Spring 1980

In Defense of Disparate Impact Analysis Under Title VII: A Reply to Dr. Cohn

Elaine W. Shoben
University of Illinois College of Law

Follow this and additional works at: http://www.repository.law.indiana.edu/ilj

Part of the Civil Rights and Discrimination Commons, and the Labor and Employment Law Commons

JEROME HALL LAW LIBRARY
INDIANA UNIVERSITY
Maurer School of Law
Bloomington

In Defense of Disparate Impact Analysis Under Title VII: A Reply to Dr. Cohn

ELAINE W. SHOBEN*

The preceding article by Dr. Richard M. Cohn[1] concerning the use of statistics in Title VII[2] employment discrimination cases makes three basic points. First, Cohn rejects the methods used to assess disproportionate differences between groups on tests, such as ability tests. He finds fault both with the approach of the Uniform Guidelines on Employee Selection Procedures[3] and with the method based on finding statistical significance that I have advocated.[4] Second, he also rejects the approach courts have adopted for evaluating the relative exclusion of groups defined by race, sex, or national origin in the employer's work force. He argues that this method of comparing the composition of the employer's work force to the relevant labor pool is an inaccurate probe of whether discrimination has occurred. Finally, Cohn offers an alternative method for analyzing employment records which he believes should more accurately detect discrimination.

In each of these sections Cohn's analysis reflects a fundamental misunderstanding of the legal questions involved. First, his objection to my use of statistical inference in testing situations is grounded in his confusion as to the population about which the court seeks information.[5] The court needs evidence on all individuals who could take the test, such as an aptitude test, both now and in the future. Information concerning those individuals who took the test at one particular administration does not probe that legal question concerning future possible test-takers. Similarly, Cohn's objection to the population comparison approach used in Title VII cases is based on his misunderstanding of the definition of discrim-

---

[1] Cohn, *On the Use of Statistics in Employment Discrimination Cases,* 55 IND. L.J. 493 (1980).

[2] 42 U.S.C. §§ 2000e, 2000e-1 to -17 (1976). Cohn's article does not specifically identify what employment discrimination law he is addressing, but his references suggest that he is concerned with Title VII. As to the relevance of Cohn's methods to constitutional employment discrimination claims, see note 71 *infra.*

[3] 43 Fed. Reg. 38,290 (1978).

[4] Shoben, *Differential Pass-Fail Rates in Employment Testing: Statistical Proof Under Title VII,* 91 HARV. L. REV. 793 (1978).

[5] See notes 10-34 & accompanying text *infra.*

ination as articulated by the Supreme Court.[6] Discrimination may be found under Title VII if selection procedures have the effect of disproportionately excluding a group covered by the Act, regardless of the employer's good faith, unless the employer can meet the burden of showing the job-relatedness of the procedures. Cohn's criticisms and his alternative model both reflect his apparent assumption that it is only intentional discrimination or unequal treatment of similarly situated individuals that are prohibited types of discrimination. His suggested focus on the differences in rate of hire by race or sex of those individuals who actually pass the selection procedures is especially indicative of his assumption. He would ask, for example, what are the selection rates of individuals who have already satisfied an educational requirement? The Supreme Court, in *Griggs v. Duke Power Co.,*[7] has endorsed a much broader definition of discrimination under Title VII; it is the impact of the selection procedures themselves, such as an education requirement, on the actual and potential applicants that is at issue. If there is an adverse impact, and if the employer cannot validate the requirement, it is a violation of the Act.[8] Quantitative evidence must be used responsively to the legal issues. To use quantitative evidence otherwise is to allow the method of proof to reshape the issues.

This reply contends that Cohn's arguments are based on a misunderstanding of the legally relevant questions under Title VII and thus that he proposes the use of particular quantitative methods that provide answers to the wrong questions.[9] The exceptions that this reply takes with each of the three sections of Cohn's article are not concerning any disagreement over statistics. To the contrary, we are in perfect agreement as to the underlying assumptions that must be met with situations using statistical inference. Rather, our disagreements revolve around questions of law and logic.

DIFFERENCES IN TEST PASS RATES: DEFINING THE "POPULATION"

Cohn addresses in the first part of his article the use of statisti-

---

[6] See notes 53-58 & accompanying text *infra.*

[7] 401 U.S. 424 (1971).

[8] *Id. See also* Dothard v. Rawlinson, 433 U.S. 321 (1977); Albemarle Paper Co. v. Moody, 422 U.S. 405 (1975).

[9] See notes 64-71 & accompanying text *infra.*

cal inference in evaluating differences in pass rates between two groups, such as blacks and whites, on employee selection procedures. He asserts that it is inappropriate to use statistical inference in such situations because the data being analyzed represent the entire population (statistical population) in question, not just a sample of the population.[10] If this assertion were correct, then we would be in agreement that an analysis based on statistical inference, such as the use of the test for the difference between independent proportions that was advocated in my article on the subject, would be inappropriate.[11] Our disagreement therefore concerns only the question of how to define "population" in employee testing situations. Cohn's limited definition is both unresponsive to the relevant legal question and unrealistically narrow scientifically as well. The population must be defined to include future applicants as well as present ones.

In statistics a population is the set of people or items in which one is specifically interested.[12] The population could be all Americans in a particular age group, all residents of a state, all persons with a particular physical characteristic, or the like. A sample is simply a subset of that larger set; a random sample is a sample selected from the population in which every member of the population has an equal chance of being included in the sample and selections for the sample are independent.[13] Statistical inference requires the assumption that the sample being studied is representative of the population, and one procedure for meeting this assumption is random sampling.[14]

In some employment discrimination situations the data being examined are population data, not sample data. For example, if the court wants to know whether more white males than black males have completed high school in one state, the census table gives an exact count of all the people in the specified population, namely white and black males in that state.[15] If the court wants to

---

[10] Cohn, *supra* note 1, at text preceeding n.9.

[11] *See* Shoben, *supra* note 4, at 798.

[12] *See* H. BLALOCK, SOCIAL STATISTICS 5-7, 109-10 (2d ed. 1972); A. EDWARDS, STATISTICAL METHODS 15 (3d ed. 1973); L. HOROWITZ, ELEMENTS OF STATISTICS FOR PSYCHOLOGY AND EDUCATION 156-57 (1974); G. SNEDECOR & W. COCHRAN, STATISTICAL METHODS 4, 29-30 (6th ed. 1967); A. STUART, BASIC IDEAS OF SCIENTIFIC SAMPLING 10 (3d ed. 1968).

