What Works to Increase Diversity? A Multi-Level Approach

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Abstract

Bias is a pervasive problem that organizations must address if they want to increase the diversity of their employees. Although many organizations rely on a one-time bias or diversity training to address this problem, research clearly shows that diversity training does not work to reduce bias over time, nor does it increase diversity. What, then, can well-intentioned organizations do to make long term changes that will increase the diversity of their employees? To answer this important question, we reviewed research across disciplines to propose a multi-level model for reducing bias--one that addresses bias at both the individual level (e.g., attitudes and behavior) and organizational level (e.g., hiring and promotion practices). First, we briefly review diversity training as the typical way in which organizations seek to increase diversity and discuss why it far too often fails to achieve its objectives. Second, we describe our proposed multi-level approach on which organizations can rely to reduce bias and increase diversity in the long run: adopt empirically based strategies to change both individuals' attitudes and organizational policies and practices. Third, we review psychological research documenting how to effectively reduce bias in individual attitudes and behavior. Fourth, we review a body of interdisciplinary research that documents how to de-bias organizations' policies and practices in two domains: recruiting and hiring and evaluation and promotion.

What Works to Increase Diversity? A Multi-Level Approach

The diversity, equity, and inclusion (DEI) space is a "big business," one that is booming (Zelevansky, 2019). By some estimates, organizations in the United States spend $8 billion annually (Mehta, 2019). Moreover, from August 2018 to August 2019, DEI-related job postings increased by more than 25% (Zelevansky, 2019).

The most common approach that organizations use to increase diversity is to implement what is commonly referred to as a "diversity training" or a "bias training." Although these terms are often used interchangeably, throughout this article, we will use the term *diversity training* because it is a broader and more inclusive label that encompasses a range of educational programs focused on bias and diversity. Such training is ubiquitous in today's fortune 500 organizations, including Google, Apple, Intel, Facebook, Starbucks, Microsoft, and Coca Cola. The assumption underlying diversity training is that organizations' lack of diversity is a product of biased individuals who make biased decisions. And, conversely, that training and motivating employees to understand their own biases and their impact will empower them to make unbiased decisions that will, ultimately, serve to diversify the organization's workforce.

The reality is that individual-level diversity training rarely achieves its objectives of reducing bias and increasing diversity (Kalev, Dobbin, & Kelly 2006). As we will outline in detail below, the research on the impact of diversity training is clear: it often fails to produce long term effects on individual attitudes and behavior, nor does it achieve the goal of diversifying the organization. At best, it is well-intentioned, but has only a minor, short-term impact on employees' attitudes and behavior. At worst, it can backfire by reinforcing group stereotypes or even increasing inequalities between groups (Kidder, Lankau, Chrobot-Mason, Mollica, & Friedman, 2004; Naff & Kellough 2003; Rynes & Rosen, 1995; Sidanius, Devereux, & Pratto, 1992). Despite its limited effectiveness, many organizations use diversity training because it is a fast and easy way to signal to employees, customers, and courts that an organization cares

about diversity or is compliant with antidiscrimination laws (Edelman, 2016; Kaiser, Major, Jurcevic, Dover, Brady, & Shapiro, 2013).

What, then, can well-intentioned organizations do to make long term changes that will increase the diversity of their employees? While there is a robust body of research documenting pervasive biases and the resulting inequalities in the workplace based on race and gender, there is far less focused on the question of what can be done to improve outcomes (Dobbin, Schrage, & Kalev, 2015; Ridgeway, 2006).

The current article reviews existing research relevant to this question and proposes that increasing diversity requires a multi-level approach that reduces bias at both the individual level (e.g., attitudes and behavior) and organizational level (e.g., hiring and promotion practices; for a similar approach, see Hamedani & Markus, 2019; Stephens, Markus, & Fryberg, 2012). We will use the term *bias* throughout this article to generally refer to people's tendency to show a disproportionate preference in favor of or against an individual or individuals based on their social group membership, identity, or background. This could include the tendency to rely on cognitive group stereotypes to make decisions for hiring (e.g., Greenwald & Banaji, 1995), or the tendency to have negative attitudes or feel negative affect, antipathy, or prejudice against someone based on group membership (e.g., Allport, 1954). Bias can occur at either an implicit or explicit level—that is, either outside of or within the bounds of individuals' conscious awareness (Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Dovidio, Kawakami, & Gaertner, 2002; Greenwald & Banaji, 1995).

In this article, we present our multi-level model for increasing diversity in the following sections. First, we briefly review diversity training as the typical way in which organizations seek to increase diversity and discuss why diversity training far too often fails to achieve its objectives. Second, we describe our proposed multi-level approach that organizations can use to reduce bias and increase diversity: adopt empirically based strategies to change both individuals' attitudes and organizational policies and practices. Third, we will review

psychological research documenting how to effectively reduce bias in individual attitudes and behavior. Fourth, we will review a body of interdisciplinary research that documents how to de-bias organizations' policies and practices in two domains: recruiting and hiring and evaluation and promotion.

The Typical Answer: Change Individual Attitudes through Diversity Training

To reduce bias and diversify the organization, many organizations' go-to response is to implement a diversity training. The content of diversity training varies widely, but they typically share a focus on fostering an awareness of bias and diversity, and also offer strategies for reducing individual biases and engaging in more positive intergroup interactions. A recent review article on diversity trainings defines them as "distinct set of instructional programs aimed at facilitating positive intergroup interactions, reducing prejudice and discrimination, and enhancing the skills, knowledge, and motivation of participants to interact with diverse others" (Bezrukova, Spell, Perry, & Jehn, 2016, p. 1228). They can include different types of instructional formats such as lectures, group activities, and videos, and include different strategies. Perhaps the most famous case of an organization implementing diversity training was the case of Starbucks, who shut down 8,000 stores to deliver a mandatory diversity training to 175,000 employees in May 2018. In their training, they showed videos about race and identity, encouraged people to be "color brave" instead of "color blind," and taught employees about unconscious bias and how to combat it (Calfas, 2018; Gino, Coffman, & Huizinga, 2019).

Although organizations invest a massive amount of money each year to implement these trainings, is there any evidence that these trainings achieve the ultimate goal of increasing diversity? Moreover, do they achieve the intermediate step of reducing bias, and therefore changing individual attitudes and behavior? Despite their common use, most organizations who rely on them do not evaluate their effectiveness. As a result, there are very few rigorous evaluations of their impact on organizational outcomes, including diversity.

A landmark study of the effectiveness of various diversity programming on the representation of women and racial minorities in management in private companies found that diversity training was *the least* effective in increasing organizational diversity (Kalev et al., 2006). However, more recent field studies have shown that, under the optimal conditions and when it provides the right content, diversity training can have small benefits. Specifically, it can help individuals acquire new knowledge about diversity, change their implicit and explicit attitudes, and even increase behaviors that foster diversity (e.g., Carnes, Devine, Isaac, Manwell, Ford, Byars-Winston, Fine, & Sheridan, 2012; Devine, Forscher, Austin, & Cox, 2012; Lai, Hoffman, Nosek, 2013; Shields, Zawadzki, & Johnson, 2011). Below we describe two recent noteworthy and rigorous evaluations of the individual-level benefits of diversity training.

