Jury Source Lists: Does Supplementation Really Work

John P. Bueker

Follow this and additional works at: http://scholarship.law.cornell.edu/clr
Part of the Law Commons

Recommended Citation
Available at: http://scholarship.law.cornell.edu/clr/vol82/iss2/4

This Note is brought to you for free and open access by the Journals at Scholarship@Cornell Law: A Digital Repository. It has been accepted for inclusion in Cornell Law Review by an authorized administrator of Scholarship@Cornell Law: A Digital Repository. For more information, please contact jmp8@cornell.edu.
NOTES

JURY SOURCE LISTS: DOES SUPPLEMENTATION REALLY WORK?

INTRODUCTION .......................................................................................................................... 390

I. BACKGROUND ......................................................................................................................... 394

A. The Jury Selection and Service Act ...................................................................................... 395

B. Constitutional Standards ......................................................................................................... 397

1. The Fifth Amendment Standard .............................................................................................. 397

2. The Sixth Amendment Standard .............................................................................................. 399

C. Persistent Problems ................................................................................................................ 401

1. The Need for a Single Statistical Test .................................................................................... 401

2. The Need for a Clear Numeric Cutoff .................................................................................... 405

3. The Need for a Clearer Definition of “Cognizable Group” ................................................. 408

4. The Need for Clarification: Master Jury List v. Qualified Jury Pool .................................... 408

D. Duren: An Excuse for Lower Courts .................................................................................... 409

II. EMPIRICAL ANALYSIS OF THE EFFECTS OF USING MULTIPLE SOURCE LISTS .................................................. 412

A. Other Empirical Studies ......................................................................................................... 413

B. An Investigation of the Use of Multiple Source Lists in Federal Court ............................ 415

III. ALTERNATIVES FOR IMPROVING MINORITY REPRESENTATION ............................................................................. 422

A. Re-designing the Jury Questionnaire ..................................................................................... 422

B. Mandating that Jury Questionnaires Be Returned and Completed .................................... 424

C. Using Stratified Sampling Techniques ................................................................................... 427

CONCLUSION .................................................................................................................................. 430

INTRODUCTION

In 1995, the Eastern District of Pennsylvania joined several other federal districts when it decided to engage in a two-year pilot program designed to evaluate the effectiveness of using multiple source lists as a means of improving minority representation in the jury selection process.¹ Currently, sixteen federal districts (including the Eastern

¹ See Government Exhibit 1 at 7, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995) (No. 95-10) (discussing the Eastern District of Pennsylvania’s plans to begin supplementing its jury source list).
District of Pennsylvania) select jurors from source lists that supplement voter registration lists with lists of licensed drivers.\(^2\) Adding to this group the District of Massachusetts,\(^3\) which employs a supplemental residents list, there are presently seventeen districts in nine circuits that use multiple source lists when selecting potential jurors. In each case, the district chose to supplement its source list to increase minority representation and to further the policies of the Jury Selection and Service Act of 1968.\(^4\) But, does supplementation really work?

\(^2\) See Affidavit of David Williams, Senior Programs Specialist, Administrative Office of the United States Courts at 2, United States v. Ramsey, No. CRIM.A.93-131 (E.D. Pa. 1993) (identifying the following thirteen districts that supplement voter registration lists with lists of licensed drivers: the Northern District of California, the District of Colorado, the District of Columbia, the District of Hawaii, the Central District of Illinois, the Eastern District of Michigan, the Western District of Michigan, the District of New Hampshire, the District of New Jersey, the Eastern District of New York, the Northern District of New York, the Middle District of Tennessee, and the Northern District of Texas). Two additional districts not mentioned by Mr. Williams supplement in the same fashion. See U.S. District Court, District of Connecticut, Second Restated Plan for Random Selection of Grand and Petit Jurors, at 3 (certified Nov. 23, 1992); U.S. District Court, Western District of New York, Jury Plan, at 2 (certified May 23, 1994); and the sources accompanying infra note 4.

\(^3\) The District of Massachusetts selects potential jurors from a residents list compiled annually pursuant to state statute, rather than voter registration lists, as permitted by federal statute. See 28 U.S.C. § 1863(b)(2) (1994). Because the list of state residents is the functional equivalent of a state census, "the coverage of the resident list in 1982 was nearly 100% when compared to the 1980 census." See G. Thomas Munsterman & Janice T. Munsterman, The Search for Jury Representativeness, 11 Jusr. Sys. J. 59, 66 (1986). In theory, a census list which is intended to count every citizen in the state is the most comprehensive source list available.

\(^4\) 28 U.S.C. §§ 1861 et seq. (1994). See U.S. District Court, Northern District of New York, Jury Plan, at 3 (certified Aug. 1994) (stating that although voter registration lists represent a fair cross section of the community, an even greater number of citizens will be eligible for jury service if supplemental source lists are used); U.S. District Court, Western District of New York, Jury Plan, supra note 2, at 2; U.S. District Court, Northern District of Texas, Jury Plan, at 4 (certified Mar. 16, 1993) (stating that although voter registration lists represent a "fair cross-section of the community," supplementation will foster the statutory policies of 28 U.S.C. §§ 1861-62); U.S. District Court, District of Connecticut, Second Restated Plan for Random Selection of Grand and Petit Jurors, at 3 (certified Nov. 23, 1992) (same); U.S. District Court, Northern District of California, General Order No. 6, Plan for the Random Selection of Grand and Petit Jurors, at 3 (certified July 21, 1992) (stating the reason for choosing to supplement voter registration lists was to further foster the goals of the Jury Service and Selection Act); U.S. District Court, Eastern District of Michigan, Jury Selection Plan, at 5 (certified Apr. 29, 1992) (same); U.S. District Court, District of Columbia, Modified Plan for the Random Selection of Grand and Petit Jurors, at 2 (certified Aug. 15, 1991) (stating that while voter registration lists represent a "fair cross-section of the community," using driver's license lists will allow an even greater number of citizens to be eligible for jury service); U.S. District Court, Western District of Michigan, Plan for the Random Selection of Grand and Petit Jurors, at 2-3 (certified May 22, 1991) (finding that either voter lists or combined lists represent a "fair cross-section of the community"); U.S. District Court, District of Colorado, Plan for the Random Selection of Grand and Petit Jurors, at 2-3 (certified Aug. 17, 1989) (stating that although voter registration lists represent a "fair cross-section of the community," supplementation will foster the statutory policies of 28 U.S.C. §§ 1861-62); U.S. District Court, District of Hawaii, Plan for the Random Selection of Grand and Petit Jurors, at 2 (certified Jan. 1, 1989) (finding it "necessary" to use driver's license lists to "fully implement the policy and protect the rights secured by 28
In theory, multiple source lists increase the likelihood that the jury selected will mirror a cross-section of the community.\textsuperscript{5} This is not, however, always true in practice. Statistics from several federal districts that have been using multiple source lists for a substantial period of time reveal that supplementation does not necessarily increase minority representation.\textsuperscript{6} As the data in Part II demonstrate, supplementing voter registration lists with lists of licensed drivers does not always solve the problem of minority underrepresentation in the pool of potential jurors.\textsuperscript{7}

Not only is supplementation ineffective, but it is also quite costly. An increased administrative burden accompanies the process of combining source lists.\textsuperscript{8} To satisfy fairness concerns, jury administrators

\begin{footnotesize}
\textsuperscript{5} See Munsterman, \textit{supra} note 3, at 60 ("The higher the percentage of the total population found on the list, the more likely that a random selection from it should yield prospective jurors representative of the entire population."); David Kairys et al., \textit{Jury Representativeness: A Mandate for Multiple Source Lists}, 65 \textit{CAL. L. REV.} 776 (1977) (arguing for the use of multiple source lists to improve minority representation).

\textsuperscript{6} See the statistical evidence and discussion \textit{infra} Part II.B. When this Note refers to minority underrepresentation, it refers to the underrepresentation of African-Americans and Hispanics on the source lists from which juries are selected. Admittedly, there are other minority groups whose distinct points of view are important to recognize and whose rights to participate in the jury process must also be protected. Yet, because the federal court system tracks only these two groups and most of the available data pertains to African-Americans and Hispanics, the conclusions of this Note are most relevant to these two groups. Moreover, this Note is only concerned with underrepresentation on jury source lists. The Sixth Amendment simply obligates the government to draw a jury from a pool that fairly represents the community; it does not guarantee that the jury itself will be fairly representative. Several factors beyond the government’s control impact the ultimate jury and the membership of the qualified jury pool. \textit{See infra} note 17.

\textsuperscript{7} Kairys, Kadane, and Lehoczky cite a 1975 study which found that public assistance and unemployment lists contain a higher percentage of minorities and argue that these are the lists that should be used to improve minority representation in the jury selection process. \textit{See} Kairys, \textit{supra} note 5, at 826 n.246. Although this claim appears \textit{a priori} true, these lists suffer from some of the same defects that prevent driver’s license lists from solving the problem of minority underrepresentation. \textit{See discussion infra} Part III. The data were simply not available to empirically evaluate whether any of these proposed source lists would be sufficient to cure the problem of underrepresentation. However, if these source lists work, they represent another potential solution.

