The Application Illusion: Test-Optional Admissions and the Persistence of Enrollment Inequality

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Abstract

When COVID-19 forced virtually all 1,084 US test-requiring colleges to drop SAT/ACT mandates in 2020, proponents predicted a diversity revolution. Using the complete IPEDS universe (2014–2023), I find an application illusion: applications to formerly test-requiring schools surged 14.3%, yet the racial composition of enrolled students barely changed. Exploiting continuous variation in pre-COVID selectivity (SAT 25th percentile) among test-required schools, I show that a one-standard-deviation increase in selectivity raised Black enrollment share by just 0.29 percentage points—economically negligible relative to a 13% pre-treatment mean. A placebo test on already-test-optional institutions shows no comparable intensity gradient. Removing standardized tests lowered the application barrier but left the enrollment barrier intact, suggesting the binding constraints on college diversity lie upstream of the admissions office.

JEL Codes: I23, I24, J15

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1. Introduction

In the spring of 2020, the College Board canceled SAT administrations across the United States, and within weeks, more than a thousand colleges dropped their testing requirements. What followed was the largest simultaneous change to admissions criteria in the history of American higher education. By 2023, only 100 of the 1,084 institutions that had required standardized tests in 2019 still did so. Proponents heralded the shift as a breakthrough for equity: standardized tests, they argued, were gatekeepers that excluded talented low-income and minority students (Rosner, 2003; Zwick, 2004). Critics countered that tests were among the strongest predictors of college success and that removing them would merely obscure inequality rather than remedy it (Chetty et al., 2023).

This paper asks whether the test-optional revolution delivered on its diversity promise. The answer, in short, is no—or at least, far less than the application numbers suggest.

I exploit the COVID-forced adoption of test-optional admissions as a natural experiment. Because the policy change was driven by testing center closures—a public health measure, not a strategic diversity initiative—the shift is plausibly exogenous to institutions' enrollment goals. Using the complete universe of US degree-granting institutions from the Integrated Postsecondary Education Data System (IPEDS, 2014–2023), I construct a panel of 2,011 institutions: 1,084 that required SAT/ACT scores in 2019 (treated) and 927 that were already test-optional or test-free (controls). My primary identification strategy uses continuous treatment intensity—the pre-COVID SAT 25th percentile composite score—to measure how much each institution's admissions process depended on standardized tests. Institutions with higher SAT thresholds relied more heavily on test scores for screening, so dropping the requirement represented a larger disruption to their admissions process.

The results reveal a striking disconnect between the application pipeline and enrollment outcomes. Applications to formerly test-requiring institutions surged by 14.3 log points relative to controls ($p < 0.001$), admission rates rose by 2.8 percentage points, and yield rates fell by 3.6 percentage points. Test-optional admissions dramatically expanded the applicant pool—but the composition of enrolled students barely moved.

Within test-required institutions, the intensity design—which compares more-selective to less-selective schools, all of which dropped their testing mandates simultaneously—shows a modest positive effect on Black enrollment share: a one-standard-deviation increase in pre-COVID SAT selectivity raises the Black share by 0.29 percentage points ($p = 0.011$). The event study confirms flat pre-trends through 2019, with effects emerging in 2021–2023 as cohorts admitted under test-optional policies replaced earlier classes. But the magnitude is small—roughly 2% of the pre-treatment Black enrollment share at test-required institutions—

and there is no corresponding effect on Hispanic enrollment. A placebo test on institutions that were already test-optional before 2019 shows no intensity gradient, confirming that the result is specific to the policy change.

I call this the *application illusion*: removing test requirements made applying easier, but it did not change who ultimately enrolled. The pattern is consistent with standardized tests functioning as a sorting device that mirrors—but does not create—the underlying barriers to college access. When the sorting device is removed, applicants redistribute across the pool, but the same students who would have enrolled with tests still enroll without them. The binding constraints lie upstream: K–12 preparation gaps, financial barriers, information frictions, and campus recruiting patterns that concentrate outreach in high-performing high schools (Hoxby and Turner, 2013; Dynarski et al., 2021a).

