

# An Issue of Numbers

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On Jan. 8, the National Collegiate Athletic Association voted overwhelmingly to ease the restriction on financial aid to entering athletes who failed to meet the academic standards required for athletic scholarships. The NCAA resolution, denominated Proposition 26, was a response to the sharp criticism of the adoption last year of the rule known as Proposition 42. Scheduled to become effective in the 1990-'91 season. Proposition 42 would prohibit NCAA member universities from providing scholarships to freshman athletes who failed to achieve a score of 700 on the Scholastic Aptitude Test and a 2.0 grade point average in a curriculum that included 11 core courses. The NCAA's recent action leaves Proposition 42 on the books, but allows member universities to provide financial assistance on the basis of need to athletes who meet only one of the academic criteria.

The opposition to Proposition 42 stemmed from what was perceived to be the harsh racial impact of the rule. It was noted that under Proposition 48- which since 1986 had prohibited academically substandard entering freshman from participating in intercollegiate athletics, although it allowed them to receive athletic scholarships- 85 percent of the affected athletes were black. In fact, in one year at schools in the Southeast, almost 95

percent of the disqualified athletes were black.

Such figures have a startling aspect to them. And it is understandable that they might influence the judgments even of educators who strongly believe in the value of academic standards for athletes and perhaps inevitable that they will receive continued attention in the debate over the wisdom and fairness of the NCAA's policies. Unfortunately, that attention will only complicate the task of the policy-makers attempting to address those issues. For, although the figures have generally been taken to mean that Proposition 48 has had an enormous racial impact, in fact, they mean just the opposite.

Statistics have shown that whites on average have performed better academically than blacks, both with respect to grades and standardized test scores. And that blacks comprise a disproportionate number of those disqualified by Proposition 48, even allowing for high black representation among college athletes, is correctly perceived as indicating that the NCAA's criteria have the same racially disparate tendencies found in numerous other contexts. But the full implications of an overwhelming black representation among the people disqualified by academic requirements, particularly the least stringent ones, are either misunderstood or ignored in the debate surrounding these programs.

If whites outperform blacks on average, assuming normal (i.e., bell-shaped) or roughly normal distributions of the scores for each group, we would expect blacks to comprise larger and larger proportions of the people at each descending scoring level. That is, for example, if the average score on a test is 80 for whites and 70 for blacks, blacks will make up a larger proportion of those scoring below 70 than they do of those scoring below 80 and a larger proportion of those scoring below 60 than they do of those scoring below 70, and so on. Consequently, when the cutoff score is set at a demanding level, there will be a relatively modest disproportionately black representation among those failing to achieve that score. However, the less demanding is the cutoff score- when only persons at the left tail of the overall distribution are disqualified- the greater will be the black representation among the persons disqualified.

In addition, the higher the cutoff score, the greater will be the disparity between the proportion of whites and blacks who pass the test, which is the usual way of measuring the racial impact of a selection procedure. Conversely, the lower the cutoff score, the closer will the proportion of blacks who pass approach the proportion of whites who pass, even as blacks come to comprise a higher proportion of the people who do not pass.

This is why judicial remedies for tests that are found to unfairly disadvantage blacks may require that the cutoff score be lowered.<sup>1</sup> The lowering of the cutoff

score causes blacks to comprise a higher proportion of those who fail the test; but the lowering of the cutoff score also causes blacks to comprise a higher proportion of those who pass the test. This occurs because the group that the lowering of the cutoff score enables to pass the test, while having a higher black representation than the group already passing, will have a lower black representation than the group still scoring below the new cutoff.

Thus, for example, suppose that 800 whites and 200 blacks take an exam and that the white mean score is one standard deviation above the black mean score.<sup>2</sup> Assuming both distributions are normal, if the cutoff is set at the white mean score, the white pass rate will be 50 percent and the black pass rate will be 16 percent, or 32 percent of the white rate; and blacks will comprise 30 percent (168 of 568) of those who fail and 7 percent (32 of 432) of those who pass. If the cutoff is lowered to two standard deviations below the white mean, the white pass rate will be 98 percent and the black pass rate will be 84 percent, or 86 percent of the white rate; and blacks will comprise 67 percent (32 of 48) of those who fail and 18 percent (168 of 952) of those who pass.

The teacher competency testing by the state of Georgia that also has received a good deal of attention illustrates the same tendency. After the ninth administration of the exam in August 1987, close to 95 percent of black teachers had passed, while the white pass rate was above 99 percent.

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440 (1982) (discussing employer's lowering of cutoff score as a form of affirmative action).

<sup>2</sup> A standard deviation is a statistical term denoting departure from the mean. When a distribution is normal, roughly 95 percent of the tested population will score within two standard deviations of the mean.

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<sup>1</sup> See *Association Against Discrimination in Employment v. City of Bridgeport*, 594 F.2d 306 (2d Cir. 1979). *Teal v. Connecticut* 645 F.2d 135, 133 n.4 (2d Cir. 1981), affirmed, 457 U.S.