Using a pre-test two weeks prior to the diversity workshop and a post-test two weeks after the workshop design, Moss-Racusin and colleagues (2016) delivered 2 hour workshops educating science faculty on their biases and the benefits of greater inclusion. The workshop was called "Scientific Diversity" and lasted for 2 hours. Although the program included diversity broadly defined (e.g., racial background, age, learning style, etc.), it focused in particular on the topic of gender bias and diversity. The program incorporated active learning techniques (i.e., small group activities and discussions) and the message that diversity is a shared goal/responsibility (i.e., they were taught to avoid assigning blame; that stereotypes are a product of culture; and well-intentioned people can be biased). To evaluate the effects of the training, a baseline pre-test survey was administered two weeks before the training and a post-test survey was administered two weeks after the diversity training. These surveys measured awareness of diversity (i.e., "To what extent do you think that your own department is diverse?"); gender bias (i.e., based on the Modern Sexism Scale; Swim et al., 1995, 2005); and responses to diversity-related challenges (i.e., the measure included 10 promotion focus items and ten prevention focus items; Rudman et al., 2012). They found that the workshop was

associated with increased awareness of diversity issues, reduced gender bias, and heightened propensity to take action to address diversity challenges.

Another rigorous study of the impact of diversity training is an experiment conducted by Chang and colleagues (2019). Very few experiments have been conducted to identify the causal effects of diversity training. In their study, they randomly assigned 10,000 employees from a large global organization from 63 countries to complete one of three 1-hour conditions: a diversity training program focused specifically on gender bias, a diversity training focused on various types of bias (gender, race, age, sexual orientation), and a control condition that did not mention bias but focused on the importance of psychological safety. The course materials were based on research on attitudes and behavior change, with a focus on preventing defensiveness. Specifically, participants in the two treatment groups "learned about the psychological processes that underlie stereotyping and research that shows how stereotyping can result in bias and inequity in the workplace, completed and received feedback on an Implicit Association Test assessing their associations between gender and career-oriented words, and learned about strategies to overcome stereotyping in the workplace" (Chang, et al., 2019; p. 7779). The control program included the same length, format, and opportunities to receive feedback and practice strategies, but did not include bias-related content.

To evaluate the impact of the training, immediately after the training, the researchers measured employees' attitudes towards women and racial minorities. For example, they measured responses to the Modern Sexism Scale, questions about one's own gender and racial biases compared to others, and a measure of intentions to engage in "inclusive workplace behaviors" toward women. They also measured behavior starting one week through 20 weeks after the intervention. To capture participants' behavior, based on a self-report survey, they examined employees' mentorship behavior in response to other colleagues of different genders and races (i.e., how many men vs. women did they choose to mentor, recognize for excellence, and volunteer to help).

The results compared participants' attitudes and behaviors across the two diversity training conditions (combined) compared to the control condition. Participating in either diversity training improved participants' attitudes about both race and gender (i.e., a positive effect across all three measures of employees' attitudes including the Modern Sexism Scale, people's perception of their bias compared to others' bias, and intentions) compared to the control condition. These positive effects were especially strong among international employees, who were on average less supportive of women compared to their U.S. counterparts.

Among the three behavioral outcomes measured, the researchers found that participating in either diversity training led to positive behavior change only in the domain of mentorship. Upon examining the average number of women selected per employee for informal mentoring, they found that the diversity training did not affect the number of women selected as mentees overall, but it did increase the number of women selected as mentees by U.S. employees. This effect, which was a consequence of the diversity training, was driven by women in the United States. who were more likely to seek out informal mentorship from colleagues regardless of gender. As for race, the researchers found a positive significant effect for only one behavioral outcome: the number of racial minorities nominated for excellence. However, this effect was driven by the increased rates of nomination offered by racial minority employees.

This section asked whether diversity training works to reduce bias in individual attitudes and behavior, as well increase organizational level diversity. The answer is that, when it is done well, diversity training can have some small positive effects on individual attitudes and/or behavior, but these effects typically do not persist over time (Bezrukova et al., 2016; Chang et al., 2019). Moreover, research examining the effects of diversity training on organizational diversity suggest that the individual level changes that have been observed in some studies do not translate into achieving the ultimate goal of increasing organizational level diversity (Kalev et

al., 2006). Thus, to increase diversity, this research suggests that organizations must go beyond simple efforts to change individuals' attitudes through diversity training; they must also make changes at the organizational level.

Increasing Diversity Requires a Multi-Level Approach

Although most organizations rely on diversity training as their silver bullet solution, the truth is that diversity training is not a panacea and does not achieve the objective of reducing bias over time, nor does it serve to increase diversity. For organizations that use diversity training merely to signal that they care about diversity—without actually increasing diversity (Edelman, 2016)—diversity training can serve this purpose. However, for organizations that genuinely want to reduce bias and increase diversity, they need to do much more. We propose that successfully increasing diversity in organizations requires an empirically grounded and multi-level approach to reducing bias at *both* the individual level (e.g., attitudes and behavior) and organizational level (e.g., hiring, promotion, and mentoring practices).

As shown in Figure 1, when we refer to the *individual level*, we mean organizational efforts to change individuals' attitudes or behavior—that is, to reduce bias from the "bottom up." Diversity training is one such example of this, but individual level changes refer more broadly to efforts that go beyond diversity training. For example, to reduce individual bias and improve attitudes about diversity, organizations might arrange for employees to meet other employees who are different from themselves (e.g., in terms of identity or background).

When we refer to the *organizational level*, we mean organizational efforts to change the organization's structures from the "top down." These changes would be policies and practices that guide how the organization functions. For example, changes to policies for hiring, promotion, or mentorship would represent changes at an organizational level.

To understand why a multi-level approach is necessary to increase diversity, it is useful to first consider why changes at *either* an individual or organizational level in isolation are often fragile, hard to sustain, or just plain ineffective. Controlling implicit bias at an individual level is

an incredibly difficult, if not impossible task (Kahneman, 2011; Tversky & Kahneman, 1974). For example, when people try to suppress certain thoughts or stereotypes, those thoughts can become even more activated (Macrae, Bodenhausen, Milne, & Jetten,1994; Wegner, Schneider, Carter, & White, 1987). In addition, individuals are often unaware of the many ways in which biases can shape their decision making (e.g., Greenwald & Banaji, 1995; Greenwald & Lai, 2020). Further, because implicit attitudes are learned early and sustained by the cultural contexts that people inhabit over time, they are very difficult to change (Hailey & Olson, 2013; Renno & Shutts, 2015; Shutts, Banaji, & Spelke, 2010).

