

Retooling Career Systems to Fight Workplace Bias: Evidence from U.S. Corporations

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The civil rights movement spurred U.S. companies and universities to implement antidiscrimination programs. Beginning in the early 1960s, employers adopted antibias training as their first line of defense against bigotry. Even then, there was substantial evidence that this approach was unlikely to lessen bias. In this essay, we discuss social science research on the effects of antibias training, as well as research on systemic approaches to reducing institutional discrimination based on insights from contact theory. As sociologist Samuel Stouffer and psychologist Gordon Allport, the progenitors of contact theory, might have predicted by the end of World War II, we find that interventions to change career systems to maximize intergroup contact can promote workplace equity.

Civil rights protests of the 1950s and 1960s led to new laws against discrimination, and the rapid spread of workplace antibias training programs. When John F. Kennedy directed federal agencies and companies with federal contracts to take “affirmative action” to stop discrimination in 1961, many began with “race relations workshops” to counter bigotry. Western Electric’s mass trainings included filmed lectures by James Baldwin, Martin Luther King Jr., and Malcolm X, and live speeches by Roy Wilkins of the NAACP and Whitney Young Jr. of the Urban League. The Department of Health, Education, and Welfare introduced equal opportunity training for its three thousand managers, and at the Social Security Administration, fifty thousand staffers had completed training by the end of 1971. By 1976, more than 60 percent of America’s big companies had instituted training programs for managers.¹

In the 1980s, Ronald Reagan rolled back civil rights regulations and appointed conservative Clarence Thomas to be chair of the Equal Employment Opportunity Commission, a position tasked with enforcing the 1964 Civil Rights Act. Antibias trainers thought the end of affirmative action law was in sight and sketched a business case for inclusion, arguing that women and people of color would soon be the backbone of the workforce and that firms would therefore need to fight discrim-

ination to prosper. Consultants heralded antibias training as good management practice. Yet because lawsuits did not abate, corporate counsel still sold antibias training as a means to fend off lawsuits, and plaintiff lawyers still asked for it in discrimination settlements.² Attorneys placed faith in it. Trainings have taken different forms over time and, over the last two decades, they have increasingly covered ideas from implicit bias research, both in bespoke live training sessions for corporate leaders and in online trainings for frontline workers. But the core idea behind training has changed little: bias is to blame for workplace inequalities, and bias can best be corrected with self-awareness through training.

While many managers and lawyers see training as a panacea for workplace bias, social scientists have known for decades that efforts to reduce intergroup animus through training typically fail. In 1945, the Social Science Research Council created a Committee on Techniques for Reducing Group Hostility in response to the rise of Hitler, Mussolini, Stalin, and the Klan. In 1947, Cornell sociologist Robin Williams, Jr. surveyed scores of bias reduction efforts for the committee, finding fourteen that used pre/post comparisons or control groups to assess trainings to reduce white people's bias against Black people.³ Five showed plausible, albeit small, positive effects. But the training with the clearest effect was not one designed to reduce bias, but rather one to *increase* existing bigotry.⁴ Williams concluded that it is difficult to extinguish racial bigotry in trainings.

We know a lot more now than we did after Robin Williams's 1947 review. In 2009, psychologist Elizabeth Levy Paluck and political scientist Donald Green published a review of 985 studies of antibias education efforts in schools, universities, nonprofits, and corporations. Where they were subjected to credible tests, training sessions had weak or null effects on bias, and few had lasting effects.⁵

Studies that explore training effects on implicit bias have since proliferated and, in 2019, implicit bias researcher Patrick Forscher and colleagues published a network meta-analysis of 492 such studies with nearly ninety thousand participants. Training can reduce implicit bias in the short term, but effect sizes are small and training does not reduce explicit bias or actual discrimination. Trainings that invoke personal motivations were more likely to reduce implicit bias, while those that invoke threats were less likely.⁶ The threat of legal sanction also appears to backfire in real-world diversity training initiatives. In their 2022 review of the literature on diversity trainings in workplaces, psychologists Patricia Devine and Tory Ash similarly found small or no effects.⁷ In a recent large-scale field experiment of antibias training, social psychologist Edward Chang and colleagues also found that while for some groups training can decrease measured bias, it does not necessarily reduce discrimination.⁸ The research record on antibias training is not promising.

