Imagine you run an organization that is exceptionally reliant on the quality of its employees. Now imagine it has been brought to your attention that there are major issues with how you manage talent. Specifically, you are making systematic and predictable mistakes in your hiring decisions. You are also failing to appropriately mentor many of your employees and are making errors with respect to your compensation and promotion practices. These errors not only have potentially problematic legal implications but also limit your organization’s ultimate chances of success. If you were really facing this situation, wouldn’t you want to know how to fix it?

This article will provide insight about how you can fix these potential talent management problems. Specifically, we will begin by summarizing the extensive research that documents how gender bias can lead to a litany of mistakes in decision making that are harmful to gender equality and to organizations. We will then present a variety of solutions that research suggests can help alleviate these biases in order to improve workplace equality and help firms leverage their talent to the fullest extent.

**HOW GENDER BIAS IMPEDES EQUALITY AND EFFICIENCY AT WORK**

A number of experiments have documented differences in decisions that lead to disparate outcomes between women and men in the workplace. In one type of experiment designed to measure bias in hiring, researchers send identical applications in response to job openings, varying only whether the name of the applicant indicates that the applicant is a male or a female.
If they find differences in outcomes (e.g., different call-back rates for interviews) favoring resumes with male names as compared to female names, then that suggests that gender bias may be hindering outcomes for women in the workplace and contributing to sub-optimal hiring decisions.

One such study showed that science professors rated male applicants for a lab manager position as significantly more competent and hirable than identical female applicants. Both male and female science professors offered male applicants more money, and they were more willing to offer career mentorship to men. Similarly, another study found that in order to receive identical promotion decisions, female professors needed more impressive resumes than male professors. In a third study, women received fewer interviews and offers for jobs at upscale restaurants than identical male applicants. Even when people have identical qualifications, many organizations favor men over women. The widespread preference for men over identically qualified women is a signal that organizations are failing to identify and hire the best talent.

Differences in treatment can emerge even before men and women reach official gateways into organizations. Even before reaching the stage of applying to a job, they may receive different levels of encouragement or support along pathways into their desired careers, which may affect whether they even try to pursue their ambitions. For example, one recent experiment showed that white male prospective graduate students were significantly more likely than otherwise identical white female prospective graduate students to receive a response from faculty members at private schools when they asked professors to meet the following week to discuss career opportunities. This work highlights that, like decisions about hiring and promotions, decisions that are made to support women (or not) along the pathways to their desired careers are subject to bias.
All of these studies point to the existence of biases in decision making that favor men over women in the workplace. And it’s not just men who exhibit these biases: study after study shows that women also exhibit these biases. But what causes these biased decisions? We next review research that helps explain how decisions about the advancement of women in organizations go awry.

A Major Culprit: The Prevalence of Stereotypes in Society

Stereotypes are persistent and pervasive in society. They are mental shortcuts that enable us to process information quickly, albeit sometimes at a cost of accuracy. Stereotypes can form without our conscious awareness, and social category stereotypes are built on years of exposure to stereotypical portrayals of groups in society. Stereotypes are not inherently bad—they help us navigate a world that bombards us with information—but they sometimes bias our decision making and lead us to make choices that perpetuate discrimination and inequality in society. Rather than considering the traits and merits of people as individuals, we may instead consciously or unconsciously rely on stereotypes to form judgments about individuals that may be inaccurate.

One specific form of stereotyping that can lead to men being favored over women in the workplace is gender stereotyping. From a young age, children are exposed to gender-stereotypic portrayals of men and women that teach them to associate women with family and household duties and men with careers and management. While men are stereotyped as competent, agentic, and ideal for leadership, women are stereotyped as emotional, caring, and delicate. These stereotypes can affect which careers we think are appropriate for men and women: we think of men as scientists, surgeons, and CEOs but women as nurses, homemakers, and teachers.
Gender stereotypes can affect us both consciously and unconsciously. Some people may hold explicit, sexist preferences that lead them to prefer to avoid working with and hiring women; others may make deliberate decisions not to hire women due to stereotypes rooted in some truth that women are more likely than men to leave the workforce to take care of children. However, most people who exhibit gender bias are likely to be influenced to some extent by unconscious stereotypes.

