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A TECHNICAL LOOK AT THE EIGHTY PER CENT RULE AS APPLIED TO EMPLOYEE SELECTION PROCEDURES

*Jacob Van Bowen, Jr.**
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Introduction

In litigation under Title VII of the Civil Rights Act of 1964, statistical data has been referred to as "the only game in town."[1] This characterization only slightly overstates the importance of statistical data to prove or rebut a case of employment discrimination. In the first decade of Title VII litigation, statistical analysis in the courts was relatively uncomplicated, sometimes involving a mere recital of percentage differences or lack thereof between minority and majority classes.[2] In recent years, however, courts and Title VII litigants have begun to take a more sophisticated view of the use of statistics in Title VII litigation.[3] Since statistics can be used both

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1. Daily Labor Report No. 188 (BNA), A-10 to A-11 (1976).

2. Griggs v. Duke Power Co., 401 U.S. 424 (1971) represents the major shift toward heavy emphasis and reliance on statistical data in employment discrimination cases. *Griggs* focuses on the actual impact of employment practices and emphasizes strict scrutiny of race, sex, and ethnic ties in analyzing discrimination against employees of a given work force or general population class. *Griggs* establishes that employer practices which have an adverse impact on minorities and are not justified by business necessity constitute illegal discrimination under Title VII. *See also* EEOC v. Detroit Edison Co., 515 F.2d 301 (6th Cir. 1975), *aff'g.*, United States v. Detroit Edison Co., 365 F. Supp. 87 (E.D. Mich. 1973) (holding that statistical data which shows there is a substantial disparity between the race, sex, or ethnic composition of the general population and the race, sex, or ethnic composition of the employer's work force is sufficient evidence to establish plaintiff's prima facie case); Erie Human Relations Comm. v. Tullio, 493 F.2d 371 (3d Cir. 1974); U.S. v. Chesapeake & Ohio Ry. Co., 471 F.2d 582 (4th Cir. 1972), *cert. denied,* 406 U.S. 906 (1972); U.S. v. Carpenters and Joiners Assoc., Local 169, 457 F.2d 210 (7th Cir. 1972), *cert. denied.*, 411 U.S. 939 (1973); U.S. v. St. Louis - San Francisco Ry. Co., 464 F.2d 301 (8th Cir. 1972), *cert. denied,* 409 U.S. 1107 (1973); U.S. v. Navajo Freight Lines, 525 F.2d 1318 (9th Cir. 1975).

3. *See* Hazelwood School District v. United States, 433 U.S. 299 (1977). In *Hazelwood,* various school officials were charged with engaging in a pattern or practice of teacher employment discrimination. In the years 1972-73 and 1973-74, it was shown that only 1.4 per cent and 1.8 per cent of Hazelwood's teachers were Black compared to 15.4 per cent of the relevant labor market area of St. Louis County and City. When this was viewed against the back-

to support and to rebut allegations of discrimination, it is important that any data offered be statistically and logically valid.

One test used to determine whether particular employee selection procedure has an adverse impact on members of a protected class is the so-called "eighty per cent rule" which provides:

> A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty per cent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact.[4]

This rule was jointly issued on August 25, 1978, by four federal agencies as part of the Uniform Guidelines on Employee Selection Procedures.[5] This rule will be used by the Equal Employment Opportunities Commission,[6] by the Department of Justice in exercising its responsibilities under federal law,[7] by the Civil Service Commission in application of Section 717 of the Civil Rights Act of 1964, as amended, as it applies to federal agencies and in application of

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ground of Hazelwood's teacher hiring procedures, it was held to constitute a prima facie case of pattern or practice of racial discrimination by the Court of Appeals.