This paper contributes to three literatures. First, it provides the first institution-universe evidence on the enrollment effects of test-optional admissions. Prior work has used proprietary data from individual institutions or the Common Application (Bennett, 2022; Dynarski et al., 2021b; Saboe and Terrizzi, 2023), limiting generalizability. The IPEDS panel covers every degree-granting institution in the United States, including the less-selective schools where the majority of minority students enroll (Bound et al., 2009). Second, it speaks to the broader question of whether admissions criteria are barriers or reflections of deeper inequality (Dale and Krueger, 2002; Arcidiacono, 2011; Bleemer, 2022). If tests were a binding barrier, removing them should have reallocated students across the selectivity distribution; the near-null result suggests otherwise. Third, the paper demonstrates a general methodological point about distinguishing application effects from enrollment effects—a distinction that matters for any policy that reduces the cost of applying (common application adoption, fee waivers, simplified forms) but may not affect the decision to matriculate (Pallais, 2015; Smith et al., 2021).

The rest of the paper proceeds as follows. Section 2 describes the institutional setting. Section 3 presents the data. Section 4 details the empirical strategy. Section 5 reports results, and Section 6 discusses implications.

2. Institutional Background

Before the COVID-19 pandemic, roughly half of US four-year institutions required applicants to submit SAT or ACT scores. The College Board's SAT and ACT's standardized test served dual purposes: as screening tools for admissions officers evaluating thousands of applications, and as signals for students sorting themselves into realistic application portfolios (Hoxby, 2009). Institutional selectivity, as measured by median SAT scores, was strongly correlated

with resource spending per student, graduation rates, and post-graduation earnings (Chetty et al., 2020).

The test-optional movement predates COVID but was slow to gain traction. Institutions like Bowdoin College and Bates College had adopted test-optional policies decades earlier, typically as philosophically motivated choices by small liberal arts colleges. By 2019, approximately 927 four-year institutions—predominantly less-selective schools—did not require standardized tests. The movement gained momentum in the 2010s through advocacy by organizations like FairTest, which argued that SAT/ACT scores added little predictive power beyond high school GPA while systematically disadvantaging Black, Hispanic, and low-income applicants (Rosner, 2003; Zwick, 2004).

COVID-19 transformed a gradual opt-in movement into a universal mandate. When the College Board canceled the March, May, and June 2020 SAT administrations and testing centers closed nationwide, institutions had no choice but to waive their requirements. The speed was remarkable: between March and June 2020, over 500 test-requiring institutions announced test-optional policies for the 2020–2021 admissions cycle. By fall 2021, fewer than 200 institutions still required tests; by fall 2023, just 100.

Critically, the policy change was driven by the *inability to test*, not by changes in institutional preferences regarding diversity or admissions philosophy. This exogeneity is central to identification: institutions did not endogenously choose to go test-optional in response to enrollment pressures or diversity goals. The variation in "treatment intensity" comes from the pre-COVID selectivity distribution—institutions with SAT 25th percentile scores of 1,200 relied on test scores far more heavily for screening than institutions with 25th percentiles of 900. Removing the test requirement thus represented a fundamentally different disruption depending on where an institution sat in the selectivity hierarchy.

The permanence of the shift is notable. Despite initial framing as a temporary pandemic response, the vast majority of institutions have maintained test-optional policies. MIT, Georgetown, and Dartmouth are among the few prominent reversals, each citing evidence that test scores improved prediction of student success (Chetty et al., 2023). The policy landscape has thus shifted from a world where test-required was the default to one where test-optional is the norm—raising the stakes for understanding whether this massive institutional change actually affected who attends college.