[13] *See, e.g.,* L. HOROWITZ, *supra* note 12, at 158; G. SNEDECOR & W. COCHRAN, *supra* note 12, at 10, 29.

[14] *See, e.g.,* L. HOROWITZ, *supra* note 12, at 159-60; A. STUART, *supra* note 12, at 11.

[15] This was the approach appropriately used by the Supreme Court in Griggs v. Duke Power Co., 401 U.S. 424, 430 n.6 (1971).

know whether more men than women over the age of eighteen in the United States are taller than five feet two inches, a precise count is available.[16] Statistical inference is inappropriate in such circumstances because the question asked has already been fully answered by the data.[17] Similarly, if the court wants to know the effect of a discontinued employee selection procedure, such as a one time exam for promotion, then the population in question would be all those who had taken the exam and data on the entire population are available.

Cohn maintains that any employee selection test, including ones with on-going administration, defines a separate population every time or small group of times the test is given.[18] He thus argues that it is inappropriate to use statistical inference to infer the characteristics of a larger group because the data being examined represent the results for the entire population. This conclusion does not comport either with the relevant legal question or with logic, however. If the court wants to know whether more whites than blacks pass a test among those who have taken or could take the test, then the population cannot be defined as only those who have taken the test in one narrow time frame. The population must be defined as those who have taken or could take the test, because that is the set of people in which the court is interested. In class actions, the class is typically defined as "all present and future applicants" to the defendant employer, thus defining the population to be considered by the evidence.[19]

Once the population is defined as all those who have taken or could take the test, the next question is whether the particular group of people who happened to take the test at one particular time are a representative sample of the population. There may be

---

[16] This was the approach appropriately used by the Supreme Court in Dothard v. Rawlinson, 433 U.S. 321, 329-30 (1977). *See also* Boyd v. Ozark Air Lines, Inc., 568 F.2d 50, 52 n.1 (8th Cir. 1977); Vanguard Justice Society, Inc. v. Hughes, 471 F. Supp. 670, 710 (D. Md. 1979); United States v. Virginia, 454 F. Supp. 1077, 1088 (E.D. Va. 1978).

[17] See discussion in Shoben, *supra* note 4, at 797-98. For examples and further discussion, see Shoben, *Probing the Discriminatory Effects of Employee Selection Procedures with Disparate Impact Analysis Under Title VII,* 56 TEX. L. REV. 1, 33-36 (1977).

[18] Cohn, *supra* note 1, at n.10 & accompanying text.

[19] *See, e.g.,* United States Fidelity & Guar. Co. v. Lord, 585 F.2d 860, 861 (8th Cir. 1978), *cert. denied,* 440 U.S. 913 (1979); Long v. Sapp, 502 F.2d 34, 43 (5th Cir. 1974); Louisville Black Police Officers v. City, 20 Fair Empl. Prac. Cas. (BNA) 1195, 1197 (W.D. Ky. 1979); Wofford v. Safeway Stores, Inc., 78 F.R.D. 460, 471 (N.D. Cal. 1978); Harriss v. Pan Am. World Airways, Inc., 74 F.R.D. 24, 40 (N.D. Cal. 1977). *See also* Boyd v. Ozark Air Lines, Inc., 568 F.2d 50 (8th Cir. 1977) (only future applicants certified as class, not including past applicants).

factors that affect the randomness of the sample because the members of the sample are self-selected; among all the people who could apply for a job with the defendant employer at one particular time, this group self-selected themselves to apply. The recruitment policies of the defendant can also severely affect the representativeness of the sample of applicants from among all those who could apply.[20] These are considerations of randomness, however, and do not challenge the basic question of what constitutes the population in question.

Cohn's argument that the population must be limited to those who take the exam at one time is supported solely by his assertion that there cannot be any larger group in question because there is no known probability by which others may become a part of the sample.[21] Although it is true that most members of the population will never apply, the sampling requirement is only that each member of the population have a known probability of being included in the sample,[22] and that probability is assumed to be equal in employment discrimination cases. In any given year any individual in the relevant labor pool is presumed equally likely to apply for a job with the defendant.[23] The self-selection process that causes some individuals to apply that year and not others makes the sample haphazardly compiled, but a sample nonetheless.[24] The group in which the court is interested is still the larger group of all those who could apply.

If information about actual applicants is unavailable or is too

---

[20] *See, e.g.,* Dothard v. Rawlinson, 433 U.S. 321, 330-31 (1977); International Bhd. of Teamsters v. United States, 431 U.S. 324, 365-67 (1977).

[21] Cohn, *supra* note 1, text between nn. 8 & 9.

[22] *See, e.g.,* L. HOROWITZ, *supra* note 12, at 158; G. SNEDECOR & W. COCHRAN, *supra* note 12, at 10, 29.

[23] This assumption is implicit in the Supreme Court's assertion that "absent explanation, it is ordinarily to be expected that nondiscriminatory hiring practices will in time result in a work force more or less representative of the racial and ethnic composition in the community from which employees are hired." Hazelwood School Dist. v. United States, 433 U.S. 299, 307 (1977) (quoting International Bhd. of Teamsters v. United States, 431 U.S. 324, 340 n.20 (1977)). *See also* Dothard v. Rawlinson, 433 U.S. 321, 330-31 (1977).

[24] *See* note 12 *supra. See also* L. KISH, SURVEY SAMPLING (1965), *cited in* Cohn, *supra* note 1, at n.4. Kish's text, best suited for attitudinal surveys, rejects as inadequate all forms of sampling except probability sampling based upon a mechanical procedure. *Id.* at 26. Kish recognizes, however, that more haphazard forms of sampling, such as use of volunteers, are indeed samples (not populations as Cohn apparently argues) with poor controls for representativeness. *Id.* at 19. Kish even acknowledges that great advances in the most successful hard sciences have occurred without mechanical probability sampling, and that the social and biological sciences routinely rely on haphazard sampling, usually out of necessity. *Id.* at 28-29.

