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# Race Differentials in College Selectivity, 1981–2000

Niki T. Dickerson and Jerry A. Jacobs

We examine differences in the selectivity of the colleges and universities from which black and white students graduate. We find a racial gap in college selectivity that is growing over time, and a decrease in racial segregation between colleges during the 1980s, which reversed directions during the 1990s. Institutional characteristics are examined to explain this gap.

Substantial race disparities in labor market outcomes persist among *college-educated* workers (Ashraf, 1994; Power & Rosenberg, 1993; U.S. Bureau of Labor Statistics, 2003). One explanation for this gap may be the difference in the status of the colleges from which white and black students graduate. School status has been linked with future wages: those with degrees from higher status colleges on average earn higher wages (Behrman et al., 1996, Kingston & Smart, 1990; Pascarella & Terenzini, 1991). An important consideration, then, is whether or not black and white college students are attaining degrees from the same colleges.

Post-secondary education in the United States has become increasingly segmented and is characterized by a highly differentiated set of institutions (Baker & Velez, 1996; Kerchoff, 1995). The higher education system has expanded substantially over the past thirty years, marked by increasing enrollments from previously excluded groups, such as women and minorities. However, there is evidence that these groups have been incorporated into the lower tiers of the hierarchy of schools in the higher education system (Karen, 2002). Hout et al. (1993) argue that the size of the educational sector can increase and still maintain inequality between dominant and subordinate groups by maintaining the elite in elite institutions and expanding the lower sector for lower-status groups.

When state systems of higher education were created during the 1940s, many were designed, either geographically or through admission and financing policies, to create a dual system of higher education, one in which blacks attended certain

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schools while whites attended others (Blak, 1991). This legal (de jure) separation of black and white students ended with *Brown v. Board of Education* during the 1950s, but in practice (de facto) segregation in many public universities continued into the early 1960s. Here, we hope to provide some evidence as to how much residue of this system remains.

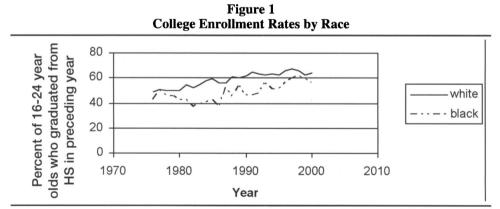
Only recently have researchers begun investigating factors that predict the college destination of college attendees. These studies have focused on the student's decision to attend college or not, not necessarily what *type* of school the student eventually enrolls in (Perna, 2000). Hearn (1991) was one of the first to analyze the factors that explain the selectivity of schools in which students enroll. He and subsequent researchers examined student characteristics, primarily socioeconomic status (SES) background and ability, as determinants of the selectivity of the school they attended. Most have found that, net of other factors, being black is associated with attending less-selective institutions (Karen, 2002).

In this paper we revisit the issue of segregation in higher education and examine institutional factors that explain the relationship between race and school selectivity. This paper will detail the extent to which black and white college attainers attend different schools (i.e., how segregated is the higher education system), examine the racial difference in the selectivity of the colleges they attend, and will examine whether institutional characteristics account for these differences.

## **Race and School Status**

Racial differences in access to higher education, although improved from 40 years ago, continue to persist. Figure 1 shows national enrollment rates by race over time.<sup>1</sup> The enrollment gap between whites and blacks over time has not changed significantly; college enrollments of both groups are increasing. The enrollment rate in 2000 for blacks was 56% compared to 64% for whites. These rates, however, mask larger race differences in graduation from college; 38% of blacks and 59% whites who begin college actually graduate with their bachelor's degrees.<sup>2</sup>

Given that half of today's college-age youth enroll in post-secondary institu-



Source: National Center for Educational Statistics, 2002

tions, and with the burgeoning number of post-secondary institutions and options, inequality among college attendees, rather than simply who attends college, becomes a critical area of inquiry (Davies & Guppy, 1997). Blacks and whites are not equally represented at selective institutions (Bowen & Bok, 1998). They made up 7.8% of matriculants at the most selective institutions, compared to 9% of students enrolled in four-year institutions in 2000. Karen (1991) found that the percentage of blacks at Ivy League and other prestigious universities grew substantially during the 1960s and 1970s and was largely attributable to political mobilization and pressure from this and other marginalized groups (primarily women). His data also reveal that this percentage stagnated and even began to slip during the 1980s, most likely due to challenges to affirmative action that began during that period.