Nevertheless, even if managers are successful in improving employees' diversity-related attitudes and behaviors, these changes will not necessarily result in more equitable outcomes unless they are paired with organizational policies and practices that encourage diversity. For example, a well-designed diversity training such as that described by Chang et al. (2019), can improve managers' openness to working with women or racial minorities, at least in the short term. However, if an organization's procedure for sourcing job applications or scoring résumés results in an interview pool that is homogenous, managers will have limited ability to act on intentions to increase diversity. Consequently, systems can be the conduits of bias even when individuals themselves are not biased (e.g., Kalev, 2009; Pedulla & Thebaud, 2015; Stamarski & Son Hing, 2015). Thus, the practices and policies of an organization—if set up in biased ways—can lead to biased outcomes in the absence of individual bias.
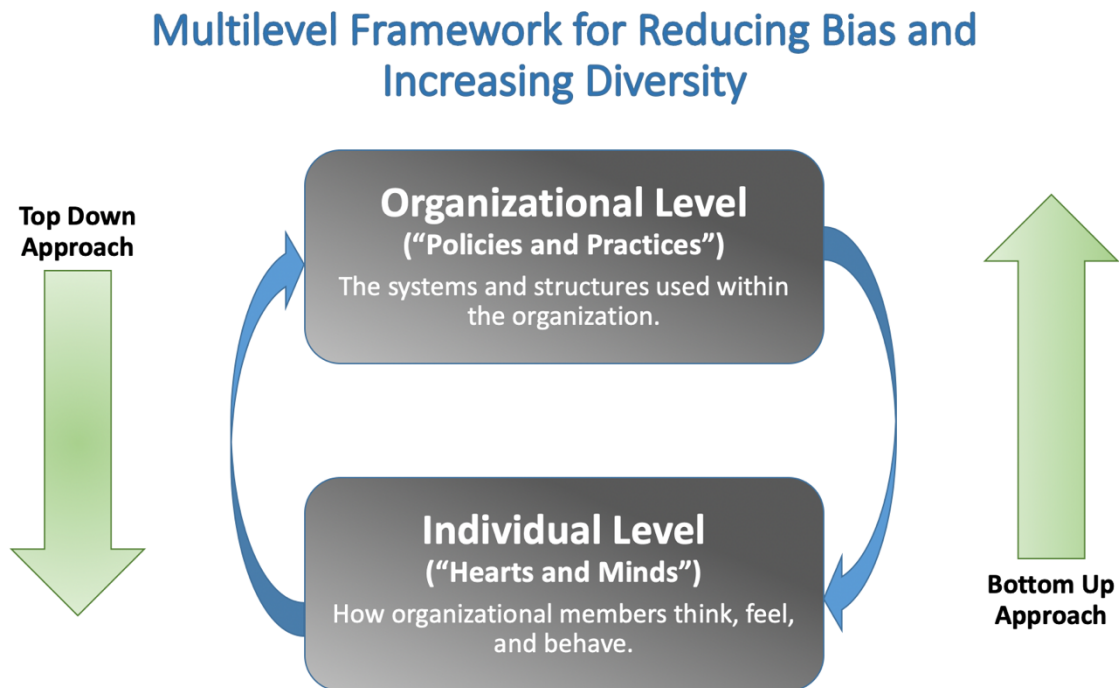
Conversely, changing organizational policies and practices in the absence of individual-level strategies is also likely to fail. A lack of internal support for diversity programs is a major factor that leads them to be infrequently adopted (Dobbin, Kim, & Kalev, 2011). If individuals do not understand why diversity is important or lack genuine interest in increasing an organization's diversity, organizational efforts to increase diversity are likely to have little impact or even elicit backlash. Indeed, employees may actively resist these organizational level changes and refuse to adopt them (Dobbin et al., 2015; Lambouths III, Scarborough, & Holbrook, 2019; Plant &

Devine, 2001; Plaut, Garnett, Buffardi, & Sanchez-Burks, 2011). One notable case of backlash against Google's new diversity initiatives occurred when a now former Google employee posted an internal memo that claimed that women's natural inferiority, rather than bias, was a source of the gender gap in the tech industry (Wakabayashi, 2017).

Considering these challenges inherent in "either-or" approaches, reducing bias and increasing diversity will be most effective when organizations make changes at both individual (bottom up) and organizational (top down) levels. In fact, making changes at both levels can render the desired diversity-related changes more likely to endure because changes made at one level can reinforce and amplify changes made at the other. This bi-directional relationship is shown in Figure 1. Specifically, policies and practices shape the individual thoughts, feelings, and behaviors that are possible, reinforced, and likely to occur (Markus, & Hamedani, 2007; Markus, & Kitayama, 2010; Stephens et al., 2012; Stephens, Markus, & Phillips, 2014). For example, from the top down direction, a policy that holds managers accountable for reaching certain diversity-relevant goals communicates to employees that the organization genuinely values diversity, and increases the chances that an individual manager will behave in ways that takes diversity seriously (e.g., mentor diverse employees). From the bottom up direction, when individuals are less biased and care more about diversity, they will be more likely to hold their organization accountable for changing policies and practices to promote diversity. Given the interdependencies between the individual and organizational level and how they influence each other, it's important to intervene at both levels to create sustainable and enduring change.

Research on diversity initiatives supports the idea that change must occur at both individual and organizational levels (Dobbin & Kalev, 2016). For example, a meta-analysis on diversity training (Bezrukova et al., 2016) showed that initiatives using what they referred to as an "integrated" approach (i.e., implemented at multiple levels throughout the organization) had higher overall effect sizes and impact on diversity-related outcomes than non-integrated approaches (e.g., a one time diversity training; Bezrukova, Jehn, & Spell, 2012).

Figure 1.

Multilevel Framework for Reducing Bias and Increasing Diversity

Top Down Approach

Organizational Level
("Policies and Practices")
The systems and structures used within the organization.

Individual Level
("Hearts and Minds")
How organizational members think, feel, and behave.

Bottom Up Approach

Increasing Diversity Requires Intervention at the Individual Level

Relying on diversity training to reduce individual bias—and change behavior—often fails. Yet, before organizations can successfully increase diversity in the long run, they need their employees to be receptive to their efforts—i.e., to be open to and buy into the organization's efforts to increase diversity. For example, employees should understand why diversity is important, be willing to implement the changes that the organization seeks to make, and experience a genuine desire to help the organization meet its objectives.

Decades of research in psychology suggests key strategies for reducing individuals' biases and fostering more positive intergroup relations. These strategies could be implemented as a part of diversity training, a marketing effort, or an employee orientation.

What works to reduce individuals' biases? Although the psychological literature offers many empirically grounded strategies, here we focus on three key strategies that organizations can employ: increasing intergroup contact, countering stereotypes, and encouraging perspective-taking. We will not provide a comprehensive review of these literatures, but instead highlight a few key conclusions from these research areas and the implications for organizations' efforts to reduce individual bias.

Intergroup Contact

Among these strategies that have been shown to reduce bias, by far the most well studied strategy for reducing bias is intergroup contact. *Intergroup contact* simply means participating in an interaction with people who are members of an outgroup. Hundreds of studies in psychology and sociology over the last 70 years have sought to establish the benefits of intergroup contact for reducing bias against others who have different identities, social group membership (e.g., race or religion), or backgrounds (e.g., social class; Lemmer & Wagner, 2015; Schroeder & Risen, 2016). At a high level, a meta-analysis of over 500 studies noted that research on intergroup contact "conclusively show[s] that intergroup contact can promote reductions in intergroup prejudice" (Pettigrew & Tropp, 2006, p. 751).

The original contact hypothesis proposed that these benefits only occur in situations that have four conditions: equal status, intergroup cooperation, common goals, and institutional support (Allport, 1954). More recent research led to the revision of this hypothesis. In the influential meta-analysis noted above (Pettigrew & Tropp, 2006), the researchers found no empirical support for the claim that these conditions are necessary to realize the benefits of intergroup contact. Instead, they concluded: "Allport's conditions are not essential for intergroup contact to achieve positive outcomes. […] samples with no claim to these key conditions still show significant relationships between contact and prejudice" (p. 766).

