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Defining diversity, equity, and inclusion (DEI) by the scientific (de)merits of its programming

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Abstract
Diversity, equity, and inclusion (DEI) refers to policies, practices, and social norms aimed at promoting fair treatment and representation of people from historically disadvantaged groups, such as sexual, gender, and ethnic minorities. DEI's institutionalization has been criticized by some as ineffective, wasteful and even antithetical to these aims, producing unintended negative side effects, such as threats to free speech and to the recognition of merit. Others maintain that DEI has had a net-positive influence, and that efforts to dismantle DEI programs in universities, business, and government are premature or unfounded. We reconcile these views by showing how critics and supporters of DEI alike could each advance their position if they (1) narrow the focus of debate to specific policies or programs, (2) evaluate how effectively programs or policies achieve their intended humanitarian outcomes through a targeted causal mechanism, and (3) build in the capacity to test for unintended negative consequences. Doing so avoids the mistake of overgeneralizing either the defense or condemnation of DEI by shifting focus to the strengths and failings of specific programs, and reveals novel avenues for researchers, policymakers, and the public to adjudicate the value of DEI programming.

Keywords Diversity · Equity · Inclusion · Science · Evidence-based programming

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In recent years, Diversity, Equity, and Inclusion (i.e., DEI) programming has expanded rapidly across public and private sector institutions. The term DEI is used by its proponents to describe a set of values, norms, programs, and policies aimed at promoting fair treatment and equal representation for historically and currently disadvantaged groups. Simply put, the goal is to ensure that the true talent and potential of members of these groups are not overlooked due to bias or structural barriers, thus serving humanitarian principles of fairness, equal opportunity, and unbiased assessment of merit. On the other hand, critics adopt a less flattering definition, describing DEI as a set of ideology-driven mandates that distort meritocratic systems, punish dissenting views, and heighten group tensions by labeling groups "oppressor" or "oppressed" to villainize members of dominant groups. From this perspective, DEI is the *antithesis* of fairness, equal opportunity, and reward by merit. These diverging – even contradictory – interpretations of DEI have led to widespread confusion about what DEI entails and what it accomplishes. Shedding light on this debate is especially pressing in the contemporary moment, as the institutionalization of DEI is being met with aggressive and sometimes authoritarian rollbacks, restrictions, and bans in the United States and elsewhere (Follmer et al., 2024).

Despite the prominence of DEI in policy, politics, and public discourse, the scholarly literature lacks resources that define terms clearly with serious consideration of diverging viewpoints and that summarize and evaluate the strengths and failings of various contemporary DEI practices. This absence has left supporters and detractors of DEI without a shared reference point, leading those with opposing views to talk past one another. For example, a disagreement might be framed as being about values ("*are you for or against merit?*") when it could more productively be about evidence ("*does this policy support or detract from the fair assessment of merit?*"). This paper – written as an adversarial collaboration between critics and supporters of DEI efforts – aims to cut through the ideological noise and foster more productive science and policy about one of the most contested institutional movements of our time. We do so by offering an outcome-defined, scientific approach to evaluating the (de)merits of DEI programming. To demonstrate this approach, we first offer an operationalization of DEI by its intended outcomes, and sketch how to use the tools of science to identify, assess, and advance effective and fair DEI programs - or reject or revise policies that are ineffective, counterproductive, or unjust. We then evaluate how well current programming meets these standards by briefly reviewing empirical evidence for several target theory-based programs (e.g., affirmative action, Critical Race Theory-inspired programs, bias reduction interventions).

Defining DEI by its outcomes

DEI's intellectual history is rooted in the collective reform efforts of the U.S. civil rights movement (Morris, 1999), when institutions such as the U.S military, universities, and corporations adopted interventions like affirmative action (Anderson, 2005), encounter groups (Brison et al., 2015), and racial sensitivity training (Reddy et al., 2022) to address public demand for change to institutional procedures that wrongfully discriminate against Black people and other ethnic minorities (see Zheng,

2024, Chap. 3). Although the "DEI" framework is now commonplace, how people define DEI is still contentiously unstandardized (Reisch & Jani, 2025), which makes it difficult to assess whether its programming achieves these aims. Here, we recommend applying scientific standards to determine how successfully DEI programming achieves the historically intended outcome of fair treatment and representation of individuals from disadvantaged backgrounds.

To do so, we propose definitions which standardize how these intended outcomes may be studied across divergent perspectives. Although definitions of DEI are numerous and contestable, definitions that permit scientific evaluation of program efficacy are helpful because they hold DEI practitioners accountable for the success of their programming. Scientists advance knowledge by proposing competing explanatory models for how and why an intervention produces change in a target outcome. This process requires that each independent, dependent, and mediating variable is operationally defined so that the effect of changing one variable (e.g., by experimental manipulation) may be observed while accounting for change or consistency in each other variable. Such precise standardization allows research groups to test and compare different explanatory models and thereby incrementally improve shared knowledge of a subject. In this spirit, the definitions we provide are flexible enough that researchers and practitioners can customize DEI interventions to the local conditions and demands of a research program or target institution, but constrained enough to yet capture the unique, intended humanitarian ideal of each term (i.e., diversity, equity, and inclusion). Collectively, each definition involves identifying and removing *barriers* (i.e., unnecessary, systemic discrimination which impedes an individual's access to institutional opportunities) so that each intended outcome may be realized.

