

The AERA et al. Amicus Brief in Fisher v. University of Texas at Austin: Scientific Organizations Serving Society

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The Context of the AERA et al. Amicus Brief

The U.S. Supreme Court's ruling in the affirmative action case of Fisher v. University of Texas at Austin is expected to be one of the most important—and controversial—decisions of its 2012– 2013 term. The stakes are high because the ruling will affect both public universities and private institutions of all sizes that employ race-conscious admissions procedures. Research organizations such as the American Educational Research Association (AERA) do not typically engage in advocacy before the courts. But in the Fisher case, as in other recent Supreme Court cases, AERA's involvement as an amicus curiae (friend of the court) in support of university policies is deeply grounded in research and scientific findings that underscore the benefits of racial and ethnic diversity.

Just about 10 years ago, in 2003, the Court ruled in two cases involving the University of Michigan—Grutter v. Bollinger and Gratz v. Bollinger—that promoting student body diversity is, in the language of constitutional law, a compelling governmental interest, and that universities could advance this interest through the limited use of race in admissions. AERA filed amicus curiae briefs in both cases, and the Court cited the AERA brief and the research presented therein in its Grutter opinion, endorsing "holistic review" policies in which race may be considered as one of many admissions factors. Essentially, the Court ruled that not just grades and test scores but also personal backgrounds and experiences may be taken into account because they help produce a broadly diverse student body. Scientific evidence shows that such diversity has benefits for minority and majority students.

In Grutter, the Court upheld a policy that is almost identical to the one being challenged by Fisher at the University of Texas at Austin. The facts of the Fisher case, however, differ. The University of Texas at Austin uses both holistic review and a "10 percent plan"—a state policy that guarantees spots in public universities to students in the highest percentiles of their high school graduating classes. Because many Texas communities suffer from racial segregation, a major effect of the percent plan is that Black and Latino students from predominantly minority schools are admitted in significant numbers. But the percent plan is not enough. The numbers fall short of what the University seeks in creating a diverse student body, and the holistic policy is designed to fill the gaps.

Strength of the Scientific Evidence and the AERA et al. Amicus Brief

Amicus curiae briefs are designed to bring information and arguments to the Court that might not be raised by the parties themselves. Organizations mobilize the law or file amicus briefs for a range of reasons. For research associations to do so reflects a commitment to bringing science to bear in public decision making.

Why has AERA once again filed an amicus curiae brief in support of a university? The scientific purpose motivating the brief was not just to reaffirm what was previously known and communicated to the Court in Grutter but also to examine the current state of the knowledge. The question is simple to ask, but more complex to answer: What do we know from the research as of 2012, the year the Fisher amicus briefs were filed, and how does it align with what we knew in 2002, when the research amicus briefs in the University of Michigan cases, including those by AERA, were first filed?

The evidence supporting the benefits of diversity in university student bodies has ballooned over the past 10 years (see citations herein and in the AERA et al. amicus brief). It is impressive to observe the extent to which talented scholars across fields and disciplines, including many early in their careers, have embraced previously unaddressed issues on this topic through rigorous research.* Impressive as well is the cumulative body of scientific research showing that diversity produces important educational benefits and helps prevent the harms of tokenism and racial isolation.

The amicus curiae brief filed in Fisher by AERA was joined by seven other leading research associations—the American Association for the Advancement of Science, the American Sociological Association, the American Statistical Association, the Association for the Study of Higher Education, the Law and Society Association, the Linguistic Society of America, and the

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^{*}Part of the scientific enterprise is to expand knowledge in transparent, wellwarranted, and self-correcting ways. Therefore, irrespective of the outcome of Fisher v. University of Texas at Austin, there will be unaddressed questions worthy of future inquiry and investigation.

National Academy of Engineering. AERA and all of the collaborating organizations brought high levels of scrutiny to examining the findings and the quality of the research and determining that standards of peer review had been met. Each decided independently whether to sign the brief, just as AERA had decided to undertake its preparation. Had these organizations found the scientific knowledge to be contingent, superficial, or uncertain, they would not have joined this brief or urged the Court to pay it heed.

Scientific Associations and the Decision to File an Amicus Brief

The decision to proceed with an amicus brief was based, in the end, on the strength of the science and the responsibility of organizations like AERA to ensure that the knowledge is accessible to the Court and that the strengths and weaknesses of the research are fully understood. Such decisions are not reached quickly or lightly by scientific associations. Assessment of the science is one consideration, but not the only one that comes into play in determining whether to advance an amicus brief.

