Book Reviews

Still Hazy After All These Years: The Data and Theory Behind "Mismatch"

MISMATCH: HOW AFFIRMATIVE ACTION HURTS STUDENTS IT'S INTENDED TO HELP, AND WHY UNIVERSITIES WON'T ADMIT IT. By Richard Sander & Stuart Taylor, Jr. New York, New York: Basic Books, 2012. 348 pages. $28.99.

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A decade ago Professor Richard Sander authored a controversial *Stanford Law Review* article marshaling empirical evidence to advance the argument that affirmative action at U.S. law schools harmed African Americans' performance and resulted in a net decrease in the number of black lawyers.[1] Lawyer and journalist Stuart Taylor favorably wrote about Sander's findings and thesis at the time,[2] and years later the book *Mismatch* is the result of their collaboration,[3] one which also includes U.S. Supreme Court amicus briefs criticizing affirmative action[4] in the recent cases of

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1. Richard H. Sander, *A Systemic Analysis of Affirmative Action in American Law Schools*, 57 STAN. L. REV. 367, 373–75 (2004).

2. Stuart Taylor Jr., *Opening Argument—Do Racial Preferences Reduce the Number of Black Lawyers*, NAT'L J. (Dec. 4, 2004), http://www.nationaljournal.com/magazine/opening-argument-do-racial-preferences-reduce-the-number-of-black-lawyers—20041204.

3. RICHARD SANDER & STUART TAYLOR, JR., MISMATCH: HOW AFFIRMATIVE ACTION HURTS STUDENTS IT'S INTENDED TO HELP, AND WHY UNIVERSITIES WON'T ADMIT IT (2012).

4. Brief Amici Curiae for Richard Sander and Stuart Taylor, Jr. in Support of Neither Party at 2, Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411 (2013) (No. 11-345) [hereinafter Brief for Sander & Taylor, *Fisher* Case]; *see also* Brief Amicus Curiae for Richard Sander in Support of Petitioner at 13–15, Schuette v. Coal. to Defend Affirmative Action, No. 12-682 (U.S. July 1, 2013) [hereinafter Brief for Sander & Taylor, *Schuette* Case] (Stuart Taylor, Jr. signing as counsel of record).

Fisher v. University of Texas at Austin[5] and *Schuette v. Coalition to Defend Affirmative Action*.[6]

We were assigned a word limit for our Review, and we understand that Professor Sander was provided an opportunity to reply,[7] so we have narrowed our Review to a few areas in Parts II and III of *Mismatch*, which are where many important data claims are found. We hope that Sander's response squarely addresses these areas and not other affirmative action topics that are important in their own right (e.g., mismatch in law school[8] and STEM—i.e., science, technology, engineering, and mathematics—fields, consideration of socioeconomic background in college admissions), but not substantively discussed herein. In this Review, we have focused our attention on Sander and Taylor's claims that purported mismatches between students and institutions give rise to lower graduation rates and wages, that Proposition 209 (Prop. 209) has resulted in "warming effects" that have increased the attractiveness of the University of California system to underrepresented minorities, and that affirmative action causes its beneficiaries to feel stigmatized.

Our comprehensive review will show that the authors of *Mismatch* cherry-pick the data to support a series of unwarranted claims, for the social science data overall (and particularly the best peer-reviewed works) do not support Sander and Taylor's assertions that affirmative action causes lower overall college graduation rates or earnings for African Americans and Latinos. Additionally, the review shows that totality of social science evidence does not support Sander and Taylor's dubious claim that Prop. 209 ushered in a "warming effect" that reduced stigma and led to African Americans and Latinos becoming more likely to accept admission offers from the University of California.

We believe our Review and the themes we have chosen to address are timely and of policy relevance, as confirmed in the Supreme Court's October 2013 oral argument in *Schuette*, where Sander and Taylor's

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5. 133 S. Ct. 2411 (2013).

6. 133 S. Ct. 1633 (2013), *granting cert. to* Coal. to Defend Affirmative Action v. Regents of Univ. of Mich., 701 F.3d 466 (6th Cir. 2012).

7. For context, we had not seen a draft of Sander's forthcoming reply at the time our substantive edits were completed and submitted to the *Texas Law Review*.

8. One of us analyzes recent law school mismatch research in William C. Kidder & Richard O. Lempert, *The Mismatch Myth in U.S. Higher Education: A Synthesis of the Empirical Evidence at the Law School and Undergraduate Levels*, *in* AFFIRMATIVE ACTION AND RACIAL EQUITY: CONSIDERING THE EVIDENCE IN FISHER TO FORGE THE PATH AHEAD (Uma M. Jayakumar & Liliana M. Garces eds., forthcoming 2014). Moreover, both of us separately coauthored earlier pieces responding to Sander's 2004 article on law school mismatch. *See infra* notes 36, 64; Kevin R. Johnson & Angela Onwuachi-Willig, *Cry Me a River: The Limits of "A Systemic Analysis of Affirmative Action in American Law Schools"*, 7 AFR.-AM. L. & POL'Y REP. 1, 4 (2005). In a couple of spots in this Review, we refer to Sander's law school mismatch claims to the extent there is an illuminating parallel on a technical point, but we do not delve into a substantive discussion of the law school mismatch literature.

mismatch hypothesis (and book) and the University of California's post-affirmative action college graduation rates were topics of discussion between the Justices and counsel.[9] We end by highlighting a revealing "mismatch" between Sander and Taylor's extensive focus on underrepresented minorities and affirmative action versus their inattention to the implications of mismatch for white students such as plaintiff Abigail Fisher. Under Sander and Taylor's worldview—highly flawed and contradictory as it is—Ms. Fisher's academic credentials indicate strong concerns about "academic mismatch" similar to many of the admitted students of color at the University of Texas at Austin for whom Sander and Taylor claim that mismatch is a serious problem.

I. Graduation Rates and Earnings: Lack of Depth, Lack of Breadth

In Chapter 6 ("The Breadth of Mismatch") and Chapter 9 ("Mismatch and the Swelling Ranks of Graduates"), and at several points throughout their book, Sander and Taylor argue that the purported mismatches caused by affirmative action bring about lower graduation rates and wages for African American and Latino beneficiaries of the policy. As we reveal in this Part, however, such claims are spurious, as the supporting evidence used by Sander and Taylor is either outdated or cherry-picked and dependent upon incomplete information and analyses. Even assuming that Sander and Taylor's evidence is reliable (and it is not), the overwhelming weight of social-science evidence bears against their contentions about the impact of mismatch on underrepresented students' graduation rates and wages.[10]

A. Introductory Points About Graduation Rates

Sander and Taylor make unsupported contentions that the findings in Bowen and Bok's *Shape of the River* are wrong,[11] and that "[s]tudies that

9. Transcript of Oral Argument at 11, 13, 16, 50–51, Schuette v. Coal. to Defend Affirmative Action, No. 12-682 (U.S. argued Oct. 15, 2013).

10. *See infra* Table 2.

11. SANDER & TAYLOR, *supra* note 3, at 106–07. Sander and Taylor claim that Bowen and Bok's findings about elite colleges' graduation rates reflect, "very plausibly, [those] students who were on average substantially less mismatched than were black students at less elite schools." *Id.* at 107. But for the subset of schools for which they had admission data for the 1989 cohort, Bowen and Bok reported an average black–white SAT score gap at the College & Beyond (C&B) schools of 209 points, compared to a nationwide gap of 200 points for the U.S. college-going population that year. *See* WILLIAM G. BOWEN & DEREK BOK, THE SHAPE OF THE RIVER 375 tbl. D.2.1 (1998). Inferring how these figures would likely translate on an apples-to-apples basis comparing within-institution gaps across the spectrum of colleges (i.e., standard deviation units) suggests that the black students at the C&B schools encounter a larger "credential gap"—at least as far as test scores—than is the case more generally in U.S. higher education. Sander and Taylor provide no data for their claims about Bowen and Bok and lesser mismatch at elite universities. Additionally, although their book promised a more technical analysis and critique of Bowen and Bok on the MISMATCH book website, SANDER & TAYLOR, *supra* note 3, at 107, Sander and

examine broader swaths of American higher education often find strong evidence that racial preferences produce lower college graduation rates."[12] These two claims by Sander and Taylor are simply not supported by contemporary social-science evidence, including the best peer-reviewed studies.[13] In fact, the two studies examining "broader swaths of American higher education"[14] that Sander and Taylor use to support their argument about lower graduation rates give the impression of being stuck in a time warp from ten or fifteen years ago.[15] Specifically, the first study that Sander and Taylor use—Loury and Garman—is outdated because it looked at students graduating high school in 1972.[16] Similarly, the second study that Sander and Taylor rely on—Light and Strayer—used a 1979 survey (students born in the late 1950s and early 1960s).[17] Undeniably, there have

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Taylor failed to deliver, even sixteen months after their book went to press. Even the Thernstroms, who champion the mismatch hypothesis and whom Sander and Taylor reference in connection with Bowen and Bok, *id.* at 106, acknowledge that in theory the mismatch hypothesis would predict that "the dropout rate for blacks should be higher at Yale [and other elite C&B universities] than at a less selective school" because of the larger credential gap at elite C&B universities. Stephan Thernstrom & Abigail Thernstrom, *Reflections on* The Shape of the River, 46 UCLA L. REV. 1563, 1603 (1999) (book review). We believe that the relevant claims of both Sander and Taylor (i.e., narrower credential gap is the cause of less mismatch) as well as the Thernstroms (i.e., there is wider credential gap at elite schools, but grade inflation and resource differences between public and private universities obscure mismatch) are questionable, but the positions they stake out are somewhat incompatible. Sander and Taylor's critique of Bowen and Bok in their *Fisher* amicus brief is equally unavailing. *See* Brief for Sander & Taylor, *Fisher* Case, *supra* note 4, at 10 & n.26.

12. SANDER & TAYLOR, *supra* note 3, at 107; *see also id.* at 278.

13. *See infra* Table 2.

14. SANDER & TAYLOR, *supra* note 3, at 107.

15. For example, a year before *Mismatch*, Bastedo and Jaquette wrote:

> In the 1980s and 1990s, critics of affirmative action argued that racial minorities were damaged by affirmative action through lower graduation rates and that minority students would perform better—earn higher GPAs and be more likely to graduate—if they attended colleges that "fit" their academic profile (e.g., Cole & Barber, 2003; Light & Strayer, 2000; Thernstrom & Thernstrom, 1999; Trow, 1999). These claims were largely refuted by empirical data (Alon & Tienda, 2005; Bowen & Bok, 1998; Melguizo, 2008). The debate played out again over affirmative action at law schools, after a legal scholar conducted an analysis showing far lower bar pass rates for minority students graduating from elite law schools (Sander, 2004, 2005). These claims were also largely refuted through more sophisticated empirical analysis (Ho, 2005).

Michael N. Bastedo & Ozan Jaquette, *Running in Place: Low-Income Students and the Dynamics of Higher Education Stratification*, 33 EDUC. EVALUATION & POL'Y ANALYSIS 318, 319 (2011). The Sander and Taylor book relies upon many of these very same stale and/or refuted sources. For a critique of Cole and Barber's (and Sander and Taylor's) underlying claims about SAT scores and affirmative action, see William C. Kidder, *Misshaping the River: Proposition 209 and Lessons for the* Fisher *Case*, 39 J.C. & U.L. 53, 91–99 (2013).

16. Linda Datcher Loury & David Garman, *College Selectivity and Earnings*, 13 J. LAB. ECON. 289, 294 (1995).

17. Audrey Light & Wayne Strayer, *Determinants of College Completion: School Quality or Student Ability?*, 35 J. HUM. RESOURCES 299, 306 (2000).

been significant shifts in education and, more so, college admissions since 1972 and 1979. Also, Sander and Taylor's reliance on both the Loury and Garman and the Light and Strayer studies is faulty for other reasons. In particular, their reliance on the Loury and Garman data is flawed because those data were strongly swayed by historically black colleges and universities (HBCUs), where African American students had higher graduation rates than black students with similar credentials who attended predominantly white institutions.

It is imprudent for Sander and Taylor (via Loury and Garman) to rely upon the HBCUs as the workhorse behind their claim for "strong evidence" that mismatch lowers college graduation rates. After all, sound empirical scholarship properly identifies and rules out plausible alternative hypotheses,[18] and with respect to graduation rates of African Americans at HBCUs, there are rival hypotheses conspicuous in the literature that caution against making causal inferences regarding mismatch. For instance, researchers have found that the HBCUs often have a more supportive campus climate and have indicated that numerical diversity (both student and faculty) is one important contributing factor in boosting African Americans' grades and graduation rates at HBCUs[19] (we return to these themes later in our Review).

Indeed, other studies, such as Thomas Kane's, have utilized a more appropriate method for examining the impact of what Sander calls "mismatch" on graduation rates by separately accounting for HBCUs.[20] Specifically, Kane, using the nationally representative High School and Beyond data sample, concluded that "even if a students' characteristics are held constant, attendance at a more selective institution is associated with higher earnings and higher college completion rates for minority

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18. *See* Leland Wilkinson & The Task Force on Statistical Inference, *Statistical Methods in Psychology Journals: Guidelines and Explanations*, 54 AM. PSYCHOLOGIST 594, 600 (1999) ("Inferring causality from nonrandomized designs is a risky enterprise. Researchers . . . have an extra obligation . . . to alert the reader to plausible rival hypotheses that might explain their results." (emphasis omitted)); MARK A. OLSON, STATISTICS FOR EXPERIMENTAL ECONOMISTS 20 (2012) (same).

19. *See* Walter R. Allen, *The Color of Success: African-American College Student Outcomes at Predominantly White and Historically Black Public Colleges and Universities*, 62 HARV. EDUC. REV. 26, 39 (1992) (finding, in an influential article, that on predominantly white campuses African Americans emphasized feelings of alienation and episodes of discrimination, whereas HBCUs had more favorable outcomes and the HBCUs tended to emphasize a greater sense of engagement, connection, and feeling encouraged in their educational pursuits); *see also* Walter R. Allen et al., *Historically Black Colleges and Universities: Honoring the Past, Engaging the Present, Touching the Future*, 76 J. NEGRO EDUC. 263 (2007).

20. *See* Thomas J. Kane, *Racial and Ethnic Preferences in College Admissions*, *in* THE BLACK-WHITE TEST SCORE GAP 431, 445–47 (Christopher Jencks & Meredith Phillips eds., 1998); *see also* MICHAEL K. BROWN ET AL., WHITEWASHING RACE: THE MYTH OF A COLOR-BLIND SOCIETY 116 (2003) (noting that Kane's study of 1982 high school seniors "flatly contradicts" the earlier Loury and Garman study of 1972 high school seniors).

students."[21] Furthermore, there is mixed, more recent evidence regarding whether African Americans at HBCUs have higher graduation rates than African American students at non-HBCU schools, all other things being equal,[22] and this research indicates that HBCUs may yield no benefit on earnings and may even result in a wage penalty controlling for other factors.[23]

Regarding the other national study cited by Sander and Taylor, the two *Mismatch* authors neglect to point out that, only two years after Light and Strayer's study based on 1979 survey data, Light and Strayer published a different study with the same data set that is more directly relevant. That study concludes that affirmative action "in college admissions boost minorities' chances of attending college and that retention programs directed at minority students subsequently enhance their chances of earning a degree."[24]

Thus far, the evidence proffered by Sander and Taylor is consistent with the title of our Review: *Still Hazy After All These Years*. After all, a decade ago in the *Stanford Law Review*, Sander relied on Loury and Garman and on Light and Strayer as his main supporting literature (that is national in scope and that is outside the STEM area) regarding undergraduate mismatch,[25] and today Sander and Taylor are unable to

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21. Kane, *supra* note 20, at 432, 452.

22. *See, e.g.*, Ronald G. Ehrenberg et al., *Do Historically Black Colleges and Universities Enhance the College Attendance of African American Youths?*, *in* A NATION DIVIDED: DIVERSITY, INEQUALITY AND COMMUNITY IN AMERICAN SOCIETY 171, 171–88 (Patricia Moen et al. eds., 1999) (HBCUs increased graduation rates); Stella M. Flores & Toby J. Park, *Race, Ethnicity, and College Success: Examining the Continued Significance of the Minority-Serving Institution*, 42 EDUC. RESEARCHER 115, 125 (2013) (in study of Texas, net of other factors, finding HBCU graduation rates were essentially the same); Mikyong Minsun Kim & Clifton F. Conrad, *The Impact of Historically Black Colleges and Universities on the Academic Success of African-American Students*, 47 RES. HIGHER EDUC. 399, 417–19 (2006) (similar B.A. rates at traditionally white and HBCUs, but this was notable given the lower funding received by HBCUs).

23. Kane found HBCU status had "no statistically significant relationship with earnings." Kane, *supra* note 20, at 445. And Fryer and Greenhouse's more recent study reveals that students enrolling in HBCUs by the 1990s incurred wage penalties relative to similarly prepared students at traditionally white institutions. Roland G. Fryer, Jr. & Michael Greenstone, *The Changing Consequences of Attending Historically Black Colleges and Universities*, 2 AM. ECON. J.: APPLIED ECON. 116, 118 (2010). This finding is inconsistent with the Sander and Taylor mismatch account, and more so because the wage penalty at HBCUs accrued even though test score differences compared to traditionally white institutions slightly decreased between the 1970s and 1990s. *Id.* at 118, 141, 144.

