



# Unconscious (Implicit) Bias and Health Disparities

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# Taller Can Equal More \$\$\$



**The average American male  
is 5-foot-9 inches tall.**

**Only 14.5 percent of  
all American men are over 6 feet tall**

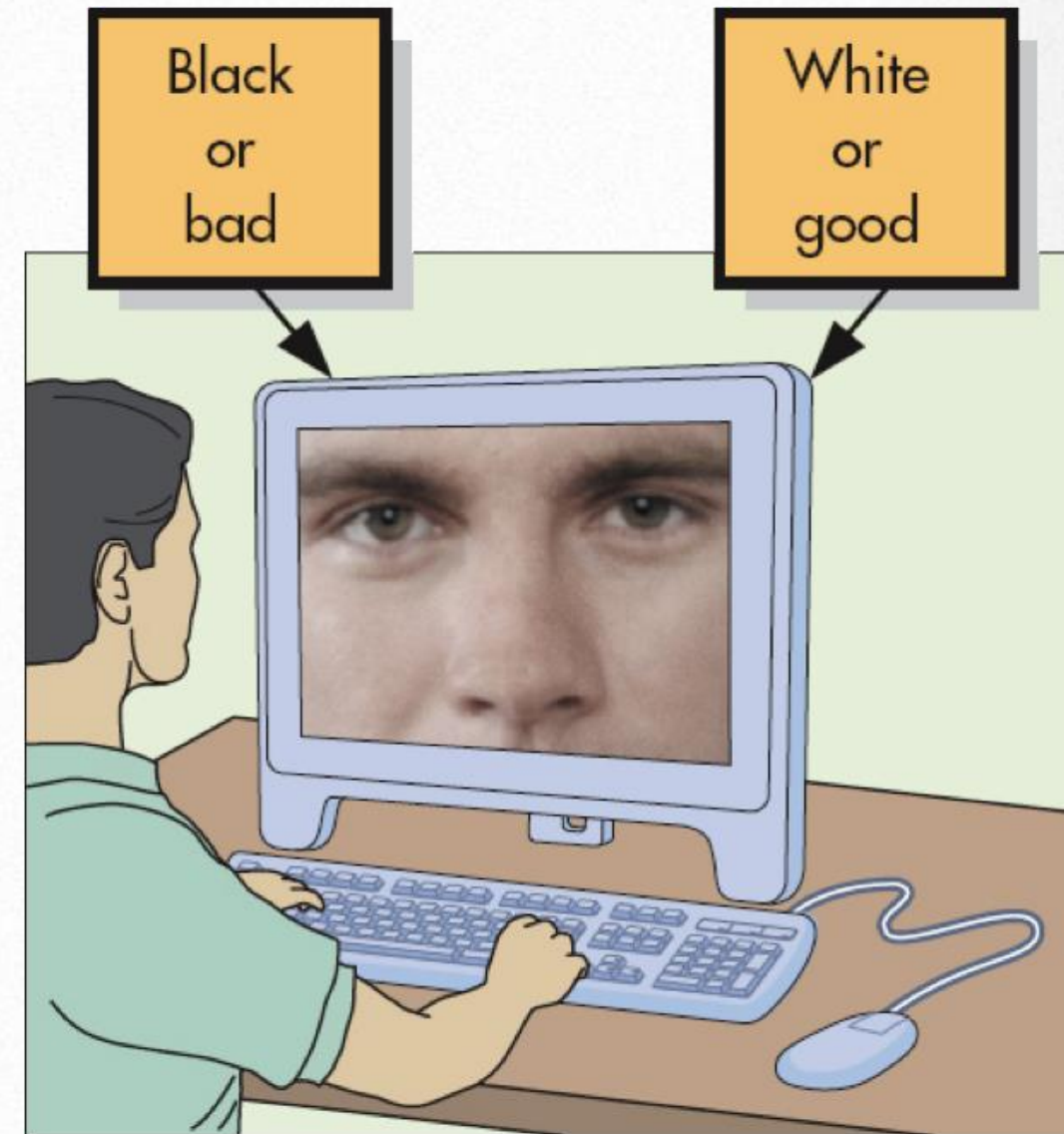
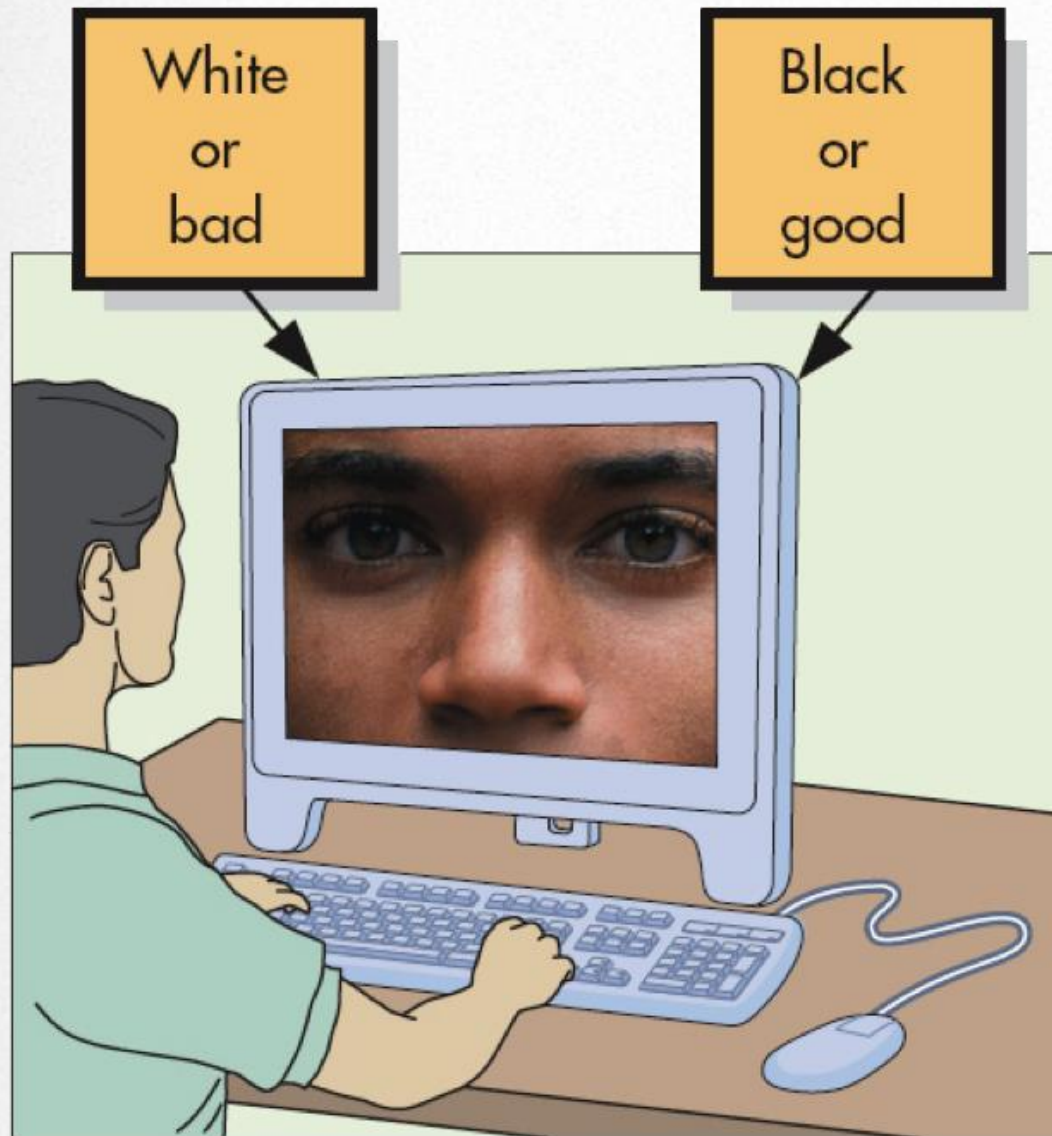
**Among fortune 500 CEOs,  
58% are taller than 6 feet.**

