

No. 11-345

IN THE
Supreme Court of the United States

ABIGAIL NOEL FISHER,
Petitioner,

v.

UNIVERSITY OF TEXAS AT AUSTIN, *et al.*,
Respondents.

**On Writ of Certiorari to the
United States Court of Appeals
for the Fifth Circuit**

**BRIEF OF AMICUS CURIAE THE AMERICAN
PSYCHOLOGICAL ASSOCIATION
IN SUPPORT OF RESPONDENTS**

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INTEREST OF *AMICUS CURIAE*¹

The American Psychological Association (APA) is a voluntary, nonprofit, scientific and professional organization founded in 1892. The APA is the largest association of psychologists in the United States, with more than 137,000 members and affiliates in 54 divisions representing every major focus within the field of psychology.

The APA aims to advance psychology as a means of promoting human welfare, to enhance psychological knowledge, and to encourage the application of research findings to the promotion of health and public welfare. The APA places a high priority on the amelioration of stereotypes, prejudice, and discrimination among individuals and institutions. *See APA Resolution on Prejudice, Stereotypes, and Discrimination* (Feb. 2006), available at <http://www.apa.org/about/policy/prejudice.pdf>. To this end, the APA has participated as *amicus curiae* in landmark cases on diversity in educational settings, including *Grutter v. Bollinger*, 539 U.S. 306 (2003).

Members of the APA research psychological causes and consequences of racial prejudice and the development of such prejudice and stereotypes in children and young adults. Thus, the APA is uniquely positioned to describe the pertinent, peer-reviewed social science studies that examine the empirical claims at

¹ No counsel for a party authored this brief in whole or in part, and no party or counsel for a party made a monetary contribution intended to fund the preparation or submission of this brief. No one other than *amicus curiae*, its members, or *amicus*'s counsel made a monetary contribution to the preparation or submission of this brief. Letters from the parties consenting to the filing of *amicus* briefs have been filed with the Clerk of the Court.

the heart of the debate on the use of race as a factor in student admissions by colleges and universities. This brief presents scientific evidence supporting the principle that institutions of higher education should be permitted to employ race-conscious admissions practices to promote the many educational benefits for all students associated with campus diversity.²

SUMMARY OF ARGUMENT

The ongoing need for sufficient diversity in higher education is real, substantial, and documented. Social science research confirms that the benefits of admissions policies like the one employed by the University of Texas extend far beyond admissions. As this Court long has recognized, diversity in higher education enhances the educational experience for all students.

Underrepresentation of minority groups poses significant obstacles to effective education of both minority and nonminority students. The social isolation and stereotyping experienced by underrepresented minority students inhibit those students' mental and emotional functioning, which leads to decreased academic performance and impaired emotional well-being. Members of majority groups, too, are hindered by persistent implicit biases that disrupt mental function.

Social science research demonstrates that increased campus diversity is a proven remedy for these

² The APA wishes to acknowledge the assistance in the preparation of this brief of Mitchell Chang, PhD, John Dovidio, PhD, Sylvia Hurtado, PhD, James Jones, PhD, Craig Lareau, PhD, Jeffrey Milem, PhD, Victoria Plaut, PhD, Toni Schmader, PhD, Nicole Shelton, PhD, and Gregory Walton, PhD.

problems. Increasing the representation of distinct racial groups improves intellectual and academic performance for both minority and nonminority students. Furthermore, campus diversity reduces prejudice, enhances leadership skills, and better prepares students to participate in modern civic society and the contemporary workplace. However, these benefits accrue only when a critical mass of different minority groups is present on campus.

Arguments against the continuing need for increased racial diversity in higher education do not withstand the crucible of empirical investigation. Especially dangerous are certain superficially plausible but empirically flawed theories that often reflect the same stereotypes and biases that diversity admissions policies serve to ameliorate. One example is the discredited “academic mismatch” theory, which hypothesizes that relatively lower graduation rates among minority students admitted under race-conscious admissions programs result from an academic curriculum too rigorous for such students. Numerous studies have debunked the “academic mismatch” myth and have proven that a university’s consideration of race as a factor in admissions *narrows* retention rate gaps between different student groups.

The scientific conclusions set forth in this *amicus* brief are grounded in 79 peer-reviewed studies reflecting the contemporary social science research on campus diversity. Nearly all of these studies have been conducted or published since the Court’s decision in *Grutter* in 2003. The studies that form the backbone of this brief, along with several other articles and books by prominent scholars, represent just a sample of the evidence collected by APA members

and their colleagues that demonstrates the value of and continuing need for diversity in higher education.

ARGUMENT

I. THE COMPELLING GOVERNMENT INTEREST IN PROMOTING DIVERSITY IN HIGHER EDUCATION HAS NOT CHANGED SINCE *GRUTTER*

For more than 30 years, this Court has affirmed that student body diversity is a compelling government interest that “legitimately may be served” by the consideration of race in admissions to public universities. *Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265, 320 (1978); see *Grutter v. Bollinger*, 539 U.S. 306, 325 (2003). The Court explained in *Grutter* that the benefits of racial diversity in higher education are both “substantial” and “real,” and that racial diversity in higher education “promotes cross-racial understanding, helps to break down racial stereotypes, . . . enables students to better understand persons of different races, . . . promotes learning outcomes, and better prepares students for an increasingly diverse workforce and society.” 539 U.S. at 330 (quotations omitted). An ever-growing body of social science research confirms the Court’s conclusions and reinforces the continuing need for increased diversity in higher education today.

A. Underrepresentation of Minority Groups Inhibits Academic Performance, Fosters Prejudice, and Hinders Cognitive Function

Social science research demonstrates that the government’s interest in diversity goes far beyond simply

reducing “societal discrimination.” *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 496 (1989). Underrepresented minorities face critical psychological impediments to success that are tied to their distinctiveness and isolation. Furthermore, persistent implicit prejudices divide individuals and exact a measurable cost on cognitive (mental) function. Institutions of higher education have a compelling interest in overcoming these obstacles to effective education, and diversity is a proven tool for meeting this task and improving outcomes for all students.

1. The detrimental academic effects on underrepresented minority students are real and documented. Study after study shows that when campuses lack sufficient diversity, underrepresented minority students are especially susceptible to psychological influences that can impair academic performance.³

One of these psychological influences is a feeling of distinctiveness or unbelonging. A member of an underrepresented minority group is more conscious of her minority identity and the negative stereotypes that are associated with that status.⁴ In the educational setting, this feeling of distinctiveness creates

³ See, e.g., Denise Sekaquaptewa et al., *Solo Status and Self-Construal: Being Distinctive Influences Racial Self-Construal and Performance Apprehension in African American Women*, 13 *Cultural Diversity & Ethnic Minority Psychol.* 321, 321 (2007).

⁴ Michael Johns et al., *Stereotype Threat and Executive Resource Depletion: Examining the Influence of Emotion Regulation*, 137 *J. Experimental Psychol.: Gen.* 691, 692 (2008); see Toni Schmader et al., *A Metacognitive Perspective on the Cognitive Deficits Experienced in Intellectually Threatening Environments*, 35 *Personality & Soc. Psychol. Bulletin* 584, 586 (2009).

the risk that a student will conform to negative academic stereotypes.⁵

Research has shown the negative effects of “stereotype threat” on minority students. For example, Black and Latino students perform worse than their White peers on standardized tests when those tests are described as assessing verbal or intellectual ability. When the same tests are framed as simple exercises in problem solving, however, their performance is equivalent to that of White peers.⁶ The stress of having to overcome a racial stereotype (whether warranted or not) inhibits performance.⁷

Social scientists have uncovered the cognitive dynamics underlying stereotype threat’s effects on performance. On an affective level—i.e., how people experience emotions or feelings—stereotype threat activates negative thoughts,⁸ which can decrease confidence, increase anxiety, and undermine an indi-

⁵ See, e.g., Harriet E.S. Rosenthal & Richard J. Crisp, *Reducing Stereotype Threat by Blurring Intergroup Boundaries*, 32 *Personality & Soc. Psychol. Bulletin* 501, 502 (2006).