24. Audrey Light & Wayne Strayer, *From* Bakke *to* Hopwood*: Does Race Affect College Attendance and Completion?*, 84 REV. ECON. & STAT. 34, 43 (2002).

25. *See* Sander, *supra* note 1, at 451. At that time Sander was aware of and attempted to distinguish Kane's criticism of Loury and Garman. *Id.* at 451 n.225. Putting aside the HBCU issue, one should note that Holzer and Neumark critique Loury and Garman on methodological grounds in a manner that more directly responds to Sander's earlier observation:

> Datcher Loury and Garman do not analyze differences in outcomes for blacks and whites over the entire range of college quality; they merely compare schools with

muster new or more robust analyses to bolster their claims that affirmative action harms African Americans' and Latinos' college graduation rates nationally.

As a first step before our more detailed review of the social-science literature on graduation rates and mismatch, we lay a foundation with comprehensive descriptive statistics responsive to Sander and Taylor's point about examining "broader swaths of American higher education"[26] in the context of college graduation rates. Here we also provide a framework for evaluating Sander and Taylor's elaboration of a "cascade effect" model in Chapter 2, which they claim "in key respects mirror[s] real-world data closely,"[27] and which they argue results in "perhaps the greatest harm done by the racial preferences used at the very elite schools[:] . . . their cascading effect on somewhat less elite schools."[28] Our data in Table 1 are not intended as causal proof refuting the mismatch hypothesis. Rather, our modest goal with Table 1 is to help readers have enough context to gain an intuitive appreciation about the extent to which the mismatch hypothesis—that underrepresented minority students will obtain *higher* graduation rates if they cascade to less selective universities—is empirically "swimming upstream" vis-à-vis the contemporary factual landscape at U.S. research

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> average SAT scores above and below 1000. And, in their simulations where the net effects of college selectivity on overall graduation and earnings outcomes are determined, they only compare schools having median scores of 900 and 1000. But Kane, as well as Long (2004), have shown that the primary effects of affirmative action are in admission to the top quintile of schools, which are above these categories in quality. If this is true, the analysis in Darman-Loury and Garman seems to miss the most relevant part of the college quality spectrum with regards to affirmative action.

Harry J. Holzer & David Neumark, *Affirmative Action: What Do We Know*? 25 J. POL'Y ANALYSIS & MGMT. 463, 479 (2006).

Fast forward a decade, and the more fundamental point is that we are still dissecting a couple of old studies only because Sander and Taylor have failed to meet their burden of proof in support of their claim that there is "strong evidence that [affirmative action programs] produce lower college graduation rates." SANDER & TAYLOR, *supra* note 3, at 107.

26. SANDER & TAYLOR, *supra* note 3, at 107.

27. *Id.* at 21–25. To avoid confusion, note that Sander and Taylor deploy the term "cascade" to indicate the harmful effects of affirmative action, but traditionally affirmative action critics have deployed the cascade metaphor to describe the benefits of affirmative action bans. For a critique of the latter, see Michael N. Bastedo, Cascading Minority Students in Higher Education: Assessing the Impact of Statewide Admissions Standards (May 19, 2009) (unpublished manuscript), *available at* http://www-personal.umich.edu/~bastedo/workingpapers.html. The original formulation of the cascade metaphor (by Heriot, the Thernstroms, Trow and others), *see id.* at 1, is even more objectionable. With its serene imagery of gently flowing water or champagne bubbling downward among stacked crystal glasses, the original cascade metaphor obfuscates a core theme in our Review: ending affirmative action means closing doors of opportunity and success in American society.

28. SANDER & TAYLOR, *supra* note 3, at 107.

universities.[29] Table 1 covers the four most recent freshmen cohorts' six-year graduation rates (combining 2003–2004 through 2006–2007 cohorts) at all one hundred universities with the "Research University-Very High" (RU-VH) classification by the Carnegie Foundation and sufficient data using the federal/NCAA graduation rates.[30] The table displays the African American and Latino freshmen graduation rates, organized into quintiles (with 20 schools each); the most "selective"[31] quintile is on the left, and the least selective quintile is on the right. With four years of data at a hundred universities, Table 1 represents almost 90,000 African American and over 100,000 Latino freshmen.

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29. To be sure, even the top one hundred research universities represent a modest share of the U.S. higher education picture overall. which includes community colleges, nonselective four-year public universities, modestly selective private colleges, and so on. At the same time, Sander and Taylor rely on Kane, *supra* note 20, for the proposition that only the top fifth or quarter of colleges use race-conscious affirmative action. SANDER & TAYLOR, *supra* note 3, at 309 n.21.

30. For information on the RU-VH Carnegie Institutions, see *Classification Description*, CARNEGIE FOUND. FOR ADVANCEMENT TEACHING, http://classifications.carnegiefoundation.org/lookup_listings/. The four cohort graduation rates are from the federal-graduation-rate NCAA "FGR Reports," which are available at *Education & Research*, NCAA, http://fs.ncaa.org/Docs/newmedia/public/rates/index.html. A few additional RU-VH universities are not displayed either because data were unavailable or the combined sample for African Americans was below 100: Brandeis, Caltech, Montana State, Hawaii, Rockefeller, Utah, and Yeshiva. For Latinos, there were actually ninety-nine institutions rather than one hundred, and those included or excluded were almost the same but not identical. (For space reasons, the table lists only the schools used to calculate the African American figures.) For Latinos the RU-VH universities not displayed due to unavailable data or samples that were too small are Alabama-Huntsville, Alabama-Birmingham, Caltech, Case Western Reserve, Mississippi State, North Dakota, Rockefeller, and Yeshiva. These small differences in "excluded schools" also account for the small differences in the comparison white graduation rates (e.g., within the second quintile the white rate is 85.8% for the African American row and it is 85.2% for the Latino row). Table 1 and the accompanying text report unweighted averages for each quintile.

31. Somewhat similar to Fischer and Massey, discussed *infra*, we use SAT median scores as a proxy for selectivity. The SAT median data are from The Education Trust's *College Results* data set, *Choose a College*, COLLEGE RESULTS ONLINE, http://www.collegeresults.org/. Using the SAT as a rough proxy for selectivity is not the same thing as claiming it is a proxy for "merit" or that it is the strongest predictor of individual student performance in college. That said, the simple correlation between median SAT/ACT scores and *U.S. News* rankings for the top 50 universities is 0.89 even if the correlations are much smaller for effective teaching and other more complex educational metrics, for example. Ernest T. Pascarella et al., *Institutional Selectivity and Good Practices in Undergraduate Education: How Strong is the Link?*, 77 J. HIGHER EDUC. 251, 252, 379–80 (2006).

Table 1: African American and Latino Six-Year Graduation Rates at One Hundred Top U.S. Research Universities (Carnegie "RU-VH"), in Quintiles by Selectivity, 2003–2004 to 2006–2007 Freshmen Cohorts

Top Quintile (# 1–20)	2nd Quintile (# 21–40)	3rd Quintile (# 41–60)	4th Quintile (# 61–80)	Bottom Quintile (# 81–100)
African American Graduation Rates (with Black–White Gap in Graduation Rates)				
88.9% (5.4 point gap)	**76.0%** (9.8 point gap)	**67.3%** (11.8 point gap)	**56.1%** (11.1 point gap)	**43.2%** (13.7 point gap)
Latino Graduation Rates (with Latino–White Gap in Graduation Rates)				
90.9% (3.4 point gap)	**80.4%** (4.8 point gap)	**71.2%** (7.9 point gap)	**60.4%** (7.9 point gap)	**49.0%** (6.6 point gap)
Institutions Included in Each Quintile				
Harvard, Yale, Princeton, MIT, Chicago, Dartmouth, Stanford, Wash. U, Columbia, Brown, Notre Dame, Penn, Duke, North-western, Rice, Vanderbilt, Tufts, Georgetown, Cornell, Carnegie Mellon	Emory, Johns Hopkins, USC, Rensselaer, UC Berkeley, NYU, Case Western, Virginia, Georgia Tech, Rochester, North Carolina-CH, Tulane, Michigan, Maryland, G-W, Miami, Illinois U-C, UCLA, UC San Diego, Florida	Boston U, Wisconsin-M, Ohio State, Pittsburg, Minnesota, UT Austin, UConn, VA Tech, Texas A&M, U of Washington, Stony Brook, UCSB, Tennessee, Penn State, Rutgers-NB, South Carolina, UC Irvine, Delaware	Florida State, NC State, Oklahoma, Central Florida, Michigan State, Iowa, Missouri, Purdue, UMass-Amherst, LSU, Alabama-H, UCSC, U at Buffalo, Iowa State, Nebraska, Kentucky, South Florida, U at Albany	Colorado State, Kansas, Cincinnati, Louisville, Oregon, Alabama-B, Arkansas, Illinois-Chi., N. Dakota State, Virginia Comm., Houston, GA State, Wash. State, Arizona, Oregon State, Arizona State, Miss State, UC Riverside, New Mexico, Wayne State

Three notable patterns emerge from Table 1 and the associated school-level data. First, African American and Latino graduation rates are highest by a considerable margin at the most selective universities. In the top twenty universities, 89% of African Americans and 91% of Latinos graduate, with the rates being even higher at the top of this tier (e.g., 97% and 96% at Harvard; and 94% at Yale). The fact that African American and Latino graduation rates increase with selectivity is important given Sander and Taylor's acknowledgement that in a "world totally purged of racial preferences, the proportion of blacks at the most elite universities . . . could fall dramatically," possibly to "as low as 1 percent" of the student body or

at least drop by half after accounting for other factors like athletics and class-based affirmative action.[32] For instance, at Duke University, African American and Latino graduation rates are nearly equal or equal to white graduation rates[33] (92%, 95%, 95%); so if African Americans plunged from ten percent of the Duke student body to two or three percent, for example, it is difficult to conceive of circumstances where ending affirmative action could result in a net gain in the likelihood of graduation for those underrepresented minority students who might no longer attend schools like Duke without any consideration of race. (Decreases in minority graduation rates also have negative implications for the University and U.S. society, discussed later in this Review.)

A second and related pattern emergent from Table 1 is more directly responsive to Sander and Taylor's assertion that the "greatest harm" of affirmative action is the cascading effect at somewhat elite colleges, which they claim "greatly aggravat[es] the overall scale of the mismatch problem."[34] In fact, Table 1 suggests the exact opposite: that graduation rates would be lower if African Americans attended less elite colleges at each level in the cascade. Specifically, Table 1 shows that the average black and Latino graduation rates in the top quintile exceed the white average graduation rate in the second quintile (86.8%), just as the African American and Latino average graduation rates in the third quintile meet or exceed the average white graduation rate in the fourth quintile (67.4%), and the black and Latino graduation rates in the fourth quintile equal or exceed the average white graduation rate for the bottom quintile (56.9%).[35] By implication, if in the absence of affirmative action many African American and Latino students cascaded to the next quintile (e.g., from schools like Boston University to schools like the University of Massachusetts at Amherst), the data in Table 1 suggest that the likelihood is quite small that these students of color could systematically be *more likely* to end up graduating even if one makes generous assumptions about a post-affirmative action landscape improving performance.[36]

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32. SANDER & TAYLOR, *supra* note 3, at 278–79.

33. Sander and Taylor discuss Duke in another mismatch context. *Id.* at 25, 176–79. Our reference to Duke's exceptional graduation rates cabins the policy relevance of those parts of the book.

34. *Id.* at 107; *see also id.* at 23–24.

35. The figures in the text are white graduation rates in relation to African Americans. In relation to Latinos, the corresponding white graduation rates are 85.2%, 68.3%, and 55.5%, respectively. As noted earlier, these modest differences are because there were some small differences regarding which schools were "tossed" due to low sample sizes.

36. If past experience offers any lessons, in the area of law school admissions Sander's post-affirmative action models relied on a combination of heroic assumptions, *see* Sander, *supra* note 1, at 473 & tbl.8.2, and his portrait of the post-affirmative action landscape benefited from internally contradictory positions and methods, *see* Richard H. Sander, *A Reply to Critics*, 57

Third, another stubborn fact in these data is that many of the premiere public universities in Table 1 without race-conscious affirmative action still have troublingly large black–white gaps in graduation rates, including Texas A&M[37] (19 points), UC Berkeley (17 points), UC Davis (14 points), UCLA (12 points), the University of Florida (11 points), Washington State (10 points), UC Santa Barbara (10 points), and the University of Washington (9 points).[38] Thus, the real world data caution strongly against the notion that graduation rates will ascend to significantly higher levels without affirmative action, and even Sander and Taylor soberly acknowledge that "some of the ostensibly race-neutral proxies for racial preferences have brought in students who encounter even greater mismatch problems" than those under affirmative action.[39] One of the explanations a number of economists have emphasized, consistent with Table 1, is that race-conscious affirmative action can simply tend to be more efficient in yielding academically successful underrepresented students[40] (and Sander and Taylor's conclusions on this point are also intermingled with their non-peer reviewed allegations about evasion and cheating in admissions, a topic

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STAN. L. REV 1963, 2000–02 (2005). *But see* David L. Chambers et al., *The Real Impact of Eliminating Affirmative Action in American Law Schools: An Empirical Critique of Richard Sander's Study*, 57 STAN. L. REV. 1855 (2005); Richard O. Lempert et al., *Affirmative Action in American Law Schools: A Critical Response to Richard Sander's "A Reply to Critics"* (Univ. of Mich. John M. Olin Ctr. for Law & Econ., Working Paper No. 06-001, 2006), *available at* http://www.law.umich.edu/centersandprograms/lawandeconomics/abstracts/2006/Documents/06-001lempert.pdf.

37. As Professor Garces notes, after *Grutter*, UT Austin "announced that it would reinstate the use of race in undergraduate admissions decisions, whereas Texas A&M University opted not to reinstate the consideration of race in admissions." Liliana M. Garces, *Necessary But Not Sufficient: The Impact of* Grutter v. Bollinger *on Student of Color Enrollment in Graduate and Professional Schools in Texas*, 83 J. HIGHER EDUC. 497, 505 (2012).

38. Just as for the "with affirmative action" universities, one should note that a portion of the racial gap in graduation rates is sometimes related to intercollegiate athletics, more so at schools with "big time" athletic programs in the NCAA Division I Football Bowl Subdivision, such as with the examples above. At a campus like UC Berkeley, likely one of the upper-bound cases in Table 1 because it garnered recent negative media attention over its "rock-bottom graduation rates" for student–athletes, the 17 point gap between white and black graduation rates (91% versus 74%) narrows to 13 points if all student–athletes receiving grant-in-aid scholarships are removed from the calculation (91% versus 78%). *See* Nanette Asimov & Ann Killion, *Why Do Many Cal Athletes Not Graduate?* SFGATE, (Nov. 22, 2013, 11:00 PM), http://www.sfgate.com/collegesports/article/Why-do-many-Cal-athletes-not-graduate-5004343.php.

39. SANDER & TAYLOR, *supra* note 3, at 280.

40. For various theoretical elaborations of these issues by economists, see Jimmy Chan & Erik Eyster, *Does Banning Affirmative Action Lower College Student Quality?*, 93 AM. ECON. REV. 858 (2003); Roland G. Fryer, Glenn C. Loury & Tolga Yuret, *An Economic Analysis of Color-Blind Affirmative Action*, 24 J.L. ECON. & ORG. 319 (2007); Debraj Ray & Rajiv Sethi, *A Remark on Color-Blind Affirmative Action*, 12 J. PUB. ECON. THEORY 399 (2010); Brent R. Hickman, Pre-College Human Capital Investment and Affirmative Action: A Structural Policy Analysis of US College Admissions (July 2013) (unpublished manuscript), *available at* http://home.uchicago.edu/~hickmanbr/uploads/AA_Empirical_paper.pdf.

for another day[41]). And the aforementioned problems Table 1 poses for the mismatch hypothesis carry even more force if, in a counterfactual world without affirmative action, some or many African Americans and Latinos were to drop two quintiles rather than one.

In contrast to the "facts on the ground" reflected in the descriptive statistics in Table 1, Sander and Taylor sketch out a simplified cascade effect admission model in which they claim that affirmative action is what produces large academic-index-score gaps throughout middle tier colleges and even at nonselective colleges.[42] Though Sander and Taylor's simplified cascade effect admission model is foundational for the remainder of their book and they claim it suggests that second and lower tier colleges suffer substantial mismatch as a byproduct of affirmative action at the most selective institutions, we, in fact, know little else about their cascade effect model except that it is not actually linked to outcome data on graduation rates (real or simulated).[43] And while Sander and Taylor claim that "a fuller description of this model[] and the underlying data can be found"[44] on their book's website, nothing has been available even now, as we near the publication date for our Review (which is sixteen months after *Mismatch* went to press).[45]

Even for those who might be generally predisposed to find the mismatch theory plausible, including some Supreme Court Justices, there are, as we have highlighted, a couple themes that should serve as early warning signs about the unreliability of the empirical claims undergirding Sander and Taylor's book: (1) limited, stale, and slanted citations to the research literature on college graduation rates; and (2) claims about a damaging cascade effect that are untethered to robust real world outcome

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41. *See* SANDER & TAYLOR, *supra* note 3, at 279–80, 286. Sander's recent claims about UCLA admissions were harshly criticized in two separate and independent reviews by Professors Stern and Lempert that were commissioned by the UCLA Bunche Center for African American Studies. *See* Richard Lempert, Observations on Professor Sander's Analysis of the UCLA Holistic Admissions System (2013) (unpublished manuscript), *available at* http://www.newsroom.ucla.edu/portal/UCLA/document/Lempert_Review-Sander.pdf; David Stern, Are There Racial Dis-parities in UCLA Freshman Admissions? (Nov. 23, 2012) (unpublished manuscript), *available at* http://www.newsroom.ucla.edu/portal/UCLA/document/Stern_Review-Sander.pdf. Likewise a rigorous analysis of UC Berkeley freshmen admissions by Professor Hout found that race only played a trivial role in post-Prop. 209 admissions. MICHAEL HOUT, BERKELEY'S COMPREHENSIVE REVIEW METHOD FOR MAKING FRESHMAN ADMISSIONS DECISIONS: AN ASSESSMENT 2, 49 (2005), *available at* http://academic-senate.berkeley.edu/sites/default/files/committees/aepe/hout_report_0.pdf .

