



UNCONSCIOUS BIAS

Understanding Our Brain's Processes for Bias Control and Better Decision Making

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Executive Summary

Being aware of the existence and implications of unconscious bias is a key step to advancing in the journey of diversity and inclusion. It is particularly important to be aware of unconscious bias and successfully manage it as it can cause/lead to decisions proved to be unfounded, and can skew our actions based on irrational judgments. It has the potential to easily de-rail a career, hurt brands and interfere with trusting, productive relationships. This paper will explore unconscious bias to help us begin to “know what we don’t know” about our biases based on findings from neuroscience. It will highlight conditions where unconscious biases show up, and ways they can be avoided and overcome using concrete actions and conscious strategies applicable in the workplace and everyday life.

Introduction

According to a new study by the Employers Network for Equality and Inclusion (enei), despite claims that the London 2012 Paralympic Games signaled a change in attitudes towards disability, levels of unconscious bias are higher now than they were before the Games.¹ This is an example that regardless of how fair-minded or objective we believe ourselves to be, we all have biases.

“The categories our biases create make it harder, not easier, to understand the variety of people around us.”

Sondra Theiderman, 7 Steps for Defeating Bias in the Workplace

Every day we make decisions on what is important to us based on available information. Scientists estimate that at any given time we are exposed to as many as 11 million bits of information per second, and yet our brain is limited to processing only 50 bits of information per second.² For instance when we interact, the vast amount of information we receive is cognitively overwhelming and we simply cannot process everything about each new person we encounter. In order to save time and effort, the brain activates ‘shortcuts’ by categorizing information for fast decision making. This rapid categorization occurs with the brain processing information using the lens of our background, cultural environment, and personal experiences. It acts rapidly making quick judgments, assessments, assumptions and interpretations of people and situations we encounter.

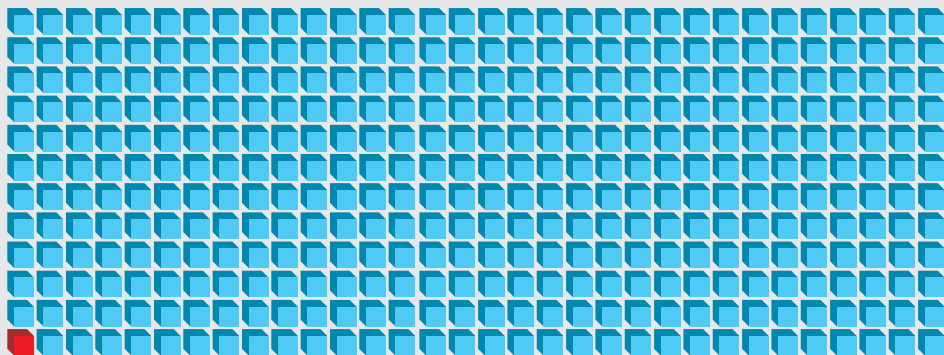
Therefore, unconscious bias comes from:³

- ✓ Information processing shortcuts called heuristics that could include instances where we might use our common sense based on what we think we know; motivational and emotional factors, for example, from our own personal experiences.
- ✓ Social influences, such as stereotypes and the media.

We have chosen the use of the term “unconscious bias” in this white paper though it is crucial to recognize that scholarly literature also embraces terms such as “implicit bias” and “implicit social cognition”; all of which refer to the same phenomenon.

1. <http://www.enei.org.uk/data/files/publications/734/Disability-A-Research-Study-on-Unconscious-Bias.pdf>
2. <http://www.britannica.com/EBchecked/topic/287907/information-theory/214958/Physiology>
3. “Unconscious bias in higher education,” Equality Challenge Unit, September 2013.

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What is Unconscious Bias?

At its most basic, unconscious bias is our tendency to prefer a thing, a person, or point of view of another person or group quite instinctively at an unconscious level. While it appears to be a positive and necessary trait, it can cause us to make decisions that are not objective. Neuropsychologists tell us that unconscious bias can ignore our normal, rational and logical thinking. For instance, you might deliberately work towards demonstrating a non-prejudice behaviour, but tend to overlook introverts during meetings.

The National Investor Relations Institute found that 18% of companies limit who can ask questions at their annual meetings and 76% actually prepare scripted answers.

*Lesson From Buffett: Doubt Yourself,
The Wall Street Journal, May 5, 2013*

Here are some conditions that influence our unconscious decisions:

Confirmation Bias

Our tendency to favour only those perspectives that agree with our existing views or position while dismissing others no matter how valid they are. A study done by Ohio State University showed that people are most likely to seek out information that confirms their political, religious, and social points of view than those that challenge them.⁴ This creates a tendency to be put off by individuals, groups, and information that make us feel uncomfortable or insecure about our views.

Affinity Bias

This is our tendency to gravitate towards people who look like us, sound and behave like us, and have something common with us. This is often defined in the context of the hiring process. The challenge with this bias is that we might have difficulty relating to those who are different from us. We more easily ignore mistakes of people with whom we have common bonds. The choices of who we mentor or help move up through the system could sometimes reflect in reproducing ourselves throughout the organization.



