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Let's Get Explicit About Implicit Bias


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Disclosure


- I have no relevant financial conflicts of interest in relation to this activity to disclose.

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Objectives


- Define the mechanisms and manifestations of implicit bias
- Explain the impact of implicit bias in health care and population health
- Review methods for reducing negative impact of implicit bias

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Disclaimers

- I am not here to tell you what to believe
- This is a participatory workshop that can help you better understand and address the difficult issue of implicit bias

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Self Assessment Question #1

Which of the following is true regarding implicit bias?

- A. One's implicit bias cannot be changed
- B. Implicit and explicit biases often manifest concurrently
- C. Implicit bias is an evolutionary mechanism to reduce cognitive load
- D. Stereotyped populations have less implicit bias than majority populations



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Self Assessment Question #2

Which best describes the impact of health care professional (HCP) implicit bias on the health care system?

- A. HCPs have the same implicit biases as the general population
HCP implicit bias is mitigated by their scientific training and background
- B. HCP implicit bias has less impact in the health care system since it is buffered from structural racism/discrimination
- C. HCP implicit bias is higher than the general population due to emotional intensity of their work



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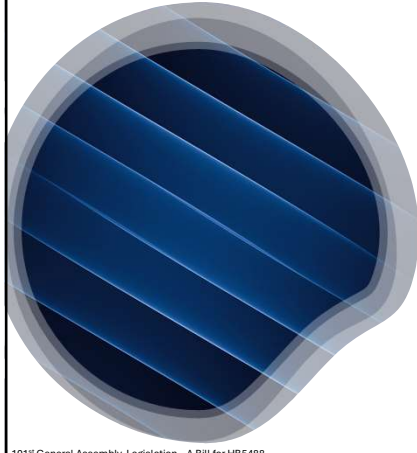
Self Assessment Question #3

Which of the following statements is true regarding reducing the impact of implicit bias?

- A. An individual is solely responsible for reducing their implicit bias
- B. Self-reflection on one's implicit biases is key to reducing its negative effects
- C. It is not possible to retrain the brain and its implicit bias processes
- D. Reducing implicit bias will not positively impact disparities in health care



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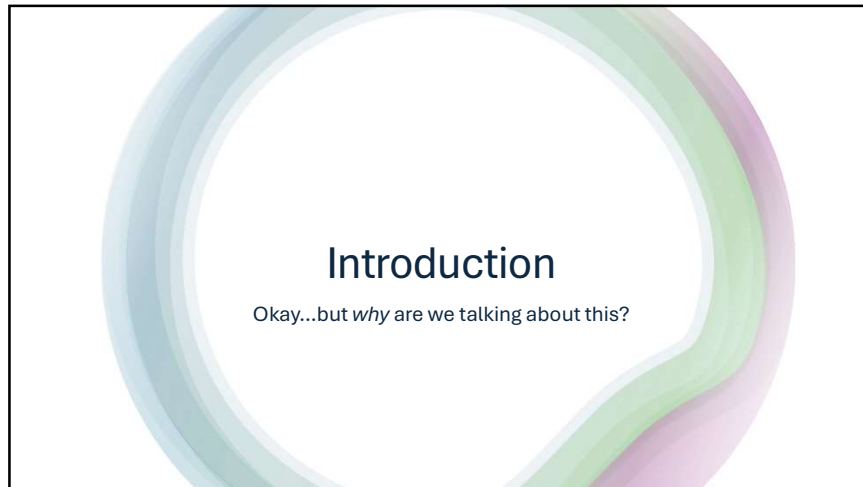
Introduction

Why are we talking about this?

"In order to renew a license as a health care professional in this State, the licensee shall complete an evidence-based implicit bias training... [regarding how to address] unintended biases regarding race, ethnicity, gender, identity, sexual orientation, socioeconomic status, or other characteristics"

101st General Assembly, Legislation – A Bill for HB5488.