For example, diversity can refer to diversity in demographic makeup, with an emphasis on including underrepresented groups within positions of power (Jansen & Searle, 2021), or refer to diversity of perspective or viewpoint, which is argued to improve organizational creativity and enhance knowledge production efforts by building effective guardrails against groupthink (Jussim, 2024; Gjesdal, 2025). For example, Gjesdal (2025) argues that viewpoint diversity, such as the inclusion of underrepresented political perspectives in higher education, may improve epistemic outcomes because it allows group members to screen each other's poor or parochial reasoning, identify inadequately represented or excluded perspectives, and avoid groupthink. Similarly, adversarial collaborations (Ceci et al., 2024) - such as this manuscript - encourage research teams to identify shared and unshared epistemologies and collect evidence for competing hypotheses. In this way, diversity prevents the pitfalls of tribal epistemology (i.e., when information is evaluated by how well it supports a personal group's goals rather than by some shared standard of evidence) (Eppard et al., 2025). A lack of diversity can produce decisions that disproportionately harm individuals in underrepresented groups because their unique needs or interests are not considered by existing institutional procedures or workplace norms. Although demographic diversity and viewpoint diversity are often framed as competing, we see them as complementary because demographic diversity can often produce epistemic benefits by illuminating blind spots and bringing new perspectives to the knowledge productiion process. Diversity, then, can be commonly measured by

how well a program removes barriers to whether its constituents' interests and views are represented.

Diverging definitions of equity have also fueled confusion and controversy. In many legal and scholarly circles, equity is understood as equality of opportunity (i.e., ensuring fair treatment by recognizing and mitigating structural disadvantages arising from SES or group membership; Braveman et al., 2018; Minow, 2021; Unterhalter, 2009). Conversely, critics of equity often define it as a demand for equality of outcome (i.e., achieving parity across demographic groups regardless of merit). These definitional disagreements may reflect a tension between equity *principles* and *practices*. Arguably, the procedurally just way to reduce disparities in outcome is to accurately identify and address the system of factors that contribute to why these disparities exist. For example, in healthcare, inequity is indicated not by equal outcome, but by access, need, and utilization of health resources (Boeckxstaens et al., 2011; Ward, 2009). When institutions seek to reduce disparities without clearly identifying the root causes, they may inadvertently target the wrong variables or simply prioritize equal group outcomes as the goal in itself. Therefore, to meaningfully evaluate equity as an outcome, we recommend operationalizing it by *how well a program removes disproportionate barriers to constituents' success in accessing and utilizing institutional opportunities*.

Inclusion refers to whether the culture of an organization creates a respectful and welcoming environment for all people in an organization, and which may require special efforts for people who deviate from the status quo. Inclusion involves creating an environment where people of different identities and cultures are fully integrated into the normal relationships, collaborations, and shared identity of an institution, fostering a sense of belonging (Burchardt et al., 1999; Park et al., 2023; Roberson & Perry, 2022), and building trust by inviting and valuing non-dominant perspectives during group decision-making (Nittrouer et al., 2025; Roberson & Perry, 2022; Salmi & D'Addio, 2021). Inclusion also involves ensuring that practices, resources, and social support systems (e.g., education; health services) are equipped to meet the needs of each person (Davey & Gordon, 2017; Krischler et al., 2019; Martin & Cobigo, 2011). Nevertheless, how people build welcoming, respectful environments can sometimes sew intolerance for ideological difference when it involves strict policing of language or disparagement of majority-group members (e.g., Hooven, 2023; Jagdeep et al., 2024). Therefore, we believe inclusion outcomes should be assessed by *whether a program improves how individuals' contributions to a group are understood and respected by each other member*, *and that existing systems do not needlessly impede each person's participation or contribution*.

How well does DEI programming work?

If the quality of DEI programming is defined, in part, by how well it achieves these intended outcomes, this allows scientific testing of DEI's (de)merits (Cox, 2021). That is, once measurable outcomes have been defined, it becomes possible to model and test the causal network of variables by which a DEI intervention is meant to improve how well individuals have their interests and views represented (i.e., diver-

sity), access and utilize institutional opportunities (i.e., equity), or participate in and contribute to a group (i.e., inclusion). Just as scientists gather multivariate data and use statistical network analysis to test competing hypotheses (Borsboom et al., 2021), rigorous evaluation of how DEI programs achieve their outcomes is both possible and necessary to decide whether or how to integrate DEI programming into their organization's procedures and how to revise programing on the basis of these evaluations (Carter et al., 2020; Pinkett, 2023). Doing so, however, requires several research steps, such as empirically identifying barriers, validating an intervention to remove these barriers, and longitudinal and context-sensitive testing to evaluate the success of the intervention as well as unintended side effects.

The real-world success of DEI programming is poorly documented (e.g., Corsino & Fuller, 2021; Devine & Ash, 2022), in part because organizations have developed their own practices for achieving DEI which are often held to poorly defined standards of quality and accountability (Aguinis et al., 2024; Tamvada, 2020; Vangeli, 2024). Although DEI efforts are sometimes regarded with more credulity than is warranted, some DEI consultants acknowledge that current efforts are far from a well-tested arsenal of interventions but are rather a crowdsourced amalgam of unstandardized procedures that should be open to scrutiny and criticism (e.g., Zheng, 2024). Notably, although researchers increasingly acknowledge the limitations and unintended consequences of DEI programming (e.g., Forscher et al., 2019; Leslie et al., 2024; Onyeador et al., 2021), some practices that have been criticized as disingenuous, unfair, or even illegal, remain commonplace in academic institutions (Burgess, 2024). This checkered history may explain ongoing criticisms that DEI is wasteful, fraudulent, deceptive, or otherwise a threat to individual and institutional wellbeing (Iyer, 2022). Indeed, if DEI program implementation is not evaluated, or if programs have been shown to be ineffective, adopting these interventions not only fails to achieve desired outcomes but also risks a substantial loss of trust in DEI (Clark et al., 2023).

