

Racial and Ethnic Preferences in Undergraduate Admissions at Two Ohio Public Universities

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Executive Summary

Miami University (MU) awarded a large degree of preference in undergraduate admissions to blacks over whites and Asians, and, to a lesser extent, to Hispanics and Asians over whites. Ohio State University (OSU) awarded a large degree of preference to Hispanics and blacks over whites, and, to a lesser extent, to Asians over whites. The evidence of these preferences is manifested in a number of ways.

Odds Ratios. The relative odds of admission of a black over a white applicant at MU and OSU were large, controlling for test scores (either the SAT or ACT), grades, gender, residency, and year of admission.

- At MU, black-to-white odds ratios favoring blacks were 8.0 to 1 using these factors and the SATs and 10.2 to 1 using these factors and the ACTs.
- At OSU, the black-to-white odds ratios favored blacks by 3.3 to 1 using the SAT and 7.9 to 1 using the ACT.

Preference was also awarded Hispanics at both schools, controlling for other factors.

- At MU, the odds ratios for Hispanics over whites (2.2 to 1 using either SATs or ACTs) showed a moderate preference given Hispanics over whites.
- OSU exhibited a strong admission preference of Hispanic over white applicants, of roughly 4.3 to 1 when using the SAT and 6.5 to 1 using the ACT.

Both schools granted a modest degree of preference to Asians.

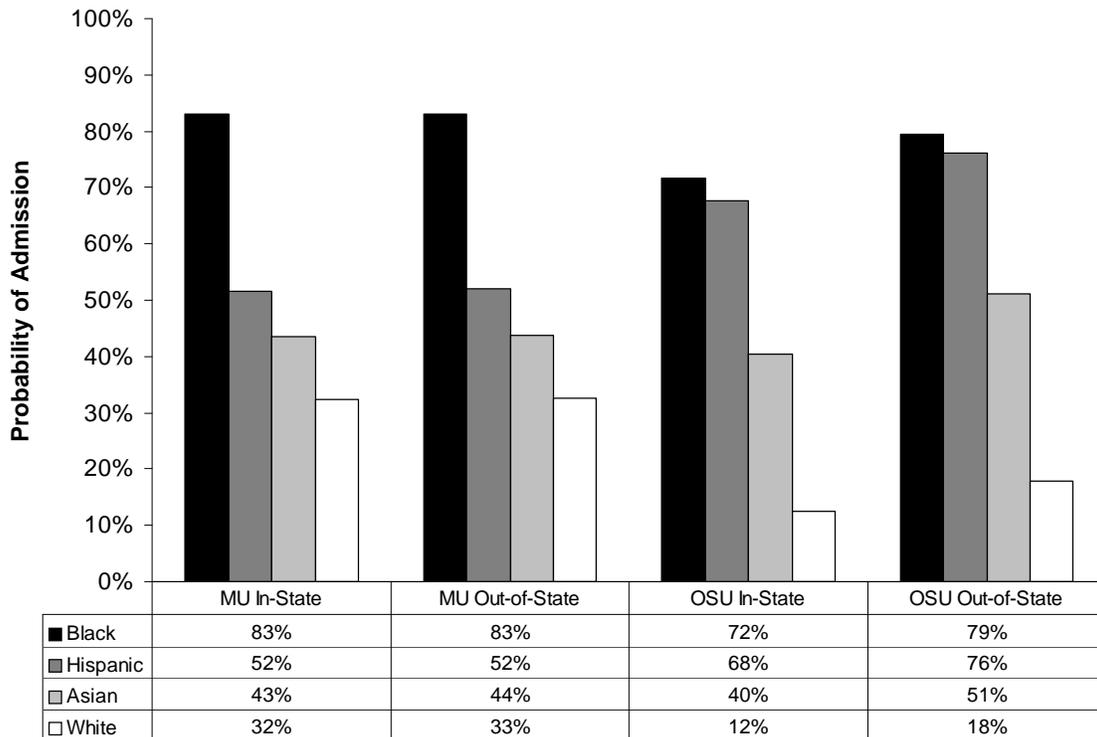
- MU awarded preference to Asians over whites, by 2.1 to 1 with the SATs and 1.6 to 1 with the ACTs.
- OSU awarded slight preference to Asians over whites, by 1.5 to 1 when using the SAT and 2.1 to 1 with the ACTs.

Probabilities of Admission. Odds ratios may be illustrated by presenting them as probabilities of admission given similar characteristics and qualifications.

- At MU, Hispanic, Asian, and white applicants with the same credentials as the average black admittee were all less likely to be admitted compared to the average black applicant with these same credentials. For example, while the percentages admitted with these credentials are all quite high, the percentage of in-state whites admitted is roughly 12 percentage points lower. Conversely, the percentage of rejected in-state white applicants (13%) is 13 times larger than the estimated percentage for in-state blacks (1%) with the same credentials as the average black admittee. For Asians, the percentage of rejected in-state applicants (9%) is about nine times larger; and for in-state rejected Hispanic applicants, it is about six times larger (6%). Additionally, in-state residency confers no particularly significant advantage at MU. In-state Hispanic, Asian, and white applicants were *less likely* to be admitted with the same academic credentials as the average black *out-of-state* applicant. Thus, 98% of out-of-state blacks would be admitted with these credentials, compared to 94% of in-state Hispanics, 91% of in-state Asians, and 87% of in-state whites.
- OSU admitted roughly 98% of in-state black and Hispanic applicants with the same credentials as the average black admittee. In-state Asian and white

applicants with this same set of credentials and background were less likely to be admitted—for example, 88% of in-state white applicants were admitted with the same credentials as the average black admittee (a 10-point difference). While this percentage admitted is still high, it can again be looked at another way: The percentage of in-state whites rejected by OSU (12%) is roughly six times larger than the percentage of rejected in-state blacks (2%). For Asians, the percentage of in-state applicants rejected by OSU (6%) is about three times larger.

Figure 1. Probability of Admission for In-State and Out-of-State Applicants Using Black Admittee Test Scores and Grades at the 25th Percentile



Assumes applicant is male with the same ACT test scores and grades as for black admittees at the 25th percentile in 2006.

Disparities were even starker when using the black admittee test scores and grades at the 25th percentile (see Figure 1 above).

- At MU, more than eight out of ten blacks with ACT scores and GPAs at the 25th percentile of black admittees were admitted, compared to roughly half of Hispanics, approximately four out of ten Asians, and fewer than one out of three whites with the same credentials. Thus, approximately 83% of *out-of-state* blacks with these test scores and grades were admitted compared to 52% of in-state Hispanics, 43% of in-state Asians, and 32% of in-state whites.
- At OSU, more than seven in ten black applicants with these credentials were admitted, compared to significantly fewer Hispanics, Asians, and whites with the same academic credentials. As a result, 79% of black *out-of state* applicants with

these scores and grades were admitted, compared to 68% of in-state Hispanics, 40% of in-state Asians, and only 12% of in-state whites.

SATs, ACTs, and High School Grades

- Overall, black admittees to MU and OSU had significantly lower SATs and ACTs compared to those of Hispanic, Asian, and white admittees. The white-black gap in median SAT scores varied from 110 to 160 points, and the ACT gap was consistently 4. The differences in high school grades for MU and high school class rank for OSU were smaller.
- To a lesser extent, there were also gaps in SATs and ACTs between white and Hispanic admittees at both schools, where whites who were admitted had higher test scores. As for high school grades, at MU whites also had a slightly higher high-school GPA, but at OSU Hispanic admittees had the higher class rank.
- In contrast, Asians were admitted with somewhat higher SAT scores than whites, but there was no overall difference in ACT scores. Asian admittees to MU also had slightly better high school GPAs, and Asian admittees to OSU had a slightly higher high school class rank.

Rejectees versus Admittees. We compared the test scores and high school grades of blacks, Hispanics, Asians, and whites rejected by these schools despite academic credentials higher than those of black admittees at the 25th percentile (and at the 50th percentile).

- In 2006, MU rejected 1 black, 2 Hispanics, 5 Asians, and 259 whites despite higher test scores and grades compared to the SAT scores and grades at the 25th percentile for black admittees. In addition, 3 blacks, 5 Hispanics, 8 Asians, and 344 whites were rejected with higher ACTs and GPAs. The following year, no blacks but 4 Hispanics, 4 Asians, and 253 whites were rejected with higher SAT scores and grades, as were 4 blacks, 8 Hispanics, 7 Asians, and 432 whites with higher ACT scores and grades.
- In 2005, OSU rejected no Hispanics but 1 black, 1 Asian, and 9 whites with higher SAT scores and class rank and no Hispanics but 5 blacks, 3 Asians, and 92 whites with higher ACT scores and class rank compared to black admittees at the 25th percentile. In 2006, OSU rejected 3 blacks, 1 Hispanic, 1 Asian, and 52 whites with higher SAT scores and class rank, along with 10 blacks, 2 Hispanics, 5 Asians, and 270 whites with higher ACT scores and class rank.

Graduation Rates. Groups that receive admission preference also generally exhibited lower graduation rates compared to whites. At MU, the six-year graduation rate for blacks was 15 points lower; at OSU, it was 17 points lower. The Hispanic graduation rate was 4 points lower at MU and 12 points lower at OSU. The Asian graduation rate was 6 points lower at MU, but, at OSU, the Asian graduation rate was 5 points higher than for their white counterparts.

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I would like to thank Linda Chavez and the staff at the Center for Equal Opportunity for giving me the chance to work on another major study of racial and ethnic preferences in university admissions. I especially want to thank Roger Clegg, who provided useful suggestions on the manuscripts, and Rudy Gersten, who handled the numerous administrative aspects in preparing the data and releasing the report. I would also like to thank Hal R. Arkes and George Dent for their help in obtaining the admissions data from the two universities analyzed in this study and for their comments on the manuscript.

Dedication

To the memory of Robert Lerner (1953-2010).

Introduction

For over thirty years, racial and ethnic preferences have played a key role in how admissions officers at many of the nation’s public and private colleges and universities have chosen their classes. A system of racial and ethnic preferences in admissions operates by establishing different standards of admission for individuals based upon their racial or ethnic background, with some students held to a higher standard and others admitted at a lower standard. In the first half of the twentieth century, some colleges and universities denied admission to Jews, blacks, women, and members of other groups even when their grades, test scores, and other measures of academic achievement surpassed those of white males who were offered an opportunity to enroll. The passage of new civil rights legislation in the 1960s made this kind of blatant discrimination illegal.

Since then, however, many colleges and universities have created “affirmative action” or “diversity” programs meant to boost the enrollment of students whose backgrounds previously had excluded them from pursuing a higher education—especially blacks and, to a lesser extent, Hispanics—by granting them preferences during the admissions process. These policies, when their existence was made public, immediately became controversial, and they remain so today. Defenders of racial and ethnic preferences claim that these policies are not discriminatory and help administrators choose between equally or almost equally qualified students, giving a slight edge to applicants who likely have faced discrimination or have come from disadvantaged backgrounds. Critics of preferences say that these policies are no better than the discriminatory ones they replaced and that, in any event, the advantages they confer upon certain applicants are much greater than supporters are willing to admit.

