Race and Merit:
Racialized Exclusion from Prestige in Higher Education Enrollment, 2004-2013

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Preface

My college experiences opened the door to a world that I had never known existed. It provided me an outlet, a community, knowledge, growth, and friendship; it enabled me to engage with the world around me in ways that had been kept away from me by societal design. I came into college thinking that I had earned my admission; I believed college and its subsequent benefits belonged to me because of the work I did between kindergarten and twelfth grade. I quickly saw this belief, and investment in meritocracy, unravel. I struggled to understand the culture around me. I failed to adjust and seek help when it was needed. I did not know that help existed for me to use. I saw others struggle with me, struggle less than me, and struggle more than me. Why?

This, “Why?” has stuck with me for almost a decade. The way I ask, “Why?” and the precision and historicity with which I ask, “Why?” may have changed over the years, but my desire to understand how college students’ arrivals on campus structure their future has stuck with me. I engaged in this project with the intention of beginning to unravel merit, much as it was unraveled in my college experiences. Merit is a worthwhile notion, but whom does it serve? Who does it hurt? I undertake this work in the tradition of DuBois; in the tradition of queer Black and Brown scholars who came before me, lending their voices to uplift those that came after. From Baldwin, to Lorde, to my family, and to my guru, I carry forth this, “Why?” because it demands answering.
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INTRODUCTION

In a time when baccalaureate aspirations are ubiquitous and students from all racial and ethnic backgrounds are enrolling in college at higher rates (Grodsky 2007), the shifting definition of merit towards test scores challenges institutions that utilize selective admissions. Whereas institutions of higher education could once utilize the subjective nature of their admissions processes to produce student bodies that aligned with their institutional purposes, the heightened attention to how these decisions are complicit in the production of social inequality has further politicized admissions policies nationwide.

Alon and Tienda (2007: 489) defined a meritocratic system as, “a social system where individual talent and effort, rather than ascriptive traits, determine individuals’ placements in a social hierarchy.” While this definition highlighted the tension between what individuals can control and what is ascribed onto them, it ignored a more systemic understanding of individual ascriptive traits. Namely, a structural perspective emphasizes how the context serves as the counterbalance to earned rewards, rather than individually ascribed characteristics. The context includes an individual’s geographic, political, economic, and social environment and history. Thus, a structural understanding of a meritocratic system puts forth a hypothesis of what could be possible: a system in which an individual’s structural context does not exert enough influence to deter or limit the opportunities one would expect from individual talent and effort.

Along with this conception of context, competition inheres in a meritocratic system. In college admissions, competition is created because the demand for admission exceeds the supply of admission spots at selective institutions. A functioning meritocratic system of higher education would reward the “most meritocratic applicants” with admission to the most prestigious institutions, regardless of context. Yet, a system based on meritocracy assumes the
existence of a standard definition of merit and that this standard would not be contingent on the social context in which students grew up. In a system with a shifting definition of meritocracy, the tensions between the structural context and competition becomes critical because how could competition be fair between people from different racialized and socioeconomic backgrounds?

Furthermore, the postsecondary education system’s structuration of access and returns to degree revealed how selective admissions produced stratified post-graduate outcomes since there are a range of positive labor market outcomes associated with graduation from selective institutions, not solely with an earned degree (Brewer, Eide, & Ehrenberg 1999; Hoxby & Long 1998; Monks 2000). Scholars have found that baccalaureate completion rates increased with institution selectivity at the national level (Astin 1985; Bowen, Chingos, & McPherson 2009; Carnevale & Rose 2003; Long & Kurlaender 2009) and among students of color (Bowen & Bok 1998; Melguizo 2010). As more students of color access non-selective institutions (NACAC 2006), the impact that institutional selectivity has on the return to degree raises immense equity concerns. Access to selective institutions is then not solely about admitting qualified students, but about for who is social and economic uplift accessible.

Thus, selective admissions, as it shifts its definition of merit towards more focus on test scores and academic preparation (Alon & Tienda 2007), plays a role in shifting the structure of inequality and excluding specific students from prestigious education. If higher-statused groups continue the arms race for more education, higher test scores, and academic preparation, the value of education could follow these higher-statused students’ aspirations. In following their increasing aspirations, selective admissions would structurally exclude a college education, particularly an elite college education, from students from minoritized backgrounds.
BACKGROUND

Through two primary interrogations, scholarship reinvigorated its interests in characterizing higher education as a meritocratic system and questioned the dynamics that reinforce or produce social inequality through higher education. First, research suggests that the definition of merit has fundamentally “shifted” in the last century. Initially, a college applicant’s merit for admission was measured by how well he¹ mastered Latin and Greek – strictly by academic criteria; since the 1920s, merit has been defined by a more nebulous package of desired qualities, such as character, social background, test scores, and grades, to ensure that admission aligns with an institution’s interests (Alon & Tienda 2007; Karabel 2005; Lemann 1999).² While merit within selective college admissions evaded an explicit definition, the subjective criteria used in admissions became indicators for assessing an applicant’s quality.

Second, research recognized that the U.S. postsecondary education system is highly stratified by mission, selectivity, and returns to earned degrees, a phenomenon known as institutional stratification (Bastedo & Gumport 2003). In stratified systems, inequality is a constitutive element of the system, but inequality was accepted “as the price to be paid for benefits of efficiency and legitimacy” (Posselt, et al. 2012: 1073). Inequality was accepted as an organizing principle even though it could reinforce inequality along some dimensions, such as race or class, while decreasing inequality along other dimensions, such as academic credentials.

In this paper, I argued that selective admissions serve as a mechanism for effectively maintaining racialized inequality by excluding students from Black, Latinx, and Multiracial, Indigenous, and Other racialized backgrounds from more elite education. By studying the trends

¹ Initially, colleges were exclusively sites for men to receive education. The use of “he” is meant to emphasize this.
² This shift, as Karabel (2005) notes, was the result of “undesirable” students being admitted under the academic admissions system. With the advent of immigrant populations from Eastern Europe, namely the Jewish population in the 1920s, the admissions policies were not yielding a culturally desired class that universities’ leadership sought.
in academic preparation between 2004 and 2013 and how they translate into changes in enrollment trends, I found that racialized exclusion continued to keep elite education out of reach for qualified students\(^3\) from these minoritized backgrounds. The continued racialized exclusion was particularly targeted for Black students, as they showed the most consistent positive growth in academic credentials, yet saw the sharpest drop in likelihood of admission to the most selective institutions. These findings suggested that, contrary to claims of a meritocratic system of admissions wherein individual talent and skills take precedence, a student’s structural context, specifically their racialized and socioeconomic background, exerted immense influence.

This paper’s findings indicated that where students enrolled had a distinctly racialized dimension. Students from the most minoritized backgrounds benefitted the most from attending more selective institutions (Hout 2012), and the stratification of pathways to two-year institutions over four-year institutions by race and socioeconomic background raised questions for admissions processes’ complicity in inequality production. This stratification problem was particularly attenuated as fall enrollment at degree-granting institutions went from 2.6 million in 1955 to 20.2 million in 2014, peaking at 21 million in 2010 (Alon 2009; NCES 2014). Yet, as Figure 1 shows, the magnitude of fall enrollments has been decreasing over time, particularly after the enrollment spike between 2008 and 2009. Figure 2 breaks apart enrollment by degree-granting institutions that are four-or more year and those that are at least two, but less than four-year. Rather than consistent growth in fall enrollments between 2002 and 2014, growth turned to decrease in fall 2011 due to the immense decrease in enrollment at two-year institutions. This decreasing enrollment trend was powerful enough within higher education that even four-year degree-granting institutions dipped into negative enrollment in fall 2013.

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\(^3\) My analyses define a “qualified” student as one who is one standard deviation above the mean for SAT scores, GPA, and highest science and math course completed.
Figure 1. Fall enrollment at degree-granting institutions, 2002-2014. Data from National Center for Education Statistics, Integrated Postsecondary Education Data System’s Trend Generator.

Figure 2. Change in fall enrollment by level at degree-granting institutions, 2003-2014. Data from National Center for Education Statistics, Integrated Postsecondary Education Data System’s Trend Generator.
Given the economic recession of 2008 and the changes in enrollment trends after 2009, selective admissions and social class may matter more now than they did in previous decades, especially with the advent of for-profit colleges (McMillan Cottom 2017). Thus, this paper updated the research on racialized enrollment (Posselt, et al. 2012) and test-score based meritocracy (Alon 2009) because access to institutions of higher education, whether selective or unselective, after 2009 has undergone a fundamental change. Through this combined framing, I found that a test-based meritocracy continued into the 2013 college-going cohort, as test scores and other academic credentials exerted a powerful influence on enrollment odds and trends. Yet, this influence was qualified because students’ enrollment outcomes remain predicted by their racialized background. In this paper, first, I extended the analyses regarding selective admissions as a mechanism for maintaining inequality by academic and test score credentials; and, second, I studied how these inequalities persisted along students’ racialized backgrounds.