Nevertheless, we build the argument below that some programming has a longstanding and still-developing scientific research literature evaluating its efficacy. To improve trust that DEI programming is effective, it is critical to distinguish which practices and policy have better versus worse evidence of effectiveness and why. Although this logic may be extended to various programming, we focus on three influential paradigms (i.e., affirmative action, Critical Race Theory, and bias reduction interventions) to demonstrate a flexible approach to adjudicating whether each accomplishes its intended outcomes.

Affirmative action

Affirmative action refers to a collection of policies that seek to make it easier for minorities to succeed in labor and education markets within which they have been historically disadvantaged (Bengston, 2024). Affirmative action policies typically involve proactive corrective adjustments for past or present discrimination, though it is important to note that national context matters: in some countries demographic quotas are mandated, whereas affirmative action involving preferential treatment toward certain groups are typically prohibited in the US (Schotte et al., 2023). Some contend that affirmative action is unfair and anti-merit because it gives advantage

to people from some demographic groups to the exclusion or disadvantage of other groups. Others argue that affirmative action builds fairer systems and more equitable outcomes because it equalizes opportunity to compete within a merit-based market. The different assumptions people hold about the state of the world (or of the institution in question) may explain this divergence in perspective. That is, people who believe that the system is already largely fair and meritocratic will view the application of affirmative action as introducing unfairness and discrimination. By comparison, people who believe the current system is unfair and discriminatory, may instead view affirmative action as equalizing the playing field (Son Hing et al., 2002, 2011). It is these diverging interpretations of affirmative action that lead to controversy even though supporters and skeptics may agree on the intended principle (fairness). Further, whether these perceptions of fairness are accurate or not, if people believe that affirmative action unfairly prioritizes diversity at the expense of merit, these programs can inadvertently produce unwanted consequences including resentment about perceived injustice and uncertainty about the beneficiary's competence and deservingness (Heilman & Welle, 2006; Leslie et al., 2024).

A recent systematic review (Schotte et al., 2023) reported that two-thirds of sampled studies found positive effects of affirmative action on the numerical representation of minority groups (i.e., diversity), but that it was less clear how these policies qualitatively affect these and other groups' quality of experience (i.e., equity and inclusion). They also note that nearly all studies used quasi-experimental methods to assess the quality of affirmative action, which make claims about causation tenuous. In a rare experimental test, disadvantaged students worked harder and did better in a quota-based reward system, but top performers did better in a pure merit-based system (Cotton et al., 2022), suggesting research assessing the effectiveness of affirmative action programs ought to examine not only how these affect the beneficiary group but also unintended side effects for other groups within that system (e.g., Antonovics & Backes, 2014).

Critical race theory

Critical race theory (CRT) was inspired by the legal scholarship of Derrick Bell (Crenshaw et al., 1995) and derived from similar "critical theories" which analyze how inequities can arise from social systems that unfairly and disproportionately favor some individuals over others. In this tradition, CRT contends that existing power structures within the United States and elsewhere favor people from racial majority groups. On one hand, CRT offers an analysis of systemic structural barriers that may reproduce patterns of inequality even in the absence of individual-level bias (Jahn, 2021). For instance, systemic racism in law and policy has produced patterns of socioeconomic inequality and barriers to wealth accumulation for Black Americans that have had profound effects on their access to education, jobs, and cultural/social capital.

Programming aligned with books like DiAngelo's (2018) *White Fragility* argues that inequity arises from hegemonic oppression (e.g., white culture supremacy), yet often focuses deeply on intensive introspective self-scrutiny and monitoring for subtle infractions such as microaggressions rather than doing much to challenge sys-

temic barriers. The efficacy of this style of diversity training is largely unevaluated, though related research on antiracism DEI training reveals almost no positive effects on workplace outcomes (Lilienfeld, 2017; Paluck & Green, 2009; Wang et al., 2024), and some harmful effects. For instance, practices (such as these) that rely on guilt, shame, or vilification can backfire and create reactance (Legault et al., 2011; Plaut et al., 2011), leading to the conclusion that these popular CRT-adjacent approaches to DEI that focus on personal thoughts and behaviors are ineffective and possibly harmful (Jagdeep et al., 2024; Mills, 2025).

Others argue these disparities are better addressed by policy or procedural changes that target SES and class (e.g., Bailey et al., 2017; Mijs et al., 2024). Although Dobbin and Kalev (2022) are not formally rooted in CRT, they engage in the kind of analysis that a CRT-informed consideration of systemic barriers might encourage. They recommend DEI practices that correct for systemic wealth inequalities that shape opportunity, social capital, and access to mentors. For example, recruiting from racially diverse colleges rather than only Ivy League schools can avoid disproportionately selecting candidates from considerably less racially, socioeconomically, and ideologically homogeneous families, and deliberate mentorship strategies that correct for the fact that higher SES students have the social capital to access mentors (Bonifacino et al., 2021). These approaches are effective in real organizations, in part, because they consider how policy can alter the barriers imposed by structural class factors, rather than attempting to change individual employees' minds (Dobbin & Kalev, 2022).