Below we describe two recent noteworthy examples of the benefits of intergroup contact for reducing bias and/or creating more positive attitudes toward outgroups. In the case of racial

bias, research has found that Whites often experience anxiety when they interact with African Americans because they lack positive experiences with interracial encounters, resulting in a desire to avoid such interactions altogether. Among White and Latina/o participants, one study examined how cross-group friendships could help to reduce this anxiety during intergroup contact (Page-Gould, Mendoza-Denton, & Tropp, 2008). The researchers randomly assigned participants to either a same-group or cross-group friendship dyad and had the friendship dyads meet for three weeks to complete bonding tasks similar to the Fast Friends procedure. Among participants who were high in anxiety about intergroup contact and high in bias before the intervention, their cross-group interactions reduced anxiety and also increased intentions to engage in additional intergroup contact in the future after the intervention. The results of this study suggest that forming relationships with members of outgroups can have a wide range of benefits: it can help individuals widen their social circles, feel less stress and anxiety in intergroup contexts, and reduce their prejudice (Page-Gould et al., 2008).

Another recent intervention found that creating intergroup interactions between Iraqi Christians and Muslims improved Christians' behaviors toward Muslims (Mousa, 2020). Specifically, after being assigned to play on a soccer team with Muslims (vs. an all Christian team), Christians with Muslim teammates were more likely to vote for a Muslim (not on their team) to receive an award, take the opportunity to play on a diverse team in the subsequent season, and train with Muslims nearly 6 months after the intervention. Interestingly, in this case, the intervention led to long term reductions in bias against Muslims, but these effects did not generalize beyond the context of soccer. What this suggests is that fostering intergroup contact in the workplace is likely to have enduring effects in the workplace, but these benefits may not translate beyond that setting (Mousa, 2020).

Countering Stereotypes

A second strategy that organizations can use to reduce individual bias is countering stereotypes (Dasgupta, & Greenwald, 2001; Kawakami, Dovidio, Moll, Hermsen, & Russin,

2000; Kawakami, Dovidio, & van Kemp, 2007; King, & Ahmad, 2010; King, Shapiro, Hebl, Singletary, & Turner, 2006; Richeson & Ambady, 2001; Singletary, & Hebl, 2009). *Countering stereotypes* refers to being presented with or imagining in detail someone who is a member of an outgroup who acts in a way that is inconsistent with a stereotype of their group. This can be used in a variety of ways—for example, by presenting people with images of someone who is counter-stereotypical, asking them to read about someone who is counter-stereotypical, or having them meet someone in person who defies stereotypes.

Research finds that when people have information about outgroup members that directly contradicts salient stereotypes, they are less likely to display biases, express prejudice, or engage in discriminatory behaviors toward them. For instance, in organizational contexts, one study found that managers who were told (versus were not told) that ostensible Muslim job applicants spent time volunteering (i.e., counter-stereotypic information) acted more positively toward them, reducing the perceived stereotype of Muslims as cold and unfriendly (King & Ahmad, 2010). Another related lab study showed that when participants completed a counter stereotypic training, they were subsequently more likely to choose the woman for the supervisory position. Furthermore, participants in the counter stereotypic training attributed less stereotypic traits to the job candidates overall compared to the participants in the no training condition (Kawakami et al., 2007). In sum, providing counter-stereotypic information suppresses the expression of prejudice and results in more positive interpersonal interactions. This could occur because counter-stereotypic information is used by perceivers as supplemental information to evaluate targets.

This research suggests that one way for organizations to reduce their employees' bias is by exposing them to other employees who defy stereotypes in their attitudes, behavior, roles, hobbies, or experiences. For example, promoting more women or racial minorities to leadership positions (e.g., counter-stereotypic roles) could lead to reduced bias against women (see Gorman, 2005). Another possibility would be for organizations to have employees share unique

personal stories with each other in a way that might encourage them to question their assumptions or stereotypes about those groups.

Perspective-taking

A third strategy that organizations can use to reduce individuals' prejudice and bias is perspective-taking (see Batson, Polycarpou, et al.,1997; Finlay & Stephan, 2000; Vescio, Sechrist, & Paolucci, 2003). *Perspective-taking* means actively considering others' psychological experiences (Dovidio et al., 2004).

Research finds that "perspective taking can combat automatic expressions of racial biases without simultaneously decreasing sensitivity to ongoing racial disparities" (Todd, Bodenhausen, Richeson, & Galinsky, 2011). There is evidence to support this assertion, both from laboratory studies in psychology as well as field studies examining the long-term effects.

For example, in a series of five laboratory experiments, Todd and colleagues (2011) demonstrated that participants who adopted the perspective of Black target in an initial context subsequently exhibited more warmth toward African Americans, less pro-White bias, and a greater awareness of racial inequality. In addition, they found that perspective taking produced stronger approach-oriented action tendencies (e.g., sitting closer) toward African Americans. Moreover, from the perspective of the Black interaction partners, face-to face interactions with the perspective-takers were rated more positively than interactions with non-perspective takers.

Even beyond these short-term benefits observed in the laboratory, a noteworthy field experiment showed that encouraging people to actively take others' perspectives can have enduring benefits on prejudice reduction (Broockman & Kalla, 2016). In this study, the researchers sought to reduce the transphobia of potential voters. Trained canvassers went door-to-door to engage in conversations with voters, in which they asked a series of questions that encouraged them to take the perspective of transgender individuals. They found that participating in active perspective-taking substantially reduced transphobia, effects that

persisted for 3 months. This experience of perspective taking also increased support for a nondiscrimination law that would protect transgender individuals.

Using These Strategies in Your Organization

Taken together, research on intergroup contact, countering stereotypes, and perspective-taking suggests that organizations might help employees to reduce their bias by creating situations and opportunities to encourage these three experiences. For example, organizations could increase interactions between diverse employees by holding regular events or workplace gatherings, training sessions, or ad-hoc initiatives in which employees who are different from each other are likely to interact in meaningful ways. They might also consider staffing projects with social group differences in mind. In addition to increasing the likelihood of these interactions occurring, organizations could also allow the time and opportunity for diverse employees to share their perspective and experiences, including unique information about themselves. For instance, employees might participate in a "fast friends" exercise with someone from a different group (Aron, Melinat, Aron, Vallone, & Bator, 1997; Page-Gould et al., 2008). This activity allows participants to have meaningful intergroup contact, to learn meaningful information about another person that has potential to counter stereotypes, and to actively consider this other person's perspective.

At the same time, these strategies are not a panacea and need to be implemented with great care and attention to the context in which they are delivered. For example, these strategies are more likely to be effective in an organizational context that genuinely values diversity and shows little tolerance for prejudice or discrimination (e.g., Purdie-Vaughns, Steele, Davies, & Ditlmann, 2008). Moreover, in encouraging employees to participate in organizationally-sanctioned activities or programs that would foster these three experiences, it is important to make sure that employees feel that they have the agency—or choice—to participate. Indeed, a wealth of studies in psychology and sociology suggest that affording people the experience of choosing such experiences for themselves, rather than having them

mandated by the organization, helps to ensure that employees fully engage in these experiences and benefit from them (Brannon & Walton, 2013; Dobbin & Kalev, 2013; Dobbin & Kalev, 2016; Dobbin, et al., 2011; Dobbin et al., 2015; Langer & Rodin, 1976).

In the case of intergroup contact, it is also critical to consider how to help employees navigate the status differences between employees at different levels. Indeed, given the reality that racial minorities and women are dramatically underrepresented in the upper echelons of organizations, creating equal status intergroup interactions at the highest organizational levels may be challenging.