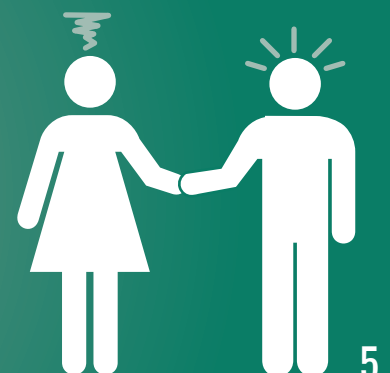
Ingroup Bias

Our tendency to go with the view of the group we most identify with. Ingroup bias has been a central aspect of our human behaviour. At its best, it ensures the reservation of positive emotions such as admiration, sympathy, and trust for the ingroup. Sondra Thiederman puts it as healthy and essential to feeling confident and develop a personal self-esteem. However, it can also trigger negative, destructive and hurtful behaviours whereby we give preferential treatment to members of our group. According to George Dvorsky, ingroup bias “causes us to overestimate the abilities and value of our immediate group at the expense of people we don’t really know.”⁵



First Impressions

Our brain tends to make unconscious judgments based on first impressions. In a fast-paced environment this might seem helpful, however it might lead us to rely on untested messages.



4. <http://researchnews.osu.edu/archive/poliview.htm>

5. George Dvorsky, “The 12 cognitive biases that prevent you from being rational,” January 2013.

An Evolutionary Twist on Bias

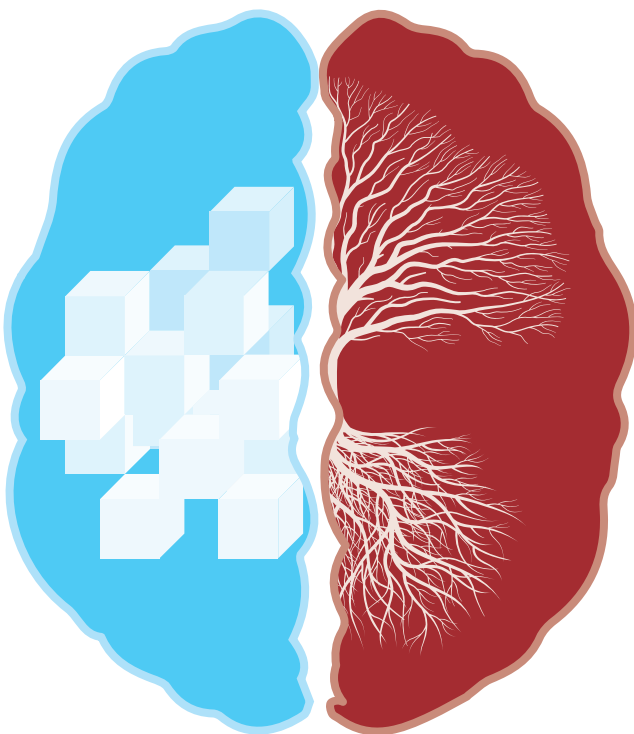
Bias has a negative connotation as if we shouldn't have any. But what if there's an upside? Has it helped to get us where we are?

We are on this earth because our ancestors strategically adapted to changing circumstances in their lives and the surrounding environment in which they lived; they fought ferociously to survive. Along the way, they decided why certain events happened, whether true or not, based on the best available knowledge at the time.

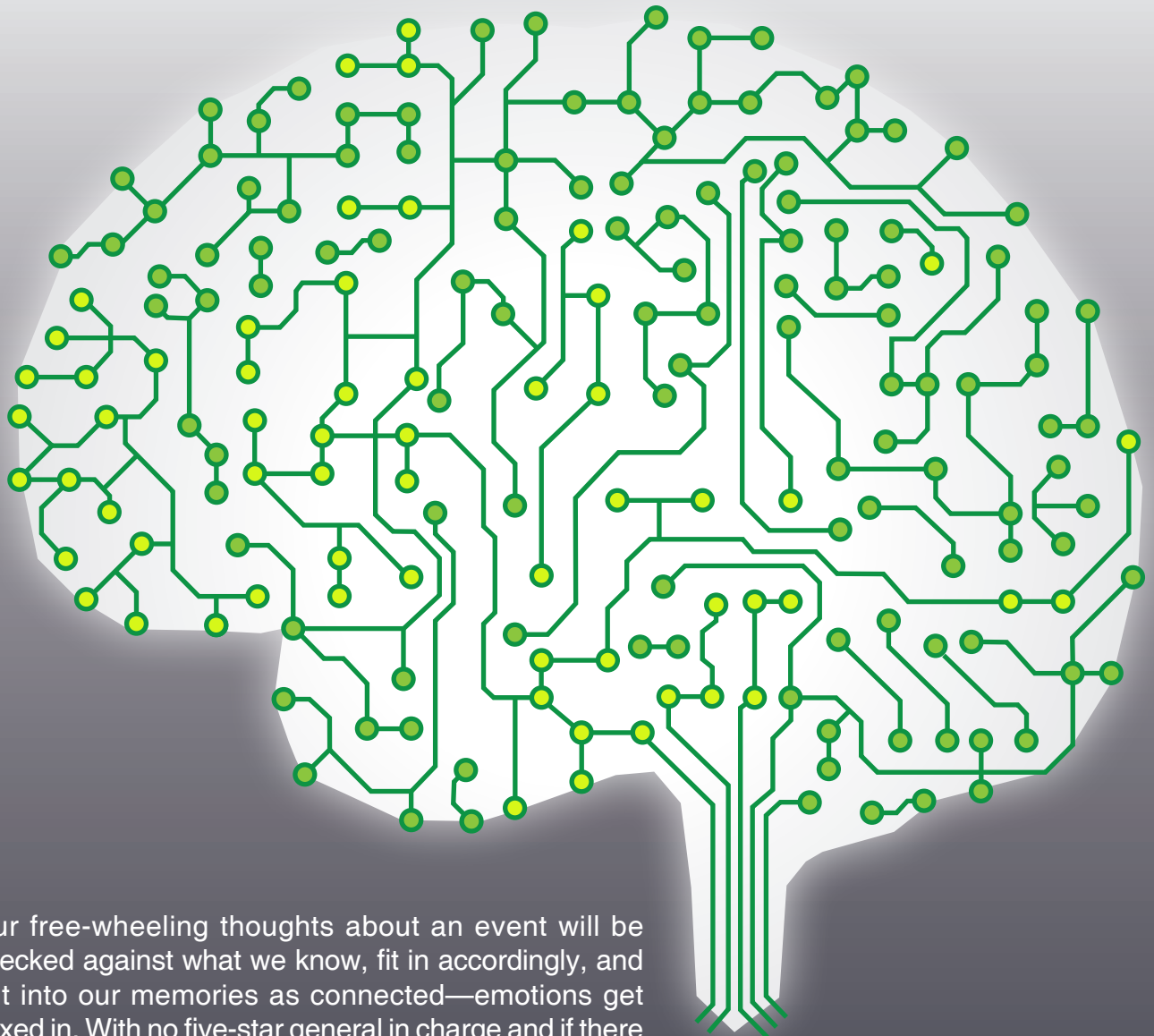
Biases can be viewed as a natural part of our evolution. Consider them memories.