unreliable to be considered a representative sample of the popula-
tion, the approach in Title VII cases is to compare the composition
of the employer's work force with the composition of the surround-
ing community. This approach, recently sanctioned by the Su-
preme Court in *United States v. Hazelwood School District*,[25] is
based on the same logic that samples are drawn from larger popu-
lations. The underlying assumption in this community composition
comparison approach is that the employer's work force is the prod-
uct of several samples drawn from the population of available
workers with appropriate skills from a relevant geographic area. It
is assumed that over time the composition of an employer's work
force will not deviate greatly from the composition of the sur-
rounding community if it is true that the selection processes do not
have a discriminatory effect on any group.[26] Phrased statistically,
the inquiry is whether the sample (the employer's work force) is an
unbiased one taken from the defined population whose characteris-
tics are already known (composition by race, sex, or national ori-
gin). If the composition of the sample deviates from the population
more than would be expected by chance alone, then it is assumed
that the selection of the sample was biased by the selection proce-
dures used by the employer.[27] Legally, then, the burden shifts to
the employer to show the business necessity of those procedures.[28]

Both of these methods of analysis in Title VII cases—examining
the pass rates of applicants or comparing the composition of the
work force with that of the relevant labor pool—are concerned
with answering the legal question as defined by the Supreme
Court. That question is whether the employer has engaged in prac-
tices that have the effect of disproportionately excluding a group
covered by the Act. The question in such cases is not whether sev-
eral *individuals* have been wrongfully excluded, but whether the
larger group to which the plaintiffs belong is adversely affected by

---

[25] 433 U.S. 299 (1977).

[26] *Id.* at 307.

[27] In *Hazelwood* the Court refers specifically to the use of inferential statistics. *Id.* at 308-
09 n.14. In doing so, the Court relies upon a jury discrimination case it had recently decided
in which inferential statistics were also employed. Castaneda v. Partida, 430 U.S. 482, 496-
97 n.17 (1977). For an explanation of the statistical technique used, see Finkelstein, *The
Application of Statistical Decision Theory to the Jury Discrimination Cases*, 80 HARV. L.
REV. 338 (1966). For a discussion of the appropriate use of this technique for discrimination
cases, see Shoben, *Book Review*, 59 B.U. L. REV. 582, 585-89 (1979).

[28] Dothard v. Rawlinson, 433 U.S. 321, 329 (1977); Albemarle Paper Co. v. Moody, 422
U.S. 405, 425 (1975); Griggs v. Duke Power Co., 401 U.S. 424, 432 (1971).

the procedures.[29] It is thus appropriate in class actions for courts to define the represented class as including not only present applicants or employees, but future applicants or employees as well.[30] It is precisely this larger group that is at issue.

Given that the relevant legal question to be addressed concerns a broadly defined population, both academicians and advocates can then quarrel over whether particular statistical techniques are more accurate than others. Also critical is the problem with the self-selection of individuals into the applicant process, making the sample biased by self-selection factors.[31] The impracticality of a court requiring a mechanized random selection must be considered.[32] Cohn specifically says that his comments do not go to these questions.[33] His position is that methods of statistical inference are inappropriate only because the applicants in one time frame alone constitute the population and that they cannot be considered a sample of a larger group.[34]

Cohn's position is not only unresponsive to the legal question to be addressed, but it is also not logical that the population must be so narrowly defined. As an example, consider the following problem in defining populations. Assume that a drug manufacturer has discovered a new drug to cure strep throat that was designed to effect a cure faster than penicillin. Assume that this new drug was given to a group of strep throat sufferers who volunteered to try it. A control group of strep throat patients was given penicillin as usual. The results of the experiment showed that one hundred percent of the people who took the new drug were cured after three days whereas no one in the control group taking penicillin recovered in that time. Does the new drug effect a cure for strep throat faster than penicillin?

---

[29] Questions of discrimination against the individual under Title VII are analyzed in accordance with McDonnell Douglas Corp. v. Green, 411 U.S. 792 (1972). The Supreme Court has carefully distinguished between such individual claims of disparate treatment and class-based claims of disparate impact. In an individual claim of disparate treatment the plaintiff must prove purposeful discrimination against him. On the other hand, a plaintiff bringing a disparate impact claim need only prove, for a prima facie case, the proportionate impact of facially neutral employment policies, and need not prove that the defendant intended to discriminate. International Bhd. of Teamsters v. United States, 431 U.S. 324, 335 n.15 (1977).

[30] *See* cases cited note 19 *supra.*

[31] *See* notes 14 & 20 *supra.*

[32] See discussion of practicality and non-mechanized sampling in note 24 *supra.*

[33] Cohn, *supra* note 1, at n.9.

[34] *Id.* at text preceeding n.9.

The problem in this example is how to define the population.[35] The question which the scientific community will want answered is whether the new drug effects a cure faster for strep throat patients both now and in the future. The individuals in the experiment are a sample of this population of strep throat patients, even though obviously no future patients could have been selected for the sample. Scientists can then use an appropriate statistical test to determine whether the favorable result in the experiment was statistically significant. If so, then the drug is suitably distributed for use by both present and future strep throat patients, and medical science has progressed.

Cohn's analysis, however, suggests that he rejects this kind of scientific inquiry because it is not possible to include future strep throat patients in the sample.[36] This particular approach, which is better suited to attitudinal surveys than to science, provokes a discussion of all the possible ways to define the population in this example and, by analogy, in testing situations in employment discrimination cases.

In the strep throat drug example there are conceivably three ways of defining the population in question: (1) the actual people in the experiment only; (2) all people who had strep throat exactly at the time of the experiment; and (3) all people who had strep throat at the time of the experiment *and* those who may contract it in the future. This third group could be described as the public at large because everyone is susceptible to the infection. If the population is defined as only those who were in the experiment, then the entire population is represented in the data and the question concerning whether the drug effected a cure faster than penicillin can be answered as yes; among those in the narrowly defined population, the new drug worked faster. This information is useless with respect to anyone else, however, because the population does not include anyone who may take the drug in the future. No conclusions about the effectiveness of the drug on others could be made and the drug should not be marketed.

The population could be defined as all those who had strep throat exactly at the time of the experiment. The people in the experiment could then be called a sample of the larger population of people who could have been in the experiment. The fact that the sample was self-selected (volunteers) poses a question concern-

---

[35] For a statistical definition of "population" see note 12 & accompanying text *supra.*

[36] Cohn, *supra* note 1, at text accompanying nn.5-13.

ing whether this sample is biased, but the people in the experiment would have to be called a sample nonetheless.[37] It is necessary to use inferential statistics to decide whether the result shown in the sample was likely to happen by chance alone even if the new drug is really no more effective than penicillin. If the result of the statistical analysis is significant,[38] then it can be concluded that the new drug works faster on people who currently have strep throat. Limited marketing to that group would be appropriate, but not to anyone who contracted strep throat after the time of the experiment.

