Bias in Action Quiz: Summary of Research Sources for Each Quiz Question

Quiz Questions and Answers	Data Sources and Quotes
Question: True or False—As a woman's body mass increases, her pay decreases. **Answer:** True. In the United States and Other Western nations, for every 1% increase in a woman's body mass, there is a .5% decrease in pay.	**US Data Source:** Conley, Dalton, Rebecca Glauber, "Gender, Body Mass, and Socioeconomic Status: New Evidence from the PSID" in *The Economics of Obesity*. Advances in Health Economics and Health Services Research, Volume 17, 253–275. **Quote From US Data Source:** "A 1% increase in younger women's body mass leads to a 0.46% reduction in younger women's hourly wages and a 0.67% reduction in women's labor market earnings." **Other Western Nations' Data Sources:** Brunello, Giorgio, Béatrice d'Hombres, "Does Body Weight Affect Wages?," 2007. *Economics & Human Biology*, Elsevier, vol. 5(1), pages 1–19, March. **Quote From Other Western Nations' Data Sources:** "We have used data from the European Community Household Panel—a comparative dataset—to investigate the impact of body weight on wages in nine European countries, covering both Northern and Southern Europe. When we pool the available data across countries and years (1998–2001), we find that a 10% increase in the average BMI reduces the real hourly earnings of males and females by 1.86% and 3.27%."

Research Sources

Quiz Questions and Answers	Data Sources and Quotes
Question: True or False—In Canada, the US, the UK, and Australia, a job seeker with a non-Western name has to submit more resumes than a job seeker with a Western name in order to get a response from the recruiter. **Answer:** True. Job seekers in most Western countries who have non-Western names have to submit approximately 30% more resumes to achieve the same results as job seekers who have Western names.	**Canadian Data Source:** Banjeree, Rupa, Ted Rogers, Jeffrey Reitz, Phil Oreopoulos. "Do Large Employers Treat Racial Minorities More Fairly? An Analysis of Canadian Field Experiment Data," *Canadian Public Policy*, 44, Issue 1 (March 2018): 1–12. **Quote From Canadian Data Source:** "Analysis shows that an Asian name on a resume can put the applicant at a serious disadvantage in the attempt to get a foot in the door with Canadian employers. Specifically, applicants with Asian names have a 28 percent reduced likelihood of getting called for an interview compared with applicants with an Anglo name even when all qualifications are equivalent and Canadian in origin." **US Data Source:** Marianne Bertrand and Sendhil Mullainathan. "Race in the Labor Market: Are Emily and Greg More Employable Than Lakisha and Jamal?" *The American Economic Review,* 2004, Volume 9, #991–1013.
(continued) **Question:** True or False—In Canada, the US, the UK, and Australia, a job seeker with a non-Western name has to submit more resumes than a job seeker with a Western name in order to get a response from the recruiter. **Answer:** True. Job seekers in most Western countries who have non-Western names have to submit approximately 30% more resumes to achieve the same results as job seekers who have Western names.	**Quote from US Data Source:** "White names receive 50 percent more callbacks for interviews. Callbacks are also more responsive to resume quality for white names than for African-American ones. The racial gap is uniform across occupation, industry, and employer size." **UK Data Source:** Wood, Martin, Jon Hales, Susan Purdon, Tanja Sejersen, and Oliver Hayllar "A Test for Racial Discrimination in Recruitment Practice in British Cities." *UK National Centre for Social Research on behalf of the Department for Work and Pensions,* 2009. **Quote From UK Data Source:** "The level of favoring of applications with white names over equivalent applications from ethnic minority candidates was 29 percent, with a 95 percent confidence interval of +/– 10 percentage points."