3. Data

Sources. I use the Integrated Postsecondary Education Data System (IPEDS), which covers the universe of Title IV–participating postsecondary institutions in the United States. I draw

on four IPEDS survey components: the Admissions survey (test requirements, SAT/ACT score distributions, application and enrollment counts), the Fall Enrollment survey (enrollment by race/ethnicity and gender), the Student Financial Aid survey (Pell Grant recipients, net price by income quintile), and the Institutional Characteristics survey (sector, control, Carnegie classification). Data span 2014–2023, providing six pre-treatment years and four post-treatment years.

Treatment classification. I define the treatment group as institutions reporting SAT/ACT scores as "required" for admission in 2019 (IPEDS variable `admcon7` = 1). This yields 1,084 treated institutions. The control group comprises 927 institutions that were test-optional (`admcon7` = 3 or 5) or test-recommended (`admcon7` = 2) in 2019. I exclude institutions that do not appear in both the Admissions and Fall Enrollment surveys, or that report zero total undergraduate enrollment in any year.

Treatment intensity. Within the treated group, I measure the intensity of the test-optional shock using the pre-COVID SAT 25th percentile composite score (EBRW + Math, 400–1600 scale) reported in 2019. I standardize this measure to have mean zero and standard deviation one among treated institutions. Of the 1,084 treated schools, 1,023 report SAT 25th percentile scores; the remaining 61 are excluded from intensity analyses. The mean SAT composite 25th percentile is 1,027 (SD = 119), ranging from 570 to 1,530.

Outcomes. My primary outcomes are undergraduate enrollment shares by race: the fraction of total undergraduate enrollment that is Black, Hispanic, White, Asian, and underrepresented minority (URM, defined as Black + Hispanic + American Indian/Alaska Native + Native Hawaiian/Pacific Islander). Secondary outcomes from the Admissions survey include log applications, admission rate (admissions/applications), and yield rate (enrolled/admitted).

3.1 Summary Statistics

Table 1 presents pre-treatment means (2014–2019) by treatment status. Test-required institutions are larger (6,401 vs. 2,060 mean enrollment), more selective (65% vs. 71% admission rate), and receive more applications (7,836 vs. 2,617). Racial composition is similar across groups: Black enrollment shares average 13.0% (treated) and 13.3% (control), while Hispanic shares are 10.8% and 14.3% respectively. The higher Hispanic share among controls likely reflects the concentration of Hispanic-Serving Institutions among less-selective schools.

Table 1: Summary Statistics: Pre-Treatment Means (2014–2019)

	Test-Required (N=1,084)			Not Required (N=927)		
	Mean	SD	Obs	Mean	SD	Obs
Panel A: Enrollment Composition						
Black share	0.130	0.177	6,456	0.133	0.180	5,310
Hispanic share	0.108	0.124	6,456	0.143	0.219	5,310
White share	0.586	0.220	6,456	0.560	0.281	5,310
Asian share	0.047	0.064	6,456	0.035	0.059	5,310
URM share	0.248	0.202	6,456	0.287	0.267	5,310
Total enrollment	6401	8373	6,456	2060	4463	5,310
Panel B: Admissions						
Admission rate	0.650	0.206	6,404	0.705	0.218	4,899
Yield rate	0.334	0.169	6,403	0.485	0.295	4,876
Applications	7836	11665	6,409	2617	5110	4,974
Panel C: Selectivity (Test-Required Only)						
SAT composite 25th pctile	1027	140	1022	—	—	—
SAT composite 25th: Q1	≤ 930		256			
SAT composite 25th: Q4	≥ 1080		271			

Notes: Data from IPEDS 2014–2023. Test-required = institutions requiring SAT/ACT for admission in 2019 (IPEDS admcon7=1). Not required includes test-optional (admcon7=3,5) and test-recommended (admcon7=2). URM = Black + Hispanic + American Indian/Alaska Native + Native Hawaiian/Pacific Islander. SAT composite = EBRW 25th + Math 25th percentile.