Increasing Diversity Requires Intervention at the Organizational Level

In the previous section, we reviewed the individual level strategies that organizations can employ to de-bias individuals' attitudes and behavior. Although this is a necessary step in the right direction, these strategies are not enough on their own. It is true that individual-level changes can reduce employees' bias against others who are different from them and also increase their support for diversity initiatives. However, to be effective in actually increasing the representation of racial minorities and women in the workplace, such efforts must also be paired with empirically grounded policies and practices at an organizational level. Below we review research-based organizational-level strategies that can be implemented in two major domains: recruiting and hiring, and evaluation and promotion.

Widening and Diversifying Recruitment Channels

Organizations that diversify their pipeline are more likely to be successful in actually hiring diverse talent. Recruiting is therefore a critical point of intervention for organizations seeking to diversify. Indeed, a series of studies showed that when only one woman or racial minority is in the finalist pool, there is virtually no chance that a woman or racial minority will be hired for the position (Johnson, Hekman, & Chan, 2016). Interestingly, this pattern occurs not only because of lower statistical odds, but also because the demographic composition of the applicant pool shapes people's perceptions of the right person for the job. When the applicant

pool is predominantly white, recruiters are more likely to view the ideal candidate as white. When the applicant pool is predominantly people of color, they are more likely to view the ideal candidate as a person of color.

Thus, one critical way for organizations to increase diversity is through diversifying their applicant pool or pipeline. Although organizations often explain their lack of diversity as the result of a narrow pipeline (Dishman, 2015), this pipeline is not fixed or unchangeable. They can take steps to diversify the pipeline or pool from which they recruit. An important first step is to increase transparency about available jobs by widely circulating job postings. This can level the playing field and help to reduce bias in who has access to information about jobs. Hiring through referrals and word-of-mouth generally favors white men (Beaman, Keleher, & Magruder, 2018; McDonald, Lin, & Ao, 2009; Pedulla & Pager, 2019). Formal job posting systems, by contrast, decrease bias and foster equity by making a wider group of people aware of available jobs and their requirements (see Baron & Bielby, 1980; Hodson & Kaufman, 1982; Reskin, 2000).

Beyond making job postings widely available, organizations also need to consider the demographic composition of the recruitment channels they use to source talent. For example, a recent survey estimated that the vast majority of companies in the United States (90 percent) hire via on-campus recruitment programs that operate in tandem with career services offices at designated universities (NACE, 2019). In on-campus recruitment, organizations designate a select number of universities (or university programs) where they will circulate job postings, review résumés, and interview job candidates. The choice of universities is typically driven by a combination of geographic proximity to the company, university or program prestige, and the *alma maters* of current employees (Rivera, 2015). For example, large tech organizations recruit most heavily from universities located in the Bay Area, where student bodies skew white and Asian; universities with the highest concentration of Black STEM graduates are frequently excluded from campus recruiting programs (see Dean, 2020). These types of choices can limit diversity because they tend to reproduce the demographic characteristics of the student body in

new hires. In a study of hiring in top consulting firms, banks, and law firms, Rivera (2011) found that companies' reliance on a small set of super-elite universities for sourcing talent created potent class and racial biases in hiring.

To diversity the applicant pool, organizations should cast a wider net beyond their traditional recruitment channels or local labor market. For example, in targeting media or social media outlets, companies should utilize those with a diverse viewership. For campus recruiting, creating targeted programs at universities with large numbers of traditionally under-represented groups such as historically black colleges and universities (HBCUs) and women's colleges may increase the diversity of the pipeline. Indeed, research suggests that these types of targeted campus recruitment programs are associated with increases in the number of racial minorities and women in management positions (Dobbin et al., 2015). In addition, these programs can also increase managerial engagement in diversity programs and enthusiasm for recruiting diverse workers (Dobbin & Kalev, 2015).

In sum, making applicant diversity a formal criterion in selecting both the media channels where organizations post job advertisements and recruitment channels for sourcing talent can help increase the diversity of the pipeline and, by extension, the diversity of new hires.

De-bias Evaluative Protocols in Hiring

Although a diverse pipeline is an important first step toward increasing diversity in an organization, it does not guarantee greater diversity in hiring. Even with a more diverse pipeline, systematic biases in how employers evaluate applicants can constrain the diversity of employees who are actually hired. It is therefore necessary to adopt practices that de-bias the evaluative protocols that are part of the hiring process.

De-Bias Résumé Screening

Bias is pervasive in decisions made about whom to hire. Research shows that employers rate identical résumés differently based on the perceived social identity, background,

or social group membership of the applicant (e.g., perceived race, social class, sexual orientation, religion, and disability status; Baert, 2018; Banerjee, Reitz, & Oreopoulous, 2017; (Benard & Correll, 2010; Bendick et al., 1991; Bertrand & Mullainathan, 2004; Gaddis, 2015; Pager, 2003; Quillian et al., 2017).

While systematic biases in résumé screening are clear, the question of how to tackle these inequalities is less so. Research on "blind" résumé review, in which employers remove potentially identifying demographic information, such as first or last names or participation in identity-based social or advocacy groups, is quite mixed. Some studies show a benefit, but others show that employers are eager to get access to this type of information in order to put labor market experiences into context (Behaghel, Crépon, & Le Barbanchon, 2014). When demographic characteristics are not evident, some employers engage in alternative means to get this information such as internet or social media research or seeking out information from common contacts (see Rivera, 2017). In addition, while blinding practices may help women in certain contexts, effects are less consistent for racial and ethnic minorities (see Krause, Rinne, & Zimmeran, 2012 for a review). Complicating matters further, preventing evaluators from accessing any information about diversity prevents them from using diversity as a criterion of evaluation and may shift them into a race- or gender-blind evaluative mindset (Tommasini, 2020), which research shows can result in more discriminatory decisions (Castilla & Benard 2008). It is notable that the study most used to justify a blind résumé screening approach—the Goldin and Rouse (2000) orchestra study—is not a study of blind résumé screening at all; it is a study of performance-based or "work sample" interviews (see Interview section, below). Consequently, more research is needed to understand whether and in which contexts blinding résumés helps to increase the diversity of the interview pool.

Specify Evaluative Criteria in Advance

When it comes to any type of workplace evaluation, including résumé screens, it is critical for organizations to specify—and to also ask employees to commit to—a set of

evaluative criteria in advance. Otherwise, evaluators frequently invent or cherry pick criteria after the fact to justify their preferred hires, resulting in biased hiring outcomes. Organizations can use several strategies to combat this bias. For example, evaluators might be asked to commit to specific criteria in advance, which research shows effectively eliminates this bias (Ulhmann & Cohen, 2005). In addition, providing employees with guidelines about how to judge criteria can keep evaluations more closely tied to the skills or traits that are most helpful for performing well in a particular job. Likewise, specifying examples of behaviors or traits that indicate high quality performance can also help combat shifting standards (e.g., Biernat & Vescio, 2002), in which raters evaluate members of different social groups according to different metrics.

Organizations can also use small behavioral "nudges" (Thaler & Sunstein, 2009) to remind evaluators of these criteria and encourage them to stick to them. First, organizations can provide evaluation forms or checklists employers use when rating a résumé. Second, they can also harness the power of accountability: in this case, knowing that others will view one's decisions and ask for an explanation for those decisions. Psychological research shows that when people are held accountable for their evaluations, they tend to engage in more thoughtful and less biased evaluations (e.g., Kruglanski & Freund, 1983). Designing the evaluation form in a way that primes accountability, such as asking evaluators to write or type their full name at the top of the form, is one potential strategy (e.g., Shu, Mazer, Gino, Ariely, & Bazerman, 2012).