LITERATURE REVIEW

Selective admissions has come under renewed scrutiny for the ways in which students are admitted due to the ongoing debates on race-conscious admissions practices (Kahlenberg 2014). While these recent pressures prompted new conversations on practices, admissions practices have been regularly subjected to scrutiny (Karabel 2005; Skrentny 1996). In this literature review, I depicted three structural dimensions of selective admissions to situate selective admissions as a mechanism for effectively structuring inequality (Lucas 2001; Alon 2009).

Institutional Stratification

The framework of institutional stratification provides insight into how failing to consider a student’s structural context can be detrimental to the student’s future, regardless of the
student’s individual skills and talent. Bastedo and Gumport (2003) defined institutional stratification as the idea that mission, selectivity and returns to earned degrees stratify the U.S. higher education system. To this end, scholarship has thoroughly documented how the type of college and university structures the kind of access students have to the higher education system (Astin & Oseguera 2004; Grodsky 2007; Hearn 1991; Karen 2002). For example, students from lower socioeconomic backgrounds since the 1960s have been more likely to attend two-year institutions, while higher socioeconomic students have enrolled at prestigious four-year institutions (Baker & Velez 1996; Karabel & Astin 1975; Kingston & Lewis 1990). Thus, framing selective admissions through institutional stratification suggested that selective admissions served to uphold this stratified system – not to challenge it – in two ways.

First, selective admissions heavily used and relied on the standardized testing (e.g., the SAT or ACT). Modern day standardized tests arose from intelligent quotient tests that were designed and perpetuated by eugenicists (Lemann 1999). They were used to measure inherent intelligence, but were later adapted by higher education institutions and private corporations to measure aptitude and preparation for college. Since then, standardized testing has been institutionalized as an objective measure of academic preparation by the public and by many college-ranking institutions (Alon 2009). Second, selective admissions have not systematically contextualized students’ from minoritized backgrounds applications. Namely, existing admission policies have masked the fact that unequal primary and secondary contexts helped to explain why Black and Latinx students were less likely to enroll at the most selective institutions (Posselt, et al. 2012).

Together, these two axes of structuration through which selective admissions upheld a stratified postsecondary system have had negative impacts on access and enrollment for students.
from minoritized backgrounds. If students from historically disadvantaged communities and backgrounds were evaluated without contextualizing their applications, or addressing the structural contexts, then selective admissions served to produce inequality rather than social mobility. Ultimately, the institutional stratification stream of research, which implicated prestige and the politics of admission, suggested that institutions continued to use selective admissions primarily as a system of allocating access to power and influence.

While academic qualifications have been a formal part of selective admissions, the history of admissions provided little support for characterizing selective admissions as a system for social mobility or academic prowess (Karabel 2005). Namely, as long as the structural context exerted more influence than individual skills and talents in admissions and enrollment, characterizing the system of selective admissions as meritocratic required inquiry. Given institutionally stratified system, I proposed the following hypotheses regarding trends in academic credentials between 2004 and 2013:

- **H1A**: Academic preparation in the form of SAT scores, GPAs, and highest math and science course completed, for students of all racialized backgrounds, will increase.
- **H1B**: While academic preparation will have increased, racialized disparities in academic preparation will have not changed, as academic preparation for students of more privileged backgrounds (e.g., White and Asian and Pacific Islander) will have stayed the same or increased.
- **H1C**: The historically positive effect of academic preparation on enrollment will, at the national level, have grown.

**Prestige, Merit, Selectivity, and Stratification**

Bound up in notions of academic merit and selectivity in admissions was the principle of prestige because the most selective and meritocratic institutions of higher education were the most prestigious (Karabel 2005). Graduates of “elite” institutions were once, and continued to be, overrepresented in the American elite class, creating a high stakes demand for gaining access
to these and other similar institutions. Institutions were viewed as “prestigious” not only because they were avenues through which material benefits can be gained, but also because they were sites for accessing a limited supply of power and influence (Loury 1998; Bowen & Bok 1998). As Karabel (2005: 5) argued in his landmark text on admission policies at Harvard, Princeton, and Yale, “the definition of ‘merit’ is fluid and tends to reflect the values and interests of those who have the power to impose their particular cultural ideals.” While merit was seen as a sanctioned level of educational quality that should determine admissions, the most reputable institutions were the most concerned in maintaining their status as prestigious in the field, regardless if it was bound to educational quality.

Karabel (2005: 6) went even further to uncover how admissions policy was “a kind of negotiated settlement among contending groups, each wishing to shape admissions criteria and the actual selection process to produce the outcome they prefer.” Accordingly, the admissions process was a political process wherein the meritocratic system of higher education admissions, rather than having competition for quality education, was a competition for social and political status. Merit, thus, served as a proxy for the political contestation that was played out by the youth in America over who will constitute the future elite class.

As such, these political contestations over power and influence have increased the impact admissions policies have on educational outcomes. Scholars have shown that “merit” and “selectivity,” and thus prestige, in admissions were imbued with meaning to reflect unique institutions needs (Espenshade, Chung, & Walling 2004; Stampnitzky 2006). For example, constituting a sports team, maintaining specific thresholds for metrics considered in national rankings, and fostering strong relationships with important feeder schools, influenced individual admissions decisions beyond a student’s educational qualifications (Espeland & Sauder, 2007;
Stevens, 2007; Karabel, 2005). Some scholars suggested that these additional criteria primarily served to simplify selection, as well as, consolidated institutional objectives on culture and financial solvency (Klitgaard 1985; Soares 2007). Unfortunately, given the historic underrepresentation of students of color and lower socioeconomic status students at elite institutions, these additional criteria potentially placed minoritized students in a bind since legacy and preferred personalities or character are culturally imbued criteria (Rivera 2015).

While the inclusion of non-educational factors in admission need not be problematic, these specific types of non-educational factors can contribute towards widening the racial gap in admissions and enrollment by privileging admission criteria that were strongly associated with more advantaged students. Given the historic privileging of White and Asian and Pacific Islander students in enrollment, I proposed the following hypotheses to trace the landscape of how racialized gaps in enrollment have changed:

\[H2A: \text{The probability of White and Asian and Pacific Islander students enrolling at more selective institutions will have stayed the same or be at higher rates than other students in 2013 compared to 2004.}\]

\[H2B: \text{For students from racially minoritized backgrounds (e.g., Black, Latinx, and Multiracial, Indigenous, or Other), the probability of enrolling at more selective institutions will have stayed the same or decreased between 2004 and 2013.}\]

\[\]

**Competition and Inequality**

Finally, in addition to the academic and racialized study of admissions in the previous two sections, admissions policies have historically been subjected to the market forces of supply and demand since the 1950s. These changes in the demand and supply for admission spots were critical for institutions because they affected when institutions could relax or contract their admission criteria. As Alon (2009) outlined, periods of high competition but low supply led to increased reliance on “objective” measure of “academic merit,” while the reverse held true for
low competition and high supply periods. Tracing the history of admissions competition from the 1950s was critical to understand the current context of competition and demand, and how these dynamics structured racial and class-based inequalities.

Duffy and Goldberg (1998) referred to the application and enrollment period between 1955 and 1970 as the “Tidal Wave” because of the huge influx of students into higher education. While higher education was under its own period of expansion to accommodate this influx, institutions responded to the Tidal Wave in extremely different ways. For example, in the 1960s, while applications hit a record high for the time, many competitive schools could not accommodate the increased demand and tightened their admissions policies. By the 1970s, demand for college began to decrease due to population changes. For example, scholars attributed this change to a drop in the absolute size of the college-age population, falling high school graduation rates, declining wage premiums for college graduates, and non-prosperous economic conditions (Baker & Velez 1996; Duffy & Goldberg 1998). The decreased demand lowered competition; this change was reflected in admission criteria as college-bound seniors’ mean SAT scores dropped by 45 points between 1972 and 1980 (The College Board 2016).