In making such decisions, AERA is guided by its by-laws and by policy developed and approved in 2005 by the AERA Council in a document titled AERA Position Taking and Policymaking Processes Guidelines (2007). First and foremost, decisions to speak as an organization must be made by the AERA Council, the legislative and policy-determining body of the Association. The AERA guidelines address three areas of policy making mission-oriented policy, public policy, and governance policy. Most germane to an amicus brief is the decision whether to speak as an association on research that pertains to public policy.

The primary obligation of a research association in the public policy arena is to ensure, through its convening capacity, programs, and activities, that high-quality research is fostered, widely known, and accessible on matters that can improve society and serve the public good. An Annual Meeting with double-blind peer review of papers; six highly ranked, peer-reviewed journals; and the Association's Standards for Reporting on Empirical Social Science Research in AERA Publications (2006) are just some of the ways that AERA promotes research quality and methodological rigor on matters of public concern. Intensive research conferences on high-profile educational topics (e.g., research on lesbian, gay, bisexual, transgender, and queer [LGBTQ] issues in education), and media and congressional briefings are among the additional vehicles that AERA uses to disseminate research and encourage the use of research in policy making.

As with Fisher v. University of Texas at Austin, however, there also are times when AERA and other scientific associations decide that the knowledge is sufficiently substantial, the issues sufficiently compelling for society, and the scientific arena sufficiently central to their missions (for AERA, education and learning) that it becomes a matter of public responsibility to provide their perspective on the state of the science and its implications. The AERA guidelines recognize the complexities of such decisions; hence the rarity of such position taking-balancing the importance of taking a position against the risk of diminished credibility in terms of an association's fundamental mission and role.

The AERA guidelines outline steps to assess the state of the knowledge and the degree of scientific consensus. In the Fisher case, this examination followed from a decade of monitoring research—beginning in 2002 with an independent panel constituted in the University of Michigan cases that reported to the AERA Council, and continuing with a research conference held in 2006 that led Council to file an amicus brief in Parents Involved in Community Schools v. Seattle School District No. 1 and Meredith v. Jefferson County Board of Education. For the Fisher case, as discussed above, this research was updated, examined, and scrutinized by researchers to assess the consistency and strength of the vetted studies. In making the decision to file an amicus brief or otherwise take a public position, AERA requires a two-thirds affirmative vote of the Council. In this case, the decision reached by Council in April 2012 was unanimous.

The decision to invite co-signers on the AERA brief was further aimed at conveying the scientific consensus on the research in the Fisher case. Research organizations, some of which had filed amicus briefs in the Michigan cases, were not necessarily positioned to take on an amicus brief on their own. Some associations asked if they might consider joining the AERA brief; others were invited to consider collaborating on this endeavor. Each participating association undertook an independent process of decision making according to its own procedures for review and approval. The number and breadth of scientific associations joining the brief make apparent the level of confidence in the science that supports diversity-based admissions.

Scientific Findings and the Shape of the **Amicus Brief**

Because amicus briefs are subject to strict formatting requirements and word-count limits, those that focus on scientific findings relevant to a case can only touch on a broad body of findings such as the research on diversity in higher education. The AERA amicus brief thus highlights three major lines of recent research supporting a compelling interest in diversity: (a) student body diversity leads to important educational benefits; (b) significant harms are associated with racial isolation and tokenism in nondiverse settings; and (c) the purported harms to minority students associated with race-conscious admissions are inconsistent with recent findings and lack a solid empirical basis.

Student Body Diversity Promotes Cross-Racial Understanding and Reduces Prejudice

Among the most thoroughly documented bodies of research supporting the diversity interest is the research showing that diversity produces concrete educational benefits. For example, several post-Grutter studies have shown that racially diverse educational settings are effective in reducing prejudice by promoting greater intergroup contact—both informally and in classroom settings—and encouraging friendships across group lines (Chang, Astin, & Kim, 2004; Denson & Chang, 2009; Lopez, 2004; Saenz, Ngai, & Hurtado, 2007).

Various meta-analyses have shown that positive intergroup contact reduces prejudice and that greater intergroup contact is associated with lower levels of prejudice (Pettigrew & Tropp, 2006, 2008). Moreover, studies and meta-analyses focusing on friendships developed in diverse settings reveal positive effects resulting from cross-racial interaction (Davies, Tropp, Aron, Pettigrew, & Wright, 2011; Fischer, 2008; Levin, Van Laar, & Sidanius, 2003). And cross-racial interaction has also been shown to have positive effects on curricular and cocurricular diversity activities that lead to prejudice reduction (Denson, 2009).