The interventions explored in these studies represent the best case. They were designed by psychologists based on past research about the drivers of attitudinal

change and carried out by scholars attuned to avoiding exposure to situations that might taint results. In real life, diversity trainings are often developed by compliance experts who believe, for instance, that the threat of sanction drives behavior. Those trainings signal in myriad ways that the threat of lawsuit is the reason for training: sessions are run by compliance departments that mandate attendance, highlight the risk of litigation, and test trainees on the law.

Why might such antibias initiatives fail even under the best of circumstances? A number of studies point to possible reasons. First, workplace training rarely changes people if it is not accompanied by changes in work systems and routines – even safety training designed to protect workers. One survey of eighty safety training programs found that only twenty-five changed behavior and only seventeen reduced injuries. Moreover, the features of safety programs that made them effective (trainings that are run live, across multiple sessions, in small groups, and with practice of new routines) are rare in antibias trainings.⁹ Second, training to reduce stereotypes tends to activate them. Please do not think of elephants.¹⁰

Third, training can make trainees think that the problem has been solved. Thus, social psychologist Cheryl Kaiser and colleagues found that when subjects are told that their employers have prodiversity measures, such as training, they presume that the workplace is free of bias and react harshly to claims of discrimination.¹¹ Similarly, sociologists Emilio Castilla and Stephen Benard found that when people are told their workplaces are free from bias, they become less likely to censor their own biases.¹²

Fourth, social psychologist Victoria Plaut and colleagues found that diversity messaging can make white people feel left out or think they will not be treated fairly, and lead them to oppose equity initiatives.¹³ This may be why white workers often leave training feeling “confused, angry, or with *more* animosity toward” other groups.¹⁴ Finally, a large body of research shows that people react negatively to efforts to control their behavior, including efforts to reduce prejudice. As it turns out, white subjects resent external pressure to control prejudice against Black people. When asked to control their own biases, they respond by unleashing them.¹⁵

While evidence against the efficacy of diversity training might be expected to hearten conservatives, some use it to argue for abolishing diversity, equity, and inclusion (DEI) efforts altogether.¹⁶

Sociologists have long argued that restructuring work to maximize contact might be more promising than antibias training. The first good evidence that you could eliminate stereotypes and animus between groups by increasing intergroup contact at work comes from the European battlefield in World War II. Harvard sociologist Samuel Stouffer was leading a team commissioned by the U.S. federal government to study soldier adaptation to war when a change in U.S. Army policy set up an unplanned experiment.

The Armed Forces were segregated during the war; Black soldiers and white soldiers did not work together. But as the war progressed, General Dwight D. Eisenhower faced shortages of combat troops in Europe. Eisenhower had to fill in all-white companies after soldiers were lost in battle. He decided to use Black replacement platoons when there were not enough white platoons available. The policy created a natural experiment. Platoons of twenty to forty soldiers were never integrated, but Black and white platoons worked side by side in integrated companies made up of three or four platoons. In some of the white companies that got Black reinforcements, most soldiers were from the Jim Crow South.

Stouffer's team of sociologists, including Shirley Star and Robin Williams, Jr., set out to examine how Eisenhower's solution would affect white soldiers' attitudes toward Black soldiers. They surveyed white soldiers whose companies had been joined by Black platoons and those whose companies had not, posing a question: "Some Army divisions have companies which include Negro platoons and white platoons. How would you feel about it if your outfit was set up something like that?" White soldiers from all-white companies overwhelmingly (62 percent) checked "Would dislike it very much," but only 7 percent of White soldiers from integrated companies felt the same. The flip side was that 60 percent of troops from integrated companies said they "would like it" or would "just as soon have it as any other set-up," while only 11 percent of troops from all-white companies agreed.