42. SANDER & TAYLOR, *supra* note 3, at 19, 23–24.

43. *Cf. id.* at 21 & 309 n.21, 22–24 (using academic-index rankings based on GPA and SAT distributions to explain the cascade effect).

44. *Id.* at 24.

45. *See Mismatch Supplements*, MISMATCH, http://www.mismatchthebook.com/?p=4 (showing no such description as of February 2014).

data and that our large-scale graduation-rate data (Table 1) suggest are built upon a foundation of sand.

B. Studies of Graduation Rates Nationally (and in Texas)

Now we turn to the social science on affirmative action graduation rates and labor market outcomes in more detail, which shows unequivocally that the cumulative weight of the educational research is in conflict with Sander and Taylor's key claims. A principle response that Sander and Taylor have to opposing social science on mismatch is to reiterate their arguments about "selection effect[s]" from Chapter 5 in claiming that selection on unobservables "will skew the analysis to favor students attending more elite schools . . . . Taking this bias into account, these studies as a group provide substantial—if not definitive—evidence that mismatch reduces minority graduation rates."[46] In other words, Sander and Taylor contend that one reason why the purported negative effects of mismatch on African Americans and Latinos may not be as prevalent for students at elite schools as they are for such students at lower tier schools is because students at elite schools may have unmeasurable positive qualities that enable them to succeed despite mismatch. Apart from the very fact that this argument by Sander and Taylor effectively concedes that there are important qualities that can enable student success in college despite what Sander and Taylor call a "mismatch" in credentials, we note that Sander and Taylor's mismatch argument is flawed in other ways. The phenomena of selection bias is true enough as far as it goes, but Sander and Taylor's degree of overreach—in claiming "substantial" or "definitive" evidence of mismatch reducing minority graduation rates[47] is unfortunate and appears (as we will show) to be based upon compound supposition rather than an empirically corroborated claim. In addition to the studies mentioned earlier (Bowen and Bok, Loury and Garman, and Light and Strayer), the only other studies included in Sander and Taylor's discussion at this point in the book are Dale and Krueger (discussed further below), and Alon and Tienda (plus data on the University of California, discussed further below).

While Sander and Taylor acknowledge that Alon and Tienda found little evidence of mismatch,[48] they fail to mention that Alon and Tienda used multiple empirical methods to overcome selection bias (i.e., propensity score analysis and Heckman methods[49]) yet still found "the mismatch

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46. SANDER & TAYLOR, *supra* note 3, at 107–08.

47. *Id.* For background about selection bias and the idea that Sander's position on this issue has evolved and been inconsistent, see Richard O. Lempert et al., *supra* note 36, at 4.

48. SANDER & TAYLOR, *supra* note 3, at 107.

49. Sigal Alon & Marta Tienda, *Assessing the "Mismatch" Hypothesis: Differences in College Graduation Rates by Institutional Selectivity*, 78 SOC. EDUC. 294, 296 (2005).

hypothesis is empirically groundless for black and Hispanic" students.[50] In fact, a number of other peer-reviewed studies—employing a range of empirical methods—reach conclusions that mirror those found in Alon and Tienda's study.

Looking beyond the studies referenced by Sander and Taylor, the literature on college graduation rates and retention is too voluminous to summarize here *and* do justice to all the methodological nuances, but our "tree-top" level summary of a body of peer-reviewed studies shows that the weight of social science supports the proposition that African American and Latino students attain higher graduation rates in connection with affirmative action at selective U.S. colleges and universities. For instance, in *Crossing the Finish Line*, Bowen, Chingos, and McPherson analyzed twenty-one public flagship universities, plus the public university systems in four states, and found there is "no support whatsoever for [the mismatch] hypothesis" and that students "are generally well advised to enroll at one of the most challenging universities that will accept them."[51]

Similar to Alon and Tienda, Melguizo used techniques to control for selection bias and looked at National Education Longitudinal Study (NELS) data spanning highly selective to nonselective institutions. She found: "[M]inorities benefit from attending the most elite institutions. . . . [T]he selectivity of an institution attended has a positive and significant impact on the college completion rates of minorities."[52]

Furthermore, a study by Small and Winship adds support to our contention that college graduation rates are higher for Latinos and African Americans at selective institutions. Though Sander and Taylor made a to-do in their book about the inaccessibility of the College and Beyond (C&B) data set[53] utilized by Bowen and Bok for their seminal work, *The Shape of the River*, in addition to the aforementioned Alon and Tienda study that used C&B data, Small and Winship also relied upon the C&B data in concluding the following: "[S]electivity increases the probability of

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50. *Id.* at 309.

51. WILLIAM G. BOWEN ET AL., CROSSING THE FINISH LINE: COMPLETING COLLEGE AT AMERICA'S PUBLIC UNIVERSITIES 12–16, 227–28 (2009).

52. Tatiana Melguizo, *Quality Matters: Assessing the Impact of Attending More Selective Institutions on College Completion Rates of Minorities*, 49 RES. HIGHER EDUC. 214, 216–17, 223, 232 (2008); *see also* Tatiana Melguizo, *Are Students of Color More Likely to Graduate from College if They Attend More Selective Institutions?: Evidence from a Cohort of Recipients and Nonrecipients of the Gates Millennium Scholarship Program*, 32 EDUC. EVALUATION & POL'Y ANALYSIS 230, 242–44 (2010) (concluding that "highly motivated low-income students of color in good academic standing can thrive at the most and highly selective institutions and attain a bachelor's degree in a timely manner").

53. SANDER & TAYLOR, *supra* note 3, at 106, 236. A point relating to several studies cited herein is that although the elite C&B institutions were primarily private, because those public universities in the sample had larger student bodies, over 30% of the students in the 1976 and 1989 C&B cohorts were from public universities. *See* BOWEN & BOK, *supra* note 11, at xxxvii.

graduation. . . . Second, it is noteworthy that it helps blacks more than it does whites . . . . [T]he strong effects of selectivity demonstrate a clear benefit of Affirmative Action in elite institutions."[54] Small and Winship's study reached these findings after controlling for a number of institutional factors, including institutional wealth, grading difficulty/leniency, and expenditures on student resources.[55]

Convergent validity comes from a study by Fischer and Massey, who reapproached the C&B schools (and added the University of California at Berkeley) in creating a newer database with the National Longitudinal Survey of Freshmen.[56] Fischer and Massey concluded, "Our estimates provided no evidence whatsoever for the mismatch hypothesis. . . . If anything minority students who benefited from affirmative action earned higher grades and left school at lower rates than others . . . ."[57] Fischer and Massey's study also directly responded to a core tenet of Sander and Taylor's theory (and Loury and Garman's less effective test of that theory[58]) insofar as it looked at the greater distance ("mismatch") between minority students' SAT scores and the median SAT score in the same institution, with findings that were the opposite of what mismatch would predict. Fisher and Massey noted:

> Indeed, the degree of an individual's likely benefit from affirmative action is *negatively* related to the likelihood of leaving school, and the effect is highly significant. For each 10 points increase in the gap between the individual's SAT score and the institutional average, there was an 8.5% *decrease* in the likelihood of leaving college.[59]

And among nearly 40,000 freshmen attending a broad swath of public and private four-year institutions in Illinois, Gong similarly found a negative relationship between dropping out after the freshmen year and the "mismatch" distance between a student's ACT score and the college median ACT.[60]

Several of the studies in this genre, including Bowen and Bok and two studies by Espenshade and colleagues that rely on a subset of C&B

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54. Mario L. Small & Christopher Winship, *Black Students' Graduation from Elite Colleges: Institutional Characteristics and Between-Institution Differences*, 36 SOC. SCI. RES. 1257, 1258, 1272 (2007).

55. *See id.* at 1267 tbl.3.

56. Mary J. Fischer & Douglas S. Massey, *The Effects of Affirmative Action in Higher Education*, 36 SOC. SCI. RES. 531, 534 (2007).

57. *Id.* at 544.

58. *See* Holzer & Neumark, *supra* note 25.

59. Fischer & Massey, *supra* note 56, at 541.

60. YUQIN GONG, ILL. EDUC. RESEARCH COUNCIL, THE DIVERGENCE OF THE RIVER: EXAMINING THE EFFECT OF ACADEMIC "MISMATCH" ON COLLEGE STUDENT'S EARLY ATTRITION (2006), *available at* http://www.siue.edu/ierc/presentations/pdf/Mismatch2006Symp.pdf (summarizing the findings from Gong's unpublished Ph.D. dissertation).

institutions, acknowledge that affirmative action has some tradeoff vis-à-vis students' college grade-point averages (GPAs), but nonetheless conclude that the net benefits as far as college graduation rates and later graduate and professional school attainment make affirmative action worthwhile from a social policy standpoint.[61]

Turning to studies about Texas, the previous affirmative action ban after *Hopwood v. Texas*[62] provided opportunities for analyzing "natural experiments" around what happened after the case's ruling took effect and ended affirmative action.[63] One such study by Cortes found that graduation rates for minorities actually decreased after *Hopwood*, rather than increased.[64] In this study, Cortes focused on those outside the top strata—the second and lower deciles in high school rank—and used the top decile students as a control group because their admission prospects were the same pre-*Hopwood* and under the Top Ten Percent Plan.[65] Cortes focused on outcomes at six Texas publics that included the two flagships (the University of Texas at Austin and Texas A&M at College Station), but also Texas Tech, Texas A&M at Kingsville, the University of Texas at San Antonio, and the University of Texas Pan American.[66] Thus, Cortes addressed a core criticism of Sander and Taylor by looking beyond a narrow set of elite institutions; yet, she found that the gap between minority and nonminority graduation rates among the students in her study grew from twenty-five percentage points in 1990–1996 (42% versus 67%) to

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61. *See* Douglas S. Massey & Margarita Mooney, *The Effects of America's Three Affirmative Action Programs on Academic Performance*, 54 SOC. PROBS. 99, 114 (2007) (noting negative association with college grades but finding that "[c]ontrary to expectations derived from the critics, the stronger an institution's apparent commitment to affirmative action, the lower the likelihood minority students would leave school"); *see also* THOMAS J. ESPENSHADE & ALEXANDRIA WALTON RADFORD, NO LONGER SEPARATE, NOT YET EQUAL: RACE AND CLASS IN ELITE COLLEGE ADMISSION AND CAMPUS LIFE 233–36, 245 (2009) (finding that class rank distributions are "sharply differentiated by race," with URM students "disproportionately concentrated toward the bottom of their graduating class," but nevertheless stating that their results are "completely consistent with those found in the C&B data" and that they "would have to conclude that there is no support in [their] data for the mismatch hypothesis"); Joanne W. Golann et al., *Does the "Mismatch Hypothesis" Apply to Hispanic Students at Selective Colleges?*, *in* THE EDUCATION OF THE HISPANIC POPULATION: SELECTED ESSAYS at 209, 222–23 (Billie Gastic & Richard R. Verdugo eds., 2013). *Compare* BOWEN & BOK, *supra* note 11, at 72–28 (class rank), *with id.* at 160–72 (leadership), *and id.* app. D tbl.D.4.1 (percentage in the three tiers of C&B schools who went on to obtain M.D., J.D. Ph.D. and M.B.A. degrees).

62. 78 F.3d 932 (5th Cir. 1996).

63. *See id.* at 962 (concluding that the law school may not use race as a factor in admissions). Regarding the point about state affirmative action bans and natural experiments, see Susan K. Brown & Charles Hirschman, *The End of Affirmative Action in Washington State and Its Impact on the Transition from High School to College*, 79 SOC. EDUC. 106, 106 (2006).

64. Kalena E. Cortes, *Do Bans on Affirmative Action Hurt Minority Students? Evidence from the Texas Top 10% Plan*, 29 ECON. EDUC. REV. 1110, 1111 (2010).

65. *Id.* at 1111–13.

66. *Id.* at 1117 & n.17.

thirty points in 1998–1999 (39% versus 69%) after *Hopwood*, when affirmative action in Texas ended.[67] By contrast, Sander and Taylor make the hollow claims in *Mismatch* that "preferences on the scale used by [The University of Texas at Austin] are almost certain to backfire on the students they purport to help."[68]

C. Graduation Rates at the University of California

Turning to graduation rates in California, Sander and Taylor devote Chapter 9 to the University of California's experience after Prop. 209 ended affirmative action,[69] claiming:

> Perhaps the most important mismatch question we can consider from the UC move to putative race-neutrality is this: Did even a modest reduction in the net preferences received by blacks and Hispanics improve their graduation rates?
>
> The simple answer is an emphatic yes. Minority graduation rates rose rapidly in the years after Prop 209, and on-time (four-year) graduation rates rose even faster. . . . The increase in black six-year graduation was less dramatic (63 percent before and 71 percent after Prop 209) but still substantial.
>
> . . . Six-year graduation rates [for Hispanics] rose from 69 to 74 percent.[70]

These claims about "substantial" and even "stunningly improved rates"[71] of graduation warrant careful examination, particularly because the Michigan attorney general very recently cited Sander's related graduation-rate research in his merit brief in the *Schuette* Supreme Court case.[72] Indeed, during the October 2013 oral argument in *Schuette*, Michigan's solicitor general asserted that the University of California's under-represented minority graduation rates are "20 to 25 percent higher than [they were] before California's Prop. 209," suggesting this was caused by

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67. *Id.* at 1120.

68. SANDER & TAYLOR, *supra* note 3, at 289. Sander and Taylor provide scant supporting evidence for this claim, *id.* at 288–89, and the same goes for their amicus brief in *Fisher*, where the claims are fleshed out in somewhat more detail, *see* Brief for Sander & Taylor, *Fisher* Case, *supra* note 4, at 5–10.

69. Prop. 209—passed by a majority of voters in November of 1996—amended the California Constitution to provide: "The State shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting." CAL. CONST. art. I, § 31(a); Sherman J. Clark, Commentary, *A Populist Critique of Direct Democracy*, 112 HARV. L. REV. 434, 434 n.1 (1998).

70. SANDER & TAYLOR, *supra* note 3, at 146.

71. *Id.* at 143.

72. Brief for Petitioner at 31 & nn.5–6, 32, 35, Schuette v. Coal. to Defend Affirmative Action, No. 12-682 (U.S. July 1, 2013).

the affirmative action ban.[73] Chief Justice Roberts referenced Sander and Taylor's work on mismatch during the same oral argument.[74]

But more in-depth examination reveals that Sander and Taylor committed a serious flaw when they reported 63% and 69% as the pre-Prop. 209 African American and Latino freshmen 1992–1997 six-year graduation rates, respectively, and later used averages from 1998–2003 for those groups' post-Prop. 209 figures.[75] Although reporting averages for adjacent years is reasonable in other circumstances, here it was masking a trend in the data that actually cuts against Sander and Taylor's principal mismatch thesis. Using Sander and Taylor's same data, Figure 1 below shows that, for African Americans, the six-year graduation rate in the University of California (UC) system improved from 60% of entering freshmen in 1992 to 69% in 1997.[76] Thus, African Americans made a substantial, nine-point improvement in their graduation rate in the half-dozen years *before* Prop. 209, making the subsequent rise in the years after Prop. 209 (to 71% of entering freshmen by 1998, and 73% by 2003[77]) look much less impressive, if not disappointing. Likewise for Latinos, the graduation rate rose pre-Prop. 209 from 67% in 1992 to 72% in 1997.[78] In the years after Prop. 209 took effect, the Latino graduation rate fluttered between 72% and 75% (73.6% average), and without an upward trajectory.[79]

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73. Transcript of Oral Argument, *supra* note 9, at 16. Michigan's solicitor general also relied on Sander to advance problematic claims about UC enrollment levels after Proposition 209, which is beyond the scope of this Review. For a critique of these claims citing several *Schuette* amici briefs, see William Kidder, *Michigan's Mangled Empirical Claims in the Schuette Affirmative Action Case*, AM. CONST. SOC'Y BLOG (Oct. 23, 2013), http://www.acslaw.org/acsblog/michigan%E2%80%99s-mangled-empirical-claims-in-the-schuette-affirmative-action-case.

74. Transcript of Oral Argument, *supra* note 9, at 50–51.

75. *See* SANDER & TAYLOR, *supra* note 3, at 146–47.