The Supreme Court ruled in favor of the Court of Appeals' selection of labor markets for comparison, but held that the court erred in disregarding the possibility that the prima facie statistical proof might be rebutted at the trial court level by statistics dealing with Hazelwood's post-Title VII hiring practices. For example, the Court stated that comparison of the number of Blacks hired compared to the total number of Black applicants might be relevant. The Court reaffirmed its belief that statistics are an effective means of establishing a pattern or practice of discrimination. However, citing International Brotherhood of Teamsters v. U.S., 431 U.S. 324 (1977) (a decision in which the Court considered the role of statistics in pattern or practice suits and offered substantial guidance in the use thereof), the Court strongly emphasized that: "Statistics . . . come in infinite variety. . . . Their usefulness depends on all of the surrounding facts and circumstances." 433 U.S. at 312. For application and analysis of both *Teamsters* and *Hazelwood,* see Presseisen v. Swarthmore College, 442 F. Supp. 593 (E.D. Pa. 1977).

4. 43 Fed. Reg. 38297 (1978).

5. Prior to issuance of the uniform guidelines in 43 Fed. Reg. 38290 (1978), two sets of guidelines existed along with an abundance of principles and orders.

6. It is significant that the EEOC has joined with the three other agencies in issuing the above Guidelines. This is the first time the EEOC has put its stamp of approval on a set of uniform guidelines. Prior documents and guidelines for employers issued separately by the EEOC are published at 29 CFR 1607 (1977).

7. Previously, the Department of Justice had not formally set forth its policy in such matters.

Section 208(b)(1) of the Intergovernmental Personnel Act concerning responsibilities toward state and local governments,[8] and by the Department of Labor in exercising its responsibilities under Executive Order 11246 as it applies to government contractors and subcontractors.[9]

Under the so-called eighty per cent rule, any selection procedure which results in a selection rate for a protected class of less than four-fifths of the selection rate for the majority class is regarded as having an adverse impact on the members of the protected class. Any selection procedure which has an adverse impact on a protected class is considered to be evidence of discrimination under the Guidelines unless the procedure is validated[10] or otherwise acceptable under the regulations.

Since plaintiffs in Title VII litigation are permitted to establish a "prima facie case" of discrimination by showing disparate treatment, *i.e.*, an adverse impact on a protected class in some aspect of employment, a test which purports to definitively establish adverse impact can be of major significance.[11] Recently, parties to court litigation have attempted to utilize this four-fifths or eighty per cent test to prove or disprove discrimination.[12] Thus, it is an appropriate

8. Former guidelines of the agency are published at 5 CFR 300.103(c) (1977).

9. Former guidelines of the agency are published at 41 CFR 60-3 (1977).

10. Validation is defined as a process whereby one determines whether the test at issue is related to the job for which it is used. For further explanation of the concept, *see* Schlei & Grossman, EMPLOYMENT DISCRIMINATION LAW (1976).

11. Once a Title VII plaintiff has submitted evidence establishing a prima facie case, the burden shifts to defendant to rebut plaintiff's prima facie case by articulating some legitimate, non-discriminatory reason for its treatment of plaintiff. The test for establishing a case of prima facie employment discrimination consists of the following elements:

> (i) that [an individual] belongs to a racial minority; (ii) that he applied and was qualified for a job for which the employer was seeking applicants; (iii) that, despite his qualifications, he was rejected; and (iv) that, after his rejection, the position remained open and the employer continued to seek applicants from persons of complainant's qualifications.

See McDonnell Douglas Corp. v. Green, 411 U.S. 792, 802 (1973).

12. In two recent cases, Brown v. Schlesinger, Civil Action No. 74-0202-R (E.D. Va. 1977) and United States v. Virginia State Police, Civil Action No. 76-0623-R (E.D. Va. 1978), the United States Department of Justice has attempte to utilize the eighty per cent rule. In *Brown*, the U.S. government was the defendant regarding employment practices at an agency within the U.S. Department of Defense and was prepared by use of the eighty per cent rule to prove the lack of discriminatory procedures for promotional selections and for selection of clerical applicants. *Brown* was settled after the conclusion of plaintiff's case and without

time to closely examine the rule's validity and applicability to Title VII litigation. Courts must be very careful before automatically adopting any rule which may be of worth only for the administrative convenience it provides the governmental agencies adopting it.