Scientists have devised tests to measure some of these pervasive unconscious stereotypes and implicit biases. On these tests, people are asked to match words from different categories together as quickly as possible. For example, people may be asked to rapidly categorize words about men (e.g., male, boy) or women (e.g., female, girl) with words about career (e.g., manager, salary) or family (e.g., children, home), and their speed doing this task is measured. The vast majority of people are faster at the task of categorizing women with family and men with career than women with career and men with family, suggesting that people hold implicit associations that reflect pervasive societal gender stereotypes. Even when people explicitly espouse gender equality, research suggests they may have implicit associations that lead them to favor men over women unintentionally.

**Effect of Bias #1: Redefining Merit**

When we’re making hiring decisions for positions that are stereotypically or traditionally male, stereotypes can lead us to redefine what qualifications are necessary to succeed in a way that favors male over female applicants. For example, one study asked participants to evaluate either a male or female applicant for the role of a police chief, a job that is stereotypically held by men. The applicant was either described as “street smart” or “book smart.” Regardless of the applicant’s qualifications, when the participants evaluated a woman, they placed more emphasis
on the criteria that the female applicant lacked (i.e., if she was described as street smart, participants thought it was more important for a police chief to be book smart; if she was described as book smart, they thought it was more important for a police chief to be street smart). By contrast, when participants evaluated a man, they placed more emphasis on the criteria that the male applicant possessed (e.g., book smarts) and downplayed the criteria he lacked (e.g., street smarts). In other words, participants redefined the job’s necessary qualifications in a way that favored the man—the more prototypical candidate according to gender stereotypes—over the woman. Worse yet, participants believed their decision-making was objective since they could use their reconstructed definitions of merit to justify their decisions. They did not realize that they had shifted their criteria depending on the gender of the applicant.

**Effect of Bias #2: Differential Credit Allocation**

Stereotypes also affect how we allocate credit for a group’s success. Specifically, we give more credit to men than to women for positive group performance, since stereotypes suggest that men are more competent, more influential, and better leaders than women. When it’s ambiguous which members in a group contributed what components to a group’s success, women are rated as being less competent, less influential, and less likely to have played a leadership role on the task than men in the same group. Ambiguity enables gender stereotypes to bias how people evaluate individuals.

To illustrate this phenomenon in action, consider the following example from the field of economics. In economics, the order of authors on academic publications is alphabetical. Because order of authorship is not based on who contributed the most to the research, it can be ambiguous which authors contributed the most work to a given publication. As a result of a reliance on gender stereotypes in the face of ambiguity, female economists who publish articles with men
receive less credit for those publications than their male coauthors do and are consequently less likely to receive promotions. Men suffer no such penalty for publishing with other men.

**Effect of Bias #3: Punishing Women for Violating Stereotypes**

Beyond relying on stereotypes when choosing whom to encourage, hire, and promote, people also punish women for violating gender stereotypes. Women are generally stereotyped as being warm and kind, but they are also stereotyped as being low in competence. When women are high in competence and successful, they violate their prescriptive gender stereotype, and people punish them in ratings of likability and warmth. While men are free to be both warm and competent, women can only easily appear to be one or the other. Women face a double bind in which they can either strive to be warm and liked but perceived as incompetent, or they can strive to showcase their competence while being perceived as cold. This becomes particularly problematic when women strive to lead: if women aim to be warm and liked, they are typically viewed as lacking the competence and assertiveness needed for effective leadership; if women strive to be competent and assertive, they are disliked as leaders.

There is also extensive research highlighting ways in which women are punished for displaying stereotypically male behaviors. When people get angry in professional contexts, men are rewarded, and women are punished. In many situations, men are rewarded for speaking up, while women are punished for doing so. Men are rewarded when they are strong negotiators; women are punished for the same assertiveness. In all of these cases, women face backlash for behaving in ways that would not negatively affect men. Rather than being viewed as assertive, proactive and go-getting (as men are), women are characterized as abrasive, emotional, and bossy. It is not just men who make these harsh judgments: women themselves will punish other women who speak, negotiate, or act assertively.
This backlash can actively prevent women from advancing in their careers in numerous ways, but recent research has highlighted one particularly interesting example: women face pressure to spend more time than men helping others and working on tasks that are not highly valued (e.g., taking notes, serving on committees). Rather than being able to devote their time to high-impact tasks, women are expected to spend time on tasks that will not have high returns for their careers, and they face backlash if they fail to help. In one study, women were almost three times as likely as men to volunteer for so-called “non-promotable” helping tasks, but these gender differences disappeared when men and women knew that they were grouped only with members of their same sex. There is no biological reason why women volunteer more than men—men volunteer just as much as women when there are no women around—but we all expect women to help more than men when in mixed company. Aware that they may be punished for not helping, women volunteer, while men, who have no such fear, sit back. This phenomenon can lead women to be passed over for promotions for not achieving enough, when in actuality they have been making unappreciated contributions to their organizations.