In the last 15 years, public colleges and universities have seen their ability to use racial and ethnic preferences increasingly restricted. The 1996 enactment of California’s Proposition 209 (also known as the California Civil Rights Initiative) forbids discrimination against or granting special treatment to any applicant on the bases of race, ethnicity, or sex in the public programs of the country’s largest state. A large majority of voters approved similar ballot initiatives in the states of Washington (1998), Michigan (2006), Nebraska (2008), and Arizona (2010). Other states such as Florida and Texas have or had policies that end explicit preferences and guarantee admission to the state university system to the top graduates of their respective state’s high schools regardless of race or ethnicity.

The question of the legality of racial and ethnic preferences in higher education came to a head in 2003, when the U.S. Supreme Court ruled in two major cases on the legality of racial preferences in higher education admission. In the first case, *Gratz v. Bollinger*, the Court found that a point-system of preferences—used by the University of Michigan in its undergraduate admissions—was unconstitutional. In the second case, *Grutter v. Bollinger*, the Court upheld a system of preferences used by the University of Michigan Law School that it found to be less mechanical.

The *Gratz* and *Grutter* decisions make it appropriate to monitor universities' use of racial and ethnic preferences for at least three reasons. First, as the split holdings demonstrate, if race is weighed too heavily or too mechanically, the law is violated. Second, since racial preferences are only allowed but not required under current law, the question remains whether universities *should* use them, even when they are allowed to. This policy question cannot be answered if the decision-makers—particularly those outside the university admissions office, including, in the case of public universities, the general public—do not have all the facts. Third, at the conclusion of her majority opinion in *Grutter*, Justice Sandra Day O'Connor wrote, "We expect that 25 years from now, the use of racial preferences will no longer be necessary." Accordingly, one would expect to see the use of preferences and the weight afforded them to decline over time (more than seven years of the grace period Justice O'Connor allowed have now lapsed).

This study builds on CEO's previous work on racial and ethnic preferences, which uncovered and systematically documented the disparities in admission among America's public colleges and universities.¹ Earlier CEO studies focused on undergraduate admissions at the public institutions of higher education in Colorado, Maryland, Michigan, Minnesota, North Carolina, and Virginia, the University of Washington and Washington State University, the U.S. Military Academy and U.S. Naval Academy, as well as the branches of the University of California at Berkeley, Irvine, and San Diego. These reports have shown that blacks and Hispanics receive large amounts of preference in undergraduate admissions. CEO studies on preferences in public undergraduate institutions of higher education have also obtained some aggregate data on graduation rates for racial and ethnic groups. These have shown that blacks and Hispanics are less likely to graduate from institutions giving them admission preferences than are their white and Asian counterparts.

We now have data on two of the more selective public universities in Ohio. Data provided by Miami University (MU) and Ohio State University (OSU) were comprised of undergraduate applicant records in database form, including the applicant's admission status, matriculant status, combined SAT scores, composite ACT scores, gender, residency status, and high school grade-point average and/or high school class rank.²

The report is in two parts. The first part compares the average academic qualifications of those admitted to MU and OSU over two years, between whites and blacks, whites and Hispanics, and whites and Asians. It also examines the relative odds of admission, controlling for other factors at these two schools, followed by a discussion of the probabilities of admission given different combinations of test scores and grades. In the second part of the report, we examine first MU and then OSU in greater detail. For MU, we look at the racial and ethnic composition of the applicants, admittees, and enrollees,

¹ See the studies on CEO's website, <http://www.ceousa.org/content/blogcategory/78/100/>. CEO's studies have also analyzed medical school and law school admissions, and have come to similar conclusions there.

² In this report, we dropped those cases for which race or ethnicity is listed as "Other," missing, or unknown. American Indians and Pacific Islanders were also omitted. Finally, cases with missing admission data were dropped from the statistical analyses.

followed by admission rates by racial/ethnic group, and then the distribution of SAT scores, ACT scores, and grades by race/ethnicity among admittees. We then look at the same factors for OSU.

Racial and Ethnic Differences in Admissions

Admission Rates

Table 1. Overall Admission Rates by Racial and Ethnic Group

	Year	Black	Hispanic	Asian	White
Miami University	2006	75.9%	87.6%	91.6%	88.0%
	2007	70.9%	83.6%	91.5%	87.2%
Ohio State	2005	60.6%	75.6%	77.1%	73.3%
	2006	51.3%	68.1%	77.6%	67.7%

Table 1 displays the overall admission rates for black, Hispanic, Asian, and white applicants. For both institutions, admission rates of black applicants are the lowest of all groups, while admission rates of Asian applicants are the highest.

The Hispanic admission rate is roughly the same as the white admission rate at MU for 2006 (87.6% and 88.0%, respectively) but is roughly 4 points lower in 2007 (83.6% versus 87.2%). At OSU, the Hispanic admission rate in 2005 and 2006 is slightly higher than that of white applicants.

Overall Group Comparisons of Admittees' Test Scores and Grades

We examined three pairs of differences in qualifications of those admitted: white-black, white-Hispanic, and white-Asian. Treating each racial-ethnic pair of comparisons separately makes it easier to see whether substantial differences in racial and ethnic differences exist, for which groups they are the greatest, and for which they are the smallest.

In this section on overall group comparisons of admittees' test scores and grades, we compare group medians rather than group means for test scores and grades. Using group means places greater weight on extreme values than is warranted. A few unusually high or low scores can have a substantial effect on the value of the mean. Standard deviations, which are based on squared deviations from the mean, are even less useful for describing the spread of cases for asymmetrical, badly skewed distributions. The median, however, and related statistics, are far less affected by the values of extreme cases. The median, or

the score at the 50th percentile, represents the middle of the distribution. Fifty percent of all applicants have higher scores, and 50 percent have lower.³

White-Black Differences

The first table below compares the median combined math plus verbal SAT scores,⁴ ACT scores,⁵ high school grade-point averages (GPAs), and high school class rank between whites and blacks admitted to MU and OSU, respectively.

Table 2. White-Black Admittee Differences in Median Test Scores and Grades

		Median Math Plus Verbal SAT Scores		
		Whites	Blacks	Difference
MU	2006	1220	1060	160
	2007	1220	1090	130
OSU	2005	1210	1100	110
	2006	1220	1110	110
		Median Composite ACT Scores		
		Whites	Blacks	Difference
MU	2006	27	23	4
	2007	27	23	4
OSU	2005	26	22	4
	2006	27	23	4
		Median High School GPA		
		Whites	Blacks	Difference
MU	2006	3.73	3.45	0.28
	2007	3.74	3.40	0.34
		Median High School Class Rank (Percentiles)		
		Whites	Blacks	Difference
OSU	2005	87.0	85.6	1.4
	2006	88.3	88.2	0.1

SATs. White-black admittee differences in median combined SAT scores are more than 100 points at both schools for both years. At MU, there is a 160-point difference in median SAT scores in 2006; in 2007, the gap was 130 points. At OSU, the white-black difference among admittees was 110 points in 2005 and 2006.

³ In subsequent analyses of the individual schools, we also report scores at the 25th and 75th percentiles, again to deal with the problem of extreme cases.

⁴ Combined SAT scores can reach a maximum of 1600 points (an 800 score on both the mathematics and verbal sections). The College Board modified the SAT in 2005 to include a separate writing (essay) section.

⁵ The ACT is a test of academic achievement, covering English, mathematics, reading, and science. ACT scores have a maximum of 36, with the composite ACT being the average of all four subject scores. One point on the ACT is worth roughly 30 to 60 points on the SAT, depending on the actual scores (ACT, Inc. 2010, “ACT-SAT Concordance Reference Sheet,” accessed October 25, 2010, <http://www.act.org/aap/concordance/>). See also <http://professionals.collegeboard.com/profdownload/act-sat-concordance-tables.pdf>.

ACTs. At both MU and OSU, the white-black admittee difference in median ACT scores was 4 points. (Converting to an SAT scale results in a difference of roughly 190 points.)

High School Grades. MU uses high school GPAs while OSU relies on class rank when assessing applicants. At MU, the white-black GPA difference was roughly a quarter-point in 2006 and a third of a point in 2007. At OSU, there was little difference in class rank between whites and blacks. In 2005, the average class rank for white admittees was the 87th percentile, compared to the 85.6th percentile for black admittees. In 2006, the median class ranks of white and black admittees were virtually identical, differing by one-tenth of a point (88.3 for whites, 88.2 for blacks).

White-Hispanic Differences

Table 3. White-Hispanic Admittee Differences in Median Test Scores and Grades

		Median Math Plus Verbal SAT Scores		
		Whites	Hispanics	Difference
MU	2006	1220	1185	35
	2007	1220	1190	30
OSU	2005	1210	1170	40
	2006	1220	1170	50
		Median Composite ACT Scores		
		Whites	Hispanics	Difference
MU	2006	27	26	1
	2007	27	26	1
OSU	2005	26	25	1
	2006	27	25	2
		Median High School GPA		
		Whites	Hispanics	Difference
MU	2006	3.73	3.61	0.12
	2007	3.74	3.63	0.11
		Median High School Class Ranking		
		Whites	Hispanics	Difference
OSU	2005	87.0	88.2	-1.2
	2006	88.3	88.6	-0.3

SATs. The SAT scores of white admittees are higher than those of Hispanic admittees, but the gaps are smaller than the white-black difference. At MU, the white-Hispanic gap was 35 points in 2006 and 30 points in 2007. At OSU, the average SAT score of white admittees was 40 points higher in 2005; in 2006, it was 50 points higher.

ACTs. The median ACT scores of white admittees are higher than those of Hispanics, at both schools, for both years, but the differences are smaller than the white-black difference in ACT scores. The white-Hispanic gap is 1 point at MU in 2006 and 2007, and at OSU in 2005; it is 2 points at OSU in 2006.

High School Grades. At MU, the average GPA of white admittees was slightly higher than the average GPA for Hispanic admittees, by roughly one-tenth of a point. At OSU, Hispanic admittees had an average class rank that was slightly higher than that for whites in both years. In 2005, Hispanic admittees had a class rank that was 1.2 points higher than the class rank of white admittees. In the following year, the gap was three-tenths of a point.

White-Asian Differences

Table 4. White-Asian Admittee Differences in Median Test Scores and Grades

		Median Math Plus Verbal SAT Scores		
		Whites	Asians	Difference
MU	2006	1220	1250	-30
	2007	1220	1250	-30
OSU	2005	1210	1280	-70
	2006	1220	1280	-60
		Median Composite ACT Scores		
		Whites	Asians	Difference
MU	2006	27	28	-1
	2007	27	27	0
OSU	2005	26	27	-1
	2006	27	27	0
		Median High School GPA		
		Whites	Asians	Difference
MU	2006	3.73	3.79	-0.06
	2007	3.74	3.76	-0.02
		Median High School Class Rank		
		Whites	Asians	Difference
OSU	2005	87.0	89.2	-2.2
	2006	88.3	92.2	-3.9

SATs. The white-Asian difference in SAT scores among admittees favored Asians at both schools and for both years investigated. At MU, Asian admittees had an average SAT that was 30 points higher than the average SAT of white admittees. At OSU, the Asian SAT scores were 70 points higher in 2005 and 60 points higher in 2006.