White soldiers in integrated companies recognized the change themselves: two-thirds reported that they were initially opposed to the idea of integration. Star, Williams, and Stouffer wrote that this shift gave them "some conception of the revolution in attitudes that took place among these men as a result of enforced contacts."¹⁷ They argued that the success of "this experiment" was tied to the fact that attention was focused on "concrete tasks and goals requiring common effort."¹⁸ These men worked as equals against a common enemy.

In 1954, Stouffer's Harvard colleague Gordon Allport published *The Nature of Prejudice*, suggesting that contact between groups reduces prejudice when the two are of equal status, are cooperating toward a common goal, and have institutional support. Fifty years later, more than five hundred studies in over thirty-five countries had confirmed these ideas.¹⁹ Across a wide range of settings, divided by race, ethnicity, and religion, contact at work was found to reduce prejudice and blur group boundaries.²⁰ But members of different groups have to be working as equals: slavery didn't do it, and as sociologist Rosabeth Kanter found, men and women working together in gender-segregated career lines don't overcome bias either.²¹ But as we argue below, it appears that mentoring relationships between people of different ranks, but within career lines, can counter bias.

Can we change employment systems to increase intergroup contact at work, and thereby reduce bias? Research on contact theory has proven, across many

contexts, that when people from different race and ethnic groups work side by side, *as equals*, racial bigotry declines. The problem is that American firms are often highly integrated when viewed from ten thousand feet, but close up, jobs are highly segregated. In many workplaces, white and Asian-American men dominate tech jobs; women of color dominate DEI departments and customer service; and Black and Brown men prevail in logistics. Sociologists James Baron and William Bielby found this was the case in public and private workplaces alike in the 1980s: despite a growth in gender, race, and ethnic diversity at the workplace, jobs remained stubbornly segregated. Sociologist Corre Robinson and colleagues found much the same pattern two decades later.²² Thus, we may be able to fight bias in the workplace simply by integrating work groups.

Research on contact theory confirms that individual-level bias is reduced by contact. Research, however, has not explored whether systemic changes that foster intergroup contact promote workforce equity. To explore this, we use data on interventions known to increase intergroup contact, and subsequent data on the diversity of the managerial workforce. The diversity of managers, we believe, is the best measure of workplace equity because management is the hardest, and usually last, level to diversify.

Here we summarize findings from the research literature, including findings from our recent book *Getting to Diversity: What Works and What Doesn't*. There we analyze data from over eight hundred firms, with eight million workers, for the years 1971 to 2015.²³ We assess effects of dozens of different employment systems and programs on the diversity of managers. Our analyses, in essence, compare the share of managers from different race, ethnic, and gender groups in the years before and after each program is in place. We control for diversity of the industry and state labor forces, and among the firm's own nonmanagers, as well as other firm features known to affect diversity (other diversity programs, DEI offices, HR policies and programs).

By following many firms over time, we can isolate the effects of individual programs: if one firm adopts three programs in a single year, there will be plenty of other firms that adopt those very programs at different times. Robustness tests give us confidence that we have identified effects of specific programs and not something else that happens at the same time, such as the arrival of a new CEO committed to DEI. The results are promising.²⁴

The advantages our data hold – of permitting us to isolate effects of particular programs on management diversity – highlight the challenges that managers face in assessing their own programs. Managers do not operate in a sterile lab. Many things outside of their control shape diversity: labor supply, recessions, headhunters, and the rise of online job boards, to name a few. Many things happening within the firm shape diversity, including changes in recruitment, promotion,

layoff, and diversity programs. With a huge dataset, we can control for all of these variables. But chief diversity officers with the best of data on their own firms cannot control for these things and, as a result, they rarely have a clue about whether their programs are actually working.