Examining the educational and SES background of a 1986 cohort of youth, Hearn (1991) found that blacks and women were more likely than whites to attend lower-selectivity institutions, even after controlling for their SES and academic achievements. Davies and Guppy (1997) replicated Hearn's work for a later cohort and found that blacks were less likely to attend selective schools when controlling for SES and cultural resources, but that the race difference disappeared when academic performance was considered. Their study used different and fewer measures of academic performance than Hearn's, including tracking. They also found, however, that students who came from higher SES households, presumably armed with more cultural resources, were more likely to attend selective schools, even after controlling for academic performance. Given stark racial differences in SES, race effects may be confounded with these effects.

Because of the small representation of minorities at selective universities, affirmative action is important for enabling minority groups to gain access to selective schools. Civil rights legislation, affirmative action, and other policies and initiatives that opened access to higher education for blacks in the 1970s swiftly narrowed the gap between black and white college enrollments. Diminution of these measures in the 1990s hampered the ability of blacks to obtain degrees from elite schools. The disparity between whites and African Americans in attending elite colleges may be growing as universities retreat from affirmative action. Court decisions striking down or weakening race-sensitive admission policies are significantly affecting admissions and even the application rates of minorities. In Texas, the first state to adopt an anti-affirmative action decree, researchers found that by 1998 black and Latino students were significantly less likely than white students to apply to selective public institutions and more likely to target nonselective schools in pursuit of their higher educational goals (Thomas, 2004). At the University of Michigan, the site of the most recent high-profile affirmative action decision, admissions of black students dropped from 499 in 2001 (or 9 percent of the entering class of freshmen) to 380 (5.8 percent of entering freshmen) by 2004.

Thus, the gap in selectivity is not narrowing, and with the contemporary political climate surrounding affirmative action, is not expected to do so in the near future. Given this differential access to selective institutions, what is missing in the literature is an understanding of exactly how different are the schools which black and white students attend—across all universities, not just the selective institutions examined in Bowen and Bok's study. By examining trends in the relationship between race and institutional selectivity over time, we can assess whether the retreat from affirmative action over the last two decades has increased differences in racial representation at different institutions. In this paper we assess the distribution of whites and blacks across all four-year institutions, not just elite schools, and how this gap has changed over time. Finally, we assess whether institutional attributes help explain this gap.

## **School Status and Labor Market Outcomes**

A college degree is a vital avenue to a good job, and increasingly not just any college degree suffices. As college enrollment rates increase, the status of the school from which potential applicants obtained their degree may function as a means for employers to differentiate among degree holders. Those who attend higher status schools earn more on average in their careers than others (Behrman et al., 1996; Kingston & Smart, 1990; Pascarella & Terenzini, 1991). This has been referred to as the college quality effect. There is even evidence that the college quality effect is becoming stronger (Daniel et al., 1997). Additionally, Fitzgerald (2000) found that the return to those holding degrees from selective schools varied by gender. It increased men's earnings 8.1% and women's by 17.4%. Dale and Krueger (2002) found that the greatest return from attending selective colleges was for students from disadvantaged backgrounds.

Dale and Krueger also found that unobserved characteristics of students who attended selective schools had an effect on earnings that confounded the effect of the status of the school. This effect may be due to status certification effects or differences in social skills or networks. Findings from Lin, Vaughn, and Ensel's (1981) study demonstrate that the effect of education on wages could be partially explained by students' association with people of higher social status during college, a key factor in how individuals gain access to better jobs. Similarly, there is evidence that students from middle class families attend liberal arts colleges to enhance their cultural capital and to prepare for leadership positions (Bourdieu & Passeron, 1977; Brint, 1998).