ACTs. The average ACT score for Asians admitted to MU in 2006 was one point higher than the average for whites admitted, but there was no difference in 2007. At OSU, the average Asian score was a point higher in 2005, but there was no difference in 2006.

High School Grades. At MU, the GPA of whites and Asians is roughly the same. In 2006, the difference at MU was six-one-hundredths of a point; in 2007, the difference was two one-hundredths of a point. At OSU, Asian admittees were ranked slightly higher in their high school class, by 2.2 percentile points in 2005 and by 3.9 percentile points in 2006.

Logistic Regression Analysis and Odds Ratios

Although the data presented thus far provide evidence of racial preferences in admissions to the undergraduate programs of MU and OSU, it is possible to make the case even stronger and considerably more precise. The most powerful means of assessing the degree of racial and ethnic preference in admissions is to develop statistical models that predict the probability of admission at a school for members of the different ethnic and racial groups, holding constant their qualifications. Computing a logistic regression equation that predicts admission decisions by race and ethnicity does this by including test scores, high school grades (or, in the OSU case, class rank), and various background characteristics as statistical control variables.

Logistic regression analysis with multiple control variables was used as the preferred statistical technique because of the nature of the data provided. One way of conventionally expressing a relationship between the independent and dependent variable is by using correlation coefficients. A negative correlation coefficient of -1.0 signifies a perfect negative relationship between the independent (predictor) variable and the dependent (or outcome) variable, whereby an increase in the value of the independent variable yields a decrease in the value of the dependent variable. A positive correlation coefficient of 1.0 signifies a perfect positive relationship between the two variables; as the independent variable increases, so does the dependent variable. Strictly speaking, however, one cannot use correlations to analyze admissions data because correlations and standard multiple regression analysis requires a dependent variable that is non-binary in form. In the case of an applicant's admission status, the dependent variable (individual admission status) is a binary dependent variable—reject versus admit. To avoid this binary-variable problem, we rely on logistic regression equations and their corresponding odds ratios, controlling for multiple variables.

The odds ratio is somewhat like a correlation coefficient, except instead of varying from 1.0 to -1.0 , it varies between zero and infinity. An odds ratio of 1.0 to 1 means that the odds of admissions for the two groups are equal. It is equivalent to a correlation of zero. An odds ratio greater than 1.0 to 1 means that the odds of members of Group A being admitted are greater than those for members of Group B, in precisely the amount calculated. An odds ratio of less than 1.0 to 1 means the members of Group A are less likely to be admitted than those in Group B. The former is similar to a positive correlation, the latter similar to a negative correlation.

The statistical technique of logistic regression with multiple controls allows us to present admissions data in terms of the relative odds of those in Group A being admitted compared to Group B while simultaneously controlling for a host of other possibly confounding variables. The value of the odds ratio is that it provides a relatively direct

summary measure of the degree of racial or ethnic preference given in the admissions process for a particular school.

Logistic regression equations predicting the likelihood of admissions were computed for MU's 2006 and 2007 applicants and for OSU's 2005 and 2006 applicants. We statistically controlled for SAT or ACT scores, high school grades, sex, and residency. We were able to derive the odds of admission from these equations for each minority group relative to that of whites, while simultaneously controlling for the effects of these other variables.⁶

Logistic regression analysis also allows us to test for statistical significance. Statistical calculations always include what is called a *p*-value. When results are deemed to be statistically significant, this means that the calculated *p*-value is less than some pre-determined cutoff level of significance. The level of significance conventionally is reported in the form of " $p \leq .05$." This value means that, with these data, there is a probability equal to or less than 5 percent that the difference found between one group and another (e.g., blacks versus whites, Hispanics versus whites, or Asians versus whites, since minority groups are being compared to whites) is due to chance. It is a convention in statistical studies to use the 0.05 value. In more stringent analyses, 0.01 (one in 100) or occasionally 0.001 (one in 1,000) can be used as the cutoff. Any *p* value greater than 0.05 (or the more stringent 0.01 or 0.001) is rejected, and the results are said to be nonsignificant. A difference that is statistically significant has very little chance of being the result of chance—that is, a statistical fluke.

In the next section, we discuss odds ratios derived from comparing all applicants, not just admittees, by race—blacks to whites, Hispanics to whites, and Asians to whites. Statistical significance is also noted. The size of the odds ratio reflects the strength of the association between race or ethnicity and admission status. An odds ratio equal to or greater than 3.0 to 1 is commonly thought to reflect a strong relationship; an odds ratio of about 2.0 to 1 reflects a moderate association; while a relative odds ratio of 1.5 or less to 1 indicates a weak relationship. Of course, an odds ratio of 1.0 to 1 indicates no relationship.⁷

* * *

MU and OSU state on their websites that applicants must submit either SAT or ACT scores. In keeping with these undergraduate admission requirements, two separate statistical analyses were undertaken for each school. The first estimated the relative odds of admission using the SATs, but also controlling for high school grades, year of admission, residency, and gender. The second used the ACTs and the additional controls.

⁶ For a discussion of logistic regression and a more complete discussion of odds ratios, see Alan Agresti, *Introduction to Categorical Data Analysis* (New York: John Wiley and Sons, 1996).

⁷ See David E. Lilienfeld and Paul D. Stolley, *Foundations of Epidemiology*, 3rd edition (New York: Oxford University Press, 1994): 200-202.

Table 5. Relative Odds of Various Groups Admitted over White Applicants, Controlling for Test Scores, Grades, Gender, Residency, and Year of Admission

	MU	
	SATs	ACTs
Black over White	8.0****	10.2****
Hispanic over White	2.2***	2.2***
Asian over White	2.1***	1.6*
	OSU	
	SATs	ACTs
Black over White	3.3****	7.9****
Hispanic over White	4.3****	6.5****
Asian over White	1.5*	2.1****

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$, ^{ns} Not statistically significant

MU. Black-to-white odds ratios are significantly higher than those for other groups at MU—8.0 to 1 with the SATs and 10.2 to 1 with the ACTs (and are statistically significant).

The odds ratios for Hispanics over whites, 2.2 to 1 for the SATs and 2.2 for the ACTs, show a moderate preference given Hispanics over whites, controlling for other factors. These odds ratios are also statistically significant.

Lastly, MU gives preference to Asians over whites. Among those taking the SAT, the odds ratio of Asians over whites is roughly 2.1 to 1; when using the ACT, it is roughly 1.6 to 1. These odds ratios are also statistically significant.

OSU. The black-white odds ratios at OSU are high but somewhat smaller than those at MU. The black-to-white odds ratio show black applicants favored over whites by an odds ratio of 3.3 to 1 when using the SAT and 7.9 to 1 when using the ACT.

The odds ratios also reveal a strong admission preference of Hispanic over white applicants (roughly 4.3 to 1 using the SAT and 6.5 using the ACT) and a more modest one for Asians over whites (1.5 with the SAT and 2.1 with the ACT).

All sets of odds ratios are statistically significant for OSU.

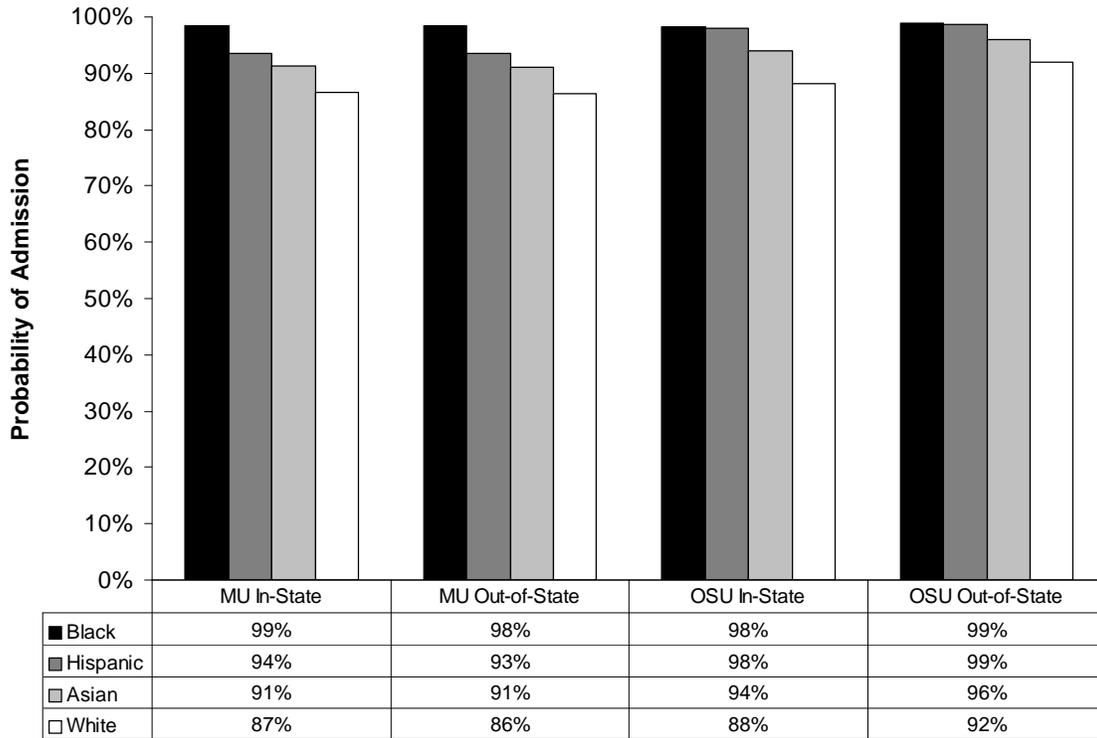
Probabilities of Admission

The meaning of logistic regression equations and their associated odds ratios may be difficult to grasp because the equations are complex and hard to explain without resorting to mathematical formulations. A more intuitive way to grasp the underlying dynamic of preferential admissions is to convert these logistic regression equations into estimates of the probabilities of admission for individuals with different racial/ethnic group membership, given the same test scores, grades, and background. In this section, we compare the probabilities of admission for individuals belonging to these different groups, using the logistic regression equation specific to the test scores and high school grades/class rank for MU and then for OSU. The probability calculations provide an estimate of the admission chances for members of each group, all with the same academic credentials, along with the same year of admission, residency status, and gender.

We chose to generate the probabilities for an in-state male applicant for 2006. For the MU calculations, the same set of ACT scores and GPAs is entered for blacks, Hispanics, Asians, and whites. Then we calculated the chances of admission for a black applicant, a Hispanic applicant, an Asian applicant, and a white applicant with those qualifications (see Figure 2 below). For the OSU calculations, the same set of ACT scores and class rank is likewise entered for blacks, Hispanics, Asians, and whites.