It is the position of this article that the four-fifths or eighty per cent rule is not statistically valid and should not be used because it does not apply consistently to all employers. Even the Guidelines recognize that the rule has limitations, providing:

> Greater differences in selection rate may not constitute adverse impact where the differences are based on small numbers and are not statistically significant, or where special recruiting or other programs cause the pool of minority or female candidates to be atypical of the normal pool of applicants from that group.[13]

The eighty per cent rule produces different results depending on variables in the percentage of minorities in the relevant labor pool and in the number of selections made. Neither courts nor governmental agencies should utilize a rule which has different application to different employers based on factors totally extraneous to issues of discrimination. In place of the eighty per cent rule, this article offers a consistent rule based on binomial distribution which makes use of the standard deviation. A statistical approach similar to that recommended has been accpeted by the Supreme Court as statistically valid in *Hazelwood School District* v. *United States.*[14] Because the so-called eighty per cent rule does not treat all employers equally, the rule should be rejected in favor of a more consistent rule as proposed herein.

Application of the Eighty Per Cent Rule

The eighty per cent rule is one which is applied to hiring and/or promotion processes in which the selection rate for a given class, *i.e.* the minority class, is compared to the selection rate for another

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judicial resolution of whether the eighty per cent rule is a valid statistical approach in litigated cases.

13. 43 Fed. Reg. 38290.

14. 433 U.S. 299 (1977). *See also* Shoben, *Probing the Discriminatory Effects of Employee Selection Procedures with Disparate Impact Analysis Under Title VII,* 56 TEXAS L. REV. 1 (1977).

class, *i.e.* the majority class. If the ratio of the selection rate for a minority class to the selection rate for the majority class is less than eighty per cent, there is automatically thought to be adverse impact, and the employer is required, under the Guidelines, to validate or discard the selection process. The burden of validation can be costly as well as impossible in at least some cases.[15] If the ratio of the selection rates is not less than four-fifths, there is no validation requirement absent special circumstances.

There are several variables which can cause the rule to have an unequal impact on employers. The two principal variables are the total number of selections being made and the relative size of the majority class. Another variable which must be considered is the relative size of the qualified applicant pool.

Before we can describe the manner in which the eighty per cent rule is not an equally stringent test for determining adverse impact, it is necessary to adopt consistent definitions for two terms: "statistically adequate employer" and "consistent rule."

> Definition 1: A "statistically adequate employer" is one who uses the same rule every time, which rule, if used repeatedly for a very large number of selections, would produce the same proportion of minorities in the job classification as that proportion of the minorities in the pool from which selections are made.
> Definition 2: A "consistent rule" is one which will have the same likelihood of requiring validation (*i.e.*, indicating adverse impact) for every statistically adequate employer.

The question which must first be addressed is the level of consistency in Definition 2 to be sought. For purposes of this article, the figure of five per cent has been chosen as the maximum permissible deviation. Statisticians use the five per cent figure most often and refer to it as the ninety-five per cent level of significance.[16] Similar

15. The tenure process in universities is but one example. Validation of the tenure process would tend to establish that there is no consistent pattern of differential treatment for class members, assuming that the factors considered are job related. Tenure decisions made by differently selected committees in departments which place different emphasis on publication, research and teaching ability would have to be numerous to establish any pattern and even more numerous to establish no consistent pattern for a small class.

16. 88 HARV. L. REV. 1610 (1975). *See also* 89 HARV. L. REV. 387, 400 n. 58 (1976).

charts and tables could be made for any value selected, but the conclusions stated below would be the same.

One way to describe the manner in which the eighty per cent rule is more harsh on the statistically adequate employer in some cases than in others is to calculate the likelihood that such employers would fail the test (eighty per cent rule) for adverse impact. In Table I, N is used to denote the number of selections made and "p" denotes the majority proportion of the selection pool. The tabular entry is the chance that the eighty per cent rule would indicate adverse impact for an employer which is a statistically adequate employer. The following appendices illustrate application of the eighty per cent rule and provide guidelines which will hopefully prove useful to attorneys analyzing Title VII problems.