What can these rich data tell us about the effects on managerial diversity of training programs and programs that increase intergroup contact? In our research on diversity training, we test the proposition that the most common form of diversity training – legalistic training for managers – backfires, leading to decreases in the diversity of managers. That is exactly what we have found. Moreover, we have found that curriculum is what divides the worst from the best. Since the 1960s, virtually all programs have covered bias. Beyond that, the worst curricula focus on legal compliance, the best on cultural inclusion.

Legal-compliance training details what the law forbids and how managers can avoid lawsuits, signaling that litigation prevention is goal number one. Often training begins with stories of well-known lawsuits to pique manager interest. An electronics industry HR manager who designed his firm’s training told us, “It’s always an eye-opener. They love to hear about the latest lawsuits.”²⁵ An Atlanta hospital covers situations that might spark suits; trainers present vignettes and ask managers to discuss how they would handle the situation “in order to keep the organization away from . . . liability.” At a Chicago food firm, an HR specialist explains, the main objective of training is to convey “what not to do as a supervisor or manager” and what steps to take if something is reported.

The format of training also signals that lawsuit avoidance is the main goal. Thus, trainings are usually mandatory, offered by compliance or legal departments, and end with exams on the content. A California hospital concludes its annual online manager training with nine exam questions: “In order to pass it you have to get nine out of nine. It won’t let you finish if one is wrong.” Trainees are told that HR saves their exam results so if there is a complaint naming them, the firm can prove it had done its part explaining the rules to them.

Is this kind of training effective? One laboratory study of MBA students found that white students were more resistant to training when legal compliance was the express motive than when improving performance was the motive.²⁶ In our analyses, we found significant negative effects of introducing legal-compliance training on the share of five groups in management: white women (12 percent), Black men (5 percent), Black women (14 percent), Asian-American men (7 percent), and Asian-American women (5 percent). For Hispanic men and women, coefficients were negative but not significant.²⁷ Some of these groups hold few management positions to begin with, so a 5–14 percent decrease does not amount to a big change in the composition of management. But antibias training is not supposed to decrease management diversity. We also found negative or null effects of

legalistic diversity training on the diversity of employees at other levels in these firms.

Legalistic diversity training for managers is designed to make managers aware of their own biases and to make it clear that the law requires them to stop acting on those biases. It follows a simple logic, but the evidence suggests that the underlying idea is wrong. Unfortunately, three-quarters of firms that train managers use a legal-compliance approach.

What about training that does not mention the law? Cultural-inclusion diversity training usually begins with an introduction to implicit bias, but the express goal is to improve communication and collaboration across groups rather than to prevent litigation. Trainers emphasize that good managers know how to handle diversity on their teams and how to foster teamwork. The message is positive: all workplaces are becoming more diverse, and ours will flourish if our managers can create an environment in which everyone can work to their maximum potential.

Cultural-inclusion training dates to the 1960s, but today only about one-quarter of firms offer it without the legalistic content that can poison the well. It usually begins with an invitation from a DEI officer, not a compliance official. One tech firm told us that managers are invited to attend and asked to RSVP, not ordered to attend. The training is often led by a coworker trained as a facilitator, never by a lawyer. “Compliance” isn’t in the course description. One health care organization calls its optional inclusion program “Valuing Differences.” A Bay Area tech firm touts its program as “an experiential . . . manager training around leading a multicultural team.” A large food-processing company emphasizes the importance of engaging everyone on the team: “It’s helping managers build their toolkits. . . . They walk out with an engagement action plan – what am I going to do differently in my job? I am going to interact with team members [differently], and I know how to see things differently.”

The point of cultural-inclusion training is to teach managers to listen to people from different backgrounds, so as to understand their challenges, and to observe interactions of their workers, so as to understand their experiences. Managers learn how to integrate everyone on the work team so each can work to their potential.