**An inch of height is worth \$769 per year**





# The Shooter Game



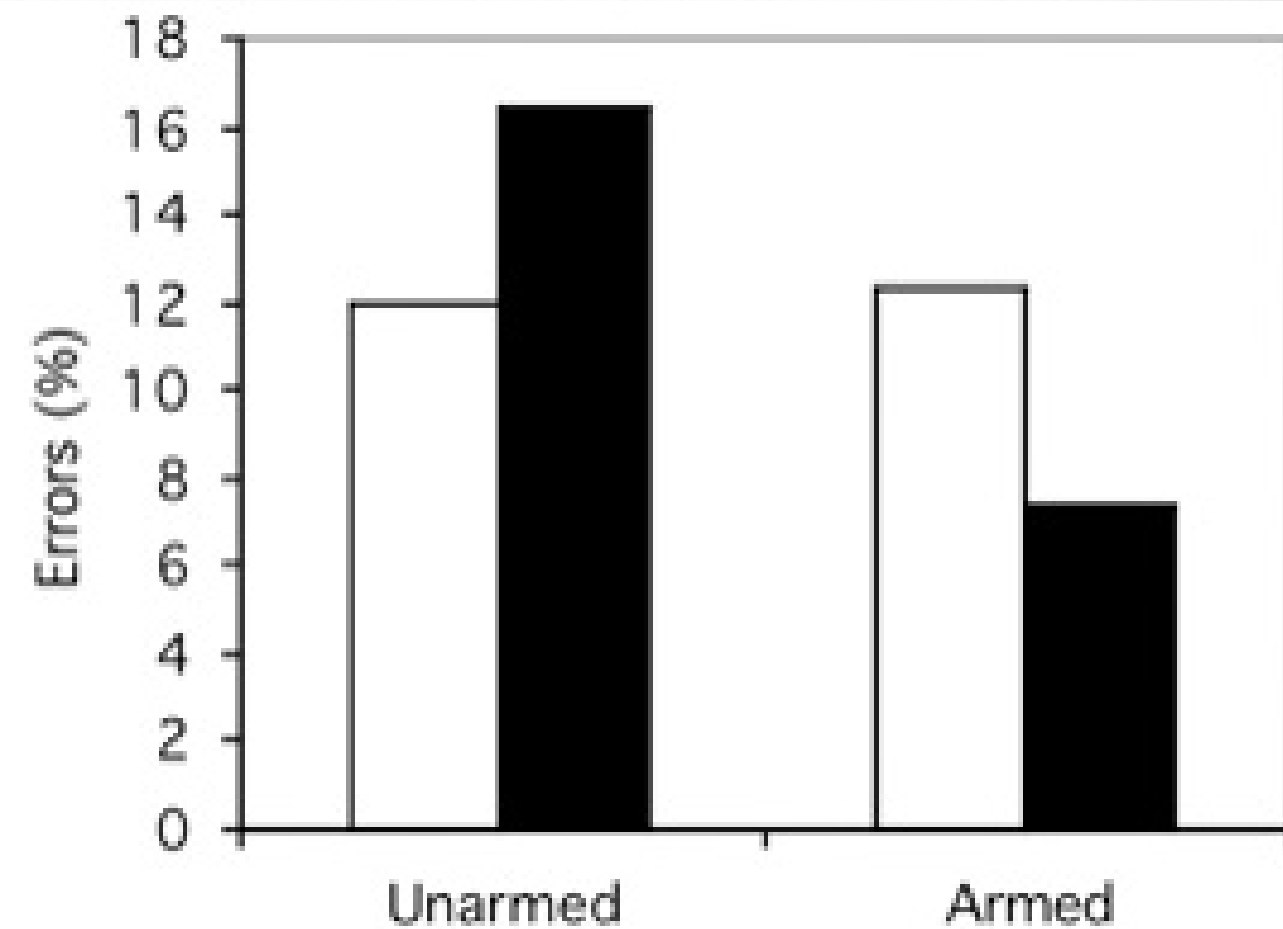
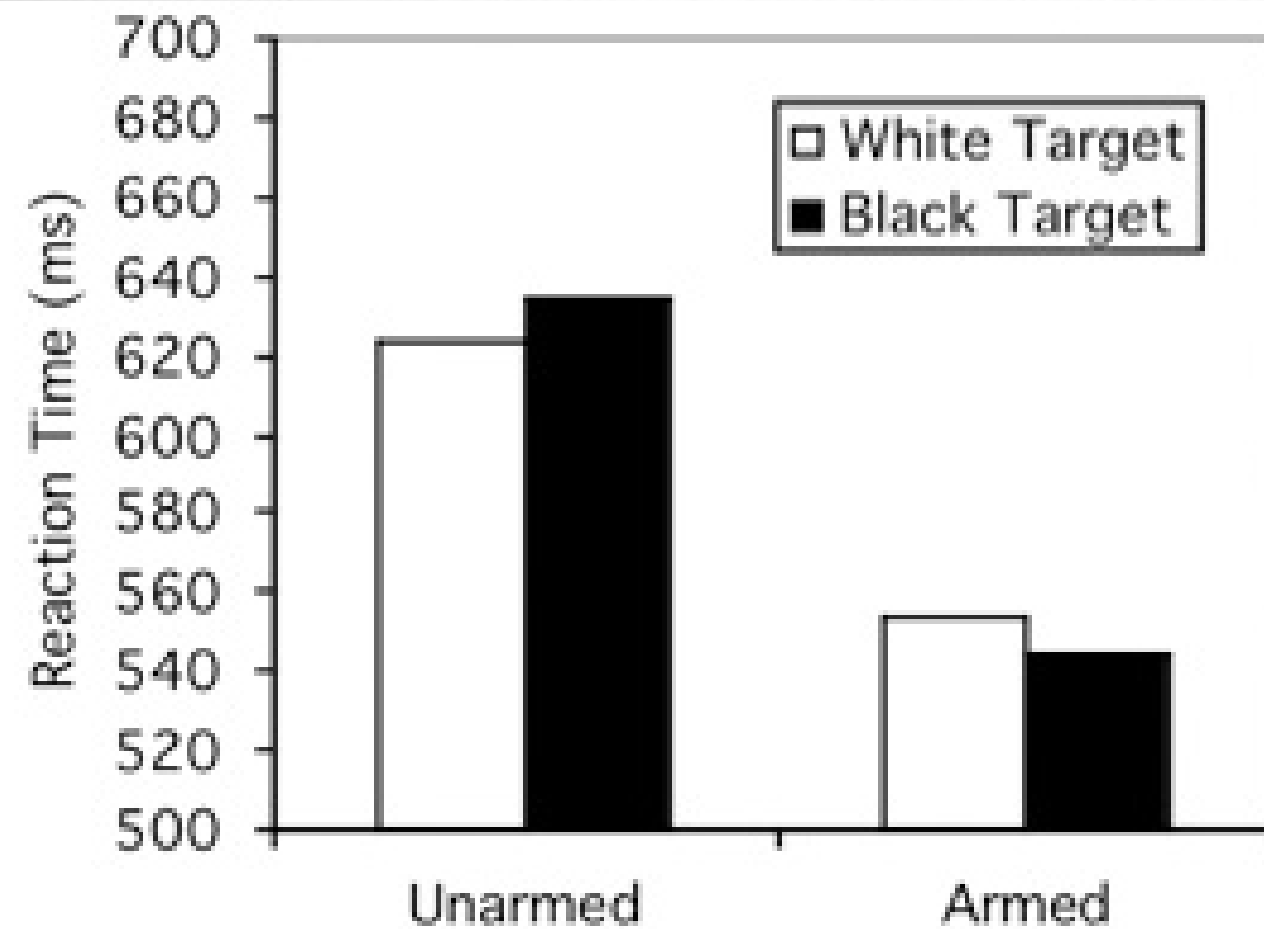