The question that the experimenter would obviously want to have answered is whether the drug is effective among all those people who currently have or may contract strep throat. The population must thus be broadly defined because it is that large group in which the investigator is interested. Do the results from the experiment reveal anything about the population thus defined? Inferential statistics can be used to make a conclusion about this population if the sample is adequately representative of the population. Problems of sampling bias now appear in two ways; the self-selection problem again must be considered, as well as the problem that those who currently have strep throat may somehow differ from future strep throat patients. These problems of bias must be considered and weighed along with problems of policy and practicality in deciding whether the inference from this sample is justified. If it is, then an appropriate statistical test should be chosen and analysis conducted to see if the result is significant.

In a Title VII case, the court is faced with the question that the scientific experimenter has in the example, namely how to draw inferences about the population as defined as present applicants as well as potential applicants.[39] Cohn's approach would suggest that neither the scientist nor the court can draw conclusions about the broadly defined populations, because future strep throat patients or future applicants to an employer could not have been in the sample groups. This approach is really based upon an objection to

---

[37] *See* notes 21-24 & accompanying text *supra*.

[38] The level of "statistical significance" refers essentially to how certain an investigator wants to be that a difference found in a sample might not have occurred by chance alone even if there is no difference in the unknown population. Social scientists often adopt a five percent level of significance, meaning that there is no more than one chance in twenty that the difference appearing in the sample could have happened by chance alone even if there is no difference in the population. For a more extensive discussion, see L. HOROWITZ, *supra* note 12, at 156-65.

[39] Compare the definition of the class typically used in Title VII cases as including future applicants or employees. See note 19 *supra*.

the bias in the sampling process. The court has already defined the group in which it is interested, so that group must be the population. If there is so much bias in the sampling process that no conclusions can be drawn about the population, then nothing can be said in answer to the question asked. Cohn suggests that a totally different question should be answered instead; namely, was the test passed at a greater rate by one group in one time frame only?[40] The answer to this question is as irrelevant to the question asked by the court as focusing only on the strep throat experimental group would be to the scientist. As to whether there is too much bias in the sampling process to draw conclusions, social and medical science can rarely enjoy mechanized random sampling.[41] Issues of policy and practicality must be considered in evaluating the sampling process, or else relevant questions can never be answered in these fields.

QUANTITATIVE PROOF FOR ANSWERING LEGAL QUESTIONS OF DISCRIMINATION UNDER TITLE VII

In the second portion of Cohn's article, he criticizes the use of what he calls inappropriate quantitative measures to define discrimination. The thrust of his argument is that the approaches presently used by the courts are inappropriate because they do not account for differences in true qualifications among applicant groups.[42] He suggests instead a comparison of the rates of hiring members of each group from among those who pass the employer's selection procedures.[43] In essence, are blacks who pass the selection procedures hired at the same rate as whites who pass? This reply contends that Cohn's analysis reflects a fundamental misunderstanding of the expansive legal definition of discrimination under Title VII. The concept of discrimination is not limited to the kind

---

[40] Cohn suggests that the Uniform Guidelines, *supra* note 3, do not seek to answer a question requiring an inference from a sample to the relevant population. Cohn, *supra* note 1, at text accompanying nn.7-8. The "4/5ths rule" is clearly intended to be used as a tool of statistical inference, however, and has been so used by some courts. *See, e.g.,* Brown v. New Haven Civil Service Board, 474 F. Supp. 1256, 1260 (D.C. Conn. 1979); Moore v. Southwestern Bell Tel. Co., 19 Fair Empl. Prac. Cas. (BNA) 232, 234 (E.D. Tex. 1978), *aff'd.,* 593 F.2d 607 (5th Cir. 1979). Cohn recognizes that the provision in the Uniform Guidelines for use of tests of statistical significance refers to the use of statistical inference. Cohn, *supra* note 1, text accompanying nn.10-12.

[41] See note 24 *supra.*

[42] Cohn, *supra* note 1, at text between nn.23 & 24.

[43] *Id.* at text accompanying n.24.

of unequal treatment that Cohn's analysis would probe. The selection procedures themselves are at issue if they have the effect of disproportionately excluding a group protected by the Act for *whatever* reason. The burden then shifts to the defendant to show the business necessity of the requirement.[44]

Cohn's concept of "qualification" as an unknowable abstraction is irrelevant to this inquiry. Title VII analysis begins with the egalitarian assumption that abilities are equally distributed among groups in our society. If a selection procedure, such as an aptitude test, disproportionately excludes a group, regardless of what social factors may have influenced the poorer performance by that group,[45] it is the defendant's burden to prove the job-relatedness of the test. To do so the employer must demonstrate that scores on the test predict actual job performance. The abstract concept of qualification can have no meaning in Title VII except in reference to concrete selection procedures unless this allocation of the burden of proof is abandoned.[46]

Cohn further suggests that evidence of the "fair administration" of selection procedures should be used to infer that the selection rate among "qualified" blacks is equal to the selection rate among "qualified" whites.[47] Cohn's use of this inference is based on the completely unjustified assumption that the particular selection procedures are validly related to the job. He seems to assume that the Uniform Guidelines' requirements for validating selection procedures allow analysis to start with the assumption that they are

---

[44] For a discussion of the various definitions of discrimination under Title VII and the importance of Griggs v. Duke Power Co., 401 U.S. 424 (1971), in accepting the disparate impact definition rather than the limited unequal treatment definition, see Blumrosen, *Strangers in Paradise: Griggs v. Duke Power Co. and the Concept of Employment Discrimination*, 71 MICH. L. REV. 59 (1972).

[45] The Supreme Court addressed this issue squarely in Griggs v. Duke Power Co.:

> The Court of Appeals' opinion, and the partial dissent, agreed that, on the record in the present case, "whites register far better on the Company's alternative requirements" than Negroes. This consequence would appear to be directly traceable to race. Basic intelligence must have the means of articulation to manifest itself fairly in a testing process. Because they are Negroes, petitioners have long received inferior education in segregated schools . . . .
>
> . . . The Act proscribes not only overt discrimination but also practices that are fair in form, but discriminatory in operation. The touchstone is business necessity. If an employment practice which operates to exclude Negroes cannot be shown to be related to job performance, the practice is prohibited.

401 U.S. at 430-31 (footnote and citation omitted).

[46] *See* Albemarle Paper Co. v. Moody, 422 U.S. 405 (1975). For further discussion of these points, see notes 53-63 & accompanying text *infra*.