⁶ See Toni Schmader et al., *An Integrated Process Model of Stereotype Threat Effects on Performance*, 115 *Psychol. Rev.* 336, 336-37 (2008); see also Patricia M. Gonzales et al., *The Effects of Stereotype Threat and Double Minority Status on the Test Performance of Latino Women*, 28 *Personality & Soc. Psychol. Bulletin* 659, 665-66 (2002).

⁷ See Schmader et al., *supra* note 4, at 586.

⁸ Sian L. Beilock et al., *Stereotype Threat and Working Memory: Mechanisms, Alleviation, and Spillover*, 136 *J. of Experimental Psychol.: Gen.* 256, 257 (2007); Mara Cadinu et al., *Why do Women Underperform under Stereotype Threat? Evidence for the Role of Negative Thinking*, 16 *Psychol. Sci.* 572, 573 (2005).

vidual's performance expectations.⁹ This phenomenon is, however, more complex than basic performance anxiety.¹⁰

Stereotype threat disrupts cognitive function.¹¹ Recent studies have explained that "activating negative stereotypes about a social identity one possesses motivates individuals to try to combat that stereotype."¹² This effect, in turn, generates increased mental effort in the form of heightened stress, increased monitoring of how one's behavior reflects the stereotypes at issue, and active efforts to push negative stereotypic thoughts and anxieties from the mind.¹³ In combination, these coping mechanisms interfere with mental performance and leave an individual with a deficit of cognitive resources to complete the intellectual task at hand.¹⁴

The effects of stereotype threat can extend beyond discrete tasks. Ultimately, the threat may lead indi-

⁹ See Mara Cadinu et al., *Stereotype Threat: The Effect of Expectancy on Performance*, 33 Euro. J. Soc. Psychol. 267, 269, 283 (2003).

¹⁰ See, e.g., Schmader et al., *supra* note 6, at 349.

¹¹ See, e.g., Jean-Claude Croizet et al., *Stereotype Threat Undermines Intellectual Performance by Triggering a Disruptive Mental Load*, 30 Personality & Soc. Psychol. Bulletin 721, 728-29 (2004).

¹² Schmader et al., *supra* note 6, at 337; see Toni Schmader & Michael Johns, *Converging Evidence that Stereotype Threat Reduces Working Memory Capacity*, 85 J. of Personality & Soc. Psychol. 440, 450-51 (2003).

¹³ Schmader et al., *supra* note 6, at 337-38.

¹⁴ *Id.*

viduals to remove themselves from the classroom or campus altogether.¹⁵

Increasing minority representation reduces stereotype threat. In general, stereotype threat is “less likely to occur if the categories that embody the stereotype become less salient.”¹⁶ Removing explicit reminders of distinctiveness has been proven to diminish stereotype threat. As one study revealed, marking one’s gender after (as compared to before) a calculus test led to a 33 percent reduction in gender gap performance.¹⁷

Removing circumstantial reminders—by bringing different groups together and emphasizing overlapping characteristics—can also reduce the salience of racial group identity and, thus, diminish stereotype threat.¹⁸ Coordinated efforts to encourage students to confront diversity issues with diverse peers and to reappraise the basis for stereotypes can remove the inhibitory effects of stereotype threat.¹⁹

2. Social isolation also makes underrepresented minorities especially vulnerable to psychological impediments to performance. Empirical studies demonstrate the dangers of “solo status,” or “being the only member of one’s social category present in a

¹⁵ Rosenthal & Crisp, *supra* note 5, at 502; see Mary C. Murphy et al., *Signaling Threat: How Situational Cues Affect Women in Math, Science, and Engineering Settings*, 18 Psychol. Sci. 879, 883-84 (2007).

¹⁶ Rosenthal & Crisp, *supra* note 5, at 509.

¹⁷ See Kelly Danaher & Christian S. Crandall, *Stereotype Threat in Applied Settings Re-Examined*, 38 J. Applied Soc. Psychol. 1639, 1645 (2008).

¹⁸ Rosenthal & Crisp, *supra* note 5, at 509.

¹⁹ Schmader et al., *supra* note 6, at 351-52.

group.”²⁰ For example, Blacks in otherwise all-White groups and women in otherwise all-male groups underperform as compared to when they are in groups with increased representation of their race or gender.²¹ Solo status “lead[s] racial minorities to construe the self in terms of race and to perceive being seen as a race representative,” which can hinder intellectual performance.²²

Isolated members of minority groups also “experience relatively greater uncertainty about their belonging in school.”²³ This uncertainty can be detrimental to “well-being and performance,”²⁴ and it can ultimately discourage students from persisting in an academic setting.²⁵ However, when minority students experience a greater sense of belonging and less sensitivity to racial rejection, their interpersonal relationships improve and they achieve higher grade point averages throughout college.²⁶

²⁰ Sekaquaptewa et al., *supra* note 3, at 321.

²¹ *See id.*; see also Denise Sekaquaptewa & Mischa Thompson, *Solo Status, Stereotype Threat, and Performance Expectancies: Their Effects on Women’s Performance*, 39 J. Experimental Soc. Psychol. 68, 68-69 (2003).

²² Sekaquaptewa et al., *supra* note 3, at 326.

²³ Gregory M. Walton & Geoffrey L. Cohen, *A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students*, 331 Sci. 1447, 1448 (2011).

²⁴ *Id.*; see Elizabeth Page-Gould et al., *Understanding the Impact of Cross-Group on Interactions with Novel Outgroup Members*, 98 J. Personality & Soc. Psychol. 775, 788-89 (2010).

²⁵ Angela M. Locks et al., *Extending Notions of Campus Climate and Diversity to Students’ Transition to College*, 31 Rev. Higher Educ. 257, 260 (2008).

²⁶ Rodolfo Mendoza-Denton et al., *Sensitivity to Status-Based Rejection: Implications for African American Students’ College*

Isolation also increases the likelihood that under-represented students will be viewed as “tokens.”²⁷ Tokenism heightens the undue attention paid to minorities, fosters stereotyping, and reduces perceptions of individuality.²⁸ Further, tokenism can foment social stigma and inhibit student achievement.²⁹

Thus, the University of Texas’s goal of increasing the number of Black and Latino students on campus in order to minimize the number of classes with a single member of a minority group properly recognizes the negative effects associated with stereotype threat and social isolation.

B. Subconscious Racial Bias Continues to Interfere with the Effective Education of Nonminority Students

The negative effects associated with insufficient racial diversity extend to members of nonminority groups. The most notable effect is the persistence of implicit bias that interferes with the educational process.

Experience, 83 J. Personality & Soc. Psychol. 896, 913-14 (2002); see Walton & Cohen, *supra* note 23, at 1448.