This type of training is akin to harassment training for managers, which commonly works on listening and observational skills to help trainees understand the diversity of worker experiences. Both kinds of training offer lessons in managing people from different groups. We do not have data to distinguish between legalistic and listen-and-observe harassment training. Nonetheless, we find that both cultural-inclusion diversity training for managers and the combined types of harassment training for managers have positive effects.

Virtually all employers who use cultural-inclusion training for managers also run harassment training. In our analyses, cultural-inclusion training picks up the effects on non-white men, and harassment training picks up the effects on all groups of women. Thus, firms that employ cultural-inclusion training for managers see significant subsequent increases in the share of managers who are Black men (10 percent), Hispanic men (14 percent), and Asian-American men (8 percent). White men see a corresponding decline (12 percent). Firms that add sexual harassment training for managers see significant increases in the share of managers who are white women (5 percent), Black women (4 percent), Hispanic women (3 percent), and Asian-American women (3 percent). On average, we observe effects of these trainings for seven years: we are seeing *sustained* positive effects for cultural-inclusion training.

Cultural-inclusion and harassment training for managers can reduce workplace inequality, and so if all firms stopped offering legalistic diversity training for managers and offered these trainings instead, we might see increases in the diversity of managers. But even the best of training will not produce workplace equity anytime soon. As we will see, changes in employment systems designed to foster intergroup contact have the potential to speed up progress considerably.

How effective are programs that foster intergroup contact through changes in work systems? We consider the effects of four programs: targeted recruitment, cross-training, formal mentoring, and self-managed work teams. By creating personal connections between people from different identity groups, these programs activate the surest mechanism social science has identified to quash bias: intergroup contact among coworkers.

Of course, these programs may also increase workplace equity by their intended means: of helping firms to recruit, train, mentor, and manage people from all backgrounds. But what these programs have in common is that they increase contact between groups and are, we have discovered, more effective than most of the many other programs firms have experimented with.

Targeted recruitment programs extend the reach of traditional recruitment systems, which were developed a century ago for the recruitment of white men, to women and people of color. Many firms have changed recruitment strategies little in recent decades. They advertise in generic venues: previously, major newspapers; now, popular job boards. They actively recruit at the alma maters of their managers – often Big Ten and Ivy League schools – neglecting Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), and women’s colleges. Many neglect the professional associations of Black, Hispanic, Indigenous, LGBTQ+, and women engineers, lawyers, physicians, and MBAs.

They often fail to see that they are missing important talent pools in doing so. As one Black nurse explained to sociologist Adia Wingfield, the devaluation of

HBCUs makes it hard for Black nurses to find jobs: “I think employers really tend to focus on the school that you went to, your grades, your references . . . in particular, the school because the school makes a huge impact on what the employer sees as a good nurse or not such a good nurse.”²⁸ Historically Black colleges are not on the radar of the many recruiters for nursing jobs who attended historically white colleges.

Our interviews suggest that targeted recruitment helps to promote workforce diversity by creating intergroup contact for both white men managers and the recruits they bring in. At one Boston food industry firm, the HR director reports, the “biggest successes” in recruiting diverse staff came from a decision to send managers to local colleges with large non-white student bodies. “It’s usually an open session,” she said, where students sit down to talk with three or four managers from different units, one after another. If a manager finds a potential hire, they invite her to visit headquarters. Managers who find recruits themselves precommit to making the hire work, unlike managers whose recruits come through third-party recruitment channels.

The new recruit thus arrives with a manager on their side, typically a manager from a different background or identity group, often white and male. At a Bay Area tech firm, targeted recruitment is done at local Hispanic-serving schools by people from departments that are hiring. Prospects are invited to the facility to meet with half a dozen team members individually. Those hired come with the backing of many on the team they will join.

