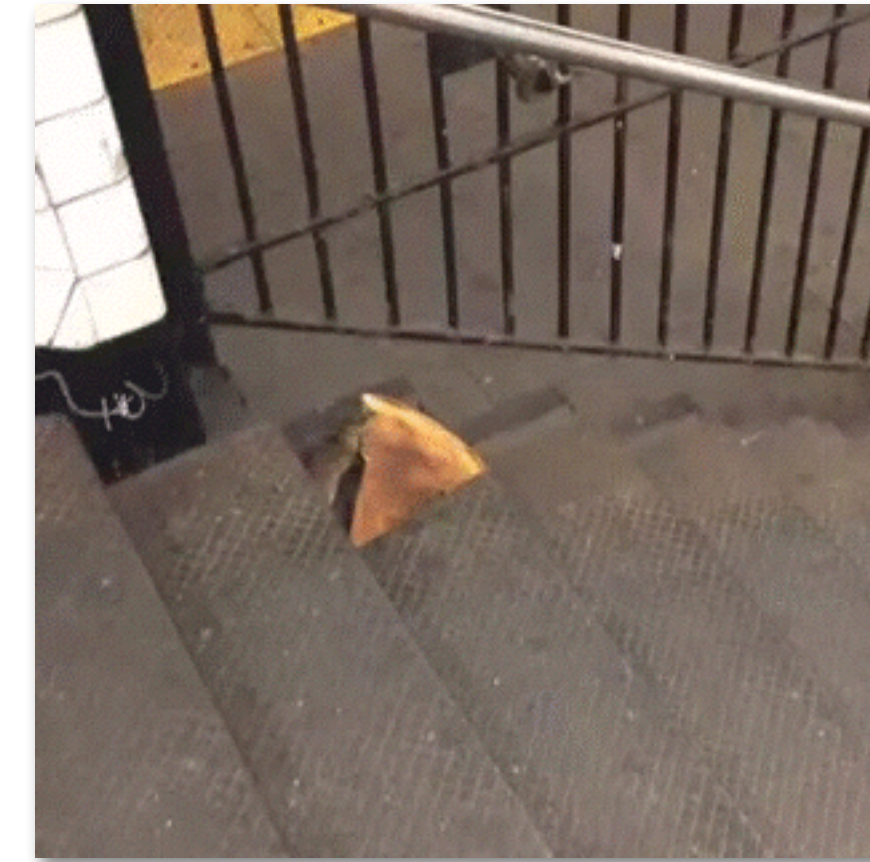
- 8-tiered company
 - Simulate people leaving (15%) and others getting promoted
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 - Repeat for 20 rounds
-
- Top: 66% men, 34% women
 - Two times as many men!