²⁷ Jeffrey F. Milem et al., *Making Diversity Work on Campus: A Research-Based Perspective*, at 4, 6 (2005), available at siher.stanford.edu/AntonioMilemChang_makingdiversitywork.pdf (last accessed Aug. 7, 2012).

²⁸ *See id.*

²⁹ *Id.*; see Sharon Fries-Britt & Bridget Turner, *Uneven Stories: Successful Black Collegians at a Black and a White Campus*, 25 Rev. Higher Educ. 315, 322 (2002); see also Shelly Taylor et al., *Categorical and Contextual Bases of Person Memory and Stereotyping*, 36 J. Personality & Soc. Psychol. 778, 791 (1978).

Behavior toward members of other races, whether positive or negative, flows from both explicit and implicit racial attitudes.³⁰ Over the past several decades, the United States has seen a “dramatic decrease” in explicit bias in the form of “overtly hostile feelings or overtly derogatory thoughts about people of color.”³¹ Despite this laudable development, research overwhelmingly indicates that subtler forms of prejudice persist. These implicit biases may produce discriminatory behavior, and they can disrupt cognitive function for members of both the majority and minority. Proactive efforts to increase campus diversity can significantly reduce implicit bias and its detrimental effects.

The most prominent test social scientists use to measure the magnitude of unconscious stereotyping is the Implicit Association Test (IAT). The IAT measures the time it takes to pair a given subject, such as a person’s face in the case of a race-focused test, with an evaluative concept, such as “awful” or “joyful”.³² The test maps reaction time in milliseconds, thus measuring an automatic associative process that is likely beyond conscious control or

³⁰ See Louis A. Penner et al., *Aversive Racism and Medical Interactions with Black Patients: A Field Study*, 46 J. Experimental Soc. Psychol. 436, 437 (2010); Anthony G. Greenwald et al., *Understanding and Using the Implicit Association Test: III. Meta-analysis of Predictive Validity*, 97 J. Personality & Soc. Psychol. 17, 18 (2009).

³¹ Faye Crosby, *Affirmative Action is Dead; Long Live Affirmative Action* 202 (2004).

³² See Adam R. Pearson et al., *The Nature of Contemporary Prejudice: Insights from Aversive Racism*, 10 Soc. & Personality Psychol. Compass 3, 6 (2009).

awareness.³³ Since this test was devised in 1998, it has been used in over 200 studies, and over 5 million individual study sessions have been completed.³⁴ The collective data made available by these studies have enabled social scientists to verify that the IAT is a valid predictor of social behavior and judgment.³⁵

The results of IAT studies show that most test takers hold implicit preferences for White individuals relative to Black individuals.³⁶ These results are by no means exclusive to Whites. Asian Americans, Latinos, and Native Americans exhibit similar automatic responses favoring Whites over Blacks.³⁷ Indeed, even many Blacks display the same reactions, with roughly half favoring Whites while the remaining half shows pro-Black implicit bias.³⁸

³³ See *id.*; Greenwald et al., *supra* note 30, at 22.

³⁴ Alexander R. Green et al., *Implicit Bias Among Physicians and its Prediction of Thrombolysis Decisions for Black and White Patients*, 22 J. Gen. Internal Med. 1231, 1231-32 (2007).

³⁵ See Greenwald et al., *supra* note 30, at 32; Allen R. McConnell & Jill M. Liebold, *Relations Among the Implicit Association Test, Discriminatory Behavior, and Explicit Measures of Racial Attitudes*, 37 J. Experimental Soc. Psychol. 435, 440 (2001).

³⁶ See Janice A. Sabin et al., *Physician Implicit Attitudes and Stereotypes About Race and Quality of Medical Care*, 46 Med. Care 678, 682 (2008).

³⁷ See Brian A. Nosek et al., *Pervasiveness and Correlates of Implicit Attitudes and Stereotypes*, 18 Euro. Rev. Soc. Psychol. 38, 55 (2007).

³⁸ Anthony G. Greenwald & Linda H. Kreiger, *Implicit Bias: Scientific Foundations*, 94 Cal. L. Rev. 945, 956 (2006); see also Nosek et al., *supra* note 37, at 55.

A growing consensus has emerged as to the basic cognitive processes that underlie implicit bias as it relates to such social assessments. In addition to making explicit judgments about the surrounding world, we categorize knowledge actively on an implicit level.³⁹ This is cognitively beneficial because it enables us to process knowledge and make judgments efficiently.⁴⁰ A natural by-product of this cognitive process, however, is the formation of stereotypes and biases based on categories ranging from age to weight.⁴¹ These assessments form independent of conscious attitudes, beliefs, and perceptions.⁴²

When we process information relating to race or ethnic status, such social categorization activates more positive feelings about members of the same racial group (“ingroup”) and more negative feelings and stereotypes about outgroup members.⁴³ Certainly, some individuals’ implicit racial attitudes are consistent with their explicit attitudes about race, either positive or negative.⁴⁴ Nonetheless, there are many who “sympathize with victims of past injustice, support principles of racial equality, and genuinely regard themselves as non-prejudiced, but at the same time possess conflicting, often non-conscious, nega-

³⁹ See Irene V. Blair, *The Malleability of Automatic Stereotypes and Prejudice*, 6 *Personality & Soc. Psychol. Rev.* 242, 242 (2002).

⁴⁰ See *id.*

⁴¹ See, e.g., Nosek et al., *supra* note 37, at 65, 70.

⁴² See Green et al., *supra* note 34, at 1236; see also Pearson et al., *supra* note 32, at 6.

⁴³ Pearson et al., *supra* note 32, at 5.

⁴⁴ See Penner et al., *supra* note 30, at 441.

tive feelings and beliefs about Blacks that are rooted in basic psychological processes.”⁴⁵

Implicit bias can have detrimental practical effects on attitudes. Individuals with high levels of implicit bias are often uncomfortable around and unfriendly toward Blacks.⁴⁶ Furthermore, implicit prejudices lead to the formation of negative and stereotypical impressions of minorities⁴⁷ and can engender tense interactions between individuals of different races.⁴⁸

Implicit bias also leads to concrete discriminatory behaviors, which can extend long past college.⁴⁹ For example, a recent study tested whether racial bias affected physicians’ treatment of patients with symptoms of a myocardial infarction.⁵⁰ The study revealed that physicians higher in implicit bias were clearly less likely to recommend appropriate treatment for minority patients.⁵¹

Whereas traditional forms of racial prejudice can produce “a direct and overt pattern of discrimination,” implicit bias often generates inconsistent effects, depending upon whether an individual mani-

⁴⁵ Pearson et al., *supra* note 32, at 5.

⁴⁶ See McConnell & Liebold, *supra* note 35, at 440-41.

⁴⁷ See John F. Dovidio et al., *Implicit and Explicit Prejudice and Interracial Interaction*, 82 J. Personality & Soc. Psychol. 62, 66-67 (2002); see also Arnd Florack et al., *When Do Associations Matter? The Use of Automatic Associations Toward Ethnic Groups in Person Judgments*, 37 J. Experimental Soc. Psychol. 518, 518, 523 (2001).

⁴⁸ Penner et al., *supra* note 30, at 441.

⁴⁹ Greenwald & Kreiger, *supra* note 37, at 961.

⁵⁰ Green et al., *supra* note 34, at 1237.

