Tests, Affirmative Action in University Admissions, and the American Way

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Affirmative action in postsecondary school admissions has been fiercely debated. Data for selective colleges suggest that Black students have admission test scores about 1.3 SDs lower than those of Whites. Has affirmative action had a positive effect on Black–White differences? Data on college completion rates and income of college graduates suggest that the Black–White differences in these measures have not changed in the last 25 years or have gotten relatively worse for Blacks. It is further argued that the college a student attends is unimportant with respect to academic achievement. Achievement test results show that 93% of the variance in outcome is due to characteristics of the individual, and only a maximum of 7% is due to the institution attended. None of the data considered show positive effects for affirmative action. Affirmative action should be discontinued for postsecondary school admissions because it is ineffective as a social policy. If there is still concern about access to higher education, open admissions should be required at all colleges and universities.

Perhaps no issue is currently more fiercely debated than affirmative action. In this article, I focus on affirmative action in college admissions. Tests and testing are often seen to be at the heart of this debate, so I consider the roles of tests and testing. However, the most important question of all is whether affirmative action has been effective in achieving its goals or whether it will achieve its goals in the future.

Following a very brief description of the history of affirmative action, its goals and the way is has been implemented on U.S. college campuses, I consider data comparing Black and White Americans on college matriculation and completion rates and compare these to what should be expected on the basis of standardized test results. Data for Black–White differences in salary for college graduates is also considered. The goals of affirmative action—to close the wage and education gaps between Whites and Blacks—have not been met. Finally, I argue that elite institutions do not provide more effective education than the average institution.

What Is Affirmative Action?

Affirmative action is a set of laws, executive orders, and court cases designed to guarantee equality of opportunity for minorities and women and to correct for past discrimination that may have occurred. In its simplest form, affirmative
action means that if two equally qualified applicants apply for a single position, preference will be given to the applicant who is a member of an underrepresented class. Like most issues in law, the simplest form is seldom encountered. Actual implementation is more complex.

If an institution has an underrepresentation of one or more minority groups, what often happens is that the institutions enters into an agreement with enforcement agencies. Such an agreement forestalls litigation or punitive actions that the enforcement agencies might take. The agreement specifies goals (quotas) that the institution must attempt to meet. So long as the institution makes an effort to meet these goals, other enforcement actions are not implemented.

The most common metaphor for affirmative action is the “footrace” metaphor. Members of minority and majority groups are pictured in a footrace. Because of past discrimination, the majority member is represented as having a head start. Affirmative action is seen as a way of correcting for the disadvantage of the minority member. The idea is that by giving advantage to the minority member in college admission, the difference in starting position will be remedied and eventually there will be no differences between minority and majority groups.

Why Do Colleges and Universities Use Tests to Select Students?

Institutions of higher learning have not always used tests to select applicants. Before tests were available, there were still what are called selective institutions. They were called selective because not everyone who applied was accepted. So, without standardized tests, how were students selected? Selection frequently was based on personal recommendations, the fact that a relative had previously attended the school, the social position of an applicant’s family, high school performance, or tests that were not standardized.

It is somewhat ironic, and a fact often lost in the debate over the role of tests, that standardized tests were adopted by colleges and universities to increase fairness in the admissions process. It is certain that standardized tests would be more fair than the use of family social position or personal recommendations.

The increase in the use of standardized tests is related to increased access to higher education. In the United States, there has been a phenomenal increase in access to education at every level. Currently, there are 8,775 postsecondary institutions in the United States. Of these, 2,793 are 4-year institutions, 2,552 are 2-year institutions, and the remainder are less than 2-year institutions (Morgan, 1997). In comparison, England, with about a quarter of the population of the United States, has 49 universities (Stevenson & Lee, 1997).

In the period between 1971 and 1996, the proportion of 25- to 29-year-olds who had completed high school or its equivalent increased from 78% to 87% (Smith, 1997, Table 22-1). For White Americans, the equivalent figures are 82% to 93%. Although there is some room for improvement, these figures certainly are reaching an upper asymptotic level. Similar but even more impressive figures can be found for 25- to 29-year-olds who have completed one or more years of college. In 1971, 44% had completed one or more years of college, but by 1995, 65% had completed one or more years of college (Smith, 1997, Table 22-2). These data represent nearly a 50% increase in the completion of one or more years
of college in a 25-year period. It is obvious that educational persistence has increased dramatically in the population as a whole.