Bias reduction interventions

Some of the most well-known DEI programs are those that encourage interpersonal interaction to dispel false beliefs about unfamiliar people, build rapport, trust, and social capital between colleagues and communities, or diffuse existing hostilities. Broadly, these are referred to as encounter groups, but their procedures vary widely (Brison et al., 2015; Paluck et al., 2021). The scientific logic for these programs derives from the clinical techniques of psychodrama (Cruz et al., 2018) and intergroup contact theory (Paolini et al., 2021), which maintain that fostering contact between unfamiliar groups can be a successful approach to reducing prejudice, though specific conditions must be present for positive outcomes (Pettigrew & Tropp, 2006; Reimer & Sengupta, 2023). Cutting edge scholarship in this area now focuses on disentangling the conditions under which these interventions work or not (e.g., Imperato et al., 2021; Paolini et al., 2024; Van Assche et al., 2023). This is essential for understanding unintended consequences, such as when intergroup contact exacerbates conflict rather than mitigating it (Bail et al., 2018).

Other programs focus more on reducing bias inside individuals' minds. Implicit bias training, for example, involves workshops where people are asked to examine latent tendencies that could lead them to wrongfully discriminate against someone based on false inferences drawn from stereotyped or habitual thinking. Its logic has its roots in social psychology, which shows that people form stereotypes to categorize and quickly navigate a computationally rich social environment (Macrae et al., 1994) and therefore may use stereotypes to judge individuals. For example, women have

historically been judged ill-suited to male-typical roles (Osman, Speer, & Weaver, 2024), and men for female-typical roles (Galos & Coppock, 2023), though this has changed in more developed countries (Schaerer et al., 2023). Although many stereotypes may be accurate because they are derived from real trends, using them to infer individual traits is hazardous because a given individual can differ from the population-level norm (Jussim et al., 2015). Implicit bias training aims to make people aware of this tendency so that they may take precautions against making this error. Though stereotype bias is well-documented, the intervention science that arose from this research has been criticized (Greenwald et al., 2022), as awareness of implicit bias does little to durably change it (Kim & Roberson, 2022; Lai & Lisnek, 2023) and changing implicit bias has not been found to change intergroup behavior (Forscher et al., 2019).

Rather than rely on individuals to self-regulate their biases, more effective interventions build anti-bias mechanisms into institutional procedure (see Greenwald et al., 2022; Onyeador et al., 2021). For example, blind review is a longstanding practice of many organizations whereby those charged with making assessments of quality (e.g., during evaluation processes for jobs, grants, or awards) must judge the fit of a prospective employee or student without knowledge of candidates' identifying characteristics. Blind review is a classic fix to in-the-moment bias because it removes from consideration cues that could prompt biased judgment. In fact, avoiding bias in this way can be a reason not to require that people use gender pronouns when introducing themselves (Tomlin, 2024) - even if doing so as a voluntary practice can improve mental health and inclusion of minority groups (e.g., Perales et al., 2022). If reviewers have existing biases (e.g., that women are unfit to traditionally masculine workplaces; that minority candidates have low social capital), expecting each reviewer to monitor how these beliefs affect their decisions may be prohibitively costly compared to procedural constraints, such as blind review, that limit access to biasing information.

Nevertheless, blind review may lead reviewers to miscalibrate a candidate's merit if, for example, their background is relevant to how they demonstrate their merit. For example, universities often use the quantity and quality of publications in peer-reviewed academic journals to evaluate the merit of postdoctoral or faculty hires. However, if a candidate has experienced barriers (e.g., Coe et al., 2019) to publishing in high-tier journals, yet they have produced an amount of scholarship that is above-average for someone who has had similarly limited access to social and material capital, a candidate's potential could be much higher than a blinded review of their curriculum vitae would suggest. That is, a rigorous, high quality candidate could be missed or undervalued if reviewers do not know about personal circumstances.

This is one rationale for diversity statements, which represent another contentious DEI intervention. Diversity statements in hiring or admissions applications may, on one hand afford valuable information about a candidate's skills (e.g., they mentor disadvantaged students, consider inclusiveness while teaching and mentoring, have considered how to increase accessibility), and in some cases may provide information about a candidate's personal context (e.g., the disadvantages they may have navigated, such as poverty, working at a primarily undergraduate institution, balancing work and parental leave). Yet, diversity statements may also encourage reviewers to

overweigh identity or use it as a pretext to select people based on identity without appearing to do so, which can be illegal (Fitcht & Levashina, 2023). Further, diversity statements can be used to disingenuously signal compliance to a norm or as a test of whether a candidate supports a favored dogma. Again, to avoid these limitations, it may be more effective to consider the information included in a diversity statement procedurally, rather than ask each reviewer to judge the relevance of a candidate's experiences for themselves. For example, organizations might adopt diversity mentorship and networking programs (Bonifacino et al., 2021) to alleviate barriers and thereby reduce the need to consider diversity statements during the candidate selection. Furthermore, DEI statements may devalue other types of valuable humanitarian service. Requiring a service statement, rather than a DEI statement, avoids these potential biases, while still permitting candidates to highlight their relevant DEI contributions (Burgess & Newton, 2024).