Thus, school status has an effect on an individual's later life chances through a myriad of mechanisms. Eide et al. (1998) found that students who graduated from selective undergraduate institutions were more likely to attend graduate school. They concluded that obtaining a graduate degree, which raises earnings, may be the mechanism through which attending a selective undergraduate institution affects subsequent earnings.

To complicate the matter further, race-specific wage decomposition analyses have shown that the return to education differs for blacks and whites (Ashraf, 1994; Cotton, 1990). For reasons that have not been fully clarified to date, blacks do not receive the same benefit from a college degree as do whites. Among college-educated women, whites are more likely to be employed in professional occupations than are blacks, and black women are more likely to be employed in clerical occupations than are whites (Power & Rosenberg, 1993). Thus, given the currency of education in the labor market, access to high status schools serves as an important factor in understanding disparities in the market.

## **Institutional Characteristics**

Previous research has shown that characteristics of the institutions that students attend affect their outcomes. Astin (1993) found that students in large research schools were more likely to major in engineering than physics. Gurin and Epps (1975) found that when black men attend liberal arts schools they are more likely to choose atypical majors. Additionally, Trent (1984) and Thomas (1985) found that blacks are more likely to get a technical degree if they graduate from a historically black college or university (HBCU). Thus, we argue that institutional characteristics may help explain why students end up at the schools they do. The features of schools that attract or meet the needs and/or interests of students vary widely from school to school. In this study, we propose to examine several of these institutional features that may account for some of the black/white gap in school status.

- Part-Time Status: Blacks are more likely than whites to be non-traditional or returning students with other responsibilities, such as jobs or children. Many simply cannot afford the costs of attending school full-time and thus seek programs that are amenable to part-time students. However, more selective schools are less likely to admit part-time students (Jacobs, 1996). Thus, blacks may be more likely than whites to be channeled to less selective schools which accommodate this need.
- 2) Field of Study: Students from working class families, presumably including many blacks, are more likely to gravitate toward majors that prepare them for specific vocational or technical careers where salaries are more reliable, such as engineering. Blacks, in particular, may utilize this strategy to mitigate potential discrimination, common in jobs relying more on subjective assessment in the hiring process rather than objective criteria. Engineering programs tend to be concentrated in selective colleges and universities. Different schools feature or specialize in different areas of study; thus all majors are not necessarily distributed equally across institutions. Racial differences in choosing majors may help to explain the racial gap in selectivity.
- 3) The Role of HBCUs: A sizable proportion of black college students attend HBCUs. In most cases, they are considerably more affordable than predominantly white colleges and universities—almost one-third to one-half the cost (Gray, 1993). The class sizes are one-third to one-half the size of many other schools and they have high retention and graduation rates. HBCUs have served as an important place of social support for black students, perhaps in a similar way that traditionally all-women's colleges have done for women. Feagin et al. (1996) found that most blacks have found the climate of predominantly white colleges to be unwelcoming. They report spending a great deal of their efforts finding strategies to cope with a chilly, even hostile, climate. Many black students, including those with top grades, often leave or avoid predominantly white schools because of experiences of stereotyping, hostility, and discrimination.

The average academic performance for blacks at HBCUs is higher than for those on white campuses and has been attributed to the more supportive academic and social environment at black colleges (Allen & Haniff, 1991). HBCUs also represent an important historical tradition to many blacks. Some are among the nation's highest ranked and well-regarded schools. The business school at Florida A & M University (FAMU) is renowned in the national business community and has a venerable reputation. More *Fortune* 100 firms recruit at FAMU than at Harvard because of the size and diversity of its graduate pool. U.S. News and World Report ranked Spelman College in Atlanta the number one school in the Southeast. Some of the nation's top black high school seniors have turned down admission to elite schools so as to be able to attend HBCUs. Seventy-three National Achievement Scholars (the highest black scorers on the Pre-SAT, a screening test taken before the SATs to identify the top high school seniors) went to FAMU compared to 49 going to Harvard (Gray, 1993).

