



PROGRAM MATERIALS

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Implicit Bias and the Brain: Why It Is So Hard to Change Biased Behavior, and the Most Effective Ways to Overcome Built-in Biases

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Implicit Bias and the Brain

***Why It Is So Hard to Change Biased Behavior,
and the Most Effective Ways to Overcome
Built-in Biases***

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Speaker

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**“The eye sees only what
the mind is prepared to
comprehend.”**

— Robertson Davies, Tempest-Tost

But First a Riddle . . .

A father and son were involved in a terrible car accident in which the father was killed. The son was seriously injured and rushed to the hospital and into emergency surgery. The surgeon came in, looked down at the patient and said, “My God, it’s my son!”

Explain.

Are Implicit Biases Hard-Wired Into Our Brains?

A Scientific Definition of Implicit Bias

Implicit or unconscious bias is the bias in judgment and/or behavior that develops from subtle cognitive processes (e.g., implicit attitudes and implicit stereotypes) that are held and often operate at a level below conscious awareness and may not be recognized.

Synaptic Plasticity and Implicit Bias

- Synaptic connections between neurons are capable of change.
- Variation in activity may determine the strength of a synaptic connection.
- Existing connections might disappear or become silent, while new connections might form in new places.

Temporal Plasticity

- In this way, the network structure of a biological neural network is dynamic, with the connections between synapses exhibiting temporal plasticity.

Implicit Biases Are Not Hard-Wired Into Us.

- *Social attitudes and expectations such as stereotypes can change how the brain processes information, and so brain-based differences in behavioral characteristics and cognitive skills change across time, place and culture.*
- *This means that our unconscious biases are not wired into us. They are learned through our experiences, and hence can also be unlearned.*
- *Pragyan Agarwal, "What Neuroimaging Can Tell Us about our Unconscious Biases", Scientific American*

Brain Imaging

- Neuroimaging shows that decision-making triggers specific regions of the brain responsible for unconscious processing.
- MRI imaging showing which regions of the brain are activated during biased responses allows one to see the occurrence of biased associations, increasing our ability to counter or diminish them.

Neural Zones That Respond to Stereotypes

- Empirical evidence has shown that the neural zones that respond to stereotypes are the amygdala, the prefrontal cortex, the posterior cingulate, and the anterior temporal cortex.

The Amygdala and Hippocampus

- The **amygdala** is the “emotional” center of the brain. The brain, through the amygdala, processes billions of stimuli per day and our brains must quickly choose what to focus on.
- This information is used to make inferences and feel emotions that attract us to certain people.

Processes Billions of Stimuli

- Because the amygdala must process billions of stimuli, our conscious brain does not have the opportunity to interpret all that we see.
- Through the amygdala, the brain processes billions of stimuli daily and has to choose what to focus on quickly, so we tend to generalize.

The Amygdala and Trust

- Research suggests that signaling within the amygdala underlies the degree to which people are reluctant to trust others. Arguably, much of the human instinct to distrust “others” can be traced to this part of the brain that’s important for feelings of fear and anxiety.

The Hippocampus

- The hippocampus, which forms links between memories such as dates and facts, also may subconsciously steer people toward choosing one option over another. The hippocampus matches new information with subjective memory -- we can believe new data is accurate when in fact it is simply being matched with our subjective experience.

The Left Temporal Lobe and Frontal Cortex

- The amygdala is balanced by other brain areas including the premedial frontal cortex, which is involved in controlling our snap judgments. When we are tired or stressed, this function can fail. The incoming stimuli is more likely processed by the amygdala, “which is why our implicit bias becomes more evident.”
 - P. Agarwal “Unraveling Unconscious Bias”

The Prefrontal Cortex and Confirmation Bias

- In one recent study, functional brain imaging data revealed a region whose activity modulation was associated with decision-making and memory. The posterior medial prefrontal cortex mediated the strength of confirming opinions over disconfirming opinions, and tracked agreements more closely than disagreements.

Accent Bias and the Prefrontal Cortex

- A part of the prefrontal cortex, the inferior frontal gyrus, is linked to processing of speech and language – a change in accent is linked to a strong emotional response and may underlie in-group accent bias.

Principal Types of Biases Impacting the Practice of Law

Confirmation Bias

- **Confirmation bias** is the **tendency to seek information that favors your position or beliefs**. In assessing a position or a course of action, our clients depend on us to assess risks; but confirmation bias **can cause us to stop looking for negatives**.

Cultural Bias

- **Cultural bias** involves **seeing things through our own cultural standards, implicitly regarding our own culture to be superior to others**, whether in regard to race, gender, religion or any number of other respects.

Affinity Bias

- **Affinity bias** (preferring what is like us over what is different) can make us **poor supervisors, implicitly preferring to provide mentoring to members of our “in-group” and ignoring an “out-group” attorney.**

Example of Affinity Bias

Imagine a partners' meeting where everyone is asked to brainstorm about new marketing ideas. Most of the partners are men. A female partner suggests an idea, which draws no responses. Later, a male partner suggests the same idea, which the other male partners praise. No one acknowledges it was actually the female partner's idea.

“Sunk Cost” Bias

Sunk cost bias causes us to make further investments based on previous ones, despite new evidence that the initial decision was wrong. Our duties of diligence and communication under Model Rules 1.3 and 1.4(a)(3) require us to “act with reasonable diligence and promptness in representing a client” and “keep the client reasonably informed about the status of the matter”. Sunk Cost bias can cause us to ignore bad facts or downplay them to the client.