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

MINOR BIASES CAN HAVE LARGE EFFECTS

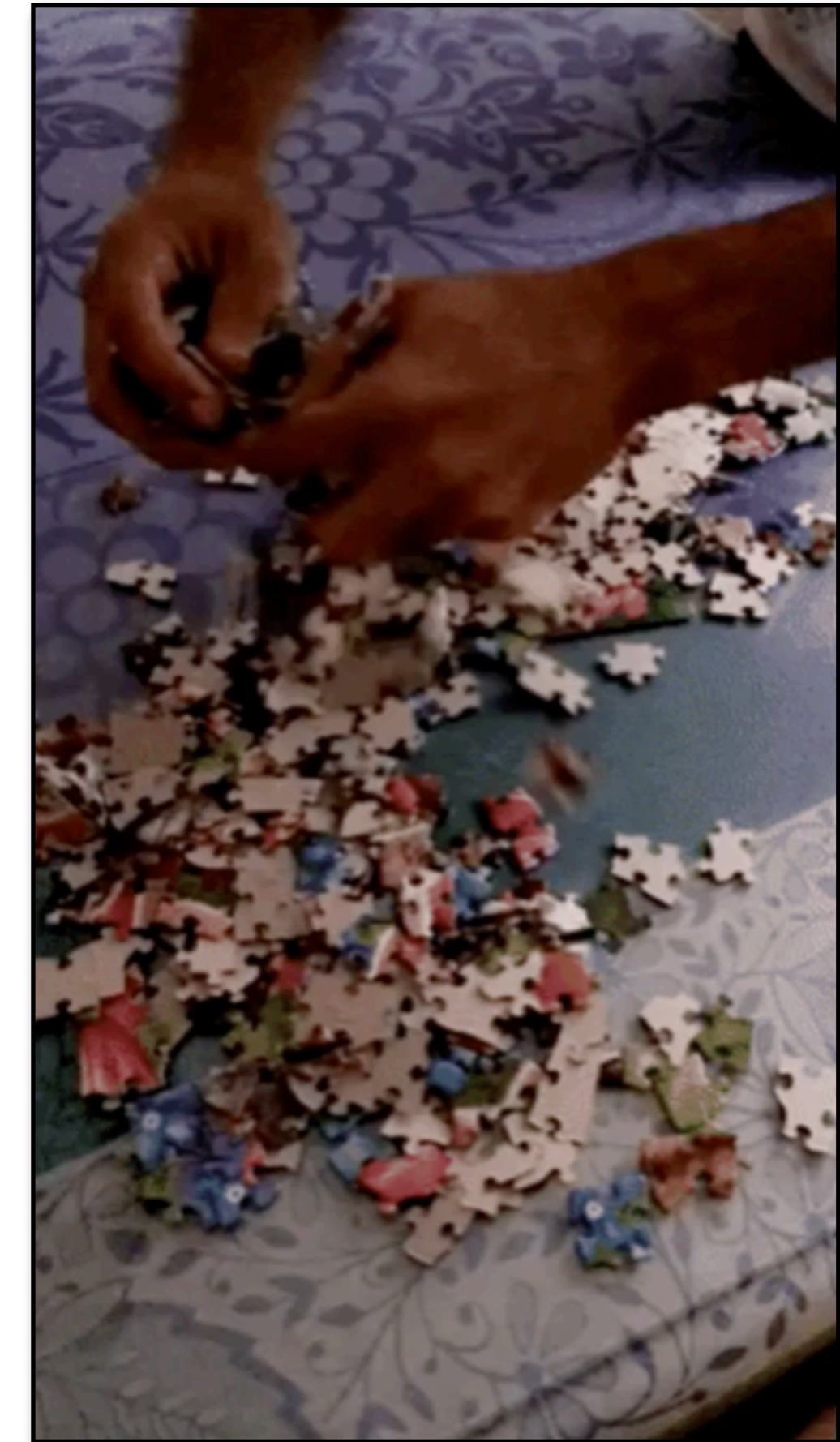
- Students test rats
- Rats labeled
 - “maze bright”
 - “maze dull”
- Rats in reality were standard lab rats and not specially bred
- Results: students unconsciously influenced the performance of rats in order to fit expected results
- Similar expectations with teachers and students



[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 _a (0.76)	8.22 _a (0.89)	7.29 _a (1.59)	5.64 _b (2.01)
Influence	7.33 _a (0.84)	7.57 _a (0.92)	6.50 _b (1.15)	5.33 _c (0.84)
Leadership	7.20 _a (1.08)	6.40 _a (2.26)	6.53 _a (1.73)	4.73 _b (1.22)