In a review of the literature comparing educational outcomes for blacks at HBCUs and predominantly white schools, Baker and Velez (1996) conclude that even though access to predominantly white schools had increased for blacks, HBCUs still have an important mission in higher education attainment for blacks. This indicates that we need to investigate characteristics of schools that fulfill needs of students and consequently help explain why students choose those institutions.

## Aims of the Study

This paper offers a comprehensive analysis of the type of schools that blacks and whites graduate from and how they vary in selectivity, shedding light on the extent of and change in segregation in higher education over time. We approach this question from a different direction than the existing literature; rather than looking at characteristics of students that direct them to particular institutions, we look at the institutions themselves to assess what characteristics account for their racial composition. This study adds to our understanding of inequality in the higher education system by offering an analysis of equally important institution-level factors that explain the college destinations of black and white college attainers.

#### **Data and Methods**

To conduct the analyses, we used data on earned degrees compiled by the Department of Education in the Higher Education General Information Survey (HEGIS) that is made accessible to researchers online via the Computer-Aided Science Policy Analysis and Research (CASPAR) website. The data represent a comprehensive accounting of all degree recipients and are available annually.

We selected colleges from the 4,327 that were included in the CASPAR database for 2000, excluded 2,456 because they granted no bachelor degrees in that year and another 156 because they granted fewer than 20 bachelor degrees. Twoyear institutions were excluded since data on college selectivity is not readily available for a large number of them.

We merged a variety of data on college rankings with the CASPAR data. These characteristics are commonly used as status indicators of college selectivity (Hearn, 1991; Jacobs, 1996). Status indicators mark a school's ability to attract the most talented faculty and students, which then reflects on the caliber of the school as a whole. The variables employed to measure school status include: average SAT scores, percentage of faculty with Ph.D.s, student/faculty ratio, graduation rate, first-year retention rate, in-state tuition fees, and percentage enrolled part-time. This information was obtained from a 1991 database collected for *U.S. News and World Report* to rank colleges.

*Limitations:* These data also do not include individual characteristics of the degree recipients. Our goal is to provide an institution-level analysis. The data represent the population of degree recipients in the United States at four-year institutions and thus we are able to speak directly to the racial character of the system of higher education in the United States and factors that create inequality within it. Additionally, the data only include degree recipients and do not directly examine college enrollment or the college experience itself. We focus on degree attainment for several reasons: 1) limitations due to data availability, 2) because the racial disparity in attainment is greater than the disparity in enrollment, and 3) most importantly, because attainment is the chief goal in addressing racial inequality.

## Analytic Strategy

There are three sets of analyses. The first details the extent of racial segregation across U.S. colleges between whites and blacks to determine how unevenly they are distributed. The second examines differences in college selectivity characteristics among the schools from which white and black students graduate. The final analysis entails multivariate analyses to determine which factors explain racial differences in the status of the schools from which black and white students matriculate.

## Results

#### Racial Segregation across Schools

Table 1 details the extent of segregation between black and white college graduates through various measures. These measures describe the racial mix at institutions of higher education in the United States to allow us to determine if whites and blacks are attending the same schools. If they are not, the analyses are designed to reveal to what extent U.S. colleges are racially segregated.

The first line in Table 1 describes the proportion of college graduates who are black for each of the reported years. Since 1981 the representation of blacks among college graduates has risen, but, given that blacks represent approximately 14% of 25–29 year olds in the United States (U.S. Bureau of Labor Statistics, 2003), they are still underrepresented among college graduates. Next in Table 1 is the index of dissimilarity, which measures the extent of segregation between blacks and whites among U.S. colleges and universities (or how evenly distributed whites and blacks are among colleges relative to each other; see appendix for definitions). For the year 2000, the index of dissimilarity is 47 out of a possible 100, which means that roughly half of white or black students would have to change schools for the distribution of white and black students across them to be even. From 1981 to 1993, this number dropped four points (50.0% to 46.3%), but from 1993 to 2000, it rose slightly to 47.0%. In other words, racial segregation among colleges decreased during the 1980s, but changed direction and began to increase in the 1990s.