Why Should We Change?

- Notwithstanding lofty goals to stamp out bias, more often than not it stamps *us* out – making us less happy and more error-prone, increasing attrition, and depriving our firms of the benefits of the talent, energy and dedication that come from an absolute dedication to unbiased thinking.

Anti-Bias Training That Works

Problems with Existing Bias Training Methods

Faulty Assumptions

- Unconscious bias training assumes that everyone is open to changing their attitudes, but most people are more comfortable keeping their biased views.
- Such training also assumes that influencing attitudes will influence behavior, which may not be the case.

Change the Individual or the Business

- The underlying assumption of much anti-bias training, i.e., that the solution to biases has to do with changing the actions of individuals, rather than changing how the business itself functions, may simply be wrong.

Most Training Is Too Brief

- A 2017 study involving over 3000 participants who volunteered for a one-hour bias training course found that the people who took the course were no more likely than control group members to mentor female employees or nominate female employees for recognition of their excellence.

Training Tools Can Be Misused

- The Implicit Association Test, which is often a component of bias training, is frequently used to predict an individual's biases – but a growing body of research indicates that taking the IAT once doesn't do the job. instead, an aggregate of such tests – maybe dozens – would be required.

Mandatory Bias Training May Not Help

- Making bias training mandatory may not be useful. In one study involving hundreds of companies with mandatory diversity training, the number of black women in management actually declined 9.2% over five years; male Asian managers decreased 4.5%; female Asian managers dropped 5.4%.

**So What Anti-Bias Training
Methods Work Best?**

What Works

- Training that takes place over **a longer period of time**.
- Rather than lectures, using **evidence-based exercises** that heighten self-reflection and offer **concrete ways to avoid the harmful effects of bias**.

Examples

- **Perspective-taking exercises:** participants are asked to write about the challenges faced by someone within a minority group.
- Such training has been found to bring about lasting changes to people's attitudes and intentions months afterward.

Examples

- Encouraging participants to identify the ways their own behavior may have been biased, and to set themselves future goals for change during their training, such as listening before judging, and challenging harmful effects of bias when they see it.

Circle of Trust

The Circle of Trust is a powerful exercise for demonstrating the effect of affinity bias. In this exercise, participants are instructed to write down in a column on the left-hand side of a blank piece of paper the initials of six to ten people whom they trust the most who are not family members.

Circle of Trust

The facilitator then reads out some diversity dimensions including gender, nationality, native language, accent, age, race/ethnicity, professional background, religion, etc., and participants are instructed to place a check beside those members of their trusted circle who are similar in those dimensions to them.

Circle of Trust

Participants are then asked to consider the implications for the workplace: when they assign responsibility for work, to whom do they entrust that responsibility? The facilitator suggests that participants will likely offer opportunities to people similar to themselves.

Demonstrating the Firm's Commitment

- So that training does not seem like window dressing, firm management should participate in leading the training, and the firm should not merely pay lip service to combatting bias but be willing to make systematic changes to do so.

Expanding the Circle

- Actively seek out cultural and social situations that are challenging for you—where you are in the distinct minority or are forced to see or do things differently.
- Make frequent contact with “out-group” members as a way of confronting the social stereotypes you may have.

Using Media to Expand our Circle

- Suppose you have a generally negative view of persons who come from a rural part of the country or an impoverished background.
- You might watch a film like “Breaking Away” that depicts in a positive way the struggles of persons from rural, blue collar backgrounds to fit in with more affluent sectors of society.

Positive Interactions

- Expanding our circle can be uncomfortable at first, however **research shows that having positive, meaningful interactions with out-group members is a powerful form of reducing implicit bias.**
- Soon enough, you wouldn't have it any other way.

**“We find comfort among
those who agree with us -
growth among those who
don't.”**

– Frank A. Clark

Mentoring

- A major roadblock to advancement in a law firm can be the lack of a mentor.
- Mentor people who are different from you. Ask questions about their experiences and ideas -- and make yourself listen.

Mentoring

Create systems that assure that choice work is distributed with inclusion in mind. Create mentoring programs where partners mentor lawyers who do not look like them. Including women and attorneys of color in client meetings, work teams, and pitches.

Find and Defeat Implicit Bias
ABA Law Practice Today

Taking Advantage of Blind Spots

- It is possible to utilize one form of bias that we all possess to combat our worst biases – if we can get the leaders of our firms, agencies or organizations to roll up their sleeves and personally lead efforts at achieving diversity and inclusion.

Emotional Contagion

- Due to a mental blind spot called ***emotional contagion***, we tend to adopt the perspectives of those we see as authority figures. With our leaders' guidance, we can overcome the effects of bias; without it, we will continue to exhibit unconscious bias in ways that are harmful to our businesses.

Follow the Leaders

- Leadership's commitment has to be demonstrated as an everyday way of doing business – direct involvement in training, constant messaging showing the firm's commitment, and sharing with everyone the positive impact on morale, retention, creative thinking and improved profitability.

Bias Training Under Attack?

- Combatting unconscious bias can be vitally helpful in promoting fairness in hiring, training, promotion and compensation decisions.
- A natural outgrowth of successful anti-bias programs can be increased diversity.
- And what's wrong with that?