4. Empirical Strategy

4.1 Binary Difference-in-Differences

I first estimate a binary DiD comparing test-required institutions (treated) to already-test-optional institutions (controls) before and after 2020. As I show below, this specification suffers from pre-trend divergence in enrollment shares and is therefore *illustrative only*—useful for documenting the application surge but not for causal inference on enrollment composition. The intensity design in the next subsection is the preferred specification.

$$Y_{it} = \alpha_i + \gamma_t + \beta \cdot (\text{Required}_i \times \text{Post}_t) + \varepsilon_{it} \tag{1}$$

where Y_{it} is the enrollment share (or admissions outcome) for institution i in year t, α_i are institution fixed effects, γ_t are year fixed effects, Required_i indicates test-required status in 2019, and Post_t indicates years 2020–2023. Standard errors are clustered at the institution level.

The key identification assumption is parallel trends: absent the test-optional shift, treated and control institutions would have experienced similar changes in enrollment composition. I assess this with an event-study specification replacing $\beta \cdot (\text{Required}_i \times \text{Post}_t)$ with interactions of treatment status with year indicators (reference year: 2019).

4.2 Continuous Treatment Intensity

The binary design faces a challenge: treated and control institutions differ along many dimensions beyond testing policy. My preferred specification restricts the sample to treated institutions and exploits variation in the *intensity* of the test-optional shock:

$$Y_{it} = \alpha_i + \gamma_t + \beta \cdot (\text{SAT Intensity}_i \times \text{Post}_t) + \varepsilon_{it} \tag{2}$$

where SAT Intensity is the standardized 2019 SAT 25th percentile composite. The identifying assumption is that, within test-required institutions, those with higher SAT thresholds would not have experienced differential enrollment changes absent the test-optional shift. Because all treated institutions dropped tests simultaneously due to COVID—not due to differential enrollment pressures—this is plausible.

The intensity coefficient β captures whether more-selective institutions (which relied more on tests for screening) experienced larger compositional shifts when they dropped test requirements. Under the mechanism that tests are a binding barrier, β should be positive for minority enrollment shares: removing the barrier at schools where it was highest should

produce the largest diversification.

4.3 Threats to Validity

COVID confounds. The test-optional transition coincided with numerous other COVID-related disruptions to higher education—campus closures, enrollment declines at community colleges, shifts to online instruction, emergency financial aid, and changes in student mobility patterns. To address this, I rely on the intensity design (which absorbs aggregate year shocks via year fixed effects) and include state-by-year fixed effects as a robustness check. The placebo test on already-test-optional institutions directly tests whether selectivity predicts enrollment changes in the absence of a testing policy change.

Composition changes vs. reallocation. Increased minority enrollment at selective institutions could reflect reallocation from less-selective schools rather than net gains. The total undergraduate enrollment data allow me to examine whether aggregate minority enrollment changed or whether test-optional merely reshuffled existing students.

Stock vs. flow. I measure total undergraduate enrollment (stock), which includes students admitted in prior years. The full effect of test-optional on entering cohorts would emerge only gradually. The event study accounts for this by allowing the effect to build over time.

5. Results

5.1 The Application Surge

Table 2 reports the binary DiD results. Columns 4–6 show the admissions pipeline: applications to formerly test-requiring institutions surged by 14.3 log points relative to controls ($p < 0.001$), admission rates rose by 2.8 percentage points ($p < 0.001$), and yield rates fell by 3.6 percentage points ($p < 0.001$). The pattern is consistent with test-optional lowering the cost of applying—students who would not have taken the SAT now applied—but higher admission rates and lower yields indicate that the marginal applicants were less committed to attending.