Future directions in the scientific evaluation of DEI programming

Based on our review, we recommend that future research should establish the effectiveness of DEI programs by operationally defining and testing the chain of causal variables by which a program is meant to achieve its intended outcome. This model can then be tested via an iterative, adversarial process of scientific hypothesis testing and parameter adjustment. To do so, researchers ought to first correctly identify and validly measure barriers to each outcome to confirm that such barriers exist. Then, interventions should be designed to eliminate these barriers and include a network model describing which factors ought to be influenced to eliminate such barriers. This network model should not only describe how the program will improve each intended outcome, but also consider the unintended negative consequences, backfire effects, and costs (in terms of both money and time) of these interventions. These models should then be tested longitudinally to confirm that program effectiveness is durable and that positive (or negative) changes are due to the intervention rather than to cohort effects or other broader shifts in society or culture. Finally, any intervention should include processes for holding decision-makers accountable for whether these interventions produce actual change at a reasonable cost without producing substantial unintended negative side effects, and avoid being impossibly ambitious if, for example, individual organizations are not capable of eliminating certain inequities produced by the wider society.

Effective programming will require an accurate audit of systemic barriers to achieving DEI to identify which status quo practices unjustifiably benefit some people over another. Evidence of substantial disparity is not proof of injustice, but it should prompt scrutiny of whether procedures are unfair. Likewise, evaluation of bias is a dynamic, not a static, process: evidence of bias at one timepoint is not a reliable indicator of bias later, and current evidence will need to be systematically updated to ensure that programming does not become obsolete as the causes of inequality or patterns of bias change (Schaerer et al., 2023). Implementation of DEI programming should also be based on clear evidence of its effectiveness and also costs (e.g., in dollars or opportunity loss) and whether bad outcomes would have occurred regardless of program

effectiveness (i.e., by chance or by unexamined causes). Here, scientific testing is useful because the scientific method offers standards for reducing procedural bias during the search for knowledge (Jabarov, 2023), including experimental intervention (Jeske et al., 2025). Given DEI's history of unstandardized implementation, programming should also be evaluated by meta-analysis or by systematic review of a field's practices and scientific outputs. Once audited, resolution of these disparities must move away from symbolic, performative fixes toward changes to policy and procedure that demonstrably produce cost effective and net positive change in each intended DEI outcome.

To accomplish this, effective accountability practices should produce consequences if these defined, measurable outcomes are not achieved by the causal mechanisms specified (e.g., Flammer et al., 2019). That is, policy should incorporate procedures that encourage critique, constructive disagreement, and ongoing revision of current programming. For example, communities might enforce accountability by establishing institutional structures (Burnett & Aguinis, 2024) or research practices (Jeske et al., 2025; Johnson, 2024; Steele & Spector, 2024) that encourage open criticism and build trust among beneficiaries, proponents, and skeptics. Parallel labs that are testing program effectiveness from different theoretical perspectives may also engage in adversarial collaboration (Ceci et al., 2024) to improve viewpoint diversity in science leadership or social justice advocacy (Jussim, 2024).

Conclusion

After a rapid rise from about 2015 to 2022, many (though not all) DEI programs have been in retreat with state governments banning it from their higher education systems, and with some of the largest and most influential universities and university systems (e.g., University of Michigan, MIT, Ohio State) closing their DEI bureaucracies or forbidding use of DEI statements. Furthermore, the Trump administration has banned DEI and related initiatives from both government agencies and federal funding. Although DEI has a deep and well-intentioned history in social justice advocacy, our perspective is that this backlash stems primarily from the pragmatic failure to base DEI interventions on rigorous scientific research, or to standardize and rigorously test program effectiveness and identify and minimize avoidable costs. Interestingly, University of Michigan administrators have raised the possibility of repurposing the funding that once went to its DEI program to provide additional financial support for meritorious students from low SES backgrounds (Caron, 2024), indicating a new understanding of tradeoffs and opportunity costs. If DEI programming aims to achieve its original humanitarian aims, widespread and rigorous evaluation of its programming will be pivotal to prune ineffective or harmful practices and advance those that effectively produce opportunity and reduce outcome disparities.

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References

Aguinis, H., Rupp, D. E., & Glavas, A. (2024). Corporate social responsibility and individual behaviour. *Nature Human Behaviour*, *8*(2), 219–227.

Anderson, T. H. (2005). *The pursuit of fairness: A history of affirmative action*. Oxford University Press.

Antonovics, K., & Backes, B. (2014). The effect of banning affirmative action on college admissions policies and student quality. *Journal of Human Resources*, *49*(2), 295–322.

Arcidiacono, P., & Lovenheim, M. (2016). Affirmative action and the quality–fit trade-off. *Journal of Economic Literature*, *54*(1), 3–51.

Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. F., & Volfovsky, A. (2018). Exposure to opposing views on social media can increase political polarization. *Proceedings of the National Academy of Sciences, 115*(37), 9216–9221.

Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: Evidence and interventions. *The Lancet*, *389*(10077), 1453–1463.

Bengtson, A. (2024). Affirmative action in the political domain. *Political Studies*, *72*(1), 158–176.

Boeckxstaens, P., Smedt, D. D., Maeseneer, J. D., Annemans, L., & Willems, S. (2011). The equity dimension in evaluations of the quality and outcomes framework: A systematic review. *BMC Health Services Research*, *11*, 1–15.

Bonifacino, E., Ufomata, E. O., Farkas, A. H., Turner, R., & Corbelli, J. A. (2021). Mentorship of underrepresented physicians and trainees in academic medicine: A systematic review. *Journal of General Internal Medicine*, *36*, 1023–1034.

Borsboom, D., Deserno, M. K., Rhemtulla, M., Epskamp, S., Fried, E. I., McNally, R. J., & Waldorp, L. J. (2021). Network analysis of multivariate data in psychological science. *Nature Reviews Methods Primers*, *1*(1), 58.