⁵¹ *Id.*

festes implicitly felt negative attitudes or explicitly held egalitarian beliefs.⁵² Typically, where “right and wrong are clearly defined,” discrimination is minimal.⁵³ By contrast, where “the guidelines for appropriate behavior are unclear, the basis for social judgment is vague, or when one’s actions can be justified or rationalized on the basis of some factor other than race,” discriminatory behavior may be present.⁵⁴

In a seminal study of this phenomenon, White college students were asked to provide hiring recommendations for selective campus positions. “[W]hen the candidates’ credentials clearly qualified or disqualified them for the position,” no discrimination occurred.⁵⁵ But “when candidates’ qualifications for the position were less obvious . . . White participants recommended the Black candidate significantly less often than the White candidate with exactly the same credentials.”⁵⁶ Social scientists have observed similar behavioral effects in various circumstances.⁵⁷

Implicit bias is also associated with interference of cognitive function. When faced with interracial interaction, explicitly well-intentioned individuals often exert significant mental effort “in order to combat the expression of stereotypes and negative atti-

⁵² Pearson et al., *supra* note 32, at 7.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.* at 9-10; see Samuel L. Gaertner & John F. Dovidio, *Reducing Intergroup Bias: The Common Ingroup Identity Model* (2000).

⁵⁶ Pearson et al., *supra* note 32, at 10.

⁵⁷ See, e.g., Donald A. Saucier et al., *Differences in Helping Whites and Blacks: A Meta-Analysis*, 9 *Personality & Soc. Psychol. Rev.* 2 (2005); Dovidio et al., *supra* note 47, at 66-67.

tudes that are often activated automatically and unintentionally.”⁵⁸

The effort to manage negative thoughts inhibits mental capacity by occupying the brain’s executive function.⁵⁹ An examination of the neurological activity generated by implicit bias suggests further that this phenomenon depletes cognitive resources relating to attention and control.⁶⁰ Although implicit bias admittedly affects members of majority *and* minority groups and its effects vary depending upon an individual’s level of bias, the psychological impairment is more pronounced among members of majority groups.⁶¹

Exposure to diversity can reduce implicit racial bias, along with the discriminatory behavior and cognitive impairment it causes.⁶² Although “[p]eople are remarkably adept at dividing up the world into *us* and *them*,”⁶³ individuals are not rigidly predisposed to draw these lines based on race. The lines are malleable: “by changing the basis of categorization from race to an alternative, inclusive dimension, one can

⁵⁸ Jennifer A. Richeson et al., *African Americans’ Implicit Racial Attitudes and the Depletion of Executive Function After Interracial Interactions*, 23 Soc. Cognition 336, 337 (2005).

⁵⁹ *Id.* at 337-38.

⁶⁰ Jennifer A. Richeson et al., *An fMRI Investigation of the Impact of Interracial Contact on Executive Function*, 6 Nature Neurosci. 1323, 1326 (2003).

⁶¹ Richeson et al., *supra* note 58, at 338-40, 349.

⁶² Jay J. Van Bavel & William A. Cunningham, *Self-Categorization with a Novel Mixed-Race Group Moderates Automatic Social and Racial Biases*, 35 Personality & Soc. Psychol. Bulletin 321, 322 (2009).

⁶³ *Id.*

alter who ‘we’ is and who ‘they’ are,” in a way that undermines the mental processes that engender bias.⁶⁴

A diverse campus provides an environment in which group membership is unrelated to racial categories. For example, students of all races at the University of Texas might feel a closer affiliation with UT students of another race than, say, a student of the same race at the University of Oklahoma. This shared affiliation can help shift automatic evaluations away from implicit racial biases and toward the inclusive attitudes associated with the college ingroup.⁶⁵

A recent case study demonstrated the strength of ingroup affiliation by measuring students’ abilities to recognize the faces of peers.⁶⁶ When the faces were grouped simply by race, participants had superior recall for faces of those in their own race group.⁶⁷ However, when the faces were grouped by university, students had superior recall for faces of those in their university group *and race had no effect*.⁶⁸ Expanding the ingroup to include members of different races

⁶⁴ Pearson et al., *supra* note 32, at 14.

⁶⁵ Van Bavel & Cunningham, *supra* note 62, at 333.

⁶⁶ Eric Hehman et al., *Where the Division Lies: Common Ingroup Identity Moderates the Cross-Race Facial-Recognition Effect*, 46 J. Experimental Soc. Psychol. 445, 447 (2010).

⁶⁷ *Id.*; see also Daniel B. Wright et al., *Inter-racial Contact and the Own-race Bias for Face Recognition in South Africa and England*, 17 Applied Cognition Psychol. 365, 371 (2003).

⁶⁸ Hehman et al., *supra* note 66, at 447.

thus diminished automatic social categorization based on race.⁶⁹

Forming personal connections with members of an outgroup may reduce implicit bias even more.⁷⁰ Studies show that individuals who have dated a member of another race or whose children have married a member of another race may replace negative implicit bias with favorable implicit attitudes.⁷¹ Furthermore, prolonged contact between members of different racial groups frequently reduces implicit negative attitudes and stereotyping.⁷² As these and other studies show, the creation of a more inclusive campus reduces both the likelihood and effects of implicit bias.⁷³

Underrepresentation of minority students leads to well-documented academic impediments for all students. Colleges and universities thus have a compelling interest in increasing campus diversity that leads to corresponding academic benefits described below.

⁶⁹ See *id.* at 448; see also Van Bavel & Cunningham, *supra* note 62, at 333.

⁷⁰ Andreas Olsson et al., *The Role of Social Groups in the Persistence of Learned Fear*, 309 Sci. 785, 785 (2005).

⁷¹ See *id.*; Greenwald & Kreiger, *supra* note 38, at 964-65.

⁷² See Christopher L. Aberson & Sarah C. Haag, *Contact, Perspective Taking, and Anxiety as Predictors of Stereotype Endorsement, Explicit Attitudes, and Implicit Attitudes*, 10 Group Processes & Intergroup Relations 179, 195 (2007).

⁷³ See Thomas F. Pettigrew & Linda R. Tropp, *A Meta-Analytic Test of Intergroup Contact Theory*, 90 J. Personality & Soc. Psychol. 751, 766-67 (2006); David W. Johnson & Roger T. Johnson, *The Three Cs of Reducing Prejudice and Discrimination*, in *Reducing Prejudice and Discrimination* 239, 247 (Stuart Oskamp ed., 2000).

II. THE CURATIVE BENEFITS OF DIVERSITY IN HIGHER EDUCATION REQUIRE A CRITICAL MASS OF STUDENTS FROM DIFFERENT BACKGROUNDS

1. Students typically enter college at a “time[] when a sense of personal and social identity is formed.”⁷⁴ They “begin to think for themselves . . . and take ownership of their ideas,” and they “possess the developmental maturity to gain a greater understanding of themselves and how they fit into the world around them.”⁷⁵ For these reasons, college students of all races and backgrounds “are ideally situated to benefit from racial diversity.”⁷⁶

To achieve the benefits of diversity, however, colleges and universities must enroll a critical mass of minority students. Increased diversity is a well-established method for removing psychological obstacles and improving minority student development.⁷⁷ “Diversity enables students to perceive differences both within groups and between groups.”⁷⁸ “[W]hen the minority group is not too small relative to the majority group,” students who interact with diverse

⁷⁴ Patricia Gurin et al., *Diversity and Higher Education: Theory and Impact on Educational Outcomes*, 72 Harv. Educ. Rev. 330, 334 (2002).