It seems we humans have a natural tendency to create order out of chaos and in doing so, attribute a cause to a happening. We are pattern-seekers and as many phenomena do have discernible, deterministic causes, the system we developed and encoded serves us well quite often. When there wasn't a clear cause, we made up a reason anyway and hence little errors of judgment and the birth of biases!

Biases may or may not align with conventional wisdom but since we are wired to learn, we have the capacity to alter our "biases" in relation to current evidence. In effect, we have the capacity to adapt or update our thinking to meet the circumstances that arise.



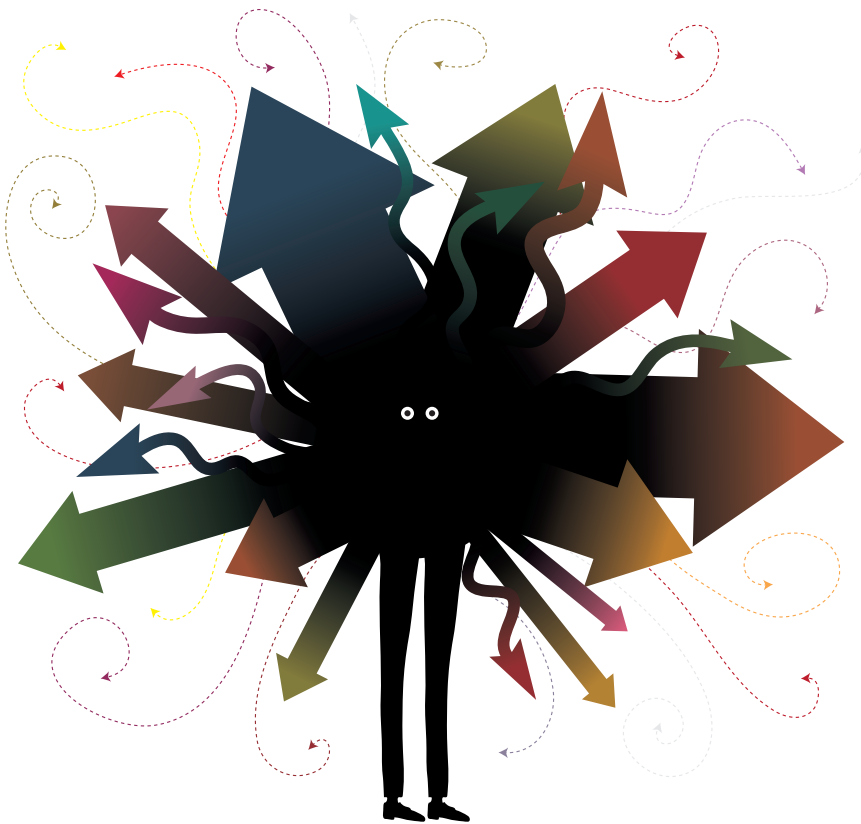
Our tightly interconnected brain is good at adaptation. It is a distributed, multi-module non-linear network with no boss and many options from which to choose when an event happens. Put another way, the architecture of our brain is a complex system like the weather, the Internet, or an ant colony. It operates on associations; when a neuron in a memory network is activated, it will light up all the other neurons elsewhere, in other networks previously linked to it. Hence the expression, what “fires together wires together.”⁶



Our free-wheeling thoughts about an event will be checked against what we know, fit in accordingly, and put into our memories as connected—emotions get mixed in. With no five-star general in charge and if there are no team members or peers with whom to argue, our memory is primarily retrieved automatically in the form of unconscious bias. New information different from our last memory does not get incorporated easily. That requires work or conscious thought!