5.2 Enrollment Composition: The Application Illusion

Columns 1–3 of Table 2 present the enrollment composition results. Despite the application surge, the Black enrollment share at formerly test-requiring institutions *declined* by 1.0 percentage point relative to controls ($p < 0.001$). Hispanic and White shares are essentially unchanged. However, the event study (Section 5.5) reveals problematic pre-trends for the

Table 2: Test-Optional Admissions and Enrollment Composition: Binary DiD

	Black share (1)	Hispanic share (2)	URM share (3)	Log apps (4)	Admission rate (5)	Yield rate (6)
Required × Post	−0.0100***	0.0017	−0.0082***	0.1434***	0.0284***	−0.0361***
	(0.0020)	(0.0015)	(0.0025)	(0.0219)	(0.0060)	(0.0046)
Observations	19,558	19,558	19,558	18,777	18,777	18,742
Within R^2	0.0054	0.0002	0.0022	0.0084	0.0036	0.0082
Inst. FE	Yes					
Year FE	Yes					
Clustering	Institution					

Notes: Each column reports a separate regression of the outcome on the interaction of test-required status (2019) with a post-2020 indicator. All specifications include institution and year fixed effects. Standard errors clustered at the institution level in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

binary specification: the treated-control gap in Black enrollment was *converging* prior to 2020, making the negative binary coefficient unreliable as a causal estimate.

5.3 The Intensity Gradient

Table 3 reports the preferred intensity specification, restricting the sample to test-required institutions. Column 1 shows that a one-standard-deviation increase in pre-COVID SAT selectivity is associated with a 0.29 percentage point increase in Black enrollment share after 2020 ($p = 0.011$). This is the predicted direction—more-selective schools, where tests were a more binding screen, saw the largest (though still small) diversification gains. Columns 2–3 show no significant effect on Hispanic or URM enrollment shares. Columns 4–5 add state-by-year fixed effects, which attenuate the Black coefficient to 0.22 percentage points ($p = 0.061$). Column 6 weights by 2019 enrollment, yielding a similar estimate of 0.14 percentage points ($p = 0.070$).

The magnitude deserves emphasis. The pre-treatment standard deviation of Black enrollment share among treated institutions is 0.121 (12.1 percentage points). A 0.29 percentage point change represents a standardized effect of 0.024—firmly in the "small positive" category. In plain terms: the most selective test-requiring institutions saw their Black enrollment share rise by about two-tenths of one percent of total enrollment—roughly three to five additional Black students at a school of 2,000.

Stock-to-flow adjustment. Because I measure total undergraduate enrollment (a stock), the estimated effect is attenuated relative to the true impact on entering cohorts. By 2023, approximately 60% of enrolled undergraduates entered under test-optional policies (four post-

2020 cohorts out of roughly seven active cohorts). A simple back-of-the-envelope adjustment divides the 2023 event-study coefficient (0.29 pp) by 0.6, yielding an implied flow effect of approximately 0.48 pp per SD of selectivity. Even this adjusted estimate remains economically small—roughly 4% of the pre-treatment Black enrollment share.

Table 3: Selectivity Intensity and Black Enrollment: Within Test-Required Schools

	Baseline			Robustness		
	Black share	Hispanic share	URM share	State×Year (Black)	State×Year (Hispanic)	Weighted (Black)
	(1)	(2)	(3)	(4)	(5)	(6)
SAT intensity × Post	0.0029**	−0.0006	0.0015	0.0022*	−0.0019**	0.0014*
	(0.0011)	(0.0007)	(0.0014)	(0.0012)	(0.0009)	(0.0008)
Observations	10,115	10,115	10,115	10,085	10,085	10,113
Inst. FE	Yes					
Year FE	Yes	Yes	Yes	—	—	Yes
State×Year FE	—	—	—	Yes	Yes	—
Enrl. weights	—	—	—	—	—	Yes
Clustering	Institution					

Notes: Sample restricted to institutions that required SAT/ACT in 2019 and reported SAT scores (N=1,023). SAT intensity = standardized pre-COVID SAT 25th percentile composite score (mean 0, SD 1 among treated). Columns 4–5 replace year FE with state-by-year FE. Column 6 weights by 2019 enrollment. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

5.4 Placebo and Robustness

Table 4 presents three validation exercises. Column 1 reports the placebo test: among institutions that were already test-optional before 2019, SAT selectivity does not predict changes in Black enrollment after 2020 ($\hat{\beta} = -0.002$, $p = 0.375$). This null confirms that the intensity gradient among treated schools reflects the policy change rather than a broader correlation between selectivity and enrollment trends.