The probability calculations presented in the next section do not change the statistical results reported in the earlier section on odds ratios. They simply provide an easier-to-understand interpretation of their meaning.

Figure 2. Probability of Admission for In-State and Out-of-State Applicants Using Black Admittee Median Test Scores and Grades



Assumes applicant is male with the same ACT test scores and grades as the median for black admittees in 2006.

Figure 2 displays the likelihood of admission for blacks, Hispanics, Asians and whites, divided into in-state and out-of-state applicants.⁸

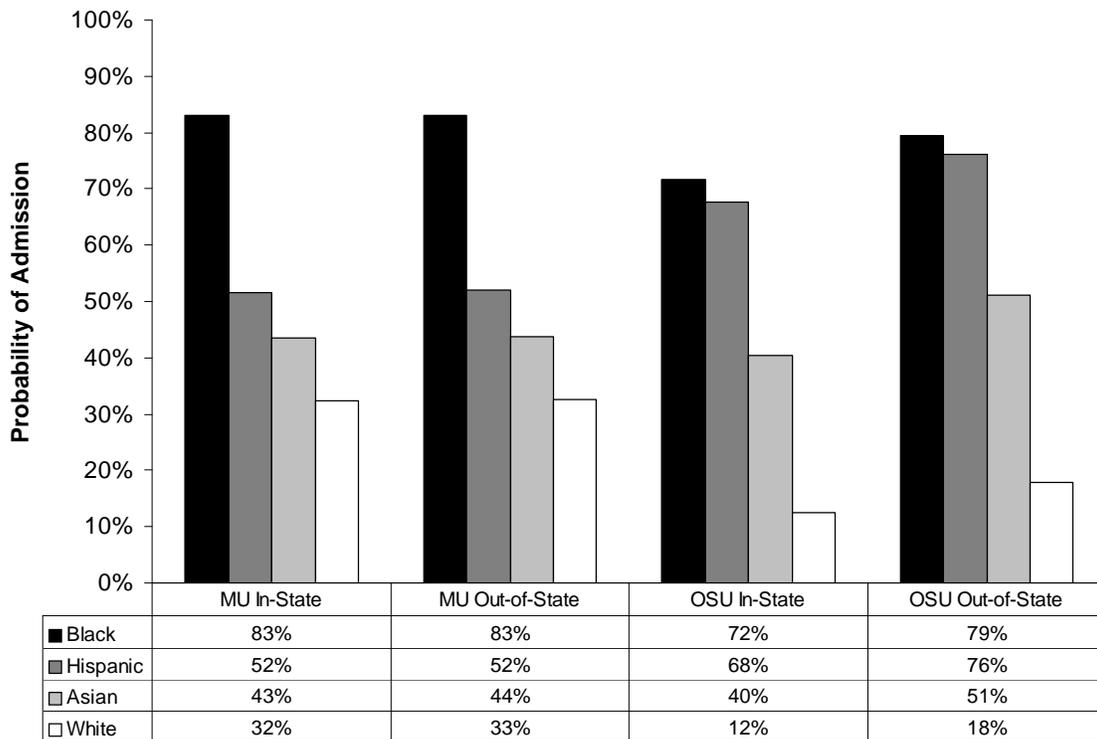
MU. At MU, Hispanic, Asian, and white applicants with the same credentials as the average (median) black admittee were all less likely to be admitted compared to the average black applicant with these same credentials. While 99% of in-state black admittees with this profile would be admitted, 94% of in-state Hispanics, 91% of in-state Asians, and 87% of in-state whites would be. So while the percentages admitted with these credentials are all quite high, the percentage of in-state whites admitted is roughly 12 percentage points lower. One could look at it this way: The percentage of rejected in-state white applicants (13%) is about 13 times larger than the percentage of in-state blacks not admitted (1%) with the same credentials as the average black admittee. For Asians, the percentage of rejected in-state applicants (9%) is about nine times larger; and for in-state rejected Hispanic applicants (6%), it is about six times larger. Moreover, in-state residency confers no particularly significant advantage at MU. In-state Hispanic, Asian, and white applicants were *less likely* to be admitted with the same academic

⁸ To estimate probabilities of admission by race/ethnicity for MU, we used the median ACT score and median GPA for blacks admitted to MU in 2006 (23 for the ACT and 3.45 for the GPA). For OSU, we used the median ACT score and median class rank in 2006 for black admittees (23 for the ACT and 88.2 for high school class rank). See Appendix 2 for formulas used in calculations.

credentials as the average black *out-of-state* applicant. Thus, 98% of out-of-state blacks would be admitted with these credentials, compared to 94% of in-state Hispanics, 91% of in-state Asians, and 87% of in-state whites.

OSU. OSU admitted roughly 98% of in-state black and Hispanic applicants with the same credentials as the average black admittee. In-state Asian and white applicants with this same set of credentials and background were less likely to be admitted. Thus, 94% of in-state Asian applicants and 88% of in-state white applicants were admitted with the same credentials as the average black admittee. While all these percentages are large, there is still a gap between black and white admission rates controlling for all these factors. Almost all in-state and out-of-state black applicants were admitted, versus 88% of in-state whites with the same credentials. This is about a ten-point difference in the probability of admission. Again, one could look at it this way: The percentage of in-state whites rejected by OSU (12%) is approximately six times larger than the percentage of rejected in-state blacks (2%). For Asians, the percentage of in-state applicants rejected by OSU (6%) is about three times larger.

Figure 3. Probability of Admission for In-State and Out-of-State Applicants Using Black Admittee Test Scores and Grades at 25th Percentile



Assumes applicant is male with the same ACT test scores and grades as for black admittees at the 25th percentile in 2006.

While there is some disparity in the probability of admission when using the median ACT score and grades for the average admittee, the disparities are even starker when using the black admittee test scores and grades at the 25th percentile. The figure above displays the

differences here in the likelihood of admission for blacks, Hispanics, Asians, and whites, divided into in-state and out-of-state applicants.⁹

MU. At MU, more than eight out of blacks with ACT scores and GPAs at the 25th percentile of black admittees were admitted by MU. In contrast, roughly half of Hispanics, approximately four out of ten Asians, and fewer than one out of three whites with the same credentials were admitted. Thus, 83% of *out-of-state* blacks with these test scores and grades were admitted compared to 52% of in-state Hispanics, 43% of in-state Asians, and 32% of in-state whites.

OSU. At OSU, 72% of black in-state applicants and 79% of black out-of-state applicants with these credentials were admitted by OSU. In contrast, 68% of in-state and 76% of out-of-state Hispanic applicants were admitted with the same qualifications. Among Asian applicants, OSU admitted 40% of in-state and 51% of out-of-state applicants with the credentials of the black admittees at the 25th percentile. The gap is the largest for whites: OSU admitted only 12% of in-state and 18% of out-of-state white applicants with the same test scores and class rank as the black admittee at the 25th percentile.

Graduation Rates

Table 6. Six-Year Graduation Rates¹⁰

	6-Year Graduation Rate		Difference with White Graduation Rate	
	MU	OSU	MU	OSU
Black	66%	56%	15 points	17 points
Hispanic	77%	61%	4 points	12 points
Asian	75%	78%	6 points	-5 points
White	81%	73%	–	–

Groups that receive preference as indicated in the previous discussion generally exhibit lower graduation rates compared to whites. The six-year graduation rate shows significantly lower graduation rates for blacks compared to whites at both MU and OSU. At MU, the six-year graduation rate for blacks is 15 points lower; at OSU, it is 17 points lower. Hispanics have a graduation rate that is 4 points lower at MU and 12 points lower at OSU. The Asian graduation rate is 6 points lower compared to the white rate at MU, but, at OSU, the Asian graduation rate is 5 points higher than the rate of their white counterparts.

⁹ At the 25th percentile, the ACT score of black admittees at MU was 20, and the GPA was 3.16. For OSU, the ACT score for black admittees was 21, while the high school class rank was the 75th percentile.

¹⁰ The six-year graduation rate is calculated for first-year students who started matriculation in the 2002-2003 academic calendar. See National Collegiate Athletic Association, “2009 NCAA Division I federal guidelines” (www.ncaa.org/wps/portal/ncaahome?W).

Miami University (MU)

Applicants and Admittees

Racial/Ethnic Composition of the MU Pool

Table 7 below displays the racial/ethnic composition of MU’s pool of applicants, admittees, and enrollees for the 2006 and 2007 academic years.

Table 7. Racial Composition of Applicants, Admittees, and Enrollees at MU¹¹

<i>Year</i>		<i>Applicants</i>	<i>Admittees</i>	<i>Enrollees</i>
2006	Black	3.4%	2.9%	3.6%
	Hispanic	2.2%	2.2%	2.1%
	Asian	4.0%	4.1%	2.5%
	White	90.5%	90.8%	91.7%
2007	Black	3.4%	2.8%	3.6%
	Hispanic	2.5%	2.4%	2.1%
	Asian	4.6%	4.9%	4.2%
	White	89.5%	89.9%	90.1%

The applicant pool for MU is overwhelmingly white. Whites made up 90.5% of all applicants in 2006 and 89.5% of applicants in 2007. Asians made up 4.0% of the applicant pool in 2006 and 4.6% in 2007. Hispanics made up 2.2% of the pool in 2006 and 2.5% in 2007, while blacks made up 3.4% in those years.

The composition of those admitted and of those who subsequently enroll in MU is similar. Whites made up 90.8% of all admitted in 2006 and 89.9% in 2007. Asians made up 4.1% of the admittees in 2006, increasing to 4.9% in 2007. Hispanics made up the smallest percentage—2.2% in 2006 and 2.4% in 2007. Blacks made up a slightly larger portion of those admitted—2.9% in 2006 and 2.8% in 2007.