Braveman, P., Arkin, E., Orleans, T., Proctor, D., Acker, J., & Plough, A. (2018). What is health equity? *Behavioral Science & Policy*, *4*(1), 1–14.

Brison, C., Zech, E., Jaeken, M., Priels, J. M., Verhofstadt, L., Van Broeck, N., & Mikolajczak, M. (2015). Encounter groups: Do they foster psychology students' psychological development and therapeutic attitudes? *Person-Centered & Experiential Psychotherapies*, *14*(1), 83–99.

Burchardt, T., Le Grand, J., & Piachaud, D. (1999). Social exclusion in Britain 1991–1995. *Social Policy & Administration*, *33*(3), 227–244.

Burgess, M., & Newton, P. (2024). *How an academic department replaced diversity statements with service statements*. *Heterodox Academy*. https://heterodoxacademy.org/blog/how-an-academic-department-replaced-diversity-statements-with-service-statements

Burnett, L., & Aguinis, H. (2024). How to prevent and minimize DEI backfire. *Business Horizons*, *67*(2), 173–182.

Caron, P. (2024). *The University of Michigan doubled down on DEI. What went wrong?* The New York Times Magazine. https://taxprof.typepad.com/taxprof_blog/2024/10/ny-times-the-university-of-michigan-doubled-down-on-dei-what-went-wrong.html

Ceci, S. J., Clark, C. J., Jussim, L., & Williams, W. M. (2024). Adversarial collaboration: An undervalued approach in behavioral science. *American Psychologist*. https://doi.org/10.1037/amp0001391. Advance online publication.

Clark, C. J., Isch, C., Everett, J. A. E., & Shariff, A. F. (2023). Even when ideologies align, people distrust politicized institutions. *PsyArXiv*.
Coe, I. R., Wiley, R., & Bekker, L. G. (2019). Organisational best practices towards gender equality in science and medicine. *The Lancet*, *393*(10171), 587–593.
Corsino, L., & Fuller, A. T. (2021). Educating for diversity, equity, and inclusion: A review of commonly used educational approaches. *Journal of Clinical and Translational Science, 5*(1), e169.
Cotton, C. S., Hickman, B. R., & Price, J. P. (2022). Affirmative action and human capital investment: Evidence from a randomized field experiment. *Journal of Labor Economics*, *40*(1), 157–185.
Cox, W. T. L. (2023). Developing scientifically validated bias and diversity trainings that work: Empowering agents of change to reduce bias, create inclusion, and promote equity. *Management Decision*, *61*(4), 1038–1061.
Crenshaw, K., Gotanda, N., Peller, G., & Thomas, K. (1995). *Critical race theory: The key writings that formed the movement*. New.
Cruz, A., Sales, C. M., Alves, P., & Moita, G. (2018). The core techniques of Morenian psychodrama: A systematic review of literature. *Frontiers in Psychology*, *9*, 1263.
Davey, S., & Gordon, S. (2017). Definitions of social inclusion and social exclusion: The invisibility of mental illness and the social conditions of participation. *International Journal of Culture and Mental Health*, *10*(3), 229–237.
Devine, P. G., & Ash, T. L. (2022). Diversity training goals, limitations, and promise: A review of the multidisciplinary literature. *Annual Review of Psychology*, *73*, 403–429.
DiAngelo, R. (2018). *White fragility: Why it's so hard for white people to talk about racism*. Beacon Press.
Dobbin, F., & Kalev, A. (2022). *Getting to diversity: What works and what doesn't*. Harvard University Press.
Eppard, L. M., Mackey, J. L., Jussim, L., & Sloman (2025). The problem of tribal epistemology. *Keystone Journal*, *11*, 16–36.
Ficht, L. S., & Levashina, J. (2023). Should DEI statements be included in faculty selection? Exploring legal, diversity, and validity issues. *International Journal of Selection and Assessment*, *31*(2), 212–224.
Flammer, C., Hong, B., & Minor, D. (2019). Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: Effectiveness and implications for firm outcomes. *Strategic Management Journal*, *40*(7), 1097–1122.
Follmer, K. B., Sabat, I. E., Jones, K. P., & King, E. (2024). Under attack: Why and how IO psychologists should counteract threats to DEI in education and organizations. *Industrial and Organizational Psychology*, *17*(4), 452–475.
Forscher, P. S., Lai, C. K., Axt, J. R., Ebersole, C. R., Herman, M., Devine, P. G., & Nosek, B. A. (2019). A meta-analysis of procedures to change implicit measures. *Journal of Personality and Social Psychology*, *117*(3), 522.
Galos, D. R., & Coppock, A. (2023). Gender composition predicts gender bias: A meta-reanalysis of hiring discrimination audit experiments. *Science Advances*, *9*(18), eade7979.
Gjesdal, A. (2025). Viewpoint diversity and its epistemic benefits. *Philosophy Compass*, *20*(3), e70021.
Greenwald, A. G., Dasgupta, N., Dovidio, J. F., Kang, J., Moss-Racusin, C. A., & Teachman, B. A. (2022). Implicit-bias remedies: Treating discriminatory bias as a public-health problem. *Psychological Science in the Public Interest*, *23*(1), 7–40.
Heilman, M., & Brian, W. (2006). Disadvantaged by diversity? The effects of diversity goals on competence perceptions. *Journal of Applied Social Psychology*, *36*(5), 1291–1319.
Hooven, C. K. (2023). Academic freedom is social justice: Sex, gender, and cancel culture on campus. *Archives of Sexual Behavior*, *52*(1), 35–41.
Horak, S., & Suseno, Y. (2023). Informal networks, informal institutions, and social exclusion in the workplace: Insights from subsidiaries of multinational corporations in Korea. *Journal of Business Ethics*, *186*(3), 633–655.
Imperato, C., Schneider, B. H., Caricati, L., Amichai-Hamburger, Y., & Mancini, T. (2021). Allport Meets internet: A meta-analytical investigation of online intergroup contact and prejudice reduction. *International Journal of Intercultural Relations*, *81*, 131–141.
Iyer, A. (2022). Understanding advantaged groups' opposition to diversity, equity, and inclusion (DEI) policies: The role of perceived threat. *Social and Personality Psychology Compass, 16*(5), e12666.
Jabarov, J. (2023). Bias in scientific research: How to identify and eliminate it. J Sci Innov Technol, 80–96.
Jagdeep, A., Jagdeep, A., Lazarus, S., Zecher, M., Fedida, O., Fihrer, G., Vasko, C., Finkelstein, J., Finkelstein, D. S., Yanovsky, S., Jussim, L., Paresky, P., & Viswanathan, I. (2024). *Instructing animosity: How DEI pedagogy produces the hostile attribution bias*. NCRI report.