The ratio of the black-to-white pass rates, at around 95 percent, would thus not have come close to violating the “four-fifths rule” (i.e., when the black pass rate is less than 80 percent of the white pass rate) that is usually used by the federal government to identify the degree of adverse racial impact that will trigger inquiry into whether a test actually measures the ability to perform a job.<sup>3</sup> Yet, it was the 75 percent (244 of 327) black representation among the small group of persons who had not yet passed the exam that received the greatest attention.

This is not to say that the courts have fully understood the matter. The U.S. Supreme Court has analyzed disparate impact cases on the basis of disparities in pass rates,<sup>4</sup> disparities in failure rates,<sup>5</sup> and disparities in both.<sup>6</sup>

The leading treatise on employment discrimination law, in summarizing the cases that have relied on differences in pass rates or differences in failure rates, has noted that the results may differ depending on which of the disparities the court examines.<sup>7</sup> What has been generally overlooked, however, is that the two disparities are inversely related.

Nor is this to say that it is entirely clear that the inquiry should focus upon disparities in pass rates in every context. For example, the disparate impact theory has been applied to the policy of refusing to hire persons with conviction records, when 5.3 percent of blacks would be disqualified compared with 2.2 percent, or half that percentage, of

whites.<sup>8</sup> Examined in terms of meeting the requirement of having no arrests, the disparity between the 94.7 percent black rate and the 97.8 percent white rate would seem trivial. This nevertheless seems to be a case when disparate impact analysis obviously should apply, as would a case where, for example, people are excluded on the basis of a medical condition affecting 5 percent of blacks but a negligible percentage of whites. Yet, it is hard to find a logical basis for distinguishing such cases from the testing cases, when the focusing upon disparities in pass rates seems so manifestly appropriate.

In any event, in the case of academic requirements such as Proposition 42, the emphasis on the racial composition of people who are disqualified faces policy-makers with a perplexing dilemma. Confronted with figures on the high black representation among the persons who do not meet the requirement, they can most easily reduce that figure by raising the standard, thereby excluding more blacks in absolute numbers, as well as increasing the racial impact as it is normally measured. There are, to be sure, sound arguments for precisely such a course, many believing that academic requirements not only are necessary, but existing ones are too lenient.

Programs for coaching those having difficulty achieving the standard will have the desirable effects of allowing more blacks to meet the standard as well as reducing the racial disparity in pass rates. But unless provided only to blacks- something that is probably not acceptable either politically or legally- such coaching, like the lowering of the standard, will only increase the black

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<sup>3</sup> Uniform Guidelines on Employee Selection Procedures, 29 C.F.R. Sec. 1607.4 (D).

<sup>4</sup> Connecticut v. Teal, supra, 457 U.S. at 444.

<sup>5</sup> Washington v. Davis, 426 U.S. 229, 246-247.

<sup>6</sup> Dothard v. Rawlinson, 433 U.S. 321, 329-330.

<sup>7</sup> Schiel and Grossman, “Employment Discrimination Law,” 100 (2d ed. 1983).

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<sup>8</sup> Green v. Missouri Pacific R.R. Co., 523 F.2d 1290, 1294-95 (8<sup>th</sup> Cir. 1975).

representation among those who are disqualified.

Measures to eliminate such cultural biases as may exist in the tests or other requirements would both diminish the racial impact and reduce the black representation among those who failed. But efforts along these lines, while warranting continued attention, have in the past proven problematic. Programs directed toward the general improvement of black academic performance relative to that of whites would also achieve both these ends simultaneously. But such programs are long-term undertakings that will little avail the administrators who must establish the policies that will promote the long-term goals.

The same features of normal distributions that cause confusion in interpreting the racial impact of academic requirements have led to misunderstandings in a variety of contexts in which the most striking aspects of the data receive unwarranted emphasis. For example, because female-headed families make up a higher proportion of each increasingly more poverty-prone segment of the population, when poverty declines, including poverty of female-headed families, female-headed families will comprise a larger proportion of the poor. Those increasing proportions often receive the greatest attention, however; and they do so without thoughtful consideration of whether there has been a true change in the relative susceptibility to poverty of female-headed families and with little recognition that their poverty rates have decreased.<sup>9</sup>

Similarly, whenever there is a general decline in infant mortality, the

ratio of the black infant mortality rate to the white infant mortality tends to increase. Yet, in calling attention to the fact that black-white infant mortality ratios were reaching all-time highs, commentators completely overlooked that at the same time black and white infant mortality rates were reaching all-time lows.

One cannot but be distressed by an overwhelmingly black representation among those failing to meet an academic standard in any context (just as one could not but be somehow distressed if almost all of the poor were in female-headed families, as would very likely be the case were we ever to verge on the elimination of all poverty). But in evaluating policies, there are useful figures and there are figures that are not so useful, and frequently the most provocative and facially distressing ones are among the latter. The sensible policy-maker must use care in distinguishing the two.

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<sup>9</sup> See Scanlan, "Poverty and Women," *Current*, May 1988, at 17.