[47] Cohn, *supra* note 1, at text preceeding n.23 and at text accompanying n.24.

valid, whereas that very fact must be litigated. It is the defendant who must prove to the court that a requirement, such as a testing requirement, is job-related; an employer cannot simply declare that the testing requirement is job-related. This crucial step in the case cannot be omitted in favor of proof merely that the test was fairly applied to both blacks and whites.[48] Unequal treatment in administration is indeed prohibited discrimination under the Act,[49] but proof of equal treatment cannot dispel a prima facie case established by showing that the testing requirement disproportionately excludes blacks.[50]

Finally, Cohn's emphasis in this portion of his article on the desirability of using applicant flow data to "detect discrimination" again reflects his unfamiliarity with the ample consideration courts have already given this subject. The Supreme Court has discussed arguments such as the ones advanced by Cohn and the Court has made it clear that applicant flow data is relevant but not controlling.[51] This conclusion is based upon problems of logic and practicality not included in Cohn's analysis.[52] Each of these objections to Cohn's analysis is further explained below.

In Defense of Disparate Impact Analysis

Cohn's objection to disparate impact analysis begins with his observation that the proportion of *qualified* applicants for a job•is unknown. His idea of "qualified" is not explicitly defined, but the idea is clarified by his reference to "unequal opportunities for schooling, job training programs, accumulation of relevant job experience, and other factors."[53] He proceeds to note that there is no reason to assume that the proportion of qualified applicants among majority and minority groups are equal. Differences in educational opportunity for blacks, for example, may result in fewer qualified

---

[48] The opinion of the Court of Appeals for the Fourth Circuit in *Griggs* noted particularly the lack of discrimination in the administration and scoring of the tests. Griggs v. Duke Power Co., 420 F.2d 1225, 1233 (1970). The Supreme Court's reversal did not find error in the Court of Appeals' examination of intent, but held that such proof does not redeem practices or tests "that operate as 'built-in headwinds' for minority groups" unless they are job-related. Griggs v. Duke Power Co., 401 U.S. 424, 432 (1971).

[49] United States v. Georgia Power Co., 474 F.2d 906, 916 (5th Cir. 1973).

[50] For further discussion of these issues, see notes 53-58 & accompanying text *infra*.

[51] Dothard v. Rawlinson, 433 U.S. 321, 330-31 (1977).

[52] For further discussion of these issues, see notes 72-81 & accompanying text *infra*.

[53] Cohn, *supra* note 1, at text following n.18.

black applicants than white applicants.[54]

It is precisely the elusiveness of the concept of "qualification" that caused the Supreme Court to reject this kind of analysis. A Title VII case alleging class discrimination therefore begins with the *assumption* that all groups are equally qualified for most jobs.[55] It is left to the defendant to prove otherwise if a selection procedure shows different rates of exclusion. A high school diploma requirement or aptitude tests, for example, cannot be used when they have a disparate impact unless the employer can show that these requirements are job-related.[56] Cohn's order of analysis would appear to put the burden of showing the lack of job-relatedness on the plaintiff, which would be an impossible burden. It is the defendant who has the access to the information that allows proof of the job-relatedness of selection procedures.

Cohn's concept of qualification might be useful for a scientific study of differences between groups defined by race, sex, or national origin, but it is a red herring in the Title VII context. Cohn argues at one point, for example, that it is important to control for differences in qualifications such as experience and education between majority and minority groups "to allow for racial comparisons when these qualifications are held constant."[57] Again, this approach seeks the answer to a question not posed. Cohn's approach seeks to find out if the test measures racial differences unrelated to nonracial factors such as experience and education. The relevant legal question, however, is whether the test has the effect of disproportionately excluding one group *for whatever reason*. If blacks are excluded by a test because on the whole they have had fewer educational opportunities than whites, then the test still may not be used unless the employer shows the job-relatedness of the test. The fact that education is a nonracial factor, and one beyond the employer's control, is irrelevant.[58] The court is not seeking to an-

---

[54] *Id. See also id.* at n.11.

[55] The Supreme Court explained the use of a population comparison in International Bhd. of Teamsters v. United States, 431 U.S. 324 (1977), as "highly probative, because the job skill involved—the ability to drive a truck—is one that many persons possess or can fairly readily acquire." Hazelwood School Dist. v. United States, 433 U.S. 299, 308 n.13 (1977). The only exception to this assumption that abilities are equally divided among racial groups is when a special skill, such as having a state license to teach school, is a legitimate requirement. See further discussion at notes 59-63 & accompanying text *infra*.

[56] These were the requirements involved in Griggs v. Duke Power Co., 401 U.S. 424 (1971).

[57] Cohn, *supra* note 1, at n.11; *see also id.*, text at n.28.

[58] *See* Griggs v. Duke Power Co., 401 U.S. 424, 430-31 (1971), *quoted in* note 45 *supra*. *See also* United States v. City of Chicago, 549 F.2d 415 (7th Cir. 1977), *cert. denied,* 434

swer any scientific questions about race and ability; if it were, then controlling for nonracial differences would be important. Title VII simply prohibits the use of unvalidated requirements that have the effect of reducing employment opportunities for any group protected by the Act.

The one respect in which the concept of "qualification" is not a red herring in Title VII cases concerns situations where a particular job requires clearly recognized special skills not possessed or easily acquired by the general population.[59] The primary example of this type of job is a school teacher. A school district justifiably limits its applicants for teachers to those members of the public who have teaching certificates. Similarly, a law firm can limit applicants for lawyer positions to those who have been admitted to the Bar.[60] How far the idea of "special skills" extends beyond professional state licensing requirements, however, is questionable. This limited concept certainly does not extend to an employer's general ideas of desirable qualifications, such as diploma requirements,[61] height requirements,[62] or aptitude tests,[63] unless the job relatedness of these requirements has been shown. The special skills cases can be seen as those limited instances when the job-relatedness of certain requirements may be *assumed* without other proof by the defendant.

Rejection of Cohn's Reliance on Unequal Treatment Measures

The unfairness that Cohn sees against Employer 1 in his exam-

---

U.S. 875 (1977):
> Defendants contend that this evidence [of the racial impact of a written exam] is insufficient to show discrimination because plaintiffs failed to show that the disproportionate failure rate resulted from racial factors. This argument misconceives the legal standard to be utilized in determining whether a prima facie case of discrimination exists within the meaning of Title VII. Plaintiffs did not need to show that the examination was devised with the intent to exclude racial minorities or that a direct causal relationship exists between an applicant's race and his performance. Rather, plaintiffs needed only to show that the examination had an adverse impact on minority applicants as a group; at that point, the burden would be on the city to demonstrate that the examination in fact tested job-related qualifications.