Jahn, B. (2021). Critical theory in crisis? A reconsideration. *European Journal of International Relations*, *27*(4), 1274–1299.
Jansen, A. E., & Searle, B. J. (2021). Diverse effects of team diversity: A review and framework of surface and deep-level diversity. *Personnel Review*, *50*(9), 1838–1853.
Jeske, M., Garcia, J., Davé, V., Kanwal, J., & Duncan, D. A. (2025). Developing an intervention tool for diversity, equity and inclusion (DEI) in laboratory settings. *Science as Culture*, *34*, 73–88.
Johnson, A. (2024). *How to design research-aligned DEI interventions in physics*. ArXiv preprint.
Jussim, L. (2024). Diversity is diverse: Social justice reparations and science. *Perspectives on Psychological Science*, *19*(3), 564–575.
Jussim, L., Crawford, J. T., & Rubinstein, R. S. (2015). Stereotype (in) accuracy in perceptions of groups and individuals. *Current Directions in Psychological Science*, *24*(6), 490–497.
Kim, J. Y., & Roberson, L. (2022). I'm biased and so are you. What should organizations do? A review of organizational implicit-bias training programs. *Consulting Psychology Journal*, *74*(1), 19–39.
Krischler, M., Powell, J. J., & Cate, P. T., I. M (2019). What is meant by inclusion? On the effects of different definitions on attitudes toward inclusive education. *European Journal of Special Needs Education*, *34*(5), 632–648.
Lai, C. K., & Lisnek, J. A. (2023). The impact of implicit-bias-oriented diversity training on Police officers' beliefs, motivations, and actions. *Psychological Science*, *34*(4), 424–434.
Legault, L., Gutsell, J., & Inzlicht, M. (2011). Ironic effects of antiprejudice messages: How motivational interventions can reduce (but also increase) prejudice. *Psychological Science*, *22*(12), 1472–1477.
Leslie, L. M., Kim, Y. L., & Emily, R. Y. (2024). Diversity initiatives: Intended and unintended effects. *Current Opinion in Psychology*, *61*, 101942.
Levi, A., & Fried, Y. (2025). Diversity, equity, and inclusion programs' emphasis on symbolism: Causes and consequences. *Journal of Organizational Behavior*, *46*, 172–187.
Lilienfeld, S. O. (2017). Microaggressions: Strong claims, inadequate evidence. *Perspectives on Psychological Science*, *12*(1), 138–169.
Macrae, C. N., Stangor, C., & Milne, A. B. (1994). Activating social stereotypes: A functional analysis. *Journal of Experimental Social Psychology*, *30*(4), 370–389.
Martin, L., & Cobigo, V. (2011). Definitions matter in Understanding social inclusion. *Journal of Policy and Practice in Intellectual Disabilities*, *8*(4), 276–282.
Mijs, J. J. B., Huang, H., A. D., & Regan, W. (2024). Confronting racism of omission: Experimental evidence of the impact of information about ethnic and Racial inequality in the united States and the Netherlands. *Du Bois Review: Social Science Research on Race*, *21*(1), 1–23. https://doi.org/10.1017/S1742058X23000140
Mills, J. (2025). A critique of antiracist ideology. *Journal of Teaching in Social Work*, *45*(2), 393–415.
Minow, M. (2021). Equality vs. equity. *American Journal of Law and Equality*, *1*, 167–193.
Morris, A. D. (1999). A retrospective on the civil rights movement: Political and intellectual landmarks. *Annual Review of Sociology*, *25*(1), 517–539.
Nittrouer, C. L., Arena Jr, D., Silver, E. R., Avery, D. R., & Hebl, M. R. (2025). Despite the haters: The immense promise and progress of diversity, equity, and inclusion initiatives. *Journal of Organizational Behavior*, *46*(1), 188–201.
Onyeador, I. N., Hudson, S. K. T., & LewisJr, N. A. (2021). Moving beyond implicit bias training: Policy insights for increasing organizational diversity. *Policy Insights from the Behavioral and Brain Sciences*, *8*(1), 19–26.
Osman, A., Speer, J. D., & Weaver, A. (2025). Discrimination against women in hiring. *Economic Development and Cultural Change*, *73*(2), 781–809.
Paluck, E. L., & Green, D. P. (2009). Prejudice reduction: What works? A review and assessment of research and practice. *Annual Review of Psychology*, *60*, 339–367.
Paolini, S., White, F. A., Tropp, L. R., Turner, R. N., Page-Gould, E., Barlow, F. K., & Gómez, Á. (2021). Intergroup contact research in the 21st century: Lessons learned and forward progress if we remain open. *Journal of Social Issues*, *77*(1), 11–37.
Paolini, S., Gibbs, M., Sales, B., Anderson, D., & McIntyre, K. (2024). Negativity bias in intergroup contact: Meta-analytical evidence that bad is stronger than good, especially when people have the opportunity and motivation to opt out of contact. *Psychological Bulletin*, *150*(8), 921–954.
Park, S., Park, S., & Shryack, J. (2023). Measures of climate for inclusion and diversity: Review and summary. *Human Resource Development Quarterly*, *34*(4), 463–480.
Perales, F., Ablaza, C., & Elkin, N. (2022). Exposure to inclusive Language and well-being at work among transgender employees in australia, 2020. *American Journal of Public Health*, *112*(3), 482–490.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751–783.