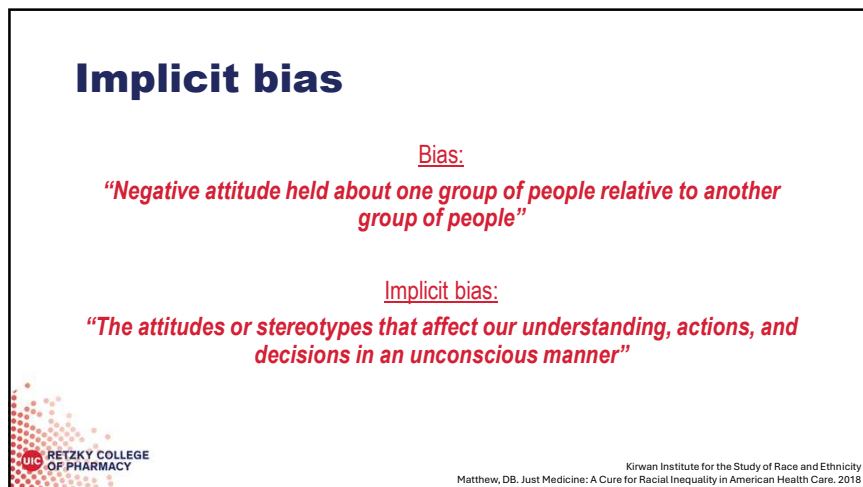
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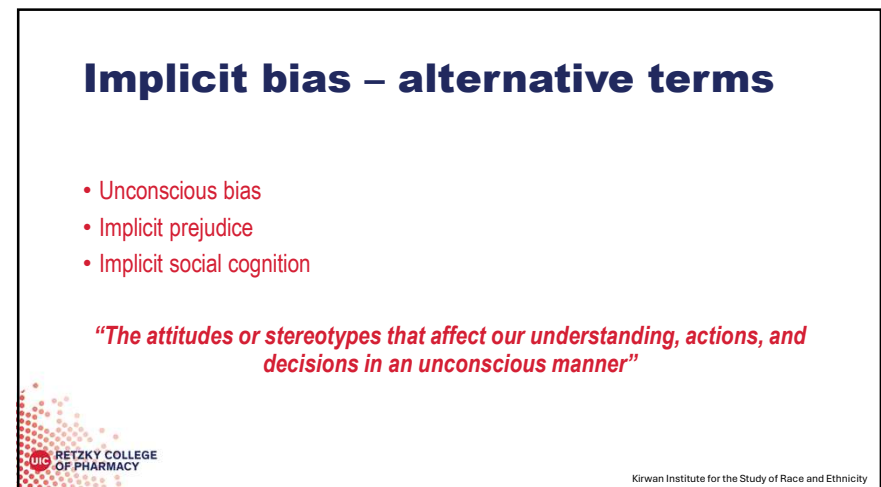
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Evolution of implicit bias

Frontal cortex: Associated with reasoning, first impressions, and empathy

Amygdala: Associated with automatic responses to stimuli and fear/"fight or flight" response

Temporal lobes: Store basic information about individuals and social stereotypes

Dalton S. Vilagran M. Minimizing and addressing implicit bias in the workplace: be proactive, part one. College & Research Libraries News. 2018;79(9):478.

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American Academy of Family Physicians. The EveryONE Project 2019.

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How implicit biases work in subconscious mind

```

    graph LR
      Store[Store] --> SK[Social Group Knowledge]
  
```

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Adapted from from: Matthew, DB. Just Medicine: A Cure for Racial Inequality in American Health Care. 2018

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How implicit biases work in subconscious mind

```

    graph LR
      Store[Store] --> SK[Social Group Knowledge]
      SK --> Identify[Identify]
      Identify --> GM[Group Membership]
  
```

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Adapted from from: Matthew, DB. Just Medicine: A Cure for Racial Inequality in American Health Care. 2018

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How implicit biases work in subconscious mind