\textsuperscript{8} \textit{See National Center for State Courts, Facets of the Jury System: A Survey} 1, 13 (1976) (labeling the use of multiple source lists “desirable,” but “expensive”). \textit{But see} Kairys, \textit{supra} note 5, at 819-25 (suggesting more efficient procedures for removing duplicates and arguing that the cost is insignificant). In addition to the administrative cost of
must remove duplicate names, often by the manual process of comparing various non-computerized lists.\(^9\) Districts aware of this additional burden require administrators to eliminate duplicates only to the extent technically and economically feasible.\(^10\) Yet, even though supplementation does not achieve its intended result and imposes this additional administrative burden, districts continue to choose supplementation as the sole means of improving minority representation.\(^11\)

The lack of a single test or clear numeric standard by which to measure underrepresentation further complicates the issue.\(^12\) The Supreme Court has consistently denied certiorari in all but the most extreme cases challenging the composition of juries.\(^13\) Consequently, no uniform standard has emerged from the case law, making it difficult to determine when supplementation is required. This, in turn, makes it possible for courts to hide behind a presumption that voter registration lists are a constitutionally valid source of potential jurors. The lack of a uniform standard allows courts to permit seemingly unreasonable underrepresentations to persist and effectively denies minority defendants their Sixth Amendment rights.\(^14\)

After examining the effectiveness of supplementation at increasing minority representation, this Note will argue that courts should pursue three less costly and more effective approaches to remedying the underrepresentation problem: (1) modifying the jury questionnaire; (2) mandating that questionnaires be returned and completed; and (3) employing stratified sampling techniques. Although none of

---

9 See Walter P. Gerwin, The Jury Selection and Service Act of 1968; Implementation in the Fifth Circuit Court of Appeals, 20 Mercer L. Rev. 349, 383 (1969) (citing the problem of removing duplicates as one of the primary reasons that supplementation is viewed as impractical); Munsterman, supra note 3, at 66 (discussing the administration problems of using lists which include corporations like tax, property, utility, and vehicle registration lists).

10 See, e.g., U.S. District Court, Western District of New York, Jury Plan, supra note 2, at 2 ("A system will be developed, before any selection procedures begin, to eliminate as reasonably as possible such duplications"); U.S. District Court, District of Colorado, Plan for the Random Selection of Grand and Petit Jurors, supra note 4, at 3 (same).

11 See supra notes 1-2.

12 See discussion infra Part I.C.

13 See discussion infra Part I.C.

14 See discussion infra Part I.D.
these approaches is without its problems, each warrants consideration as an alternative to supplementing jury source lists.

Part I of this Note outlines the statutory and constitutional requirements for jury selection and examines their application in the context of choosing a jury source list. The empirical evidence presented in Part II refutes the claim, commonly made, that supplemental source lists improve minority representation in the jury selection process. Finally, Part III explores alternative means for achieving greater minority representation.

I

BACKGROUND

The U.S. Constitution guarantees all criminal defendants "the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed."15 The right to a jury chosen from a "fair cross-section of the community" is a fundamental element of this guarantee.16 Unfortunately, without rigorous procedures to ensure fairness in the jury selection process, the process is susceptible to abuse at many points.17 Potential jurors may be excluded for discriminatory purposes, may not be selected at random, or, more fundamentally, the source list from which potential jurors

15 U.S. CONST. amend. VI.

16 See Taylor v. Louisiana, 419 U.S. 522, 530 (1975) ("We accept the fair-cross-section requirement as fundamental to the jury trial guaranteed by the Sixth Amendment and are convinced the requirement has solid foundation."); Thiel v. Southern Pac. Co., 328 U.S. 217, 227 (1946) ("Trial by jury presupposes a jury drawn from a pool broadly representative of the community . . . . ").

17 A general overview of the typical jury selection process may be helpful for a fuller understanding of this Note. Because it is not necessary to ask every citizen to serve on a jury, most federal districts begin the jury selection process by creating a "master jury wheel." Names are chosen at random from a "source list," which is often a voter registration list, and are placed on the "master jury wheel." This list of names is the master list of potential jurors. Next, the district begins the process of qualifying jurors. Potential jurors are chosen again at random from the "master jury list" and are sent jury questionnaires. Potential jurors are asked to respond to questions about age, citizenship, and other qualifying factors, as well as to indicate their race and ethnicity. These questionnaires are usually sent to a potential juror a second and a third time if the potential juror fails to respond to the first mailing of the questionnaire. When the district receives the returned questionnaire, potential jurors meeting the legal requirements for jury service are placed in the "qualified jury pool." This is the group of individuals who are actually eligible to serve on juries. As jurors are needed, names are selected at random, and summons are mailed to potential jurors. On the appointed day, those individuals receiving summons are expected to report to court where they may be impaneled on a jury. See generally Federal Judicial Center, Handbook on Jury Use in the Federal District Courts (Jody George et al. eds., 1989) (outlining the jury selection process and highlighting the basic legal requirements for each step).
are selected may not be representative of the community. It is this last abuse that is the subject of this Note.

A. The Jury Selection and Service Act

In 1968, Congress enacted the Jury Service and Selection Act (the "Act") to standardize the jury selection procedures used in federal courts and to ensure that the procedures used would guarantee that the "fair cross-section requirement" was satisfied. In short, the Act was intended to eliminate purposeful discrimination and to promote minority representation on juries. Congress sought to enforce these policies by imposing strict requirements of randomness at each stage in the jury selection process and by mandating that each district's jury selection plan include an exclusive list of criteria for which a juror would be excused or exempted from jury service. Moreover, Congress sought to foster its policy of representativeness by specifying that "the names of prospective jurors shall be selected from the voter registration lists... [or] some other source... of names in addition to voter lists where necessary to foster the policy and protect the rights secured by section 1861 and 1862 [of the Act]."

The Act has, for the most part, solved the problem of intentional discrimination in the jury selection process. By imposing strict procedural guidelines requiring random jury selection at each stage in the process, the Act virtually eliminates the opportunity to discriminate through the exercise of discretionary selection procedures. Re-
quiring that the criteria for excuse and exemption be set out in advance adds an additional protection.27 Rather than treating the statutory qualification requirements as minimum standards to which a jury commissioner can add his or her own notions of "good character," the Act specifies that the requirements are the only qualifications for jury service and, thus, eliminates another opportunity for abuse.28

The Act, however, has not had the same success with respect to guaranteeing minority representation.29 The Act's selection of voter registration lists as the primary source of potential jurors is both controversial and, in some commentators' opinions, itself discriminatory.30 Congress selected voter registration lists as the primary source of jurors, stating that "these lists provide the widest community cross section of any list readily available."31 Commentators, however, vigorously dispute this claim.32 They argue that voter registration lists are neither the most widely inclusive nor the most representative33 source list available.34

The crux of the controversy lies in determining the point at which a source list is so unrepresentative that supplementation is required. In the final version of the Act, Congress acknowledged that there would be times when voter registration lists would be insufficient to implement the policies of the Act and should be supple-

27 Munsterman, supra note 3, at 59-60.
28 "Except as provided in section 1865 of this title or in any jury selection plan provision adopted pursuant to paragraph (5) or (6) of section 1863(b) of this title, no person or class of persons shall be disqualified, excluded, excused, or exempt from service as jurors . . . ." 28 U.S.C. § 1866(c) (1994).
29 See Williams, supra note 25, at 542 ("Neither the JSSA nor the effectively uniform jurisprudence upholding the exclusive use of voter registration lists as constitutionally sufficient has ended sixth amendment [sic] challenges to the composition of jury source lists . . . .") (citations omitted).
32 See supra note 30.
33 Inclusiveness refers to the percentage of the population that is on the list. Representativeness is the degree to which the list mirrors the characteristics of the population. A list can be representative, but not be inclusive. Moreover, generally, as a list becomes more inclusive, it becomes more representative. "Voters lists typically cover 60 to 80 percent of the '18 and over' population while drivers lists cover 80 to 95 percent." Munsterman, supra note 3, at 63.
34 See supra note 30.
mented with some other source list. On the other hand, the legislative history that accompanies the Act states that "[t]he bill uses the term 'fair cross section of the community' in order to permit minor deviations from a fully accurate cross section." Ultimately, the decision as to when the Act requires supplementation lies with the courts.

B. Constitutional Standards

1. The Fifth Amendment Standard

Courts employ two constitutional tests for measuring jury representation and making the determination as to when supplementation is necessary. The Fifth Amendment protects defendants from the effects of a source list skewed by the exclusion of a particular group

35 28 U.S.C. § 1865(b)(2) (1994) ("The plan shall prescribe some other source or sources of names in addition to voter lists where necessary to foster the policy and protect the rights secured by sections 1861 and 1862 of this title.").


37 Id. See also United States v. Brummitt, 665 F.2d 521, 528 (5th Cir. 1981) ("Congress, however, has left the determination, when necessary, to the judiciary."); United States v. Test, 550 F.2d 577, 584 (10th Cir. 1976) ("Thus instead of prescribing an objective statutory standard of 'necessity' for determining when supplementation of voter lists was required, Congress deferred this decision to the courts . . . .").