Yet, when it comes to scoring performance, there is a delicate balance between formalization and flexibility. While some scholars advocate complete formalization in which criteria and scoring rubrics are fixed and managerial discretion is eliminated entirely (e.g., Reskin, 2000), others have found that complete standardization can actually increase bias (Jencks, 1998; Steele & Aronson, 1998; Walton, Spencer, & Erman, 2013). In addition, when the measures used to assess quality under a specific criterion are biased against members of under-represented groups, rigid scoring systems may backfire. To return to the on campus

example described previously, Rivera (2012) found that many elite professional service firms had specialized recruitment programs at HBCUs. However, because résumé scoring rubrics gave points only for attendance at traditional core and target schools, these candidates rarely made it to the interview.

Likewise, simply automating or using artificial intelligence (AI) alone to score résumés does not necessarily reduce bias (Angwin, Larson, Mattu, & Kircher, 2016; Obermeyer, Powers, Vogeli, & Mullainathan, 2019). As a notorious example of how these efforts can backfire, Amazon attempted to reduce bias in recruiting by using machine learning to rate résumés. The algorithm was trained on résumé data from the past 10 years. However, because the applicant pool during that time skewed heavily in favor of men, the system began to use maleness as a success signal and systematically excluded job applicants who were women from invitations to interview (see Destin, 2018). These examples are not reasons to avoid developing scoring rubrics; rather, managers need to think carefully about whether the signals they use to judge merit may be systematically relying on the culturally biased defaults common among dominant groups (e.g., masculine defaults; see Cheryan & Markus, 2020; Kray, Galinsky, & Thompson, 2002; Stephens, Dittmann, & Townsend, 2017; Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012), and thus excluding job candidates from under-represented groups.

Finally, another potential strategy is to substitute résumé screens with job tests, which are more closely correlated with job performance. Companies such as GapJumpers have developed ways to measure job-relevant skills without the biases induced by various pieces of résumé information, such as names or alma mater.

Use Structured Interviews

Job interviews are one of the most common tools managers use to hire new workers (Macan, 2009). Although open-ended interviews are quite popular, they are notoriously poor predictors of future performance (Huffcutt, 2011). While researchers used to believe that open-ended interviews were simply ineffective tools, newer research has shown that they can actually

reduce the chances of selecting high quality employees (e.g., see Dana et al., 2013). In addition, when interviews are unstructured, evaluators tend to rely on "gut" feelings of "fit," "chemistry" and "spark," which can introduce bias against both racial minorities and women (Rivera, 2012b; Rivera, 2015a). Given the ineffective—or even harmful—nature of unstructured interviews, organizations should avoid using them.

Instead, organizations should rely on structured interviews. Structured interviewing techniques are less subject to bias than unstructured interviews. They also tend to be more valid predictors of job performance (Huffcutt, 2011). There are two main types. The first category is situational or behavioral interviews. In these types of interviews, evaluators ask job candidates about how they handled themselves in past situations that are relevant for the job (e.g., in a client service role, "Tell me about a time when you had a difficult client. Tell me about the situation and what you did.") or ask them how they would respond in a job-relevant situation. These types of interviews can provide useful information both about future job performance and overall cognitive skills (Huffcutt et al., 2004).

A second category of structured interviews is "work sample" tests in which employers ask applicants to complete a task or set of tasks that are similar to those required by the job. These tests have a structured means of scoring responses (Ployhart et al., 2006). These are different from job knowledge tests, which are often pencil and paper tests tapping general knowledge of a field (e.g., the U.S. Civil Service Exam). Instead, they demonstrate job-relevant skills. Work sample interviews, while not perfect, correlate with job interview performance and cognitive skill (Roth et al., 2005). As with behavioral interviews, there is also evidence to suggest that when done correctly they can reduce bias.

The most famous example of the bias-reducing benefits of using a work sample test is Goldin and Rouse's (2000) orchestra study. The authors analyzed audition records from 8 major symphony orchestras, dating from the late 1950s to 1995. They found that when orchestras implemented a pure work sample test—when job candidates were asked to play music behind a

screen where only their performance could be heard—this increased the likelihood that a woman would advance to the next round by 11 percentage points. During the final round, this practice increased the likelihood of women being selected by 30%. According to further analyses, the researchers concluded that the transition to this interview format from 1970 to the 1990s can explain 30 percent of the increase in the proportion of women among new hires and possibly 25 percent of the increase in the percentage of women in the orchestras. Thus, the researchers found that implementing work-sample-based auditions significantly reduced gender-bias in hiring and the gender gap in the composition of symphony orchestras.

When using structured interviews of either type, organizations need to think carefully about whether the questions, situations, or work-sample types developed are themselves biased (see for example, Dittmann, Stephens, & Townsend, 2020). For example, as a standard practice, large consulting firms often present candidates with a situational "case interview," in which job candidates are presented with a business situation are asked to talk through how they would solve the problem. In Rivera's (2015b) study of professional service firm hiring, one organization noted that a prior case they used—where the applicant was asked to pontificate about an industry heavily dominated by men—was biased against women because they had less background knowledge about the industry. The organization subsequently selected industries and business problems that had more general appeal.

Just like résumé screening, organizations should develop standardized, agreed upon criteria on which to judge performance and specific guidelines on how to assess various skills or traits. The latter is especially important for less tangible qualities such as social skill or cultural fit (Chatman, 1991), where in the absence of guidelines, individuals use their feeling of liking toward or similarity with the candidate (Rivera, 2012b).

De-bias Evaluation Protocols in Promotions

After organizations take these steps to de-bias the hiring and recruiting process, they may succeed in diversifying the employees whom they hire. However, bias does not stop after

employees gain access to an organization; it also systematically informs how employees are treated by colleagues, the opportunities they have to get access to mentors, and the ways in which they are evaluated for promotion (e.g., Bohnet, 2016; Williams, 2018). Given the critical nature of performance evaluations in employees' opportunities for promotion and leadership outcomes, we focus here on how to de-bias performance evaluations and practices that are part of the promotion process.

De-bias Performance Evaluations

Performance evaluations are ubiquitous in contemporary organizations (Castilla, 2008). They are often seen as a means to increase efficiency, standardize comparisons between workers, provide developmental feedback, and reduce bias (Dobbin et al., 2015). Structured performance evaluations have also become important symbolic tools organizations use to signal compliance with federal and state anti-discrimination laws (Dobbin, 2009; Edelman, 2016). While there are many types of performance evaluations, numeric ratings are among the most common (Murphy & Cleveland, 1995).

Despite their intended purpose as vehicles of bias reduction, a large body of research shows that performance evaluations are biased against underrepresented groups. For example, research in the laboratory and in the field shows that women and racial minorities tend to receive lower performance ratings even when their behaviors or skill levels are equivalent or identical (for a review, see Heilman, 2001; see also Elvira & Town, 2001; McKay & McDaniel, 2006). These patterns occur because managers view workers' behaviors through the lens of gender and racial stereotypes, which portray women and minorities as less capable and committed workers than men and whites (Cuddy et al., 2009; Cuddy, Glick, & Beninger, 2011).