Thus, targeted recruitment activates the positive effects of intergroup contact in both directions. White men managers get to know new recruits from other groups as individuals even before they start work. In turn, people recruited through these programs get to know a supervisor as a supporter even before they start.

While ever-popular legal-compliance diversity training programs lead to reductions in management diversity, targeted recruitment programs lead to increases. We asked firms if they have *any* targeted recruitment programs for women or people of color, and if they do, we asked when they put those programs in place. On average, after firms began targeted recruiting, representation in management showed statistically significant increases for white women (6 percent), Black men (11 percent), Black women (10 percent), Hispanic women (4 percent), Asian-American men (8 percent), and Asian-American women (7 percent). Moreover, targeted recruitment in firms with employee resource groups have proven even more effective, as employee resource groups take charge of making sure recruitment happens. In those firms, we see large positive effects for Black men (23 percent), Black women (22 percent), Hispanic men (9 percent), Hispanic women (15 percent), Asian-American men (12 percent), and Asian-American women (21 percent).

Targeted recruitment surged in popularity among big firms with federal contracts after President Kennedy ordered them to take affirmative steps to end discrimination in 1961. By the late 1960s, Fortune 750 CEOs overwhelmingly favored special recruitment for Black workers.²⁹ But these programs waned during successive recessions, when recruitment is typically curtailed. Today, our research suggests, only about 20 percent of medium and large employers target women and people of color in their recruitment programs. If it became the norm, our analyses suggest, corporate diversity in America might grow quickly.

How do we keep up intergroup contact after onboarding new workers? Once hired, many employees encounter highly segregated work environments. One way to increase intergroup contact after hiring is through rotational training programs, in which new workers move through jobs to acquire different skills. In American companies, this sort of “cross-training” is part of a “high-performance workplace” toolkit, designed to maximize skill development and make the workplace more flexible in the face of rapid change, whether in software development, biotech engineering, or steel mini-mills.

While cross-training does not come under the DEI umbrella, it can help break down siloes that, in a typical firm, may cluster women in sales, white men in management, and Black and Hispanic men in production or logistics. In his study of cross-training in manufacturing, sociologist Steve Vallas found that women were eager to rotate into the high-wage jobs usually done by men, gaining new skills that could lead to promotions.³⁰ It helped them to break out of their siloes. In a clothing factory, sociologist Ian Taplin found that supervisors came to appreciate the abilities of Hispanic employees relegated to low-skill jobs after seeing them master new positions.³¹ That’s a textbook example of intergroup contact reducing bias.

In our analyses, the introduction of cross-training programs leads to statistically significant increases in the representation of white women (5 percent), Black men (4 percent), Black women (4 percent), Asian-American men (7 percent), and Asian-American women (5 percent) in management. As these groups rise, white men see a corresponding decline (5 percent), as do Hispanic men (4 percent). The negative effect for Hispanic men may be a result of the fact that they are the group least likely to have completed college, and thus are less likely to have jobs that are included in cross-training programs.³²

How do firms sustain intergroup contact after training? Mentoring programs have the potential to boost intergroup contact by connecting newcomers with higher-ups from different groups. In the absence of formal mentoring, up-and-coming white men more often have mentors than up-and-coming women and people of color, and their connections with their mentors tend to be closer.³³ Thus, when Sun Microsystems created a formal mentoring program open to all, women and people of color signed up in droves. White men more often said, in effect,

“Thanks anyway, I’m good.”³⁴ Firms can both increase the equity of mentoring benefits and promote intergroup contact through formal mentoring programs.