APPENDIX A

An examination of Table I clearly indicates that two statistically adequate employers having different numbers of selections (N) or having a different majority component of the selection pool also have different chances of failing the test for adverse impact.

> *Example 1:* Consider two statistically adequate employers. Suppose that one employer makes 50 selections from a pool having 65% majority class membership. Its chance of failing the test for adverse impact is .23. On the other hand another employer making 25 selections from a pool having 80% majority class membership has a .34 chance of failing the test for adverse impact.

Conclusion 1: The Eighty Per Cent Rule is not equally stringent. Note how the tabular entries increase as the number of selections (N) is decreased. Also the entries increase if "p" (the majority proportion of the pool) is increased.

Conclusion 2: The Eighty Per Cent Rule is a more stringent test for those employers who make fewer selections, and it is harsher on those who make selections from pools which have larger proportions of majority class members.

Another way to examine this issue is to develop a rule which would provide equal chances under varying conditions. If five per cent is chosen as the level of permissible error (the chance of requiring validation of the selection process when it should not be required), the following formula can be used to provide a consistent rule.

$R = A/(A + 1.645)$; where $A = Np(1 - p) - 1.645\,p$, N is the number of selections and "p" is the majority proportion of the pool. The value of R obtained from the equation is the number which should replace .80 in the Eighty Per Cent Rule in order to produce a *consistent rule.*

APPENDIX B

Chart I indicates various values of R under varying conditions so that R can be read from the chart rather than calculated from the formula.

Example 2: Consider an employer who has made 50 selections from a pool composed of 75% majority class members.

$A = 50(.75)(.25) - 1.645(.75)$

$A = 3.06 - 1.24$

$A = 1.82$

$R = 1.82/(1.82 + 1.645)$

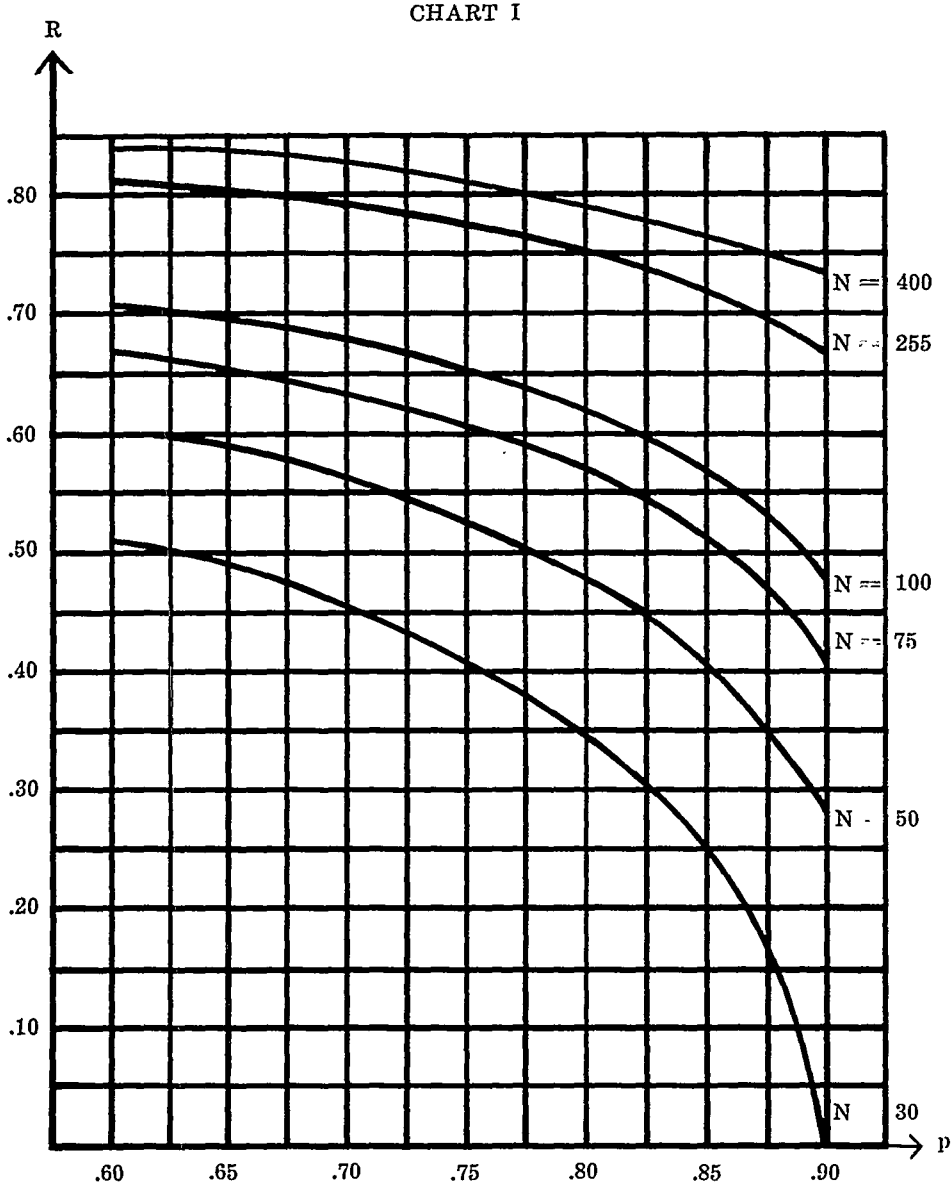
$R = .524$ or about .52.