While there is ample evidence of bias in performance evaluations, there is less information about what can be done to make them more fair. Some organizations, like Adobe, have eliminated the use of performance reviews altogether; time will tell whether this practice increases or decreases workforce diversity. While this strategy may be a workable solution in

situations where there is rich documentation of actual performance and frequent feedback (e.g., sales), in occupations or roles where quality is determined more subjectively, this runs the risk of making personnel decisions based even more on stereotypes, gut feelings, or personal connections. What is clear is that if organizations no longer rely on performance evaluations, something needs to be used in their place (see Cappelli & Travis, 2016 for a discussion).

For companies that use performance evaluations, the literature on workplace evaluations suggests several steps that can make them less biased and more equitable. First, as with résumé screening and interviewing, specifying criteria up front is critical (Ulhmann & Cohen, 2005). Second, it is also important to apply these criteria in a standard and consistent way--for example, by providing evaluators with rubrics or checklists of what types of behaviors are associated with different levels of performance. This can give them more data on which to base their ratings, rather than relying on group stereotypes or gut feelings. Suggesting the benefits of clear rules and standard criteria, one study examining data from 8000 employees in a financial sector organization found that there were larger gender gaps in bonuses and variable pay (decisions that involve greater discretion and rely on fewer rules) than in base salary or merit raises (decisions subject to consistent and standard rules) after controlling for performance (Elvira & Graham, 2002; see also Castilla, 2008).

It is also critical for organizations to review the criteria and metrics being used to ensure they are not defining merit in a way that is biased against members of under-represented groups (see Cheryan & Markus, 2020; Dittmann et al., 2020). As an example, one of the authors consulted with a large professional service firm that was struggling with gender gaps in performance ratings. It turned out then when evaluating leadership skills—one of several official performance categories listed on evaluation forms—managers relied on whether employees "took up enough space" during meetings as a signal of quality. Given gender differences in dominance behaviors (e.g., Luxen, 2005), this criterion was inadvertently biased against women.

Third, gathering data about absolute (rather than relative) performance can reduce shifting standards. For example, rather than asking if someone is tall (a category dependent judgment, in which people may say someone is tall for a woman but the same height might not be considered tall for a man), ask for absolute height (Biernat & Vescio, 2002). Likewise, in the workplace, rather than asking someone to rate whether someone or not is a rainmaker, companies could gather data about the number and the profitability of clients an employee helped to develop and maintain.

Fourth, gathering data in real time may be useful. When long stretches of time pass between an event and evaluation, biases of numerous types are likely to creep in (see Kahneman, 2011 for a review). New tools are being developed to evaluate performance in real-time, which may help reduce bias (Cecchi-Dimeglio, 2017).

Finally, as with other types of workplace evaluations, the design of the tools used to evaluate merit matters. Companies can use some of the same accountability nudges we discussed previously with respect to résumé screening and interview evaluations to encourage managers to make more thoughtful and deliberate evaluations. In addition, research shows that for numeric performance evaluations, the specific numeric scale matters. Rivera and Tilcsik (2019) found that when a university changed its rating scale in teaching evaluations from a 10-point scale to a 6-point scale, it eliminated previously large gender gaps in performance ratings. The researchers found that the 10-point scale elicited images of perfection and brilliance that raters were more likely to associate with men versus women. Nevertheless, given the many places that bias can creep in, it is important to note that a 6-point scale should not be viewed as a panacea; rather, organizations should think carefully about how they design review systems because seemingly minor design considerations matter.

De-bias Promotion Practices

Performance reviews are a major determinant of promotions in many fields (Cappelli & Travis, 2016). Thus, having an equitable system in place to track or review performance is an

important first step toward de-biasing promotion practices. However, even beyond the specific practice of performance reviews, it is critical to ensure that organizations go further to de-bias the broader system of promotion practices. Doing so can help to promote a greater number of women and racial minorities into management roles. Having women and racial minorities in leadership roles can help to retain existing workers and also serve as a signal that can attract more diverse job candidates and clients (e.g., Beckman & Phillips, 2005; Gorman, 2005).

Promotion systems often suffer from similar biases as hiring procedures, such as a lack of specified criteria or guidelines for how to assess quality in a given domain. Promotion entails additional biases as well. One key bias that can inform promotion opportunities is the bias that occurs in job assignments (Williams, Li, Rincon, & Finn, 2016). It is critical to consider who has opportunities to engage in the types of career-advancing work assignments that can result in a promotion. Research clearly shows that women and/or racial minorities are more likely to be assigned office "housework" activities (e.g., planning social events, serving on a diversity committee) that are important for the organization, but do not advance one's career (Williams, 2014). In contrast, men and/or whites are more likely to be assigned office "glamour work" activities that are high profile or client-facing activities that tend to advance one's career (e.g., presenting to a client; Williams et al., 2016). There are various strategies that organizations can use to reduce this bias in job assignment. Most importantly, they can develop a system to track assignments to ensure that they are equitably distributed across different demographic groups (Madden, 2012; Tulshyan, 2018).

Other strategies to de-bias the promotion process include making information about promotions clear to all employees. For example, for the internal roles for which an organizations' own employees could be promoted, job postings are often not widely circulated and thus only certain employees (e.g., those with the most connections) have access to information about these opportunities. A potential solution to this issue is to ensure that organizations create clear job ads for internal promotions (e.g., with clear descriptions and qualifications required) and

widely circulate these ads. This can increase transparency and reduce bias by encouraging a more diverse set of individuals to apply or be considered (DiPrete, 1989).

As with job ads, having clear job ladders (i.e., a map of job levels within an organization and the required pathways to achieve them) can also contribute to transparency. This information can help a broader range of employees to understand what the career progression for a given role is and what is required to move to the next level (see Dobbin et al., 2006 for discussion).

Beyond clearly identifying the steps to progress from one role to another, it is also critical to be clear and transparent with employees about the criteria on which promotions will be based. This will help to ensure that all employees are aware of what is required to gain a promotion. Given gender and racial biases in who is willing to nominate oneself for an opportunity, the promotion system should not rely on self nomination. Being clear on both the process and performance requirements can not only decrease bias but also increase employee engagement more generally (Garcia-Izquierdo, Moscoso, & Ramos-Villagrasa, 2012). For example, the People Analytics team at Google noticed a discrepancy between men and women in receiving promotions and discovered that equally qualified women were less likely to self-nominate for promotions. To eliminate the gender discrepancy in promotions, a senior leader used a nudge to remind employees to "self-nominate if they are ready and told managers to keep their eyes open for promo-ready Googlers" (Google, n.d.).

Once high performing employees are identified for promotions (or other opportunities), it is critical to avoid making assumptions about who wants or would take advantage of a given opportunity. Indeed these assumptions are often subject to stereotypes (see Rivera, 2017). For example, people often incorrectly assume that women with children would not want a promotion and therefore do not offer it to them. Instead, organizations should offer all qualified employees opportunities and let the employees decide for themselves.

De-bias Mentoring Practices

Making promotion systems less biased also entails creating formal and informal mentoring systems that reduce bias and serve to level the playing field. Having equal access to mentorship and/or sponsorship is critical for employees' opportunities to succeed in an organization (Blau, Currie, Croson, & Ginther, 2010; Eby, Allen, Evans, Ng, & DuBois, 2008). Indeed, mentorship and/or sponsorship can help to develop employees' talents and also increase their chances of being promoted. In many organizations, getting promoted requires a senior manager who serves as a sponsor (e.g., Roth, 2004). Given gender and racial differences in social networks, women and minorities are less likely to be sponsored by high status members of the organization (Ibarra, Carter, & Silva, 2010).