# The Shooter Game





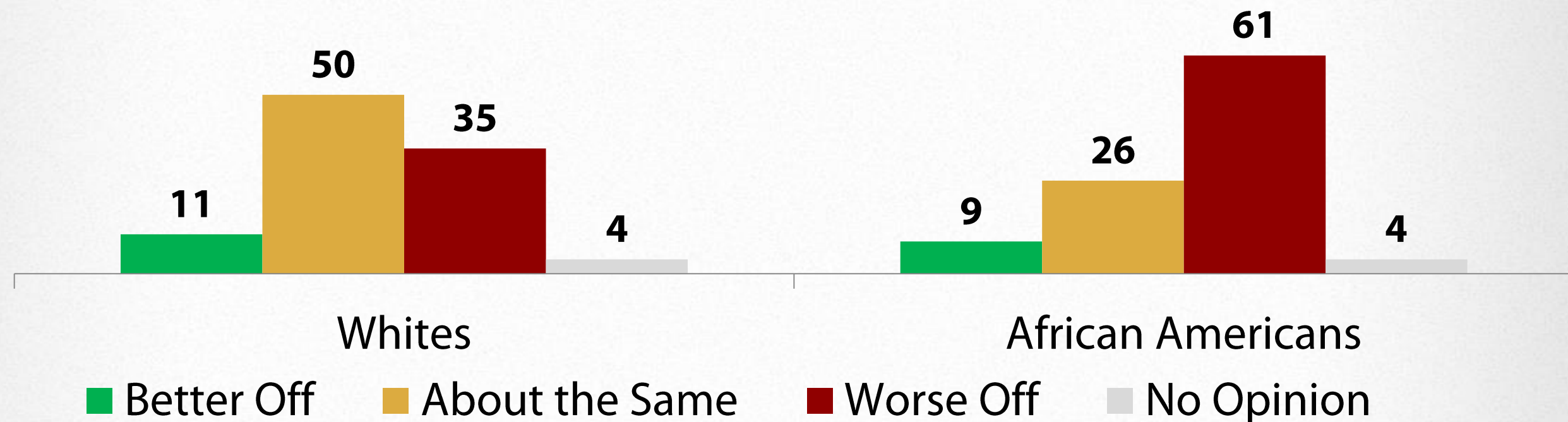
# The Shooter Game





# What About Health Care? Any Trends There?

Is the average African American better off...worse off... or about as well off as the average white person in terms of access to health care?