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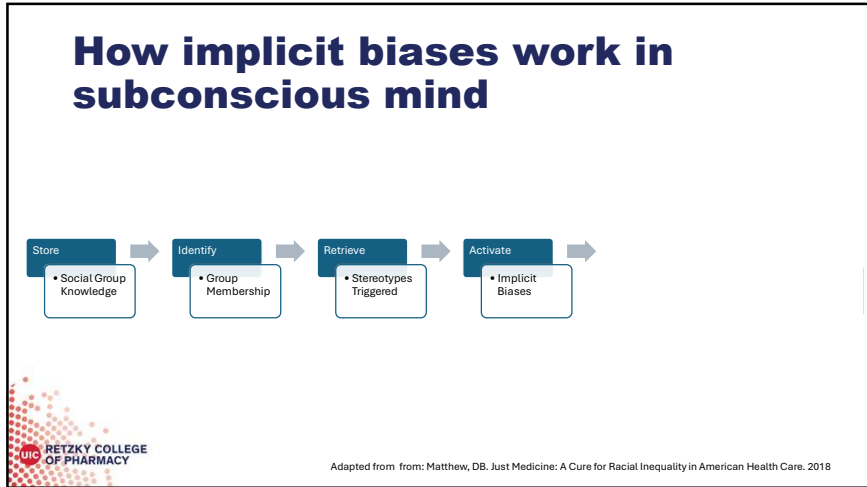
    graph LR
      Store[Store] --> SK[Social Group Knowledge]
      SK --> Identify[Identify]
      Identify --> GM[Group Membership]
      GM --> Retrieve[Retrieve]
      Retrieve --> ST[Stereotypes Triggered]
  
```

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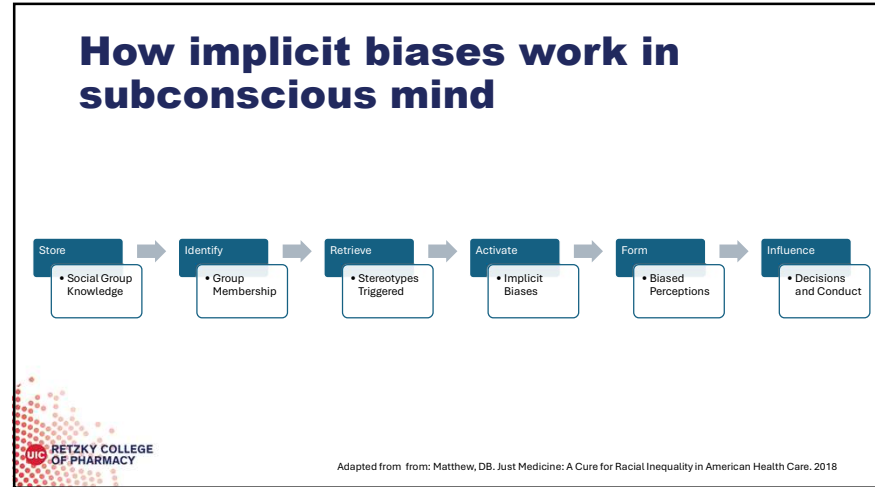
Adapted from from: Matthew, DB. Just Medicine: A Cure for Racial Inequality in American Health Care. 2018

"Unconscious stereotypes are pulled from storage to help sort out the new person or situation before us, regardless of their accuracy about or applicability to the individual in fact"

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Measuring implicit bias – IAT

- Gold standard – Implicit Association Test (IAT)
- Measures user's unconscious associations between concepts and evaluations

Implicit Association Test

Next, you will use the 'E' and 'I' computer keys to categorize items into groups as fast as you can. These are the four groups and the items that belong to each:

Category	Items
Good	Smiling, Glad, Laughing, Spectacular, Cheerful, Excitement, Glorious, Terrific
Bad	Dirty, Horrible, Gross, Notion, Degraded, Despicable, Yucky, Hurtful
Fat People	
Thin People	

There are seven parts. The instructions change for each part. Pay attention!

[Continue](#)

Project Implicit. Accessed Jan 2025

19

Press "E" for
Bad words
or
Thin people

Press "I" for
Good words
or
Fat people

[Part 3 of 7](#)

Use the **E** key for **Thin people** and for **Bad words**.
Use the **I** key for **Fat people** and for **Good words**.
Each item belongs to only one category.

If you make a mistake, a red **X** will appear. Press the other key to continue.
Go as fast as you can while being accurate.

Press the **space bar** when you are ready to start.

Project Implicit. Accessed Jan 2025

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Press "E" for Bad words or Thin people

Press "I" for Good words or Fat people

If you make a mistake, a red X will appear. Press the other key to continue.

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Project Implicit. Accessed Jan 2025

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Press "E" for Bad words or Thin people

Press "I" for Good words or Fat people

Smiling

If you make a mistake, a red X will appear. Press the other key to continue.

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Project Implicit. Accessed Jan 2025

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The Impact of Implicit Bias