38 The standard that the defendant must meet to prove a violation of the Jury Selection and Service Act is the same as the standard a defendant must meet to prove a violation of the Sixth Amendment. Courts considering the issue have found the "fair and reasonable in relation to the community" test under the Sixth Amendment and the "fair cross-section of the community" test under the Jury Service and Selection Act indistinguishable. See United States v. Biaggi, 909 F.2d 662, 678 (2d Cir. 1990) ("We also agree that the rejection of the Sixth Amendment claim, in the circumstances of this case, necessarily requires rejection of the statutory claim . . . ."); cert. denied, 499 U.S. 904 (1991); United States v. DiPasquale, 864 F.2d 271, 282 n.15 (3d Cir. 1988) (stating the same test is to be applied to a violation of the Jury Selection and Service Act as would be applied to a Sixth Amendment violation), cert. denied, 492 U.S. 906 (1989); United States v. Miller, 771 F.2d 1219, 1227 (9th Cir. 1985) ("The test for a constitutionally selected jury is the same, whether challenged under the Sixth Amendment of the Constitution or under the Jury Selection and Service Act."); United States v. Rodriguez, 776 F.2d 1509, 1510 n.1 (11th Cir. 1985) (stating that the test for showing underrepresentation is the same under the Act as it is under the Sixth Amendment); United States v. Musto, 540 F. Supp. 346, 354 n.1 (D.N.J. 1982) ("The 'fair cross section' [requirement] of 28 U.S.C. § 1861 is the functional equivalent of the 'reasonably representative' standard of the Constitution. Therefore, the tests for showing underrepresentation under the Constitution and the statute are the same."); aff'd sub nom. United States v. Aimone, 715 F.2d 822 (9th Cir. 1983), cert. denied, 468 U.S. 1217 (1984); United States v. Clifford, 640 F.2d 150, 154 (8th Cir. 1981) ("These standards are functionally equivalent to those used to enforce 28 U.S.C. § 1861 . . . ."); United States v. Test, 550 F.2d 577, 584 (10th Cir. 1976) ("[T]he majority of lower federal courts have responded to this congressional mandate by construing the statutory 'fair cross section' standard as the functional equivalent of the constitutional 'reasonably representative' standard previously developed."). But see United States v. Guzman, 337 F. Supp. 140, 142 (S.D.N.Y. 1972) ("[T]he standards embodied in the Act embrace and go beyond the constitutional requirements.").
from the jury selection process. This standard is most often invoked to judge cases in which a defendant alleges that the decision to use a particular source list is discriminatory and does not implement the Jury Selection and Service Act's policy of promoting minority representation, because a particular group was prevented from gaining inclusion in the source list chosen. In other words, the defendant asserts the claim that the jury in his case will be biased, because members of a cognizable group to which the defendant belongs were denied their right to serve on a jury.

The Supreme Court first applied the equal protection standard in Strauder v. West Virginia to strike down a West Virginia law which excluded African-Americans from grand and petit jury service. In Castaneda v. Partida, the Court articulated the much more expansive standard that controls today. To prevail on a Fifth Amendment claim in the jury selection context, a defendant must demonstrate that: (1) the group allegedly excluded is a constitutionally cognizable group that is capable of being singled out for discriminatory treatment; (2) this group was subject to substantial underrepresentation over a significant period of time; and (3) the jury selection procedures used were "susceptible [to] abuse or [were] not racially neutral." The statistical evidence presented to satisfy the second prong of this test raises an inference of discrimination, while the third prong of the test requires that a defendant demonstrate that the alleged discrimination was purposeful.


40 See Williams, supra note 25, at 596-97 (discussing the equal protection standard for testing jury source list representativeness).

41 This interpretation is consistent with the requirement that only persons who are members of the group allegedly excluded have standing to make a Fifth Amendment challenge to the jury selection process. See Castaneda v. Partida, 430 U.S. 482 (1977) ("The defendant must show that the procedure employed resulted in substantial underrepresentation of his race or of the identifiable group to which he belongs.") (emphasis added). But see Taylor v. Louisiana, 419 U.S. 522, 526 (1975) ("[T]here is no rule that claims such as Taylor presents may be made only by those defendants who are excluded from jury service.").

42 100 U.S. 303 (1879).

43 Id. at 304.


46 Castaneda, 490 U.S. at 494.

47 The Court in Duren v. Missouri, 499 U.S. 357 (1979), explained:
2. The Sixth Amendment Standard

Unlike the Fifth Amendment, which views the jury selection process from the perspective of an individual's right to serve on a jury, the Sixth Amendment's "fair cross-section requirement" is based on the concept of the jury pool as an integral part of a fair system of justice. The importance of a perception of fairness in the judicial system cannot be underestimated. The "fair cross-section requirement" is intended to protect the integrity of the jury selection system by guaranteeing a defendant a jury panel that is unbiased and that includes the views of all segments of society. At the same time, the Sixth Amendment does not guarantee a defendant the "right to be tried by a particular jury which [is] itself 'a fair cross section of the community,' nor [the] right to a jury selected at random from the fairest cross section of the community." Thus, the "fair cross-section requirement challenges to jury selection and composition are not entirely analogous to the case at hand. In the cited cases, the significant discrepancy shown by the statistics not only indicated discriminatory effect but was also one form of evidence of another essential element of the constitutional violation—discriminatory purpose. Such evidence is subject to rebuttal evidence either that discriminatory purpose was not involved or that such purpose did not have a determinative effect. In contrast, in the Sixth Amendment fair-cross-section cases, systematic disproportion itself demonstrates an infringement of the defendant's interest in a jury chosen from a fair community cross section.


See Glasser v. United States, 315 U.S. 60, 85-86 (1942) (the jury selection process "must always accord with the fact that the proper functioning of the jury system, and, indeed, our democracy itself, requires that the jury be a 'body truly representative of the community.'"); Ramseur v. Beyer 983 F.2d 1215, 1234 (3d Cir. 1992) (en banc) (7-5 decision) ("In making our Sixth Amendment analysis, we use standards that are somewhat different . . . . A significant reason for this is that the focus of Sixth Amendment protections, more than Fourteenth Amendment protections, is upon the concept of the jury as a system rather than upon individual rights.").

*See generally Williams, supra* note 25, at 598 (explaining the three-part Sixth Amendment test from *Duren v. Missouri*).

See *Peters v. Kiff*, 407 U.S. 493, 503 (1972) ("When any large and identifiable segment of the community is excluded from jury service, the effect is to remove from the jury room qualities of human nature and varieties of human experience, the range of which is unknown and perhaps unknowable.").

United States v. Lewis, 472 F.2d 252, 255 (3d Cir. 1973) (footnote omitted). See also Swain v. Alabama, 380 U.S. 202, 203-04 (1965) ("Although a . . . defendant is not entitled to a jury containing members of his race, a State's purposeful or deliberate denial . . . on account of race of participation as jurors in the administration of justice violates the Equal Protection Clause."); Brown v. Lockhart, 781 F.2d 654, 656 (8th Cir. 1986) ("The Constitution does not require that the jury which tries a criminal defendant 'must mirror the community.'") (quoting *Taylor v. Louisiana*, 419 U.S. 522, 598 (1975)).
requirement" mandates a representative jury source list, but does not extend to the actual jury venire.\footnote{52}

In \textit{Duren v. Missouri},\footnote{55} the Supreme Court articulated its standard for judging a Sixth Amendment claim. To substantiate a valid claim, a defendant must show that: (1) the group allegedly being excluded is part of a "distinctive" group in the community; (2) "the representation of this group . . . is not fair and reasonable in relation to the number of such persons in the community;" and (3) "this underrepresentation is due to systematic exclusion of the group in the jury-selection process."\footnote{54} Unlike the equal protection test, the third prong of this test does not require a showing of purposeful discrimination. "[I]n Sixth Amendment fair-cross-section cases, [a] systematic disproportion itself demonstrates an infringement of the defendant's interest in a jury chosen from a fair community cross section."\footnote{55} Thus, no proof of intent is required.

Not requiring a defendant to prove purposeful discrimination makes the Sixth Amendment test a less stringent standard.\footnote{56} In theory, it also makes it easier for a defendant to succeed in challenging a jury selection system on Sixth Amendment grounds. In practice, however, Sixth Amendment challenges are more common,\footnote{57} but not more successful.\footnote{58} This is unfortunate. If the Sixth Amendment is supposed to preserve a perception of fairness in the jury selection system, it should not take proof of an outrageous underrepresentation to succeed in asserting a claim. The public can lose faith in a jury selection system that continually yields juries that are unrepresentative of the community even if the juries are not always single-race juries.\footnote{59} 

\footnote{52} The legislative history of the Jury Selection and Service Act provides: The voting list need not perfectly mirror the percentage structure of the community. . . . The act guarantees only that the jury shall be 'selected at random from a fair cross section of the community.' It does not require that at any stage beyond the initial source list the selection process shall produce groups that accurately mirror community makeup. Thus, no challenge lies on that basis.

\footnote{53} 439 U.S. 357 (1979).
\footnote{54} Id. at 364.
\footnote{55} Id. at 368 n.26. See generally Munsterman, \textit{supra} note 3, at 62 (arguing that the third prong of the test in \textit{Duren} eliminates the need to show purposeful discrimination and permits the use of statistical evidence to make a prima facie showing of discrimination).

\footnote{57} See Williams, \textit{supra} note 25, at 602.
\footnote{58} Despite more than one hundred challenges in federal court, none has ever succeeded in invalidating a jury selection process on the grounds that using voter registration lists as the sole source of potential jurors is a constitutional violation. See Munsterman, \textit{supra} note 3, at 60 n.1.
\footnote{59} See Domitrovich, \textit{supra} note 30, at 43-46.
The Sixth Amendment test is intended to ensure the integrity of the jury selection system by allowing a defendant to raise a claim based entirely on statistical evidence. A defendant must simply examine the results of the jury selection process and allege, based on the evidence collected, that a cognizable group has been systematically excluded from jury service. In making a Sixth Amendment claim based on the use of voter registration lists alone, a defendant is, in essence, asserting that because certain cognizable groups do not register to vote at the same rate as other groups, the decision to use voter registration lists as the sole source of potential jurors is discriminatory. Furthermore, without supplementation, the choice of voter registration lists does not fulfill the Jury Selection and Service Act's policy of promoting minority representation in the jury selection process. In short, when a defendant raises a Sixth Amendment challenge based on the choice of source lists, he or she is challenging the integrity of the jury system by alleging that the use of voter registration lists as the sole source of potential jurors is unrepresentative, discriminatory, and unfair.