Effect of Bias #4: Treating Diversity as a Box to Check

The perceived need for a “token woman” in groups and on committees is a particularly insidious effect of gender bias. To avoid being accused of placing no value on diversity, groups sometimes will recruit a single female (a “token”) simply so their group will no longer be all-male. But when women are tokens and diversity is merely treated as an item on a checklist, both women and the groups to which they belong suffer. Having just one female in a group is harmful to group satisfaction and leads to more gender-related challenges.

When diversity isn’t valued, individuals can internalize these beliefs and develop negative perceptions of women. Viewing a token woman as not having earned her rightful spot
in a group, others in the group may become resentful, leading to strained relationships with the woman in question. This negativity can affect the performance and job satisfaction of token women, creating reinforcing cycles that prevent them from performing to their fullest capabilities in these hostile environments and validating incorrect beliefs that women are not as qualified as men. Even worse, research has shown that women are judged more harshly and receive lower ratings, controlling for performance, when they are perceived as tokens than when they escape token status. When the proportion of women in a group is small, women are judged more negatively than in gender-balanced groups. Thus, even if women are performing well, they will not receive adequate credit for their work.

In our own research, we’ve found that U.S. companies are disproportionately likely to include exactly two women on their boards. Boards in the U.S. are generally composed of nine or ten members, so the fact that we find an overrepresentation at the number two, relative to other numbers, suggests that these boards are still satisficing when it comes to diversity. While boards with two women may escape accusations of tokenism, adding a single additional female suggests they still don’t have a genuine commitment to diversity, which is why we call this phenomenon “twokenism.” Even when two women are present in a group instead of one, research still suggests we should see many of the negative effects associated with tokenism. Focusing solely on impression management and damage control is unlikely to produce a truly diverse and inclusive organization. More compelling reasons to pursue diversity, in our view, include a desire to gain a competitive advantage and to act in a socially responsible manner.

HOW TO DEBIAS DECISIONS THAT IMPEDE EQUALITY AND EFFICIENCY IN THE WORKPLACE
Ample research has shown that gender-related biases in decision making can be pervasive, consequential, and pernicious. They can lead to disparate outcomes for women in the workplace while also harming the interests of the organization in which those decisions are made. What can be done to overcome these biases? We now present several research-backed strategies that can help us de-bias decisions that may otherwise harm women in the workplace and lead organizations to mismanage their talent.

**Strategy #1: Blind decision-making**

One way to eliminate the effects of gender bias in decision-making is to simply eliminate the salience of gender as part of the decision. Here’s one impressive example: in the 1970s, most major U.S. orchestras had large gender imbalances; fewer than 10 percent of their musicians were female. Many at the time thought that women did not have the strength, fortitude, or skill needed to play instruments as well as men. The gender composition of these orchestras started to change, though, as orchestras adopted “blind” audition processes. Rather than have auditioning musicians perform on an open stage, a process that made gender salient, orchestras asked musicians to audition behind heavy screens that made it impossible for decision makers to know whether the musician they were listening to was male or female. Once the gender of the musician was no longer clear, female musicians had much higher rates of success in the auditioning process. Today, most major U.S. orchestras are nearly 40 percent female thanks, in large part, to the widespread adoption of blind auditions.

Blind decision-making can help us avoid relying on gender stereotypes when making many sorts of decisions. When we are unaware of the gender of a candidate whose CV we are evaluating, for instance, our stereotypes about what sort of person should fill a given role are no longer a factor. Making gender-blind decisions is particularly helpful in overcoming biases that
result from a reliance on stereotypes. More generally, blind decision-making can help us avoid relying on any sort of social category stereotype when making decisions.