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Why does implicit bias matter?

Implicit bias influences behavior/actions more than explicit bias

In our country, it's been shown to create *biased conduct* and *decision-making* amongst

- Attorneys when deciding who to prosecute
- Lawyers choosing jury members
- Corporate managers hiring and deciding promotions
- Teachers and administrators when deciding who to punish among misbehaving students
- Jury members when deciding who should receive death penalty

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Heath, D.B. Just Medicine: A Cure for Racial Inequality in American Health Care. 2018

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Do health care professionals have implicit bias?

FitzGerald and Hurst *BMC Medical Ethics* (2017) 18:19
DOI 10.1186/s12910-017-0179-8

BMC Medical Ethics

RESEARCH ARTICLE

Open Access

Implicit bias in healthcare professionals: a systematic review

Chloë FitzGerald¹ and Samia Hurst



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Implicit bias in healthcare professionals: a systematic review

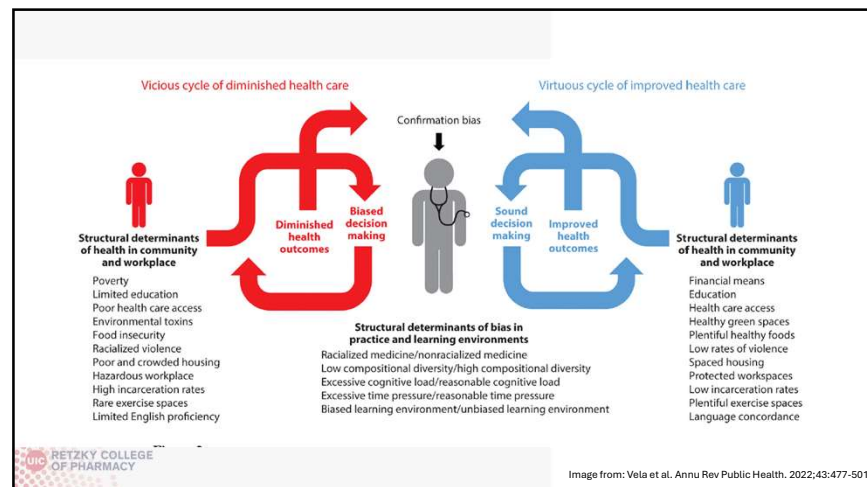


Chloë FitzGerald¹ and Samia Hurst

Year	Author(s)	Country	Assumption Method Biases: Age, Gender, Racial/ethnic, and Socio-Economic Status (SES)	Sample Size	Method	Results	Notes
2004	Arber ¹ [27]	US/UK	Assumption Method Biases: Age, Gender, Racial/ethnic, and Socio-Economic Status (SES)	256 primary care physicians in the US and the UK	Screening telephone calls	65% in the US and 60% in the UK	Gender and age influenced the doctors' questioning of patients presenting with coronary heart disease (CHD) in both countries. Men were asked more questions overall and middle-aged patients were asked more lifestyle questions.
2006	Arber ¹ [32]	UK and US	Assumption Method Biases: Age, Gender, Racial/ethnic, and SES	256 primary care physicians in the US and the UK	Screening telephone calls	65% in the US and 60% in the UK	The gender of the patient significantly influenced doctors' diagnostic and management activities. Middle women were asked fewest questions and prescribed least medication appropriate for CHD.
2006	Barnhart [66]	US	Assumption Method Biases: Racial/ethnic, Gender, and Social Circumstances	544 family medicine physicians, internists, cardiologists, and cardiothoracic surgeons	Mail-out	70%	The patients' race and gender did not significantly affect the physicians' treatment preferences. However, significant differences were found according to social circumstance.