We also note that $R = .52$ can be read from Chart I.

In Example 2 we found $R = .52$. This means that if the 52% rule is used in place of the 80% Rule it would provide a 5% chance of the statistically adequate employer failing the (52% Rule) test for adverse impact. We also note that using the R obtained in this manner would produce an equally stringent test under varying conditions.

The assumptions which have been made for all of the calculations in this work require that the number of members of each class of the selection pool should be sufficiently large to fill all of the N positions. In cases where there are only a few class members or where the number of selections is small there is no (statistical) rule appropriate for use.

CHART I



p: the proportion of majority in the selection pool
N: the number of selections made
R: the number which should replace .80 in the 80% Rule

TABLE I

Probability of Requiring Validation for a Statistically Adequate Employer

# Selections	Population Proportions for the Majority Class						
N	.60	.65	.70	.75	.80	.85	.90
15	.340	.345	.353	.362	.373	.388	.406
20	.317	.323	.331	.342	.355	.371	.392
25	.297	.304	.313	.324	.338	.356	.380
30	.280	.287	.296	.309	.324	.343	.369
35	.264	.272	.282	.295	.311	.331	.358
40	.250	.258	.269	.282	.299	.321	.349
45	.237	.246	.256	.270	.288	.311	.340
50	.226	.234	.245	.259	.278	.301	.332
55	.215	.223	.235	.249	.268	.292	.325
60	.205	.213	.225	.240	.259	.284	.317
65	.195	.204	.216	.231	.251	.276	.311
70	.186	.195	.207	.223	.243	.269	.304
75	.178	.187	.199	.215	.235	.262	.298
80	.170	.179	.191	.207	.228	.255	.292
85	.163	.172	.184	.200	.221	.248	.286
90	.156	.165	.177	.193	.214	.242	.281
95	.149	.159	.171	.187	.208	.236	.275
100	.143	.152	.165	.181	.202	.231	.270
125	.117	.126	.138	.154	.176	.205	.247
150	.096	.104	.116	.132	.154	.183	.226
175	.079	.087	.098	.114	.135	.165	.209
200	.066	.073	.084	.098	.119	.149	.193
250	.046	.052	.061	.075	.094	.122	.166
300	.032	.038	.045	.057	.074	.101	.144
350	.023	.027	.034	.044	.059	.084	.126
400	.016	.020	.025	.034	.048	.070	.110
450	.012	.015	.019	.026	.038	.059	.097
500	.008	.011	.014	.021	.031	.050	.085

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