Research Sources

Quiz Questions and Answers	Data Sources and Quotes
(continued) **Question:** True or False—In Canada, the US, the UK, and Australia, a job seeker with a non-Western name has to submit more resumes than a job seeker with a Western name in order to get a response from the recruiter. **Answer:** True. Job seekers in most Western countries who have non-Western names have to submit approximately 30% more resumes to achieve the same results as job seekers who have Western names.	**Australian Data Source:** Booth, Alison, Andrew Leigh, Elenea Varganova. "Does Racial and Ethnic Discrimination Vary Across Minority Groups?" *Evidence From a Field Experiment*. Research School of Social Sciences, Australian National University, 2009. **Quote From Australian Source:** "In order to get as many interviews as an Anglo applicant, an Indigenous person must submit 35 percent more applications, a Chinese person must submit 68 percent more applications, an Italian person must submit 12 percent more applications, and a Middle Eastern person 64 percent more applications."
Question: True or False—Men are far less likely than women to report being victims of domestic violence, hazing, or sexual assault. **Answer:** True. Men are three times as likely as women to not report being victims of domestic violence, hazing, or sexual assault; only 10% of those reporting will report to the police.	**UK Data Source:** "Domestic Violence Against Men," Hertfordshire Domestic Abuse Helpline. **Quote From UK Data source:** "Male victims are three times as likely as women not to tell anyone about what they are suffering. Of those victims, only 10% of men will report the abuse to the police." **Additional UK Data Source:** "Intimate Personal Violence and Partner Abuse." UK Office for National Statistics, 2015. **Global Data Source:** Krug, Etienne G., Linda L. Dahlberg, James A. Mercy, Anthony B. Zwi, and Rafael Lozano "World Report on Violence and Health," World Health Organization, 2002. **Quote From Global Data Source:** "Studies conducted mostly in developed countries indicate that 5–10% of men report a history of childhood sexual abuse. In a few population-based studies conducted with adolescents in developing countries, the percentage of males reporting ever having been the victim of a sexual assault ranges from 3.6% in Namibia and 13.4% in the United Republic of Tanzania to 20% in Peru. Studies from both industrialized and developing countries also reveal that forced first intercourse is not rare. Unfortunately, there are few reliable statistics on the number of boys and men raped in settings such as schools, prisons, and refugee camps."

Research Sources

Quiz Questions and Answers	Data Sources and Quotes
Question: More or Less—LGBTQ+ youth are more or less than twice as likely to have attempted suicide compared to heterosexual youth. **Answer:** More. In most Western countries, LGBTQ+ youth are three to five times as likely to have attempted suicide as heterosexual youth. **Note: References refer to LGBT, LGBTI, and LGBTQ+**	**Global Data Source:** di Giacomo, Ester, Micheal Krausz, Fabrizia Colmegna, Flora Aspesi, Massimo Clerici. "Estimating the Risk of Attempted Suicide Among Sexual Minority Youths: A Systematic Review and Meta-analysis." *JAMA Pediatrics*, 172, Issue 12 (2018):1145–1152. **Quote From Global Data Source:** "Transgender adolescents were 5.87 times more likely, gay and lesbian adolescents were 3.71 times more likely and bisexual youth were 3.69 times more likely than heterosexual peers to attempt suicide." **Australian Data Source:** "Snapshot of Mental Health and Suicide Prevention Statistics for LGBTI People," July 2016, National LGBTI Health Alliance, Australia. **Quote From Australian Data Source:** "Compared to the general population, LGBTI people are more likely to attempt suicide in their lifetime, specifically: LGBTI youth are five times more likely to attempt suicide in their lifetime." **New Zealand Data Source:** Fergusson, Horwood, & Beautrais, "Is Sexual Orientation Related to Mental Health problems and Suicidality in Young People?" *Christchurch Health and Development Study*, Christchurch, 1999. **Statistic From New Zealand Data Source:** 32.1 percent of gay, lesbian, or bisexual youth through age 21 had attempted suicide, whereas only 7.1 percent of same-age heterosexual youth had made such an attempt.