Student Body Diversity Leads to Educational Benefits Such as Improvements in Cognitive Abilities, Critical Thinking, and Self-Confidence

Another line of research has shown that student body diversity fosters improvements in students' cognitive skills—such as critical thinking and problem solving-because students' exposure to individuals different from themselves, as well as to novel ideas and situations arising from that exposure, challenges their thinking and leads to cognitive growth (Antonio et al., 2004; Bowman, 2010; Chang, Denson, Saenz, & Misa, 2006; Hurtado, 2005).

Other research has demonstrated that student interaction with diverse peers contributes to positive effects by the second year of college, including improvements in cognitive abilities (e.g., analytical problem-solving skills and complex thinking skills), sociocognitive skills (e.g., cultural awareness and leadership), and democratic sensibilities (e.g., pluralistic orientation and understanding of the importance of civic contribution) (Hurtado, 2005). Students with greater exposure to diversity are also more likely to score higher on academic self-confidence, social agency (the belief in taking personal action to improve society), and dispositions toward critical thinking (Nelson Laird, 2005).

Student Body Diversity Promotes Civic Engagement and Skills Needed for Professional Development and Leadership

Multiple studies have documented the positive relationships between diversity and a range of benefits that have long-term implications for civic engagement, professional growth, and the preparation of leaders for an increasingly diverse society (Engberg, 2007; Gurin, Nagda, & Lopez, 2004; Hurtado, 2005). Improvements on measures of civic engagement, including (a) civic attitudes toward democratic participation, (b) civic behaviors such as participating in community activities, and (c) intentions to participate in civic activities, have also been documented in multiple studies (Bowman, 2011; Engberg & Hurtado, 2011).

Postcollege leadership skills (as measured by leadership ability, public speaking, social self-confidence, and ability to discuss and negotiate controversial issues) and the level of pluralistic orientation have been shown to be significantly related to the degree of student body diversity and to the racial climate of institutions, as well as to the level of cross-racial interaction during college (Jayakumar, 2008). And one study showing the long-term effects of diversity found that diversity experiences were positively related to personal growth, purpose in life, recognition of racism, and volunteering behavior among college graduates in their mid-30s (13 years after graduation) (Bowman, Brandenberger, Hill, & Lapsley, 2011).

Student Body Diversity Leads to Improved Classroom Environments

Research has also shown that improved discussions and learning outcomes result from diverse classrooms, where White students and minority students add different personal experiences to the discussion (Deo, 2011; Pitt & Packard, 2012). For instance, survey data from more than 500 students from the University of Michigan showed that most respondents were engaged in positive interactions with students from different racial backgrounds; the data indicated that (a) greater diversity in the student body leads to increased classroom diversity and improved learning; (b) classroom diversity results in open minds and engaging classroom conversations; and (c) more structural diversity leads to greater participation by minority students and less tokenism (Deo, 2011). The Michigan study concluded that more lively and engaging conversations occur when diversity discussions are included in the classroom, and improved learning occurs because abstract concepts are tied directly to concrete examples drawn from personal experience.

Harms Are Associated With Tokenism, Racial Isolation, and Stereotyping

Other areas of research focusing on educational harms have shown that isolation, subordination, and negative stereotyping are common problems that arise in a wide range of settings when minority numbers are especially low and the norms and behaviors of majority groups dominate (Harper & Hurtado, 2007; Thompson & Sekaquaptewa, 2002). For instance, stereotype threat (increased pressure on groups arising from negative stereotypes, which leads to poor performance on tests and other measures) contributes to diminished academic performance among racial and ethnic minorities, as well as among women in mathematics and science fields (Logel, Walton, Spencer, Peach, & Mark, 2012; Steele, 2010; Walton & Spencer, 2009).

Microaggressions (day-to-day verbal and nonverbal slights and insults) toward minorities have also been shown to be commonplace in nondiverse settings (e.g., McCabe, 2009; Smith, Hung, & Franklin, 2011). For example, a 2009 study drawing data from a large public university with low percentages of minority students found microaggressions in many campus and classroom settings: African American men were characterized as aggressive, threatening, and criminal; African American women frequently reported not being taken seriously in discussions or always being expected to represent their race; and Latinas commonly encountered stereotypes of foreignness and exoticism, often of a sexual nature. As a result, minority students consistently reported feeling isolated and not belonging to their campus community (McCabe, 2009). Other studies have shown that feelings of exclusion from campus events and activities, and of being subjected to offensive comments and visual images, are more prevalent among underrepresented minority students in low-diversity institutions, with significant declines in such

feelings as the campus minority student enrollment increases (Hurtado & Ruiz, 2012).