2008	Börner ¹ [31]	US, UK and Germany	Assumption Method Biases: Age, Gender, Racial/ethnic, and SES	384 physicians (internists or family practitioners in the US and Germany or general practitioners in the UK)	Screening telephone calls	64.9% in the US, 59.6% in the UK, and 65% in Germany	Results showed gender differences in the diagnostic strategies of the doctors.
2010	Dehlendorf [9]	US	Assumption Method Biases: Racial/ethnic and SES	524 health care providers (90% MD/DO, 4% Nurse Practitioner/Physician Assistant)	Convenience sample from meetings of professional societies	Not specified	Low SES whites were less likely to have intrauterine contraception recommended than high SES whites. By race/ethnicity, low SES Latinos and blacks were more likely to have intrauterine contraception recommended than low SES whites, with no effect of race/ethnicity for high SES patients. Low SES patients were judged to be significantly more likely than high SES patients

BMC Medical Ethics (2017) 18:19

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Implicit bias in health care

• Implicit biases manifest in several ways

- Absence of evidence-based management plans
 - Not prescribing a statin to someone who qualifies because they are homeless and uninsured
 - Not prescribing necessary opioids in an acute pain syndrome in a person of color
 - Not prescribing buprenorphine to a patient with opioid use disorder because of the concern that they are selling it for illicit drug money
 - Encouraging a patient with obesity to lose weight to help with their joint pain instead of offering the standard workup
- Tone of voice, language, body language
 - Use of incorrect pronouns
 - Speaking in overly simple terms to a female person
 - Standing or sitting far away from a transgender person

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Biomedical Inquiry, 2016:13
Matthew, DB. *Just Medicine: A Cure for Racial Inequality in American Health Care*. 2018

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Impact of implicit bias on health care

- Lack of analgesia in Black people
- Lack of thrombolysis in Black people
- Increased weight gain in people who are obese
- Lack of MOUD or appropriate pain management in people with SUD

Society of General Internal Medicine 2007:22
Am J Public Health. 2012;102
American Diabetes Association. 2016;43:1
Substance Use & Misuse. 2014;49:7

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Impact of implicit bias on health care

