Unconscious Bias: What You Don’t Realize that Affects Your Every Life Action

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Learning Objectives

• Define unconscious bias and describe its effects on key actions
• Understand its physiologic basis and its main purpose in human function
• Name at least three key components that play into our unconscious biases and at least four ways to work with your unconscious biases
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Thomas Jefferson University
Portuguese Society Against Racism
BIAS

Howard Ross
Cook Ross Inc.
How Successful are We?
What is Bias?

A tendency or inclination that results in judgment without question.
What function does bias serve?
Bias in Action
Ian Ayres, Yale University
The Impact of a Name

Sendhil Mullainathan, MIT and Marianne Bertrand, Univ. of Chicago
Are Doctors Fattists?

University of Washington, University of Virginia, University of Modena, Wake Forest University

So are patients!

Bloomberg School of Public Health, Johns Hopkins University
ORIGINAL CONTRIBUTION

Sex Differences in Diagnoses, Treatment, and Outcomes for Emergency Department Patients With Chest Pain and Elevated Cardiac Troponin

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A related article appears on page 467

ABSTRACT

Objective: While sex differences in the treatment and outcomes of subjects with acute coronary syndromes are well documented, little is known about the impact of cardiac troponin (cTn) levels obtained in the emergency department (ED) on the observed sex differences. We sought to determine whether cTn levels by chest pain features modify sex differences in diagnosis, treatment, and outcomes in patients presenting with chest pain suggestive of ischemia.

Methods: All adults presenting to two hospitals in Vancouver, Canada, between May 2008 and March 2013 with ischemic chest pain and with cTn testing were included in the study. Outcomes were obtained through data linkage with population-based administrative data sets, including Vital Statistics (death), Discharge Abstract Database (hospitalizations), and PharmaNet (medications). Cumulative event rates for the composite major adverse cardiac event (MACE) endpoint (death, myocardial infarction [MI], incident admission for heart failure or for angina requiring diagnostic catheterization or revascularization) were estimated for each sex and cTn level using the Kaplan-Meier method; Cox models were used to estimate hazard ratios and 95% confidence interval (CIs) for 1-year MACE and 7-day catheterization. Logistic models were used to estimate odds ratios (ORs) and 95% CI for 90-day medication use.

Results: Over the 5-year study period, 25,539 patients presented to the ED with chest pain of which 7,272 (2,933 females and 4,339 males) met the inclusion criteria. Among patients with chest pain with cardiac features/history and cTn > 99th percentile, females were less likely to be diagnosed with MI (46.4% vs. 57.5%). Females were less likely to receive antiplatelet therapy (76.3% vs. 80.8%) or beta-blockers (34.7% vs. 41.0%). Males were less likely to experience hospitalization (42.6% vs. 48.4%) or heart failure admission (19.4% vs. 25.0%).
Women had 35.2% more emails ignored…and 59.9% more meetings declined.

Katherine Milkman, Wharton, Modupe Akinola, Columbia University, Dolly Chugh, New York University
Even Female Hurricanes Get No Respect!

Researchers studied the 47 most damaging hurricanes, from 1950-2012 (excluding Katrina and Audrey).

“Female hurricanes are deadlier than male hurricanes” National Academy of Sciences, Jung, Shavitt, Viswanathan, and Hilbe, May 2014
Which are ours?
Book of Rules

↓

Schema
Book of Rules

Schema

Background
Background
Background creates CONTEXT
What is there...?

Welded steel

Bright paint

Nuts and Bolts

Curved design
What we see...

Fun

Exciting

Exhilarating

Scary

Nauseating

Dangerous
What is there...?

Hair

Earrings

Glasses

Neutral expression
What we see...

Well Groomed
Intelligent
Expressive
Stoic

One of “those people”
Socially Inept
Rebellious
Unfriendly
The Neurobiology of Bias
Fast (Emotional) Brain

Catalyzing person or circumstance

Background
Do we “know” or are we just “reacting”? 
WHODUNNIT?
Catalyzing person or circumstance

**Fast (Emotional) Brain**

**Slow (Thinking) Brain**

Background

Catalyzing person or circumstance
We make associations very quickly, based on our experience or beliefs, and more slowly when we see something counter to our experience or beliefs.
John Ridley Stroop, 1935
Key Patterns of the Mind

- Selective Attention/Inattentional Blindness
- Social Primacy
- Subliminal Messages
- Projection
- Power and Empathy
Selective Attention/Inattentiveness
Can you find the mistake?
83% of Radiologists who were asked to search for cancer nodules, did not notice the gorilla in the top right hand portion of this image!
Subliminal Messages
Rainy Days Get You Down?

Medical school applicants interviewed on rainy days received scores equivalent to a 10% lower mark on the MCAT than those interviewed on sunny days.

Donald Redelmeier, MD and Simon Baxter, BSc, University of Toronto Medical School, 2009
Projection
We make stuff up about people...

John Fetterman
- Lt. Governor of PA, Former mayor of Braddock, PA – the tattoo on his arm is the zip code!
- Has a Master’s degree in Public Policy from Harvard
- Served in the Americorps
- Received international media attention for the economic revitalization programming he started in his community

Ted Bundy
- American serial killer and rapist.
- Confessed to killing 30 women
“The past is not dead. It isn’t even past.”

William Faulkner
Requiem for a Nun
Women in Media Today

- Women are 51% of the U.S. population but only 37% of prime-time TV characters, and women 45 and older are only 15% of prime-time characters.
- Male TV characters are 13% more likely to be shown “on-the-job” than females and 12% more likely to be shown talking about work.
Social Primacy
Maslow’s Hierarchy

- Physiological
- Safety
- Belongingness
- Esteem
- Self-Actualization

Abraham Maslow, 1943
“...being excluded from a group triggers activity in the same regions of the brain associated with physical pain.”

Kipling D. Williams, Purdue University, 2007
Power and Empathy
Empathy

• “Empathetic neural responses...decreased significantly when participants viewed faces of other races”
  – Xiaojing Xu, Xiangyu Zuo, Xiaoying Wang, and Shihui Han, Peking University

• “When the target is an out-group member, people may have powerful motivations not to care about or help ‘the other.’”
  – Mina Cikara, Carnegie Mellon University, Emile Bruneau, MIT, and Rebecca Saxe, MIT

• “Empathy is diminished when people (black or white) who hold racial biases see that pain is being inflicted on those of another race.”
  – Salvatore Maria Aglioti of Sapienza Università di Roma
How do I get this right??
The Unconscious is Malleable
”Unless you make the unconscious conscious it will direct your life and you will call it fate. We cannot change anything until we accept it.”

Carl Jung
6 Ways to Develop More Consciousness in Decision-Making
Recognize and accept that you have bias
Develop the capacity to “use a flashlight on yourself”
How much does intelligence, confidence and success matter?
The Overconfidence Effect

“...A larger bias blind spot was associated with higher cognitive ability.”

Richard F. West and Russell J. Meserve
James Madison University, Keith E. Stanovich
University of Toronto, APA Journal 2012
Practice “constructive uncertainty”
Explore awkwardness and discomfort
5
Engage with people you consider “others” and expose yourself to exemplars from that group.
6

Get feedback
To change systems, we have to think from a systems perspective!

Education
Systems and structures
Accountability
Transform employee and physician experience by improving engagement to enable the delivery of the best patient experience.
Thank You!