SOURCE: Morin, 2001: Healthcare Environment and Racial Disparities





# Black and White Differences In Speciality Procedure Utilization Among Medicare Beneficiaries >65

PROCESS	BLACK	WHITE	BLACK-TO-WHITE RATIO
<b>Angioplasty</b> (procedures per 1,000 beneficiaries per year)	2.5	5.4	0.46
<b>Coronary Artery Bypass Graft Surgery</b> (procedures per 1,000 beneficiaries per year)	1.9	4.8	0.40
<b>Mammography</b> (procedures per 100 women per year)	17.1	26.0	0.66
<b>Hip Fracture Repair</b> (procedures per 100 women per year)	2.9	7.0	0.42
<b>Amputation of All or Part of Limb</b> (procedures per 1,000 beneficiaries per year)	6.7	1.9	3.64
<b>Bilateral Orchiectomy</b> (procedures per 1,000 beneficiaries per year)	2.0	0.8	2.45

Source: Gornick et al, 1996





# It Doesn't Just Apply To Race...

- ❌ Doctors treat patients differently when the patient is overweight
- ❌ And patients treat doctors differently if the doctor is overweight





# What are Potential Sources Of Disparities In Health Care?



## HEALTH SYSTEMS-LEVEL FACTORS

Financing  
Structure of Care  
Cultural and Linguistic  
Barriers



## PATIENT-LEVEL FACTORS

Patient Preferences  
Refusal of Treatment  
Poor Adherence  
Biological Differences



## CLINICAL ENCOUNTER



# What are Potential Sources Of Disparities In Health Care?

Lack of **stable relationships** with **primary care providers** – minority patients even when insured at the same level as whites are more likely to receive care in ER and have less access to private physicians

How could well-meaning and highly educated health professionals working in their usual circumstances with diverse populations **create a pattern of care** that *appears* to be discriminatory



# Goals

- 📍 What is unconscious bias and why should I care?
- 📍 What causes it?
- 📍 I am a clinician/leader/citizen – what can I do about it?







# Unconscious Bias: An Overview





# What is Unconscious Bias (UB)?

- ☞ Form of rapid cognition that finds patterns based on small bits of information
- ☞ Ancient Reflexive system
- ☞ Adaptive: Danger detector





# Most Importantly...

- ❧ People do this without realizing they are demonstrating bias.
- ❧ People don't know they have certain biases.
- ❧ Biases occur without knowing why.
- ❧ This results in behaviors that are irrational and sometimes even dangerous.







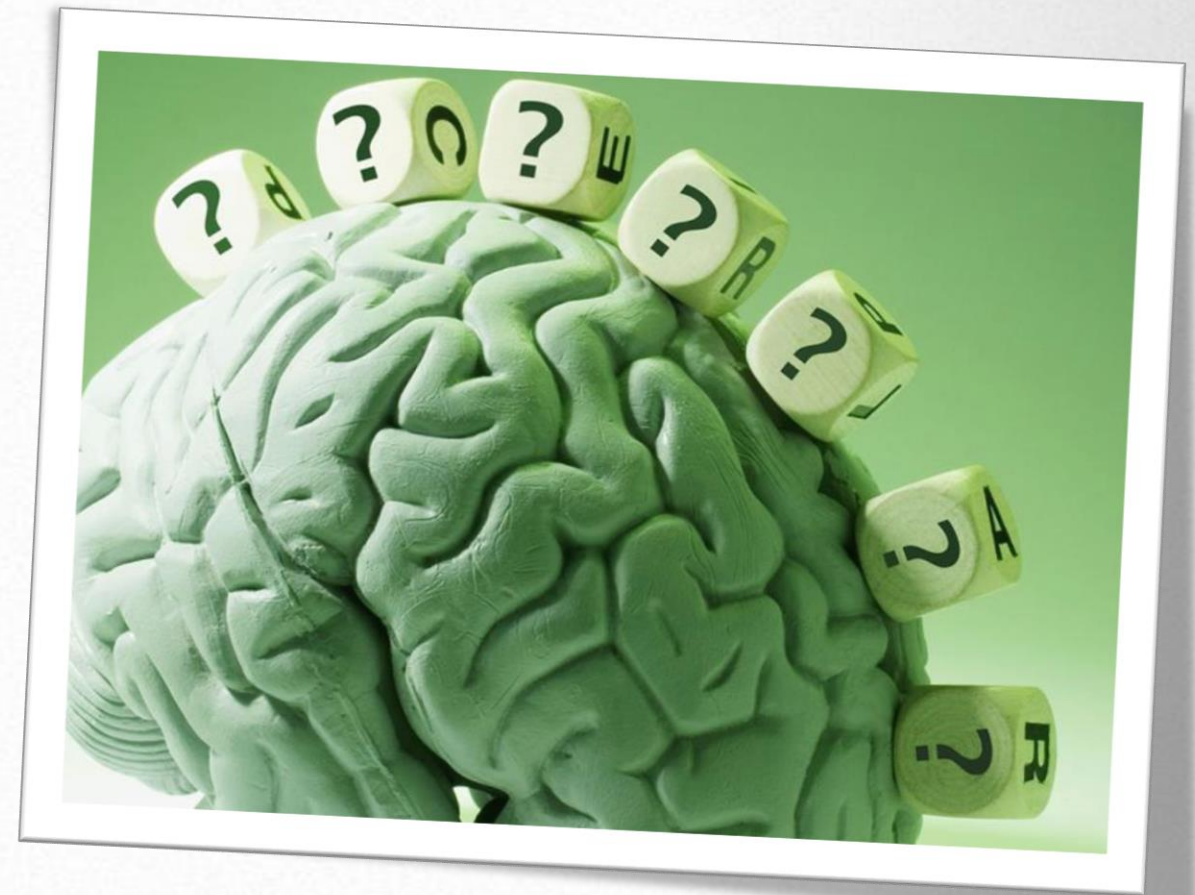
“Rule Your Mind  
or It Will Rule You”

Buddha



# Why?

- ❷ 11 million pieces of info at one time but can only deal with about 40
- ❷ Brain produces 'shortcuts' to what is right, wrong or important
- ❷ Evolutionarily adaptive, have served us for eons to protect us
- ❷ Biases impact decision-making and serves a purpose
- ❷ Not effective when dealing with diverse humans in workplace