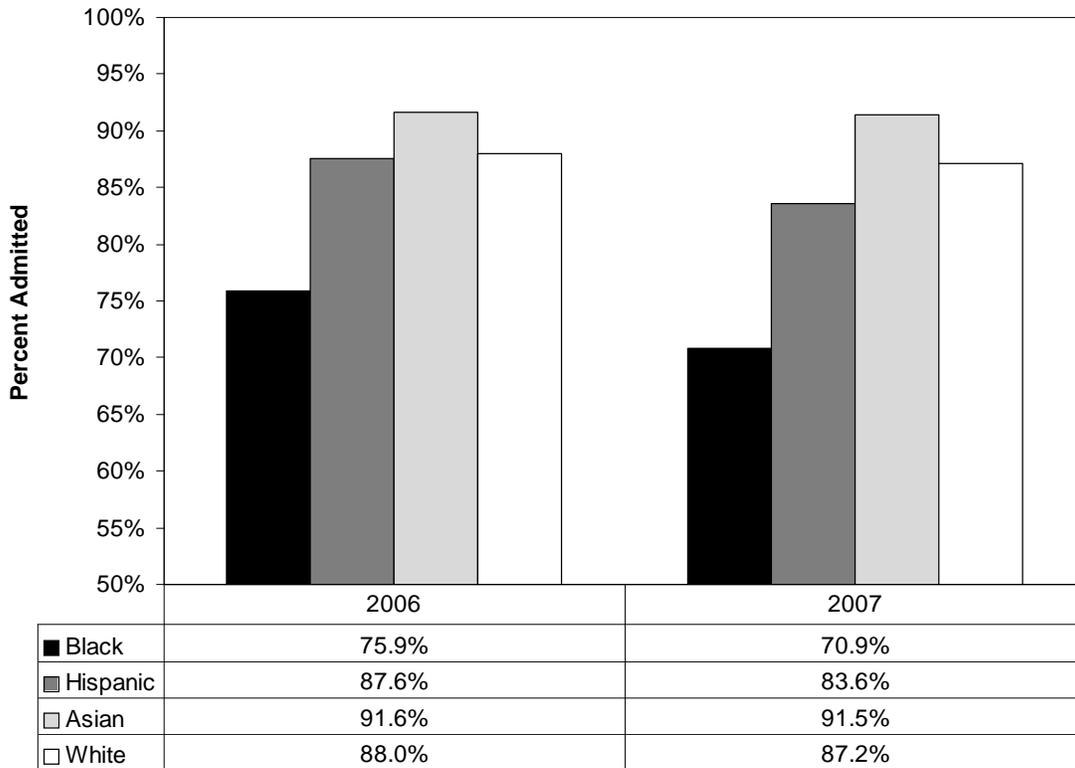
Whites were more than nine out of ten of those who subsequently enrolled (91.7% in 2006 and 90.1% in 2007). Asians were 2.5% of enrollees in 2006, rising to 4.2% in 2007. Hispanics remained at a little over 2 percent in both years, while blacks were at 3.6% in both years.

¹¹ “American Indian,” “Pacific Islander,” and “Unknown” were dropped from the MU analysis. The total numbers used for calculating Table 1 are below.

	Applicants	Admitted	Enrollees
2006	12,984	11,388	3,458
2007	13,235	11,477	3,344

Admission Rates, MU

Figure 4. Miami University Undergraduate Admission Rates



Blacks were admitted to MU at substantially lower rates compared to other groups. The admission rate for black applicants was 75.9% in 2006, dropping to 70.9% in 2007. The Hispanic admission rate was more than ten percentage points higher—87.5% in 2006 and 83.6% in 2007.

Asians had the highest admission rate: 91.6% were admitted in 2006, while 91.5% were admitted in 2007. Thus, the admission rate of Asian applicants was more than 15 points higher than that of black applicants and several points higher than the admission rate of Hispanics and whites.

White applicant admission rates were similar to those for Hispanics: 88.0% of white applicants were admitted in 2006, 87.2% in 2007. The white admission rate, like that for Hispanics, was more than 10 percentage points higher than the black admission rate in both years.

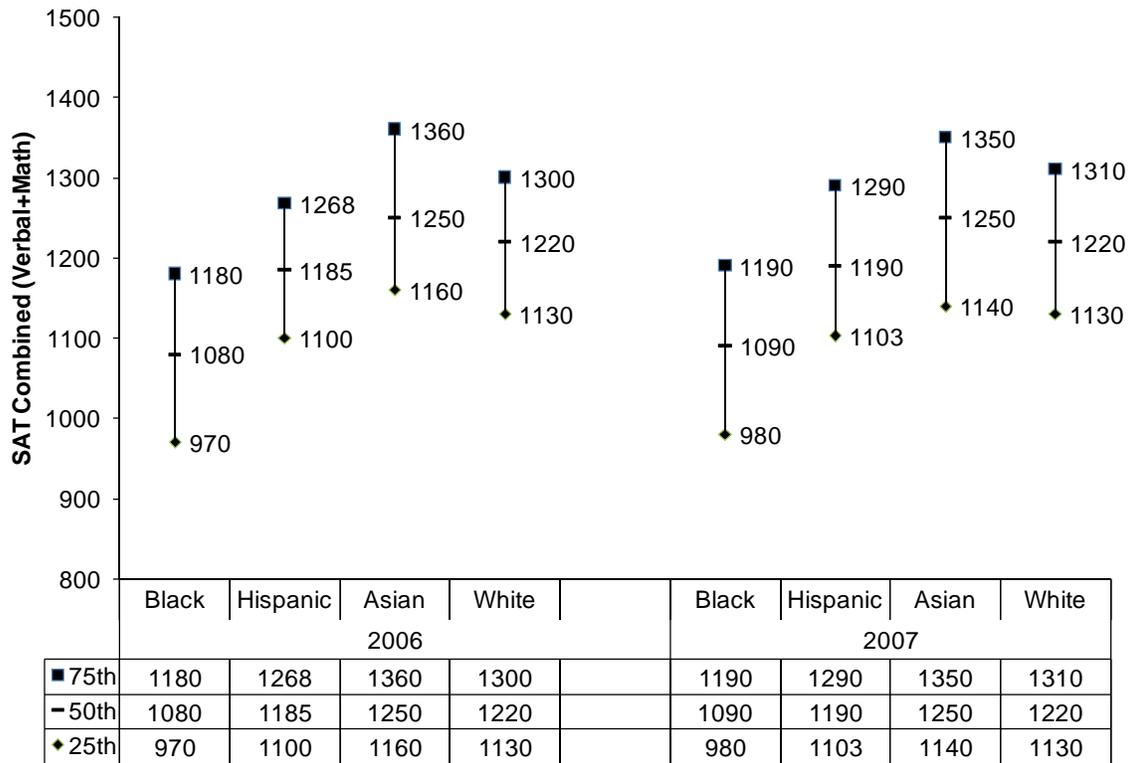
Differences in Test Scores and Grades, MU Admittees

In this section, we compare SAT scores, ACT scores, and grade-point averages (GPAs) among those admitted to MU by racial and ethnic groups. As discussed earlier, we do not

report means and related statistics as bases for comparison. Here, as in an earlier section, we compare medians. We also report scores at the 25th and 75th percentiles, again to deal with the problem of extreme cases. The median represents the middle of the distribution, while the 25th and 75th percentile scores taken together represent the actual spread of scores. For example, a 3.2 GPA at the 25th percentile means that 25 percent of GPAs were below 3.2, while 75 percent of the scores were above it. A GPA of 3.9 at the 75th percentile means that 75 percent of scores were below 3.9, while 25 percent were above it.

SAT Scores

Figure 5. Combined Math-Verbal SAT Scores for MU Admittees



The figure above shows the distribution of combined SAT scores among those admitted to MU, by racial and ethnic group. The combined SAT scores of black admittees to MU are lower compared to scores of the other three groups. In 2006, the SAT score for blacks at the 75th percentile (1180) was slightly lower than the median score for Hispanic admittees (1185). It was 70 points lower than the median Asian score (1250) and 40 points lower than the median score for whites (1220). In 2007, the SAT score of black admittees at the 75th percentile (1190) was the same as the median score for Hispanic admittees. It was 60 points lower than the median score for Asians (1250) and 30 points lower than the median score for whites (1220). In other words, for both years, 75 percent of blacks admitted to MU were admitted with test scores equal to or lower than the average scores of Hispanic, Asian, and white admittees.

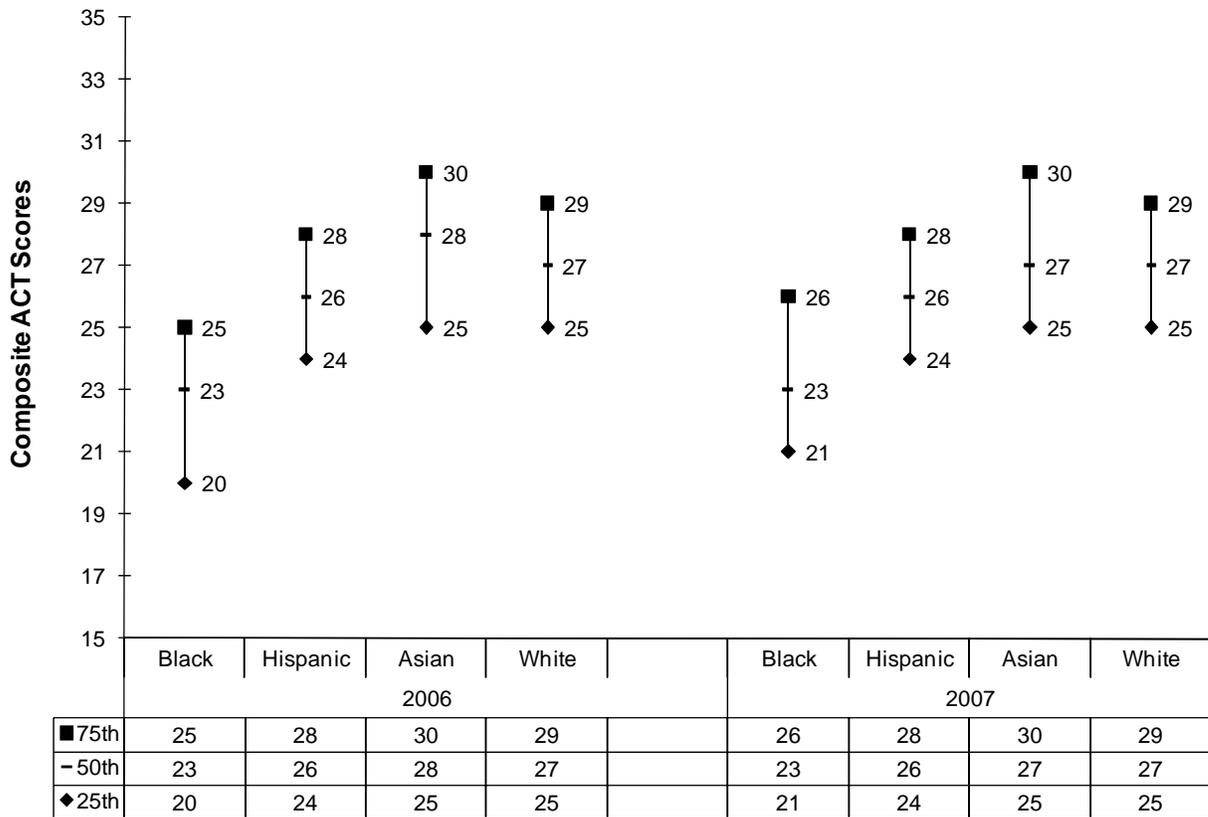
The Hispanic-Asian and Hispanic-white gaps in SAT scores were substantially smaller, though Hispanic scores overall were lower than those for Asians and whites. In 2006, the median Hispanic SAT score (1185) was 65 points lower than the median Asian score (1250), and only 25 points higher than the Asian score at the 25th percentile. In 2007, the Hispanic median (1190) was 60 points lower than the Asian median (1250), and 50 points higher than the Asian score at the 25th percentile (1140).