Id. at 428 (citations omitted).

[59] Hazelwood School Dist. v. United States, 433 U.S. 299, 308 n.13 (1977).

[60] *See, e.g.,* Coopersmith v. Roudebush, 517 F.2d 818 (D.C. Cir. 1975) (lawyers); Cypress v. Newport News Gen. & Nonsectarian Hosp. Ass'n, 375 F.2d 648 (4th Cir. 1967) (doctors).

[61] *E.g.,* Griggs v. Duke Power Co., 401 U.S. 424 (1971).

[62] *E.g.,* Dothard v. Rawlinson, 433 U.S. 321 (1977).

[63] *E.g.,* Albemarle Paper Co. v. Moody, 422 U.S. 405 (1975).

ple shown in his Table I is premised on the initial assumption that among applicants, ninety percent of the whites, but only sixty percent of the blacks are qualified.[64] If Cohn is referring only to special skills situations, his argument has merit. He appears to be arguing.the general case, however. He maintains that the defendant should be able to support his case by pointing to "qualitative evidence of fair administration of the selection procedures"[65] to infer that the selection rate among qualified blacks equals the selection rate among qualified whites.

To the extent that this approach reflects only a suggestion for relevant rebuttal evidence by the defendant, it is useful;[66] to the extent that it purports to help "define discrimination" as the title of his section suggests, it is inappropriate. As Cohn noted previously, his concept of qualification among applicants is unknowable.[67] It is for that reason that he must suggest only evidence of the "fair administration" of selection procedures to make the inference of nondiscrimination. In reality, or at least in litigation, qualification is provable only by the selection procedures. Therefore, courts have properly focused on the selection procedures, not the abstraction of qualification. To focus on qualification by proof of the fair administration of the selection procedures is to dilute the concept of discrimination under Title VII to the point where only equal treatment is required.[68] When an aptitude test is used to se-

---

[64] Cohn, *supra* note 1, at nn.22-23 & accompanying text (Table I). Conversely, the unfairness which Cohn sees against Employer 2 in the same table is all premised on the assumption that a greater proportion of black applicants are qualified than whites. Both examples thus rely on the persuasiveness of his abstract concept of "true qualification" independent of any measures of qualification.

[65] *Id.* at text preceeding n.23.

[66] The defendant may introduce a great variety of rebuttal evidence in a disparate impact case because the Supreme Court has noted appropriately that "statistics are not irrefutable; they come in infinite variety and, like any other kind of evidence, they may be rebutted. In short, their usefulness depends on all the surrounding facts and circumstances." International Bhd. of Teamsters v. United States, 341 U.S. 324, 340 (1977). The rebuttal evidence must be probative of the question of whether there was any disparate impact caused by the employer's selection procedures. Such evidence may include post-Act hiring data or applicant flow data. *Id.*; Dothard v. Rawlinson, 433 U.S. 321, 330-31 (1977). Evidence that merely goes to good faith or lack of unequal treatment, such as Cohn's suggested use of evidence of the fair administration of the procedures, does not rebut a prima facie case based on the disparate impact of the procedures. The defendant must show also the business necessity of the criteria. Griggs v. Duke Power Co., 401 U.S. 424, 432 (1971). Compare the unsuccessful attempt of a defendant to advance a claim that there was a disproportionately large number of less qualified minorities in the applicant pool. Chance v. Board of Examiners, 458 F.2d 1167, 1172 (2d Cir. 1967).

[67] Cohn, *supra* note 1, at n.18 & accompanying text.

[68] On the difference between impact analysis and unequal treatment, see ·International

lect employees, the focus would be simply on whether the test was *administered* fairly. Under this scheme, courts would never probe whether a selection procedure is irrelevant to the job, so long as it is fairly administered. Surely Cohn did not mean to allow this conclusion, but otherwise his focus on the unknowable proportion of qualified applicants is without relevance except in the limited area of special skills cases already discussed.[69]

Similarly, Cohn's suggested use of the comparative ratio of those hired among those of each group who pass the selection procedures[70] is very limited in its usefulness. Suppose that one hundred percent of whites who pass the selection procedures are offered employment whereas only ten percent of the blacks passing are offered employment. This information would clearly be relevant in an employment discrimination case, especially to show intentional discrimination.[71] If, however, the rates of offers to each group are identical among those who pass the selection procedures, this information reflects only on the good faith of the defendant; among the blacks who pass the aptitude test one hundred percent are hired and among the whites who pass one hundred percent are hired. This approach does not reveal anything about the possible impact of the selection procedures themselves; it concerns only the equal treatment of similarly situated individuals. Questions of disparate impact remain unanswered by this approach.

Applicant Flow

Cohn's attack on the community composition comparison approach to disparate impact includes his observation that minority and majority group members may not become *applicants* to the

---

Bhd. of Teamsters v. United States, 431 U.S. 324, 335 n.15 (1977). *See also* B. SCHLEI & P. GROSSMAN, EMPLOYMENT DISCRIMINATION LAW 1-12 (1976).

[69] See notes 59-63 & accompanying text *supra.*

[70] Cohn, *supra* note 1, at text accompanying n.20.

[71] Evidence of intentional discrimination is not necessary in a *Griggs*-based claim of disparate impact under Title VII, but it is necessary in cases where the government has pleaded intentional discrimination as part of a pattern or practice suit. International Bhd. of Teamsters v. United States, 341 U.S. 324, 328-29 n.1, 336-37 n.16. Evidence of intentional discrimination is essential in cases brought under the Constitution. Washington v. Davis, 426 U.S. 229 (1976). Cohn's suggested use of comparative rates of hire from among those who pass the employer's selection procedures would be useful to probe *intentional* discrimination, especially in cases brought under these jurisdictional bases. It is uncertain, however, whether statistics alone can ever suffice to establish a case of intentional discrimination without additional testimony of specific instances of individual discrimination. Compare the language in *Teamsters,* 341 U.S. at 338-39, and *Davis,* 426 U.S. at 241-42.

employer at the same rate. He therefore finds it misleading to rely on a population or labor pool comparison without indication of the proportion of applicants from each group.[72] Cohn relies on a 1970 district court case to support this proposition legally.[73] Both legally and logically, however, requiring an impact in the applicant flow data to establish a plaintiff's prima facie case is incorrect. Cohn's observation has clear merit, but not to the extent of rejecting the community composition comparison approach.