Also in Table 1 is a measure of crowding, or the concentration of a group into a limited number of schools. Relative crowding, or the difference in crowding between two groups, reveals the extent to which blacks are more likely to be clustered

	1981	1993	2000
Percent of Degree Recipients Black	6.6%	6.7%	9.0%
Index of Dissimilarity (D)Between Blacks and Whites Calculated Between Institutions	50.0	46.3	47.0
Contact (black/black)	38.0%	36.1%	34.3%
Contact (black/white)	4.3%	4.4%	6.4%
Relative Crowding (Black-White)	22.3	10.1	10.5
Number of Schools with 1-19 Black Bachelor's Degree Recipients	972	848	948
Percent of Blacks Obtaining Degrees at Schools with 50% or more Black Degree Recipients	33.8%	32.2%	27.7%
Percent of Blacks Obtaining Degrees at Schools with less than 5% Black Degree Recipients	3.1%	15.4%	12.6%
Percent of Blacks Obtaining Degrees at Schools with less than 1 percent Black Degree Recipients	.9%	.7%	.4%
Percent of Whites Obtaining Degrees from schools with no black graduates	3.8%	1.7%	1.4%
Percent of Whites Obtaining Degrees from Schools with 50% or more black graduates	.2%	.3%	.3%
Percent of Whites Obtaining Degrees at Schools with less than 5% Black Degree Recipients	72.1%	62.2%	51.3%
Percent of Whites Obtaining Degrees at Schools with less than 1% Black Degree Recipients	15.7%	11.6%	9.4%
Percent of Blacks Obtaining Degrees From HBCUs	32.2%	N/A	24.5%

 Table 1

 Measures of Racial School Segregation

N/A: not available

into fewer schools than are whites. A positive sign on the score means that blacks are more crowded into fewer schools than are whites (a negative sign would indicate the opposite). Black students are more concentrated in a limited set of schools than are whites. This likely reflects their concentration in HBCUs. The degree of over-concentration, or crowding, declines from a 22.3% difference in 1981 to a 10.1% difference in 1993. This concentration measure rose slightly between 1991 and 2000, from 10.1% to 10.5%.

Related to crowding is the number of schools that graduated fewer than 20 blacks. In 2000, more than half of the schools in the sample graduated 0 to 19 blacks. These two measures indicate that blacks were clustered into a smaller number of schools than were whites. Interestingly, both measures decreased from 1981 to 1993 before the direction reversed and began to increase slightly.

The next indicator shown in Table 1 is contact. Contact measures the probability of whites and blacks attending the same school, or the chances that a randomly

selected person in one's school is the same race as the subject. There is a 35% chance that a randomly selected person in a black student's graduating class is black and a 6% chance that a randomly selected person in a black student's graduating class is white. Thus, black students are far more likely to graduate with other black classmates than would be true if all graduates were distributed evenly across campuses. The low contact of blacks with whites is very likely due to their concentration at HBCUs. Whites are far more likely to attend school with other whites, reflecting a racial asymmetry in contact; the defining trait of segregation. However, this is changing; blacks are becoming increasingly less likely to graduate with other blacks and increasingly more likely to graduate with whites, although in 2000 the differences between the two were still large.

Table 1 also reveals that in 2000, 13% of blacks graduated from schools where 5% or fewer of the graduates were black, whereas a majority of whites (51%) graduated from schools where 5% or fewer of the graduates were black. These percentages have decreased for both groups since 1981, most likely by definition since minority representation has increased at U.S. colleges over the past 20 years. Almost 10% of white students graduated from schools in 2000 where only 1% or fewer of the graduates were black; this too is decreasing. In 2000, nearly one-third of black graduates came from schools that were predominantly black (primarily HBCUs). This overlaps with the quarter that graduated from HBCUs. The percentage of blacks attending predominantly black schools decreased throughout the three decades, but so did the percentage attending predominantly white schools. Black students may be shifting into predominantly white schools (i.e., less segregated schools). The percentage of whites attending predominantly white schools with very low percentages of blacks declined as well. This may be either because the number of schools that fit this designation is changing (i.e., the percentage of blacks is increasing at predominantly white schools) or because fewer white students are attending schools with very low percentages of blacks than in previous years. Only a tiny fraction of whites graduate from predominantly black schools (where 50% or more of graduates are black). Conversely, a slightly larger fraction of whites graduated from schools that awarded no degrees to blacks in 2000.