The test-score gap between Hispanic and white admittees is somewhat smaller. While the median Hispanic score in 2007 is 30 points lower than the white median (1220), it is closer to the white median than the white score at the 25th percentile (1130).

There was also a test-score gap between Asian and white admittees, with Asian scores being higher overall. The Asian median (1250) was 30 points higher than the white median (1220) for both 2006 and 2007.

ACT Scores

Figure 6. Composite ACT Scores for MU Admittees



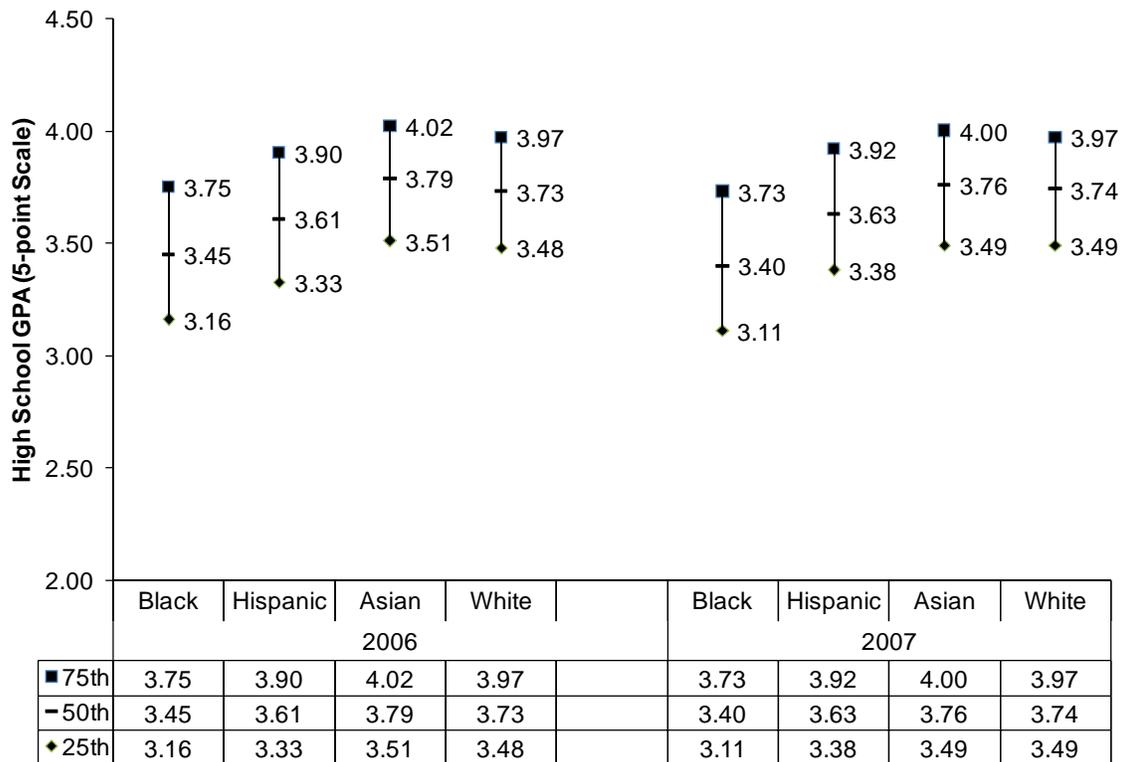
A gap in ACT scores is also seen when comparing black admittees to their white counterparts. In 2006 and 2007, the black admittee ACT score at the 75th percentile (25 and 26, respectively) was lower than the white median (27). This means that 75 percent of blacks admitted to MU in 2006 and 2007 had ACT scores lower than the average white admittee.

There was also an ACT gap between Hispanic and white admittees, but the differences were much smaller and there is considerable overlap between Hispanic and white admittee scores. In 2006 and 2007, the median score for Hispanic admittees (26) was a point lower than the median score for whites (27). Hispanic scores at the 75th percentile fell in between white scores at the 75th percentile and the white median.

There was also an ACT gap between Asians and whites, with slightly higher test scores by Asian admittees. In 2006, the average score for Asian admittees was one point higher than the scores for whites. In 2007, the median scores were the same. Asian scores at the 75th percentile for both years are roughly one point higher than the white scores at the same rank.

High School GPAs

Figure 7. High School GPA of MU Admittees



There is also a gap in high school grades among admittees by race and ethnicity. The GPAs of black admittees were lower in both 2006 and 2007 compared to the other groups. In 2006, the GPA at the 75th percentile for black admittees (3.75) is roughly the same as the white median (3.73), while the black median (3.45) was roughly three-tenths of a point lower than the median GPA of white admittees. The differences are similar in magnitude for 2007. This means that 75 percent of blacks admitted to MU had lower GPAs compared to the average white (and Asian) admittee.

The gaps between Hispanic-Asian and Hispanic-white GPAs are not as large as those between blacks and other groups. Hispanic GPAs are slightly lower than those of Asian and white admittees. In 2006, the median Hispanic GPA (3.61) is roughly two-tenths of a point lower than the Asian median (3.79) and one-tenth of a point lower than the white median (3.73). In 2007, the Hispanic median GPA (3.63) was roughly one-tenth lower than the Asian median GPA (3.76) and the white median GPA (3.74).

Finally, Asian GPAs are slightly higher than or equal to white GPAs at the 25th, 50th, and 75th percentiles. The largest difference is between the Asian and white median in 2006—but it is a gap of only six-hundredths of a point (0.06).

Rejectees versus Admittees, MU

Next we look at the number of blacks, Hispanics, Asians and whites rejected by MU despite test scores and grades higher than the median scores and grades of black admittees.

Table 8. Applicants Rejected by MU with Test Scores and Grades Higher Than Black Admittee Median

	2006		2007	
	SATs, GPA	ACTs, GPA	SATs, GPA	ACTs, GPA
Black	0	0	0	0
Hispanic	0	0	0	1
Asian	1	0	0	1
White	28	45	36	96

As shown in the table above, MU in 2006 rejected 1 Asian and 28 whites with SAT scores and GPAs higher than the black admittee median, along with 45 white applicants with higher ACT scores and GPAs. Similarly, in 2007, MU rejected 36 whites with higher SATs and GPAs, along with 1 Hispanic, 1 Asian, and 96 whites with higher ACTs and GPAs.

Table 9. Applicants Rejected by MU with Test Scores and Grades Higher than Those of Black Admittees at 25th Percentile

	25 th Percentile			
	2006		2007	
	SATs, GPA	ACTs, GPA	SATs, GPA	ACTs, GPA
Black	1	3	0	4
Hispanic	2	5	4	8
Asian	5	8	4	7
White	259	344	253	432

In the table above, we display the number of blacks, Hispanics, Asians, and whites rejected by MU despite test scores and grades higher than the scores and grades of black admittees at the 25th percentile.

In 2006, 1 black, 2 Hispanics, 5 Asians, and 259 whites were rejected by MU despite higher test scores and grades compared to the SAT scores and grades at the 25th percentile for black admittees. In addition, 3 blacks, 5 Hispanics, 8 Asians, and 344 whites were rejected with higher ACTs and GPAs. The following year, no blacks but 4 Hispanics, 4 Asians, and 253 whites were rejected with higher SAT scores and grades, as were 4 blacks, 8 Hispanics, 7 Asians, and 432 whites with higher ACT scores and grades.

Differential Graduation Rates at MU

Table 10. Six-Year Graduation Rates at MU¹²

	Graduation Rate of Freshman Class, 2002-2003
Black	66%
Hispanic	77%
Asian	75%
White	81%

The table above reports the six-year graduation rate at MU for the entering class of 2002-2003. A majority of every group graduates within six years, but black matriculants have the lowest graduation rate (66%); it is 15 points lower than the white graduation rate (81%). Hispanic and Asian graduation rates (77% and 75%, respectively) are also lower than the graduation rates of their white counterparts.

¹² The six-year graduation rate is calculated for first-year students who started matriculation in the 2002-2003 academic calendar. See National Collegiate Athletic Association, “2009 NCAA Division I federal guidelines” (www.ncaa.org/wps/portal/ncaahome?W).

Ohio State University (OSU)

Applicants and Admittees

Racial/Ethnic Composition of the OSU Pool

Table 8 below displays the racial/ethnic composition of OSU’s pool of applicants, admittees, and enrollees for the 2005 and 2006 academic years.

Table 11. Racial Composition of Applicants, Admittees, and Enrollees at OSU¹³

<i>Year</i>		<i>Applicants</i>	<i>Admittees</i>	<i>Enrollees</i>
2005	Black	8.7%	7.3%	7.5%
	Hispanic	3.4%	3.6%	3.1%
	Asian	6.7%	7.1%	5.7%
	White	81.2%	82.1%	83.7%
2006	Black	9.3%	7.1%	6.4%
	Hispanic	3.5%	3.6%	3.1%
	Asian	6.4%	7.4%	6.4%
	White	80.8%	81.8%	84.1%

The applicant pool for OSU is mostly white. In 2005, whites were 81.2% of the applicant pool. Blacks made up 8.7%; Hispanics, 3.4%; and Asians, 6.7%. In 2006, whites made up 80.8% of applicants; blacks were 9.3%; Hispanics, 3.5%; and Asians, 6.4%.

The composition of those admitted to and of those who subsequently enroll in OSU is similar, but the percentage of whites is slightly higher than in the applicant pool. In 2005, whites were 82.1% of those admitted to OSU, while blacks and Asians made up roughly 7% apiece and Hispanics, 3.6%. Similarly, whites were 81.8% of admittees in 2006, while blacks and Asians were again a little more than 7% apiece, and Hispanics again made up 3.6% of admittees.

Whites make up a still higher percentage of those who enroll at OSU. Whites made up 83.7% of enrollees in 2005 and 84.1% in 2006. Blacks were 7.5% of those enrolled in 2005, but dropped to 6.4% in 2006. Hispanics remained steady at 3.1% for both years, while Asians made up 5.7% in 2005, rising to 6.4% in 2006.

¹³ “American Indian,” “Pacific Islander,” and “Unknown” were dropped from the OSU analysis. The total numbers used for calculating the table are below.