Since the 1980s though, colleges have seen increased demand. As the wage premium for a college education increased from the 1970s, more students were drawn to college due to the economic rewards (Clotfelter 1993; Bound, Hershbein & Long 2009). Selectivity became particularly important, as annual college rankings emerged in the early 1980s to publicize the distinctions between institutions of higher education, and students responded to these prestige representations (Alon 2009; Bowman & Bastedo 2009). Furthermore, due to degree completion rates and placement rates for graduate school being highly associated with prestigious
institutions, student demand increased towards more selective institutions (Frank & Cook 1995; Hoxby & Long 1998)

As expected, with the increase in demand, institutions were more selective for their incoming cohorts and the mean SAT scores for college-bound seniors began to rise and have consistently risen (Posselt et al. 2012). Alon (2009) showed how these forces combined to intensify the magnitude of class gaps, while Posselt et al. (2012) revealed how these forces decreased the likelihood of admission for Black and Latinx students at selective institutions. Importantly, prestigious institutions stood to benefit from the increased demand and increased selectivity since they had the ability to choose from a surplus of students and applications (NACAC 2006). The increased selectivity also served as a signal to employers in the labor market that students were already highly selected (Rivera 2015), and thus desirable. In this way, by increasing their selectivity, institutions benefitted from choosing highly desirable students and facilitated their access to powerful positions in the political and labor market.

While these changes in demand could be attributed to population changes, as they were in the 1970s, the college degree was increasingly valuable (Hout 2012) and more students from underrepresented communities were enrolling at high rates (Grodsky 2007). As such, the rising competition had implications for educational outcomes for racially minoritized communities because a college education remained a competitive goal that was not universally available. I proposed the following hypotheses to view how competition, as measured through “objective metrics,” has exerted influence between 2004 and 2013:

*H3A:* For students who would have a competitive profile, the probability of enrolling at more selective institutions will have stayed the same or decreased.

*H3B:* For students who would have a competitive profile, the probability of enrolling at less selective institutions will have decreased or stayed the same.
H3C: Despite having an academically competitive profile, students of Black, Latinx, and Multiracial, Indigenous, or Other background will have a lower probability of enrolling at more selective institutions in 2013 than in 2004.

THEORETICAL FRAMEWORK

Drawing on Weber’s ideas of social closure, which was “a process whereby social collectivities seek to maximize rewards by restricting access to resources and opportunities to a limited circle of eligible individuals,” Alon (2009: 735) highlighted the twin mechanisms of exclusion and adaptation underlying the relationship between social closure and inequality.\footnote{I adopt Alon’s (2009) mechanism-based theory of expanding inequality and extend it to racially minoritized communities.} Framing this closure in Parkin’s (1979) framework of modern capitalist societies, Alon identified exclusion was executed by growing propriety barriers and the inflated use of academic qualifications. In the context of higher education, exclusion was manifest in the burgeoning college tuition levels and in the emphasis on standardized test scores in selective admission (Trends in College Pricing 2016; Alon & Tienda 2007; Posselt et al. 2012). Adaptation, the second mechanism, was evident in how privileged collectivities maintained their resources and opportunities, since the advantaged cannot rest on the assumption that privileges would simply be transmitted from one generation (Parkin 1973). When extending this framework to racialized inequality, these two mechanisms function within, not only a capitalist system, but also racialized modernity that operated through racialization (DuBois 1935; Bonilla-Silva 1997). Thus, I introduce racial exclusion and adaptation in Alon’s (2009) framework.

Racialization\footnote{Racialization produces a material structure in which “racialized groups are hierarchically ordered and ‘social relations’ and ‘practices’ emerge that fit the position of the groups in the racial regime” (Bonilla-Silva 2015: 75).} is a mechanism within a racialized social system, or a society “in which economic, political, social, and ideological levels are partially structured by the placement of actors in racial categories or races” (Bonilla-Silva 2001:37). Analytically, the mechanism of
racialization was observed through practices (behavior, styles cultural affections, traditions, and organizational procedures), but racial ideology was a critical element that maintained the racial order, even though it alone could not maintain racial domination (Bonilla-Silva 2015).

In the context of higher education, racial exclusion primarily concerns erecting barriers to maintain the status quo of who is and is not allowed into institutions, in addition to the inflated use of academic qualifications (e.g., capitalist exclusion). This exclusion is grounded in historical terms (DuBois 1899), wherein higher education was the purview of White, rich, and Protestant men (Karabel 2005). Furthermore, the elite institutions of higher education were able to function, in part, due to their ties with the chattel slave trade, which provided labor and financial resources for universities (Wilder 2013). Racial exclusion, in this context, implies how non-White students, particularly Black students, were kept out of higher education, from formal exclusions, such as the creation of Historically Black Colleges and Universities (Wooten 2015), to informal exclusions, such as the burgeoning enrollment of Black and Brown students at for-profit institutions (McMillan Cottom 2017).

Whereas college costs, tests scores, and shifting students of color out of prestigious institutions showcase racial exclusion in higher education, capitalist adaptation occurred in the act of middle- and high-SES parents being powerfully involved in their children’s academic activities and tracking placement in high school (Lareau 2000; Lareau and Horvat 1999; Lucas 1999; Bourdieu 1996; Massey et al. 2003). Through this involvement, parents conveyed the necessary cultural and social knowledge for success within primary and secondary education. From a class-based perspective, the use of expensive test preparation programs, which are used by 70% of privileged seniors and less than half of low-SES students (Buchmann, Roscigno & Condron 2010), embodied capitalist adaptation. From a racialized perspective, racial adaptation
adds attention to the use of legacy status (Espenshade, Chung, & Walling 2004) as a mechanism for structuring inequality since alumni of elite institutions are predominantly White.

While racial adaptation falls in line with capitalist adaptation with its emphasis on consolidating control over resources and opportunities, it differs because racial adaptation is concerned with how hierarchies of difference are maintained through racialization. Whereas racialization works through exclusion to constitute racialized groups in a racial regime, adaptation ensures that the relations between these groups continue in such a way to maintain the White supremacist and anti-Black ideology that originally constituted racial relations in American higher education. The phenomenon of institutional stratification speaks to how adaptation occurs over the years, as it brings attention to how certain racialized groups are historically and consistently denied entry despite playing “the rules of the game”.

Thus, the mechanism-based theory for inequality (Alon 2009) unearths how social closures occur in higher education based on test scores to structure inequality, and based on the type of selective institution students are structurally placed. As test scores become polarized by class and racialized backgrounds, indicating the effect of adaptation, the increasing reliance on test scores in admissions is amplified, indicating the effect of exclusion.

DATA AND METHODS

Data

I used two nationally longitudinal datasets: the Education Longitudinal Study of 2002 (ELS) and the High School Longitudinal Study of 2009 (HSLS). The ELS followed high school students throughout their secondary and postsecondary years, starting with 10th graders in 2002. While the ELS continued into 2013 with a third wave of data, I used data solely from the base
year and first follow-up since students who were 10th graders in 2002 were 12th graders in 2004. Out of the total respondents, I focused explicitly on those students who graduated in 2004 for whom I had data on their postsecondary trajectory (n=8,860). Namely, for the purposes of constructing the outcome variable, I focused on whether they attended a postsecondary institution following graduation, and, if they did attend an institution, I identified the selectivity of their first institution attended.

To compare what changes occurred between 2004 and 2013 for college admission, I used the HSLS, which followed students who were 9th graders in 2009. I used data from its base year survey and first follow-up in 2012, with supplementary data from its 2013 update to include the college going data for students who were 12th graders in 2013 (n=9,986). To ensure that the samples across both datasets were comparable, only students who did graduate during their traditional 12th grade year were included in the final samples. Analyses used inverse-probability weighting through the restricted-access weights to maintain national representativeness; for ELS and HSLS, the analytical weights were non-zero for students who were present in the base year and follow-up years of their respective surveys. I did not pool the data, but chose to do separate analyses for 2004 and 2013 to control for potential time-specific factors.

**Measures**

**Dependent Variable.** I constructed the dependent variable based on the first institution attended the fall semester after graduation from each survey. Because I did not pool the two surveys together, I kept the outcome variables separate between 2004 and 2013. In each survey, I identified whether the student did not enroll in postsecondary education, enrolled in a two-year institution, or enrolled in a four-year institution. I matched those students who enrolled in four-
year institutions with the IPEDS-institution code for their first-institution attended. Then, I used restricted-access data to match students’ first institution attended IPEDS-code with Barron’s (2014) Profiles of American Colleges, which assigns levels of selectivity to institutions. To standardize any rankings variation across the datasets, I utilized the most recent Barron’s classifications for 2014.