Given the large number of schools and the large number of students applying for admission, tests seem an obvious way for postsecondary institutions to make decisions about whom they should accept. Even though there are a large number of students applying, there are also a large number of schools competing for students. Nairn (1980) has estimated that fewer than 20% of schools accept less than 80% of the students who apply. That means two things. First, only a small portion of universities and colleges are truly selective (although all may give the impression that they are) and, second, nearly anyone can get into some college because they are so numerous. These points will be important to bear in mind as this discussion continues.

There probably would have been no objection to the use of tests in postsecondary school admissions if it had not been for one problem. Various groups defined as minority groups show different average values on IQ and achievement tests. For the purposes of this article, only one of these differences is discussed. The average difference on IQ tests between Blacks and Whites is about 15 points (Loehlin, Lindzey, & Spuhler, 1975), or one standard deviation. This difference tends to be reflected on achievement tests to about the same degree, although there is some recent evidence that the difference on some selected achievement test scores is becoming smaller. The problem, of course, is that if Blacks are to be admitted to colleges on the basis of test scores and in proportion to their frequency in the population, they will be admitted to a given academic institution with test scores one standard deviation lower than those of their White counterparts.

Has Affirmative Action Changed Admission Patterns at Colleges and Universities?

The first question that needs to be asked is if affirmative action has actually changed admission patterns for Black students. That is, are Black students admitted to the same institution with lower scores than White students? Data on this issue are difficult to obtain, but what data have been reported suggest that the answer is “yes.” Hernstein and Murray (1994) report data obtained from 26 of the most prestigious U.S. colleges for their entering classes of 1991 and 1992. They report that the difference between White and Black means on the Scholastic Aptitude Test (SAT) was 180 points, or approximately 1.3 standard deviations (Hernstein & Murray, 1994, p. 451). They also report more subjective evidence of fierce competition for qualified Black students that suggests that universities are taking their commitment to affirmative action very seriously.

If selective institutions are unable to recruit Black students with the same test scores as White students, then it is reasonable to expect that less prestigious schools will have even greater problems. It is therefore not unreasonable to predict that less prestigious schools will show differences between White and Black students as large as or larger than those shown in more prestigious schools. The conclusion, then, is that affirmative action has been taken very seriously by most postsecondary institutions. It is probably possible to make a case that universities have taken affirmative action more seriously than even the strictest interpretation of the law requires. Anyone who has spent time in a college or university in the
United States will have little difficulty accepting this conclusion. In fact, post-secondary schools, as a group, have probably embraced the goals and principles of implementation of affirmative action more than any other sector. Although I know of no data on the subject, in my opinion, affirmative action has been more fully implemented in postsecondary school admissions than in employment, housing, or most other areas in which it or similar principles could be applied.

Has Affirmative Action Changed College Completion Rates for Black Americans?

One way to judge whether affirmative action has been effective is to determine, according to the metaphor, if the gap between Blacks and Whites is becoming smaller. If affirmative action has had the effect intended, objective indicators should show it. One of the most obvious indicators would be the rate at which each group finishes college. If affirmative action has been effective, the percentage of Blacks who finish college should be increasing more rapidly than the percentage of Whites who finish college.

Figure 1 shows the percentages of Black and White high school graduates between the ages of 25 and 29 who have finished four or more years of college. The most obvious trend is that for both groups, the percentages who have completed college have increased. For both Whites and Blacks, there has been a 48% increase from 1971 to 1996. However, because Blacks have started from a lower base, the increase caused by what appears to be a secular trend affecting both groups has had a smaller absolute effect on Blacks than on Whites. The net result is that the gap between Blacks and Whites finishing four or more years of college has actually increased! In 1971, there was an 11% difference between the two groups. By 1996, that difference had grown to 17%. Although the absolute gap has increased, the relative gap has remained constant. In both 1971 and 1996, about 50% as many Blacks as Whites who finished high school completed four or more years of college. The linear trend lines fitted to the data show that for both

![Figure 1. Percentages of Black and White 25- to 29-year-old high school graduates who have completed four or more years of college (Smith, 1997, Table 22-3).](image-url)
groups, the percentage of college completion has increased, but the slope of the line is less steep for Blacks.

One interesting aspect of the data is not shown in Figure 1. Much of the increase in college completion for both Blacks and Whites can be attributed to increasing participation of women. Although percentage of both Black and White women who have completed four or more years of college has nearly doubled, the corresponding increase for men has been 25% or less.