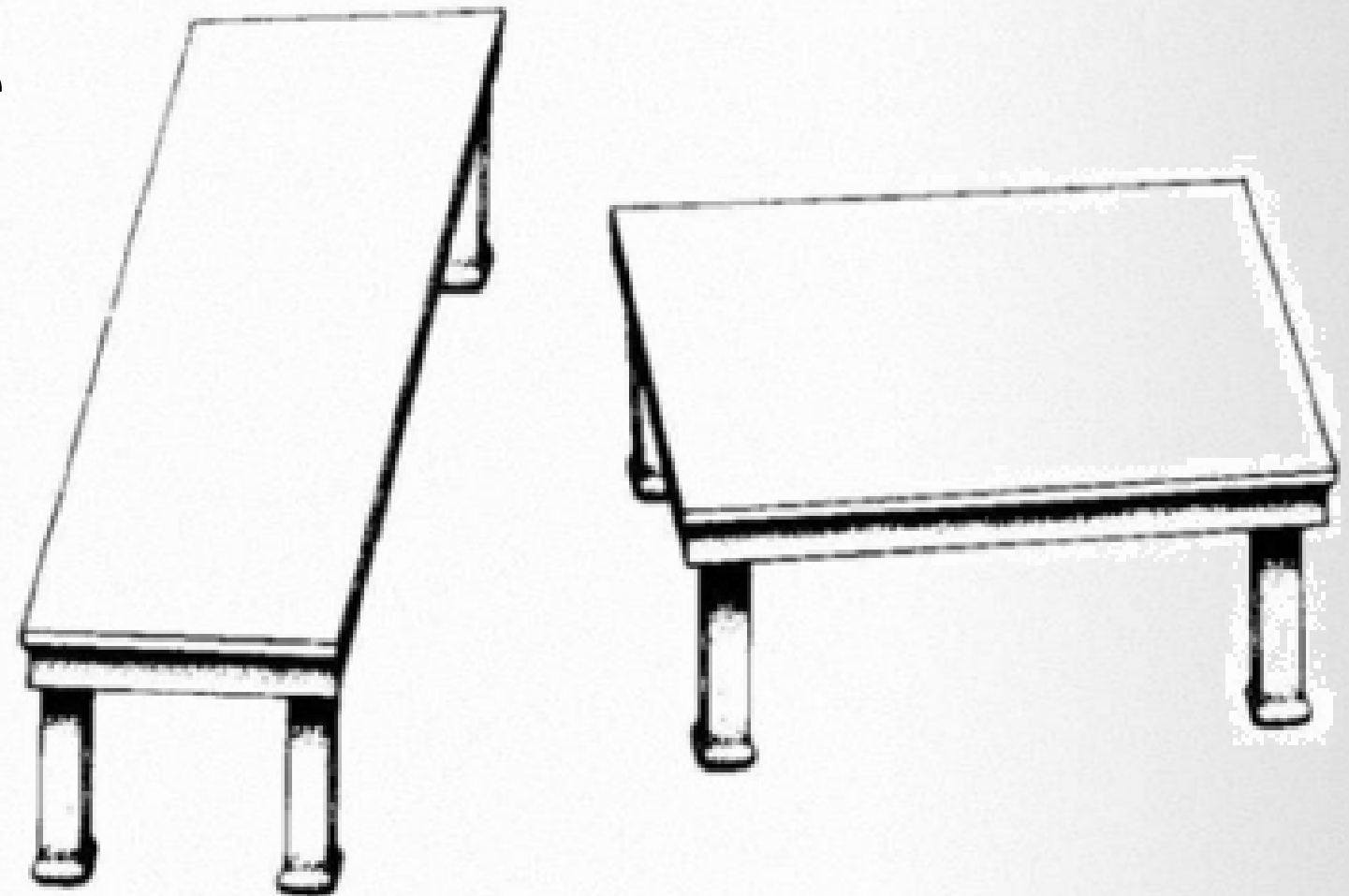


# Myth #1: I Don't Have Any Unconscious Bias



# Myth #1: I Don't Have Any Unconscious Bias

- ❌ Which is LONGER?
- ❌ The brain sees what it wants to see





# We all Have an Internal “Book Of Rules”



- ☞ Ultimately we believe our decisions are consistent with our conscious beliefs, when in fact, our unconscious is running the show.
- ☞ Not accessible through introspection.
- ☞ Measured indirectly but noticed directly.
- ☞ Active area of study in employment law, education, and even medicine.





# Where Do They Come From?



**“Wrong information always shown by the  
media**

**Negative images is the main criteria  
Infecting the young minds faster than bacteria  
Kids wanna act like when they see the cinema”**



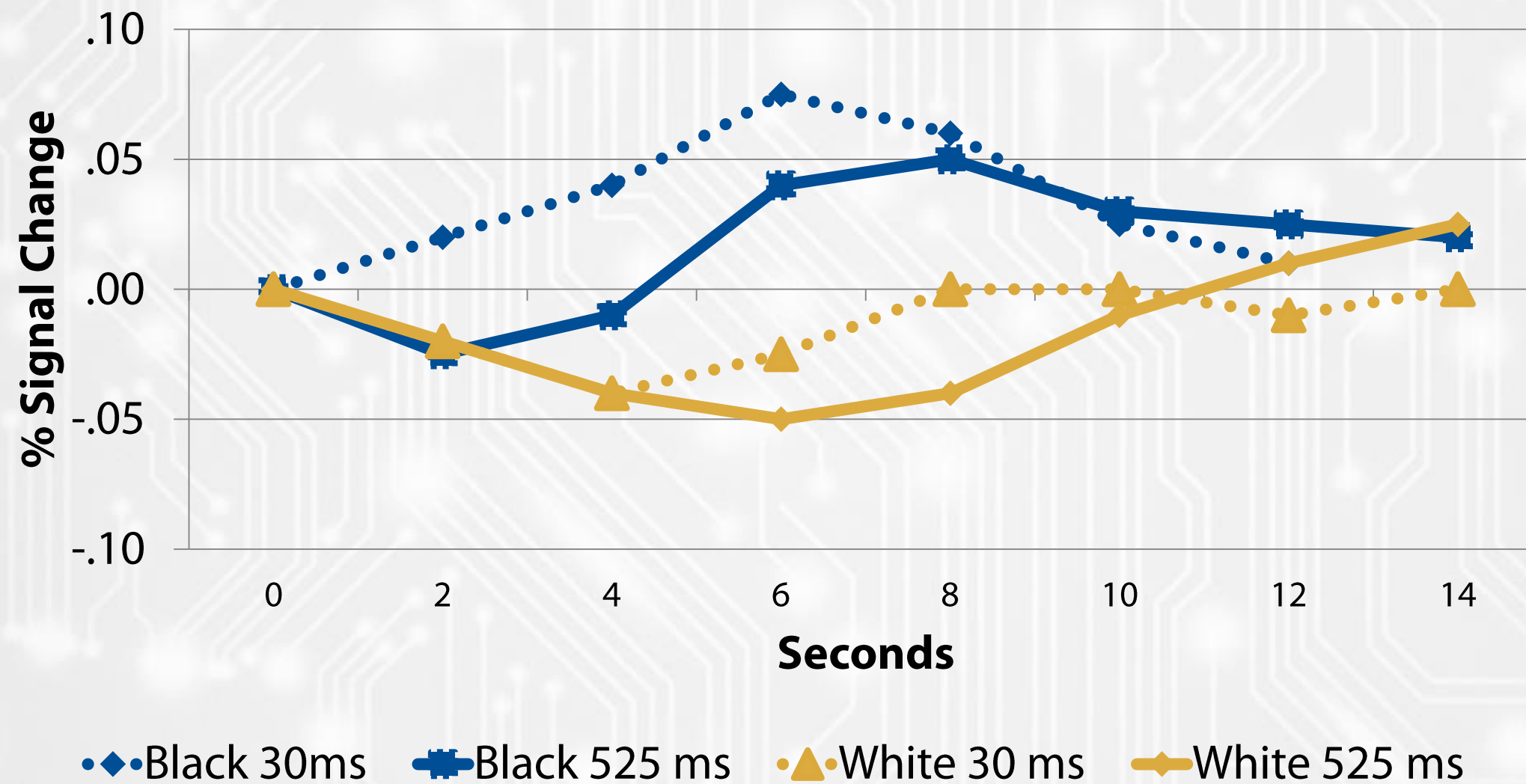
# Where Do They Come From?