Blind decision-making, however, is not a panacea. For example, it may not help when institutionalized differences might lead women to have systematically worse qualifications than men, on average. For example, if women have not had the same opportunities as men to build up their qualifications (perhaps because women received less support along pathways into organizations), then blind decision-making may still result in many more men being selected than women. In these cases, it may be necessary to actively consider gender when evaluating candidates rather than blinding yourself to it. Rather than considering what a person has accomplished without regard to circumstances, it may be more beneficial to consider what a person has accomplished given her circumstances. The journey a person has completed may be more indicative of future success than where she currently stands today. Blinding is also not possible in all situations (e.g., when evaluating an individual’s job performance). Thankfully, there are numerous other strategies that can be employed to reduce gender bias in organizations.

**Strategy #2: Substituting**

Although it might be relatively easy to remove names from resumes when evaluating job applicants, it is not practical in other situations like when deciding whom to promote or to whom one should give a raise. In such instances, rather than ignoring gender, it can be helpful to go through the thought exercise of asking yourself whether you would make the same decision if you were judging a man rather than a woman.

In a study conducted in the classroom, Stanford professor Frank Flynn taught a case about an entrepreneur. In one class, the entrepreneur was (truthfully) referred to as Heidi Roizen; in another, the entrepreneur was referred to as Howard Roizen. All other aspects of the case were
identical. When asked to give their impressions of Roizen, students who had read about Heidi were much harsher than those who had read about Howard; they also rated Heidi as being less competent, less effective, less likable, and less hirable than Howard. These ratings appeared to be driven by how much students disliked Heidi’s aggressive personality, although they apparently were not put off by Howard’s aggressive personality. Despite having an identical record, the man was judged much more favorably than the woman because the case under consideration violated people’s expectations of how a woman should act.

When we have gut reactions to women being “abrasive,” “bossy,” or “difficult to work with,” we should ask ourselves whether we would have the same gut reaction to a man acting in the same way. This strategy, which we refer to as “substituting,” may help us think through whether we’re allowing stereotypes to shape our decisions or whether we would make the same decision regardless of the gender of the person we’re evaluating. More generally, substituting can help us overcome the bias of punishing women for violating stereotypes or punishing people of any social category for violating stereotypes that apply to their social category.

**Strategy #3: Articulating New Social Norms**

When women violate gender stereotypes, such as the stereotype that women don’t advocate on their own behalf, they are punished by both men and women on ratings of likability. To facilitate the equal acceptance of women and men engaging in the same behaviors, organizations should have senior leaders publicly articulate new social norms that any work-related behaviors are equally appropriate whether engaged in by men or by women.

For example, Google once found that male engineers nominated themselves for promotions at higher rates than female engineers. To combat this inequity, one of the heads of engineering sent an email to all engineers describing research that highlighted how women often
fail to advocate for themselves and reminding everyone that it was time to apply for promotions. By having a senior leader make a public announcement that suggested that women should advocate more for themselves, Google created a new social norm that allowed women to push back against their stereotypes and led to more self-nominations by women.

A word of caution: it is critical to follow through on any articulated norms. If women receive the message that they are expected to advocate for themselves, it is crucial to ensure that they are not punished for actually advocating. Having senior leaders articulate these norms in public can help ensure that these norms permeate the workplace and hold people accountable to the new norms.

**Strategy #4: Evaluating Candidates Jointly**

People often like to make comparisons when making decisions because it makes the task of choosing easier. But in a personnel decision, if there’s no obvious comparison to make when evaluating a single candidate in isolation, people are particularly likely to rely on stereotypes to make judgments, which encourages biased decisions.

In one study of hiring decisions, participants were assigned to hire someone to complete mathematical assignments. They were presented with either a male or a female candidate for hire and told to decide whether to hire that candidate or to choose another randomly selected person from a pool of candidates instead. In both cases, the male and female candidate had earned identical scores on a previous math task. When presented with just a single candidate in isolation, participants were more likely to accept a male candidate than a female candidate with an identical record. Rather than considering only the objective information available about the candidate’s record, participants were affected by the stereotype that men are better at math than women and chose the male candidate more frequently. On the other hand, if participants were
presented with both a male and a female candidate side-by-side along with their differing qualifications, gender bias was erased. Participants relied on the available objective information about candidates (their past performance on the math task) rather than relying on gender stereotypes in this side-by-side comparison. In this case, jointly evaluating these candidates eliminated gender bias.