Pinkett, R. (2023). *Data-driven DEI: The tools and metrics you need to measure, analyze, and improve diversity, equity, and inclusion*. Wiley.

Plaut, V. C., Garnett, F. G., Buffardi, L. E., & Sanchez-Burks, J. (2011). What about me? Perceptions of exclusion and whites' reactions to multiculturalism. *Journal of Personality and Social Psychology*, *101*(2), 337–353.

Reddy, J., Williams-Isom, A., & Putnam-Hornstein, E. (2022). Racial sensitivity training: An inadequate solution to systemic Racial disparities in child protection systems. *Child Abuse & Neglect*, *128*, 105584.

Reimer, N. K., & Sengupta, N. K. (2023). Meta-analysis of the ironic effects of intergroup contact. *Journal of Personality and Social Psychology*, *124*(2), 362–380.

Reisch, M., & Jani, J. S. (2025). Deconstructing DEI: Unmasking its complexities, contradictions, and challenges. *Journal of Teaching in Social Work*, *45*(2), 250–275.

Roberson, Q., & Perry, J. L. (2022). Inclusive leadership in thought and action: A thematic analysis. *Group & Organization Management*, *47*(4), 755–778.

Salmi, J., & D'Addio, A. (2021). Policies for achieving inclusion in higher education. *Policy Reviews in Higher Education*, *5*(1), 47–72.

Schaerer, M., Du Plessis, C., Nguyen, M. H. B., Van Aert, R. C., Tiokhin, L., & Lakens, D. (2023). On the trajectory of discrimination: A meta-analysis and forecasting survey capturing 44 years of field experiments on gender and hiring decisions. *Organizational Behavior and Human Decision Processes*, *179*, 104280. … Gender Audits Forecasting Collaboration.

Schotte, S., Gisselquist, R. M., & Leone, T. (2023). *Does affirmative action address ethnic inequality? A systematic review of the literature* (No. 2023/14). UNU-WIDER.

Son Hing, L. S., Bobocel, D. R., & Zanna, M. P. (2002). Meritocracy and opposition to affirmative action: Making concessions in the face of discrimination. *Journal of Personality and Social Psychology*, *83*(3), 493–509. https://doi.org/10.1037/0022-3514.83.3.493

Son Hing, L. S., Bobocel, D. R., Zanna, M. P., Garcia, D. M., Gee, S. S., & Orazietti, K. (2011). The merit of meritocracy. *Journal of Personality and Social Psychology*, *101*(3), 433–450.

Steele, L. M., & Spector, P. E. (2024). Activism or science? Navigating the tension between objectivity and advocacy in DEI research. *Industrial and Organizational Psychology*, *17*(4), 520–524.

Tamvada, M. (2020). Corporate social responsibility and accountability: A new theoretical foundation for regulating CSR. *International Journal of Corporate Social Responsibility*, *5*(1), 2.

Tomlin, B. (2024). Pronoun usage and gender identity's effects on market outcomes: Evidence from a preregistered field experiment. *Economics Letters*, *236*, 111584.

Unterhalter, E. (2009). What is equity in education? Reflections from the capability approach. *Studies in Philosophy and Education*, *28*, 415–424.

Van Assche, J., Swart, H., Schmid, K., Dhont, K., Al Ramiah, A., Christ, O., & Hewstone, M. (2023). Intergroup contact is reliably associated with reduced prejudice, even in the face of group threat and discrimination. *American Psychologist*, *78*(6), 761–774.

Vangeli, A. (2025). Transcending the DEI contradictions: A Bourdieusian path to social justice in international business. *Critical Perspectives on International Business*, *21*(1), 27–58.

Wang, M. L., Gomes, A., Rosa, M., Copeland, P., & Santana, V. J. (2024). A systematic review of diversity, equity, and inclusion and antiracism training studies: Findings and future directions. *Translational Behavioral Medicine*, *14*(3), 156–171.

Ward, P. R. (2009). The relevance of equity in health care for primary care: Creating and sustaining a 'fair go, for a fair innings'. *Quality in Primary Care*, *17*, 49–54.

Zheng, L. (2024). *DEI deconstructed: Your no-nonsense guide to doing the work and doing it right*. Penguin Random House.

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