To reduce these types of biases, organizations should develop formal mentoring programs. Research shows that formalized systems that give everyone the same opportunities are somewhat successful in increasing the representation of women and minorities in management positions (Dobbin et al., 2006; 2015). These programs should create clear and standardized systems that operate in the same way for everyone. For example, with a formal mentoring program, all employees would be assigned a mentor or multiple mentors, rather than being asked to seek them out. This should help a broader range of employees to get more equal access to mentoring and the feedback associated with it. For individual managers and their interactions with diverse mentees, they should make sure that their mentorship practices are the same for all employees, irrespective of social group membership. Indeed, Joan Williams notes that "If you meet with men alone with a closed door and you don't meet with women, that's called sex discrimination" (Women at Work, 2018).

Designing equitable mentoring systems also requires considering the composition of mentor-mentee dyads. For underrepresented groups in organizations (e.g., women and racial minorities), the most effective mentoring systems include both in-group and out-group members;

while in-group members provide needed social support and solidarity, outgroup members tend to have higher status in the organization and connections to decision makers (see Ibarra, 1992).

Using These Strategies in Your Organization

Across the domains of hiring and recruiting, developing people and talent, and evaluation and promotion, we reviewed various empirically grounded strategies that organizations can employ to reduce bias and increase diversity. To make these strategies as effective as possible, there are additional factors that organizations should take into account.

First, it is important for the organization to set specific and clear goals for what they hope to achieve with respect to diversity. The goals set should be challenging, yet achievable. Goals can take the form of specific targeted numbers for hiring. For example, an organization could set the target of increasing the percentage of African American hires from 2 to 4% over the course of 2 years. Psychological research suggests that setting goals can function as an important commitment device that makes it more likely that people will follow through on their intentions or desires. At least among employees who have the intention or desire to increase diversity (e.g., diversity officers), setting goals should help to narrow their focus to achieving the diversity-relevant goal and help them to make a plan for achieving that goal (Bandura & Schunk, 1981; Kolb & Boyatzis, 1970; Pritchard, Jones, Roth, Stuebing, & Ekeberg, 1988). Research across disciplines suggests that setting specific diversity-relevant goals can lead to enduring changes in diversity-relevant attitudes and behavior (e.g., more positive attitudes and behavior toward outgroup members; Bohnet, 2016; Madera, King, & Hebl, 2012). It can also help to improve diversity-relevant outcomes (e.g., increase in hiring of racial minorities and women; see Leonard, 1985)

Second, it is critical to ensure that there is sufficient oversight such that someone is held responsible for ensuring that employees adhere to the new policies and guidelines. Research shows that the organizations that are most effective in increasing diversity are those that create positions or entities that are responsible for managing diversity, such as full-time diversity staff

or diversity taskforces (Kalev et al., 2006). The reasons such practices are effective are threefold. First, creating these types of roles vests specific people with formal organizational authority to act on diversity-related matters. Second, doing so generates accountability; it puts increasing diversity into someone's job description and assigns responsibility for results. Finally, creating such roles signals to current and prospective employees that diversity is an organizational priority (see Kalev et al., 2006; Dobbin et al., 2015 for discussions). Yet, it is important that diversity personnel have sufficient status within the organization to be credible, otherwise their recommendations may be easily disregarded or sidelined (Rivera, 2012a). Consequently, organizations need to think carefully both about which diversity-related roles to create and who specifically should fill them.

General Discussion

Contribution

Hundreds of studies in psychology, sociology, political science and economics document the pervasive and enduring biases that disadvantage employees from underrepresented social groups, identities, or backgrounds. There is no doubt that bias exists and that it affects employees' chances of being hired and their opportunities to be successful and gain leadership positions after gaining access. The current article answered a question that builds on this important foundation, and goes one step further: What can well-intentioned organizations do to reduce bias and increase the diversity of their employees?

To answer this important question, we reviewed research across disciplines to propose a multi-level model for reducing bias—one that acknowledges the interdependencies between individuals and organizations. We argue that either-or approaches that intervene on only level are an important step in the right direction, but are ultimately fragile, hard to sustain, or just plain ineffective on their own. For example, changing individual attitudes through diversity training is not enough to reduce bias or increase diversity over time. At its worst, diversity training can backfire if not implemented with great care. In the absence of reforming organizational systems

to reduce bias, simply highlighting the value of meritocracy and claiming to have the "right" or fair values can lead to increased rather than decreased bias and discrimination (Castilla & Benard, 2010; Kaiser et al., 2013)

With our proposed multi-level model, we suggest that reducing bias and increasing diversity in an enduring and sustainable way requires intervening at *both* individual and organizational levels. At an individual level, it is necessary for organizations to ensure that employees understand the importance of diversity, recognize how bias matters, and are willing to actively and productively engage with organizations' diversity initiatives. This can be accomplished through a diversity training that is empirically grounded in best practices for reducing bias (Moss-Racusin, van der Toorn, Dovidio, Brescoll, Graham, & Handelsman, 2014). Outside of or as part of diversity training, this can also be accomplished through organizations' efforts to increase intergroup contact among employees, counter stereotypes of underrepresented groups, and encourage perspective-taking across various forms of social difference. At an organizational level, it is important for organizations to build on this foundation of individual awareness and openness to diversity. They can do so by using empirically grounded strategies to de-bias their systems for recruiting and hiring, evaluating and promoting employees, and developing their talents (e.g., through mentoring).

Take the Context into Account

Across both individual and organizational levels, it is important to deliver the intervention strategy in a way that takes that context into account. There are certain cross-cutting principles that should be considered as part of an organization's strategy depending on the context in which they are delivered. First, it is important to consider employees' psychological experiences in an organization. For example, in a context in which most employees are not supportive of diversity, it would be especially critical to give employees a choice to participate in a diversity training. Other approaches that can be effective are for organizations to be more transparent, to hold employees accountable for reaching diversity-relevant goals, to encourage goal-setting,

and to provide oversight from high-status employees. In an organizational context in which there is little trust, transparency might prove to be especially important.

Another important part of the context to consider is the type of diversity (e.g., gender, race, sexual orientation, class, disability status, veteran status, religion, etc.) that an organization wants to increase. In the current review, we focused on reducing gender and racial bias for two reasons. First, most of the existing research on bias focuses on these groups. Second, most organizations are likewise focused on reducing bias based on gender and/or race. While we believe that most of the strategies we reviewed here would be effective irrespective of the type of diversity under consideration (e.g., intergroup contact, transparency), there may be some strategies that could backfire for a particular group. Nevertheless, far more research is needed on intervention to promote diversity of other types (e.g., social class, disability status, etc.).

Conclusion: Diversity is Not Enough

In this article, we have reviewed and integrated research on empirically grounded strategies to reduce bias in individuals' hearts and minds and in organizations' policies and practices. Our goal is to provide organizations with a framework to help conceptualize their change efforts and also offer strategies they can use as they work to increase the demographic diversity of their employees. Yet, increasing diversity is only the first step in a two step process of creating high performing, diverse, equitable, and inclusive organizations. Indeed, organizations must first reduce the impact of bias on decision-making throughout all levels of the organization in order to increase diversity. From a public-facing view, achieving this diversity might give organizations "diversity credentials." However, these organizations and their employees will not benefit from that diversity without careful and systematic efforts to foster inclusion: taking steps to ensure that a broad range of diverse employees are fully engaged, empowered, respected, and feel part of the organizational community.

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