- ☞ Accrued and change passively
- ☞ Documented in children as young as 6 years old (the doll test)
- ☞ Nature/Nurture: YES.





# Conscious vs Unconscious: 687,500x Speed Difference – Brain Wins



Source: Stanley D. Phelps E. Banaj, M. The Neural Basis of Implicit Attitudes, Curr. Dir. Psycholog Sci. 2008; 17(2):164-170





# Bias Works Behind The Scenes As We Take In...

Greetings	Non-Verbals & Body Language	Clothes	Body Type / Age
Hairstyle	Other Appearance	Language Fluency / Accents	Parental Status
Name	Alma Mater	Common Interests	Spelling Ability





# Can You Make It Out?





# The Washington Post

Morning Mix

The inside story of the 'white dress, blue dress' drama that divided a planet



The famous dress picture. (Courtesy of Canach)



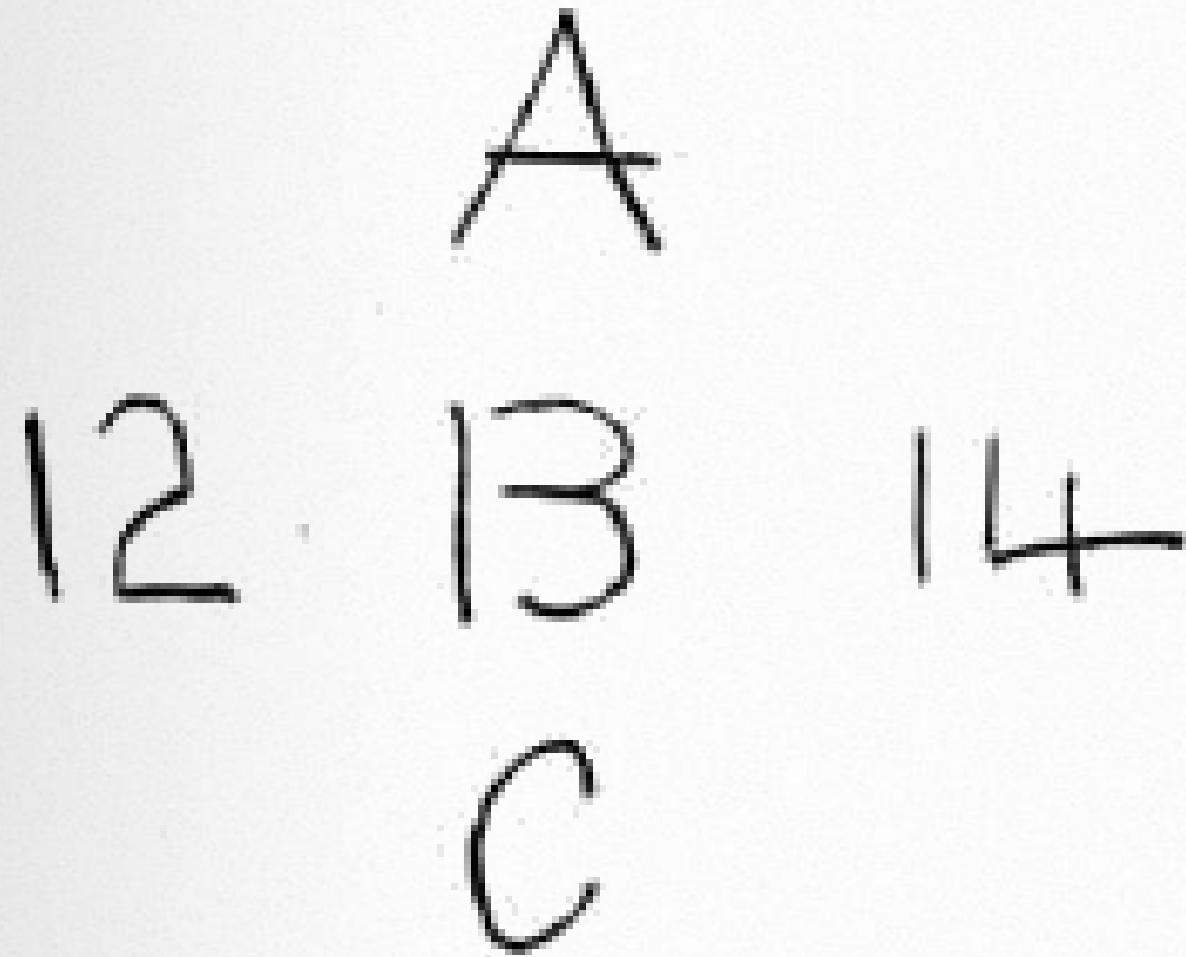
# This 'Shiny Legs' Optical Illusion Is Driving The Internet Crazy