	Applicants	Admitted	Enrollees
2005	17,224	12,488	5,865
2006	18,000	12,032	6,199

Admission Rates, OSU

Figure 8. OSU Undergraduate Admission Rates

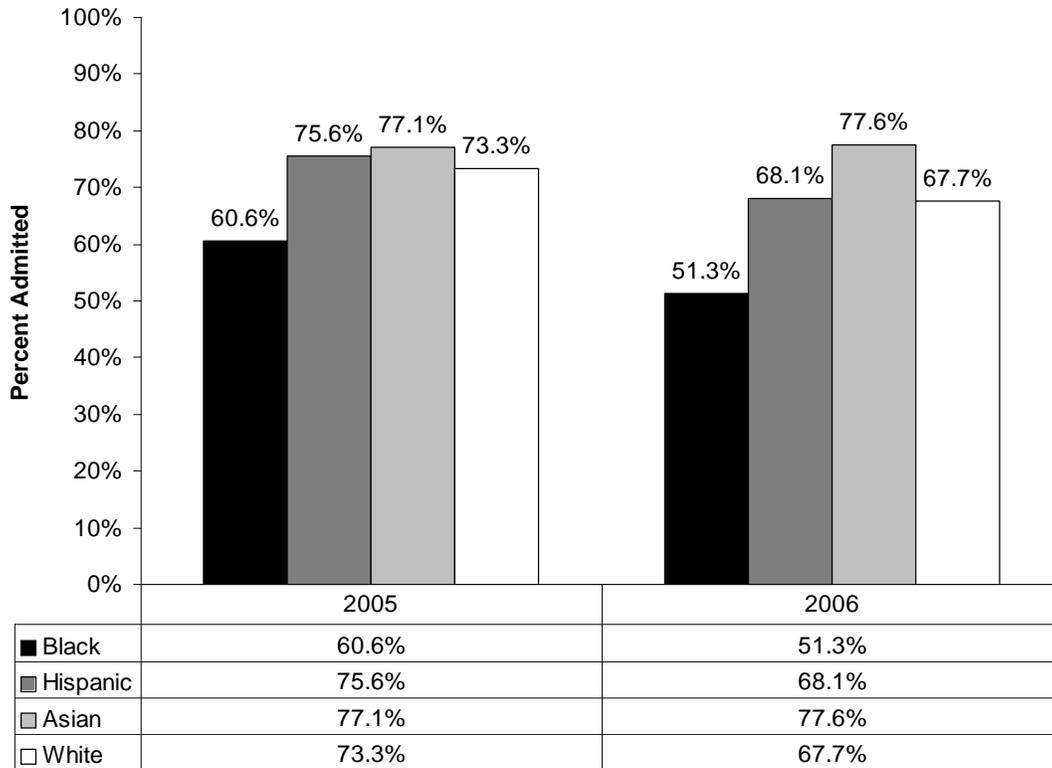


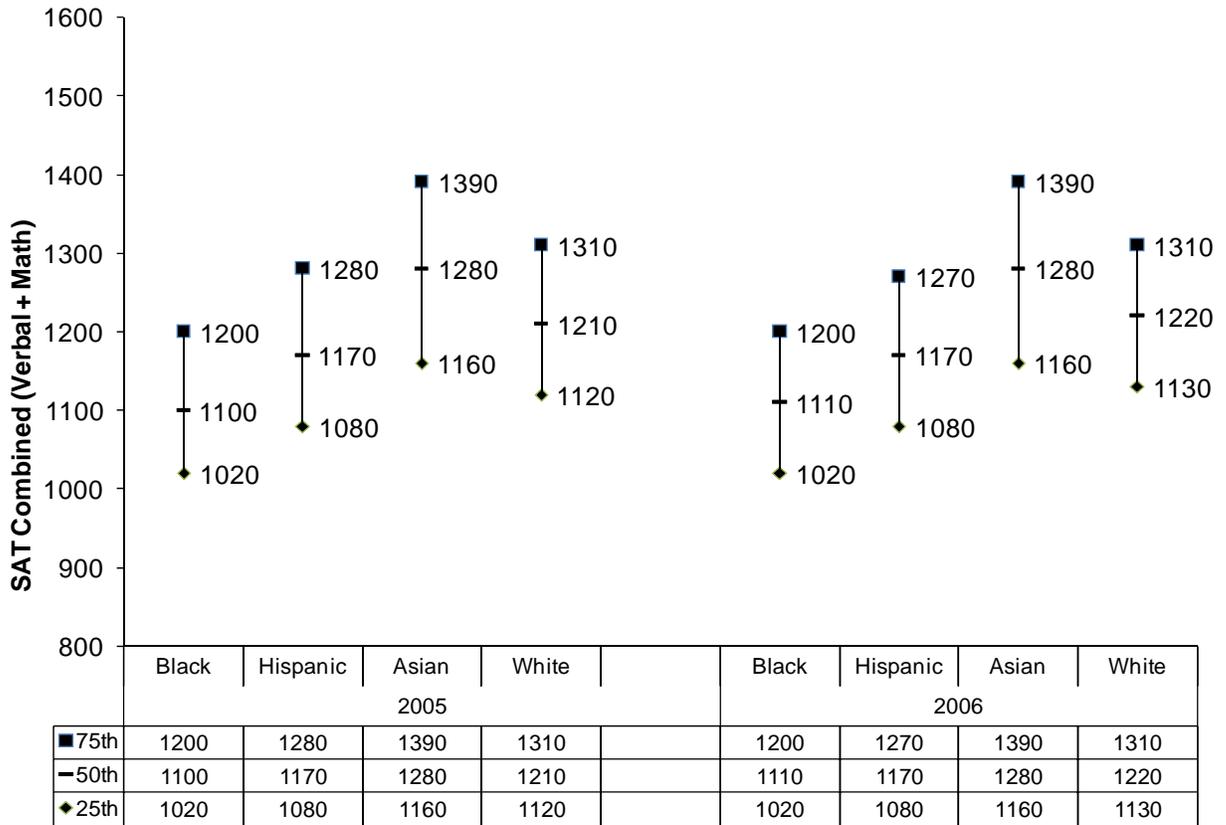
Figure 8 displays the OSU undergraduate admission rates by racial and ethnic group. Black applicants had the lowest admission rate in 2005 (60.6%), which dropped further in 2006 (51.3%). Hispanic applicants had a slightly higher admission rate compared to whites. In 2005, 75.6% of Hispanic applicants were admitted compared to 73.3% of whites; in 2006, the admission rates were 68.1% for Hispanics and 67.7% for whites. Asian applicants had the highest admission rate: 77.1% in 2005 and 77.6% in 2006. Moreover, Asian applicants were the only group whose admission rate went up from 2005 to 2006, when it dropped for all others. The largest drop was among black applicants (9.3 percentage points, from 60.6% to 51.3%).

Differences in Test Scores and Grades, OSU Admittees

In this section, as in a similar section on MU admittees, we compare SAT scores and ACT scores by racial and ethnic groups. Instead of GPAs, OSU provided high school class rank, which we will also analyze. We compare medians (scores at the 50th percentile) and scores at the 25th and 75th percentiles for those admitted by OSU, separated into racial and ethnic groups.¹⁴

SAT Scores

Figure 9. Combined Math-Verbal SAT Scores for OSU Admittees



The distribution of SAT scores among those admitted to OSU by racial and ethnic group is presented in the figure above. The SAT scores of black admittees are lower compared to scores of all other groups. For example, the SAT score at the 75th percentile for black admittees in 2005 (1200) falls between the 50th and 75th percentile of Hispanic admittees, and is lower than the median score for Asian and white admittee (1280 and 1210, respectively). This means that 75 percent of blacks were admitted to OSU with scores lower than the average score for Asians and whites admitted to OSU.

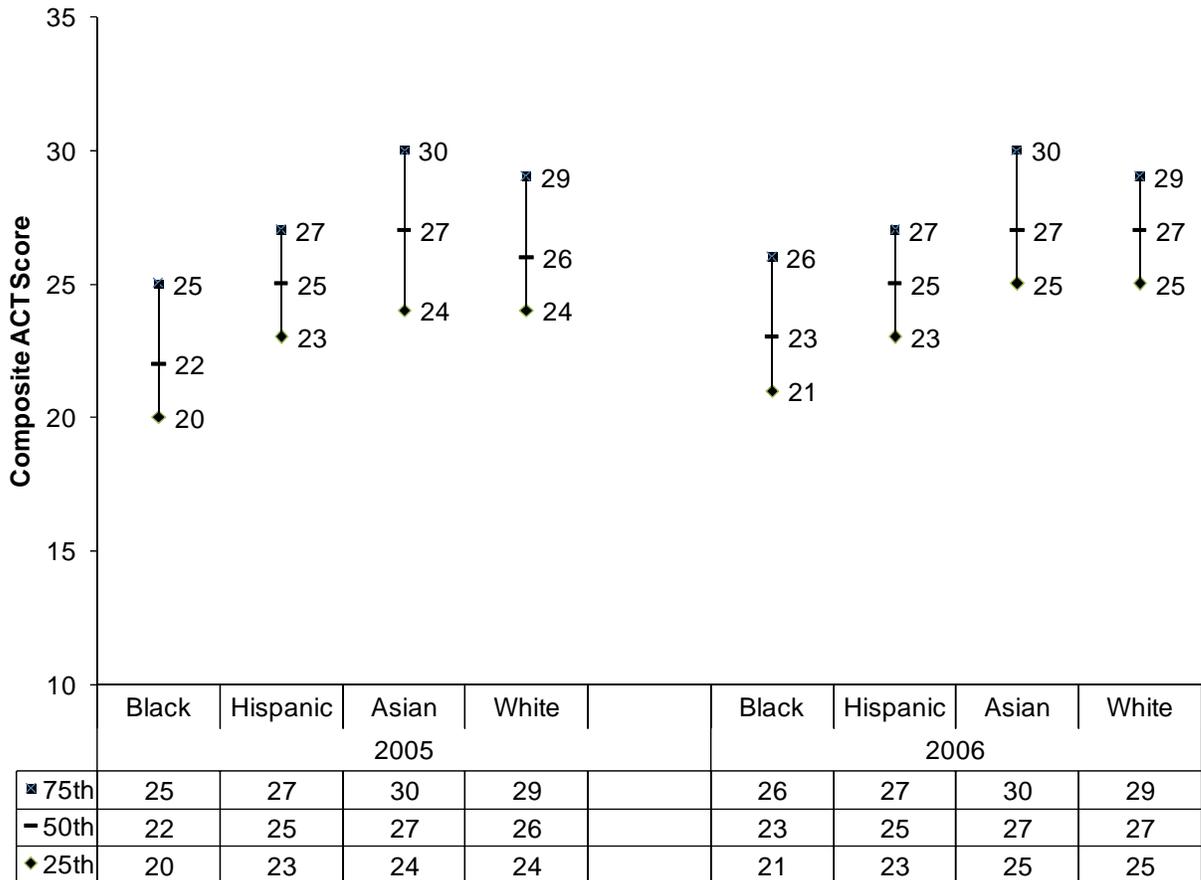
¹⁴ The median represents the middle of the distribution, while the 25th and 75th percentile scores taken together represent the actual spread of scores. Scores at or below the 25th percentile are in the bottom 25 percent (i.e., 75 percent had higher scores), while scores at the 75th percentile or higher are in the top quartile.

Test scores for Hispanic admittees are higher than those for black admittees but somewhat lower than those of Asian and white admittees. The Hispanic median in 2005 (1170) was 110 points lower than the Asian median and 40 points lower than the white median. In 2006, the Hispanic median (1170) was 110 points lower than the Asian median, and is also lower than the white median (1220).

SAT scores for Asians admitted to OSU are the highest of all groups. For example, in 2006, Asian admittee scores at the 75th percentile (1390) are 80 points higher than white scores at the 75th percentile (1310). The Asian median (1280) falls between white scores at the 75th percentile and the white median (1220), but is closer to white scores at the 75th percentile.