“While no study has precisely quantified the extent of demonstrated associations between...bias, inferior health care, and poor health outcomes, the scientific record is too well developed to ignore that there is more than a mere chance association between implicit bias and health disparities.”

-Dayna Bowen Matthew
Just Medicine: A Cure for Racial Inequality in American Health Care

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US: Covid-19 Disparities

SPOTLIGHT STORY REPORT: FACEBOOK ALD

TIME

America's Long Overdu

How George Floyd Police Custody

VISUAL INVESTIGATIONS

The Times has reconstructed the 25. Security footage, witness vid how a series of actions by officer

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Mitigating Implicit Bias's Effects

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Mitigating Implicit Bias's Effects

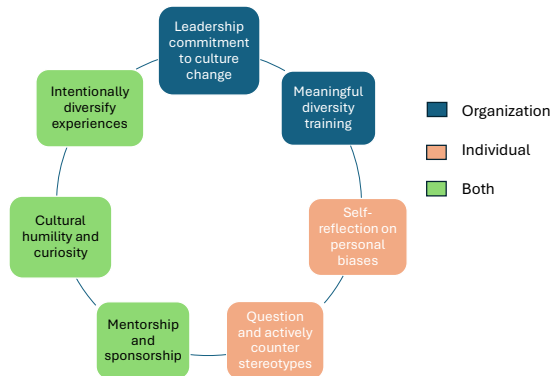
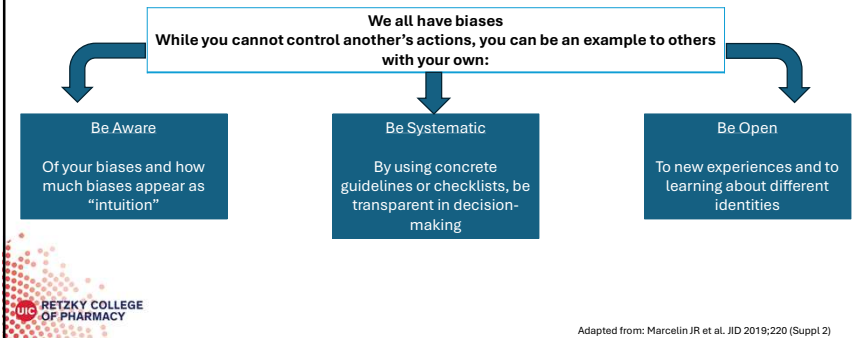


Image adapted from: Marcelin JR et al. JID 2019;220 (Suppl 2)

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Self-reflection on personal biases Addressing personal bias (*before* it occurs)



Adapted from: Marcelin JR et al. JID 2019;220 (Suppl 2)

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Self-reflection on personal biases Addressing personal bias (*after* it occurs)



Adapted from: Marcelin JR et al. JID 2019;220 (Suppl 2)

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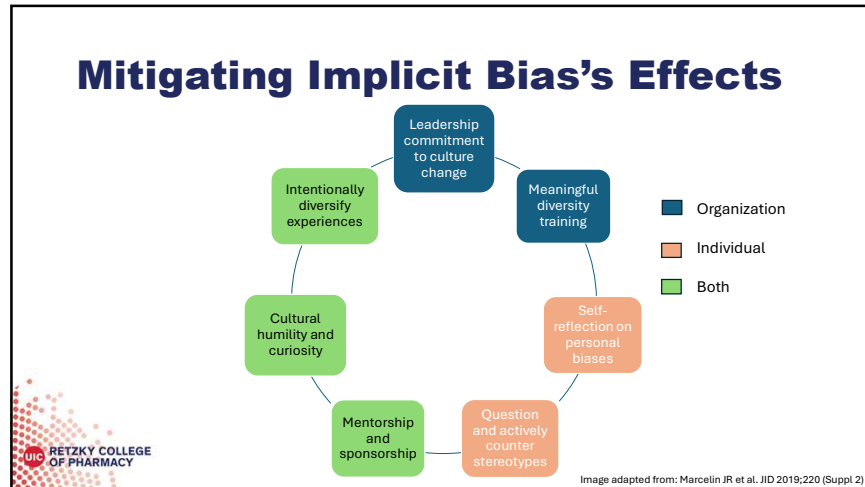
Question and actively counter stereotypes

- Step 1: Acknowledge the bias in the interaction
- Step 2: Make a conscious decision to address the bias
- Step 3: Utilize one of the following action strategies to counter the bias
 - Humor
 - Reject the stereotype outright
 - Ask questions
 - Acknowledge discomfort
 - Be direct
- Step 4: Continue the conversation beyond the interaction

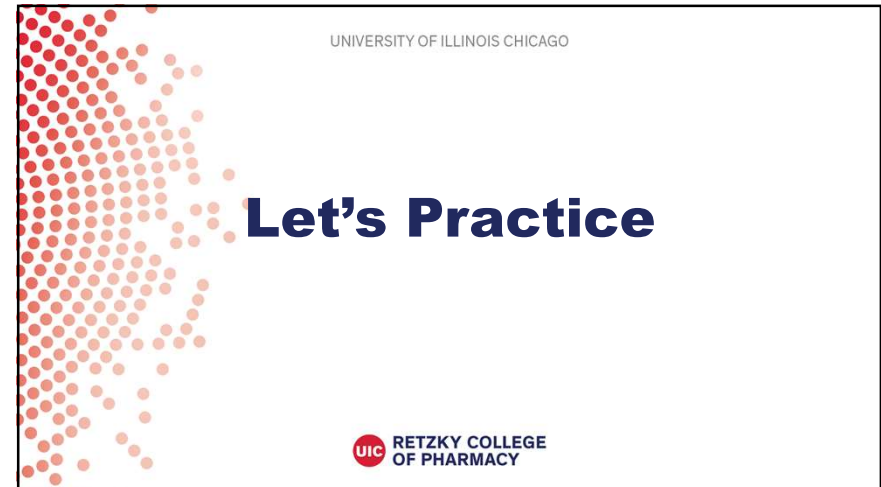
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Adapted from: Marcelin JR et al. JID 2019;220 (Suppl 2)
Kirwan Institute

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Cognitive Dissonance Exercise

- First, complete Attitudes Survey
- Next, complete Behaviors Survey

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Cognitive Dissonance Exercise

Attitude Survey

- 1) Texting while driving is dangerous. Yes/No
- 2) It is important to stay informed about proposed legislation that affects my community. Yes/No
- 3) Soft drinks/sodas are unhealthy beverages. Yes/ No
- 4) Poverty is a serious problem that needs to be addressed. Yes/No
- 5) Smoking is an unhealthy behavior. Yes/No

RETZKY COLLEGE OF PHARMACY Cognitive Dissonance Exercise