C. Persistent Problems

1. The Need for a Single Statistical Test

Several difficulties arise for a court when trying to evaluate a claim based on statistical evidence. *Duren* was an easy case and left a number of issues unresolved. In *Duren*, the Court had no difficulty reaching its conclusion that in a locality where women constituted 54% of the population, but only 26.7% of those summoned for jury duty, a defect existed in the jury selection process. To reach its conclusion, the Court did not have to reach a consensus on the statistical method to use when evaluating jury underrepresentation. Instead, the Court simply concluded that such a "gross discrepancy" is unacceptable and never considered which of the statistical measures of underrepresentation most commonly used by lower courts should be applied when judging a Sixth Amendment claim. In a difficult case, however, the choice of statistical measures can be dispositive.

60 See Munsterman, supra note 3, at 62 ("This [test] eliminates the need to show purposeful discrimination and permits the use of statistical evidence to make a prima facie case that shifts the burden of proof to the other party."). See also supra notes 47, 55.
61 See supra note 60.
62 See supra note 20.
63 See generally Williams, supra note 25, at 598.
65 *Id.* at 365-66. As discussed subsequently in this section, the four most commonly used measures of underrepresentation are absolute disparity, comparative disparity, statistical significance, and substantial impact.
Courts most commonly use the absolute disparity measure when evaluating jury representation. Absolute disparity measures the difference between a group's percentage in the population and its percentage on the master jury wheel or in the qualified pool. Absolute disparity, however, fails to account for the range at which the disparity occurs. For example, an absolute disparity of 10% in a jurisdiction which is 40% Hispanic is quite different than an absolute disparity of 10% in a district where the population is only 10% Hispanic. Moreover, as the example illustrates, if a group constitutes a small enough percentage of the population, the group can be totally excluded from the jury selection process without the exclusion resulting in an impermissibly large absolute disparity. The decision to use the absolute disparity measure to evaluate underrepresentation may significantly affect the rights of a litigant who happens to be a member of a small minority group.

Comparative disparity, on the other hand, accounts for the size of the group allegedly being excluded. Comparative disparity is calculated by dividing the absolute disparity by the group's percentage in the population. This standard measures the percentage by which

---

67 Kairys, supra note 5, at 790.
68 Equations for each of the measures are presented in the footnotes using the following notation:

\[ P = \text{percentage in the population of the allegedly underrepresented group} \]
\[ L = \text{percentage of the master jury list or qualified jury pool comprised of members of the allegedly underrepresented group} \]
\[ n = \text{total number of people in the sample} \]

Thus, absolute disparity is defined as

\[ \text{Absolute Disparity} = P - L. \]

69 See, e.g., Kairys, supra note 5, at 793 ("The absolute disparity standard is objectionable on both legal and mathematical grounds, because it fails to account for the range at which the disparity occurs."); Munsterman, supra note 3, at 64.
70 See Kairys, supra note 5, at 793.
71 As discussed later in this section, although there is no definitive standard for what constitutes an unacceptable absolute disparity, courts consistently ignore absolute disparities that do not exceed 10%-15%.
72 The Second Circuit reasoned:

The risk of using this approach is that it may too readily tolerate a selection system in which the seemingly innocuous absence of small numbers of a minority from an average array creates an unacceptable probability that the minority members of the jury ultimately selected will be markedly deficient in number sometimes totally missing... [T]he Sixth Amendment assures only the opportunity for a representative jury, rather than a representative jury itself, but that opportunity can be imperiled if venires regularly lack even the small numbers of minorities necessary to reflect their proportion of the population.

73 Comparative disparity is defined as

\[ \text{Comparative Disparity} = \frac{P - L}{P}. \]
the probability of serving on a jury is reduced for an individual in the group allegedly being excluded.\textsuperscript{74} Intuitively, this standard measures the size of the underrepresentation.\textsuperscript{75} Returning for a moment to the example, a 10% underrepresentation of Hispanics in a district where the population is only 10% Hispanic would result in a comparative disparity of 100%. Such a large comparative disparity would certainly signal a problem.\textsuperscript{76} Courts, however, have criticized the use of comparative disparity when applied to measuring the underrepresentation of small minority populations, finding that when applied to these small populations, reliance on the comparative measure is deceiving.\textsuperscript{77} Supporters of the comparative disparity measure, on the other hand, argue that this is precisely when the use of comparative disparity is most necessary to protect a litigant's rights.\textsuperscript{78} There are strong

\textsuperscript{74} See, e.g., Kairys, \textit{supra} note 5, at 790; Munsterman, \textit{supra} note 3, at 64; Williams, \textit{supra} note 25, at 610.

\textsuperscript{75} See Kairys, \textit{supra} note 5, at 791, 795 (arguing that comparative disparity ought to be the single statistical test for underrepresentation, because it best captures the intuitive notion of the fair cross section idea).

\textsuperscript{76} As discussed later in this section, although there is no definitive standard for what constitutes an unacceptable comparative disparity, a 100% comparative disparity or total exclusion would likely be found unacceptable by any court if the disparity persisted for a significant period of time.

\textsuperscript{77} Foster v. Sparks, 506 F.2d 805, 834-35 (5th Cir. 1975) (appendix to the opinion authored by Gerwin, J.). Judge Gerwin argues more generally:

The import ascribed by a court to a deviation from proportional representation will necessarily depend upon whether the deviation is viewed in absolute or comparative terms. Where, for example, [African-Americans] comprise twenty percent of the presumptively eligibles, their appearance on 10 percent of the venires can be viewed as a 10 percent deviation under the absolute [disparity] view, or a 50 percent deviation under a comparative [disparity] view. While there is authority for the latter measure, the preferable view is that an absolute [disparity] measure should be employed because the comparative [disparity] measure may distort the significance of a deviation.

\textit{Id.} at 834-35. \textit{See also} United States v. Hafen, 726 F.2d 21, 24 (1st Cir.) ("[T]he smaller the group is the more the comparative disparity figure distorts the proportional representation."); \textit{cert. denied}, 466 U.S. 962 (1984); United States v. Clifford, 640 F.2d 150, 155 (8th Cir. 1981) ("This court has not seen fit to adopt the comparative disparity concept as a better means of calculating underrepresentation."); United States v. Whiteley, 491 F.2d 1248, 1249 (8th Cir.) (Reliance comparative disparity "is ordinarily inappropriate where a very small proportion of the population is \{African-American\}, and, "in such circumstances distorts reality."); \textit{cert. denied}, 416 U.S. 990 (1974); Smith v. Yeager, 465 F.2d 272, 279 n.18 (9th Cir.) (Reliance on comparative disparity leads to "absurd results" when the allegedly underrepresented group constitutes only 4.4% of the population and approximately 2% of the jury list), \textit{cert. denied}, 409 U.S. 1076 (1972); United States v. Musto, 540 F. Supp. 346, 355 (D.N.J. 1982) (citations omitted) ("Where the eligible population in issue is relatively low, the comparative disparity will magnify the difference."), \textit{aff'd sub nom.}, United States v. Aimone, 715 F.2d 53d Cir. 1983), \textit{cert. denied}, 468 U.S. 1217 (1984). \textit{But see} Quadra v. Superior Court, 403 F. Supp. 486, 495 n.9 (N.D. Cal. 1975) (defending the use of the comparative disparity measure with small populations, because of the importance of the group's size in the population to determining the significance of the underrepresentation).

\textsuperscript{78} One commentator explained:
arguments on both sides of this issue, and comparative disparity must only be used carefully and in the appropriate circumstances.\textsuperscript{79}

Members of a small minority group might also want to rely on the statistical significance test.\textsuperscript{80} Statistical significance measures the probability that a given disparity could have resulted from random selection or chance.\textsuperscript{81} If the challenge is to the source list used and the probability is low, courts conclude that the disparity resulted from bias or discrimination in the choice of source lists.\textsuperscript{82} Statistical significance, however, is difficult to calculate, and the results of the test are hard to understand.\textsuperscript{83} The test measures the likelihood that the disparity resulted from random chance, but does not indicate anything about the magnitude of the disparity.\textsuperscript{84} Moreover, like comparative disparity, the results of a statistical significance test are affected by the size of the underlying population.\textsuperscript{85} Thus, the statistical significance test is not nearly as widely used as either absolute or comparative disparity.

This suggestion would have the effect of applying the absolute disparity standard where it is least revealing or appropriate. Moreover, application of the absolute disparity standard where the cognizable class is small means that almost all underrepresentations . . . are validated, for by definition, a small minority can never have a large absolute disparity.

Kairys, \textit{supra} note 5, at 796 (footnote omitted).\textsuperscript{79} For example, if Hispanics represent 3% of a district's population, a perfectly representative jury pool of 100 people would include 3 Hispanics. Few would be alarmed if the pool contained only 2 Hispanics, even though this underrepresentation results in a comparative disparity of 33%. However, if no Hispanics appeared in a series of jury pools, there would be cause for concern.\textsuperscript{80} The results of the statistical significance test are evaluated using a normal distribution table where

$$ z = \frac{(P - L)}{\sqrt{n}} \cdot \sqrt{\frac{P(1 - P)}{n}} $$

\textsuperscript{81} See, \textit{e.g.}, Kairys, \textit{supra} note 5, at 792; Munsterman, \textit{supra} note 3, at 64; Williams, \textit{supra} note 25, at 609.

\textsuperscript{82} Cf. Castaneda v. Partida, 430 U.S. 482, 496 n.17 (1977) (concluding that there was a less than 1 in $10^{20}$ likelihood that the underrepresentation of Mexican-Americans resulted from random chance); Alexander v. Louisiana, 405 U.S. 625, 630 n.9 (1972) (noting that there was a less than 1 in 20,000 likelihood that low number of African-Americans selected from the jury pool was the result of random chance); Whitus v. Georgia, 385 U.S. 545, 552 n.2 (1967) (stating that the mathematical probability of having only 7 African Americans on a venire of 90 when they represented 25-35% of the total 600 is .000006).