Research Sources

Quiz Questions and Answers	Data Sources and Quotes
Question: What Percentage—While 50% of the US workforce are extroverts, they account for what percentage of leaders and managers? **Answer:** C. 85–100%. Specifically, 96% of managers and executives display high levels of extroversion.	**US Data Source:** Grant, Adam, Francesca Gino, David A. Hofmann. "The Hidden Advantages of Quiet Bosses." *Harvard Business Review*, 2010. **Quotes From US Data Source:** "Whereas just 50% of the general population are extroverted, 96% of managers and executives display extroverted personalities." "In a 2006 survey, 65% of senior corporate executives viewed introversion as a barrier to leadership." **Additional US Data Source:** Ones, Deniz S., Stephan Dilchert, "How Special Are Executives? How Special Should Executive Selection Be? Observations and Recommendations," *Industrial and Organizational Psychology*, 2009, 163–170.
Question: More, Less, or the Same?—Brown and black Brazilians earn more, less, or the same as white Brazilians with the same background? **Answer:** Less. Brown, and especially black, Brazilians earn approximately 20–25% less than white Brazilians with the same background.	**Data Source:** Telles, Edward. "Racial Discrimination and Miscegenation: The Experience in Brazil." *UN Chronicle*, Vol. XLIV, No. 3 (September 2007). **Quote From Data Source:** "Also econometric analyses based on human capital models reveal that brown, and especially black, Brazilians earn about 20 to 25 percent less than whites with the same background, when age, work experience, educational level, sex, region, class origin, and labour market characteristics are considered."
Question: What percentage of male CEOs of Fortune 500 companies are over 6 feet tall? **Answer:** C: 50–60%. Specifically, 58% of male CEOs of Fortune 500 companies are over 6 feet tall. 14.5% of US males are taller than 6 feet.	**Data Source:** Gladwell, Malcolm. *Blink: The Power of Thinking Without Thinking*. 2005. New York: Little, Brown & Co. **Detail From Data Source:** The average male CEO in the Fortune 500 in 2005 was "just a shade" under 6 feet tall. Given the average American male is 5'9", that means CEOs are about 3 inches taller than the rest of their sex. In the US, 14.5% of all men are 6 feet or taller. Even more striking, 3.9% of US adult men are 6' 2" or taller. One-third of Fortune 500 CEOs are 6' 2" or taller.

Research Sources

Other Biases	Data Sources and Quotes
71% of leaders pick protégés of the same race and gender.	**Data Source:** "The Sponsor Dividend," Center for Talent Innovation, 2019. **Detail From Data Source:** 71% of sponsors pick protégés of the same race and gender. **Quote From Data Source:** "Diversity pushes us into uncomfortable territory. We're more comfortable around people who are like us, who share our gender, race, upbringing, religion, or culture. Research on implicit bias and affinity bias confirms this pattern. In our research, we find sponsors hit the same obstacle: they are far more likely to select protégés who share their race or gender." **Additional Data Source:** Banaji, Mahzarin R., Max H. Bazerman, and Dolly Chugh, "How (Un)ethical Are You?" *Harvard Business Review*, 2003.
In the US, minority patients are less likely to receive pain medication than white patients.	**Data Source:** Kennel, Jamie, "Investigating EMS Treatment Disparities by Patient Race/Ethnicity for Traumatic and Painful Emergencies," *Oregon Health and Science University*, 2018. **Key Finding From Data Source:** In a study of 104,000 US medical charts of ambulance patients between 2015 and 2017, the key finding was that minority patients were less likely to receive morphine or other pain medication compared to white patients. Specifically, black patients experienced the most severe treatment disparity and were 40% less likely to receive any pain medication compared to white patients when controlling for pain severity, primary impressions, patient gender, anatomical location of the complaint, age of patient, and the insurance status of the patient.

Research Sources

Other Biases	Data Sources and Quotes
78% of AI developers are male, implying this technology is being developed without diverse talent.	**Data Source:** "The Global Gender Gap Report 2018," World Economic Forum. **Quote From Data Source:** "Based on collaboration with LinkedIn, we find that only 22% of AI professionals globally are female, compared to 78% who are male. This accounts for a gender gap of 72%, which has remained constant over the last years and does not, at present, indicate a positive future trend. The implications of this finding are wide-ranging and require urgent action. First, AI skills gender gaps may exacerbate gender gaps in economic participation and opportunity in the future as AI encompasses an increasingly in-demand skillset. Second, the AI skills gender gap implies that the use of this general-purpose technology across many fields is being developed without diverse talent, limiting its innovative and inclusive capacity. Third, low integration of women into AI talent pools—even in industries and geographies where the base of IT talent has a relatively high composition of women—indicates a significant missed opportunity in a professional domain where there is already insufficient supply of adequately qualified labour."
Children with learning disabilities account for 8.6% of students in US public schools and 32% of youth in juvenile detention.	**Data Source:** Elias, Marilyn, "The School to Prison Pipeline," *Teaching Tolerance*, Issue 43, 2013. **Quote From Data Source:** "The school-to-prison pipeline in the US starts (or is best avoided) in the classroom. When combined with zero-tolerance policies, a teacher's decision to refer students for punishment can mean they are pushed out of the classroom—and much more likely to be introduced into the criminal justice system. Students from two groups—racial minorities and children with disabilities—are disproportionately represented in the school-to-prison pipeline. African-American students, for instance, are 3.5 times more likely than their white classmates to be suspended or expelled, according to a nationwide study by the U.S. Department of Education Office for Civil Rights. Black children constitute 18 percent of students, but they account for 46 percent of those suspended more than once. For students with disabilities, the numbers are equally troubling. One report found that while 8.6 percent of public-school children have been identified as having disabilities that affect their ability to learn, these students make up 32 percent of youth in juvenile detention centers."