Thus, most white college graduates graduate from predominantly white schools where only a small fraction of the graduates are black. Conversely, a sizable proportion of blacks attend predominantly black schools. These findings offer strong evidence that blacks and whites do not attend the same universities. However we measure it, blacks and whites do not uniformly attend the same schools; there are substantial levels of segregation among black and white college graduates. These differences shrank between 1981 and 1993, and then reversed direction in 2000. In many cases the change from 1993 to 2000 is small. However, the direction of the change is so consistent that it is likely that these changes represent a real underlying shift in the racial distribution among U.S. schools.

## Race Differences in College Rankings

High status colleges and universities typically are distinguished from lower status schools by features associated with greater resources and selectivity. School characteristics such as these are shown by race in Table 2. The means are weighted

	1981		1993		2000	
	Blacks Mean	Whites Mean	Blacks Mean	Whites Mean	Blacks Mean	Whites Mean
Percent part time	22.1	18.5	21.4	19.5	22.4	19.0
First year recruitment rate	72.5	78.6	74.0	77.4	73.2	77.3
Graduation rate	42.12	51.0	44.9	49.7	42.9	49.6
In-state tuition fees	4106.4	4816.56	4252.0	4745.0	3923.5	4576.2
Average SAT	885.9	981.0	909.4	967.0	899.8	969.2
Student faculty ratio	15.81	16.1	16.0	16.3	16.2	16.4
Acceptance rate	69.1	71.1	69.1	72.0	69.4	72.2
Percent of faculty with Ph.D.s	70.4	78.7	71.2	76.5	71.2	76.7

Table 2					
<b>College Rankings f</b>	for	Blacks	and	Whites	

by race so that they represent the school from which the average degree recipient receives his or her degree.

Whites are more likely than blacks to graduate from schools with higher status. This pattern holds across a variety of status indicators. For each year, the graduation rate, acceptance rate, the mean SAT score, the first-year yield<sup>3</sup> are lower at schools from which blacks are more likely to matriculate. These characteristics tend to be high at higher status schools. There are fewer faculty with Ph.D.s at schools from which blacks are more likely to graduate. Tuition fees are lower, which is probably due to the fact that higher status schools are more likely to be private and charge more for tuition than public schools. Also, blacks are more likely to attend schools where the percentage of part-time students is higher, which is known to be associated with lower-status schools. Similar to the trend seen in school segregation, the racial disparities in school selectivity were largest in 1981, declined in 1993, and started to widen again in 2000.

In short, not only do blacks and whites in general not attend the same schools but the schools that blacks are more likely to graduate from are less selective than those from which whites graduate. These differences are not large, but they are consistent. It is also important to keep in mind that these are figures for graduates only. Students who do not graduate may be more likely to attend less selective schools, which means that these differences most likely are understated.

## Multivariate Analyses: Institutional Characteristics and College Selectivity

Having established that white and black students do not uniformly attend similar schools and that the selectivity of their schools are substantially different, we now seek to determine if the attributes of the schools account for racial differences in selectivity. Selectivity, the outcome variable, is measured by the average SAT score of the school from which the respondent graduated. The unit of analysis is the school. Table 3 shows nested regressions for the dependent variable, school selectivity. The goal of these analyses is to answer the question: Do institutional factors help explain the relationship between the percentage of black graduates at a school and the selectivity status of the school?