Offbeat | Written by Amrita Kohli | Updated: October 27, 2016 10:25 IST





# Perceptual Organization



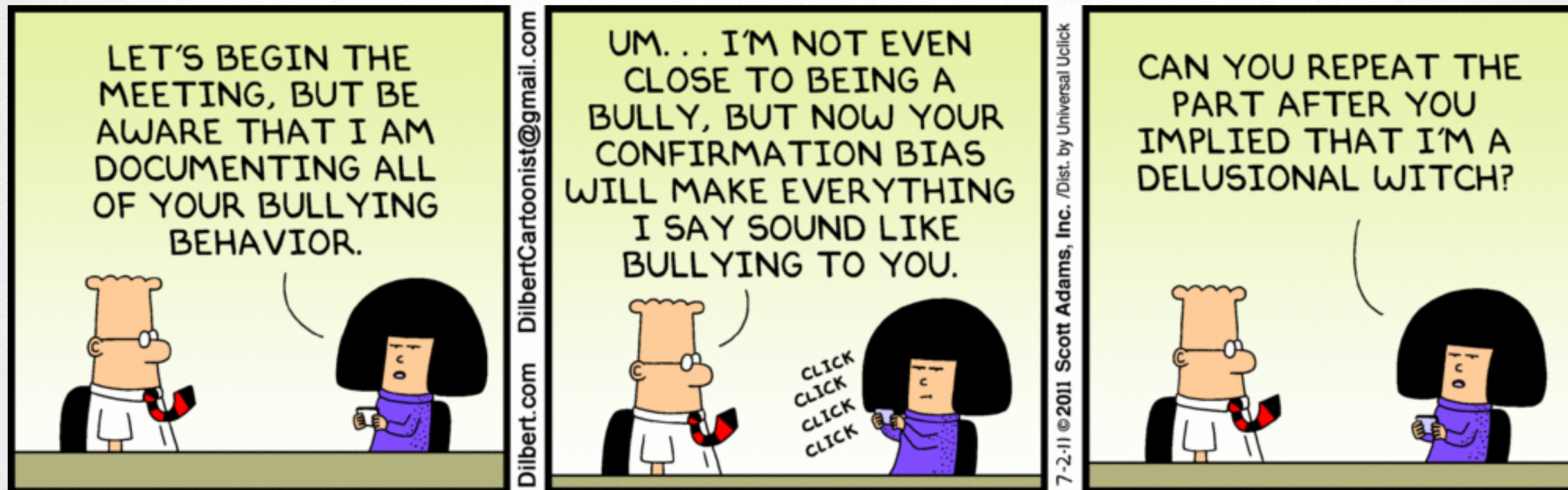
Our minds tend to fill in the blanks depending on the context around it





# Our Mind Fills In The Blanks In Other Areas Too

**CONFIRMATION BIAS** is the tendency for people to selectively search for and consider information that confirms already held beliefs.