ACT Scores

Figure 10. Composite ACT Scores for OSU Admittees



The same pattern is seen for ACT scores among admittees by racial and ethnic group. ACT scores for black admittees are lower than those of other ethnic groups. For example, the ACT score for black admittees at the 75th percentile in 2005 (25) was the same as the Hispanic median and was lower than the medians for Asians and whites (27 and 26,

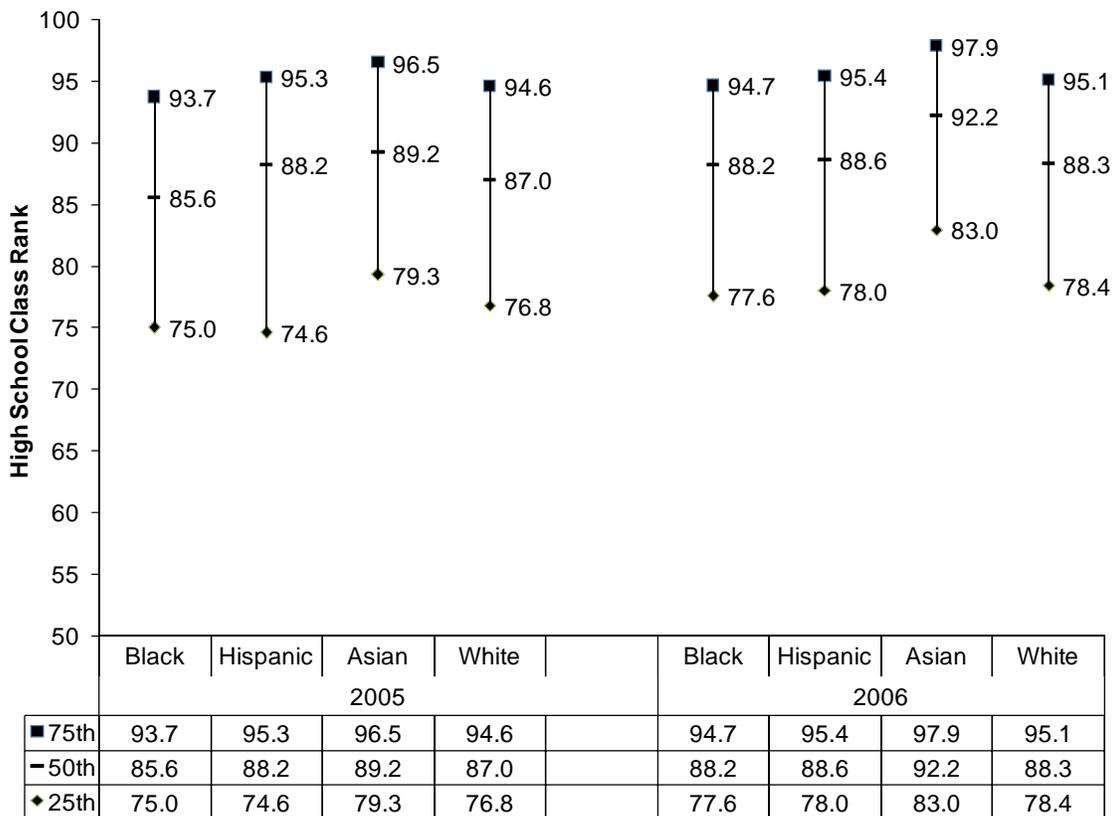
respectively). That is, 75 percent of blacks in 2005 were admitted with ACT scores lower than half or more of Hispanic, Asian, and white admittees.

Hispanic scores fall between those for blacks and those for Asians and whites. For example, in 2005, Hispanic admittee scores at the 75th percentile (27) are the same as the Asian admittee median and slightly higher than scores for the white admittee median. In 2006, the Hispanic score at the 75th percentile (27) is identical to the Asian and white medians.

Asian scores are equal to or slightly higher than white scores at the same percentile. At most, they differ by a single point. For example, the Asian median in 2005 was 27 compared to the white median of 26.

High School Class Rank

Figure 11. High School Class Ranking for OSU Admittees



Unlike test scores, the distribution of high school class rank among admittees differs little among racial and ethnic groups. Nevertheless, where there is a gap in class rank, black class rank is lower. For example, in 2005, at the 75th percentile, the class rank for black admittees is roughly one to three points lower than those of other groups (93.7 for blacks versus 95.3 for Hispanics, 96.5 for Asians, and 94.6 for whites). In 2006, the gap in class

rank is small. At the 50th percentile, the class rank for black admittees was 88.2, compared to 88.6 for Hispanics, 92.2 for Asians, and 88.3 for whites.

When comparing Hispanic admittees with their Asian and white counterparts, the picture is more mixed. Hispanic class rank at the 25th, 50th, and 75th percentiles for 2005 and 2006 is lower than those for their Asian counterparts. In comparison to whites, however, Hispanic class rankings in 2005 and 2006 at the 75th and 50th percentiles (but not the 25th) were slightly higher than the white rank at that same percentile. For example, in 2005, Hispanic class rank at the 75th percentile was 95.3, compared to white class rank of 94.6. The Hispanic median in that year was 88.2 versus 87.0 for whites.

The class ranking of Asian admittees was generally the highest of all groups. For example, the Asian median in 2005 (89.2) was 2 points higher than the white median (87.0) and in 2006 was 4 points higher (92.2 versus 88.3).

Rejectees versus Admittees, OSU

Table 12. Applicants Rejected by OSU with Test Scores and Grades Higher Than Black Admittee Median

	2005		2006	
	SATs, Class Rank	ACTs, Class Rank	SATs, Class Rank	ACTs, Class Rank
Black	0	1	0	1
Hispanic	0	0	0	0
Asian	1	1	0	0
White	1	9	7	19

Next we look at the number of blacks, Hispanics, Asians, and whites rejected by OSU despite test scores and grades higher than the median scores and class rank of black admittees. In 2005, OSU rejected no blacks or Hispanics but 1 Asian and 1 white with higher SAT scores and class rank compared to the average black admittee, while also rejecting 1 black, 1 Asian, and 9 whites with higher ACT scores and class rank. In 2006, 7 whites were rejected despite higher SAT scores and class rank, as were 1 black and 19 whites with higher ACT scores and class rank.

Table 13. Applicants Rejected by OSU with Test Scores and Grades Higher Than Those of Black Admittees at 25th Percentile

	25 th Percentile			
	2005		2006	
	SATs, Class Rank	ACTs, Class Rank	SATs, Class Rank	ACTs, Class Rank
Black	1	5	3	10
Hispanic	0	0	1	2
Asian	1	3	1	5
White	9	92	52	270

In the table above, we display the number of blacks, Hispanics, Asians, and whites rejected by OSU despite test scores and grades higher than the scores and class rank of black admittees at the 25th percentile. In 2005, OSU rejected 1 black, 1 Asian, and 9 whites with higher SAT scores and class rank and 5 blacks, 3 Asians, and 92 whites with higher ACT scores and class rank compared to black admittees at the 25th percentile. In 2006, OSU rejected 3 blacks, 1 Hispanic, 1 Asian, and 52 whites with higher SAT scores and class rank, along with 10 blacks, 2 Hispanics, 5 Asians, and 270 whites with higher ACT scores and class rank.

Differential Graduation Rates at OSU

Table 14. Six-Year Graduation Rates at OSU¹⁵

	Graduation Rate of Freshman Class, 2002-2003
Black	56%
Hispanic	61%
Asian	78%
White	73%

The table above reports the six-year graduation rate at OSU for the entering class of 2002-2003. A majority of every group graduates within six years, but black matriculants have the lowest graduation rate (56%) of all groups. It is 17 points lower than the white graduation rate (73%). The Hispanic graduation rate (61%) is also lower than the white graduation rate, by 12 points. The graduation rate of Asian matriculants (78%), in contrast, is higher than the rate for whites at OSU, by 5 points.

¹⁵ The six-year graduation rate is calculated for first-year students who started matriculation in the 2002-2003 academic calendar. See National Collegiate Athletic Association, “2009 NCAA Division I federal guidelines” (www.ncaa.org/wps/portal/ncaahome?W).

Appendix 1. Logistic Regression Equations

Miami University

	Using Combined SATs		Using Composite ACTs	
	Unstandardized Regression Coefficient	Odds Ratio	Unstandardized Regression Coefficient	Odds Ratio
Year	-0.166	0.847*	-0.342	0.710****
Test Score	0.010	1.010****	0.395	1.484****
GPA	4.800	121.510****	4.861	129.105****
Afr Am	2.078	7.990****	2.321	10.185****
Asian	0.762	2.143***	0.475	1.608*
Hispsc	0.771	2.162***	0.803	2.232***
Residency	-0.137	0.872*	-0.012	0.988 ^{ns}
Gender	0.214	1.239**	-0.012	0.988 ^{ns}
Constant	306.897*	—	661.985****	—

*p<0.05, **p<0.01, ***p<0.001, ****p<0.0001, ^{ns}Not statistically significant

Ohio State University

	Using Combined SATs		Using Composite ACTs	
	Unstandardized Regression Coefficient	Odds Ratio	Unstandardized Regression Coefficient	Odds Ratio
Year	-0.886	0.412****	-1.246	0.288****
Test Score	0.017	1.017****	0.815	2.258****
Class Rank	0.129	1.138****	0.143	1.154****
AfrAm	1.203	3.330****	2.064	7.880****
Asian	0.385	1.469*	0.755	2.128****
Hispsc	1.459	4.300****	1.876	6.528****
Gender	0.104	1.110 ^{ns}	-0.050	0.952 ^{ns}
Residency	0.272	1.312***	-0.427	0.653****
Constant	1751.678****	—	2470.551****	—

*p<0.05, **p<0.01, ***p<0.001, ****p<0.0001, ^{ns}Not statistically significant

Appendix 2. Calculating the Probability of Admission Using Composite ACTs

Probability of Admission = $A/(1+A)$

Miami University

$A = \text{EXP}[(-0.34196 \cdot \text{Year}) + (0.395018 \cdot \text{ACTComposite}) + (4.860626 \cdot \text{GPA}) + (2.320963 \cdot \text{Afr Am}) + (0.802875 \cdot \text{Hispsc}) + (0.475033 \cdot \text{Asian}) + (-0.0123 \cdot \text{Female}) + (-0.01231 \cdot \text{In-State}) + 661.9849]$

Ohio State University

$A = \text{EXP}[(-1.246 \cdot \text{Year}) + (0.815 \cdot \text{ACTComposite}) + (0.143 \cdot \text{ClassRank}) + (2.064 \cdot \text{AfrAm}) + (1.876 \cdot \text{Hispsc}) + (0.755 \cdot \text{Asian}) + (-0.050 \cdot \text{Female}) + (-0.427 \cdot \text{In-State}) + 2470.551]$



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Linda Chavez, Chairman