\textsuperscript{83} See Kairys, \textit{supra} note 5, at 794 n.101 (noting that the statistical significance test involves complicated calculations, answers that are difficult to visualize and evaluate, and results that "tell[ ] us there is a disparity without really providing any information concerning how big or substantial the disparity is.").

\textsuperscript{84} Id.

\textsuperscript{85} Munsterman, \textit{supra} note 3, at 64.
Finally, although the Supreme Court has never considered the use of the substantial impact test, a number of circuit courts employ this measure to evaluate minority underrepresentation. The substantial impact test measures how many additional persons from the allegedly excluded group would need to be added to each jury venire to achieve perfect representation. For example, if Hispanics constitute 10% of the population, but only 5% of the master jury list, correcting the underrepresentation would add 1.5 Hispanics to each thirty person grand jury venire. Although the results of the substantial impact test are easy to understand, clearly an advantage for any test, critics complain that the test is merely another way of expressing absolute disparity and claim that the test suffers from the same defects. United States v. Jenkins provides the best illustration of their complaint. In Jenkins, African-Americans constituted 5.45% of the population and 3.3% of the jury pool. Yet, despite labeling a comparative disparity of 40% "substantial indeed," the Second Circuit nevertheless held that the disparity was insubstantial, because correcting it would add only one African-American to each sixty person grand jury venire. As Jenkins illustrates, the decision to measure underrepresentation using a test based on absolute disparity can create the risk that a disparity that might otherwise be found unacceptable will be permitted to persist.

2. The Need for a Clear Numeric Cutoff

Adoption of a single statistical test alone, however, is insufficient to end underrepresentation. The relevant issue is at what point the disparity becomes too great and the jury selection system loses its presumption of validity. In addition to choosing an appropriate method by which to measure underrepresentation, the Supreme

---

86 The substantial impact test can be calculated using the following formula: Impact = (P - L) x Size of the Venire.
87 See, e.g., United States v. Biaggi, 909 F.2d 662, 678 (2d Cir. 1990), cert. denied, 499 U.S. 904 (1991); United States v. Test, 550 F.2d 577, 588 (10th Cir. 1976); United States v. Goff, 509 F.2d 825, 826 (5th Cir.), cert. denied, 423 U.S. 887 (1975); United States v. Jenkins, 496 F.2d 57, 66 (2d Cir. 1974).
88 See Munsterman, supra note 3, at 64; Williams, supra note 25, at 609.
89 See Kairys, supra note 5, at 800; Munsterman, supra note 3, at 64-65; Williams, supra note 25, at 609.
90 According to some critics, the substantial impact test suffers from an additional defect. By taking into account the size of the actual jury venire, the substantial impact test introduces another variable that can further distort the result. Introducing the size of the panel as a variable "confuses" rather than "clarifies" the meaning of the underrepresentation. See Kairys, supra note 5, at 800.
91 496 F.2d 57 (2d Cir. 1974).
92 Id. at 64.
93 Id. at 64-65.
94 See discussion supra Part I.A.
Court must specify a numeric cutoff that can be used to identify when an underrepresentation is unreasonable. To date, the Supreme Court has not stated what constitutes an unreasonable underrepresentation.95

In Duren, the petitioner proved that the Jackson County jury venires consistently contained approximately 15% women, while, at the same time, women constituted 53% of the population.96 Although the lower court found this disparity tolerable, the Supreme Court concluded that the gap constituted a "gross discrepancy...requir[ing] the conclusion that women were not fairly represented in the source from which petit juries were drawn."97 Earlier, in Swain v. Alabama,98 the Court held that an underrepresentation of a group by as much as 10% did not, by itself, establish "purposeful discrimination."99 Although Swain was a Fifth Amendment case, most courts have interpreted the Supreme Court's decisions as permitting absolute disparities ranging from 10% to 15%, absent a showing of purposeful discrimination, in jury challenges based on both the Fifth and Sixth Amendments.100

95 Ramseur v. Beyer, 983 F.2d 1215, 1231 (3d Cir. 1992) (en banc) (7-5 decision) ("The imbalance necessary to establish an equal protection or Sixth Amendment violation in the composition of a jury venire is not determined by a bright line test. The Supreme Court 'has never announced mathematical standards' that would apply to all such challenges.", cert. denied, 508 U.S. 947 (1993). See Kairys, supra note 5, at 779 (arguing that "[n]either courts nor legislatures have established criteria for distinguishing allowable from impermissible deviations from the cross-sectional idea").
97 Id. at 366.
99 Id. at 208-09.
100 For example, the Fifth Circuit explained:

The Supreme Court in Swain v. Alabama held that underrepresentation by as much as ten percent did not show purposeful discrimination based on race. We recognize, however, that Swain was an equal protection case where purposeful discrimination must be shown and that the Court in Duren stated that a defendant need not show discriminatory purpose for the sixth amendment violation. The Court in Duren, however, discussed the statistical discrepancy needed to make out an equal protection violation along with its discussion of the disproportion that demonstrates a sixth amendment violation. Thus, while the Court stated that statistical evidence is used to prove different elements in equal protection and sixth amendment claims, it did not indicate that the necessary amount of disparity itself would differ.

A similar problem exists with using comparative disparity and statistical significance. The Supreme Court has never definitively stated what constitutes an unacceptable comparative disparity and has provided even less guidance on the use of the statistical significance test. The Court found a comparative disparity of 42% permissible in Swain v. Alabama, but condemned without further comment a smaller disparity in Turner v. Fouche. With respect to statistical significance, not only has the Court failed to set a numeric cutoff, but the Court's use of the test has left lower courts wondering whether the statistical significance test has any applicability to Sixth Amendment challenges, or whether its use is limited to Fifth Amendment cases in which purposeful discrimination is an essential element of the claim.

A third difficulty arises in applying the Duren test to certain minority groups. Women, unlike some other groups, are easily identifiable and more often than not distinguished from men on a source list. The same is not necessarily true for racial or ethnic minorities. Take Hispanics for example. Hispanics are not a distinct group in the same way that men and women, or even blacks and whites, are a unique group. According to the Census Bureau, Hispanics are a "self-identified" minority, and an individual is free to choose to be considered Hispanic or may decline the label altogether. Moreover, voter re-

---

5.4% found permissible), aff'd sub nom., United States v. Aimone, 715 F.2d 822 (3d Cir. 1983), cert. denied, 468 U.S. 1217 (1984); Bryant v. Wainwright, 686 F.2d 1373, 1377-78 (11th Cir. 1982) (absolute disparity of 7.4% found permissible), cert. denied, 461 U.S. 932 (1983); United States v. Hawkins, 661 F.2d 436, 442 (5th Cir. 1981) (absolute disparity of 5.45% found permissible), cert. denied, 456 U.S. 991 (1982); United States v. Clifford, 640 F.2d 150 (8th Cir. 1981) (absolute disparity of 7.2% found permissible); United States ex rel. Barksdale v. Blackburn, 639 F.2d 1115, 1126-27 (5th Cir. 1981) (absolute disparity of 11.5% found permissible), cert. denied, 454 U.S. 1056 (1981); United States v. Armstrong, 621 F.2d 951 (9th Cir. 1980) (absolute disparity of 2.8% found permissible); United States v. Maskeny, 609 F.2d 183 (5th Cir. 1980) (absolute disparity of 10% found permissible); United States v. Potter, 552 F.2d 901, 906 (9th Cir. 1977) (absolute disparity of 2.7% found permissible); Thompson v. Sheppard, 490 F.2d 830, 832-33 (5th Cir. 1974) (absolute disparity of 11.0% found permissible), cert. denied, 420 U.S. 984 (1975).

101 See discussion supra Part I.B.

102 380 U.S. 202, 204 (1965) (African-Americans constituted 26% of the population and 15% of the grand and petit jury panels drawn).

103 396 U.S. 346 (1970) (African-Americans constituted 60% of the population and 37% of the grand jury lists resulting in a comparative disparity of 38%).

104 The Supreme Court came the closest to suggesting a standard in a footnote in Castaneda v. Partida, 430 U.S. 482 (1977). The Court commented that "[a]s a general rule for such large samples, if the difference between the expected value and the observed number is greater than two or three standard deviations, then the hypothesis that the jury drawing was random would be suspect to a social scientist." Id. at 496 n.17. However, there is still a great deal of confusion as to when the use of the measure is appropriate. See Detre, supra note 66, at 1916-20, 1923-25.

105 See Record at TR1 p. 77 and TR2 p. 51, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995); see also Williams, supra note 25, at 607.
3. The Need for a Clearer Definition of "Cognizable Group"

Although the Court's jurisprudence defining what constitutes a cognizable group is relatively settled, at least with respect to sex and race, the lack of defining characteristics for certain groups has important practical consequences for a court when trying to evaluate a jury challenge. Good data are essential to using any statistical measure to accurately evaluate the significance of a disparity. It is, however, difficult to accurately estimate a group's percentage of a source list if the source list does not designate who the members of a group are, and the group is free to self-identify. In these circumstances, an alternative and sometimes controversial means of estimating a group's representation must be employed.

4. The Need for Clarification: Master Jury List v. Qualified Jury Pool

Applying the test the Supreme Court formulated in Duren is difficult for a final reason. In Duren, the petitioner was challenging the validity of the qualified jury pool and not the validity of the source list used. The petitioner alleged that by allowing women to request an automatic exemption from jury service when they returned their jury questionnaire, the resulting qualified pool underrepresented women. The truth of the petitioner's claim is evident from the

106 See, e.g., Stipulation of Joseph J. Rogers, Administrative Services Manager, United States District Court for the Eastern District of Pennsylvania at 2, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995) (stating that of the 10 counties in the Eastern District of Pennsylvania only Philadelphia County's voter registration form asks for an individual's race and none ask if an individual is Hispanic).