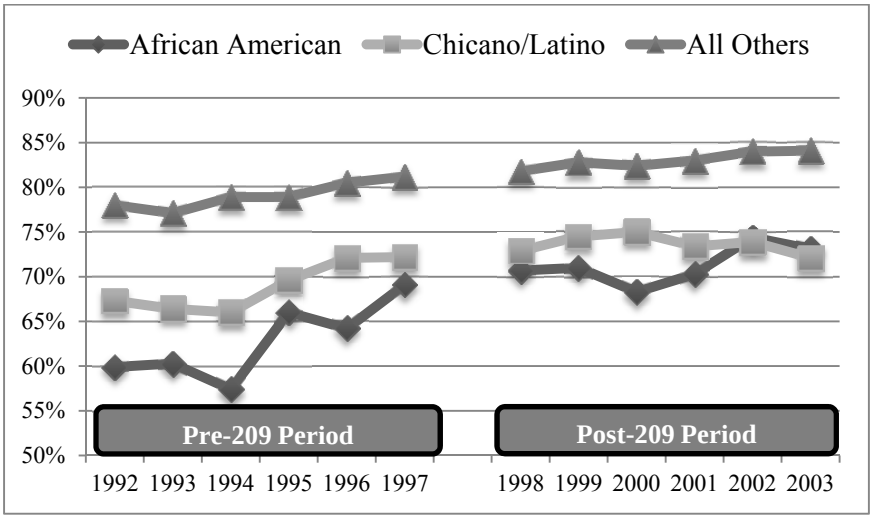
76. Additional details, with figures identical to those in *Mismatch*, are provided in a short paper by Sander from around 2010. Richard H. Sander, An Analysis of the Effects of Proposition 209 upon the University of California 6 (unpublished manuscript), *available at* http://www.seaphe.org/pdf/analysisoftheeffectsofproposition209.pdf. Michigan's solicitor general cites this same unpublished paper by Sander as the source for claims in his merit brief in *Schuette*. Brief for Petitioner, *supra* note 72, at 35.

77. Sander, *supra* note 76.

78. *Id.*

79. *Id.*

Figure 1: UC's Six-Year Graduation Rates, 1992–2003 Freshmen[80]



Sander and Taylor are even more celebratory about the post-Prop. 209 changes in four-year graduation rates.[81] UC's four-year graduation rates are not displayed in a figure because of an "apples-to-oranges" problem that is ignored by Sander and Taylor: The source data for UC in 1992–1994 do not include the fourth-year summer in the graduation rate, unlike the 1995–1997 data and the post-Prop. 209 (1998–2005) data.[82] This is not nearly as big of a deal for six-year rates (because a sixth-year summer adds a miniscule bump to graduation rates), but for the 1992–1994 four-year rates, (which constitute half of what makes up Sander and Taylor's pre-Prop. 209 average), the absence of fourth-year summer data deflates the graduation rates by about five percentage points.[83] Taking that into account as well as

80. The "all other" category is for all domestic, but not international, students.

81. *See* SANDER & TAYLOR, *supra* note 3, at 146 (saying that on-time (four-year) graduation rates rose even faster than six-year graduation rates).

82. Sander's original paper and the *Mismatch* book relied upon UC data from the UC Office of the President "Statfinder" website, *id.* at 323 n.143, which is no longer available due to budget constraints. But the library of tables produced in Statfinder would presumably have included this proviso. Likewise, the latest UC Accountability Report includes such a caution regarding data on pre-1995 graduation rates. *See* UNIV. OF CAL., ANNUAL ACCOUNTABILITY REPORT 42 n.1 (2013), *available at* http://accountability.universityofcalifornia.edu/documents/accountabilityreport13.pdf (qualifying its presentation of four-year graduation rates by stating that the rates after 1995 include fourth-year summers, but that data before 1995 do not).

83. This is a ballpark estimate. The 1992–1994 entering freshmen cohorts' second year persistence rate is the same as it was for the 1995 cohort (82.1% average versus 82.0%), but the 1992–1994 four-year graduation rate (35.3% average) is over five points lower than the rate in 1995 (40.7%). *See* Memorandum from the Univ. of Cal. Office of the President, University of California Undergraduate Student Persistence and Graduation Rates, Entering Cohorts: Fall 1992-Fall 2011 (Feb. 7, 2013) (on file with authors).

the fact that graduation rates were rising for all UC students in the pre- and post-Prop. 209 period[84] because of rising selectivity, more relevant than the averages Sander and Taylor report is the fact that the gaps in four-year graduation rates in 1997 were within two or three points of the first post-Prop. 209 (1998–2005) averages reported by Sander and Taylor.[85] The chart in Sander's working paper shows that the increase in four-year graduation rates for all other domestic students (i.e., non-underrepresented minorities) increased with a similar slope as for underrepresented minority (URM) students.[86] We are not the first, nor likely the last, to emphasize that paying proper attention to trend lines and other contextual factors is important when analyzing UC graduation rates and drawing inferences about Prop. 209.[87]

Sander and Taylor also rely on a recent working paper about Prop. 209 and graduation rates by Duke economists Arcidiacono et al.,[88] arguing that "[t]here is simply no other study that has so effectively handled the difficult problem of 'selection effects'" and that, "if anything, [the paper] underestimate[s] Prop. 209's true effects."[89] What Sander and Taylor do not emphasize, however, is that "mismatch" was third on the list in Arcidiacono et al.'s findings about what factors were most influential in explaining their results: (1) they attributed the largest share of the increase in minority graduation rates, 35%–50%, to increased selectivity (see our

84. Sander, *supra* note 76, at 4–6.

85. Again, post-Prop. 209, four-year graduation rates rose significantly between 1998 and 2005—mostly for selectivity reasons—but given the trend line associated with the period between 1992 and 1997, this rise certainly would have been the case as well in a counterfactual world where Prop. 209 never occurred. *See id.*

86. *Id.* at 4. Additionally suggestive of confounders, the combined (for all groups) four-year graduation rates at *non-UC* elite public universities likewise rose from 41% for the 1998 freshman class to 52% for the 2005 freshman class (the period corresponding to the initial years after Prop. 209). *See Freshman Graduation Rates*, U. CAL. ACCOUNTABILITY REP. 2013, http://accountability.universityofcalifornia.edu/index/4.1.

87. For example, Chang and Rose analyze 1994–2003 UC and UCB/UCLA graduation rates and conclude, "Proposition 209 added little to the momentum URM students already had going back at least to 1995. About two-thirds of the graduation-rate improvement occurred before students were subject to the Proposition 209 admissions requirements." Tongshan Chang & Heather Rose, *A Portrait of Underrepresented Minorities at the University of California, 1994–2008*, *in* EQUAL OPPORTUNITY IN HIGHER EDUCATION: THE PAST AND FUTURE OF CALIFORNIA'S PROPOSITION 209, at 83, 98 fig.5.5, 99 (Eric Grodsky & Michal Kurlaender eds., 2010); *see also* Brief for the President and Chancellors of the University of California as Amici Curiae in Support of Respondents at 31–34, Schuette v. Coal. to Defend Affirmative Action, No. 12-682 (U.S. Aug. 30, 2013) (referring to Sander's unpublished paper and reaching the same result that cuts against Sander's conclusion, namely, that Sander masks a trend in the data); Kidder, *supra* note 15, at 105–08 (same).

88. Peter Arcidiacono et al., *Affirmative Action and University Fit: Evidence from Proposition 209* (Inst. for Study of Labor Discussion Paper Series, Paper No. 7000, 2012), *available at* http://ftp.iza.org/dp7000.pdf. This Review uses the benchmark of five-year graduation rates. *Id.* at 6 n.7.

89. SANDER & TAYLOR, *supra* note 3, at 147–48.

earlier discussion); (2) 30%–45% was attributable to "university response," a residual category including various efforts to promote student success (see our conclusion of this Review for related observations); and (3) the lessening of "mismatch" accounted for 20% of the change in graduation rates.[90] Sander and Taylor's "all eggs in one basket" reliance on the Arcidiacono et al. study is unpersuasive in light of the literature reviewed herein (including the wages studies noted below), and the Arcidiacono et al. study has also been recently criticized by Chingos for ignoring the trend in UC graduation rates.[91] Moreover, Arcidiacono's recent paper with Koedel regarding the Missouri higher education system is in tension with the mismatch hypothesis, as they estimate that African American degree attainment would improve if more African Americans were upwardly shifted to more selective public colleges in Missouri.[92]

Additionally, like the study by Cortes of Texas, a recent study about several UC campuses by Kurlaender and Grodsky took advantage of a natural experiment to address selection effects by looking at a unique set of students who were initially denied straight admission as freshmen to UC because the 2003–2004 budget crisis caused funding cuts, but were then later admitted at Berkeley, UCLA, and UC San Diego late in the summer when the budget modestly improved.[93] Kurlaender and Grodsky utilized additional controls for selection bias (patterned after the "self-revelation" Dale and Krueger method, discussed below) by focusing on those students who had applied to the same UC campuses. They looked at these students' performance over the next four years and found that mismatch "has no reliable or substantively notable bearing on grades, rates of credit accumulation, or persistence."[94] Other recent articles on degree attainment that include, but are not limited to, California and Prop. 209 have found that

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90. *See* Arcidiacono et al., *supra* note 88, at 3–4, 29 tbl.8.

91. *See* Matthew M. Chingos, *Are Minority Students Harmed by Affirmative Action?*, *Brown Center Chalkboard*, BROOKINGS (Mar. 7, 2013, 11:00 AM), http://www.brookings.edu/blogs/brown-center-chalkboard/posts/2013/03/07-supreme-court-chingos ("A key problem with the before-and-after method is that it does not take into account pre-existing trends in student outcomes.").

92. Peter Arcidiacono & Cory Koedel, *Race and College Success: Evidence from Missouri*, AM. ECON. J.: APPLIED ECON. (forthcoming) (manuscript at 3–4), *available at* http://public.econ.duke.edu/~psarcidi/ak_college.pdf ("[W]e show that differences in enrollment patterns between African Americans and whites across groups of less prestigious colleges are the primary drivers behind the counterfactual sorting gains. In particular, it is moving African Americans out of urban schools and the very bottom schools that result in the graduation gains.").

93. Michal Kurlaender & Eric Grodsky, *Mismatch and the Paternalistic Justification for Selective College Admissions*, 86 SOC. EDUC. 294, 297–98 (2013).

94. *Id.* at 305–07. Initially, budget cuts caused the UC System to scale back admissions to a group of eligible, but less academically competitive, students, who were made the promise of later admission after two years at a community college. *Id.* at 297–98. When funding was partly restored in the summer of 2004, this group of "guaranteed transfer offer" students at UC Berkeley, UCLA, and UC San Diego were offered automatic admission. *Id.* Note that this study had retention data through four years, which is similar to, but not the same thing as, graduation rates.

affirmative action bans have modest negative effects (or modest negative effects nationwide) on URMs' graduation prospects, particularly at the most selective universities.[95]

D. After Graduation: Earnings in the Labor Market

Sander and Taylor's claim about lower post-graduation wages for so-called mismatched minority students also is not supported by the evidence. For example, the part of *Mismatch* that centers on Sander and Taylor's related discussion of earnings—where they argue that the "hard evidence" of earning advantages for attending elite schools is "surprisingly weak"[96]—also has a certain time warp quality.[97] After again deriding Bowen and Bok, Sander and Taylor then discuss a "clever analysis" in Dale and Krueger's 2002 matching study.[98] Despite the fact that Sander had earlier bent the Dale and Krueger study to fit his own critique of affirmative action,[99] the "proof in the pudding" is found in a very recent follow-up article by Dale and Krueger that looked at C&B schools (plus some others) and federal administrative and tax data on earnings.[100] For the 1989 cohort at largely C&B schools (overlapping a lot with the cohort studied by Bowen

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95. Ben Backes, *Do Affirmative Action Bans Lower Minority College Enrollment and Attainment? Evidence from Statewide Bans*, 47 J. HUM. RESOURCES 435, 437 (2012) (concluding, based upon 1990–2009 Integrated Postsecondary Education Data System data, "All in all, although the effect sizes were modest, estimates show that there were fewer black and Hispanic students graduating from four-year, public universities following the bans, and those who did graduate tended to do so from less prestigious universities"). Peter Hinrichs has also stated:

> I find that overall graduation rates do not change very much when affirmative action is banned. I find that graduation rates for underrepresented minorities at selective universities rise, although I acknowledge that this may be due to the changing composition of students who enroll at such universities. Moreover, the effects are small compared to the number displaced from selective universities due to affirmative action bans. I find that the negative effect on enrollment outweighs the positive effect on graduation from these universities, so that affirmative action bans lead to fewer underrepresented minorities becoming graduates of selective institutions.

Peter Hinrichs, Affirmative Action Bans and College Graduation Rates 5 (Nov. 21, 2012) (unpublished manuscript), *available at* http://www9.georgetown.edu/faculty/plh24/affactionbans-collegegradrates_112112.pdf.

96. SANDER & TAYLOR, *supra* note 3, at 108.

97. *See supra* notes 10–13 and accompanying text.

98. SANDER & TAYLOR, *supra* note 3, at 108, 319 n.108 (citing Stacy Berg Dale & Alan B. Krueger, *Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables*, 117 Q.J. ECON. 1491 (2002)). Likewise, Sander previously called the Dale–Krueger method "the most reliable way of measuring mismatch effects." Sander, *supra* note 36, at 2016.

99. *See* David L. Chambers et al., *supra* note 36, at 1882 & n.101 (critiquing Sander's empirical methodology and asserting that—contrary to the conclusions drawn by Sander—the Dale and Krueger study "has a more nuanced message when read in context").

100. Stacy Dale & Alan Krueger, *Estimating the Effects of College Characteristics over the Career Using Administrative Earnings Data*, J. HUM. RESOURCES (forthcoming) (manuscript at 4–5), *available at* http://www.aeaweb.org/aea/2013conference/program/retrieve.php?pdfid=220.

and Bok), Dale and Krueger found that, among matched students, wage premiums were not significant *except that* "the effect of attending a school with a higher average SAT score is positive for black and Hispanic students, even in the selection-adjusted model."[101]

Other recent economic research finds that attending selective colleges is associated with higher economic returns for blacks and Latinos,[102] and earlier studies utilizing the National Longitudinal Survey of Youth (NLSY) reach the same conclusion.[103] Recently, Andrews, Li, and Lovenheim looked at males in Texas who graduated from high school in 1996–2002 to determine the extent to which attending the University of Texas at Austin (UT Austin) and Texas A&M had later effects on earnings, other things being equal, compared to those attending less selective public universities.[104] They found heterogeneous results, with small returns among UT Austin's African Americans and Latinos in the middle of the income distribution, but "quite large" returns elsewhere in the distribution, and for African Americans and Latinos at Texas A&M, the earnings returns were "universally large."[105] Another study by Hoekstra addressed selection bias by comparing students who were *barely* above or below the admission cutoff at one of the Texas flagship universities, and while this study analyzed only white men, the author found a 20% wage premium of attending the "most selective" Texas flagship university by the time the students were in their late twenties and early thirties.[106]

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101. *Id.* (manuscript at 28).

102. Mark C. Long, *Changes in the Returns to Education and College Quality*, 29 ECON. EDUC. REV. 338, 346 (2010) (concluding that "[f]or annual earnings, the increases in returns to years of education were greatest for men, Blacks, and Hispanics").

103. *See* Kermit Daniel et al., *Racial Differences in the Effects of College Quality and Student Body Diversity on Wages*, *in* DIVERSITY CHALLENGED: EVIDENCE ON THE IMPACT OF AFFIRMATIVE ACTION 221, 222, 229 (Gary Orfield ed., 2001) (finding "strong evidence of a much larger effect of college quality on the later wages of blacks than of nonblacks"); James Monks, *The Returns to Individual and College Characteristics: Evidence from the National Longitudinal Survey of Youth*, 19 ECON. EDUC. REV. 279, 286 (2000) ("In particular, non-white [black and Latino] graduates of highly or most competitive institutions earn a larger premium than whites.").

104. Rodney J. Andrews, Jing Li & Michael F. Lovenheim, *Quantile Treatment Effects of College Quality on Earnings: Evidence from Administrative Data in Texas* 6 (Nat'l Bureau of Econ. Research, Working Paper No. 18068, 2012), *available at* http://www.nber.org/papers/w18068.

105. *Id.* at 4, 26–28. This review also compared graduating from a Texas community college, instead of a non-flagship, public, four-year university, and for black and Latino students there were negative returns for graduating from a community college below the 91st percentiles and the 84th percentile, respectively. *Id.* at 28–29.

106. Mark Hoekstra, *The Effect of Attending the Flagship State University on Earnings: A Discontinuity-Based Approach*, 91 REV. ECON. & STAT. 717, 724 (2009) ("The results indicate that attending the flagship state university increases the earnings of 28- to 33-year-old white men by approximately 20%, which suggests significant economic returns to college quality, at least in the context of the most selective public state university.").

All of these studies on graduation rates and wages, nationally and in Texas and California, are reflected in the summary table below.[107] The weight of the overall evidence substantially calls into question the claims made by Sander and Taylor. In Table 2, under the Sander and Taylor column, a superscript question mark follows the name of two studies (Dale and Krueger, 2002; Light and Strayer, 2000) where we believe Sander and Taylor's claims are at variance with the conclusions the authors of those studies reach in related works and refers readers to those related studies, indicated by a superscript asterisk in the right-hand column. We also mark with a single asterisk several studies that shed light on Loury and Garman's 1995 findings.

If one is to read between the lines, Sander and Taylor may be arguing something along the lines of, "We are unsatisfied with the vast majority of scholarly studies; we believe that *if* the research were to reflect controls for selection bias that we deem satisfactory, then we expect the resulting findings *would* conform to our belief that mismatch significantly reduces graduation rates and wages of affirmative action beneficiaries."[108] If that is essentially their position—rather than simply failing to provide sufficient research support for their claims—then the *Mismatch* book is covertly bottomed on dogma rather than data. Either way, Sander and Taylor's claims are not supported by the weight of social-science evidence.