Fast forward to today, we continue to wrestle with how to interpret the events and behaviours of others around us. The battle is always with the new and our made-up narrative with which we feel comfortable. Climate change, the weather, new technologies, financial crises, gridlock, joblessness, pandemics and much more threaten our safety and security. The human spirit seldom gives up. We try to figure it out increasingly on a global, local and personal basis. Our brains (the conscious parts) decide. We believe. And, we adapt.

Trial and error works more or less because we have to argue our beliefs (positive or negative biases) in a team or on a larger scale. We challenge assumptions. We ask for and look for the evidence. We then might take a second look at our points-of-view. Eventually collective intelligence mitigates the errors. The mounting evidence on the reality of climate change is one example.



The culprit behind bias creation is primarily our left hemisphere, according to Daniel Kahneman,⁷ Iain McGilchrist,⁸ Michael S. Gazzaniga⁹ and many others who study and write about how we make decisions. It is the great interpreter; it does not like chaos. It tries to fit everything into a story—events with context. It does not believe in randomness. The left hemisphere does not operate in real time but rather in post-hoc time (explanations and observations) trying to make sense out of scattered “facts.” A little bit of fudging here and there arises to create a story that makes sense. It is a slow thinking process.

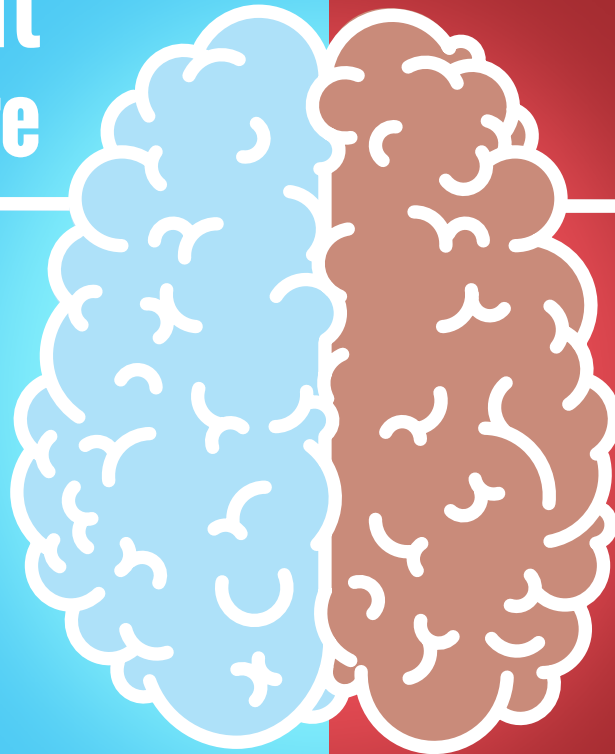
7. Daniel Kahneman, *Thinking Fast and Slow*, Doubleday Canada, 2011.

8. Iain McGilchrist, *The Master and His Emissary: The Divided Brain and the Making of the Western World*, Yale University Press, New Haven and London, 2009.

9. Michael S. Gazzaniga, *Who's in Charge? Free Will and the Science of the Brain*, Harper Collins, 2009.

Left Hemisphere

Right Hemisphere



More specialized in interpretation
Quality of thinking is only as good as the information it accesses
Slow (simplicity)
Pay attention to detail
Abstract/analysis

Ultimate explorer if we let it
A good listener
Fast (complexity)
Pay attention to things and relationships
Always on and observing

When the left hemisphere strays too far from reality, the “explorer” might rein the “interpreter” in because of what it “knows.” The two hemispheres are complementary, acting like a smart partnership when we humans choose to take advantage of our respective specialties.

Since survival has been our *raison d’être* over millennia, we rely first and foremost on our emotional brain to guide us. The threat/reward response is vital to our well-being. In our modern organizations, it is alive and well determining how we will interpret an event or action or react to change, to a new person, to feedback, and generally to the way we are treated by others; the opportunities for bias creation abound.

David Rock’s SCARF model¹⁰ captures the essence of this system wherein we strive to maximize reward and minimize threat and along the way make up the narrative for better or worse—**Status, Certainty, Autonomy, Relatedness, and Fairness.**

10. Ed Batista, “David Rock on Neuroscience, Leadership and the SCARF Model.” Executive Coaching Change Management Blog, March 25, 2010.

Status

In social relationships we are acutely aware of our status relative to others. We accept roles (the boss role, for example) but we thrive better (are rewarded) in an egalitarian atmosphere. Humiliation in front of others (threat) in which our status is under the microscope is extremely painful. No wonder saving face is an important social skill on both sides!



Certainty

We do not like uncertainty because it is upsetting to our sense of security and safety. Plus, it takes more mental energy to deal with it. That's why we love to plan (it's a reward even if faulty) and to inspire ourselves with hope over an unpredictable future.



Autonomy

Leaders feel less stress than those in the front line of the action. Their sense of control mitigates against the chaos. But no matter where we are in the pecking order, there are universal ways of rewarding ourselves to increase autonomy (e.g. daily gratitude, meditation, exercise, celebrating with others, giving to others) so that the positive overcomes the negative improving our emotional well-being and ability to adapt—and be open—to our changing circumstances.



Fairness

Well-known primatologist Frans de Waal¹¹ and his colleagues have demonstrated quite robustly in their research that monkeys, chimpanzees and many other animals balk when a partner receives a reward and they do not, especially when they did the same work. Social justice is built into our sense of fairness (reward). Inequality taken to extremes (threat) upsets the social equilibrium.