Barron’s assigns four-year degree granting institutions one of six categories: noncompetitive, competitive, less competitive, very competitive, highly competitive, and most competitive. I collapsed the categories of less competitive and competitive together, and collapsed highly competitive and most competitive due to a very low number of students of color enrolled in the less competitive and most competitive institution categories. This resulted in a six-category outcome variable: (1) does not attend postsecondary education, (2) attends a 2-year or a less than 2-year institution; or attends a four-year institution that Barron’s categorizes as (3) noncompetitive, (4) competitive, (5) very competitive, and (6) most competitive.

**Covariates.** I included demographic, school background, and academic and extracurricular activity background variables as covariates, all displayed in Table 1 for both 2004 and 2013 senior-class cohorts. For demographic variables, I included designations of which race students marked on their surveys, students’ academic aspiration in their base year surveys, and their socioeconomic status in the base year (2002 and 2009 for each survey).

For racial designations, I included Asian and Pacific Islander; Black; Multiracial, Indigenous, and Other; and White. Ethnic identify for Latinx was not subsumed under the racial designations due to cell size concerns and to ensure that students’ ethnic identification was not 

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6 For students who marked Latinx/Hispanic with a racial designation, I reassigned students to their respective racial designation and kept Latinx/Hispanic as a designation for students who marked Latinx/Hispanic and no racial designation. For example, students who marked Latinx/Hispanic and only White were moved to White; students who marked Latinx/Hispanic and White and Black were moved to Multiracial.
conflated with their racial designation. While it is important to consider the processes of how communities are racialized (Itzigsohn 2011) – particularly Latinx communities, given the limitations of Census categories (Mora 2014) – coding racial and ethnic designations separately was the most comprehensive approach for analysis. Due to small cell size concerns for convergence in the multinomial logistic regressions, student identifying as American Indian or Alaskan Native were coded with Multiracial and Other students to create a “Multiracial, Indigenous, and Other” racialized background category. While there are valid concerns on how to code indigenous populations under racial designations, I did not want to exclude these students from analysis and ascribed them into this category for methodological reasons. For both dataset sets, I collapsed Pacific Islander with Asian for analyses across racial designations.

For educational aspirations, I created a five-category range of aspiring for less than BA/AA degree, attaining an Associate or two-year degree, or attaining a bachelor’s degree, a Master’s degree, or a PhD, Advanced/Professional degree. A continuous socioeconomic composite scale was recoded into weighted quartiles respective for each year.

For school background, I included indicators of whether the high school was in an urban, suburban, or rural community, as well as, whether it as a public, Catholic, or other private school. These measures were meant to account for the differential effects on college-going behavior that could arise from the context of school locale and school control. Finally, academic and extracurricular activities are included through the student’s cumulative grade point average, weighted for honors courses; a composite score of SAT ranging from 400 to 1600; a measure for highest science and math course taken; and indicators for whether the student was involved in extracurricular, athletic, or academic activities.
Following existing measures of math and science course-taking trends (e.g., Burkam, Lee, & Owings 2003; Downing & Bozick 2007; Posselt, et al. 2012), I defined a scale for math and science course from least advanced to advanced. For highest math course passed, a student received a designation according to the following ordinal scale: 1 = No math or low math; 2 = Algebra 1 or plane geometry; 3 = Algebra 2; 4 = Algebra 3, trigonometry, or analytic geometry; 5 = Pre-calculus; and 6 = Calculus. Similarly, for science courses, the following scale was used: 1 = No science or low science; 2 = Basic biology or secondary physical science; 3 = General biology; 4 = Chemistry 1 or Physics 1; 5 = Chemistry 1 and Physics 1; 6 = Chemistry 2, Physics 2, or advanced biology. To handle item-missingness in the four academic dimensions – SAT composite score, GPA, and highest math and science courses completed – I conducted multiple imputation of 20 datasets. Variables were then recoded if they fell outside the appropriate ranges.

**Analysis and Model**

I conducted analysis through a multinomial logistic regression model. As scholars have found, an ordinal logistic regression is not appropriate for studying enrollment by selectivity because the parallel regression assumption is violated (Posselt, et al. 2012; Long & Freese 2005). Through the multinomial model, there are $M$ logistic regression equations for each of the $M$ categories in the outcome variable relative to one base outcome $f$, resulting in $M - 1$ total equations. For my model, $f$ is not enrolling in postsecondary education. For each covariate then, there are $M - 1$ coefficients. The following is the general equation used to model the enrollment for 2004 and 2013, separately:

$$
p_{ij} = \frac{e^{x_i \beta_j}}{\sum_{l=1}^{m} e^{x_i \beta_j}}.
$$
where $p_{ij}$ is the probability of individual $i$ having the postsecondary education enrollment outcome $j$ out of the total $m$ outcomes; $x_i$ is the vector of demographic, school background, and academic and extracurricular activity background factors; and $\beta_j$ is the vector of coefficients for the covariates in Table 1 on the probability of having postsecondary education enrollment outcome $j$.

**Limitations**

My project’s has three limitations, each of which I attempt to address. First, in relying on Census categories for race and ethnicity, I was limited to their designations (Mora 2014). These categories present concerns for my analyses because they aggregated the Asian and Pacific Islander populations. While more recent Census data has begun to systematically disaggregate by ethnicity and Pacific Islander designations, in order to study these specific populations longitudinally, I re-aggregated to prior Census categories. This raised concerns because of the immense diversity within these communities along socioeconomic status and postsecondary outcomes (Chang & Kiang, 2002; Hune, 2002; Kiang, 2004), as is the case with Latinx and Black communities, as well. To the extent possible within the multinominal model, I conducted additional analyses by ethnicity to dis-aggregate the overall findings for Asian and Pacific Islanders. I do not display these findings, but they corroborated calls for disaggregated analyses.

Second, scholars have identified that there is substantive movement that occurs between institutions that a student first attends and where they ultimately receive their degree. These tendencies to transfer are powerfully correlated with lower socioeconomic status students relative to more advantaged students (Goldrick-Rab 2006). While this was a concern, in studying
Table 1. Means and standard deviations of outcome variables and explanatory variables for 2004 and 2013 high school seniors.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>2004 Seniors</th>
<th>2013 Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postsecondary enrollment destination (outcome variable)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No postsecondary education</td>
<td>10.20%</td>
<td>22.30%</td>
</tr>
<tr>
<td>Two-year or community college</td>
<td>36.40%</td>
<td>32.10%</td>
</tr>
<tr>
<td>Noncompetitive, four year</td>
<td>5.79%</td>
<td>4.96%</td>
</tr>
<tr>
<td>Competitive</td>
<td>22.00%</td>
<td>20.10%</td>
</tr>
<tr>
<td>Very competitive</td>
<td>14.60%</td>
<td>12.20%</td>
</tr>
<tr>
<td>Most competitive</td>
<td>11.00%</td>
<td>8.37%</td>
</tr>
<tr>
<td>Demographic background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>53.90%</td>
<td>51.50%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>5.00%</td>
<td>4.68%</td>
</tr>
<tr>
<td>Black</td>
<td>13.70%</td>
<td>12.70%</td>
</tr>
<tr>
<td>Multiracial, Indigenous, or Other</td>
<td>11.50%</td>
<td>15.10%</td>
</tr>
<tr>
<td>White</td>
<td>69.90%</td>
<td>67.50%</td>
</tr>
<tr>
<td>Latinx</td>
<td>12.50%</td>
<td>19.60%</td>
</tr>
<tr>
<td>Less than BA/AA degree</td>
<td>3.44%</td>
<td>16.40%</td>
</tr>
<tr>
<td>Associates/Two year degree</td>
<td>7.79%</td>
<td>9.76%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>41.50%</td>
<td>33.60%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>26.10%</td>
<td>24.40%</td>
</tr>
<tr>
<td>PhD, Advanced/Professional degree</td>
<td>21.20%</td>
<td>15.70%</td>
</tr>
<tr>
<td>School background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>28.00%</td>
<td>42.20%</td>
</tr>
<tr>
<td>Suburban</td>
<td>52.50%</td>
<td>33.10%</td>
</tr>
<tr>
<td>Rural</td>
<td>19.40%</td>
<td>24.70%</td>
</tr>
<tr>
<td>Public School</td>
<td>90.30%</td>
<td>91.90%</td>
</tr>
<tr>
<td>Catholic School</td>
<td>5.84%</td>
<td>4.43%</td>
</tr>
<tr>
<td>Other private school</td>
<td>3.86%</td>
<td>3.70%</td>
</tr>
<tr>
<td>Academic and extracurricular background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulative GPA</td>
<td>2.90 (0.79)</td>
<td>3.02 (0.85)</td>
</tr>
<tr>
<td>SAT/ACT composite score</td>
<td>974 (211.2)</td>
<td>955 (225.7)</td>
</tr>
<tr>
<td>Highest science course taken</td>
<td>4.37 (1.37)</td>
<td>4.44 (1.22)</td>
</tr>
<tr>
<td>Highest math course taken</td>
<td>3.89 (1.42)</td>
<td>4.13 (1.35)</td>
</tr>
<tr>
<td>Extracurricular activities</td>
<td>33.50%</td>
<td>62.40%</td>
</tr>
<tr>
<td>Athletic activities</td>
<td>58.90%</td>
<td>51.60%</td>
</tr>
<tr>
<td>Academic involvements</td>
<td>44.80%</td>
<td>19.90%</td>
</tr>
</tbody>
</table>