107. *See infra* Table 2.

108. *Cf.* SANDER & TAYLOR, *supra* note 3, at 107–08 ("Taking [selection] bias into account, these studies as a group provide substantial—if not definitive—evidence that mismatch reduces minority graduation rates.").

Table 2: Summary of the Graduation Rate/Wages Literature

SANDER & TAYLOR	THIS REVIEW
Grad. Rates: National[109] Loury & Garman, 1995* Light & Strayer, 2000?**	**Grad. Rates: National (and Texas)** Golann et al., 2013; Cortes, 2010; Bowen et al., 2009; Espenshade & Radford, 2009; Melguizo, 2008; Fisher & Massey, 2007*; Massey & Mooney, 2007; Small & Winship, 2007; Gong, 2006*; Holzer & Neumark, 2006*; Alon & Tienda, 2005; Light & Strayer, 2002**; Bowen & Bok, 1998; Kane, 1998* HBCUs: Flores & Park, 2013; Allen et al., 2007*; Kim & Conrad, 2006; Ehrenberg et al., 1999; Allen, 1992*
Grad. Rates: California Arcidiacono et al., 2012 Sander & Taylor, 2012 (see also Sander, 2010)	**Grad. Rates: California+** Arcidiacono & Koedel, forthcoming; Kurlaender & Grodsky, 2013; Chingos, 2013; Kidder, 2013; Arcidiacono et al., 2012; Backes, 2012; Hinrichs, 2012; Chang & Rose, 2010
Wages Dale & Krueger, 2002?*** Loury & Garman, 1995*	**Wages** Dale & Krueger, 2011 and forthcoming***; Andrews et al., 2012; Long, 2010; Daniel et al., 2001; Monks, 2000; Hoekstra, 2009[110]; HBCUs: Fryer & Greenstone, 2010*; Ehrenberg et al., 1999*; Kane, 1998*

In summary, our review and synthesis of the social science around college graduation rates, labor market earnings, and the mismatch hypothesis, reflected in Table 2, reveals that Sander and Taylor have cherry-picked[111] data to support their conclusions, and they substitute

109. We debated adding Cole and Barber to the Sander and Taylor column. *See generally* STEPHEN COLE & ELINOR BARBER, INCREASING FACULTY DIVERSITY (2003). While that book does address African American and Latino college degree attainment somewhat, *see id.* at 226–30, it is referenced by Sander and Taylor primarily around STEM mismatch and other issues. SANDER & TAYLOR, *supra* note 3, at 44–47, 283.

110. This study analyzed only white men. *See supra* note 106 and accompanying text.

111. *See* Roy L. Brooks, *Helping Minorities by Ending Affirmative Action? A Review of* Mismatch: How Affirmative Action Hurts Students It's Intended to Help, and Why Universities Won't Admit It (San Diego Legal Studies Paper Series, Paper No. 13-133, 2013) (manuscript at 37), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2327713 ("The authors simply do not engage this evidence. Instead, they rely on ridiculously narrow definitions of

questionable *ipse dixit* models and premises (e.g., the cascade effect model purporting to reveal significant harm to minority students who would otherwise go to middle-tier universities) rather than engaging in a real and robust attempt to address the cumulative (and largely peer-reviewed) social-science evidence discussed herein. Not surprising then, in the *Fisher* case nearly a dozen top social scientists and methodologists from various academic disciplines—including Gary King and Donald Rubin, who are members of the National Academy of Science—filed an amicus brief responding to Sander and Taylor's *Fisher* brief. The leading empirical scholars reviewed Sander's prior data and methods and other studies cited in the Sander and Taylor brief, and concluded:

> Whether one finds Sander's conclusions highly unlikely or intuitively appealing, his "mismatch" research fails to satisfy the basic standards of good empirical social-science research. The Sander-Taylor Brief misrepresents the acceptance of his hypothesis in the social-science community and, ultimately, the validity of mismatch. Numerous examples exist of better ways to perform the type of research Sander undertook. Sander's failure to set up proper controls to test his hypothesis and his reliance on a number of contradictory assumptions lead him to draw unwarranted causal inferences. At a minimum, these basic research flaws call into question the conclusions of that research.
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> . . .
>
> In light of the many methodological problems with the underlying research, *amici curiae* respectfully request that the Court reject Sander's "mismatch" research . . . .[112]

To the extent Sander and Taylor attempt to deflect the searing rebuke in the Empirical Scholars' brief by claiming it was too singularly focused on law

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academic and professional success . . . and cherry pick the data on the effects Prop 209 has had on black students.").

112. Brief of Empirical Scholars as *Amici Curiae* in Support of Respondents at 27–28, Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411 (Aug. 13, 2012) (No. 11-345). Sander and Taylor attempt to respond to the Empirical Scholars in their *Schuette* brief, and some of their responses are peculiar. They speculate as to the reason that "most of the distinguished signatories" agreed to sign the brief, claim that Empirical Scholars cite but failed to review the details of twenty cited journal articles critical of Sander "since the specific arguments have been answered so decisively as to be discredited," and claim in the accompanying footnote, "Most authors of these critiques have generally made no substantive reply to scholarly responses. Specifically, there has been no further defense of the critiques advanced by Ian Ayres, Richard Brooks, Jesse Rothstein, Albert Yoon, David Wilkins, or Mitu Gulati." Brief for Sander & Taylor, *Schuette* Case, *supra* note 4, at 25 & n.70, 26 . This latter claim about "further defense of the critiques" is a mischaracterization about how social-science scholarship normally works, as there is typically no social-science norm that is the equivalent of a sur-reply legal brief—and one of us (Kidder) is speaking from direct experience as one of the foolhardy minority of scholars who "replied to Sander's reply" by posting a working paper responsive to Sander's *Reply to Critics* piece in the *Stanford Law Review*, *see* Lempert et al., *supra* note 36.

school mismatch and neglected "academic [undergraduate?] mismatch or the stunningly positive effects of Proposition 209 at the University of California,"[113] our Review has a lot to say about academic/undergraduate mismatch and Proposition 209 but little to say about law school mismatch (for space reasons), yet our conclusions in this Review closely parallel the collective judgment rendered by our more esteemed colleagues who authored the Empirical Scholars' brief.

II. The Warming Effect and Stigma?: Keepin' It Real?

Much like they did when discussing graduation rates and post-graduation wages, Sander and Taylor, in their book *Mismatch*, also failed to examine all available data, looking only to studies that they view as supporting their claims and turning a blind eye to the bulk of research on these topics, as well as the overall demographic changes that have occurred in California.

A. Examining the Direct Evidence

Sander and Taylor devote a chapter to the "warming effect" of Prop. 209, which is their rejoinder to the notion that affirmative action bans can result in "chilling effects," whereby URMs perceive university campuses with such bans as less welcoming.[114] Sander and Taylor posit that "[i]t is worth standing back and asking whether a rigorous analysis of all the available data supports" their opposite claim of a warming effect hypothesis about Prop. 209.[115] At the university application stage, Sander and Taylor focus attention on one 2005 study by Card and Krueger, which found application patterns to be unchanged after Prop. 209 among high-credential

113. Brief for Sander & Taylor, *Schuette* Case, *supra* note 4, at 24. This claim is also dubious in light of the studies discussed in Brief of Empirical Scholars as *Amici Curiae* in Support of Respondents, *supra* note 112, at 14–16, regarding undergraduate-level mismatch research, including Alon and Tienda; Fischer and Massey; Kane; Long; Small and Winship; Cortes; Melguizo; and Bowen and Bok.

The Sander and Taylor *Schuette* brief even has an amusing tidbit of criticism directed at one of us (Kidder) regarding data transparency. *See* Brief for Sander & Taylor, *Schuette* Case, *supra* note 4, at 23. But the Kidder memo to the State Bar of California cited in the Sander and Taylor brief stakes out a different position than those totally opposed to release of California bar data, recommending: "If the Sander et al. team were to overcome the methodological, data privacy and sample size concerns detailed herein, and the State Bar was then inclined to release the data, this should only be done with a prior agreement that the same access will be granted to other bona fide researchers." Memorandum from Bill Kidder, Special Assistant to the Vice President, Student Affairs, Univ. of Cal. Office of the President, to Gayle Murphy, Senior Exec. for Admissions, Office of Admissions, State Bar of Cal. 2 (Jan. 19, 2007), *available at* http://www.seaphe.org/pdf/bar-proposal/kidder_critique.pdf. *Contra* Brief for Sander & Taylor, *Schuette* Case, *supra* note 4, at 23 n. 60 (citing Memorandum from Bill Kidder, *supra*).

114. *See* SANDER & TAYLOR, *supra* note 3, at 131–42.

115. *Id.* at 135.

URMs in California.[116] However, Sander and Taylor make no mention of (or attempt to distinguish) three studies by Long, Dickson, and Brown and Hirschman that found net declines in applications by URMs after affirmative action bans in California, Texas, and Washington, respectively.[117] Thus, Sander and Taylor fall short of their own benchmark of looking soberly at all available data.[118]

Moreover, to the extent Sander and Taylor might justify their focus on Card and Krueger because of Sander and Taylor's disproportionate policy interest in the behavior of URMs with the highest credentials,[119] we note such a justification is inconsistent with Sander and Taylor's focus on lower credential black and Latino admits to UC campuses as the basis for their claims discussed further below about rates of accepting admission offers (i.e., yield rates) and Prop. 209's supposed "warming effect."

Sander and Taylor then turn to a study of UC yield rates by Antonovics and Sander, which compared yield rates among admitted students at UC campuses in 1995–1997 versus 1998–2000, as their key evidence of a post-Prop. 209 "warming effect."[120] Sander and Taylor then add theoretical embellishment to their findings about "warming effects" by asserting that Prop. 209 may have caused African Americans and Latinos admitted to UC to feel "more intellectually self-confident and less (if at all) stigmatized" and that, conversely, there is little support for the "critical

116. *Id.* at 136–37 (discussing David Card & Alan B. Krueger, *Would the Elimination of Affirmative Action Affect Highly Qualified Minority Applicants? Evidence from California and Texas*, 58 INDUS. & LAB. REL. REV. 416 (2005)).

117. *See* Susan K. Brown & Charles Hirschman, *The End of Affirmative Action in Washington State and Its Impact on the Transition from High School to College*, 79 SOC. EDUC. 106, 125 (2006) (interpreting the drop in minority applications after Washington State's affirmative action ban as a "discouragement effect" that followed the ban); Lisa M. Dickson, *Does Ending Affirmative Action in College Admissions Lower the Percent of Minority Students Applying to College?*, 25 ECON. EDUC. REV. 109, 116 (2006) (finding a decrease in the number of Hispanic and black applicants applying to college in Texas after the Top Ten Percent Plan, which essentially ended affirmative action, was put into place); Mark C. Long, *College Applications and the Effect of Affirmative Action*, 121 J. ECONOMETRICS 319, 324–25 (2004) (finding that in California, URMs sent relatively fewer applications to colleges after Prop. 209).

118. Another recent study by a coauthor of Sander reached ambiguous results regarding "chilling effects." Kate Antonovics & Ben Backes, *Were Minority Students Discouraged from Applying to University of California Campuses After the Affirmative Action Ban?*, 8 EDUC. FIN. & POL'Y 208, 249 (2013) ("An important issue in the debate surrounding Prop 209 . . . is whether [such bans] lowered the value URMs placed on attending UC schools. . . . Unfortunately, our results do not allow us to make definitive conclusions about this kind of 'chilling effect'. . . .").

119. *See* SANDER & TAYLOR, *supra* note 3, at 136 (suggesting that the Card and Krueger study used only highly qualified applicants because of the belief that those applicants would get into the schools both before and after Prop. 209).

120. *Id.* at 137–38 (discussing Kate L. Antonovics & Richard H. Sander, *Affirmative Action Bans and the "Chilling Effect,"* 15 AM. L. & ECON. REV. 252, 279 (2013)).

mass" hypothesis[121] (a key issue in the remanded *Fisher v. University of Texas* case[122]).

One of us has written in more detail elsewhere about UC yield rates and the problems with Sander et al.'s claims in both a refereed journal and a working paper,[123] so here we simply note a handful of points that have implications for Sander and Taylor's "warming effect" claim in *Mismatch*, and then we move on to a broader discussion of "stigma." First, Sander and Taylor claim that, under Prop. 209 at UC campuses, "it seems that the aura of race-neutrality attracted many, many more black and Hispanic students than it repelled."[124] However, the Antonovics and Sander data show that URM yield rates to the *UC system* went down (in absolute and relative terms) after Prop. 209 *even though* URM yield rates purportedly *went up on individual UC campuses*.[125] Thus, as a claim about numbers, Sander and Taylor's claim makes little sense unless (as occurs elsewhere in *Mismatch*), the authors are relying on extraneous trends to do the "heavy lifting" behind their Prop. 209 claim, such as the increase in total available freshmen "seats" at UC campuses between the mid-1990s and the early 2000s or the growth in Latino, college-going, high school graduates in California during that time.[126]

Second and relatedly, the most straightforward analytical question Antonovics and Sander could have looked at is whether Prop. 209 "warmed" more URMs to choose a UC campus without affirmative action *instead of* selective private institutions with affirmative action. However,

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121. *Id.* at 153.

122. *See* Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411, 2416 (2013) (describing the University's goal of attaining "critical mass" as the reason behind its decision to include race in the admissions process, suggesting that the "critical mass" theory is a point of contention).

123. Kidder, *supra* note 15, at 71–85; WILLIAM C. KIDDER, CIVIL RIGHTS PROJECT, THE SALIENCE OF RACIAL ISOLATION: AFRICAN AMERICANS' AND LATINOS' PERCEPTIONS OF CLIMATE AND ENROLLMENT CHOICES WITH AND WITHOUT PROPOSITION 209, at 15–32, app. B. at 37–42 (2012), *available at* http://civilrightsproject.ucla.edu/research/college-access/affirmative-action/the-salience-of-racial-isolation-african-americans2019-and-latinos2019-perceptions-of-climate-and-enrollment-choices-with-and-without-proposition-209/Kidder_Racial-Isolation_CRP_final_Oct2012-w-table.pdf.

124. SANDER & TAYLOR, *supra* note 3, at 139.

125. *See* Antonovics & Sander, *supra* note 120, at 273 tbl.4 (finding an overall 1.9% decrease for the UC system but an increase varying between 5.8% and 1.3% for individual UC campuses).

126. *See* Brief of Civil Rights Project/Proyecto Derechos Civiles as *Amicus Curiae* in Support of Respondents Chase Cantrell et al. at 11, 12 & n.14, Schuette v. Coal. to Defend Affirmative Action, No. 12-682 (U.S. July 1, 2013); Brief for the President and Chancellors of the University of California as Amici Curiae in Support of Respondents, *supra* note 87, at 22–23; PATRICIA GÁNDARA, CIVIL RIGHTS PROJECT, CALIFORNIA: A CASE STUDY IN THE LOSS OF AFFIRMATIVE ACTION: A POLICY REPORT 5–8 (2012), *available at* http://civilrightsproject.ucla.edu/research/college-access/affirmative-action/california-a-case-study-in-the-loss-of-affirmative-action; Kidder, *supra* note 15, at 89–90.

Antonovics and Sander did not have data on selective private colleges.[127] Even worse, they claim that their study was the first to investigate pre- and post-Prop. 209 yield rates in a systematic manner, yet they were seemingly unaware of Geiser and Caspary's study (using 1997–2002 data),[128] finding that after Prop. 209, "private selective enrollment of top URM admits to UC jumped by approximately six percentage points in 1999–2000, while the UC enrollment rate for these students fell by almost the same amount."[129] Ten years of post-Prop. 209 data suggest *that relative to a pre-Prop. 209 baseline of 1997*, the gap between URMs enrolling at selective privates widened compared to whites, Asian Americans, or others in both the top and middle thirds of UC's admit pool.[130] Such findings are inconsistent with Sander and Taylor's warming effect hypothesis and are consistent with the chilling-effect hypothesis.

Third, Sander and Taylor claim the warming effect is all the more remarkable given the cessation of race-conscious financial aid after Prop. 209,[131] but they (and Antonovics) again seem unaware of the anomalous situation whereby UC in-state and out-of-state tuition *decreased* by ten percent during the post-Prop. 209 years of their study (1998–2000 versus 1995–1997),[132] while at the same time that tuition *increased* nationwide between 1995 and 1999 by thirteen percent at public universities and eighteen percent at private universities.[133] Thus, UC had an unusually robust, if temporary, market price advantage among research universities in the years right after Prop. 209,[134] and Sander and Taylor fail to consider or account for that.[135]

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127. *See* Antonovics & Sander, *supra* note 120, at 284 ("While our data do not allow us to directly examine what happened to URMs' relative chances of being admitted to schools outside the UC system after Proposition 209, we can calculate the net drop in the number of URMs enrolled in the UC system after Proposition 209.").

128. This study and its key findings were cited in one of our coauthored critiques of Sander's law school mismatch article, *see* Chambers et al., *supra* note 36, at 1864 n.32, to which Sander published a reply.

129. Saul Geiser & Kyra Caspary, *"No Show" Study: College Destinations of University of California Applicants and Admits Who Did Not Enroll, 1997–2002*, 19 EDUC. POL'Y 396, 401 (2005).