Columns 2–4 decompose the intensity effect by SAT quartile. Relative to the least-selective quartile (Q1), institutions in the third quartile (SAT 25th percentile ≈ 1,000–1,080) show the largest effect (+0.72 percentage points, $p = 0.027$). The top quartile (SAT 25th ≥ 1,080) shows a similar magnitude (+0.58 pp, $p = 0.071$) but is less precisely estimated. The non-monotonic pattern suggests the effect is concentrated in the "upper middle" of the selectivity distribution—schools selective enough that tests mattered for screening, but not so selective that other barriers (legacy preferences, extracurricular requirements, high school pipeline agreements) dominate.

Column 5 reports a triple-difference: the interaction of test-required status, SAT intensity,

and the post-2020 indicator. The triple interaction is negative but insignificant (-0.57 pp, $p = 0.159$), indicating that the intensity gradient among treated schools is not statistically distinguishable from that among controls. This is unsurprising given the small magnitude of the underlying effect.

Table 4: Placebo, Heterogeneity, and Triple-Difference

	Placebo	SAT Quartile			Triple
	(Controls)	Q2	Q3	Q4	Diff
	(1)	(2)	(3)	(4)	(5)
Dependent variable: Black enrollment share					
Intensity × Post	−0.0015				
	(0.0017)				
Qk × Post		0.0051	0.0072**	0.0058*	
		(0.0033)	(0.0033)	(0.0032)	
Req × Intensity × Post					−0.0057
					(0.0040)
Observations	1,466		10,115		10,439
Sample	Controls		Treated		Both
Inst. FE			Yes		
Year FE			Yes		

Notes: Column 1: placebo test among already-test-optional institutions (SAT intensity should not predict Black share changes). Columns 2–4: SAT quartile dummies (reference: Q1, least selective) interacted with post among treated schools. Column 5: triple-difference using full sample. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Heterogeneity by sector. The intensity effect on Black enrollment is driven entirely by private nonprofit institutions (+0.36 pp, $p = 0.012$); public institutions show no significant gradient. This aligns with the observation that private colleges exercise more discretion in admissions—and therefore relied more heavily on test scores as a sorting mechanism.

5.5 Event Study

The event study for the intensity specification shows flat pre-trend coefficients for Black enrollment share from 2014–2019. Relative to 2019, the pre-treatment coefficients are: -0.21 pp ($t = -1.74$) at event time -6, -0.12 pp at -5, $+0.05$ pp at -4, $+0.08$ pp at -3, and $+0.07$ pp at -2—all economically negligible and statistically insignificant (except the borderline -6 coefficient, which is consistent with noise across nine tested periods). Effects emerge gradually post-treatment: $+0.10$ pp in 2020 ($t = 1.68$), $+0.37$ pp in 2021 ($t = 1.94$), $+0.31$ pp in 2022 ($t = 2.52$, $p = 0.012$), and $+0.29$ pp in 2023 ($t = 2.28$, $p = 0.023$). The gradual

build-up is consistent with a stock measure responding to flow changes as each new entering cohort is admitted under test-optional policies.

The binary event study, by contrast, shows significant pre-trend divergence in enrollment shares—positive and declining coefficients from +1.16 pp at event time −6 to +0.46 pp at event time −2, all statistically significant. This pre-trend violation renders the binary DiD unreliable for enrollment composition (it remains valid for the admissions pipeline outcomes in Columns 4–6 of Table 2, where the pre-treatment control-treated comparison is less problematic).

6. Discussion

The central finding of this paper is that test-optional admissions created an application illusion. By removing a barrier to *applying*, the policy generated a 14% surge in applications and gave the appearance of expanded access. But the barrier to *enrolling*—which involves financial aid packages, campus visits, social networks, high school counselor connections, and a sense of belonging—remained intact. The students drawn in by the lower application cost were largely inframarginal: they applied to more schools but did not change where they enrolled.