Observations: 8,860 for 2004 Seniors; 9,986 for 2013 Seniors

Note: For all indicator variables, percentages are shown to indicate how many students in the sample for that year could be identified in that category. For continuous variables, standard deviations are shown in parentheses. Multiple imputation of 20 datasets is used to handle item-missingness. Model estimates use inverse-probability weighting to deal with stratified sample design and sample attrition in each respective survey in order to be nationally representative.
where students attend postsecondary education first, I focused on the immediate outcomes from secondary schooling. In regards to understanding how selectivity and prestige operate through a presumed meritocratic system, the first institution attended (or not attended) is conceptually more relevant to observe how capitalist and racialized exclusion operate. As Alon (2009) also argues, in constructing broad categories for my outcome variables, the concern of transfers was partially mediated because between-tier transfer rates are lower than between-institution rates.

Finally, as Alon (2009) and Posselt, et al (2012) recognized, increasing tuition costs and changes in financial aid are powerful factors in determining at which institutional type students enroll. These concerns are particularly important when considering the effect that selectivity has on the magnitude of class gaps (Alon 2009), and could have on the rise and fall of need-blind admissions as a response to increasing tuition costs. Thus, these cost-based factors likely have a negative effect on the odds of enrolling in postsecondary education, particularly for students from more disadvantaged and lower socioeconomic backgrounds. While I do not have institution-specific data on these changes, more comprehensive analyses on how these factors affect selectivity are necessary.

RESULTS

Hypothesis 1: Institutional Stratification

As Posselt, et al (2012) identified, academic credentials between 1972-2004 were increasing. These credentials included the level of high school math and science courses completed, GPA and college-exam taking rates. Following in this tradition of studying institutional stratification (Posselt et al 2012), I evaluated the extent to which these increasing trends extended to 2013 with the use of weighted descriptive statistics and to assess hypothesis 1.
As Figures 3A-3D indicate, academic credentialing did not follow a straightforward narrative between 2004 and 2013. Hypothesis 1A suggested that academic credentialing should have increased for all students given the institutionally stratified nature of selective admissions in higher education. Table 1 showed that the mean highest math course taken had nationally increased over time, and Figure 3 showed that this was the case for students from all racialized backgrounds. Thus, in regards to credentials for math coursework, Figure 3A supported hypothesis 1A; yet, the remaining depictions in Figure 3 revealed a more nuanced landscape.

In comparison to the moderate change in overall average highest science course taken between 2004 and 2013 in Table 1, disaggregating the change in Figure 3B revealed a distinct racialized dimension. Science course taking did not change among White or Asian and Pacific Islander students, but Black, Multiracial, and Latinx students increased their average level of science course completed. Hence, hypothesis 1A is supported, but only for Black, Multiracial, and Latinx students.

Figures 3A and 3B illuminated a critical departure from prior findings regarding the racialized gaps in coursework. While the racialized gaps in math coursework persisted, lending support to hypothesis 1B, in science coursework, Black, Multiracial, and Latinx students completed more advanced coursework and decreased the gap. The latter trend provided support against hypothesis 1B – that the racialized disparities in academic preparation would not have changed or would have increased.

When observing changes in SAT scores, Figure 3C depicted national trends, while Figure 3D focused on these same trends but only for students enrolling at the most selective institutions. Nationally, Black and Latinx students became more competitive with SAT scores, while at the most selective institutions, Black and Asian and Pacific Islander students increased their
Figure 3A. Highest mean math course completed by racialized background, weighted to 2004 and 2013 levels.
Figure 3B. Highest mean science course completed by racialized background, weighted to 2004 and 2013 levels.
Figure 3C. Mean SAT composite score by racialized background, weighted to 2004 and 2013 levels.
Figure 3D. Mean SAT composite score at the most selective institutions by racialized background, weighted to 2004 and 2013 levels.
SAT scores. With these trends, Figure 3C provided evidence against hypothesis 1A – except for Black and Latinx students – and Figure 3D provides evidence against hypothesis 1A – except for Black and Asian and Pacific Islander students. For hypothesis 1B, Figure 3C provided support when nationally looking at Multiracial students in comparison to White and Asian and Pacific Islander students because the gaps in SAT scores stayed the same. Yet, as Black and Latinx students nationally increased their SAT scores, the figures provided support against hypothesis 1B because the gaps in SAT scores have decreased. Finally, Figure 3D highlighted who was admitted and enrolled at the most selective institutions, and provided no evidence for hypothesis 1B since White and Asian students no longer followed the same trends. Ultimately, through all these divergent trends, regardless of selectivity or the academic dimension in question, Black students became more academically competitive between 2004 and 2013.

To see whether institutional stratification was taking place, the trends that we see in Figures 3A-3D should map onto the enrollment trends in Figures 4A-4E. In other words, as hypothesis 1C states, positive academic preparation should translate into positive enrollment at the national level. While students from all racialized backgrounds increased their math coursework level, only students from Black, Latinx, and Multiracial, Indigenous, and Other backgrounds showed increases along other dimensions of academic preparation. While there is stagnation in enrolling at more competitive institutions (Figures 4), students of all racialized backgrounds are more likely to not enroll in 2013 compared to 2004. Given the increases in Black students’ academic preparation, focusing on their enrollment trends over time provides evidence against hypothesis 1C. In other words, when academic credentials remained stagnant for most students between 2004 and 2013, we saw that enrollment decreased rather than stayed stagnant. Furthermore, even for students who became more academically competitive, namely Black
Fig 4A. Asian Student Enrollment

Fig 4B. Black Student Enrollment

Fig 4C. Multiracial Student Enrollment

Fig 4D. White Student Enrollment
Figure 4A. Student enrollment by postsecondary destination, as percentage of Asian and Pacific Islander racialized background and weighted to 2004 and 2013 levels.
Figure 4B. Student enrollment by postsecondary destination, as percentage of Black racialized background and weighted to 2004 and 2013 levels.
Figure 4C. Student enrollment by postsecondary destination, as percentage of Multiracial, Indigenous, and Other racialized background and weighted to 2004 and 2013 levels.
Figure 4D. Student enrollment by postsecondary destination, as percentage of White racialized background and weighted to 2004 and 2013 levels.
Figure 4E. Student enrollment by postsecondary destination for, as percentage of Latinx racialized background and weighted to 2004 and 2013 levels.
students, an institutionally stratified system did not reward them. This suggests that the power of academic preparation in isolation does not translate into enrollment, as a meritocratic system would dictate; rather, these academic and enrollment trends depict that structural context may continue to exert influence over individual skill and talent. I explore this in the following analyses and discussions of hypotheses 2 and 3.

**Hypotheses 2 and 3: Race, Merit, and Selectivity**

Table 2A documents the odds-formulation of the multinomial regressions with racialized background as the only explanatory variable, and then includes socioeconomic quartile in Table 2B. These tables identify the odds of enrolling in a two-year institution, a noncompetitive four-year institution, or the most competitive four-year institution, relative to not enrolling in postsecondary education, between 2004 and 2013 senior cohorts. I focus on these categories for comparisons because, relative to not enrolling in postsecondary education, the impact that selectivity would have had on racialized gaps in enrollment (e.g., hypothesis 2A-2B) would be most prevalent in these categories.\(^7\)

Hypothesis 2A predicts that White and Asian and Pacific Islander students will have higher rates of enrollment at more selective institutions in 2013 compared to 2004; in addition, hypothesis 2B predicts that Black, Latinx, and Multiracial, Indigenous, or Other students will be less likely to enroll at selective institutions. While predicted probabilities are discussed later and

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7 As Figure 2 indicated earlier, fall enrollment decreased at two-year and four-year institutional type between 2004 and 2013. The theoretical framing suggests that competition should be low in this context, but enrollment levels in Figure 1 showed that there were still more students enrolled in higher education in 2013 than in 2004. Thus, providing a comparison between two-year institutions and four-year institutions, and then between noncompetitive and the most competitive four-year institutions helps paint a picture of how students from different racialized backgrounds were experiencing the enrollment shrinkage within a highly populated higher education landscape.
show in Figures 5A-5D (and Appendix Table A1), Tables 2A and 2B provide a baseline for measuring the impact that racialized background had for enrollment at these outcomes.