⁷⁵ Uma M. Jayakumar, *Can Higher Education Meet the Needs of an Increasingly Diverse and Global Society? Campus Diversity and Cross-Cultural Workforce Competencies*, 78 Harv. Educ. Rev. 615, 621 (2008).

⁷⁶ *Id.*; see Ernest T. Pascarella & Patrick T. Terenzini, *How College Affects Students: A Third Decade of Research* 60-61 (2d ed. 2005).

⁷⁷ See, e.g., Rosenthal & Crisp, *supra* note 5, at 502-03, 509.

⁷⁸ Gurin et al., *supra* note 74, at 360.

peers develop more sensitive, complex views of minority individuals.⁷⁹ Such interaction leads to a reduction in negative treatment toward minorities as well as an increase in openness for members of the majority.⁸⁰

Nonminority students are equally primed to reap the benefits of diversity. Social scientists widely agree that “students’ interpersonal interaction with peers is one of the most powerful educational resources in higher education.”⁸¹ Both formal, classroom-based interaction and informal, everyday interaction contribute to achieving various academic benefits, in particular where interactions are positive.⁸² Even small increases in diversity may have significant effects on certain aspects of the educational experience, such as promoting gains in creativity and civic engagement for all students.⁸³

⁷⁹ *Id.* at 360-61.

⁸⁰ *See id.*

⁸¹ Mitchell J. Chang et al., *Cross-Racial Interaction Among Undergraduates: Some Consequences, Causes, and Patterns*, 45 *Research Higher Educ.* 529, 530 (2004).

⁸² *See* Nicholas A. Bowman, *College Diversity Experiences and Cognitive Development: A Meta-Analysis*, 80 *Rev. Educ. Research* 4, 6 (2010); Gary R. Pike et al., *Evaluating the Rationale for Affirmative Action in College Admissions: Direct and Indirect Relationships Between Campus Diversity and Gains in Understanding Diverse Groups*, 48 *J. College Student Dev.* 166, 167 (2007).

⁸³ *See* Nicholas A. Bowman, *Promoting Participation in a Diverse Democracy: A Meta-Analysis of College Diversity Experiences and Civic Engagement*, 81 *Rev. Educ. Research* 29, 48 (2011).

In order for these “crucial encounters” to occur, a sufficiently diverse body of students must be present.⁸⁴ Social science evidence indicates that student-body diversity leads to increased interracial interaction, thus firmly establishing the “relationship between numbers and achieving the benefits to be derived from a diverse student body.” *Bakke*, 438 U.S. at 323.⁸⁵

Empirical evidence also shows that increased contact fosters greater positive interactions over time, which serves to ensure that the benefits of diversity accrue.⁸⁶ Institutional efforts to improve racial climate on campus by exposing students to content about race also provide a critical resource for maximizing the potential of interracial interaction.⁸⁷ Nonetheless, because meaningful interaction “cannot be replaced by teaching about diversity abstractly in courses or workshops,”⁸⁸ colleges must be permitted

⁸⁴ Chang et al., *supra* note 81, at 545.

⁸⁵ See, e.g., Pike et al., *supra* note 82, at 177; Mark E. Engberg, *Educating the Workforce for the 21st Century: A Cross-Disciplinary Analysis of the Impact of the Undergraduate Experience on Students’ Development of a Pluralistic Orientation*, 48 Research Higher Educ. 283, 286-87 (2007).

⁸⁶ See Thomas F. Pettigrew & Linda R. Tropp, *How Does Intergroup Contact Reduce Prejudice? Meta-Analytic Tests of Three Mediators*, 38 Euro. J. Soc. Psychol. 922, 922, 929 (2008); Aberson & Haag, *supra* note 72, at 195.

⁸⁷ Bowman, *supra* note 82, at 6, 20; Nida Denson & Mitchell J. Chang, *Racial Diversity Matters: The Impact of Diversity-Related Student Engagement and Institutional Context*, 46 Am. Educ. Research J. 322, 327 (2009).

⁸⁸ Bowman, *supra* note 83, at 49; see Bowman, *supra* note 82, at 21-22.

to attain the critical mass of students necessary to foster diverse interactions.⁸⁹

A flexible definition of critical mass best serves the university's interest. Although colleges have compelling concerns about diversity levels that are too low, it is unreasonable and speculative to claim that colleges will purposely engage in excessive affirmative admissions in contravention of the interests of the students and public they serve.

It is not appropriate to reduce critical mass to a simple target number. The optimal level of student body diversity depends upon numerous considerations and varies by institution. Colleges and universities should be given breathing space to determine and to tailor, based on their relevant expertise, the appropriate critical mass of students for their campuses in order to guard against the dangers of underrepresentation and to secure the many benefits that flow from diversity.

2. In order to maximize the educational benefits of diversity, colleges must enroll a heterogeneous student body in which racial minority groups are independently and sufficiently represented. Petitioner nevertheless conflates independent racial groups no fewer than 13 times in her opening brief. See Pet'r Br. 3-5, 9-10, 35, 39-40.

Petitioner's approach wrongly assumes that certain "non-White" groups are interchangeable for purposes of diversity. This assumption ignores a central aspect of the government's interest in diversity: "a

⁸⁹ See Jayakumar, *supra* note 75, at 632, 637; see also Jiali Luo & David Jamieson-Drake, *A Retrospective Assessment of the Educational Benefits of Interaction Across Racial Boundaries*, 50 J. College Student Dev. 67, 80-81 (2009).

diverse student population creates a richer learning environment because students learn most from those who have very different life experiences from theirs”—even *among* distinct minority groups.⁹⁰

Social scientists carefully employ methodologies that disaggregate students by race, recognizing that “[d]ifferences in peoples’ experiences require closer focus on racial or ethnic groups.”⁹¹ Numerous studies have contrasted the educational outcomes and experiences of White, Black, Hispanic, and Asian American students.⁹² Researchers have found that certain groups experience more discrimination in college than do their peers⁹³ and that students of different races perceive the supportiveness of campus environments in different ways.⁹⁴ It follows that criti-

⁹⁰ Mitchell J. Chang, *Does Racial Diversity Matter?: The Educational Impact of a Racially Diverse Undergraduate Population*, 40 J. College Student Dev. 377, 383, 385 (1999).

⁹¹ Frances K. Stage, *Moving from Probabilities to Possibilities: Tasks for Quantitative Criticalists*, 133 New Dir. Institutional Research 95, 99 (2007).

⁹² See, e.g., Sigal Alon & Marta Tienda, *Assessing the “Mismatch” Hypothesis: Differences in College Graduation Rates by Institutional Selectivity*, 78 Sociol. Educ. 294, 299 (2005); Mark E. Engberg & Sylvia Hurtado, *Developing Pluralistic Skills and Dispositions in College: Examining Racial/Ethnic Group Differences*, 82 J. Higher Educ. 416, 417, 422 (2011).

⁹³ Julie R. Ancis et al., *Student Perceptions of Campus Cultural Climate by Race*, 78 J. Counseling & Dev. 180, 184 (2000); see Yolanda Suarez-Balcazar et al., *Experiences of Differential Treatment Among College Students of Color*, 74 J. Higher Educ. 428, 438 (2003).

⁹⁴ Thomas F. Nelson Laird & Amanda Suniti Niskodé-Dossett, *How Gender and Race Moderate the Effect of Interactions Across Difference on Student Perceptions of the Campus Environment*, 33 Rev. Higher Educ. 333, 347 (2010).

cal mass is a variable concept among different racial groups. Indeed, the University of Texas has recognized as much by tailoring a critical mass for each group to the university's unique educational environment.