130. KIDDER, *supra* note 123, at 28–29. The same data are in Kidder, *supra* note 15, at 80 tbl.2, 81 tbl.3, but an error was introduced in the editing process so the "difference" row in table 3 is not correct.

131. SANDER & TAYLOR, *supra* note 3, at 139.

132. *See* KIDDER, *supra* note 123, at 39–40; *UC Mandatory Student Charge Levels*, U. OF CAL. OFFICE OF THE PRESIDENT, http://budget.ucop.edu/fees/documents/history_fees.pdf.

133. *See* CHRISTINA CHANG WEI & LUTZ BERKNER, NAT'L CTR. FOR EDUC. STATISTICS, TRENDS IN UNDERGRADUATE BORROWING II: FEDERAL STUDENT LOANS IN 1995–96, 1999–2000, AND 2003–04, at 23, 28 (2008), *available at* http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008179rev. Figures in the text above and this source are not adjusted for inflation.

134. Complementing the broad national trend data by Wei and Berkner are more precise data by Hemelt and Marcotte documenting that public research universities in California (i.e., the University of California) experienced a temporary decline in total tuition costs in the late-1990s

Fourth, the unit-level data obtained by Antonovics and Sander have some advantages, but one disadvantage seems to be a greater propensity for missing data, and another disadvantage is that they were unable to separately analyze African Americans and Latinos even though those two groups exhibit important differences. For example, an exchange with Sander shows that his UC data indicate that URMs in the top third of UCLA's admit-pool yield rates rose from 13.5% in 1995–1997 to 17.3% in 1998–2000,[136] whereas the data we obtained (also from the UC Office of the President, like Antonovics and Sander) indicate that for African Americans and Latinos there was a decline between 1995–1997 (18.5%) and 1998–2000 (17.2%) in the top third of UCLA's admit pool.[137] For African Americans reported separately, there was a more substantial drop in the top third of UCLA's admit pool—from 29% in 1995–1997 to only 8% in 1998–2000.[138] All UC campuses saw disproportionate declines in African American and Latino yield rates in the top thirds of UC campus admit pools, and over a dozen times in the years 1998–2011 there were African American yield rates in the top third of UC campus admit pools

during the same time tuition increased at research universities in Florida and Texas and was flat in New York. *See* Steven W. Hemelt & Dave E. Marcotte, *Rising Tuition and Enrollment in Public Higher Education*, (Inst. for Labor Studies Discussion Paper Series, Paper No. 3827, 2008) (manuscript at 14, 24 fig.23), *available at* ftp://ftp.iza.org/SSRN/pdf/dp3827.pdf.

135. The relationships between financial considerations and student enrollment choice are complex and need to be carefully considered. *Cf.* Laura W. Perna & Marvin A. Titus, *Understanding Differences in the Choice of College Attended: The Role of State Public Policies*, 27 REV. HIGHER EDUC. 501 (2004).

136. Letter from Richard Sander, Professor, UCLA School of Law, to author (July 16, 2013) (on file with author).

137. Reply Memorandum from author to Richard Sander, Professor, UCLA School of Law, (July 29, 2013) (on file with author).

138. *Id.* A partial explanation may be that our data were for California resident applicants, while Antonovics and Sander's data included out-of-state applicants. To the extent nonresident admittees are more affluent—and less likely to be URMs and to have modest yield rates because they are, by definition, greater participants in the "national admissions market" with many good choices across the country—Antonovics and Sander's study may be capturing a spurious correlation associated with demographic differences between in-state and out-of-state candidates in the UC admissions pool. Regarding the meaning and import of the national admissions market, see, for example, Caroline M. Hoxby, *The Changing Selectivity of American Colleges*, 23 J. ECON. PERSP. 95 (2009), documenting the increasingly national admissions market, which increases the policy relevance of attending highly selective colleges vis-à-vis long-term career outcomes).

(including three times at UC Berkeley) that fell to the "inexorable zero,"[139] which is something that never occurred on UC campuses in 1994–1997.[140]

Fifth, the Antonovics and Sander results are being driven by yield rates in the bottom third of the UC admit pool, which is the area least relevant to the analysis of "warming effects" and stigma[141] and is inconsistent with the *Mismatch* book's emphasis on Card and Krueger's study of the most competitive URM applicants. While Sander and Taylor claim the opposite—celebrating "astonishing" gains at UC Berkeley's ability to enroll the most competitive African Americans' in 1998 immediately after Prop. 209, their claim is demonstrably false.[142] Moreover, in the bottom third of the UC admit pool, there are additional confounders not adroitly handled by Antonovics and Sander. At UCLA, for example, the NCAA data indicate that student–athletes receiving scholarships were 7.3% of African American freshmen in 1995–1997 versus 12.8% in 1998–2000.[143] The shift in the

139. *See, e.g.*, Johnson v. Transp. Agency, 480 U.S. 616, 656–57 (1987) (O'Connor, J., concurring) (comparing the percentage of available women in the workforce to the fact that zero women were in fact employed, noting that this fact was "sufficient for a prima facie Title VII case brought by unsuccessful women job applicants," and concluding that this statistic was a proper justification to institute an affirmative action program); Int'l Bhd. of Teamsters v. United States, 431 U.S. 324, 342 n.23 (1977) (stating that "the company's inability to rebut the inference of discrimination came not from a misuse of statistics but from 'the inexorable zero'").

140. KIDDER, *supra* note 123, at 24–25.

141. *Id.* at 24, app. B at 37–38.

142. Sander and Taylor also focus on the 1998 admissions cycle at Berkeley and claim that the African American yield rate immediately after Prop. 209 in 1998 was "particularly astonishing because the black students admitted that year had, on average, far stronger academic records than their predecessors." SANDER & TAYLOR, *supra* note 3, at 134. We believe Sander and Taylor's claim—or perhaps it is better described as a gossamer chain of statements that give the reader the impression they are making a claim about the credentials of enrolled African American students at Berkeley—used to bolster the "warming effect" hypothesis, is demonstrably false. What was astonishing was the drop in African American freshmen who enrolled at Berkeley in 1998, but the average credentials of those who did enroll that year were similar to other years. The table below on average SAT scores for African American freshmen admits and enrollees shows that the average SAT score for enrolled black freshmen in 1998 actually *dropped* 23 points compared to the prior year with affirmative action.

Year	***1995***	***1996***	***1997***	***1998***	***1999***	***2000***
Admits	1132	1133	1136	1165	1154	1167
Enrollees	1082	1089	1087	1064	1057	1102

Perhaps Sander and Taylor are confusing data about admits and enrollees or African Americans versus Latinos (or there are deeper "missing data" problems on their end). The average SAT score of black admits at Berkeley went up 29 points, but that fact accompanied by the 23 point decline in the black enrollees' SAT averages in 1998 is highly inconsistent with Sander and Taylor's warming effect and is consistent with the studies (Geiser and Caspary, 2005 and Kidder, 2012) pointing to a chilling effect at UC Berkeley. The data in the above table was generated by UC Office of the President's Statfinder in 2012, a query tool that is no longer available, but charts with these SAT data for all racial/ethnic groups at UC Berkeley and UCLA covering 1994 to 2009 are available at Kidder, *supra* note 15, at 95–96.

143. The data show that 54 out of 739 African American freshmen received scholarships in 1995–1997 versus 59 out of 461 in 1998–2000. *See Federal Graduation Rates: University of California, Los Angeles*, *Education & Research*, NCAA, http://fs.ncaa.org/Docs/newmedia/public/

concentration of recruited student athletes among UCLA's African American, Prop. 209 freshmen population is consequential because while other high school seniors are making up their mind in April about enrolling at UC, recruited athletes commit to a university under an earlier, and very distinct, recruitment process that other researchers try not to confound with the general campus admissions and recruitment cycle.[144] This reinforces the previous point that the "warming effect" data cited in *Mismatch* regarding "blacks and Hispanics"[145] have not been shown to meaningfully apply to African American students specifically.

For all of the aforementioned reasons, Sander and Taylor (and Antonovics and Sander) do not fashion a good test of holding out Prop. 209 as the basis for the stigma-reducing, "warming effect" hypothesis that they advocate.[146] The two of us have written separately about the topic of stigma in the context of affirmative action and have tested the extent of affirmative action's purported causal role by comparing survey data at institutions with and without affirmative action at the law school[147] and undergraduate[148] levels. Unfortunately, the *Mismatch* book by Sander and Taylor participates in a too-familiar political trope of affirmative action critics—including Justice Clarence Thomas[149]—deriding the harmful impact of the

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rates/index.html. These NCAA federal graduation-rate reports only go back to 1998, but the 1998 report lists four years of data (1995–1998) from which the 1995–1997 data can be obtained by deleting the 1998 totals.

144. *See* Stephen L. DesJardins, *An Analytic Strategy to Assist Institutional Recruitment and Marketing Efforts*, 43 RES. HIGHER EDUC. 531, 534 (2002) ("Recruited athletes are eliminated since the recruitment process for student–athletes is markedly different than for students in general.").

145. *See, e.g.*, SANDER & TAYLOR, *supra* note 3, at 138 & fig.8.1 (indicating that the "announced end of racial preferences at the University of California coincided with a jump in the rate at which blacks and Hispanics accepted offers of admission from UC schools").

146. *See* Antonovics & Sander, *supra* note 120, at 288–90 ("Removing the stigma of being a 'special admit' has both social and economic advantages. Being a URM admitted without a racial preference could increase the signaling value of one's college degree; thus, Proposition 209 may have increased the signaling value of a UC degree for URMs.").

147. *See* Angela Onwuachi-Willig et al., *Cracking the Egg: Which Came First—Stigma or Affirmative Action?*, 96 CALIF. L. REV. 1299, 1304 (2008) (administering a survey related to stigma issues to law students at UC Berkeley, UC Davis, Cincinnati, Iowa, Michigan, Virginia, and Washington).

148. KIDDER, *supra* note 123, at 20–32; Kidder, *supra* note 15, at 57–85.

149. *See* Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411, 2422–32 (2013) (Thomas, J., concurring) ("We acknowledged the possibility of stigma but nevertheless concluded that the reality of private biases and the possible injury they might inflict do not justify racial discrimination." (internal quotation marks omitted)); Grutter v. Bollinger, 539 U.S. 306, 373 (2003) (Thomas, J., concurring in part and dissenting in part) (protesting that African Americans admitted to law schools are "tarred as undeserving" because of affirmative action); Adarand Constructors, Inc. v. Pena, 515 U.S. 200, 240–41 (1995) (Thomas, J., concurring) (objecting to the premise that there is a "racial paternalism exception to the principle of equal protection"); *see also* Angela Onwuachi-Willig, *Just Another Brother on the SCT?: What Justice Clarence Thomas Teaches Us About the Influence of Racial Identity*, 90 IOWA L. REV. 931, 987–96 (2005)

"stigma" supposedly created by race-conscious policies without either a serious theoretical understanding of stigma scholarship or firm data delineating the causal role of affirmative action (as opposed to the longstanding and deep-seated sociological phenomenon of racial stigma that is rooted in America's legacy of racial inequality).[150]

An additional example is in Sander and Taylor's portrayal of the stigma-related study by Sidanius, Levin, van Laar et al., who found that African Americans and Latinos at UCLA in 1996 who *believed* they were admitted due to affirmative action had, controlling for SAT scores, lower self-reported academic performance at the end of their freshmen year.[151] Sander and Taylor acknowledge that Sidanius, Levin, van Laar et al.'s "remarkable finding" about stereotype threat is "probably real," but then they pivot to misappropriate this study under the mismatch banner by claiming that stereotype threat "plausibly will be most severe for students admitted with the largest racial preferences."[152] But Sander and Taylor's "spin" is directly at odds with what the authors of this study (in both a companion article and the book) state: "We do not take our findings to indicate that affirmative action is harmful for ethnic minority students. On the contrary, suspecting that one was a beneficiary of affirmative action impaired ethnic minorities' academic performance *only when it was accompanied by personal or social identity stereotype threat*."[153] In this study, students' SAT scores explained only 2% of the variance in whether

(discussing at length Justice Thomas's views with respect to law school affirmative action and the negative perceptions it can promulgate).

150. *See* Onwuachi-Willig et al., *supra* note 147, at 1308–24 (tracing the storied history of stigma as related to affirmative action); *see also* Christopher A. Bracey, *The* Cul de Sac *of Race Preference Discourse*, 79 S. CAL. L. REV. 1231, 1234 (2006) (suggesting that the debate over affirmative action has "devolve[d] into disengaged moral and ideological posturing"); R.A. Lenhardt, *Understanding the Mark: Race, Stigma, and Equality in Context*, 79 N.Y.U. L. REV. 803, 809 (2004) (arguing that when understood in context, stigma is the cause of many racial harms, and that intentional discrimination and racialized behavior are a function of racial stigma, not vice versa). From the shrewd standpoint of political persuasion, commitments to theoretical coherence and evidence-based argument by such affirmative action critics becomes epiphenomenal. *See* Onwuachi-Willig et al., *supra* note 147, at 1323 (noting that in the political context, "stigma rhetoric is persuasive because of how it impacts the ordering of our national values and political commitments").

151. JIM SIDANIUS ET AL., THE DIVERSITY CHALLENGE: SOCIAL IDENTITY AND INTERGROUP RELATIONS ON THE COLLEGE CAMPUS 287–88 (2008). This study used both self-reported college GPA and self-perceived performance ("How well will you do (are you doing) in school, compared to other students at UCLA?") on a seven-point scale. *See id.* at 255, app. A at 326. For more information, such as the methods used in the companion study, see Colette van Laar et al., *Social Identity and Personal Identity Stereotype Threat: The Case of Affirmative Action*, 30 BASIC & APPLIED SOC. PSYCHOL. 295, 298–99 (2008).

152. SANDER & TAYLOR, *supra* note 3, at 105–06.

153. van Laar et al., *supra* note 151, at 308. Jim Sidanius was not a coauthor of this companion article, but his book similarly states that "affirmative action did not have harmful effects on later academic performance, unless that student was concerned about the negative stereotypes about his or her group." SIDANIUS ET AL., *supra* note 151, at 290–91.

students believed they were admitted because of affirmative action ($r = -.15$), and two-fifths (41%) of the 54 African Americans in this study did not believe affirmative action was a factor, a combination of facts that is hardly an endorsement of the mismatch hypothesis.[154]

Moreover, Sidanius, Levin, van Laar et al., properly acknowledge that for black and Latino college students, academic stigma and stereotype threat are "part of a larger set of minority status stressors that can undermine minority students' psychological and academic outcomes"; therefore, they recommended that universities communicate to students of all backgrounds that the "institution is committed to maintaining a positive campus racial climate."[155]

B. Campus Climate Survey Data and the "Warming Effect"

The above discussion segues our Review to a key natural-experiment question that Sidanius, Levin, van Laar et al. could not analyze, but that is central to Sander and Taylor's "warming effect" and stigma reduction hypotheses.[156] From the perspective of black and Latino undergraduates, do UC campuses after Prop. 209 have a "warmer" campus racial climate whereby URMs feel more respected and less stigmatized than their peers at comparable leading research universities with affirmative action? Or do UC campuses with low diversity levels because of the affirmative action ban have black and Latino students who feel less respected compared to those at universities with affirmative action or higher diversity levels (i.e., critical mass)? Against this benchmark of student perceptions about campus racial climate (and stigma salience), can Sander and Taylor's claims—that the "size of the warming effect should be, as it is, closely related to the reduction in racial preferences after Prop. 209[;] [P]references fell dramatically at Berkeley and UCLA, and this had particularly impressive warming effects"[157]—still be substantiated?

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154. van Laar et al., *supra* note 151, at 298–301. Though not definitive, the fact that 41% of African Americans but only 28% of Latinos in this study did not believe that affirmative action was a factor in their UCLA admission, *see id.* at 301, suggests that a student's self-perceptions are important regardless of whether they are objectively accurate or not, which again cuts against the mismatch hypothesis. The authors also eliminated reverse causation (i.e., lower academic performance was not associated with increased identity stereotype threat). *Id.* at 304–05.

155. SIDANIUS ET AL., *supra* note 151, at 291.

156. Sander and Taylor state:

> But, of course, another possibility was at least equally plausible: that students of color would welcome the chance to attend a school without the stigma of being a suspected 'affirmative-action admit.' They may have anticipated that under a race-neutral regime campus life would be easier and that white and Asian students would be less likely to stereotype them as academically weak and more likely to be friends.

SANDER & TAYLOR, *supra* note 3, at 140.

157. *Id.* at 141.