Research Sources

Impact of Bias at Work: Summary of Sources on Organizational Results, Innovation, Team Performance, and Individual Performance

The following notes summarize the key findings and research sources for the facilitator-led discussion on impact of bias at work. The information is organized under four lenses: organizational results, innovation, team performance, and individual performance.

Impact of Bias	Data Sources and Quotes
Organizational Results: Companies in the top 25% on gender and racial diversity are more likely to overperform in relation to their industry peers. Companies in the lowest 25% are 25% more likely to underperform.	**Data Source:** "Delivering through Diversity," January 2018, McKinsey & Company, www.mckinsey.com. Copyright © 2019 McKinsey & Company. All rights reserved. Reprinted by permission. **Quote From Data Source:** "The statistically significant correlation between a more diverse leadership team and financial outperformance holds for a global data set. Companies in the top quartile for gender diversity on executive teams were 21% more likely to outperform on profitability and 27% more likely to have superior value creation. The highest-performing companies on both profitability and diversity had more women in line (i.e., typically revenue-generating roles) than in staff roles on their executive teams. Companies in the top-quartile for ethnic/cultural diversity on executive teams were 33% more likely to have industry-leading profitability. That this relationship continues to be strong suggests that inclusion of highly diverse individuals—and the myriad ways in which diversity exists beyond gender (e.g., LGBTQ+, age/generation, international experience)—can be a key differentiator among companies. There is a penalty for opting out. The penalty for bottom-quartile performance on diversity persists. Overall, companies in the bottom quartile for both gender and ethnic/cultural diversity were 25% less likely to achieve above-average profitability than were all other companies in our dataset. In short, not only were they not leading, they were lagging."

Impact of Bias	Data Sources and Quotes
Innovation: Diverse and inclusive organizations are more innovative. • Improvements in diversity policy predict innovative efficiency.	**Data Source** Mayer, Roger, Richard Warr, and Jing Zhao, "Do Pro-Diversity Policies Improve Corporate Innovation," *Financial Management*, Volume 47, Issue 3, 2018. **Quote From Data Source** Pro-diversity practices enhance innovative efficiency because a more diverse hiring policy increases the potential pool from which a firm is able to recruit talented and creative employees. In addition, a wider range of views, backgrounds, and expertise can help innovative problem solving, and a culture of inclusion may help attract and retain talent. **Quote From Richard Warr** "Basically, once you get through all the statistical jargon, we found that a company that checks all of the diversity boxes would see about two new additional product announcements over 10 years. Given that most firms produce an average of two new product announcement per year, that's significant. On the other hand, it shows that improving diversity policies won't lead to overnight improvements in innovation. It may take time to reap the benefits. The take-home message here is that a business which relies on innovation will benefit significantly from supporting diversity within its organization.

Research Sources

Impact of Bias	Data Sources and Quotes
Innovation: Organizations that don't mitigate bias are less innovative. • Bias against diverse teams inhibits funding and organizational support. • Individuals are less likely to take advice and input from women and accented voices.	**Data Source:** Phillips, Katherine W., Robert B. Lount, Jr., Oliver Sheldon, and Floor Rink, "The Biases That Punish Racially Diverse Teams," *Harvard Business Review*, 2016. **Quotes From Data Source:** "… Racially diverse teams were perceived as having more relationship conflict than homogenous ones. And they were less likely to receive additional resources because of these biased perceptions of conflict—even though the objective content of the group interaction was exactly the same." "Diverse groups were perceived as having more relationship conflict, and because of this, financial resources were less likely to be given to them than to homogenous groups. The diverse groups were handicapped, potentially derailing future success." **Data Source:** Dolly Chugh, "How Good People Fight Bias: The Person You Mean to Be," 2018. Specific research was conducted as part of the authors research work Whose Advice Is It Anyway? An exploration of bias and implicit social cognition in the use of advice. **Key Finding from Data Source:** US research participants were given the opportunity to earn money for answering a difficult question correctly. All participants were able to get help by listening to correct advice. The advice was auditory only and participants could use or discount it as they saw fit. The only thing that was different about the advice was the voice: either male, female, stereotypically "white," "black," or "Hispanic." Participants with female advisers earned 69 cents for every dollar earned by participants with male advisers. *Without intending to, the research participants discounted or essentially muted female or minority voices*. The implication for innovation is that when bias isn't mitigated, people can discount or mute contributions from females and minorities.