On the legal side, the Supreme Court made it clear in *Dothard v. Rawlinson*,[74] in 1977, that a plaintiff is not required to show disproportionate applicant flow figures to establish a prima facie case. The logic of the Court was that known requirements, such as a height requirement, affect applications;[75] an employer's reputation similarly affects applications.[76] Although applicant flow evidence is relevant, it is the defendant who must introduce it to rebut the prima facie case.[77] If the court finds that potential applicants are not adequately reflected among actual applicants, such rebuttal evidence should be insufficient to dispel the prima facie case. Instead, the court continues to assume that minority and majority groups would want to apply for the job in the same ratio as they are represented in the relevant labor pool.[78] The practical effect of holding otherwise would be to encourage employers not to keep applicant flow data,[79] to minimize contacts with the minority community,[80] and to let unvalidated requirements such as a height re-

---

[72] Cohn, *supra* note 1, at text accompanying n.15.

[73] *Id.* at n.15.

[74] 433 U.S. 321 (1977).

[75] *Id.* at 330.

[76] International Bhd. of Teamsters v. United States, 341 U.S. 324, 365-67 (1977).

[77] Dothard v. Rawlinson, 433 U.S. 321, 330-31 (1977).

[78] *Id.* In dissent, Justice White took the position that the burden should be on the plaintiff to show that the composition of the applicant pool was distorted by the exclusion of potential applicants who did not apply because of the allegedly discriminatory requirement. *Id.* at 348-49 (White, J., dissenting).

[79] It is noteworthy that one of the key Supreme Court cases establishing the relevant population comparison approach involved an employer who did not keep reliable records of applications. Hazelwood School Dist. v. United States, 433 U.S. 299, 301-03 (1977).

[80] Compare the recruitment procedures used in League of United Latin Am. Citizens v. City of Santa Ana, 410 F. Supp. 873, 881, *modified on other grounds*, 13 Fair Empl. Prac. Cas. (BNA) 1019 (C.D. Cal. 1976). On recruitment practices generally see B. SCHLEI & P. GROSSMAN, *supra* note 68, at 445-54. Cohn acknowledges that an employer's recruitment practices may influence applications, but focuses on other factors such as alternative job opportunities to conclude that failure to consider applicant ratios is misleading. Cohn, *supra* note 1, at text preceeding n.15. It is unclear how his point relates to the problem of the allocation of proof in trial. The overall thrust of his argument is that disaggregated measures of the selection process should be used, so presumably he intends that the plaintiff

quirement be generally known.[81]

COHN'S PROPOSED ANALYTICAL PROCEDURE

In the final section of his article, Cohn proposes a model which he says concerns how information is properly analyzed to detect discrimination.[82] This portion of his article suffers from the same problems identified in the previous sections. This model is limited in its usefulness because it appears to rely on a concept of intentional discrimination in its approach to "detecting" discrimination. Its usefulness in probing questions concerning the bona fide occupational qualification (BFOQ) defense is also limited because of Cohn's apparent misunderstanding of the current legal use of that concept.

Cohn uses correlation analysis to ascertain whether sex or age can be a BFOQ.[83] He uses an example of an employer with three equally weighted requirements: an educational requirement, a weightlifting test, and a requirement that the applicant be willing to stay on the job for at least five years. He shows that the only one of these requirements that affects the probability of a woman being hired more than a man being hired in his hypothetical data is the weightlifting requirement. His analysis then proceeds that "[s]ince the probability of hiring is based on the expected productivity in the job, this sex difference in the hiring probability represents an expected sex difference in productivity."[84]

This proposition makes the assumption that the weightlifting requirement is valid. If it is not, then Cohn's model is irrelevant. Cohn acknowledges this problem at the conclusion of his discussion, but adds sanguinely that the Uniform Guidelines' requirements for job validation should make objective job analyses more common.[85] This anticipation will hopefully be fulfilled, but the result would still not solve the problem. Job-relatedness must be es-

---

would have the burden of producing the applicant ratios. The Supreme Court's approach of allowing the defendant to rebut with applicant flow only if the court can be persuaded of the reliability of the figures appears to be the better solution.

[81] *See* Dothard v. Rawlinson, 433 U.S. 321, 330-31 (1977); Smith v. City of East Cleveland, 363 F. Supp. 1131, 1134 (N.D. Ohio 1973), *aff'd. in part* and *rev'd. in part sub nom.* Smith v. Troyan, 520 F.2d 492 (6th Cir. 1975), *cert. denied,* 426 U.S. 934 (1976).

[82] Cohn, *supra* note 1, at text preceeding n.25.

[83] *Id.* at text accompanying n.29.

[84] *Id.* at text preceeding n.32.

[85] *Id.* at text accompanying n.38.

tablished factually by the court during the litigation.[86] It is the court that determines the business necessity of requirements; the employer cannot simply assert it. Therefore, a model that starts with the assumption that requirements are job-related either must contemplate a complete reversal of the *Griggs* order of proof or must not be intended as a litigation model of analysis.

Cohn's analysis proceeds that the sex difference in weightlifting used by the hypothetical employer can make sex a BFOQ if the correlation between sex and weightlifting is high. In his example, the moderate strength of the correlation with a coefficient of 0.5 would make it "difficult for the employer to substantiate" the BFOQ claim.[87] The underlying assumption that a higher correlation might substantiate the claim is incorrect. The BFOQ defense is very narrowly defined. The Supreme Court's formulation of the test for a BFOQ in a sex discrimination context is whether the employee's "very womanhood" would "directly undermine her capacity" to do the job.[88] A similar formulation is whether the *"essence of the business operation* would be undermined by not hiring members of one sex exclusively."[89] Another test, perhaps closest to Cohn's concept, is whether "all or substantially all women would be unable to perform safely and efficiently the duties of the job involved."[90] The Seventh Circuit clarified all these formulations in a more recent case by noting that the critical issue was whether females had a "sexual characteristic" different than males that would affect their ability to perform the job.[91] The decision further noted: "Characteristics that might, to one degree or another, *correlate* with a particular sex are insufficient to provide the basis for a BFOQ."[92] Height is highly correlated with sex, for example, but this fact does not justify the automatic exclusion of women from consideration. Cohn's model would therefore appear to be severely limited as a tool for determining the substantiation of a BFOQ

---

[86] *See* Albemarle Paper Co. v. Moody, 422 U.S. 405, 425 (1975); Griggs v. Duke Power Co., 401 U.S. 424, 431 (1971).