To address these questions relevant to warming effects and stigma, we present data from a campus survey item administered at thirty campus-level data points between 2008 and 2012, which includes twenty-five administrations at UC campuses, two at UT Austin, and three at other leading research universities that were willing to share their data if their institutions were not named (AAU #1 and AAU #2).[158] This survey asked undergraduates if they believed that students of their race or ethnicity were respected on campus, and includes over 3,000 African American and over 17,000 Latino respondents, which is an unusually large sample relative to the campus climate research literature.[159]

In the set of UC campuses on the right side of Figure 2A—Berkeley, Davis, Irvine, UCLA, San Diego, Santa Barbara, and Santa Cruz—African Americans are only 2%–4% of the student body, and on these campuses, only 59.0% of African Americans feel respected (defined as students who responded that they "strongly agree," "agree," or "somewhat agree"). The set of universities on the left side—UT Austin, UC Riverside, UC Merced, AAU #1, and AAU #2—are ones where African Americans are 5% or more of the student body and include cases with affirmative action. At this set of universities, by contrast, the percentage of African American undergraduates who report feeling respected is 79.9%, approximately 21 percentage points higher (or 20 percentage points higher if excluding UC Merced[160]). There is a robust relationship between African American representation in the student body and the percentage of these students who feel respected on their campus ($R^2 = 0.52$).[161] All of this runs contrary to

158. Kidder, *supra* note 15, at 60–61.

159. Our findings here add 2012 data to companion papers by Kidder that provide additional detail about these survey data. *See* KIDDER, *supra* note 123, at 34–37 (using 2008–2011 data but noting that the data do not include 2012 data, which, as noted, is what is added in this subpart); Kidder, *supra* note 15, at 61–63 (using 2008–2011 data). UC Merced did not administer this survey item in 2008 and 2010. KIDDER, *supra* note 123, at 34–35.

160. It can be argued that UC Merced is not as comparable as the other 29 campus data points because UC Merced is a small and new campus that does not yet have a Carnegie classification as a "very high" research university. *See* Kidder, *supra* note 15, at 63 n.22 (indicating that the "much smaller" UC Merced campus was not included in the study); Results of Search for Institutions with a "Very High" Carnegie Classification, CARNEGIE FOUND., http://classifications.carnegiefoundation.org/lookup_listings/srp.php?clq={%22basic2005_ids%22%3A%2215%22}&limit=0,50 (listing doctorate-granting universities classified as having "very high research activity," of which UC Merced is not included). So if UC Merced is excluded, then 79.3% is average for the percentage of African American students who feel respected at the other universities in the left grouping in the chart.

161. These data are not part of a causal model, and we do not have the quantitative data on other contextual factors that may influence this relationship. The wider scholarly literature documents the multifaceted nature of a positive campus racial climate. *See* KIDDER, *supra* note 123, at 7–9 (summarizing several studies); Liliana M. Garces & Uma M. Jayakumar, *Dynamic Diversity: Toward a Contextual Understanding of Critical Mass*, EDUC. RESEARCHER (forthcoming);. Thus, it is very plausible (even expected) that if one were analyzing a broader representation of American public and private research universities that—in contrast to our data here—were not effectively "over-sampling" UC campuses under an affirmative action ban, the

the warming effect hypothesis, including the finding that UC Berkeley (51%–57%) and UCLA (49%–62%) are toward the lower end in terms of having African American students who feel respected, whereas the Sander and Taylor hypothesis is that Berkeley and UCLA should be the campuses where one can most readily see the unbounded Prometheus of ending "racial preferences" after Prop. 209.[162]

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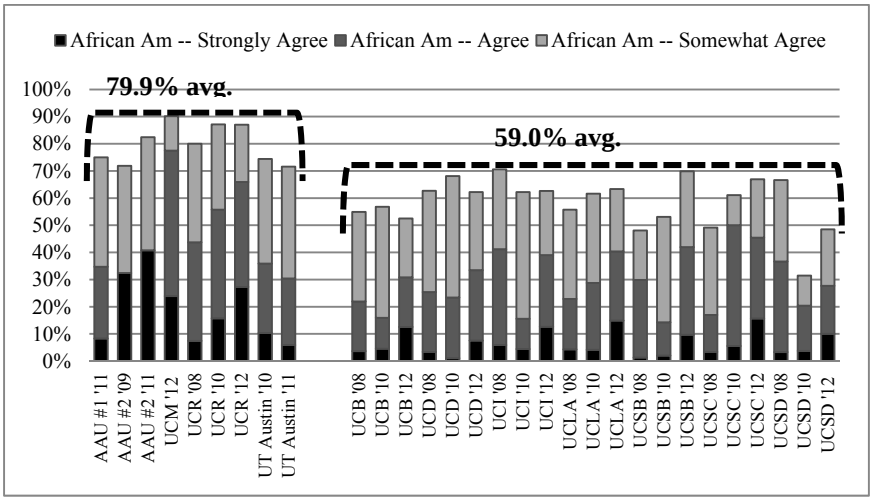
strength of the simple correlation between "critical mass" and URM students feeling respected would become more attenuated. Rather, our intent in this part of our Review is to present what lawyers and judges would refer to as "rebuttal evidence" vis-à-vis the claims Sander and Taylor make in *Mismatch* in a context in which the "over-sampling" of UC campuses is relevant and responsive because Sander and Taylor's claims are about Prop. 209.

162. Professor Sander was quoted in connection with the *Fisher* case as dismissive of "research based on surveys of students who felt pressure 'to endorse the diversity ideology' of their college." Peter Schmidt, *444 Scholars Tell Court that Research Supports Race-Conscious Admissions*, CHRON. HIGHER EDUC. (Aug. 10, 2012), https://chronicle.com/article/444-Scholars-Tell-Court-That/133515/. It is difficult to respond to such an abbreviated quote, but to the extent this is relevant to Professor Sander's reply to our Review, we simply note that the above quote appears to be self-referential and lacking in empiricism. It amounts to dodging rather than offering a viable alternative explanation for the core finding of Figures 2A and 2C regarding how comparable research universities exhibit considerable variation in URM students feeling respected and how that is associated with "critical mass" at least for this set of universities. As one distinguished sociologist at UCLA puts it, "[I]t goes without saying that survey research has its limitations: one wants to know, not just what people say, but what they do, though one would have to endorse a very strong view of the mind/body split to insist that what people say is of no value at all." Roger Waldinger, *The Bounded Community: Turning Foreigners into Americans in Twenty-first Century L.A.*, 30 ETHNIC & RACIAL STUD. 341, 367 (2007). Second, the studies by Park, Sax & Arredondo, and Edwards discussed later in this subpart, *see infra* notes 174–75 and accompanying text, all rely on CIRP freshmen surveys taken *just before students enrolled* in college, yet show a consistent pattern that black and Latino students have substantially more favorable attitudes about affirmative action in college admissions than white students. *See also* WALTER R. ALLEN ET AL., BLACK UNDERGRADUATES FROM *BAKKE* TO *GRUTTER*: FRESHMEN STATUS, TRENDS AND PROSPECTS, 1971–2004, at 23 (2005), *available at* http://www.heri.ucla.edu/PDFs/pubs/TFS/Special/Monographs/BlackUndergraduatesFromBakkeToGrutter.pdf ("In 2004, 50 percent of incoming freshmen felt affirmative action should be abolished, as compared to 25 percent of Black freshmen."). These studies are not the same as campus racial climate, obviously, but large pre-existing differences in students' attitudes by race/ethnicity are a reminder to readers that the "college indoctrination" hypothesis suggested by the Sander quote should—like so many claims in the *Mismatch* book—be regarded with strong skepticism.

"Students of my race/ethnicity are respected on this campus" Surveys in 2008–2012 (% strongly agree, agree, or somewhat agree)[163]

Figure 2A: African-American Undergraduates



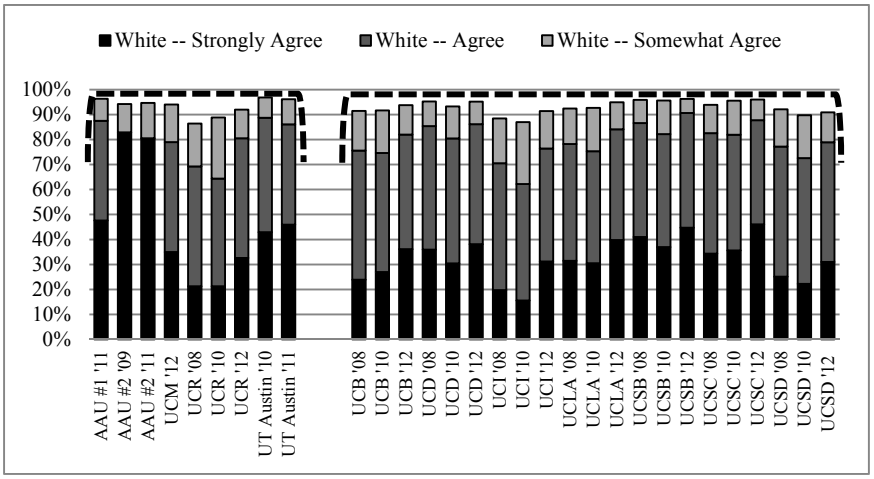
Juxtaposing Figure 2A on African Americans (above) with Figure 2B (below) for white students at the same set of universities provides additional confirmation that Sander and Taylor's working hypothesis—that affirmative action *qua* affirmative action is primarily or entirely causing the stigma that African American students face on college campuses—is shallow and poorly theorized.[164] In the set of UC campuses on the right side, only 34.5% of African Americans either "strongly agree" or "agree" that they are respected, which confirms that these students perceive their

163. Regarding statistical significance, the two-tailed *P* value is less than 0.0001 when comparing the respected/not respected totals for the two groups of universities. The group of universities on the left includes 1,421 African American respondents, and the group on the right includes 1,768 African Americans. Note that for AAU #2 there are no middle bars in Figures 2A–C for "agree" because the institution providing the data already combined "strongly agree" and "agree."

164. *See, e.g.*, Brenda Major & Laurie T. O'Brien, *The Social Psychology of Stigma*, 56 ANN. REV. PSYCHOL. 393, 412 (2005) ("[O]ne of the major insights . . . on stigma is the tremendous variability across people, groups, and situations in responses to stigma. The emerging understanding of . . . stigma and identification of effective coping strategies for dealing with identity-threatening situations holds some promise for improving the predicament of the stigmatized."); *see also* John F. Dovidio et al., *Stigma: Introduction and Overview*, *in* THE SOCIAL PSYCHOLOGY OF STIGMA 1, 16 (Todd F. Heatherton et al. eds., 2000) (explaining that the "oversimplification" of a "topic as broad and complex as stigma" may "obscure critical distinctions or exclude important points"); Cheryl R. Kaiser, *Dominant Ideology Threat and the Interpersonal Consequences of Attributions to Discrimination*, *in* STIGMA AND GROUP INEQUALITY: SOCIAL PSYCHOLOGICAL PERSPECTIVES 45, 45–64 (Shana Levin & Colette van Laar eds., 2006) (observing that social psychologists have just recently begun examining the interpersonal consequences of perceptions of prejudice).

world in a decidedly different manner than their white classmates, of whom 81.8% either "strongly agree" or "agree" that students of their race are respected on these same UC campuses.[165] Even the "outlier" data among white students are consistent with the "critical mass" hypothesis.[166] Moreover, the black–white student gaps in feeling respected are considerably worse at the UC campuses on the right side of the two charts.

Figure 2B: White Undergraduates



Likewise, other reports using the same UC Undergraduate Experience Survey (UCUES) data show that, at UC Berkeley for the 2008–2012 UCUES combined, on this "respect" survey item there is a gulf separating African Americans (52% at least somewhat agree they are respected) from more privileged and even other traditionally marginalized student affinity groups on campus, including students identifying as heterosexual (98%), white (93%), Asian (91%), bisexual (85%), Christian (83%), gay/lesbian (83%), Muslim (81%), and Jewish (75%).[167] And if excluding those who

165. Regarding statistical significance, the two-tailed *P* value is less than 0.0001 when comparing the totals for the African American and white respondents at the UC campuses on the right side of the two charts. This comparison includes 1,768 African American and 28,213 white respondents.

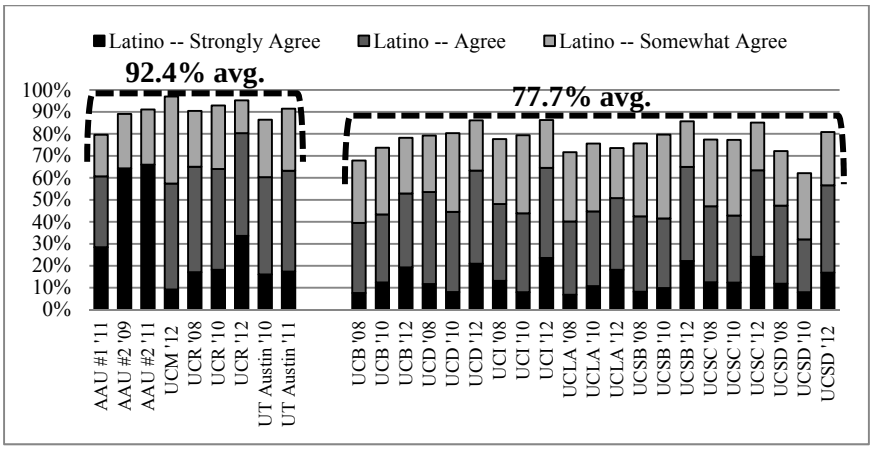
166. Where there is modest softening of whites' high percentage of feeling respected, at UC Riverside and UC Irvine, it is on those campuses where white students are a smaller percentage of the student body (under 20% in 2012), consistent with what one would predict a priori based on the "critical mass" hypothesis, other things being equal.

167. ANDREW EPPIG & SEREETA ALEXANDER, ASSESSING UNDERGRADUATE CAMPUS CLIMATE TRENDS AT UC BERKELEY 7–8 (2012), *available at* http://www.cair.org/conferences/cair2012/pres/32_Eppig.pdf (presentation at the 2012 California Association for Institutional Research conference). For this UC Berkeley report, the African American UCUES sample was 484, and all of the groups mentioned above had larger samples (e.g., Christian n = 6,544) except for Muslim students (n = 277). *Id.*

"somewhat agree," the proportion of African American UC Berkeley students who strongly agree or agree about feeling that students of their race are respected drops to half or below the levels for all the other above-mentioned groups.[168]

The data for Latinos are shown below in Figure 2C. While not as dramatic as the data for African Americans, there is a fifteen point difference (92.4% versus 77.7%) between Latinos feeling respected in the group of campuses on the left side of Figure 2C versus the group of UC campuses on the right side.[169] As with African Americans, Latinos have a lower sense of feeling respected at UC Berkeley and UCLA—the opposite of what would be predicted by the "warming effect" hypothesis advanced by Sander and Taylor.

Figure 2C: Latino Undergraduates[170]



Our results are consistent with other studies. Using the new *Diverse Learning Environments* survey,[171] Hurtado and Guillermo-Wann find:

168. *Id.* at 8.

169. To facilitate consistent comparisons, the campuses are clustered in 2C in the same order as in 2A and 2B. If arrayed in terms of Latinos' percentage of the student body, the results are only slightly different, and the big picture is the same.

170. Regarding statistical significance, the two-tailed P value is less than 0.0001 when comparing the respected/not respected totals for the two groups of universities. The group of universities on the left includes 5,405 Latino respondents and the group on the right includes 13,027 Latinos. As noted earlier, for AAU #2, the institution provided the data that already combined "strongly agree" and "agree."

171. SYLVIA HURTADO & CHELSEA GUILLERMO-WANN, HIGHER EDUC. RESEARCH INST., DIVERSE LEARNING ENVIRONMENTS: ASSESSING AND CREATING CONDITIONS FOR STUDENT SUCCESS (2013), *available at* http://heri.ucla.edu/dle/DiverseLearningEnvironments.pdf. This survey covered a broader set of colleges and universities and included 218 African Americans and 959 Latinos in the sample. *See id.* at 59–60. A concise policy brief with the key findings can be found in SYLVIA HURTADO & ADRIANA RUIZ, THE CLIMATE FOR UNDERREPRESENTED GROUPS

"While underrepresented minority students experience less frequent discrimination at more compositionally diverse institutions, negative climates still persist, especially for African American students and for students underrepresented in their major departments."[172] Likewise, Deirdre Bowen's finding that a higher proportion of the URM students from four states with affirmative action bans feel "[p]ressure to prove themselves academically because of race" compared to URM students from nearly two dozen states with affirmative action (74% versus 41%).[173] And the longstanding CIRP (Cooperative Institutional Research Program) freshmen surveys consistently show that African Americans on predominantly white campuses express by far the highest levels of support for (i.e., disagree with abolishing) "affirmative action in college admissions;"[174] that pattern held for the freshmen attending four-year universities in California who took the CIRP survey shortly before and after Prop. 209.[175] Not only do the results of all of these surveys run counter to Sander and Taylor's claims, but they must be understood in the context of our earlier point that Antonovics and Sander did not have separate data on African Americans. More broadly, reviewers of the wider literature (mostly on the employment sector) find that any negative stigma of being an affirmative action beneficiary is highly context-dependent and the negative effects can fade from relevancy under the right conditions.[176]

Conclusion

In conclusion, despite claims of rigor, Sander and Taylor failed throughout their book to look beyond the miniscule number of studies that support their claims and, in so doing, neglected to respond to mountains of

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AND DIVERSITY ON CAMPUS fig.2 (2012), *available at* http://heri.ucla.edu/briefs/urmbriefreport.pdf.

172. *Id.* at 32.

173. Deirdre M. Bowen, *Brilliant Disguise: An Empirical Analysis of a Social Experiment Banning Affirmative Action*, 85 IND. L.J. 1197, 1222 tbl.2, 1223–24 (2010).

174. *See, e.g.*, Julie J. Park, *Taking Race into Account: Charting Student Attitudes Towards Affirmative Action*, 50 RES. HIGHER EDUC. 670, 675–76, 678 tbl.1 (2009); Linda J. Sax & Marisol Arredondo, *Student Attitudes Toward Affirmative Action in College Admissions*, 40 RES. HIGHER EDUC. 439, 443, 445 tbl.1 (1999).