Problems of tokenism, stereotyping, and microaggression have been shown to be especially commonplace in programs and fields with low numbers of minorities or women, particularly in STEM fields (science, technology, engineering, and mathematics) (Chang, Eagan, Lin, & Hurtado, 2011; Museus, Palmer, Davis, & Maramba, 2011; Ong, Wright, Espinosa, & Orfield, 2011). And several studies show that less-supportive educational environments are tied to minority students' departure from STEM fields (Museus et al., 2011), while positive factors such as racial and gender diversity of graduate students in STEM have been linked to persistence among women and minority students in STEM majors (Griffith, 2010).

Arguments Opposing Affirmative Action Because of Stigma or Mismatch Lack a Strong Empirical Basis

Recent research also shows that many of the arguments offered by opponents of affirmative action are not grounded in the scientific evidence. For instance, critics often cite stigma as a harm to minority students because they become labeled as secondclass students who were admitted only because of affirmative action. But studies have shown that stigma is no worse at universities that employ race in admissions than at those that do not (Bowen, 2010; Onwuachi-Willig, Houh, & Campbell, 2008). In fact, research shows that stigma is lower in states with raceconscious admissions (Bowen, 2010).

Research also undermines the so-called mismatch hypothesis. The claim that minority students suffer academic harms when their admissions credentials do not "match" their institutions finds limited support in the scientific literature (Alon & Tienda, 2005; Ayres & Brooks, 2005; Bowen, Chingos, & McPherson, 2009; Chambers, Clydesdale, Kidder, & Lempert, 2005; Fischer & Massey, 2007). Research on undergraduates has found that probabilities of graduation were higher, rather than lower, at selective institutions than at nonselective ones, a finding that controverts the mismatch hypothesis (Alon & Tienda, 2005; Bowen et al., 2009). Research has also found that diversity-based admissions are positively related to minority students' firstsemester grades and negatively related to their dropout rates (Fischer & Massey, 2007). And research on law schools shows little evidence of mismatch; moreover, evidence suggests significant declines in the number of African American lawyers if raceconscious admissions are eliminated (Ayres & Brooks, 2005; Chambers et al., 2005; Ho, 2005; Rothstein & Yoon, 2008).

Indeed, contrary to the mismatch hypothesis, numerous studies show that minority students gain significant educational and economic benefits through their attendance at selective institutions-including higher graduation rates and increased earnings and labor force participation following graduation (Bowen et al., 2009; Long, 2010; Melguizo, 2008; Small & Winship, 2007).

The Necessity of Holistic Admissions Policies

Just as important, studies of percent plans and other race-neutral policies show that considering race is essential to producing diverse student bodies. Using a percent plan alone or attempting to use a proxy such as income or socioeconomic status instead of race is simply not as effective in producing racial diversity as a policy that employs race directly (Harris & Tienda, 2010; Howell, 2010; Long & Tienda, 2008). Thus, if the policy at stake in the Fisher case is struck down, the University of Texas at Austin will be left with an incomplete solution to its diversity problem. And many institutions and programs—private colleges, graduate programs, professional schools—that cannot employ percent plans will be left with weak or nonexistent alternatives.

Concluding Comments on the AERA et al. **Amicus Brief**

In the Fisher case, AERA and the other seven signatories reached the conclusion that the strength of the science and the gravity of the issues being taken up were sufficiently compelling to justify serving as an amicus before the U.S. Supreme Court to present the research, including addressing the studies that were less robust and rigorous. AERA's sense of its educative purpose and its commitment to transparency about the amicus brief also led to the establishment of a dedicated portal on the Association website. The site includes all of the research amicus briefs filed in the Fisher case, whether filed on behalf of Fisher, the University of Texas at Austin, or neither side. And, in the interest of enabling the public to scrutinize the research, AERA obtained permission from journal publishers to provide open access to all of the articles included, whether supported or critiqued in the AERA et al. amicus brief.

Ultimately, will all of this scientific evidence make a difference to the Supreme Court? There is no requirement that the Court rely on amicus briefs or scientific findings to reach a decision on affirmative action. Indeed, the Justices need not look at any new science to reaffirm that the benefits of diversity are compelling; there is already a legal precedent in the Grutter case. But when there is strong agreement among organizations whose primary purpose is to maintain the quality and integrity of scientific research, it merits the close attention of the Court.

NOTE

The authors worked closely together on all four of the amicus curiae briefs filed by the American Educational Research Association. The first author wishes to acknowledge the research and policy analyst skills of the second author, who served as counsel of record for the briefs. The authors thank the editors and anonymous reviewers who moved quickly to develop and bring forward a special section of the Educational Researcher on the Fisher v. University of Texas at Austin case. We hope it serves the interests of science and society beyond any one Supreme Court decision.

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