107 Judge Gerwin noted that the definition of cognizability dates back to the Supreme Court's 1954 decision in Hernandez v. Texas. See Foster v. Sparks, 506 F.2d 805, 819 (1975).


109 See generally Williams, supra note 25, at 606. The problem is further complicated when individuals return their jury questionnaire, but do not specify their race or ethnicity. See discussion infra Part III.A.


112 Id.
Court's decision. The decision, however, left open the question of whether a court should examine the representativeness of the source list or its effects on the resulting qualified pool. Does the right to a jury drawn from a "fair cross-section of the community" mean a jury drawn from a representative source list, or does it mean that the resulting qualified pool must also be representative?113

D. Duren: An Excuse for Lower Courts

These unresolved issues are reflected in the way lower courts tend to deal with challenges to the use of voter registration lists. Rather than considering whether the facts in a given case substantiate the claim, courts too often decide that the use of voter registration lists as the sole source of potential jurors is constitutionally permissible as a matter of law.114 Courts repeatedly conclude that to succeed, a defendant must demonstrate that a cognizable group has systematically been excluded, and that "[p]ersons who choose not to register to vote do not comprise such a cognizable group."115 By this logic, any claim

---

113 It is important to note that a right to a jury drawn from a representative "qualified pool" would be affected by factors arguably beyond the scope of the government's control. See discussion infra Part III.

114 For example, the court in United States v. Cecil concluded:

[T]he unbroken line of federal cases in this Circuit to the same effect are cited with the hope that 'it will be perceived that the principles of stare decisis are... applicable' here. In summary, as a matter of law, the construction of the defendants of Section 1863 and the constitutional mandate in this matter is contrary to established precedent and the challenge of the defendants to the use of the voter registration list in this case, because members of a cognizable class were not adequately represented in the jury selection by reason of the failure of members of that class to register, should be dismissed as a matter of law.

United States v. Cecil, 836 F.2d 1431, 1448, 1451 (4th Cir. 1988) (emphasis added). Likewise, the court in United States v. Test explained:

[T]he circuits are in complete agreement that... neither the Act nor the Constitution require that a supplemental source of names be added to voter lists simply because an identifiable group votes in a proportion lower than the rest of the population.... Although we could base our decision on this ground alone, we will proceed to consider defendants' remaining contentions.

United States v. Test, 550 F.2d 577, 586 n.8 (10th Cir. 1976); United States v. Lewis, 472 F.2d 252, 255 (3d Cir. 1972) ("We hold as a matter of law that the defendant has failed to sustain this burden.") (emphasis added); United States v. Caci, 401 F.2d 664, 671 (2d Cir. 1968) ("It is well established that the use of voter registration lists as the source of names of prospective jurors is not unlawful because it results in the exclusion of nonvoters.")., vacated and remanded on other grounds, 994 U.S. 310; United States v. Ortiz, 897 F. Supp. 199, 203 (E.D. Pa. 1995) ("We need not decide whether Hispanics are or can be a 'distinctive group.'... Even assuming that Hispanics are a distinctive group and the defendants' statistics are accurate, we find no constitutional or statutory violation.").

115 United States v. Affierbach, 754 F.2d 866, 869 (10th Cir. 1985). The court in United States v. Brummitt reached a similar conclusion:

The mere fact that an identifiable minority group votes in a proportion lower than the rest of the population and is therefore underrepresented on jury panels presents no constitutional issue.... This court has held that
that asserts that a group has been excluded from the jury selection process because its members do not register to vote in proportion to members of other groups must fail.\(^1\)

This logic, however, is fundamentally flawed. First, it confuses the rights protected by the Fifth and Sixth Amendments.\(^2\) The Sixth Amendment protects a defendant's right to be tried by a jury chosen from a "fair cross-section of the community," and not an individual's right to serve on a jury.\(^3\) If certain segments of the population are not registering to vote regardless of their eligibility, the right to a jury drawn from a "fair cross-section of the community" can never be protected by using voter registration lists as the sole source of potential jurors. Second, the usual claim is not that the individuals who failed to register to vote are a cognizable class, but that those individuals who typically do not register to vote are themselves members of tradi-

---

1. Kairys, Kadane, and Lehoczky argue that: 
   [this reasoning is tautological [and] allows voter registration lists to be upheld by their bootstraps: all disparities between a voter registration list and the population result from an identifiable group voting in a proportion lower than the rest of the population, and to validate the use of voter registration lists on this basis is to validate all voter registration lists, no matter how underrepresentative.]

2. United States v. Brummitt, 665 F.2d 521, 527, 529 (5th Cir. 1981); United States v. Clifford, 640 F.2d 150, 156 (8th Cir. 1981) ("The mere fact that one identifiable group of individuals votes in a proportion lower than the rest of the population does not make a jury selection system illegal or unconstitutional."); United States v. Lopez, 588 F.2d 450, 452 (5th Cir.) ("The fact that an identifiable minority group votes in a proportion lower than the rest of the population and is therefore underrepresented on jury panels presents no constitutional issue.")., cert. denied, 442 U.S. 947 (1979) (quoting United States v. Arlt, 567 F.2d 1295, 1297 (5th Cir. 1978)); United States v. Lewis, 472 F.2d 252, 255 (3d Cir. 1972) ("[T]hose who do not choose to register to vote cannot be considered a 'cognizable group.' ... Further, their non-registration is a result of their own inaction; not a result of affirmative conduct by others to bar their registration. Therefore, while a fairer cross section of the community may have been produced by the use of 'other sources of names,' the Plan's sole reliance on voter registration lists was constitutionally permissible.") (quoting Camp v. United States, 413 F.2d 419, 421 (5th Cir. 1969), cert. denied, 396 U.S. 968 (1969)).

3. See, e.g., Gee, supra note 56, at 792 ("[C]ourts are sometimes confused in analyzing the two types of challenges to jury composition: fair cross-section and equal protection claims.").

   [the defendant has a [Sixth Amendment] right... not to have the pool diminished at the start by the actions or inactions of public officials, nor by the inertia, indifference, or inconvenience of any substantial group or class who do not choose to vote or to serve on juries. From the viewpoint of a black, or young, or poor, or rich defendant, his interest is in having a pool with a fair proportion of blacks, young, poor, and rich.

See also Gee, supra note 56, at 792:93 (discussing the difference between the rights protected by the Sixth Amendment and the rights protected by the Equal Protection Clause of the Fourteenth Amendment).
tionally cognizable groups. Their failure to register to vote results in the underrepresentation of these traditionally cognizable groups in the jury selection process. Finally, the conclusion too quickly dismisses the long history of legal and structural barriers to voter registration, some of which, arguably, still exist today.¹¹⁹

Moreover, courts often accompany the conclusion that “people who do not register to vote are not a cognizable group” with the assertion that Congress endorsed the use of voter registration lists.¹²⁰ To a certain extent, Congress did.¹²¹ However, as discussed earlier, Congress also recognized that in certain situations courts would need to supplement voter registration lists in order to ensure minority representation on juries.¹²² To assert that Congress wished to create a presumption of validity for the exclusive use of voter registration lists would simply be factually incorrect. In 1977, faced with a mounting number of challenges, the Committee on the Operation of the Jury System proposed an amendment to the Jury Selection and Service Act

¹¹⁹ See Williams, supra note 25, at 599.

¹²⁰ See, e.g., United States v. Cecil, 836 F.2d 1431, 1445 (4th Cir. 1988) ("The use of [voter registration lists] as the source for jury selection in federal courts has been expressly sanctioned by Congress . . . .") (emphasis added); Brown v. Lockhart, 781 F.2d 645, 654 (8th Cir. 1986) ("Although some identifiable groups are underrepresented on voter-registration lists, this Court held in United States v. Freeman, 514 F.2d 171 (8th Cir. 1975), that use of jury rolls derived from such lists does not result in constitutionally impermissible exclusion, unless those under-represented persons were obstructed from registering.")

¹²¹ The legislative history of the act contains substantial support for this proposition. Congress found that voter registration lists would “provide the widest community cross section.” H.R. Rep. No. 90-1076, supra note 19, at 2, reprinted in 1968 U.S.C.C.A.N. at 1794. Moreover, Congress felt that voter registration lists would provide an important screening function. The legislative history of the Act calls voter registration lists "[t]he initial line of defense against incompetence" and states that voter registration lists are meant to "eliminate[ ] those individuals who are either unqualified to vote or insufficiently interested in the world about them to do so." Id. at 1795-96. In formulating its position, Congress acknowledged that the use of voter registration lists would "discriminate[ ] against those who have the requisite qualifications for jury service but who do not register to vote," and decided that "[t]his is not unfair . . . because anyone with minimal qualifications—qualifications that are relevant to jury service—can cause his name to be placed on the lists simply by registering or voting." Id. at 1794-95. In the words of Congress, "sources of names other than voter lists may be used to supplement, but not supplant, voter lists." Id. at 1794.

¹²² See discussion supra Part I.A.
that would have created such a presumption. This amendment, however, was never adopted, and has never again been considered.

The most recalcitrant courts refuse to consider the merits of a Sixth Amendment challenge, because no challenge has ever succeeded. Given that the Act requires courts to "prescribe some other source . . . where necessary" and Congress left this decision to the courts, an outright refusal to consider the merits of a Sixth Amendment challenge is clearly not in keeping with the spirit or the language of the Act. Such bold resistance to supplementation, however, has led some to conclude that "[u]nless the Supreme Court changes legal ground that appears to be thoroughly settled, challenges to jury arrays based on the underrepresentation of a cognizable group among registered voters will fail so long as the freedom of eligible persons to register to vote is not obstructed." The Court in Cecil put it more succinctly when it wrote:

The authorities cited, from practically every Circuit including our own, in many of which certiorari has consistently been denied by the Supreme Court, as well as the legislative intent expressed in the Jury Selection Act itself, as found by the courts, categorically establish that there is no violation of the jury cross-section requirement where there is merely underrepresentation of a cognizable class by reason of failure to register, when that right is fully open.