Before including any additional explanatory variables, in 2004 and 2013, racial designations capture a statistically significant positive relationship for Asian and Pacific Islander students, relative to White students, for enrolling in two-year and the most competitive four-year institutions, relative to no enrollment. In contrast, students from Black, Latinx, and Multiracial, Indigenous and Other backgrounds had a generally negative or non-significant relationship with enrolling at more selective institutions in 2004, relative to White students. These trends persisted into 2013; in conjunction with the diminishing statistical significance of racial designation in Table 3 in predicting enrollment, there is partial support for hypotheses 2A and 2B.

Interestingly, similar trends continued when weighted socioeconomic quartiles were introduced into the model in Table 2B. Relative to being in the first socioeconomic quartile, students with more class-based privilege had statistically significant positive relationships with enrolling at all institutional types. Yet, with the introduction of class variables, racialized background was no longer predictive of Asian and Pacific Islander enrollment at noncompetitive institutions in 2004, or of Black students’ enrollment at the most selective institutions in 2013. While interaction effects would have helped to parse out the nuances in these models, the multinomial models never converged when including interaction affects. I attempt to account for this issue through the inclusion of more explanatory variables (e.g., Table 3).

To understand the changes over time in odds of enrollment along racialized backgrounds, I conducted predicted probability analyses in two steps. First, I produced a full model of multinomial logistic regressions that included all the variables in Table 1 as explanatory variables; these results are depicted in Table 3. Similar trends emerge that were evident in Tables
Table 2A. Multinomial logistic regression odds ratios for enrolling in postsecondary education in 2004 and 2013, by racialized background

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Two-year or less</th>
<th>Noncompetitive four year</th>
<th>Most competitive four year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian and Pacific Islander</td>
<td>1.460**</td>
<td>2.648***</td>
<td>0.694</td>
</tr>
<tr>
<td></td>
<td>(0.267)</td>
<td>(0.671)</td>
<td>(0.221)</td>
</tr>
<tr>
<td>Black</td>
<td>0.649***</td>
<td>0.901</td>
<td>1.511**</td>
</tr>
<tr>
<td></td>
<td>(0.0801)</td>
<td>(0.135)</td>
<td>(0.249)</td>
</tr>
<tr>
<td>Multiracial, Indigenous, or Other</td>
<td>0.732*</td>
<td>1.018</td>
<td>0.960</td>
</tr>
<tr>
<td></td>
<td>(0.129)</td>
<td>(0.146)</td>
<td>(0.255)</td>
</tr>
<tr>
<td>Latinx</td>
<td>0.926</td>
<td>1.284*</td>
<td>0.473***</td>
</tr>
<tr>
<td></td>
<td>(0.149)</td>
<td>(0.177)</td>
<td>(0.117)</td>
</tr>
<tr>
<td>Female</td>
<td>1.213**</td>
<td>1.550***</td>
<td>1.315*</td>
</tr>
<tr>
<td></td>
<td>(0.115)</td>
<td>(0.139)</td>
<td>(0.185)</td>
</tr>
<tr>
<td>Constant</td>
<td>3.671***</td>
<td>1.096</td>
<td>0.507***</td>
</tr>
<tr>
<td></td>
<td>(0.291)</td>
<td>(0.0679)</td>
<td>(0.0608)</td>
</tr>
<tr>
<td>Observations</td>
<td>8,860</td>
<td>9,986</td>
<td>8,860</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.0208</td>
<td>0.0139</td>
<td>0.0208</td>
</tr>
<tr>
<td>Wald Chi-squared (25 df)</td>
<td>422.08***</td>
<td>201.60***</td>
<td>422.08***</td>
</tr>
</tbody>
</table>

Note: Coefficients are represented as odds-ratios. The base for multinomial logistic regression was not enrolling at a two- or four-year, degree-granting institution after graduation; as such, the log-odds coefficients should then be interpreted as enrolling at a particular type of selective institution relative to not enrolling. For indicator variables included in the regression, the coefficients represent the odds of attending a particular type of selective institution (shown in the columns) relative to the following: race is relative to White students, female is relative to male students. *** p<0.01, ** p<0.05, * p<0.1 *** p<0.01, ** p<0.05, * p<0.1
Table 2B. Multinomial logistic regression odds ratios for enrolling in postsecondary education in 2004 and 2013, by racialized background and class

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multinomial, Indigenous, or Other</td>
<td>1.978***</td>
<td>1.514***</td>
<td>3.534***</td>
<td>2.207***</td>
<td>7.632***</td>
<td>4.380***</td>
</tr>
<tr>
<td></td>
<td>(0.270)</td>
<td>(0.190)</td>
<td>(0.690)</td>
<td>(0.506)</td>
<td>(1.519)</td>
<td>(1.306)</td>
</tr>
<tr>
<td>SES quartile 4</td>
<td>2.387***</td>
<td>2.819***</td>
<td>4.768***</td>
<td>7.419***</td>
<td>34.92***</td>
<td>47.13***</td>
</tr>
<tr>
<td></td>
<td>(0.424)</td>
<td>(0.402)</td>
<td>(1.115)</td>
<td>(1.949)</td>
<td>(7.676)</td>
<td>(13.19)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.184***</td>
<td>0.771**</td>
<td>0.208***</td>
<td>0.0578***</td>
<td>0.176***</td>
<td>0.0472***</td>
</tr>
<tr>
<td></td>
<td>(0.237)</td>
<td>(0.0838)</td>
<td>(0.0370)</td>
<td>(0.0134)</td>
<td>(0.0312)</td>
<td>(0.0132)</td>
</tr>
</tbody>
</table>

Note: The base category was not attending a degree-granting institution. For indicator variables, the coefficients represent the odds of enrolling an institutional type such that race is relative to White students, SES is relative to the first quartile, and female is relative to male students. *** p<0.01, ** p<0.05, * p<0.1
Table 3. Multinomial logistic regression odds ratios for enrolling in postsecondary education, relative to base category of not enrolling, between 2004 and 2013

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Two-year or less</th>
<th>Noncompetitive four year</th>
<th>Most competitive four year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian and Pacific Islander</td>
<td>1.683***</td>
<td>2.772***</td>
<td>0.619</td>
</tr>
<tr>
<td></td>
<td>(0.329)</td>
<td>(0.753)</td>
<td>(0.207)</td>
</tr>
<tr>
<td>Black</td>
<td>0.910</td>
<td>1.100</td>
<td>2.283***</td>
</tr>
<tr>
<td></td>
<td>(0.131)</td>
<td>(0.174)</td>
<td>(0.472)</td>
</tr>
<tr>
<td>Multiracial, Indigenous, or Other</td>
<td>0.793</td>
<td>1.160</td>
<td>0.969</td>
</tr>
<tr>
<td></td>
<td>(0.146)</td>
<td>(0.177)</td>
<td>(0.279)</td>
</tr>
<tr>
<td>Latinx</td>
<td>1.239</td>
<td>1.540***</td>
<td>0.689</td>
</tr>
<tr>
<td></td>
<td>(0.215)</td>
<td>(0.219)</td>
<td>(0.187)</td>
</tr>
<tr>
<td>Female</td>
<td>1.055</td>
<td>1.369***</td>
<td>1.047</td>
</tr>
<tr>
<td></td>
<td>(0.110)</td>
<td>(0.133)</td>
<td>(0.161)</td>
</tr>
<tr>
<td>SES quartile 2</td>
<td>1.758***</td>
<td>0.992</td>
<td>1.761***</td>
</tr>
<tr>
<td></td>
<td>(0.216)</td>
<td>(0.125)</td>
<td>(0.344)</td>
</tr>
<tr>
<td>SES quartile 3</td>
<td>1.810***</td>
<td>1.216</td>
<td>2.760***</td>
</tr>
<tr>
<td></td>
<td>(0.254)</td>
<td>(0.153)</td>
<td>(0.562)</td>
</tr>
<tr>
<td></td>
<td>(0.375)</td>
<td>(0.296)</td>
<td>(0.785)</td>
</tr>
<tr>
<td>GPA</td>
<td>1.648***</td>
<td>1.416***</td>
<td>2.460***</td>
</tr>
<tr>
<td></td>
<td>(0.156)</td>
<td>(0.125)</td>
<td>(0.372)</td>
</tr>
<tr>
<td>SAT</td>
<td>0.999</td>
<td>1.000</td>
<td>0.999*</td>
</tr>
<tr>
<td></td>
<td>(0.0004)</td>
<td>(0.0003)</td>
<td>(0.0006)</td>
</tr>
<tr>
<td>Highest science course</td>
<td>1.092*</td>
<td>0.946</td>
<td>1.133*</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.053)</td>
<td>(0.082)</td>
</tr>
<tr>
<td>Highest math course</td>
<td>1.009</td>
<td>1.043</td>
<td>1.324***</td>
</tr>
<tr>
<td></td>
<td>(0.0550)</td>
<td>(0.0523)</td>
<td>(0.104)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.072</td>
<td>0.709</td>
<td>0.0116***</td>
</tr>
<tr>
<td></td>
<td>(0.494)</td>
<td>(0.309)</td>
<td>(0.00761)</td>
</tr>
<tr>
<td>Observations</td>
<td>8,860</td>
<td>9,986</td>
<td>8,860</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.2092</td>
<td>0.2209</td>
<td>0.2092</td>
</tr>
<tr>
<td>Wald Chi-squared (120 df)</td>
<td>1980.01***</td>
<td>1906.60***</td>
<td>1980.01***</td>
</tr>
</tbody>
</table>