Given that our emotional threat/reward response has served us well for surviving and thriving, we can understand that biases are not always rational, based on irrefutable evidence. If our emotional needs are not satisfied or not addressed, no amount of new information will be readily consumed consciously. Our biases will be the winners until we feel safe, secure and respected.

11. Frans de Waal, "Moral Behaviour in Animals," YouTube (TED Talk), April 10, 2012.

Unconscious Bias in the Workplace

Unconscious bias behavioural research is increasingly adopting a workplace focus. Recent years have seen many dialogues, training modules, and events examining this topic. Below, we have summarized a few findings and examples of how unconscious bias can influence decisions and behaviours in the workplace.

Gender

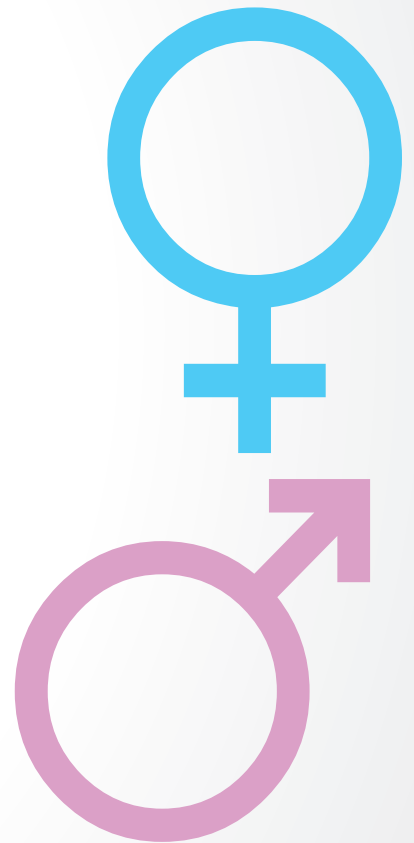
Gender promotion and relocation transfers

William Beilby¹² testifies on behalf of employee plaintiffs engaged in employment discrimination cases including those against Home Depot, Merrill Lynch, and Walmart. His 2003 report shows that Caucasian men often overlook women and minorities because of preconceived stereotypes in the evaluation of such persons, even when they are consciously trying not to do so. For example, in identifying candidates for management positions requiring relocation, hiring managers systematically excluded women from consideration because they reflexively assumed that women weren't interested in jobs requiring them to move long distances.

Gender success and likeability – Heidi/Howard Roizen Case Study

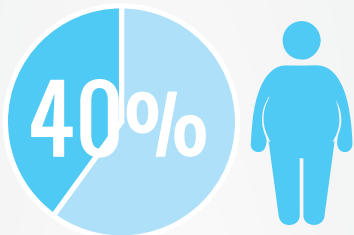
Research also shows that success and likeability are positively correlated for men, and negatively correlated for women. In her book, *Lean In: Women, Work, and the Will to Lead*,¹³ Sandberg writes about two professors from New York University and Columbia Business School, Cameron Anderson and Frank Flynn, who ran an experiment to test perceptions of men and women in the workplace. In 2003, they took a Harvard Business School case study about a venture capitalist called Heidi Roizen, who became very successful by using her “outgoing personality ... and vast personal and professional network.”

The professors gave half of their students Heidi's story to read, and to the other half they assigned the same story with just one subtle difference—they changed Heidi's name to Howard. When the

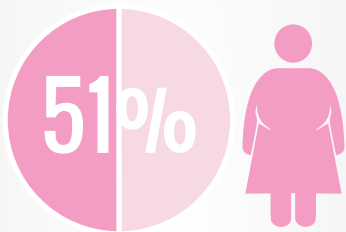


12. Beilby Williams (2003), “Expert Report of William T. Bielby, Betty Dukes, et al. v. Wal-Mart Stores, Inc.” February 3, available at: http://www2.law.columbia.edu/fagan/courses/law_socialscience/documents/Spring_2006/Class%2017-Gender%20Discrimination/BD_v_Walmart.pdf

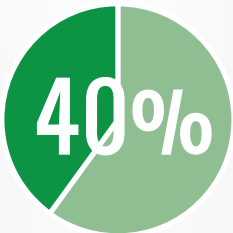
13. Sheryl Sandberg (2014), *Lean In: Women, Work, and the Will to Lead*, Alfred A. Knopf, New York (pp. 39–51).



40%
of HR professionals
were biased against
overweight men



51%
of HR professionals
were biased against
overweight women



40%
of medical students have
an unconscious bias
against obese people

students were polled about their impressions of Heidi and Howard, the students rated both as equally competent, but when asked who they would prefer to work for, Howard was almost universally seen to be a more appealing colleague, with Heidi seen to be selfish and “not the type of person you would want to hire or work for.” The same data with a single difference—gender—created vastly different impressions.¹⁴

Sheryl Sandberg’s conclusion is that when a man is successful, he is well liked. When a woman does well, people like her less. This she noted presents a conundrum for women as it either makes them undermine their accomplishments or demotivates them from doing well.