Independent and sufficient representation of each group broadens the range of perspectives on campus and in the classroom.⁹⁵ The differing viewpoints offered by students of different races have positive effects in the classroom setting, and sufficient representation of each set of views is necessary to realize the full potential of diversity.⁹⁶

Conversely, a lack of independent and sufficient representation of each group can negatively affect the campus environment and individual students by increasing stereotyping and inhibiting academic performance.⁹⁷ Whereas increasing the representation of the individual's group can ameliorate those outcomes, the presence of minority students of a *different* race does nothing to temper these effects.⁹⁸

⁹⁵ Mitchell J. Chang, *Racial Differences in Viewpoints About Contemporary Issues Among Entering College Students: Fact or Fiction?*, 40 NASPA J. 55, 67 (2003).

⁹⁶ See *id.* at 66; see also Richard N. Pitt & Josh Packard, *Activating Diversity: The Impact of Student Race on Contributions to Course Discussions*, 53 Sociol. Q. 295, 312-13 (2012).

⁹⁷ See Milem et al., *supra* note 27, at 6; see also Gurin et al., *supra* note 74, at 360.

⁹⁸ See *supra* Part I.A.2; see also Sekaquaptewa et al., *supra* note 3, at 321.

III. ADMISSIONS POLICIES THAT INCREASE CAMPUS DIVERSITY CONTINUE TO ADVANCE THE GOVERNMENT'S INTERESTS

A. Increased Racial Diversity Improves Intellectual and Academic Performance for Minority and Nonminority Students

1. Social science literature at the time of the *Grutter* decision demonstrated “that student body diversity promotes learning outcomes.” *Grutter*, 539 U.S. at 330. Since *Grutter*, social scientists have rigorously put these precepts to the test on campus and in the classroom, and the evidence supporting the academic benefits of college diversity is stronger than ever.⁹⁹

Research clearly demonstrates that exposure to diversity enhances critical thinking and problem-solving ability.¹⁰⁰ Campus diversity also improves several other attributes related to academic success, including student satisfaction and motivation,¹⁰¹ general knowledge,¹⁰² and intellectual self-confidence.¹⁰³

⁹⁹ See Bowman, *supra* note 82, at 22-23.

¹⁰⁰ See Nida Denson & Shirley Zhang, *The Impact of Student Experiences with Diversity on Developing Graduate Attributes*, 35 *Studies Higher Educ.* 529, 540 (2010).

¹⁰¹ Biren A. Nagda et al., *Learning about Difference, Learning with Others, Learning to Transgress*, 60 *J. Soc. Issues* 195, 208 (2004).

¹⁰² See Denson & Chang, *supra* note 87, at 325; see also Luo & Jamieson-Drake, *supra* note 89, at 70.

¹⁰³ Thomas F. Nelson Laird, *College Students' Experiences with Diversity and Their Effects on Academic Self-Confidence, Social Agency, and Disposition toward Critical Thinking*, 46

Moreover, these benefits are not exclusive to students who engage actively in diversity programs. Students on diverse and diversity-promoting campuses share in these benefits even where their own level of engagement in diversity measures is less than that of their peers.¹⁰⁴ In other words, *everyone* benefits.

These academic benefits flow largely from interaction with the “broader collection of thoughts, ideas, and opinions held by” more diverse student bodies.¹⁰⁵ According to recent empirical research, individuals differ to a great degree, by race, on experiences, values, and viewpoints.¹⁰⁶ “Not only are their actual experiences different, but their perceptions of those experiences differ as well.”¹⁰⁷ Accordingly, contributions to formal and informal discussion on many issues “are significantly correlated with student race.”¹⁰⁸

Research Higher Educ. 365, 382-83 (2005); see Anthony L. Antonio, *The Influence of Friendship Groups on Intellectual Self-Confidence and Educational Aspirations in College*, 75 J. Higher Educ. 446, 455 (2004).

¹⁰⁴ Denson & Chang, *supra* note 87, at 343; Mitchell J. Chang et al., *The Educational Benefits of Sustaining Cross-Racial Interaction Among Undergraduates*, 77 J. Higher Educ. 430, 447 (2006).

¹⁰⁵ Milem et al., *supra* note 27, at 7.

¹⁰⁶ Pitt & Packard, *supra* note 96, at 299, 312-13; see, e.g., Marino A. Bruce & Michael C. Thornton, *It's My World? Exploring Black and White Perceptions of Personal Control*, 45 Sociol. Q. 597, 607-08 (2004).

¹⁰⁷ Pitt & Packard, *supra* note 96, at 299.

¹⁰⁸ *Id.* at 313; Shouping Hu & George D. Kuh, *Diversity Experiences and College Student Learning and Personal Development*, 44 J. College Student Dev. 320, 321, 331 (2003).

Diverse perspectives create “an atmosphere of speculation, experiment and creation, [which is] essential to the quality of higher education.” *Bakke*, 438 U.S. at 312 (quotation omitted). Comparing homogeneous and heterogeneous discussion groups, one study showed that the presence of minority individuals stimulates an increase in the complexity with which students—especially members of the majority—approach a given issue.¹⁰⁹ Members of homogeneous groups in this study exhibited no such cognitive stimulation.¹¹⁰

As this research shows, “the mere inclusion of different perspectives, and especially divergent ones, in *any* course of discussion leads to the kind of learning outcomes (e.g., critical thinking, perspective-taking) that educators, regardless of field, are interested in.”¹¹¹ Furthermore, while informal interactions produce important gains, “the formal interactions that take place in a course discussion offer the most potential for educators to extract the benefits of structural diversity on college campuses.”¹¹² Thus, the University of Texas properly seeks to ensure these educational benefits for all students by achieving maximal diversity in every classroom as well as at the university-wide level.

¹⁰⁹ Anthony L. Antonio et al., *Effects of Racial Diversity on Complex Thinking in College Students*, 15 Psychol. Sci. 507, 509 (2004).

¹¹⁰ See *id.*; see also Samuel R. Sommers et al., *Cognitive Effects of Racial Diversity: White Individuals’ Information Processing in Heterogeneous Groups*, 44 J. Experimental Soc. Psychol. 1129, 1134-35 (2008).

¹¹¹ Pitt & Packard, *supra* note 96, at 298.

¹¹² *Id.* at 315.

Social scientists have gone beyond simply documenting enhancements to critical thinking skills, to study how such academic benefits result from increased diversity. “[W]hen a student is exposed to thoughts and ideas different from his or her own, it tends to produce cognitive disequilibrium, dissonance, or incongruity.”¹¹³ Resetting cognitive equilibrium requires complex processing and gathering of data, as well as consideration of revised viewpoints.¹¹⁴ This process often causes students to develop a preference for “effortful” thinking and to seek nuanced explanations for human behavior.¹¹⁵

Interactions with diverse peers inspire deeper information processing “not just because of what [those peers] are saying but because of how they are categorized and because that categorization presents them as inconsistent with the norm.”¹¹⁶ In other words, members of different races often confront each other with surprising attributes or opinions that challenge stereotypes.¹¹⁷ Processing such “surprising category combinations” requires more generative or creative thinking than simply relying on preconceived stereotypes.¹¹⁸ Over time, individuals adapt to

¹¹³ Chang et al., *supra* note 81, at 545.