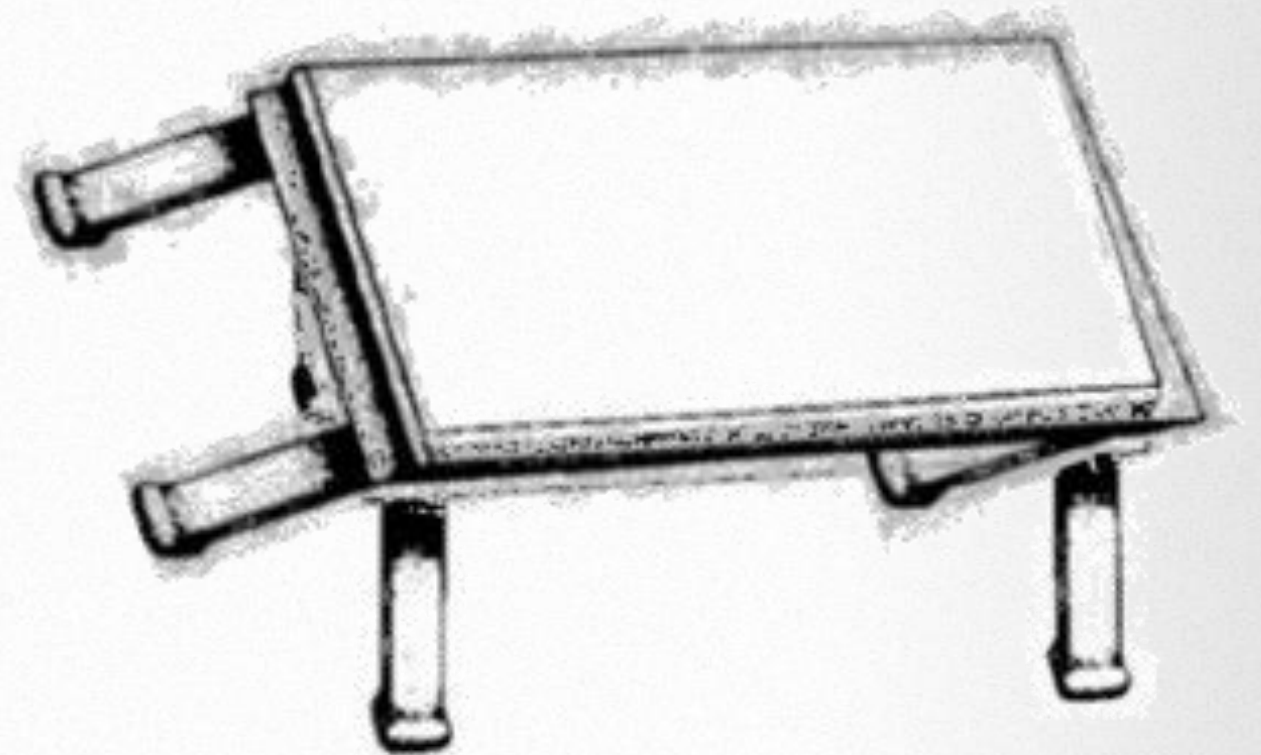


## Myth #2: I Know What My Unconscious Biases Are



# Myth #2: I Know What My Unconscious Biases Are

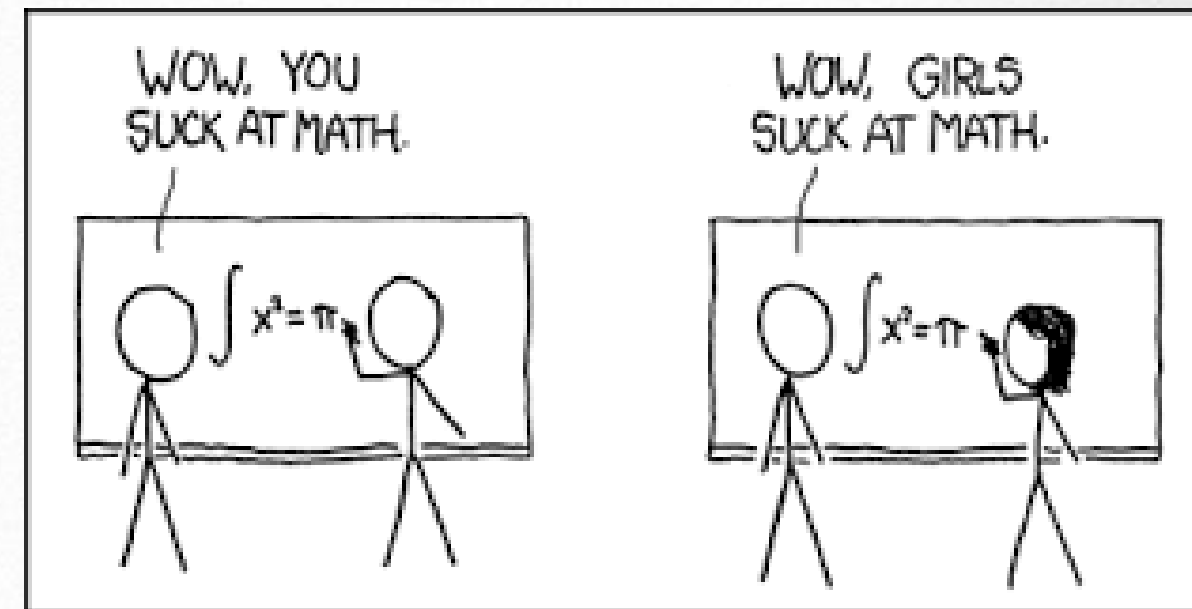
**Which is LONGER?**





# By Definition they are Unconscious!

- ☞ May have a sense of some of them but blind to others
- ☞ Consider Implicit Association test
  - Designed to detect automatic associations between concepts in memory
- ☞ Rather than deny our UB, be curious as to how it came about





# Implicit Association Test (IAT)



- Developed 1998
- Available for bias in age, weight, gender, race, sexual orientation
- About 5 min long

Easily taken at [www.projectimplicit.net](http://www.projectimplicit.net)





# Implicit Association Test (IAT)

**“The IAT has demonstrated enough  
reliability and validity that  
TOTAL DENIAL IS IMPLAUSIBLE.”**

Kang and Lane, 2010







Okay, So What Does This  
Have To Do With Health Care?







# Evidence Suggests That Physician Biases May Influence The Clinical Encounter

- 🚫 Studies by van Ryn and Burke 2000
- 🚫 In actual clinical settings found that doctors are more likely to ascribe negative racial stereotypes to minority patients
- 🚫 This occurs even when differences in patient's education, income and personality characteristics were considered

Clinicians may order fewer tests for racial and ethnic minorities if they do not understand the description of the patients symptoms



# It Starts in Medical School...

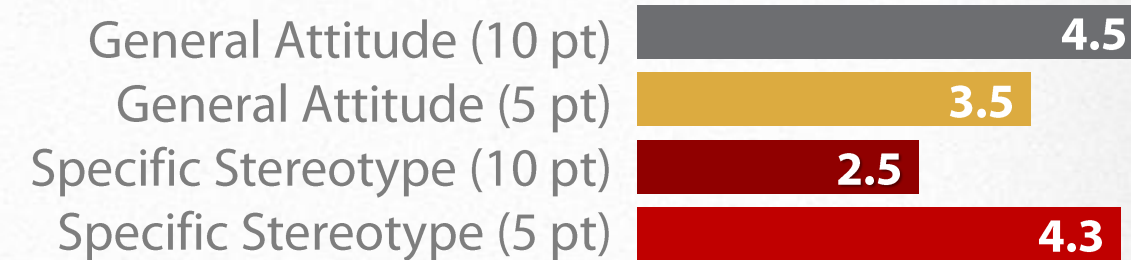
- 🚫 “Looking for the roots of Racial Bias in the Delivery of Healthcare” (2011)
- 🚫 John’s Hopkins’ study suggests medical students may “learn” to treat nonwhite patients differently than white patients.



# And Residency...

- ❷ Reduced likelihood to prescribe thromolytics for African American patients associated with implicit bias.
- ❷ Higher likelihood of prescribing thromolytics for African Americans if they were aware of what the study was measuring.

## Explicit (Self-Reported) Bias



## Implicit (IAT) Bias



2007 survey-based study; 28% response rate





# Can Your Gender Or Race AFFECT YOUR HEART?

When presented with same primary symptoms, physicians sent far **more white men for cardiac cath** than either white women or men and women of color.

The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization"(1999) New England Journal of Medicine published study out of Duke University







Myth #3:  
Since UB is Unconscious,  
There Is Nothing  
I Can Do About it.



# Advice from Experts

**“Own the fact that you’re not exceptional. You are in this sweet spot of judges, lawyers, police, all of whom have bias. If you care, it would make sense to find out.”**

Jerry Kang, JD, Professor of Law, UCLA  
April 15, 2014

**“Don’t present this as scary. This behavior is malleable and contextually sensitive.”**

Irene Blair, PhD, Associate Professor, Psychology and Neuroscience,  
University of Colorado  
April 11, 2014





# Things We Can Do

## MEASURE

Implicit Association Test  
(Encourage...don't  
mandate)

## REFRAME

**From:** Discrimination,  
protected Class  
**To** Fair Treatment,  
Respect

## QUESTION

Illusion of Objectivity

## CREATE

"Tell Me More" Culture

## INCLUDE

Instruction in social  
psychology and prejudice





# Apply the P.A.U.S.E. Technique for Results

- P** Pay attention to what's actually happening beneath the judgments and assessments
- A** Acknowledge your own reactions, interpretations, and judgments
- U** Understand the reactions, interpretations and judgments that may be possible
- S** Search for the most empowering and productive way to deal with the situation
- E** Execute your action plan





# The Bottom Line: Bias is Natural And Will Always Be Present.

- ❧ It doesn't make us prejudiced, it makes us human.
- ❧ However it is a fact, not an excuse.
- ❧ Recognition first step and then can respond and shift.
- ❧ Medical disparity gaps – Patient Care.

Other resources: <http://www.stop-disparities.org/RESOURCES.html>







## Discussion + Q&A