Note: Coefficients are represented as odds-ratios. The base for multinomial logistic regression was not enrolling at a two- or four-year, degree-granting institution after graduation; as such, the log-odds coefficients should then be interpreted as attending a particular type of selective institution relative to not attending. For indicator variables included in the regression, the coefficients represent the odds of attending a particular type of selective institution (shown in the columns) relative to the following: race is relative to White students, socioeconomic quartile is relative to students from the first quartile, female is relative to male students, degree expectation is relative to achieving a PhD, Advanced/Professional degree, urban and suburban communities are relative to rural communities, and high school public or Catholic is relative to private schools. Not shown are coefficient estimates for degree expectation, school control, school locale, or extracurricular activities. *** p<0.01, ** p<0.05, * p<0.1
2A and 2B, but the inclusion of academic preparation variables emerged as significant, particularly SAT scores, GPA, and math course preparation. Consistent with Alon’s (2009) and Posselt et al.’s (2012) prior longitudinal analyses, these variables continued to exert immense influence in 2013, despite the inclusion of other explanatory variables.

To understand how powerful these academic preparation variables were over time in affecting the racialized enrollment gaps for hypothesis 3, in my second step, I produced predicted probabilities based off the regression analyses in Table 3 for a “competitive student.” I considered a competitive student as someone who was one standard deviation above the mean in SAT, GPA, and highest math and science course. To understand to what degree higher education admissions functioned as a meritocracy wherein individual skills and talent were most predictive of enrollment, studying a “qualified” student’s probability of enrollment into distinct institutional types, by selectivity, depicted this landscape. For these probabilities, I left all other variables as they were observed in the data. In this way, the probabilities are simulations of each student’s probability of enrollment, if only the academic preparation variables were altered, while controlling for all explanatory variables shown in Table 1. These results are in Figures 5A-5D. In Figure 5, I showed the probability of enrollment at an institutional type based on the full model, which included all explanatory variables in Table 1. I compared the probabilities of not enrolling in postsecondary education, enrolling at a two-year institution, a noncompetitive four-year institution, and the most competitive four-year institution.8

When looking across the likelihood of enrolling at particular institution types, this archetypical qualified student was most likely to attend a two-year institution or the most

---

8 When looking at changes across time, I focused on the overall system and observed how the racial exclusion mechanism operated in a meritocratic system. Analytically, to gain a system-wide narrative of racial exclusion, I looked at changes along four dimensions for a qualified student. I reviewed the increased likelihoods of 1) not enrolling, 2) enrolling at a two-year, or 3) enrolling at a noncompetitive, four-year institution, coupled with 4) a decreased likelihood of enrolling at the most competitive institutions.
competitive institution in 2004, regardless of racialized background. Students with these credentials were unlikely to not enroll in postsecondary education, as would be expected if individual skills and talent were more influential than structural context. Students’ chances for enrollment at two-year institutions ranged from 8 to 21.5% when controlling for all explanatory variables. Among the most competitive institutions, an academically qualified student had a 24 to 33% chance of enrolling.

However, in 2013, students of all racialized backgrounds are more likely to not enroll, or enroll at two-year, or noncompetitive four-year institutions – signifying an exclusion from the more competitive stratum of institutions for a qualified student. Yet, for qualified students of Black, Latinx, and Multiracial, Indigenous, and Other backgrounds, they were more likely to enroll at two-year institutions than they were at the most competitive institutions; White students saw about equal likelihood of enrolling at two-year and the most competitive institutions. For qualified Asian and Pacific Islander students, they were still more likely to attend the most competitive institutions than any other institutional type depicted in Figure 5. Thus, Figure 5 supports hypothesis 3A – that enrolling at more selective institutions would have stayed the same or increased for students with competitive profiles – for White and Asian and Pacific Islander students. But, it provides support against hypothesis 3A for students of other racialized backgrounds. In contrast, hypothesis 3B was not supported for students of all racialized backgrounds, as shown in Figures 5A and 5B. In other words, the probability of enrolling at less selective institutions did not decrease or stay the same for competitive students from minoritized backgrounds because they were more likely to attend less competitive institutions.

Noting these trends, the predicted probabilities lend full support to hypothesis 2A: White and Asian and Pacific Islander students are more likely to enroll at more selective institutions.
Figures 5A-D. Predicted probabilities for postsecondary education enrollment of selected outcomes in multinomial logistic regression. For these analyses, there were 8,860 observations in 2004 and 9,986 for 2013 and all variables in Table 1 were included as covariates. These models predicted a “qualified” student’s probability of enrolling at these four outcomes in 2004 and 2013. A qualified student was defined as having an SAT score, GPA, and highest math and science course one standard deviation above the respective grand means for these variables.
than students from Black, Latinx, and Multiracial, Indigenous, and Other backgrounds in 2013 compared to 2004. Similarly, _supporting_ hypothesis 2B, students from these latter minoritized backgrounds were significantly less likely to enroll at more selective institutions in 2013.

Finally, Figure 5 _supports_ hypothesis 3C, which touches on the distinctly racialized dimension of enrollment by selectivity because competitive candidates from minoritized backgrounds had lower chances of enrolling at competitive institutions in 2013 than in 2004. While all students were less likely to enroll at the most competitive institutions, competitive students from Black, Multiracial, Indigenous, and Other and Latinx backgrounds saw the greatest drop in likelihood of enrolling at these institutions. While Asian and Pacific Islander and White students had 3.2% and 7.1% lower chances of enrolling at these institutions in 2013, Black, Multiracial, Indigenous, and Other, and Latinx students saw a drop of 17.4%, 13.4% and 10.2% between 2004 and 2013.

**DISCUSSION**

When coupling this contraction in the likelihood of enrolling at the most selective institutions for Black, Multiracial, Indigenous, and Other, and Latinx students with the expanded likelihood of not enrolling, enrolling at two-year institutions, and enrolling at noncompetitive, four-year institutions, the _racial_ dimension of the exclusion mechanism becomes apparent. While students from all racialized backgrounds were more likely to not enroll at a postsecondary institution in 2013 relative to 2004, Black, Multiracial, and Latinx students had the highest likelihood of not enrolling _despite having competitive academic credentials_ for more selective institutions. Furthermore, competitive Black, Multiracial, and Latinx students had the lowest
chances of enrolling at the most competitive institutions in general, despite all students seeing a drop in their likelihood of enrollment.

These changes in likelihood gave insight into the racialized gaps in enrollment between 2004 and 2013. In a meritocratic system, students who are competitive should be more likely to enroll at more selective institutions relative to not enrolling, controlling for all relevant explanatory variables because individual skill and talent should exert the more influence than structural context. The increased likelihood of enrolling at less competitive institutions and leaving the postsecondary education system all together undermines claims of a structural context not being a powerful mediating force in enrollment.