¹¹⁴ *See id.*

¹¹⁵ Bowman, *supra* note 82, at 6; see Sylvia Hurtado, *The Next Generation of Diversity and Intergroup Relations Research*, 61 J. Soc. Issues 595, 598-599 (2005).

¹¹⁶ Richard J. Crisp & Rhiannon N. Turner, *Cognitive Adaptation to the Experience of Social and Cultural Diversity*, 137 Psychol. Bulletin 242, 248 (2011).

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 249, 250, 259.

this generative process, which leads to enhanced cognitive flexibility and intellectual self-confidence.¹¹⁹

2. Attending selective universities generally prepares minority students, like all students, for success. Nonetheless, opponents of race-conscious admissions policies, including several *amici* supporting petitioner,¹²⁰ continue to advance a debunked “academic mismatch” hypothesis. According to this theory, “lower average graduation rates of ‘affirmative admits’ result from a mismatch between their academic preparation . . . and the scholastic requirements of the schools that admitted them by taking race into account.”¹²¹ Numerous empirical studies have effectively discredited the validity of the “academic mismatch” hypothesis.

Over a decade ago, two seminal studies demonstrated that graduation rates of all students, including minority students, rise as the selectivity of the institution increases.¹²² More recently, rigorous research has reaffirmed that “the mismatch hypothesis . . . is empirically groundless for black and His-

¹¹⁹ *Id.* at 244, 257-58, 261.

¹²⁰ *See, e.g.*, Br. of Richard Sander & Stuart Taylor, Jr. at 2-13.

¹²¹ Alon & Tienda, *supra* note 92, at 295; *see* Terrance J. Pell, *Racial Preferences and Formal Equality*, 34 J. Soc. Phil. 309, 310 (2003).

¹²² *See* William G. Bowen & Derek Bok, *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions* 53, 59 (1998); *see also* Thomas J. Kane, *Misconceptions in the Debate Over Affirmative Action in College Admissions*, in *Chilling Admissions: The Affirmative Crisis and the Search for Alternatives* 17, 17-18 (Gary Orfield & Edward Miller eds., 1998).

panic (as well as for white and Asian) students.”¹²³ A recent national study found that “[i]n no case did . . . having an SAT score below the institutional average undermine[] the performance or well being of individual minority students. If anything minority students who benefited from affirmative action earned higher grades and left school at lower rates than others.”¹²⁴

In fact, race-conscious admissions programs narrow retention rate gaps between different student groups and “broaden educational opportunities for minority students and enable minority students to realize their full potential.”¹²⁵ Research shows that minority students who attend selective colleges show an increase in “the completion of advanced degrees, earnings, and overall satisfaction with college experiences.”¹²⁶

Careful studies of student performance in law school and specific undergraduate majors further illustrate that lower rates of academic success for minorities are not the product of race-conscious admissions policies.¹²⁷ Studies supporting the academic

¹²³ Alon & Tienda, *supra* note 92, at 309.

¹²⁴ Mary J. Fischer & Douglas S. Massey, *The Effects of Affirmative Action in Higher Education*, 36 Soc. Sci. Research 531, 544 (2007).

¹²⁵ Alon & Tienda, *supra* note 92, at 309.

¹²⁶ *Id.* at 296.

¹²⁷ See Ian Ayres & Richard Brooks, *Does Affirmative Action Reduce the Number of Black Lawyers?*, 57 Stan. L. Rev. 1807, 1809 (2005); see also Mitchell J. Chang et al., *Considering the Impact of Racial Stigmas and Science Identity: Persistence Among Biomedical and Behavioral Science Aspirants*, 82 J. Higher Educ. 564, 586 (2011).

mismatch hypothesis suffer from tunnel vision, treating affirmative admits' entering credentials as the sole determinant of school choice, academic success, and, in the case of law school, likelihood of passing the bar exam.¹²⁸

As a result of this singular focus on entering credentials, the academic mismatch hypothesis ignores other considerations, such as legacy preferences and financial considerations, that factor into school choice. Furthermore, the analysis assumes a direct relationship between academic credentials and success that is not supported by the evidence.¹²⁹ Evaluating the same data without these flawed assumptions results in an entirely different outcome: "instead of increasing the number of black attorneys by 7.9%, the elimination of affirmative action would decrease the number of black lawyers by 12.7%."¹³⁰ Properly viewed, the evidence indicates that the best way to increase the number of successful black law students is to expand diversity admissions programs.¹³¹

The academic mismatch hypothesis also ignores alternative explanations for minority underperformance in certain academic settings, such as stereotype threat and uncertainty about belonging.¹³² Phenomena such as stereotype threat may explain not only minority students' lower retention rates in

¹²⁸ Ayres & Brooks, *supra* note 127, at 1813-14.

¹²⁹ *Id.* at 1813.

¹³⁰ *Id.* at 1814.

¹³¹ *Id.* at 1809.

¹³² *Id.* at 1838-39; *see supra* Part I.A.

college and graduate school generally but also in specific academic majors.¹³³

A large and growing body of social science research supports the proposition that increased campus diversity improves academic outcomes for all types of students. Increased student body diversity contributes to specific, meaningful gains in academic skills for both majority and minority students. For minorities, diversity admissions programs further improve the overall likelihood that they will achieve academic success.

B. Diversity in Higher Education Improves Civic Engagement and Professional Competency

1. In addition to obvious academic pursuits, colleges and universities also prepare students to be effective economic and political leaders on local, national, and global levels.¹³⁴ Campus diversity has been shown to help schools achieve this practical aspect of their mission.¹³⁵ Effective leadership begins with prejudice reduction.

¹³³ Chang et al., *supra* note 127, at 586.

¹³⁴ Daria Witt et al., *Introduction*, in *Compelling Interest: Examining the Evidence on Racial Dynamics in Colleges and Universities* 1, 10-11 (Mitchell J. Chang et al. eds., 2003); see APA, *Dual Pathways to a Better America: Preventing Discrimination and Promoting Diversity* (Final Report), at 70, 72 (Jan. 2012), available at <http://www.apa.org/pubs/info/reports/promoting-diversity.aspx>.

¹³⁵ See Sylvia Hurtado, *Linking Diversity with the Educational and Civic Missions of Higher Education*, 30 *Rev. Higher Educ.* 185, 186 (2007).

Some *amici* supporting petitioner suggest that campus diversity generally feeds discord and the reinforcement of stereotypes.¹³⁶ That contention is alarming for two reasons. First, the hefty weight of empirical evidence shows that campus diversity *reduces* racial discord. Second, the practical import of *amici*'s contention favors the reinstatement of academic segregation long since abandoned by this Court.

The “basic contention that intergroup contact typically diminishes intergroup prejudice” is “firmly established.”¹³⁷ Indeed, interactions with select members of a different racial group can improve attitudes toward the entire group and even toward members of entirely separate racial groups.¹³⁸ Prejudice reduction in this context results largely from diminished anxiety and enhanced exposure to diverse perspectives.¹³⁹

Prejudice reduction naturally correlates to a greater degree with positive intergroup interactions.¹⁴⁰ As relevant studies show, regular intergroup contact on campus over time leads to an increase in positive interactions.¹⁴¹ In cases of prolonged positive contact and intergroup friendship, members of sepa-

¹³⁶ See, e.g., Br. of Abigail Thernstrom et al. at 18, 23.

¹³⁷ Pettigrew & Tropp, *supra* note 86, at 922.

¹³⁸ Pettigrew & Tropp, *supra* note 73, at 766.

