



## The Neuroscience of Implicit Bias

**Background:** At any given moment, our brains receive 11 million bits of information. Consciously, our brains can only process 40 bits. To manage the remaining information overload, our brains create unconscious mental shortcuts, some of which are called implicit biases. *Implicit bias can be defined as the automatic, unconscious processes underlying stereotyping and prejudices that guide perceptions, attitudes and behaviors towards social groups.*

Although there are some benefits to our brain's creation of unconscious mental shortcuts, research suggests that implicit biases can create misperceptions in decision making in the hiring, evaluating, promoting and retaining of diverse employees. In corporations, higher rates of diversity and inclusion lead to more effective and innovative problem solving which ultimately impacts increased profit margins. Implicit biases can deter these efforts.

**Rationale:** Our brains consist of extraordinarily complex neurocircuitry that drive a range of unconscious beliefs, behaviors, and reactions.

Psychologists and neuroscientists such as Catherine Cottrell at the University of Florida and Joshua Green at Harvard University argue that bias, prejudice and discrimination originally evolved as a function of group living. Over the course of our evolutionary history, joining together in groups has allowed humans to gain access to resources necessary while providing protection from others that might do our group harm. As a result, it became evolutionarily

advantageous to quickly identify who belongs to our group and who does not. Overtime, these processes have been embedded within our neurobiology acting in remarkably fast and imperceptible ways.

“The capacity to discern ‘us’ from ‘them’ is fundamental in the human brain. Although this computation takes just a fraction of a second, it sets the stage for social categorization, stereotypes, prejudices, intergroup conflict and inequality,” (David Amodio, Associate Professor of Psychology and Neural Science, New York University, 2014)

### DID YOU KNOW?

It takes 50 milliseconds to register someone's gender when we first see them and only 100 milliseconds to note their racial background.

(1 second = 1000 milliseconds)

### DID YOU KNOW?

Organizations that give diverse voices equal airtime are nearly twice as likely as others to unleash value-driving insights and their employees are 3.5 times more likely to contribute their full innovative potential.

Firms with inclusive cultures are 45% more likely to report a growth in market share over the previous year and 70% more likely to capture a new market.

(Center for Talent Innovation, 2013)

Implicit biases can influence us in ways that are counter-productive to our individual and organizational goals and values. As a result, corporations such as Google, Facebook, Novartis, Bloomberg, Bristol-Myers among others have identified addressing the intersection of innovation, diversity and implicit bias as fundamental to achieving market growth.

### **Discovering Your Relationship With Implicit Bias**

If we have a brain, we have bias. Understanding our relationship with bias is a fundamental first step to mitigating its effects.

#### **Take the Implicit Association Test (IAT):**

<https://implicit.harvard.edu/implicit/takeatest.html>

The IAT is a computer-based task that measures unconscious biases by determining how quickly we associate different words (e.g. “good” and “bad”) with specific groups of people or things (e.g. faces of either African-Americans or European-Americans). In other words, the test is designed to detect the strength of a person’s automatic, neurobiological association between things. If a person is quicker to associate “bad” with African-American faces compared to European-American faces, for example, this suggests an implicit bias against African-Americans.

After you have completed the test, you will be given your score. You can then compare your score to the thousands of people who have taken the IAT nation-wide and see the state of implicit bias as it exists today.

**Mitigation & Thought Exercises:** The fact that prejudice often occurs automatically doesn’t mean we can’t find ways of overcoming its negative effects. With new insights emerging daily from the world’s universities, labs, and research institutions, today’s leaders need to be equipped with an awareness and understanding of the processes that underlie and motivate individual and group-level biases from the office to the wider community. When people develop a stronger understanding of their unconscious processes, they can fundamentally reshape their companies, policies, programs, and practices in ways that can disrupt harmful perceptions and behaviors. A popular acronym used to help develop a stronger understanding of these processes is **SPACE**: **S**low Down, **P**erspective Taking, **A**sk Yourself, **C**ultural Intelligence, as well as **E**xemplars and **E**xpand.

## Practicing SPACE

### **SLOW DOWN:**

#### **HOW IT WORKS**

The moments when we feel tired (e.g., long hours, lack of sleep), stressed (overwhelmed, high work load, company or peer-based pressures, crisis situations), distracted (e.g. multi-tasking), vulnerable (e.g. emotional, triggered, tired, in the spot light), among other situations all contribute to moments when we default to our automatic, implicit processes.

Certain emotional states (anger, fear, disgust) can exacerbate implicit bias judgments of stigmatized group members, even if the source of the emotion has nothing to do with the current situation or with the stereotype more broadly (DeSteno et al., 2004; Dasgupta et al., 2009). Relatedly, when the basis for a decision or judgment is vague or ambiguous we will likewise default to more familiar, automatic and unconscious biases.

## PRACTICE

Slow down. Becoming aware of our triggers and moments when we might feel vulnerable are an integral part of mitigating implicit bias. Slowing down can be easier said than done but becoming a more thoughtful, considerate and aware individual is fundamental to great leadership.