[87] Cohn, *supra* note 1, at text preceeding n.36.

[88] Dothard v. Rawlinson, 433 U.S. 321, 336 (1977).

[89] Diaz v. Pan Am. World Airways, 422 F.2d 385, 388 (5th Cir.) (emphasis. in original), *cert. denied,* 404 U.S. 950 (1971).

[90] Weeks v. Southern Bell Tel. & Tel. Co., 408 F.2d 228, 235 (5th Cir. 1969).

[91] *In re* Consolidated Pretrial Proceedings in the Airline Cases, 582 F.2d 1142, 1146-47 (7th Cir. 1978).

[92] *Id.* at 1147 (emphasis added). *See also* Long v. Sapp, 502 F.2d 34, 39-40 (5th Cir. 1974); Rosenfeld v. Southern Pacific Co., 444 F.2d 1219, 1225 (9th Cir. 1971).

defense.[93]

Next, Cohn argues that partial correlation analysis would be useful to detect the presence of an explicit sex factor in the hiring decision process.[94] Familiar problems with this analysis arise. Cohn is proposing that the court control for sex differences in true job qualifications and thus determine the probability of males and females being hired once the effect of legitimate differences is accounted for. Again, the model makes the assumption that job-related qualifications have already been ascertained by the court. As previously noted, this approach must contemplate a reversal of the *Griggs* order of proof.[95]

Further, the subjective component of the hiring process that allows the employer, such as Cohn's hypothetical employer, to select among candidates who have already passed the other requirements must be considered a selection procedure in itself.[96] As such, the subjective component is capable of being scrutinized for its disparate impact without reference to the other requirements. A previous section of Cohn's article made a similar suggestion,[97] so it is unclear why the correlation analysis is needed at all. Moreover, the subjective component that selects some individuals over others from among an equally qualified group (qualified in the sense that they have all passed the previous requirements) gives an individual claim of intentional discrimination to a plaintiff under *McDonnell Douglas v. Green*,[98] reference to the effect of other requirements is not needed once it is shown that the individual has met them. In either type of case, Cohn's analysis is unnecessary at best.

---

[93] Cohn's use of correlation analysis for age as a BFOQ meets with the same substantive problem. Cohn uses correlation analysis to show the relationship between age and the requirement of his hypothetical employer that applicants be willing to stay on the job for five years. Cohn, *supra* note 1, at text accompanying n.36. Cohn's analysis again begins with the unproven assumption that the requirement is job-related. *Id.* at text accompanying n.37. Even if it were, however, Cohn fails to realize that even a perfect correlation such as the one in his example might easily fail to qualify as a BFOQ. *See generally* Employee Benefit Plans; Amendment to Interpretative Bulletin, 44 Fed. Reg. 30,648 (1979) (to be codified in 29 C.F.R. § 860); Bickerton, *The ADEA Comes of Age*, 16 TRIAL 23 (1980). The limited kind of case to which Cohn's analysis might apply would be pilot applicants, where safety can justify the exclusion. The key factor is the safety component, however, not the perfect correlation. *See* Murnane v. American Airline, Inc., 21 Fair Empl. Prac. Cas. (BNA) 284, 293 (D.D.C. 1979). For further clarification of the difference between the business necessity defense and the BFOQ defense, see Garcia v. Gloor, 609 F.2d 156, 163 (5th Cir. 1980).

[94] Cohn, *supra* note 1, at text between nn.37 & 38.

[95] See notes 84-85 & accompanying text *supra*.

[96] *See* A. SMITH, EMPLOYMENT DISCRIMINATION LAW 850-57 (1977).

[97] Cohn, *supra* note 1, at text accompanying n.20.

[98] 411 U.S. 792 (1972).

Conclusion

Dr. Richard M. Cohn's article, *On the Use of Statistics in Employment Discrimination Cases,* regrettably does not provide useful methods of probing legally relevant questions. His criticisms of existing methods, as well as his own proposals, both derive from a more limited concept of discrimination under Title VII than the Supreme Court's definition. Intentional discrimination or unequal, treatment are both prohibited by the Act, but also prohibited is the use of selection procedures that disproportionately exclude a group covered by the Act unless the employer can demonstrate the job-relatedness of the requirements. Cohn's methods do not make these distinctions in the definition of discrimination, nor do they take into account the order and allocation of the burden of proof provided by the Supreme Court in *Griggs v. Duke Power Company.*[99] Under *Griggs* the plaintiff establishes a prima facie case by showing the adverse impact of the employer's selection procedures, and then the burden shifts to the defendant to show the job-relatedness of the requirements. Cohn's methods assume that the job-relatedness of the requirements has already been proven before the analysis of exclusion begins.[100]

Furthermore, the concept of disproportionate exclusion contemplates proof that both actual and potential applicants to the employer are adversely affected by the requirement. It is the effect of the selection procedures on this population that is at issue in establishing the prima facie case.[101] Any analysis that is limited to studying the effect of procedures on one year's applicants alone, as Cohn suggests, does not address the legally relevant question. Even if equal proportions of minority and majority applicants one year happen to have a high school diploma, for example, the use of a high school diploma requirement can still establish a prima facie case if the diploma requirement adversely affects potential minority applicants.[102] The same reasoning applies to testing requirements because the population in which the court is interested includes both present and potential applicants.

As Cohn notes, interdisciplinary work is greatly needed in employment discrimination law, and his work is to be commended as

---

[99] 401 U.S. 424 (1971).

[100] See notes 55-58 & accompanying text *supra.*

[101] See notes 18-20 & accompanying text *supra.*

[102] *See* Dothard v. Rawlinson, 433 U.S. 321 (1977); Griggs v. Duke Power Co., 401 U.S. 424 (1971).

a step in that direction. It is true that lawyers are ill-versed in quantitative methods and need to understand these tools as well as any other tools of evidence. It is equally important, however, that quantitative methods be responsive to the legally relevant questions. When methods are used that provide answers to different questions, the proof has effectively altered the issues. If the legally relevant questions are themselves being challenged as wrongly phrased, then the challenge should be a direct one and not done under the guise of improving methods of proof. Legal issues should be addressed as legal issues; quantitative methods of proof must be responsive to the legal questions posed. This reply's primary objection to Cohn's approach to the use of statistics in employment discrimination cases is that his approach is not responsive to the relevant legal questions.