One way to ensure that decisions are based on objective qualifications is to use joint processes of evaluation in which all candidates are evaluated simultaneously along the same dimensions. This allows people to focus on qualifications rather than on stereotypes. But again, it is important to highlight a caveat to this strategy. As we noted when describing the benefits of blinding decision making, this strategy will not eliminate bias if there are systemic reasons why women may not have had the same opportunities to achieve as men. In such cases, it may be important to actively consider the context to understand how far people have come given their opportunities and not just where they stand today.

**Strategy #5: Individuating**

By learning more about an individual, we can decrease our reliance on stereotypes when making decisions. Past research suggests that we are less likely to stereotype or automatically categorize people we have met or know a lot about. Individualizing information acts as a buffer against stereotyping: when we have access to specific information about a person, we are less likely to rely on stereotypes to fill in our knowledge gaps. For example, we are less likely to view an individual as “just another woman” who embodies familiar gender stereotypes and more likely to view her as a distinct person. Reducing ambiguity can thus reduce the harmful effects of stereotypes.
Increased knowledge also makes us feel closer to people and more invested in their successes. This suggests that women may benefit from proactively providing information about themselves and differentiating themselves to try to take an active role in reducing the harmful effects of gender stereotypes. This strategy can be useful in situations where blinding decision making is not feasible, as well as in long-term or ongoing working relationships.

**Strategy #6: Educating**

One way to reduce gender bias is to educate people about the negative ways that bias can affect women and organizations. Once people are aware of these issues, they can take steps to correct or ameliorate their own and others’ biases.

How can we educate people in a way that will change their behavior? One solution is to share the mountain of research that points to the positive economic benefits of gender diversity. Research has shown, for example, that gender diversity in the workplace is associated with higher financial performance. Companies that have more gender diversity amongst their employees produce better average relative returns with lower volatility compared to less diverse companies. Firms with more female directors on their boards deliver higher average returns on equity and better average growth. At a global level, advancing gender equality could add up to $12 trillion to economic growth.

What drives these economic benefits? In large part, reducing gender bias can enable organizations—and even nations—to more effectively draw on the talents of the entire population, rather than just half. These institutions gain a competitive advantage in the marketplace from selecting, promoting, and cultivating the best talent. Gender diversity has also been shown to lead to better problem solving and more creative ideas and solutions, which are critical in any industries where innovation impacts firm performance. Greater gender diversity is also
associated with better group functioning, superior decision-making, better governance, and higher productivity.

By educating people about the tangible, positive benefits of gender equality, we can try to overcome the bias that leads people to treat diversity as an item on a checklist. When people are convinced that diversity is something they should inherently value, they can help foster more inclusive environments for women and derive the full benefits of gender equality for their organizations.

CONCLUSION

As the business world becomes increasingly competitive, organizations cannot afford to miss out on the contributions of talented women. By working to overcome biases in decision-making that harm women’s outcomes in the workplace, organizations can take full advantage of the offerings of the entire population and reap the benefits of increased gender diversity.

In this article, we’ve illustrated how prevalent and consequential gender bias can be. Although decisions around hiring, promotion, and mentoring can be some of the most critical choices people make in organizations, they are still prone to systematic errors. High stakes are not enough to ensure accuracy or rationality, and this is all the more reason why tackling gender equality in the workplace is crucial.

The example of gender bias suggests that we need to remain vigilant and examine our decision-making in all realms to ensure more optimal choices. The strategies we propose to overcome gender bias are not without costs, but by forcing ourselves to reconsider and redesign our decision-making processes where gender biases may arise, we can reduce the frequency of errors that make organizations less effective, competitive, and fair.
SELECTED BIBLIOGRAPHY


To learn more about strategies for de-biasing decision making, see: C. Goldin and C. Rouse, “Orchestrating Impartiality: The Impact of ‘Blind’ Auditions on Female Musicians,” *The