One question that Figure 1 raises is what kind of differences should be expected solely on the basis of test scores. As mentioned earlier, it is known that Blacks score about one standard deviation lower than Whites on equivalent tests. If the simplifying assumption is made that completion of college is dependent on a fixed cutoff score on a test and nothing else, the percentages of Blacks and Whites who finish high school and who should complete college can be estimated. That is, for any given standard deviation for Whites, the equivalent standard deviation for Blacks is one standard deviation higher because the mean of score for Blacks is one standard deviation lower.

Figure 2 needs some explanation. The curve shown for Whites is the cumulative percentage of the normal distribution for any standard deviation, accumulating from high to low. This curve is based solely on the properties of the normal distribution. All IQ tests have this distribution for Whites. At a standard deviation of zero, the mean of the normal distribution, the curve has a value of 50%. The curve shown for Blacks is the identical cumulative normal distribution but offset downward one standard deviation. Standard deviation units for Blacks can be obtained by subtracting one standard deviation from the standard deviation units for Whites on the x-axis.

Figure 2, then, shows the difference in college completion rates that would be

![Figure 2](image_url)

**Figure 2.** Percentages of Black and White students who would be expected to graduate from college on the basis of the normal curve and a test cutoff score as high as or higher than a given point on the x-axis. The x-axis shows standard deviation (SD) units for Whites. Blacks’ standard deviation units would be one standard deviation higher, since the mean for Blacks is one standard deviation lower than that for Whites.
expected between Whites and Blacks if everyone above a specific IQ cutoff finished college and if IQ tests were distributed normally. Although the second assumption is somewhat incorrect, the first assumption is very incorrect. IQ is not the sole determinant of college completion, and there is no firm cutoff score above which everyone finishes college and below which no one finishes. Even so, these curves are a rough estimate of the difference expected in college completion rates for Whites and Blacks.

Figure 3 shows these differences in college completion rates. The curve shown is the cumulative percentage for Whites minus the cumulative percentage for Blacks as shown in Figure 2. The difference curve represents the expected difference for any given cutoff on the x-axis. That is, if everyone above the mean finished college, 50% of Whites and 16% of Blacks would finish and the difference would be 34%. This difference is what is plotted in Figure 3 for each of the potential cutoffs on the x-axis. As can be seen, the differences in college completion rates between Blacks and Whites would be expected to change as the cutoffs for completing college change.

It is apparent from Figure 3 that the differences in completion rates between Blacks and Whites would not be expected to decline until 68% of Whites were completing college. This corresponds to −0.46 standard deviation unit, or an IQ of about 94. This is the point at which maximal differences in college completion rates would be expected between Blacks and Whites, and that difference would be 38%. Currently, only about 34% of Whites complete college. This corresponds to a cutoff of 0.42 standard deviation unit, or an IQ of 106. The difference between Blacks and Whites for current completion levels is predicted to be about 24%. This analysis suggests that as college completion rates increase, the differences between Black and White completion rates will also increase until 68% of Whites are finishing college. Additional increases in college completion rates, if they occurred, would lead to smaller differences in college completion rates between Whites and Blacks.

![Figure 3](image-url)
Note that the actual differences between completion rates for Blacks and Whites are about half what would be expected from this consideration of the normal curve, as can be seen from a comparison of Figure 1 and Figure 3. In 1996, about 34% of White high school graduates completed college. On the basis of consideration of the normal curve alone, 8% of Black high school graduates would have been expected to complete college but, in fact, 17% did—twice the number expected from test score cutoffs. On the basis of test scores alone, it appears that Blacks are finishing college at double the rate that would be expected from test scores and always have been.

One issue that could affect the interpretation of the college completion data is the rate of high school completion. Blacks’ completing high school at a much lower rate than Whites would explain why more Blacks are finishing college than are predicted by test scores alone. In effect, high school is acting as a screen, allowing relatively more talented Blacks than Whites to enter college. Although this notion might be part of the explanation, it is unlikely to explain the whole effect. In 1971, 81% of Whites and 59% of Blacks who were 25 to 29 years old had completed high school or its equivalent. By 1996, 93% of Whites and 86% of Blacks in this age range were completing high school or its equivalent. In 1971, the Black college completion rate was 73% that of Whites, but by 1996 it had increased to 92% that of Whites. Accounting for Black–White differences in high school completion rates would adjust the Black college completion rates downward. The adjustment would not be large enough to account for the discrepancy between college completion rates based on test cutoffs and the normal curve and actual Black college completion rates.