Weight

Professionals likely to be biased against overweight women – People Management Survey

In a specialty survey conducted by People Management, about half of HR professionals were found to be biased against overweight women while nearly 40 per cent were biased against men. Fifty-one per cent of respondents held an unconscious bias towards overweight women that would be likely to affect their behaviour toward these women. Just 4 per cent of respondents showed a bias against slim women.¹⁵

Medical practitioners more likely to be biased against overweight patients – Wake Forest Study

In a three-year study with 300 geographically diverse medical students representing at least 25 different states and 12 countries outside the United States, David Miller and a team of researchers at Wake Forest Baptist Medical Center found that almost 40% of medical students have an unconscious bias against obese people. This unconscious bias did not vary by gender, race, age, clerkship timing, or academic year.¹⁶ The implication is broad; not only can this bias affect clinical care and the doctor-patient relationship, but even a patient’s willingness or desire to go see their physician.

14. Sheryl Sandberg (2014), *Lean In: Women, Work, and the Will to Lead*, Alfred A. Knopf, New York (pp. 39–51).

15. Joshua BJerke, “People Management Finds Widespread HR Bias Against Men and Overweight Women,” November 1, 2012 available at: <http://www.recruiter.com/i/people-management-finds-widespread-hr-bias-against-men-and-overweight-women/> (accessed 7 July 2014).

16. “Are Medical Students Aware of Their Anti-obesity Bias?” *Academic Medicine*. 88(7):978–982, July 2013.

Recruitment

Philip Oreopoulos and Diane Dechief¹⁷ conducted a study in Canada which has shown that potential employers may never follow through on a candidate's resume if the name on the resume sounds foreign. Researchers have linked the underlying reason to unconscious bias, with potential employers having concerns about whether the person has the social and language skills the job requires. This is consistent with findings from other studies.¹⁸



Compensation

In a study by MIT titled “Gender, Race, and Meritocracy in Organizational Careers,” Emilio Castilla studied the effect of a merit-based reward system in the workplace. Results showed that women and minorities continue to receive less compensation than white men with equal scores on performance evaluations. The author developed and tested a set of propositions isolating performance-reward bias, and discovered that gender, race and nationality differences continue to affect salary growth.¹⁹ Although these policies are often adopted in the hope of motivating employees and ensuring meritocracy, policies with limited transparency and accountability can actually increase bias and reduce equity in the workplace.

17. “Why do some employers prefer to interview Matthew, but not Samir? New evidence from Toronto, Montreal, and Vancouver,” Working Paper Series, Metropolis British Columbia Centre of Excellence for Research and Immigration Diversity, No. 11–13, September 2011, available at: <http://mbc.metropolis.net/assets/uploads/files/wp/2011/WP11-13.pdf> (Accessed 29 July 2014).
18. Oreopoulos, Philip. “Why Do Skilled Immigrants Struggle in the Labour Market? A Field Experiment with Six Thousand Resumes.” Manuscript, 2009; Bertrand Marianne and Mullainathan Sendhil, “Are Emily and John more employable than Lakisha and Jamal?” *The American Economic Review*, Vol. 94, No. 4, (Sep., 2004), pp. 991–1013.
19. “Gender, Race, and Meritocracy in Organizational Careers,” *American Journal of Sociology* Vol. 113, No. 6, May 2008.

Overcoming Unconscious Bias

Below are five ways to overcome unconscious bias which you can apply in your workplace and personal life.

1. Think Like a Child

Our automatic ‘voices of judgment’ suppress openness to the new and different. Up to about age 4, children top the scales at divergent thinking (a right hemisphere activity). They ask far more questions than adults due to their intense curiosity.²⁰ Thereafter, it is downhill. Social self-consciousness and the natural maturing of children’s brains paradoxically subvert openness. The executive functions of thinking, planning and emotional self-control, as necessary as an adult, too often push away and cover up the vital explorative capabilities we had as children.²¹

The good news is that there are means and ways to stoke the fires of receptiveness and bring out the child in us in the workplace:

- Encourage a stimulating work environment
- Create a space so that people can mix and mingle informally throughout the day
- Encourage frequent time-outs for mind wondering, learning and reflecting
- Practise the art of asking questions

2. Raise Conversational IQ

McDonald’s recently opened their first *feng shui* inspired restaurant in Hacienda Heights, CA. It was designed to include water elements, earth tones, red accents, and exotic fauna. The idea behind this is to create a soothing environment for customers to enjoy their dining experience. Similarly, in our workplace, we can create an environment where we raise our conversational IQ which is our “ability to connect and think innovatively, empathetically, creatively and strategically with others.”²² A study done by The Creating WE Institute identified a

20. Howard Gardner, “Frames of Mind: The Theory of Multiple Intelligences,” Harvard University Press, 1993.

21. Alison Gopnik, *The Philosophical Baby: What Children’s Minds Tell Us About Truth, Love, and the Meaning of Life*, 1998.

22. Judith E. Glaser and Richard D. Glaser, “The Neurochemistry of Positive Conversations,” Harvard Business School Publishing, June 2014.