II
EMPIRICAL ANALYSIS OF THE EFFECTS OF USING MULTIPLE SOURCE LISTS

Despite the callous attitude adopted by these courts, minority groups are not actually harmed by their repeated refusal to require supplementation. Although the use of supplemental source lists is aimed at achieving a laudable goal, good intentions by themselves are not necessarily adequate guideposts for setting policy. In addition

124 Kairys, supra note 5, at 816-18; Munsterman, supra note 3, at 60; Williams, supra note 25, at 601.
125 In United States v. Cecil, the Fourth Circuit opined:
In light of this, to suggest, as defendants do, that the Act's use of voter registration lists violates the Constitution, simply goes too far. . . . Of course voter registration lists are imperfect . . . but this does not render use of these lists unconstitutional, especially considering the alternative, which is . . . [to] supplement voter lists accordingly. No court has ever required this, and for good reason.
127 Newman, supra note 8, at 7.
128 Cecil, 836 F.2d at 1448.
129 Newman, supra note 8, at 7.
to examining intentions, one must assess the effectiveness of the policy. Data from eighteen federal districts demonstrate that using multiple source lists does not necessarily increase minority representation. Thus, even if the petitioner in each of these cases had received his desired outcome, there is no guarantee that minority representation in the jury selection process would have been improved.

A. Other Empirical Studies

Studies of this issue almost universally call for the use of supplemental source lists. However, the empirical proof offered by these studies fails to substantiate a claim that using multiple source lists will improve minority representation. The empirical proof offered generally consists of a showing that voter registration lists underrepresent minorities and that a combined source list improves inclusiveness. These studies, however, generally omit empirical proof that a com-

---

190 See discussion infra Part II.B.
191 One commentator has suggested:
The remedy necessary to actuate the requirements of the sixth amendment [sic] was discussed in, but not achieved by the Jury Selection and Service Act of 1968: courts must . . . order mandatory supplementation of voter registration lists by other source lists to create jury pools that represent a fair cross section of the community . . . .

Williams, supra note 25, at 630; see also Kairys, supra note 5, at 825 ("Multiple list procedures are necessary to overcome the biases and exclusiveness inherent in available single lists."); Munsterman, supra note 3, at 74 (suggesting the use of supplemental source lists as one solution to the problem of minority underrepresentation in the jury selection process). But see Newman, supra note 8, at 20 ("[T]he available evidence suggests that drivers licenses should not be used.") (emphasis added).

192 In her article, Williams first presents data contained in the CURRENT POPULATION REPORT on voting and registration in the November 1988 Election which shows that African-Americans, Hispanics, and low-income individuals register to vote at lower rates than other groups. Williams, supra note 25, at 615 (citing BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, Series P-20, No. 440, CURRENT POPULATION REPORT: VOTING AND REGISTRATION IN THE 1988 ELECTION (1989)). She then simply concludes that "a number of . . . lists could be merged with voter registration lists to create a more representative . . . jury pool." Id. at 632. She offers no empirical proof for her assertion. Id. In an earlier study, Kairys, Kadane, and Lehoczky went a step further. They used data from the CURRENT POPULATION REPORT for the 1972 and 1974 elections and demonstrated not only that certain minority groups are represented in lower proportion on voter registration lists than their proportion in the population, but that certain minority groups are represented in lower proportion on voter registration lists, but also that voter registration lists as a whole are underinclusive. Kairys, supra note 5, at 805-07. In the 1974 election, for instance, 38% of those eligible to register to vote did not register, and only 45% of the population actually voted. Id. at 805-06. Moreover, while 36.5% of eligible white individuals did not register to vote, 45.1% of the eligible African-American community and 65.1% of the eligible Hispanic community did not register. Id. at 807. Kairys, Kadane, and Lehoczky's study, however, suffers from the same defect as Williams' study. After presenting this information, they simply conclude that "[m]ultiple list procedures are necessary to overcome the biases," without offering empirical evidence to substantiate their claim. Id. at 825. In fact, they admit that their study lacks "data concerning representativeness." Id. at 806 n.158.
combined source list is more representative.\textsuperscript{138} The demonstration of increased inclusiveness and the general proposition that a more inclusive source list is more likely to be representative are assumed without empirical evidence to be sufficient to prove that using driver's license lists to supplement voter registration lists will increase minority representation in the jury selection process.\textsuperscript{134}

Although the argument is theoretically appealing,\textsuperscript{135} it is factually incorrect.\textsuperscript{136} As studies began to look further and to examine the actual effects of combining voter registration lists with lists of licensed drivers, it became clear that minority representation does not always improve.\textsuperscript{137} In their 1986 article, Munsterman and Munsterman collected a number of studies done by courts around the country and found the data far from convincing.\textsuperscript{138} Despite the apparent increase in coverage of the combined source lists,\textsuperscript{139} the resulting improvements in representation were, at best, "mixed."\textsuperscript{140} Kairys, Kadane, and Lechoczky explain that care must be taken to select a supplemental list that increases the total number of unique names. "If a group is

\begin{flushleft}
\textsuperscript{133} See supra notes 131-32. For a discussion of "inclusiveness" versus "representativeness," see supra note 33.
\textsuperscript{134} See Kairys, supra note 5, at 825-26 (explaining why multiple source lists are necessary to overcome bias).
\textsuperscript{135} It seems logical that a 100% inclusive source list must be perfectly representative, and, thus, as the inclusiveness increases and approaches 100%, the representation must necessarily improve.
\textsuperscript{136} The empirical evidence offered in the remainder of this section refutes this argument.
\textsuperscript{137} See, e.g., Munsterman, supra note 3, at 65-74; Newman, supra note 8, at 7-21.
\textsuperscript{138} In a study done by the Court in New Castle County, Delaware, the addition of driver's license lists caused the proportion of non-whites serving on juries to change from an underrepresentation to an overrepresentation. Munsterman, supra note 3, at 71-72. In Los Angeles County, on the other hand, the supplemental use of driver's license lists slightly improved the representation of Hispanics, but reduced the representation of African-Americans. Id. In Des Moines, Iowa, although the impact proved minimal, the addition of driver's license lists reduced the representation of non-whites. Id. at 72-73. In the Northern District of Illinois, a court study showed that for the Eastern Division, using only the list of licensed drivers would reduce the representation of African-Americans by 1.04% on the master jury list and by 2.07% in the qualified jury pool. Newman, supra note 8, at 14. In contrast, the study showed that Hispanics would be shifted "from a position of underrepresentation to one of overrepresentation." Id. In the Western Division, the study demonstrated that using names from only the driver's license list would increase the representation of African-Americans by a mere 0.54% and Hispanics by a mere 0.92%. Id. at 16. The study concluded that because the sole use of driver's license lists is not an option under the Act, and the already minimal effect of supplementation would be diminished when the driver's license lists are combined with voter registration lists as required, the Northern District should not go to a system of choosing jurors from a combined source list. Id. at 17, 20.
\textsuperscript{139} Munsterman and Munsterman found that when driver's license lists were added to voter registration lists, inclusiveness improved in twenty-four states by at least 21%, in seventeen states by anywhere from 11% to 20%, and in seven states by less than 10%. Munsterman, supra note 3, at 67.
\textsuperscript{140} Id. at 73.
\end{flushleft}
underrepresented on all the lists [and the lists contain the same individuals, the group] will be underrepresented in the combined source no matter how many lists are used. To increase minority representation, the supplemental list used must contain names that do not appear on the primary source list. Thus, the choice of supplemental source lists is crucial.

B. An Investigation of the Use of Multiple Source Lists in Federal Court

An examination of data from eighteen federal district courts proves that driver’s license lists do not overrepresent African-Americans or Hispanics, and their use as a supplemental source list does not always improve these groups’ representation in the jury selection process. Table A reports absolute disparity by division for eighteen federal districts. Nine of the districts shown currently use a source list that combines voter registration lists and lists of licensed drivers. The other nine districts compile their master jury wheel from voter registration lists alone.

141 Kairys, supra note 5, at 825. They further warn that “supplementation with some lists can increase a group’s underrepresentation or create an underrepresentation of another group.” Id.

142 Id. Kairys, Kadane, and Lehoczky suggest that using public assistance or unemployment lists would improve the representation of minorities who are traditionally excluded, but they offer no empirical evidence to support their claim. See supra note 7.

143 See discussion infra Part II.B.

144 See U.S. District Court, Northern District of New York, Jury Plan, supra note 4, at 3; U.S. District Court, Western District of New York, Jury Plan, supra note 2, at 2; U.S. District Court, Northern District of Texas, Jury Plan, supra note 4, at 4; U.S. District Court, District of Connecticut, Second Restated Plan for Random Selection of Grand and Petit Jurors, supra note 2, at 3; U.S. District Court, Northern District of California, General Order No. 6, Plan for the Random Selection of Grand and Petit Jurors, supra note 4, at 3; U.S. District Court, Western District of Michigan, Plan for the Random Selection of Grand and Petit Jurors, supra note 4, at 2-3; U.S. District Court, District of New Hampshire, Plan for the Random Selection of Grand & Petit Jurors for Service, supra note 4, at 4; U.S. District Court, Middle District of Tennessee, Administrative Order No. 79, Procedure for Filling the Master Jury Wheel, supra note 4, at 1; U.S. District Court, Central District of Illinois, Plan for the Random Selection of Jurors, supra note 4, at 2 (finding that the combined lists represent a “fair cross-section of the community”).