It can be concluded that Blacks are completing college at numbers in excess of what would be predicted from test scores alone. However, even with this absolute increase in completion, the relative difference between Blacks and Whites in the rate of college completion is increasing. Further, this trend has shown no significant deviation in the 25 years of data considered. These 25 years cover a period from before affirmative action was enforced to the present. If affirmative action has made a difference, these data do not show it.

Has Affirmative Action Increased Income for Black Americans Who Complete College?

It might be argued that the effect of affirmative action has not been to improve access of minorities to higher education generally but to improve their access to selective institutions, access that had, in the past, been denied to them. If that is the case, college completion rates would be insensitive to the effects of affirmative action. Only indicators that would show the effect of obtaining a more selective education would be sensitive to the effects of affirmative action. One such variable might be income. Those who attend more selective institutions might receive a better education and, therefore, obtain higher-paying jobs on graduation.

To consider this possibility, I plotted for Blacks and Whites the median income for male year-round, full-time wage and salary workers who were between the ages of 25 and 34 and who have completed four or more years of college (Smith, 1997). Only men were considered in order to avoid any changes
in women's income that might have occurred during 1971–1996. The results are shown in Figure 4. The results are discouraging for everyone but particularly so for Blacks.

Figure 4 shows that income for male college graduates has been declining. A White college graduate between 25 and 34 years old made median salaries of $45,708 (all figures in constant 1996 dollars) in 1972 but only $39,313 in 1995, a decline of 14%. A Black college graduate in the same age range made median salaries of $41,171 in 1971 and $31,428 in 1995, a decline of 24%. The linear trend lines plotted in Figure 4 indicate the same situation. If affirmative action is working, it is working in the wrong direction. At least for male college graduates, the gap between Blacks and Whites is increasing.

Why are wages decreasing for college graduates? One possibility might be the general economic conditions producing what has been described as a transition to a service economy. However, another possibility is the law of supply and demand. The number of persons with college degrees has increased dramatically over the past 25 years. This increased supply may account for the general decline of income for those with college degrees. It does not account for the Black–White differences, though.

Is It Important to Attend a Selective College?

Does it matter what college one attends? Do people learn more at selective colleges and universities than at less selective institutions? This question is important to a consideration of affirmative action. If affirmative action is justified because it provides access to more selective institutions for minorities, then it is important to know if more selective institutions actually provide a better education. If it could be shown that students at more selective institutions show higher levels of academic achievement than students with the same test scores at less selective institutions, then there would be good reason for keeping affirmative action.
action in place. It could be argued that minority placement at more selective institutions would help correct the gap assumed in the footrace metaphor.

Anghoff and Johnson (1988) studied a sample of 22,923 students who had taken the SAT and then, at the completion of college, had taken the Graduate Record Examination (GRE). They correlated like subtests (verbal with verbal and quantitative with quantitative) and found a correlation of .86 for the entire sample. In order to determine the extent to which the quality of an institution could contribute to achievement, they did additional analyses. They used SAT-quantitative scores to predict GRE-quantitative scores. They used quantitative scores because they were most influenced by educational quality. They also included field of study, gender, and interaction components in their prediction equation. Whatever variance they were unable to predict with these variables could then be attributed to differences in institutions, other unmeasured variables, and error.

What they found was that these variables accounted for from 93% to almost 100% of the variance in GRE scores. Students who scored higher on the SAT actually had less predictable GRE scores. These findings indicated that, at most, 7% of the variance could be affected by differences in institutions. As Anghoff and Johnson (1988) put it, “The interpretation of this result is that, for a given level of initial ability, the variation in GRE-quantitative scores between students within an institution swamps the variation in scores between institutions. This might be taken to indicate that, given initial ability, individual (i.e., within-school) characteristics are much more important in determining the final GRE score than are institutional level characteristics” (p. 45). With a maximum of only 7% of the variance attributable to institutional characteristics, their conclusion would seem to be a classic case of understatement.

One might argue that students at selective institutions gain benefits not reflected in achievement tests. One class of benefits might include getting to know the “right” people, having access to the best jobs, or gaining status by attending the “right” school. These are benefits of position and privilege. Such benefits are unrelated to a student’s ability or accomplishment and are advantages that a just society would probably wish to eliminate. The other benefits that a selective institution might confer and that are not measured by achievement tests include creative thinking, better problem-solving skills, and a better sense of values. I know of no research showing that when test scores are equated, students at selective institutions have more of these or any other skills.