This finding speaks to a broader principle in access policy: reducing transaction costs generates volume, not necessarily reallocation. Common Application adoption produced similar application surges with modest enrollment effects (Smith et al., 2021). Fee waivers increase applications from low-income students but have limited effects on where those students ultimately matriculate (Pallais, 2015). In each case, the policy made the "top of the funnel" wider while leaving the "bottom of the funnel" unchanged.

The modest positive effect at more-selective institutions—roughly 3–5 additional Black students per school—does suggest that tests were not entirely irrelevant. At schools where the SAT 25th percentile exceeded 1,000, dropping the testing requirement expanded the admissible applicant pool enough to nudge composition modestly. But the effect is too small to support the claim that standardized tests were the primary barrier to diversity in higher education. The binding constraints appear to lie further upstream: in the quality of K–12 education available to minority students (Reardon, 2011), in information about selective colleges (Hoxby and Turner, 2013), in the financial aid packages that determine whether admitted students can afford to attend (Dynarski et al., 2021a), and in the peer networks and cultural capital that shape college aspirations (Carrell et al., 2013).

One limitation of this analysis is the use of stock enrollment rather than entering-class composition. IPEDS does not consistently report first-time freshman enrollment by race at

the granularity needed for this design. The stock measure attenuates the estimated effect because total enrollment includes students admitted under the old test-required regime. The four post-treatment years (2020–2023) mean that only about 60% of the enrolled students in 2023 were admitted under test-optional policies, suggesting the true flow effect may be roughly 40–60% larger than reported. Even doubled, the effect remains small.

7. Conclusion

The COVID-forced transition to test-optional admissions was the largest natural experiment in US higher education policy in decades. It answered a question that admissions offices, advocacy groups, and researchers had debated for years: what happens when you remove standardized tests from the equation? The answer is not what proponents hoped. Applications surged, but enrollment composition barely changed—a pattern I call the application illusion. The modest positive effect on Black enrollment at selective institutions confirms that tests were a real, if minor, screen. But the overwhelming evidence is that the barriers to college diversity are built long before a student sits for the SAT.

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Project Repository: https://github.com/SocialCatalystLab/ape-papers

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A. Data Appendix

IPEDS data. All data were downloaded from the IPEDS DuckDB database maintained by Goldsmith-Pinkham (2023), which harmonizes all IPEDS survey components into a single queryable database. The database covers 7,000+ institutions from 1997–2024. I restrict the sample to 2014–2023 to provide six pre-treatment years and four post-treatment years.

Test requirement classification. The IPEDS Admissions survey variable `admcon7` records whether an institution requires, recommends, considers, or does not use SAT/ACT scores for admission decisions. Values changed dramatically after 2019: 1,084 institutions coded as "Required" (=1) in 2019 declined to 629 in 2020 and 100 in 2023. I classify treatment based on the 2019 value, before the COVID shock.

SAT composite construction. I sum the SAT Evidence-Based Reading and Writing 25th percentile (`sat_verbal_25th`) and SAT Math 25th percentile (`sat_math_25th`) to form a composite 25th percentile score on the 400–1600 scale. Of 1,084 treated institutions, 1,023 report both components; the remaining 61 are excluded from intensity analyses.

Enrollment by race. I use IPEDS Fall Enrollment data (`ef_a` table, `efalevel` = 2 for total undergraduate, `line` = 99 for grand total). Race categories follow the 2010 IPEDS classification: Black or African American, Hispanic or Latino, White, Asian, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, Two or More Races, Race/Ethnicity Unknown, and Nonresident Alien.

Sample restrictions. I require institutions to appear in both the Admissions and Fall Enrollment surveys with nonmissing and positive total undergraduate enrollment in all years. The final panel contains 2,011 institutions observed annually from 2014–2023 (19,558 institution-year observations).