The bivariate relationship between school selectivity and percentage of black graduates shown in the first model of Table 3 is significant; the school's mean SAT score varies partially as a function of the proportion of black students who graduate from it. Models 2 and 3 add the predictors, percent part-time, percent engineering, and HBCU status to examine the change in the effect of the percent of black students on the dependent variable, which is the on the status of the school. This nested strategy allows us to determine if the effect of percent black on selectivity can be accounted for by the inclusion of institutional characteristics. The significance of percent black does not change when HBCU status or when percent engineering is added, although the magnitude of the coefficient for percent black does decrease substantially. Thus, these two factors partially explain the association between the percentage of black graduates and the school's selectivity. When percent part-time is entered, percent black is no longer significant and its coefficient is reduced by two-thirds. A similar pattern is revealed in the 1993 regression results.

The goal of this study was to examine the factors associated with high status schools to determine if they explained racial disparities. The results indicate that the correlation between the institutional characteristics and the percentage of black graduates at a school plays an intervening role in the relationship between race and school selectivity. Blacks' underrepresentation in engineering and other technical

2000	Model 1	Model 2	Model 3	
Percent black	-2.42**	-1.88**	58	
HBCU status		-55.19	-169.46**	
Percent engineering			3.49**	
Percent part-time			-2.99**	
Intercept	960.19	957.17	993.60	
R <sup>2</sup>	.10	.12	.29	
1990				
Percent black	-2.34**	-1.42**	-0.45	
HBCU status		-92.11*	-184.37**	
Percent engineering			3.48**	
Percent part-time			-2.96**	
Intercept	956.35	952.14	997.47	
R <sup>2</sup>	.11	.11	.28	
1981				
Percent black	-2.45**	-2.33**	-1.17*	
HBCU status			-117.59*	
Percent engineering		4.03**	3.45**	
Percent part-time			-2.99**	
Intercept	956.32	942.70	995.19	
$\mathbb{R}^2$	.12	.19	.30	

 
 Table 3

 OLS Regression of Effect of School Characteristics on School's Mean SAT in 1981, 1990, and 2000

\*p< .05, \*\*p< .10

Characteristics on SAT Cutoris 2000					
	SAT 1200+	SAT 1100	SAT 1000		
Percent black	.06	.002	01		
Percent engineering	.06**	.05**	.07**		
Percent part time	30**	13**	07*		
Intercept	-1.43	66	.14		
χ <sup>2</sup>	128.67	183.36	243.01		

Table 4Logistic Regression of Effect of SchoolCharacteristics on SAT Cutoffs 2000

\*p< .05, \*\*p< .10

and scientific fields that tend to characterize highly selective schools may explain the disparity in selectivity at the schools attended by black and white students.

The results indicate that a substantial portion of the racial gap in school quality is associated with the fact that African American students are more likely to enroll in colleges and universities with disproportionate numbers of part-time students. This likely reflects the fact that they do not have the financial wherewithal to enroll full time. In this sense, the racial disparities in type of college attended in part reflect racial differences in class resources.

The 1981 results stand out from the later years in that the coefficient for percent black stays significant in the final model, although it is reduced substantially by the consideration of the other covariates. In the 1993 and 2000 analyses, the effect of percent black was accounted for fully by the other covariates. This may reflect decreasing racial disparities in test scores and a shift to other structural factors underlying racial disparities in access to higher education.

Table 4 shows logistic regressions which use the covariates to predict whether a school's mean SAT falls above three thresholds: 1000, 1100, or 1200. HBCUs had to be removed from the analysis because there were not enough of them whose mean SAT score was above the threshold for the analysis. For all three of the thresholds percent black was not significantly related to mean SAT score. Thus, outside of HBCUs, the schools that blacks and whites attend do not vary considerably in mean SAT, when percent part-time and percent engineering are taken into consideration.

## Conclusion

The analyses in this study reveal that the system of higher education in the United States is segregated. Blacks and whites are not evenly distributed across U.S. colleges and universities. On average, the schools from which whites graduate are more likely to have the characteristics of a more selective school. This disparity is particularly important given that the characteristics of selective schools tend to be associated with greater resources, and given the previously documented association between higher wages and school selectivity (Behrman et al., 1996; Kingston & Smart, 1990; Pascarella & Terenzini, 1991). Institutional characteristics (percent of part-time students, percent of engineering students, and HBCU status) par-

tially explain the gap in average SAT scores of the schools from which blacks and whites matriculate. With the exception of 1981, these characteristics mediate the relationship between the school's racial composition and its average SAT score.