The finding that students accomplish what pretest scores predict strongly suggests that, at least in terms of academic achievement, it matters very little what kind of institution a student attends. What matters is the student’s ability level on admission to that institution. A student with a given test score will do as well (as measured by an academic achievement test) at a nonselective institution as at a selective one. What does this conclusion indicate about tests and their use as admission devices? It indicates that selective schools maintain their aura of selectivity by choosing the best students. The quality of instruction that a student obtains has very little to do with academic outcome. Any student will achieve equally well at any university. If students were randomly assigned to undergraduate schools, there would be little difference in outcome as measured by academic achievement.
This has to be one of the biggest cons ever perpetrated. Selective schools have convinced students that their life will end if they do not attend the "best" school. In reality, the school has developed its reputation for academic excellence only because good students go there. In the jargon of economics, selective schools add no value to the product (the student) when that product is judged in terms of objectively defined academic achievement.

Will Affirmative Action Ever Work for College Admissions?

It is clear that, at least for the measures considered here, affirmative action has not had its intended effect. Blacks are no better off today than they were 25 years ago. It might even be possible to show that they are relatively worse off, as data on college completion and income of college graduates seem to suggest. At best, affirmative action for college admissions has been inconsequential to the welfare of minorities.

It might be argued that affirmative action has not been in effect long enough or has not been vigorous enough to produce its intended results. This argument does not seem reasonable. Available data suggest that colleges are pursuing minority students with vigor. Test scores for Black students are lower than those for White students at institutions that have reported such test scores. I know of no major prosecution of a college or university for failing to abide by affirmative action. It is difficult to imagine that an improvement in enforcement could reverse the substantial trends that the data reported here show. For those who argue that affirmative action has not been implemented long enough to show its intended effects, the question is, "How long will it take?" One would expect to see at least an inkling of a positive effect in the time it has been in force. None of the data examined here show any positive trends, only negative trends.

Finally, there are good reasons to think that affirmative action for postsecondary school admissions will never work. It is well known that the gap between Blacks and Whites develops early in life. It is obvious by the age of 3 on standardized tests. It is also known that intensive intervention efforts before primary school are immediately effective but, once discontinued, show little or no lasting effect (Spitz, 1986). If such efforts early in life are ineffective, how can less intense efforts later in life have any chance of benefit?

What Should Be Done?

Affirmative action was implemented because it seemed like the right thing to do. Like most social programs, it was implemented without any data to support its effectiveness. As far as I have been able to determine, there are still no data to support its continuation. If such data are not forthcoming, the program should be discontinued. In the absence of supporting data, affirmative action for postsecondary school admissions can be regarded only as another well-meaning but misguided and ineffective social program. Too frequently, the solutions offered for social problems are based on whim and supposition, not on data. Solving any social problem requires an understanding of its origins.

Tests are not the problem with affirmative action. Tests indicate a difference between Blacks and Whites that occurs early in life and persists. Test scores indicate a problem that needs to be corrected, but the problem will not
be corrected by eliminating tests. It will only be eliminated when the source of the problem is understood and corrective action can be taken. It is imperative that the source of Black–White differences be understood. If nothing is done to understand this difference, future generations will blame present generations for inaction, as well they should. A significant portion of the population is at risk for poor academic performance, and nothing useful has been done to correct the situation.

The major goal of affirmative action has been to ensure access to higher education for all. Two facts are important to remember. First, there is a large number of U.S. colleges and universities competing for students. This observation is bolstered by the large increase for both Blacks and Whites in the number of students completing four or more years of college. Second, in terms of academic achievement, it does not matter what institution a student attends. The results will be nearly identical at any school and will be determined largely by the student’s level of ability on admission to the school.

If a concern about access to higher education remains, then my suggestion would be to require open admissions at all colleges and universities. Just as hotels and restaurants are required to offer services to anyone, with few restrictions, institutions of higher education could be required to do the same. Such a policy would certainly change the nature of higher education in the United States. The change might be for the best. Selective institutions now make their reputation on the quality of students that they admit. If they were required to have open admissions, they might pay more attention to the effectiveness of their instruction. In such a scenario, tests would become even more important. They would provide a means for institutions to validate the effectiveness of their instruction.

If society wishes to do something about Black–White differences, it should do something that will be effective. Cosmetic programs such as affirmative action in college admissions may help society feel better about the problem now, but they will not cure a problem that cries out for a solution.

References


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