CASE STUDY: COMPETENCY-LIKABILITY TRADEOFF

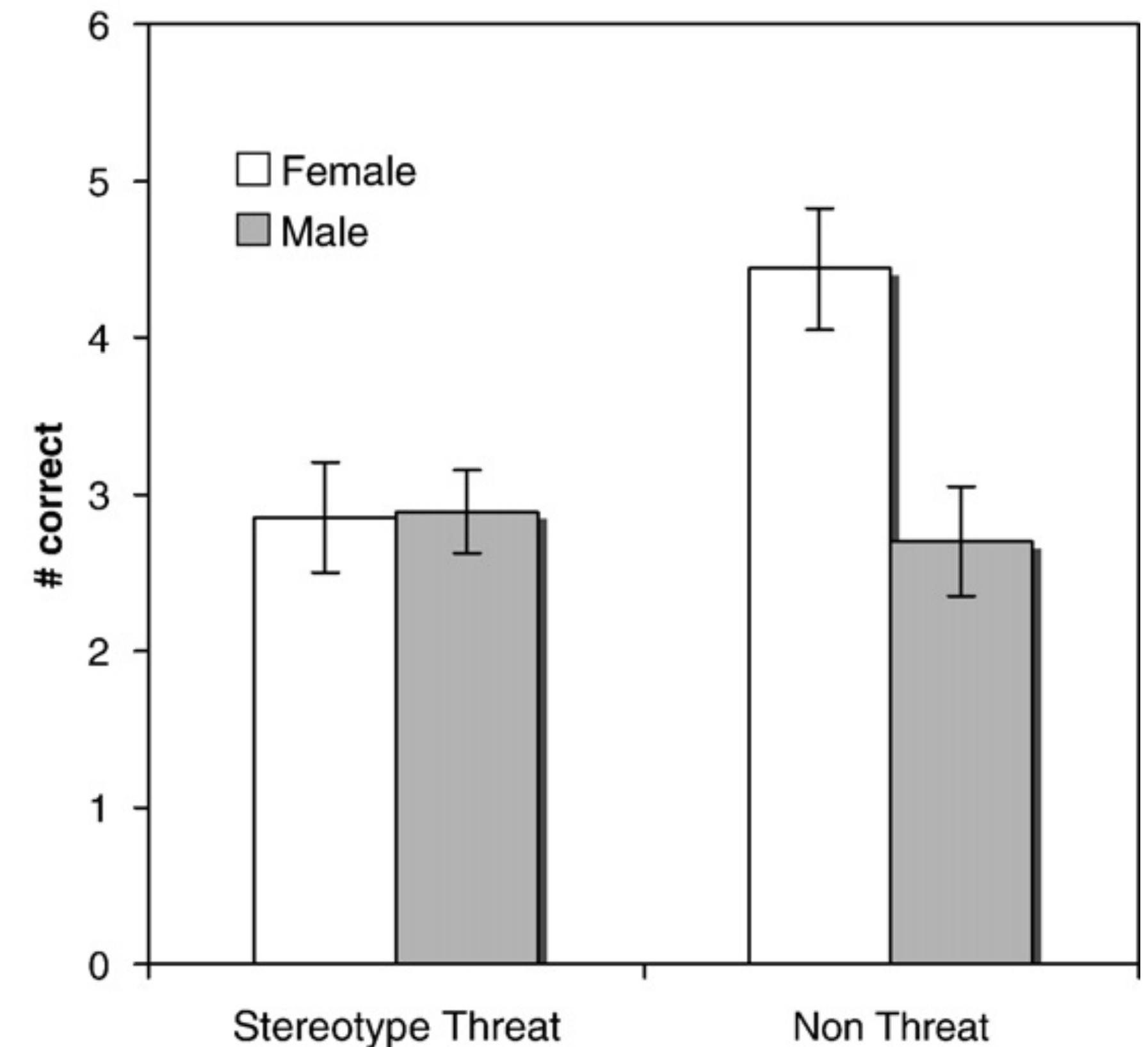
- Heidi Roizen's bio
- Howard Roizen's bio
- Same bio, people's reactions...