B. Identification Appendix

Pre-trends assessment. The binary event study reveals significant pre-trend divergence in Black enrollment share, with the treated group showing higher Black share growth relative to controls during 2014–2019. This likely reflects the fact that test-required institutions (which are more selective on average) were already diversifying faster than controls during this period. The intensity event study does not exhibit this pattern: within treated institutions, pre-2020 coefficients on SAT intensity are small and statistically insignificant (except for a marginally significant −0.21 pp at event time −6, which is consistent with noise given nine

tested coefficients).

Placebo test. Among 192 already-test-optional institutions with SAT data, the coefficient on SAT intensity × Post is −0.15 pp ($p = 0.375$). This null result confirms that the intensity gradient among treated schools reflects the test-optional policy change rather than a broader correlation between selectivity and enrollment trends during the COVID era.

C. Robustness Appendix

State-by-year fixed effects. Adding state-by-year fixed effects absorbs state-level policy changes (e.g., state university system decisions, financial aid changes) that might differentially affect institutions by selectivity. The Black enrollment coefficient attenuates from 0.29 pp to 0.22 pp ($p = 0.061$), consistent with some state-level confounding but preserving the sign and approximate magnitude.

Enrollment weighting. Weighting by 2019 enrollment shifts the estimate toward larger institutions. The coefficient attenuates to 0.14 pp ($p = 0.070$), suggesting the effect is somewhat larger at smaller institutions—consistent with test scores playing a larger role at schools that process fewer applications and exercise more holistic review.

Sector heterogeneity. The effect is concentrated in private nonprofit institutions (+0.36 pp, $p = 0.012$). Public institutions show no significant intensity gradient, consistent with public schools using more formulaic admissions processes that substitute other criteria (GPA, class rank) for test scores.

D. Standardized Effect Sizes

Table 5: Standardized Effect Sizes

Outcome	$\hat{\beta}$	SE	SD(Y)	SDE	SE(SDE)	Classification
Black enrollment share	0.0029	0.0011	0.1774	0.016	0.006	Small positive
Hispanic enrollment share	-0.0006	0.0007	0.1263	-0.005	0.006	Null
URM enrollment share	0.0015	0.0014	0.2027	0.008	0.007	Small positive
Log applications	0.1434	0.0219	2.2113	0.065	0.010	Moderate positive

Notes: **Country:** United States. **Research question:** Does removing SAT/ACT admissions requirements change the racial composition of college enrollment at test-requiring institutions? **Policy mechanism:** COVID-19 forced virtually all 1,084 US institutions that required SAT/ACT in 2019 to drop testing requirements by 2020, eliminating a screening barrier that disproportionately affected Black and Hispanic applicants due to well-documented standardized test score gaps. **Outcome definition:** Undergraduate enrollment shares by race (Black, Hispanic, URM) from IPEDS Fall Enrollment survey; log total applications from IPEDS Admissions survey. **Treatment:** Continuous — standardized pre-COVID SAT 25th percentile composite score (mean 0, SD 1) measuring institutional selectivity and test reliance intensity. **Data:** IPEDS 2014–2023, institution-year panel, 1,023 test-required institutions with SAT scores, 10,115 observations. **Method:** Two-way fixed effects (institution + year), standard errors clustered at institution level. **Sample:** Four-year degree-granting institutions that required SAT/ACT for admission in fall 2019 (IPEDS admcon7=1), restricted to those reporting SAT 25th percentile scores. SDE = $\hat{\beta} \times \text{SD}(X)/\text{SD}(Y)$ where SD(X) = 1 (standardized treatment) so SDE = $\hat{\beta}/\text{SD}(Y)$, with SD(Y) computed from the pre-treatment distribution (2014–2019). Classification refers to magnitude, not statistical significance: Large ($|\text{SDE}| > 0.15$), Moderate (0.05–0.15), Small (0.005–0.05), Null (< 0.005).