In a similar vein, the decreased likelihood of competitive candidates enrolling in the most selective institutions, controlling for all relevant factors, raises three possibilities. First, admissions decisions are not purely meritocratic and determined by academic credentials, as some qualitative research suggested (Espeland & Sauder, 2007; Stevens, 2007; Karabel, 2005). Thus, subjective institutional decision-making continues to assert influence on admissions and enrollment in 2013. These subjective institutional-level interests can vary between institutions, but they increase the possibility that admissions processes are political processes in which students compete for social and political status. If this were the case, then merit would be a proxy through which institutions enable youth to compete for the ability to constitute the future elite class. Furthermore, this would highlight a dimension of the structural context of admissions that is in tension with students’ individual skills and talents predicting admission and enrollment.

Second, it is possible that the threshold for what is considered “qualified” for the most competitive institutions has increased in 2013. Students who are one standard deviation above the mean are roughly at the 88th percentile nationally in academics. If these students were no
longer qualified, then students who entered into the most competitive institutions in 2004 would no longer be considered qualified in 2013. The magnitudes of these drops in likelihood of enrollment were the largest for students from Black, Latinx, and Multiracial, Indigenous, and Other racialized backgrounds, indicating the racial dimension of exclusion and adaptation. Thus, these two explanations would indicate that structural context continued to exert influence over individual skills and talent, undermining claims of meritocracy.

Finally, if these two prior explanations were not the case, Table 3 suggested that socioeconomic class status could be a contributing factor, along with race, since students in the highest socioeconomic quartiles were ten times as likely to enroll at the most selective institutions over not enrolling, relative to someone in the lowest quartile in the full model. This is particularly a strong explanation. Aside for competitive Asian and Pacific Islander students who had nearly a 30% chance of enrolling at the most selective institutions in 2004 and 2013, Figure 5 showed that competitive students from other racialized backgrounds had a 10 to 18% chance of enrolling. Yet, even if this were the case, the social context in which students grow up (e.g., racialized and classed context) remains predictive of enrollment.

In any of these three explanations for why qualified students had lower chances of enrolling at the most competitive institutions in 2013 than in 2004, structural context continued to have an influence on enrollment by selectivity. Alon (2009) noted that high competition with low supply could lead to an increased reliance on objective measures of academic merit, but these findings suggest that reliance on academic merit persisted even in times of plentiful supply. In line with the mechanism-based theory for inequality, it is likely that higher-statused groups – along racialized and classed backgrounds – continued the arms race for more education between 2004 and 2014 by increasing the threshold for what necessary academic credentials were needed
to enter the most competitive institutions. Thus, as the institutions increasingly relied on academic credentials, like test scores—the effect of the exclusion mechanism—the expected baseline for academic credentials will become even more polarized by class and racialized demographics—the effect of the adaptation mechanism.

**IMPLICATIONS AND CONCLUSION**

The findings paint an important picture for future research. The analyses of predicted probabilities for competitive students revealed a system in which, despite decreasing enrollment across the system in 2013, competition remained high for qualified students among the most selective institutions. The theoretical framing suggested that competition should decrease during times of decreasing enrollment. Yet, the findings reveal that while academic credentials remained stagnant (Figure 3), competition remained highly coveted by the most selective institutions. In fact, across all academic credentials, Black students consistently increased their qualification between 2004 and 2013 (Figure 3), yet their likelihood of enrolling at the most selective institutions decreased. This racialized finding suggests attention to an explicitly anti-Black racist impact in admissions and enrollment.

In disaggregating the outcome variable for postsecondary trajectory by Barron’s selectivity, it became evident that future analyses must disaggregate a student’s postsecondary trajectory. Specifically, outcomes after high school graduation cannot be fully understood through a tripartite system of “did not enroll”, “enrolled at a two-year or community college”, or “enrolled at a four-year institution.” As the mechanism of racial exclusion emerged to highlight the importance of placement within the system, future analyses should actively continue this exploration.
Academic credentials continued to assert an influence on admissions and enrollment. Yet, when controlling for major explanatory factors, the fact that a student one standard deviation above national academic standards remained more likely to attend two-year institutions than more competitive institutions if they are from Black, Latinx, or Multiracial, Indigenous, or Other backgrounds upholds White supremacy. While Asian and Pacific Islander students do not fall into this same trend, their exclusion does not suggest that White supremacist effects are not taking place. In fact, their exclusion from this trend calls for disaggregation by class and ethnic background to uncover to what degree Asian and Pacific Islander ethnic groups also experience what students from Black, Latinx, or Multiracial, Indigenous, or Other backgrounds do.

In addition to disaggregating the postsecondary outcomes by selectivity, systematic analyses of race with class are needed. While it was beyond the immediate scope of this paper, class is a salient factor in predicting enrollment at more selective institutions, even when controlling for academic credentials and racialized backgrounds. Following Alon’s (2009) findings for increasing class gaps between 1970s and 1990s, this suggests that class has a critical relationship with selectivity. Yet, given the racialized gaps found in this paper, any class analysis that is not attenuated to racial exclusion and racial adaptation, in addition to capitalistic exclusion and adaptation, will not depict a comprehensive picture.

Ultimately, the institutional stratification presented between 1970s to early 200s remained intact. While stratification along academic credentials did not increase substantially, the enrollment gaps by selectivity are at least as severe as previous decades. In identifying the mechanism of racial exclusion, it became clear that competition to the most selective institutions continued to have a racialized outcome. In light of no substantive changes occurring nationwide in the academic criteria used for admissions, structural context still mattered in admission and
enrollment trends because students from Black, Latinx, and Multiracial, Indigenous, and Other racialized backgrounds were even less likely to enroll at the most selective institutions. While there is no a priori threshold or level for likelihood of enrollment to the most selective institution, the racialized gaps between students raises equity concerns that must be taken up.
Appendix Table A1. Predicted Probabilities for postsecondary education enrollment, by selectivity and race

<table>
<thead>
<tr>
<th>Students’ Racial Designation</th>
<th>2004</th>
<th>2013</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>No postsecondary education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1.2%</td>
<td>3.9%</td>
<td>2.70%</td>
</tr>
<tr>
<td>Black</td>
<td>1.6%</td>
<td>0.3%</td>
<td>-1.30%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>3.6%</td>
<td>10.7%</td>
<td>7.10%</td>
</tr>
<tr>
<td>White</td>
<td>1.7%</td>
<td>9.9%</td>
<td>8.20%</td>
</tr>
<tr>
<td>Latinx</td>
<td>3.9%</td>
<td>11.7%</td>
<td>7.80%</td>
</tr>
<tr>
<td>Two-year or community college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>12.3%</td>
<td>18.9%</td>
<td>6.60%</td>
</tr>
<tr>
<td>Black</td>
<td>8.0%</td>
<td>17.5%</td>
<td>9.50%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>18.2%</td>
<td>21.0%</td>
<td>2.80%</td>
</tr>
<tr>
<td>White</td>
<td>11.8%</td>
<td>17.5%</td>
<td>5.70%</td>
</tr>
<tr>
<td>Latinx</td>
<td>21.5%</td>
<td>26.7%</td>
<td>5.20%</td>
</tr>
<tr>
<td>Noncompetitive, four year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1.4%</td>
<td>3.2%</td>
<td>1.80%</td>
</tr>
<tr>
<td>Black</td>
<td>6.2%</td>
<td>7.1%</td>
<td>0.90%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>4.4%</td>
<td>6.9%</td>
<td>2.50%</td>
</tr>
<tr>
<td>White</td>
<td>3.1%</td>
<td>3.9%</td>
<td>0.80%</td>
</tr>
<tr>
<td>Latinx</td>
<td>3.9%</td>
<td>5.7%</td>
<td>1.80%</td>
</tr>
<tr>
<td>Most competitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>33.0%</td>
<td>29.8%</td>
<td>-3.20%</td>
</tr>
<tr>
<td>Black</td>
<td>28.1%</td>
<td>10.7%</td>
<td>-17.40%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>29.3%</td>
<td>15.9%</td>
<td>-13.40%</td>
</tr>
<tr>
<td>White</td>
<td>24.9%</td>
<td>17.8%</td>
<td>-7.10%</td>
</tr>
<tr>
<td>Latinx</td>
<td>25.6%</td>
<td>15.4%</td>
<td>-10.20%</td>
</tr>
</tbody>
</table>

Note: Predicted probabilities for postsecondary education enrollment of selected outcomes in multinomial logistic regression. For these analyses, there were 8,860 observations in 2004 and 9,986 for 2013 and all variables in Table 1 were included as covariates. These models predicted a “qualified” student’s probability of enrolling at these four outcomes in 2004 and 2013. A qualified student was defined as having an SAT score, GPA, and highest math and science course one standard deviation above the respective grand means for these variables.
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