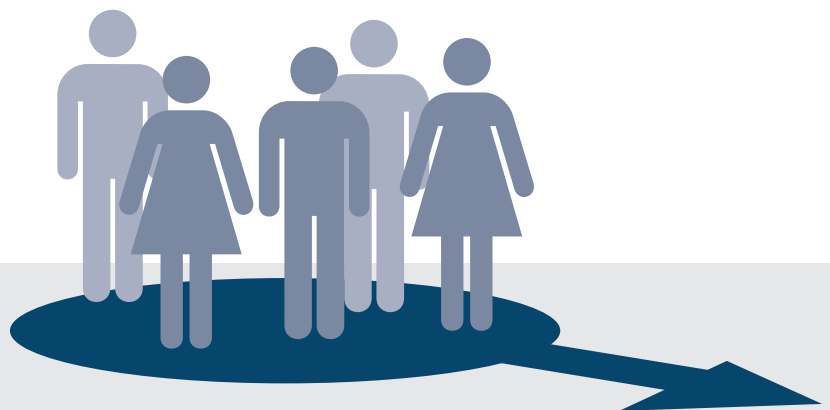
relationship between the chemical reactions of our body to the type of conversation we have.²³ For instance, when we face criticism, rejection, fear, or when we feel we are marginalized, we produce a high level of cortisol. Cortisol shuts down our brain's capacity to think and instead activates behaviours that are conflict focused and judgmental. On the other hand, when we engage in a positive and encouraging conversation, our oxytocin level is elevated allowing positive communication and collaboration as well as enhancing our trust in others.

In your organization, you can stimulate oxytocin producing behaviours in the following ways:

- Show genuine concern for others
- Be truthful about what is on your mind
- Stimulate discussion/curiosity
- Paint a picture of mutual interest
- Be open to difficult conversations

3. Rally Around a Common Cause and Goal

A study shows that people usually get inspired if they work in an environment where they know their work makes a difference. They are drawn to causes but less inspired if the focus is on the task at hand. Most organizations do not inspire action because they start by sharing WHAT they do and HOW they are different. The best way to inspire a behaviour is to start by communicating the purpose or cause of what you do.²⁴ As such, people are open to ideas if they rally around a common cause and goal.



23. Judith E. Glaser and Richard D. Glaser, "The Neurochemistry of Positive Conversations," Harvard Business School Publishing, June 2014.

24. Simon Sinek, "The Golden Circle."



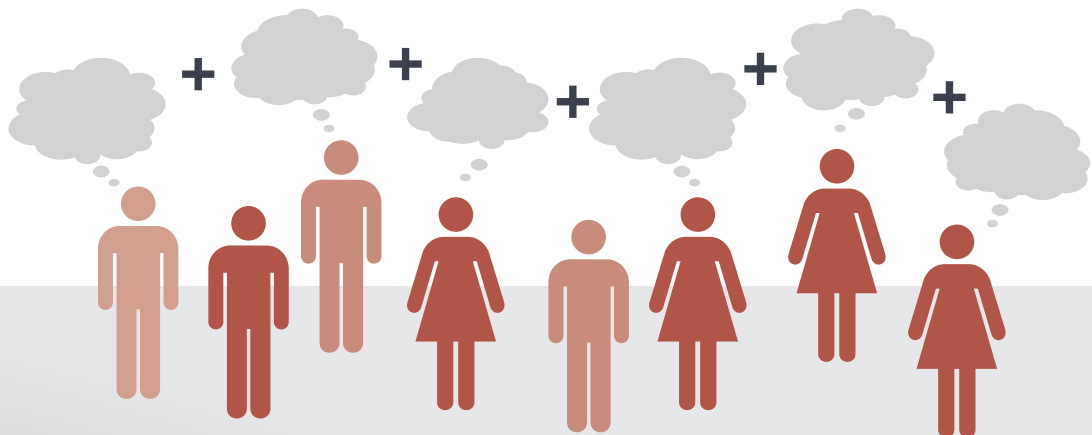
4. Enable Equality of Conversational Turn-Taking

Alex Pentland,²⁵ a social physicist with MIT through the new science of idea flow, offers revolutionary insights into the mysteries of collective intelligence and social influence using data collected over a period of time which he calls ‘living laboratories.’ His findings show that a key component of a successful team performance is what is referred to as “*equality of conversational turn-taking*,” giving every person on the team an opportunity to share their ideas as it helps idea flow, challenges bias, and produces novel solutions. These kind of face-to-face conversations and engagement help to boost innovation.

5. Get Independent Observations and Opinions

‘Groupthink’ is an ever-present danger. Group brainstorming has its limitations because not enough ideas are unearthed. The smartest person in the room does not necessarily have the right answer. Extroverts can overwhelm the thinking of introverts in a group. Innovative ideas may never see the light of day when a few people dominate, thereby, biasing a group towards a particular perspective.

The antidote is to enable the reflective input of each person before ideas are shared and as the problem-solving process unfolds. The technique can be as simple as posing a few questions in advance of a meeting for each person to answer. Or, alternatively while at the meeting allow reflective time for each individual before the ideas are shared. The net result is a greater quantity of ideas being generated which in turn increases the probability of fresh connections among ideas being made.



25. *Social Physics: How Good Ideas Spread – The Lessons from a New Science*, Penguin Press, New York, 2014.

Implications for Diversity Practitioners

RECOGNIZE

Encourage staff and managers to become aware that we all possess unconscious biases, even those with avowed commitments to impartiality such as judges. Staff and managers should be introspective. Offer the opportunity to complete an online Implicit Association Test (IAT) so that they can learn more about unconscious bias.

ENGAGE

Raise awareness and create a forum that encourages open conversations about how both you and your staff members should handle concerns around differences or awkward issues that could impact their experience in the workplace.