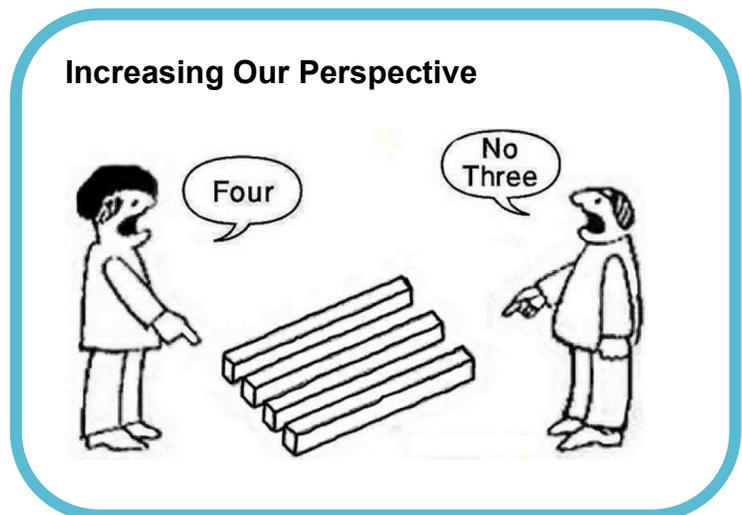
## THOUGHT EXERCISE

When are the moments you might be the most vulnerable to implicit bias? Are there certain situations that you personally find more stressful or emotionally triggering than others? When are moments that you might be able to slow down? What are ways that you can gain a greater awareness of your triggers and vulnerabilities?

## PERSPECTIVE-TAKING:

### HOW IT WORKS

All too often decisions are made when we feel rushed, stressed or under pressure thereby increasing our likelihood at engaging our implicit biases. As a result, the perspective and experience of others may be omitted from the conversation. Considering the perspective of others can act to counter stereotypic imagery and increase empathy as well as provide necessary information for making more nuanced and informed decisions.



## PRACTICE

Perspective-Taking is the active contemplation of another's psychological experiences – thinking and imagining the feelings and viewpoints of others.

## THOUGHT EXERCISE

Seek out an individual you have never met before. While engaging in a casual conversation, learn three pieces of information about that individual. Do not tell them this is an assignment.

## ASK-YOURSELF:

### HOW IT WORKS

Unconsciously, we tend to like people who look like us, think like us and come from backgrounds similar to ours. Consequently, we tend to engage with, hire and promote PPlus (people like us). In 2017, Forbes Magazine characterized our unconscious biases and preference toward similarity as "best embodied by the word 'fit,'" such as hiring for a "good fit" or selecting individuals for group projects based on "fit." However, research-focused organizations, such

as the Center for Talent Innovation, have long linked serial innovation and increased market share not through the creation of homogenous groups but by selecting for diversity. In order to promote a more diverse and inclusive workplace, we need to ask ourselves a few questions.

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## PRACTICE

### Ask yourself...

- Does this person remind you of anyone else? Is that positive or negative?
- Are there things about this person that particularly influence your impression? Are they really relevant to the job?
- What assessments have you already made? Are these grounded in solid information or your assumptions?

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## THOUGHT EXERCISE

Think back to a time when you were tasked with adding a member to your team or group project. What criteria did you use? How might the questions above have influenced your decision or the way you approached the situation. Are there other questions you can think of that you might ask yourself prior to interviewing a candidate or selecting members of a team?

## CULTURAL INTELLIGENCE:

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## HOW IT WORKS

As globalization has rendered the business environment more complex, dynamic and competitive, the ability to function effectively in different cultural contexts, called Cultural Intelligence (CQ), has never been more important for organizations. And yet, while technologies continue to advance, trade flows move across continents and corporations seek to diversify their workforce, the implicit biases underlying dissimilar “others” undermines corporations’ competitive advantage.

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## PRACTICE

Cultural intelligence (CQ) is the ability to understand, communicate with and effectively interact with people across cultures. This means gaining an awareness of one’s own world view while gaining knowledge and respect of different cultural beliefs and practices.

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## THOUGHT EXERCISE

- 1) **Identifying Your Culture:** How does your background, personal history, family and experience influence your view of the world? If you had to describe your personal “culture” to someone in one paragraph, what would it say?
- 2) **Learning About Culture:** Identify one or two ways that you will learn about a new culture. This can be a book, a movie, or by attending an event.

## EXEMPLARS & EXPAND:

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## HOW IT WORKS

Stereotypes often factor in decision-making, in part, because of how salient and easily-accessible they are in society (Macrae et al., 1995; Mitchell, Nosek, & Banaji, 2003). This reduces the effort and time needed to make decisions. As a result, low-effort decision makers tend to develop inferences or expectations about a person early on in the information-gathering process. These expectations and related stereotypes then guide information processing in biased ways.

## PRACTICE

Identifying exemplars and expanding your circle are effective ways of mitigating bias. Counter-stereotypical exemplars are individuals who contradict widely held stereotypes held either personally or more broadly by society. For example, a counter-stereotypical exemplar in healthcare might include a male nurse. Expanding your circle entails seeking out and making direct contact with counter-stereotypes by increasing your exposure to stigmatized group members that contradict the social stereotype at hand. Expanding our circle can be difficult and uncomfortable, however research shows that having positive, meaningful interactions with out-group members is a powerful form of reducing implicit bias. When possible, introduce yourself to a stranger. Try and learn something about that person if you have the opportunity while shopping or traveling.

## THOUGHT EXERCISE

Did you take the IAT? What biases or stereotypes do you hold (that you are aware of)? Seek out an opportunity to volunteer and/or to engage with a stigmatized group. Write down (1) the reason you chose the event/organization/opportunity, (2) how you felt upon entering, (3) your experiences during the event and (4) how you felt upon completion.

This self-study module on implicit bias within the workplace was developed by:

### **Mindbridge**

A nonprofit organization using psychology and neuroscience to support human rights initiatives.

[www.mindbridgecenter.org](http://www.mindbridgecenter.org)