To boost intergroup contact, professional mentoring programs should exhibit three features. First, formalization. Informal mentoring relationships rarely cross gender and racial lines.³⁵ As management scholar and Morehouse College president David Thomas has shown, when men mentor women informally, the relationship may be misperceived as sexual. Men may conclude that it is best to avoid mentoring women.³⁶ The #MeToo movement may have helped to check harassment at work, but surveys show that it heightened the discomfort men feel in mentoring women informally, exacerbating the problem of a lack of mentorship for women.³⁷

Second, to boost intergroup contact, mentoring programs need to match people based on interests, not demographics. The numbers usually give them no choice. In corporate America there are four junior white managers for every senior white manager and twenty-four junior Black managers for every senior Black manager.³⁸ There is no reason not to match people from different groups. While protégés report stronger social support from same-race mentors, people of color don’t advance faster under same-race mentors.³⁹ And one study found that women matched with mentors by formal programs were 50 percent more likely to be promoted than women who found mentors on their own.⁴⁰ That may be because programs connect protégés to higher-ups outside of their normal circles who can provide new opportunities.⁴¹

And third, to boost intergroup contact, employers must open mentoring programs to workers at all ranks. Many firms have mentoring programs for the top 1 percent, the “high potentials” nominated by executives. Protégés in those programs already have a sponsor in the executive who nominated them. “HiPo” programs may serve a role, but they need to be accompanied by programs that offer everyone a mentor: mentoring has the biggest payoff for people who are not already on an executive’s radar.⁴² Sun Microsystems found that protégés who hadn’t been tagged as stars improved the most with mentors.⁴³

We found that the creation of formal mentoring programs led to a statistically significant increase in the representation of Black women (15 percent), Hispanic men (7 percent), Hispanic women (17 percent), Asian-American men (14 percent), and Asian-American women (17 percent) in management. When we focus on industries in which most people have college degrees – electronics and chemical manufacturing – mentoring boosts white women and Black men managers as well, by more than 20 percent.

Contact theory suggests that interactions between people of equal rank help to fight bias. Our findings on mentoring suggest that contact between people of different ranks in the same career line helps to promote workforce equity, likely in part by undermining bias.

Beyond targeted recruitment, cross-training, and formal mentoring programs, can firms build sustained intergroup contact – across segregated jobs and departments – into their everyday work routines and operations? Many firms now use self-managed teams to plan, coordinate, and carry out work across jobs and units. These teams have the added benefit of forging intergroup contact between white people and men, concentrated in certain departments and roles, and people of color and women, concentrated in other departments and roles.

On self-managed teams, employees in different jobs, who otherwise might work under different supervisors and have little interaction with one another, work together to manage their own tasks, with no formal leader. Each team member has a say in the decision-making and coordination that is usually done by managers.⁴⁴ To design new products, one tech firm creates self-managed teams made up of engineers, production line technicians, and administrative assistants who meet several times a week to apportion tasks, try out new ideas, and track progress.⁴⁵ In a bank, team members in customer service, tech, and administrative roles share responsibility for technical tasks and phone service, jointly managing scheduling, training, and quality control.⁴⁶ In a paper mill, workers from a wide variety of jobs collectively plan activities, assign and rotate tasks among themselves, and take charge of production, quality, and safety.⁴⁷ These opportunities can be especially important for Black workers, who are more often isolated in segregated jobs and more often face negative stereotypes about their soft skills.⁴⁸

Like cross-training, self-managed teams spread across U.S. firms as part of the high-performance toolkit. Business scholars have produced a spate of studies demonstrating that self-managed teams outperform traditional, hierarchical management in a range of industries, from steelmaking to tech to retail.⁴⁹ In consequence, some four in ten firms use self-managed teams to perform some of their core tasks.⁵⁰ When we ran the numbers, we found that firms that introduced self-managed teams for at least some of their core production or service tasks saw statistically significant increases in the share of managers who are white women (6 percent), Black men (3 percent), and Black women (3 percent), and a corresponding decrease in managers who are white men (8 percent). Thus, self-managed teams seem to outperform hierarchical management not only when it comes to productivity, but when it comes to equity and inclusion. They might work even better if, as with mentoring programs, all employees were asked to participate.