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Cognitive Dissonance Exercise

Behavior Survey

- 1) I text when I am driving. Yes/No
- 2) I am able to name at least one bill affecting my community that was passed in the last year by the legislators in my county or my state. Yes/No
- 3) I drink soft drinks/sodas. Yes/No
- 4) Within the last year I have donated money or engaged in volunteer work to address the problem of poverty. Yes/No
- 5) Within the last year I have smoked a cigarette. Yes/No

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Debrief

1. Did you experience cognitive dissonance? Why or why not?
2. What thoughts were going through your head as you completed the Behavior Survey and had answers that were incongruent with your Attitude Survey
3. What was your emotional reaction to experiencing dissonance?
4. What strategies did you use to try and lessen your experience of dissonance?
5. How does this activity relate to understanding implicit bias?

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COGNITIVE DISSONANCE

an unpleasant state that arises when an individual holds beliefs, attitudes or behaviors that are at odds with one another



CONFLICTING THOUGHTS

"I know it is good for my health to exercise three times a week," and "I did not exercise at all this week."

CAUSE

Anxiety & discomfort; individuals are motivated to move themselves out of dissonance

COPING STRATEGIES

Rationalization, Denial, Minimization
"That was a long walk from the parking lot, I can count that as my exercise."

RECOGNIZE & CHALLENGE

Recognize and challenge the anxiety and discomfort. Transformational learning occurs when we open our minds and hearts to this work.

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Summary

- To be human is to have implicit bias
- Implicit bias plays a role in propagating health disparities among disadvantaged and vulnerable populations
- Acknowledging and addressing our implicit bias are key to reducing the negative impact it has on our society at large
- The negative impact of implicit bias *can* be mitigated

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Supplemental Sources

- Kirwan Institute for the Study of Race and Ethnicity. Understanding Implicit Bias. No longer available for viewing outside of OSU, but transcript available here: <https://kirwaninstitute.osu.edu/sites/default/files/documents/video-captions.pdf>
- Take an Implicit Association Test: <https://app-prod-03.implicit.harvard.edu/implicit/takeatest.html> (free upon account activation, or as a guest)



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