¹³⁹ Aberson & Haag, *supra* note 72, at 195; see Hermann Swart et al., *Affective Mediators of Intergroup Contact: A Three-Wave Longitudinal Study in South Africa*, 101 J. Personality & Soc. Psychol. 1221, 1222 (2011).

¹⁴⁰ Swart et al., *supra* note 139, at 1223.

¹⁴¹ See Aberson & Haag, *supra* note 72, at 195; Anthony L. Antonio, *Diversity and the Influence of Friendship Groups in College*, 25 Rev. Higher Educ. 63, 83 (2001).

rate groups develop more complex views of each other, which can lead to increases in empathetic ideas and attitudes.¹⁴² Moreover, coordinated institutional efforts to engage students in dialogue about diversity increase students' confidence in taking action to reduce societal prejudice.¹⁴³

2. Prejudice reduction is only the beginning of the impact diversity has on student preparation for contemporary political and economic life. A critical mass of diverse student groups promotes "the attitudes, knowledge, and skills that prepare college students for meaningful participation in a pluralistic and diverse democracy."¹⁴⁴ This stems from the development of a student's cultural competence and "pluralistic orientation: the ability to see multiple perspectives; the ability to work cooperatively with diverse people; the ability to discuss and negotiate controversial issues; openness to having one's views challenged; and tolerance of others with different beliefs."¹⁴⁵

Intergroup contact, which is possible only in diverse settings, generally improves cross-group interacting skills, motivates civic engagement, and promotes "greater openness to and understanding of

¹⁴² See Pettigrew & Tropp, *supra* note 86, at 923; see also Swart et al., *supra* note 139, at 1223.

¹⁴³ Nagda et al., *supra* note 101, at 200.

¹⁴⁴ Ximena Zúñiga et al., *Action-Oriented Democratic Outcomes: The Impact of Student Involvement with Campus Diversity*, 46 J. College Student Dev. 660, 661 (2005); see Bowman, *supra* note 83, at 31, 49.

¹⁴⁵ Engberg, *supra* note 85, at 285; see Engberg & Hurtado, *supra* note 92, at 436; Hu & Kuh, *supra* note 108, at 324-25, 330.

diverse people.”¹⁴⁶ In addition to documenting improved attitudes, research in this area demonstrates “consistent, positive effects of diversity experiences on behaviors and intentions” relating to civic engagement, such as time spent volunteering.¹⁴⁷

A study conducted over the course of four years at the University of Michigan evaluated the impact of diversity on democratic attributes in the student body at large as well as a subset of Michigan students enrolled in a class on diversity.¹⁴⁸ This study found that the novel experiences students have with diverse peers in college cause them to build a “sense of commonality” with those peers and to become “more motivated and better able to participate in a heterogeneous and complex society.”¹⁴⁹

Students who enrolled in the diversity curriculum exhibited even “greater motivation to take the perspective of others” and were “more interested in politics.”¹⁵⁰ As many studies have found, institutional efforts to promote cooperation and awareness greatly enhance students’ personal commitment “to promote inclusion and social justice in their communities.”¹⁵¹

3. The American workforce is rapidly becoming more diverse, and businesses operate on an increas-

¹⁴⁶ Pike et al., *supra* note 82, at 167.

¹⁴⁷ Bowman, *supra* note 83, at 31.

¹⁴⁸ Patricia Gurin et al., *The Benefits of Diversity in Education for Democratic Citizenship*, 60 J. Soc. Issues 17, 20-22 (2004).

¹⁴⁹ *Id.* at 19, 28; see Bowman, *supra* note 83, at 49.

¹⁵⁰ Gurin, *supra* note 148, at 24.

¹⁵¹ Zuñiga, *supra* note 144, at 676; see Gurin, *supra* note 148, at 32.

ingly global scale.¹⁵² For these reasons, “major American businesses have made clear that the skills needed in today’s increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas, and viewpoints.” *Grutter*, 539 U.S. at 330. In response to these demands, colleges and universities strive to produce “empowered, informed, and responsible student[s] capable of negotiating the inevitable differences in a diverse society.”¹⁵³

Campus diversity is a proven vehicle for preparing students for the diversity they will encounter in the modern workforce. Prior to enrolling in college, most students have limited experience with racial diversity, leaving them underprepared for the marketplace.¹⁵⁴ Because college presents a critical stage in moral and intellectual development, students are positioned to build the “cross-cultural workforce competencies” that are enhanced by diversity.¹⁵⁵

Cross-racial interaction during college correlates to enduring benefits.¹⁵⁶ Those interactions correspond to an increase in “honest, personal, and intellectual exchanges” with peers.¹⁵⁷ Furthermore, students exposed to diverse peers build enhanced leadership skills, such as the ability to negotiate conflict.¹⁵⁸

¹⁵² Engberg, *supra* note 85, at 285.

¹⁵³ *Id.*; see Jayakumar, *supra* note 75, at 617, 642.

¹⁵⁴ Jayakumar, *supra* note 75, at 642.

¹⁵⁵ *Id.* at 640.

¹⁵⁶ *Id.* at 639; see Luo & Jamieson-Drake, *supra* note 89, at 80-81.

¹⁵⁷ Engberg, *supra* note 85, at 309.

¹⁵⁸ Jayakumar, *supra* note 75, at 636-37.

Students unaccustomed to racial diversity especially benefit from such interactions.¹⁵⁹ Finally, the critical thinking and problem solving skills that research has documented in the classroom further prepare students for the marketplace.¹⁶⁰ Institutions that actively promote positive racial climates on campus are more likely to secure these benefits.¹⁶¹

Campus diversity also provides students with opportunities to experience working in diverse teams. Research demonstrates that “cognitively diverse societies, cities, and teams perform better than more homogeneous ones.”¹⁶² Furthermore, studies show that businesses benefit from diverse workforces, including seeing higher revenues.¹⁶³ This occurs in large part because diverse perspectives, which correlate with race, improve group predictive and problem-solving abilities.¹⁶⁴ Experience working in diverse teams also holds the potential to ease tensions sometimes seen in heterogeneous groups.¹⁶⁵

¹⁵⁹ Anthony L. Antonio, *The Role of Interracial Interaction in the Development of Leadership Skills and Cultural Knowledge and Understanding*, 42 Research Higher Educ. 593, 607 (2001).

¹⁶⁰ See *supra* Part II.A.

¹⁶¹ Nagda, *supra* note 101, at 209.

¹⁶² Scott E. Page, *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies* 299, 323 (2007).

¹⁶³ *Id.* at 325-26.

¹⁶⁴ *Id.* at 320-27; see also *supra* Part II.A.

¹⁶⁵ Page, *supra* note 162, at 326-28; see Pettigrew & Tropp, *supra* note 86, at 922.

“The ability to adapt to different perspectives” has become “an absolute necessity for success in an increasingly diverse and global workplace.”¹⁶⁶ Social science research shows “the compelling interest of diversity to promote a range of pluralistic abilities and dispositions that will undoubtedly help future graduates navigate a workforce and society characterized by increasing diversity and complexity.”¹⁶⁷

Colleges and universities are justified in taking steps necessary to prepare their students—all of them—to meet these challenges and achieve success.

CONCLUSION

The judgment of the Fifth Circuit should be affirmed.

Respectfully submitted,

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¹⁶⁶ Jayakumar, *supra* note 75, at 636.

¹⁶⁷ Engberg, *supra* note 85, at 312.