“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/)

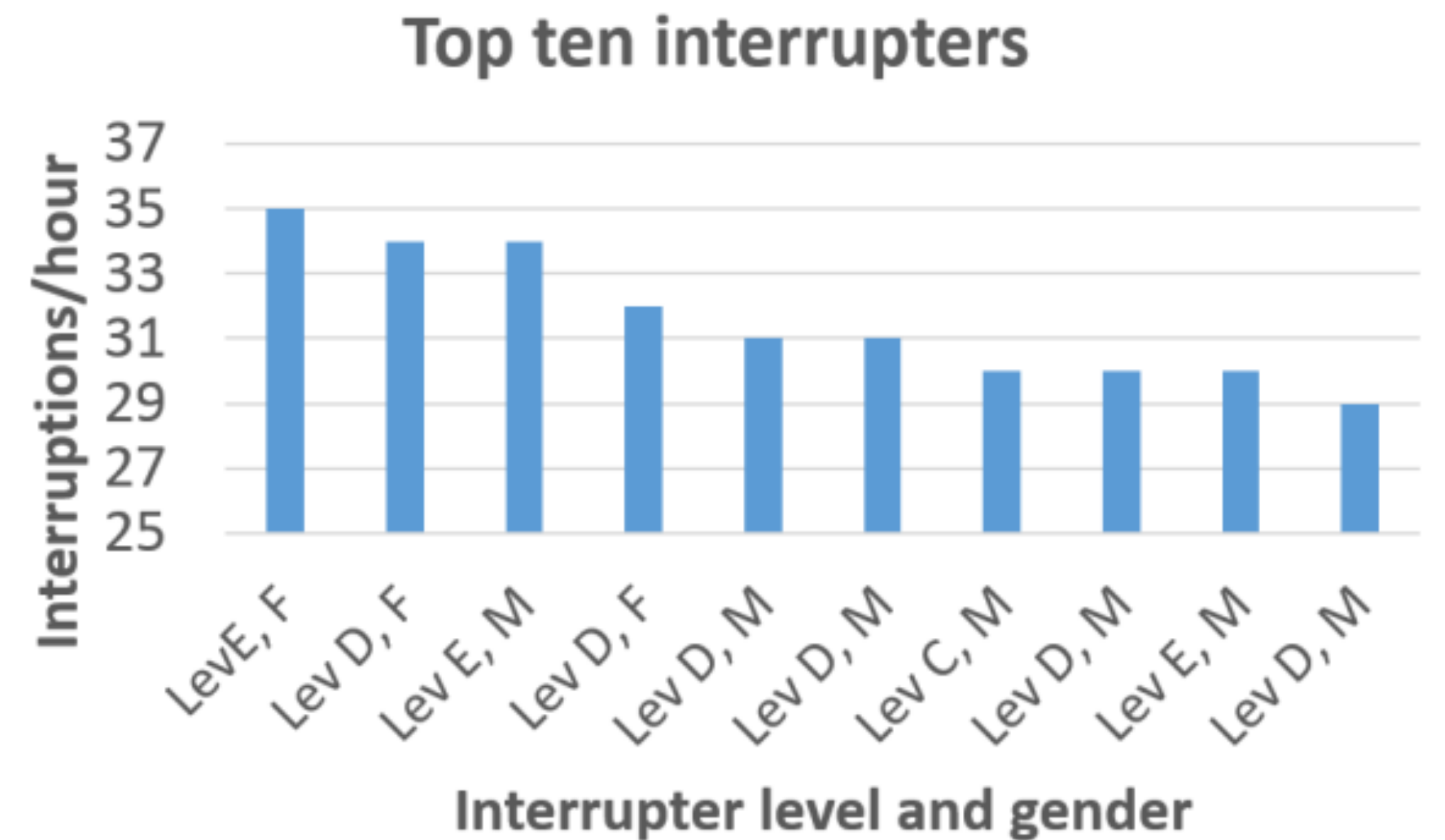
CASE STUDY: STEREOTYPE THREAT

- **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**
- **Call attention to the issue (not ideal)**
 - 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](#)