Research Sources

Impact of Bias	Data Sources and Quotes
Team Performance: Diverse teams that act inclusively make better business decisions 87% of the time, make decisions twice as fast, and have half the number of meetings.	**Data Source:** "Hacking Diversity with Inclusive Decision Making," Cloverpop, 2017. **Quote From Data Source:** "Our research shows inclusive decision making drives better company performance and gives a decisive competitive advantage. Inclusive decision making leads to better business decisions up to 87 percent of the time. Business teams drive decision making twice as fast with half the meetings. Decision outcomes can improve by 60 percent."
Individual Performance. Employees who perceive themselves to be the target of bias are 3X as likely to be disengaged, 3X as likely to withhold ideas, and 3X as likely to leave their job within the year.	**Data Source:** Hewlett, Sylvia Ann, Rashid Ripa, and Laura Sherbin. *Disrupt Bias, Drive Value: A New Path Toward Diverse, Engaged, and Fulfilled Talent.* Center for Talent Innovation, 2017. **Key Finding From Data Source:** Survey participants were asked whether they thought their potential was being fairly assessed by their managers or if they saw bias in the way their potential was judged at work. The survey was conducted by the University of Chicago under the auspices of the Center for Talent Innovation, a nonprofit research organization. Employees who perceived bias were compared with those who did not and asked a series of questions. The following comparative data (% of respondents who perceived themselves as targets of bias compared to % of respondents who did not) was collected: Do you feel regularly alienated at work (33% to 8%)? Do you withhold ideas or solutions (34% to 13%)? Do you plan to leave your employer (31% to 10%)? Have you looked for another job in the last 6 months (48% to 30%)? Have you intentionally failed on an assignment in the last 6 months (9% to 2%)?

Research Sources

Results Stories: Summary of Research Sources for Statistics on Results Stories

The following notes summarize the key findings and research sources for the facilitator-led discussion on results stories at the end of the one-day work session.

Data	Data Sources and Quotes
Employee resource groups provide input to product development and cultural insights to the business:	**Data Source:** "ERGs Come of Age: The Evolution of Employee Resource Groups," Mercer, 2011. **Key Finding From Data Source:** Mercer's Global Equality, Diversity, and Inclusion Group found that ERGs are involved in three broad categories of business activities: those with direct impact on business operations such as marketing, product development, and enhancement of the brand. More than half of Mercer's respondents (56 percent) said their ERGs provide cultural insight to the business, and nearly one in five (19 percent) provide input in product development.
Mentoring programs boosted the representation of targeted groups in management by up to 24%.	**Data Source:** Dobbin, Frank, and Alexandra Kalev. "Why Diversity Programs Fail and What Works Better," *Harvard Business Review*, 2016. **Quotes From Data Source:** "Companies that do a better job of increasing diversity forgo the controlling tactics and frame their efforts more positively. The most effective programs spark engagement, increase contact among different groups, and draw on people's strong desire to look good to others." "Managers who sponsor women and minorities come to believe, through their increased contact, that their protégés deserve the training and opportunities that they receive. On average, mentoring programs boost the representation of black, Hispanic, and Asian-American women, and Hispanic and Asian-American men, by 9% to 24%. In certain industries where plenty of college-educated non-managers are eligible to move up, mentoring programs increase the ranks of white women and black men by 10% or more."

Data	Data Sources and Quotes
LGBTQ+ and ally employees at inclusive companies were 10% more likely to "go the extra mile" for company success.	**Data Source:** Hewlett, Sylvia Ann, and Keni Yoshino. "LGBT-Inclusive Companies Are Better at 3 Big Things," 2016. **Quotes From Data Source:** "Fostering an LGBT-inclusive workplace helps a company attract and retain top talent, woo and win critical consumer segments, and innovate for underserved markets." "Not only are inclusive workplaces more attractive to potential talent, but they also ensure that current employees stay committed and engaged. LGBT and ally employees at inclusive companies are significantly more likely to say they are proud to work for their employer (84% versus 68%) and more likely to "go the extra mile" for company success (84% versus 73%) than those at companies that have a negative attitude toward LGBT employees."