EDUCATE

Adopt high involvement and capacity building workplace methods making sure it includes diverse groups (e.g. coaching and mentoring to encourage participation and opportunity, at all levels of the organization).

IMPLEMENT

Use diverse panels of interviewers, committees for screening, assessing and selecting candidates who will be successful and help the organization grow. If there is a bias concern, include more structured interview questions so it stays on track and provides solutions.

ANALYZE

Review and revise deficiencies in the company's policies and practices for identifying and eliminating barriers to employment of diverse candidates at all levels of your organization and employment life cycle. A sample of practices that can trigger unconscious bias can be seen around the language used in the recruitment process. For example, recruitment ads that suggest an organization needs someone "smart, and innovative," can work against certain groups that are stereotyped as not smart. More appropriate language would be, "organization will need someone with experience to increase innovation by 23 per cent and improve social media."

APPLY

Instigate intentional positive team behaviours (micro-equities) such as challenging offensive jokes, non-inclusive hiring practices, asking opinions for the unusual suspects, and encouraging learning opportunities across cultures, gender, race, and generations; zero tolerance for negative behaviours.

EXPLORE

Ask for ideas and input from people that you usually would not; this helps break stereotypes and assumptions.

EVALUATE

Put in place diversity standards and accountability mechanisms that can help evaluate if professionals (e.g. recruiters, interviewers, judges, doctors, etc.) are fair, objective and bias-aware.

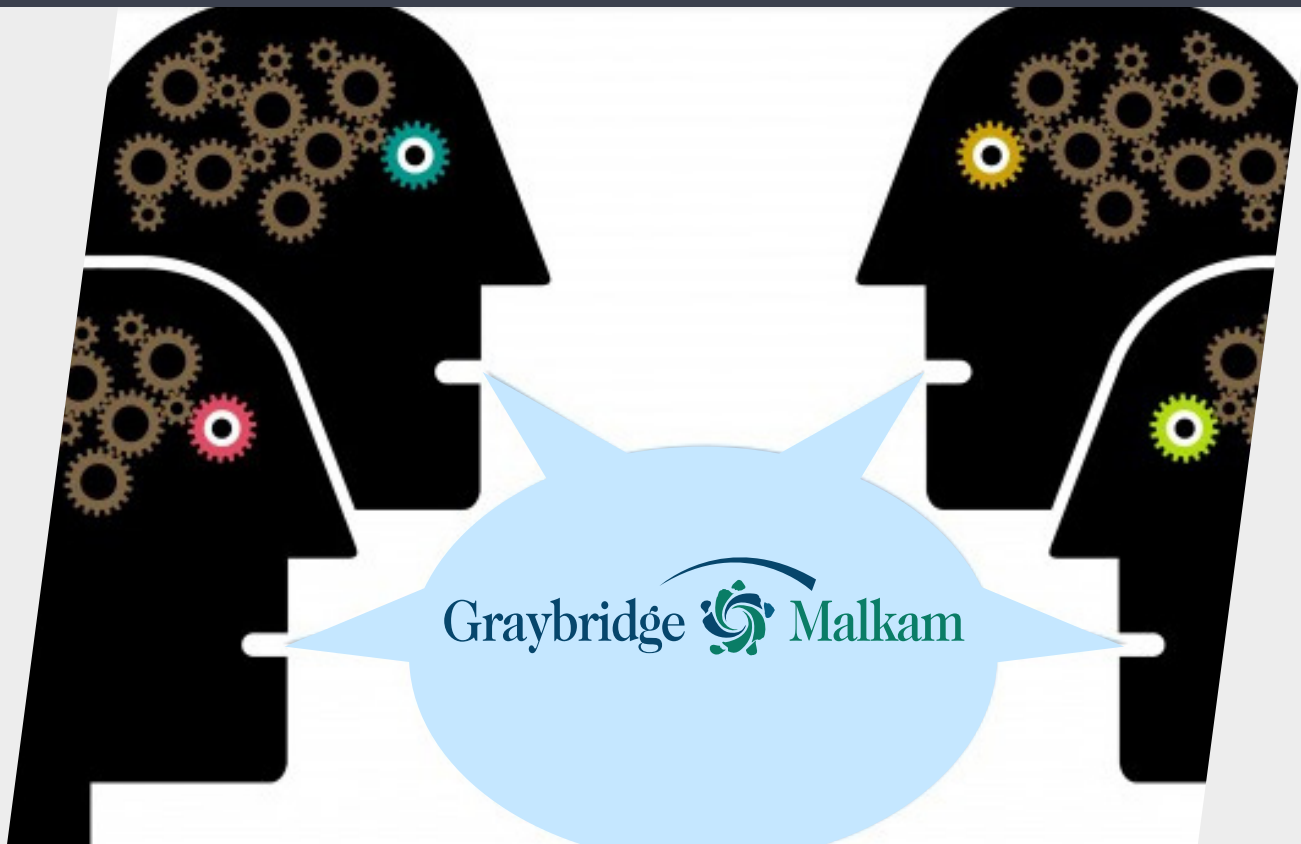
MEASURE

Employ diversity metrics to help you spot any hidden biases in the organization. For example, statistical analysis of performance and staff surveys can provide good metrics to spot patterns and monitor relationship quality.

**When in doubt, start with
“I don’t know”!**

D**DIVERSITY****L****LANGUAGE****C****CULTURE**

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