The analyses also revealed several trends over time. First, blacks' representation among college graduates has increased steadily since the 1980s. Secondly, however, crowding measures reveal that blacks are clustered into a smaller number of schools relative to whites and that this pattern of crowding is increasing: in 2000, half of all U.S. colleges matriculated fewer than 20 blacks. Finally, a trend emerged among the various measures of segregation and selectivity. Many of the disparities between whites and blacks in school selectivity and measures of segregation shrank between 1981 and 1993. However, between 1993 and 2000 the direction of this trend reversed on almost all of the measures as the gap between blacks and whites in higher education began to widen. In many cases, the change from 1993 to 2000 is small, but the direction is so often the same that these changes likely indicate a real underlying shift in racial distribution among U.S. schools. This is likely to have been caused by anti-affirmative action decisions of the 1990s. These decisions very likely have served to limit equal access to institutions of higher education and consequently perpetuate an uneven racial distribution among colleges.

The segregation of blacks and whites into different types of schools documented here has implications for policies concerning educational equity. The findings of this study revealed that institutional factors help explain this phenomenon. The identification of these factors as barriers is a key step in assuring access for all students regardless of their race to the full range of educational opportunities in the higher education system. Effective intervention should focus on reducing lack of resources as a significant barrier to educational opportunity, as in the case of many students' need for part-time work. Many HBCUs, which continue to play an important role in blacks' educational opportunities, are under-resourced. A more equitable distribution of resources across schools would provide more equitable educational environments, particularly on the factors measured here—percent of faculty with Ph.D.s and low teacher/student ratios. Also, in the interest of making a range of schools accessible and hospitable to both black and white students, the issue of climate documented at predominantly white institutions should be addressed. A focus on both access and retention is needed.

The importance for understanding these differences also lies in their implications for labor market inequality. As noted earlier, the currency of a college degree in the labor market is increasing. The influence of the status of the school from which a worker received his/her degree is a critical factor in the return in earnings resulting from a college education. Racial differences in the return to college education undoubtedly must be related to this disparity. Race-specific wage decomposition analyses have shown that the return to education differs for blacks and whites (Ashraf, 1994; Cotton, 1990; Farley and Allen, 1987). If significant differences do exist, the potential to better understand the role education plays in racial stratification of the occupational structure is substantial. The narrowing race gap in college enrollment rates is regarded as unequivocal progress toward equal opportunity. However, nagging questions of whether or not white and black graduates have access to the same opportunities persist, as well as what role segregation in higher education plays in the labor market.

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## Appendix

# Segregation Measures

If:

 $\begin{array}{l} b_i = number \ of \ blacks \ in \ school \ i \\ B = total \ number \ of \ blacks \ across \ all \ schools \\ w_i = number \ of \ whites \ in \ school \ i \\ W = total \ number \ of \ whites \ across \ all \ schools \\ n = total \ number \ of \ schools \\ t_i = total \ number \ of \ students \ in \ school \ i \end{array}$ 

Index of dissimilarity:

$$\frac{\sum \left|\frac{b_i}{B} - \frac{w_i}{W}\right|}{2}$$

Crowding:

$$\frac{\sum \left|\frac{w_i}{W} - \frac{1}{n}\right|}{2}$$

Contact:

$$\sum \left| \frac{b_i}{t_i} * \frac{w_i}{W} \right|$$

likelihood of contact with individuals of opposite race

$$\sum \left| \frac{w_i}{t_i} * \frac{w_i}{W} \right|$$

likelihood of contact with individuals of same race (i.e., other whites)

## Notes

- 1. National Center for Educational Statistics, Digest of Education Statistics 2001: Table 184.
- 2. Within six years of starting. National Center for Educational Statistics, Digest of Education Statistics 2001.
- 3. The first year recruitment rate or the number of students who are admitted that actually enroll at the school. Higher status schools, which are more desirable to students, are able to attract a higher percentage of those that they actually admit.

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