175. *See* William A. Edwards, Student Attitudes Toward Affirmative Action in College Admissions and Racial Diversity Before and After Proposition 209, at 71–73, 87, 130 app. A (2008) (unpublished Ph.D. dissertation, Michigan State University) (on file with author) (analyzing 1996 and 2000 CIRP freshmen surveys of students at over thirty four-year colleges and universities in California).

176. *See* Faye J. Crosby et al., *Affirmative Action: Psychological Data and the Policy Debates*, 58 AM. PSYCHOLOGIST 93, 106 (2003) (suggesting that in everyday work conditions—where the competence of an affirmative action beneficiary's peers can be observed—there is less negative association with the affirmative action label); Linda Hamilton Krieger, *Civil Rights Perestroika: Intergroup Relations After Affirmative Action*, 86 CALIF. L. REV. 1251, 1261 (1998) ("Subsequent studies have demonstrated that the self-denigrating effects of affirmative action are highly sensitive to contextual variables and, under certain conditions, disappear entirely.").

research by many of the world's top social scientists that have found such claims about mismatch to be empirically groundless. Moreover, the few studies that Sander and Taylor examined and cited in support of their arguments about mismatch were either based on outdated data or their own or others' flawed empirical analyses.

Indeed, the one-sided nature of Sander and Taylor's arguments—the very way in which the two authors seem to pay no attention to white students with grades and scores that are comparable to those of allegedly "mismatched" students of color—exposes a fatal flaw about claims in their research. After all, if mismatch were such a problem, why would Sander and Taylor specifically link their analyses predominantly to race and affirmative action?[177] They could, for example, add gender and affirmative action, particularly in the sciences, to their discussion. Or better yet, they could make broader claims that include legacies—nearly all white students who find themselves "mismatched" at their institutions.[178] Indeed, consider the fact that Sander and Taylor supported and urged the Supreme Court to review the lawsuit by Abigail Fisher.[179] Had Fisher been admitted to the University of Texas at Austin, she, too, would have been a "mismatched" student. As the University proclaimed in its Supreme Court brief, Abigail Fisher (who had an Academic Index score of 3.1), "would not have been admitted to the Fall 2008 freshman class even if she had received a 'perfect' [Personal Achievement Index (PAI)] score of 6" (and her actual PAI was, in fact, lower than that).[180] In fact, Ms. Fisher was also denied admission to UT Austin's 2008 summer freshmen admissions program in which 168 African Americans and Latinos were also denied admission with AI/PAI scores equal to *or higher* than Fisher's (versus only a handful of African Americans or Latinos offered summer admission with lower AIs/PAIs than Fisher).[181] Moreover, while comparing students based solely on SAT

177. *See also* Kurlaender & Grodsky, *supra* note 93, at 294 ("Although the logic of the mismatch argument is color-blind, we have not been able to find an instance in which the mismatch argument has been deployed by advocates out of concern for white or Asian students.").

178. In their brief supporting Supreme Court review of the *Fisher* case, Sander and Taylor begin a discussion of mismatch by briefly noting that "admissions preferences — regardless of whether these are based on race, 'legacy' considerations, or other factors" cause lower grades, Brief Amicus Curiae for Richard Sander and Stuart Taylor, Jr. in Support of Petitioner at 4, Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411 (Oct. 19, 2011) (No. 11-345), but this is a rhetorical pivot and the thrust of their book and Supreme Court briefs focus on race/ethnicity.

179. *See, e.g.*, SANDER & TAYLOR, *supra* note 3, at 274–75 (asserting that the "Supreme Court case of *Fisher v. University of Texas* provides an opportunity for the Court to start us down this better path").

180. Brief for Respondents at 15–16, Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411 (2013) (No. 11-345) (internal quotation marks omitted). Fisher's exact PAI is in a sealed brief. *Id.* at 15.

181. For example, the *Fisher* Brief stated:

> Although one African-American and four Hispanic applicants with lower combined AI/PAI scores than petitioner's were offered admission to the summer program, so were 42 Caucasian applicants with combined AI/PAI scores identical to or lower than

scores is simplistic and not how college admissions really works, Fisher's SAT score of 1180 would have placed her below at least 84% of the summer-program students at UT Austin in 2008.[182] Yet, despite the fact that Abigail Fisher herself would have been subject to the purported harms of mismatch, Sander and Taylor praise her lawsuit as a critical intervention, noting that the "mismatch is bound to be a serious problem for the racially preferred at UT."[183] In fact, Sander and Taylor argued in the *Fisher* case that at UT, "Hispanics who are admitted due to preferences typically enter with markedly less academic preparation," and they cited as their supporting evidence that in 2009 Latinos admitted outside the Ten Percent Plan had SAT scores at the 80th percentile nationally in 2009, compared to the 89th percentile for whites and 93rd percentile for Asian Americans.[184] While Sander and Taylor argue that "*Fisher* does not directly pose the problem of mismatch. . . . But the mismatch issue lurks in the background,"[185] Abigail Fisher's SAT score was equivalent or lower to the Latino SAT mean score that Sander and Taylor cited as primary evidence of "markedly less academic preparation."[186] Notwithstanding the poor

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> petitioner's. In addition, 168 African-American and Hispanic applicants in this pool who had combined AI/PAI scores identical to or *higher* than petitioner's were *denied* admission to the summer program.

Id. at 15–16. This since-discontinued summer program bears some resemblance to the "mismatched" students from the provisional University of California program that Kurlaender and Grodsky studied, though the latter was a one-time occurrence. *See supra* notes 87, 94–95 and accompanying text.

182. *Compare* Brief for Respondents, *supra* note 180, at 15 (identifying Fisher's SAT score of 1180), *with* UNIV. OF TEX. AT AUSTIN OFFICE OF ADMISSIONS, THE PERFORMANCE OF STUDENTS ATTENDING THE UNIVERSITY OF TEXAS AT AUSTIN AS A RESULT OF THE COORDINATED ADMISSION PROGRAM (CAP): STUDENTS APPLYING AS FRESHMEN 2008, at 4 tbl.5 (2011), *available at* http://www.utexas.edu/student/admissions/research/CAPreport-CAP08.pdf (demonstrating that a sum of 84% of the 2008 summer-program freshmen at UT Austin had SAT scores of 1200 or higher).

183. Kali Borkoski, *Ask the Author: Richard Sander and Stuart Taylor, Jr. on* Mismatch, SCOTUSBLOG (Oct. 16, 2012, 9:39 AM), http://www.scotusblog.com/2012/10/ask-the-author-richard-sander-and-stuart-taylor-jr-on-mismatch/.

184. Brief for Sander & Taylor, *Fisher* Case, *supra* note 4, at 3–4. A similar claim appears in SANDER & TAYLOR, *supra* note 3, at 288. It is unclear why they rely on 2009 data when Abigail Fisher applied in 2008.

185. SANDER & TAYLOR, *supra* note 3, at 289.

186. Sander and Taylor are referencing SAT percentile ranks for scores on the 2400-point scale that includes the writing section, but the sparse record in *Fisher* only seems to report her SAT of 1180 on the 1600-point scale (500 on critical reading; 680 on math). Joint Appendix at app. C at 41a, Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411 (2013) (No. 11-345). We say "or lower" in the text because it is unclear if Abigail Fisher took the SAT writing test, but if she did, then her discrepant scores between reading and math suggest that it may be too optimistic to assume that her SAT score on a 2400-point scale (i.e., including writing) was at the 80th percentile (1780) nationally. *See* COLLEGE BOARD, SAT PERCENTILE RANKS FOR MALES, FEMALES, AND TOTAL GROUP: 2008 COLLEGE BOUND SENIORS—CRITICAL READING + MATH + WRITING (no date), *available at* http://professionals.collegeboard.com/profdownload/sat_percentile_ranks_2008_composite_cr_m_w.pdf.

empirical support for the mismatch hypothesis that we documented earlier in this Review, for adherents like Sander and Taylor who believe that mismatch is prevalent and deeply harmful, the case of Abigail Fisher was one where mismatch was hardly lurking in the background—it was staring them directly in the face. The extent to which Abigail Fisher and a Latina applicant with equivalent qualifications (let's call her "Abigaíl Pescadora") are being marked in decidedly different ways in the affirmative action debate by Sander and Taylor[187] reveals a form of "doubletalk"[188] different than the type their book purports to expose.

Such gaps in analysis reveal the malleability of standards for admission for many critics of affirmative action, like supporters of Abigail Fisher's case. For many of these critics, their concerns are not so much about merit and consistency but rather about whom they view (whether consciously or unconsciously) as belonging and not belonging at selective institutions, about whom they presume as properly having a claim to seats at certain schools. In their book *Mismatch*, Sander and Taylor consistently argued for alterations to affirmative action that would push minority students (yet not the Abigail Fishers of the world) into less elite institutions. While doing so, the two authors presumed the neutrality of the approaches being used to teach students and never questioned the curriculum in any programs, despite the many questions being raised about the exclusivity in topics and the practicality of, and approaches to, education today. Sander and Taylor also imagined, through all their arguments about why less (or non-) selective schools are better options than selective schools for minority students, a nonexistent world in which an institution's resources play no role in a school's ability to offer programs that enable students to both survive and thrive within their hallways (but see Table 1 graduation rates).[189] Furthermore, Sander and Taylor pretended that students receive their education and important lessons only from the books and classroom learning, and not at all from interactions and other kinds of nonacademic resources and programs.[190] Yet, as Abigail Fisher herself once explained in

187. "[P]references on the scale used by UT are almost certain to backfire on the students they purport to help." SANDER & TAYLOR, *supra* note 3, at 289.

188. *Id.* at xiv.

189. For example, at the top thirty or so American private universities—members of the AAU—the endowment per alumni in 2012 was $54,959, compared to $5,852 at the approximately thirty public universities in the AAU and $6,710 at the University of California. *See Indicator 12.3.5*, U. CAL. ACCOUNTABILITY REP. 2013, http://accountability.universityofcalifornia.edu/index.php?in=12.3.5&source=uw.

190. For example, they state: "The general claim that boosting blacks and Hispanics up to more elite institutions is essential for their long-term success relies on outdated assumptions and falls apart on close examination." SANDER & TAYLOR, *supra* note 3, at 277. Then, in their discussion and comparison of law school mismatch to undergraduate mismatch, they argue that studies like Loury and Garman's "strongly suggest that the same thing is true for undergraduates: Performance trumps elite credentials." *Id.* at 278.

a newspaper interview, education is not only about academic performance; it is also about relationships, broadened experiences, and cultural capital. Speaking about what she believes she "lost" when the University of Texas at Austin denied her admission, Abigail Fisher proclaimed: "The only thing I missed out on was my post-graduation years. . . . Just being in a network of U.T. graduates would have been a really nice thing to be in. And I probably would have gotten a better job offer had I gone to U.T."[191]

We cannot help but notice the striking similarities between this quote by Abigail Fisher and parts of the Supreme Court's rationale in *Sweatt v. Painter*,[192] another decision that involved the University of Texas at Austin, only more than sixty-three years ago. In *Sweatt*, the Supreme Court responded to the legal challenge from Heman Marion Sweatt, a man whom the University's law school refused to admit because he was African American, against the University of Texas's policies of racial segregation.[193] Finding that the educational opportunities offered to black and white students at the University were not substantially equal, the Court held that the Equal Protection Clause of the Fourteenth Amendment entitled Sweatt to the law school admission he would have earned had he not been African American.[194] In so holding, the Supreme Court, like Abigail Fisher, highlighted many benefits of education, detailing how such benefits always extend beyond what professors lecture about in the classroom. The Court declared:

> Whether the University of Texas Law School is compared with the original or the new law school for Negroes, we cannot find substantial equality in the educational opportunities offered white and Negro law students by the State. In terms of number of the faculty, variety of courses and opportunity for specialization, size of the student body, scope of the library, availability of law review and similar activities, the University of Texas Law School is superior. *What is more important, the University of Texas Law School possesses to a far greater degree those qualities which are incapable of objective measurement but which make for greatness in a law school. Such qualities, to name but a few, include reputation of the faculty, experience of the administration, position and influence of the alumni, standing in the community, traditions and prestige*. It is difficult to believe that one who had a free choice between these law schools would consider the question close.

191. Adam Liptak, *Race and College Admissions, Facing a New Test by Justices*, N.Y. TIMES, Oct. 8, 2012, http://www.nytimes.com/2012/10/09/us/supreme-court-to-hear-case-on-affirmative-action.html?pagewanted=all.

192. 339 U.S. 629 (1950).

193. *Id.* at 631.

194. *Id.* at 633–36.

> Moreover, although the law is a highly learned profession, we are well aware that it is an intensely practical one. The law school, the proving ground for legal learning and practice, *cannot be effective in isolation from the individuals and institutions with which the law interacts. Few students and no one who has practiced law would choose to study in an academic vacuum, removed from the interplay of ideas and the exchange of views with which the law is concerned. The law school to which Texas is willing to admit petitioner excludes from its student body members of the racial groups which number 85% of the population of the State and include most of the lawyers, witnesses, jurors, judges and other officials with whom petitioner will inevitably be dealing when he becomes a member of the Texas Bar. With such a substantial and significant segment of society excluded, we cannot conclude that the education offered petitioner is substantially equal to that which he would receive if admitted to the University of Texas Law School.*[195]

Access via affirmative action to the leadership, educational, and career opportunities associated with attending the most selective and elite institutions in the United States matters for America's future; this observation applies to a variety of settings including the University of Texas School of Law, where the combined proportion of black and Latino J.D. students enrolled today (20.4%) is miles ahead of UC Berkeley Law (12.4%) and UCLA Law (11.6%);[196] science and engineering doctoral education, where nationally 62% of African Americans and 73% of Latinos earn their Ph.Ds. at universities with "very high" research profiles;[197] America's military academies and officer corps;[198] and undergraduate education, in light of all the graduation-rate and wage studies summarized in our Review.[199] Yet, in their book *Mismatch*, Sander and Taylor repeatedly discount, for minority students, these very kinds of interactive experiences and benefits of education, contending over and over that what truly matters are the mere books and classroom learning, and not the eliteness and resources of an institution and its alumni network. And, they

195. *Id.* at 633–34 (emphasis added).

196. LAW SCHOOL ADMISSIONS COUNCIL, 2014 ABA-LSAC OFFICIAL GUIDE TO ABA-APPROVED LAW SCHOOLS (2013), *available at* https://officialguide.lsac.org/release/officialguide_default.aspx (reporting 2012 JD enrollments).

197. *Women, Minorities, and Persons with Disabilities in Science and Engineering, Data Tables*, NAT'L SCI. FOUND. tbl.7-18, *available at* http://www.nsf.gov/statistics/wmpd/2013/pdf/tab7-18.pdf; *see also* Liliana M. Garces, *Understanding the Impact of Affirmative Action Bans in Different Graduate Fields of Study*, 50 AM. EDUC. RES. J. 251, 274 (2013) (summarizing data showing that affirmative action bans in four states were associated with a decline, controlling for other factors, of 26% in engineering and 19% in the natural sciences).

198. *See, e.g.*, Brief for the United States as Amicus Curiae supporting Respondents at 5–6, 10–15, Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411 (Aug. 13, 2012) (No. 11-345).

199. Regarding leadership specifically see, for example, BOWEN & BOK, supra note 11, at 160–75.

do so while also implicitly accepting that such benefits are worth it for mismatched white students. In the end, Sander and Taylor are right in one sense, at least. There is a mismatch, but the mismatch is not with the students of color they discuss in the book and the institutions that those students attend. Instead, it is in the cherry-picked data and flawed analyses that Sander and Taylor employ as support for their arguments and in the sad, sad fact that we still find ourselves trying to convince individuals such as Sander and Taylor to understand important points that the Supreme Court made very clearly sixty-four years ago in that other Texas decision, *Sweatt v. Painter*. Indeed, the rationale in *Sweatt* applies with similar force for white students today, who, without affirmative action, would be attending colleges and universities with substantially less interaction with huge segments of the rapidly growing and diversifying population within the United States.[200]

200. For an example of meta-analytic studies of the benefits of diversity where college diversity experiences are positively related to cognitive skills and development, see Nicholas A. Bowman, *College Diversity Experiences and Cognitive Development: A Meta-Analysis*, 80 REV. EDUC. RES. 4, 20 (2010). For a similar meta-analytic study where greater intergroup contact is associated with lower levels of prejudice, see Thomas F. Pettigrew & Linda R. Tropp, *A Meta-Analytic Test of Intergroup Contact Theory*, 90 J. PERSONALITY & SOC. PSYCHOL. 751, 766 (2006). And for a meta-analysis study that found cross-group friendships promote positive intergroup attitudes, see Kristin Davies et al., *Cross-Group Friendships and Intergroup Attitudes: A Meta-Analytic Review*, 15 PERSONALITY & SOC. PSYCHOL. REV. 332, 345 (2011).

As should be clear from our discussion of Figures 2A–C, *supra*, affirmative action is an important tool in protecting URM students from the educational harms of racial isolation, and our Review of graduation rates and earnings are leading to the point about affirmative action fostering the training of future minority leaders. Both of these concerns were acknowledged by the Court in *Grutter v.* Bollinger, 539 U.S. 306, 331–33 (2003). Thus, the above paragraph and footnote should not be misinterpreted as an argument that constitutionally permissible affirmative action results in benefits primarily for white students—our view is much broader than that.