Already by 1950, social science research had suggested that antibias training was ineffective. Nonetheless, when federal regulations outlawed workplace discrimination in the early 1960s, many leading firms pursued antibias training as a first line of defense. Laboratory and field research on implicit bias training has taken off in recent decades. Academics have developed training

protocols based in the science, yet meta-analyses of their own scientific studies are clear: this sort of training does not reliably reduce implicit bias in the long term or discrimination in the short term.

In our studies of the effects of real-world diversity training programs on actual workforce diversity, results are mixed. Most trainings involve a smidgeon of antibias content. On top of that, trainings typically cover legal compliance, cultural inclusion, or both. Legal-compliance curricula cause training to backfire, leading to reductions in the diversity of the managerial workforce. Cultural-inclusion curricula actually promote management diversity, so long as they are not tainted by legal-compliance material. That finding is promising because only about one-quarter of trainings for managers take this form, suggesting that mass conversion to cultural-inclusion training could provide a significant boost to workforce equity. But even the best type of training only goes so far. There are more effective ways to promote change.

The earliest research on intergroup contact, which suggests that contact can reduce racial animus, points to a promising means of further promoting workplace equity. Since Stouffer's World War II study of integrated army companies, hundreds of studies conducted in many different contexts, with many different groups, have replicated the finding that bringing people from different groups together to work toward common goals with institutional support can reliably reduce bias.

Our research on workplace programs to promote intergroup contact began with the observation that in workplaces with diverse workforces, work groups are seldom integrated. We explored the effects of targeted recruitment of women and non-white workers, cross-training for employees, formal mentoring programs, and self-managed work teams. Of these four management innovations, only targeted recruitment is a diversity program. The others are popular for improving management generally. All four programs, however, significantly increase intergroup contact. Targeted recruitment sends managers, including white men, to recruit people from colleges and professional associations serving women and people of color. Those managers become mentors and sponsors of the people they bring on board. Cross-training rotates employees through different departments for a month or two each, giving new recruits working in departments that are largely segregated by sex and race sustained contact with people from other groups. Formal mentoring programs typically extend mentoring to women and people of color, creating new contacts with white male managers. Self-managed teams bring together people from different roles, and at different levels, as equal team members to manage production or service provision without a leader.

These approaches work remarkably well at promoting workplace equity, as measured by the diversity of managers. Changes in employment systems, together, can do significantly more than even the most effective diversity and harassment training programs to promote workplace equity. With the data now avail-

able, we cannot know whether these effects result principally from reductions in employee bias. But we do know from hundreds of previous studies that intergroup contact at work reduces bias, so it stands to reason that these changes in employment systems, which are known to promote intergroup contact, reduce bias and promote workforce diversity.

The finding that work systems that increase intergroup contact increase equity also provides insight into hierarchical organizations more broadly. While hierarchical management may be efficient in certain contexts, it tends to reproduce status inequalities and strengthen out-group biases.⁵¹ The rich evidence about the importance of collaborative contact from studies testing contact theory, and from our own research on corporate DEI programs, suggests that workplaces with rigid hierarchies, such as universities and law firms, may face challenges in reducing implicit biases to promote equity.

We have noted that the most popular form of diversity training – legal-compliance training – often leads to backlash and reductions in the diversity of managers. Here, we have focused on the promise of systemic changes to promote equity. Does antibias training have a role to play? Our research suggests that it does, but by itself, current legalistic forms of antibias training are unlikely to promote equity. On its own, antibias training that teaches listening and management skills for cultural inclusion does promote equity.⁵² Moreover, we find that even legalistic diversity training can augment the positive effects of systemic changes. When such training is introduced with mentoring or employee resource groups, it renders them more effective. And when such training is introduced in tandem with measures to apportion responsibility for equity and inclusion, such as diversity taskforces or managers, it can boost their effects.⁵³ Thus, there is a role for antibias training in efforts to promote equity, but we caution that by itself, even cultural-inclusion diversity training is unlikely to move the needle by much.

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