As Table B indicates, the average underrepresentation of African-Americans in the districts that use only voter registration lists is less than the average underrepresentation in the districts that use a combined source list. On an overall basis, the average absolute disparity in those districts relying solely on voter registration lists is 1.60%, while the average absolute disparity in those districts that use combined source lists is 2.51%. Moreover, because of the importance of comparing similar underlying populations, regional averages were calculated. In all three instances, the average absolute disparity was less when only voter registration lists were used.

### Table A

**Absolute Disparity on the Master Jury List**

<table>
<thead>
<tr>
<th>Currently Using Supplemental Source Lists</th>
<th>African-Americans</th>
<th>Hispanics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population List</td>
<td>Absolute Disparity</td>
</tr>
<tr>
<td>N.D. California</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Francisco/Eureka</td>
<td>9.00%</td>
<td>7.89%</td>
</tr>
<tr>
<td>San Jose</td>
<td>3.70%</td>
<td>2.94%</td>
</tr>
<tr>
<td>D. Connecticut</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridgeport</td>
<td>8.36%</td>
<td>5.41%</td>
</tr>
<tr>
<td>Hartford</td>
<td>6.34%</td>
<td>3.69%</td>
</tr>
<tr>
<td>New Haven</td>
<td>7.08%</td>
<td>4.27%</td>
</tr>
</tbody>
</table>

146 For a discussion of absolute disparity, see supra Part I.C and notes 68-72.

147 As was mentioned in discussing absolute disparity, an absolute disparity of 10% in a jurisdiction which is 40% Hispanic is quite different than an absolute disparity of 10% in a district where the population is only 10% Hispanic. Thus, in comparing the average absolute disparity from districts that use multiple source lists with the average absolute disparity from districts that do not, it was important to consider the characteristics of the underlying population. To ensure that the population has similar attributes, regional averages were prepared. The averages calculated for the Northeast region include data from the District of New Hampshire, the District of Maine, and the District of Vermont. The averages calculated for the Southwest region include data from the Northern District of California, the Northern District of Texas, the District of Arizona, the Eastern District of California, the Central District of California, and the Southern District of California. The averages calculated for the heavily Hispanic states include data from the Northern District of California, the Northern District of Texas, the District of Arizona, the Eastern District of California, the Central District of California, the Southern District of California, the Northern District of Florida, and the Southern District of Florida. The “heavily Hispanic states” grouping is based on a Census Bureau study which identified the eleven states with the highest proportion of Hispanics in the general population. See R. Colby Perkins, U.S. Dep’t of Commerce, Technical Working Paper No. 4, Evaluating the Passel-Word Spanish Surname List: 1990 Decennial Census Post Enumeration Survey Results (1993).

148 The data contained in Tables A-D were provided by the district court clerk’s office in the district to which the data pertains. In most instances, the clerk of the court used government form JS-12 to record the race and ethnicity information. In other instances, the clerk provided a report unique to the given district, and data from the 1990 Census of the Population were used to determine the racial and ethnic composition of the population within the district eligible for jury service. In all instances, the most recent available data were used. All data are on file with the author. In keeping with the formulas discussed in Part I, underrepresentations are shown as positive numbers and overrepresentations as negative numbers.
<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>List</th>
<th>Absolute Disparity</th>
<th>Population</th>
<th>List</th>
<th>Absolute Disparity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C.D. Illinois</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danville</td>
<td>7.07%</td>
<td>3.30%</td>
<td>3.77%</td>
<td>1.24%</td>
<td>0.47%</td>
<td>0.77%</td>
</tr>
<tr>
<td>Peoria</td>
<td>4.54%</td>
<td>2.06%</td>
<td>2.48%</td>
<td>0.89%</td>
<td>0.46%</td>
<td>0.43%</td>
</tr>
<tr>
<td>Rock Island</td>
<td>3.82%</td>
<td>2.08%</td>
<td>1.74%</td>
<td>2.92%</td>
<td>1.32%</td>
<td>1.60%</td>
</tr>
<tr>
<td>Springfield</td>
<td>3.34%</td>
<td>0.96%</td>
<td>2.38%</td>
<td>0.38%</td>
<td>0.10%</td>
<td>0.28%</td>
</tr>
<tr>
<td><strong>W.D. Michigan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Rapids</td>
<td>4.58%</td>
<td>2.19%</td>
<td>2.39%</td>
<td>1.97%</td>
<td>0.90%</td>
<td>1.07%</td>
</tr>
<tr>
<td>Kalamazoo</td>
<td>7.72%</td>
<td>6.10%</td>
<td>1.62%</td>
<td>1.60%</td>
<td>1.24%</td>
<td>0.36%</td>
</tr>
<tr>
<td>Lansing</td>
<td>5.60%</td>
<td>2.29%</td>
<td>3.31%</td>
<td>2.84%</td>
<td>2.28%</td>
<td>0.56%</td>
</tr>
<tr>
<td>Marquette</td>
<td>1.58%</td>
<td>0.00%</td>
<td>1.58%</td>
<td>0.33%</td>
<td>0.00%</td>
<td>0.33%</td>
</tr>
<tr>
<td><strong>D. New Hampshire</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.59%</td>
<td>0.24%</td>
<td>0.35%</td>
<td>0.89%</td>
<td>0.20%</td>
<td>0.69%</td>
</tr>
<tr>
<td><strong>N.D. New York</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>N.D. Texas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abilene</td>
<td>4.20%</td>
<td>1.00%</td>
<td>3.20%</td>
<td>1.90%</td>
<td>0.40%</td>
<td>1.50%</td>
</tr>
<tr>
<td>Amarillo</td>
<td>3.30%</td>
<td>1.52%</td>
<td>1.78%</td>
<td>14.10%</td>
<td>5.77%</td>
<td>8.33%</td>
</tr>
<tr>
<td>Dallas</td>
<td>16.70%</td>
<td>9.08%</td>
<td>7.62%</td>
<td>13.50%</td>
<td>5.27%</td>
<td>8.23%</td>
</tr>
<tr>
<td>Fort Worth</td>
<td>9.50%</td>
<td>5.83%</td>
<td>3.67%</td>
<td>9.70%</td>
<td>4.40%</td>
<td>5.30%</td>
</tr>
<tr>
<td>Lubbock</td>
<td>5.50%</td>
<td>2.42%</td>
<td>3.08%</td>
<td>24.00%</td>
<td>12.41%</td>
<td>11.59%</td>
</tr>
<tr>
<td>San Angelo</td>
<td>3.10%</td>
<td>1.37%</td>
<td>1.73%</td>
<td>20.00%</td>
<td>10.95%</td>
<td>9.05%</td>
</tr>
<tr>
<td>Wichita Falls</td>
<td>6.00%</td>
<td>2.56%</td>
<td>3.44%</td>
<td>6.80%</td>
<td>3.99%</td>
<td>2.81%</td>
</tr>
<tr>
<td><strong>Using Only Voter Registration Lists</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>D. Arizona</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoenix</td>
<td>3.00%</td>
<td>2.72%</td>
<td>0.28%</td>
<td>14.90%</td>
<td>7.85%</td>
<td>7.05%</td>
</tr>
<tr>
<td>Prescott</td>
<td>0.50%</td>
<td>0.62%</td>
<td>-0.12%</td>
<td>6.14%</td>
<td>3.27%</td>
<td>2.87%</td>
</tr>
<tr>
<td>Tucson</td>
<td>2.92%</td>
<td>0.67%</td>
<td>2.25%</td>
<td>23.20%</td>
<td>14.38%</td>
<td>8.82%</td>
</tr>
<tr>
<td><strong>E.D. California</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresno</td>
<td>3.80%</td>
<td>3.10%</td>
<td>0.70%</td>
<td>26.60%</td>
<td>12.60%</td>
<td>14.40%</td>
</tr>
<tr>
<td>Sacramento</td>
<td>5.60%</td>
<td>3.63%</td>
<td>1.97%</td>
<td>11.40%</td>
<td>6.05%</td>
<td>5.35%</td>
</tr>
<tr>
<td><strong>C.D. California</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern/Eastern</td>
<td>4.30%</td>
<td>4.00%</td>
<td>0.30%</td>
<td>13.80%</td>
<td>11.00%</td>
<td>2.80%</td>
</tr>
<tr>
<td>Western</td>
<td>12.10%</td>
<td>14.00%</td>
<td>-1.97%</td>
<td>19.00%</td>
<td>14.00%</td>
<td>5.00%</td>
</tr>
<tr>
<td><strong>S.D. California</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gainesville</td>
<td>5.70%</td>
<td>6.00%</td>
<td>-0.30%</td>
<td>19.18%</td>
<td>10.00%</td>
<td>9.18%</td>
</tr>
<tr>
<td>Tallahassee</td>
<td>14.78%</td>
<td>11.99%</td>
<td>2.79%</td>
<td>26.17%</td>
<td>20.90%</td>
<td>5.27%</td>
</tr>
<tr>
<td><strong>S.D. Florida</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fort Lauderdale</td>
<td>12.60%</td>
<td>9.00%</td>
<td>3.60%</td>
<td>8.10%</td>
<td>7.70%</td>
<td>0.40%</td>
</tr>
<tr>
<td>Fort Pierce</td>
<td>8.60%</td>
<td>2.90%</td>
<td>5.70%</td>
<td>3.90%</td>
<td>1.10%</td>
<td>2.80%</td>
</tr>
<tr>
<td>Key West</td>
<td>4.60%</td>
<td>3.90%</td>
<td>0.70%</td>
<td>11.30%</td>
<td>7.50%</td>
<td>3.80%</td>
</tr>
<tr>
<td>Miami</td>
<td>17.70%</td>
<td>15.30%</td>
<td>2.40%</td>
<td>50.60%</td>
<td>44.10%</td>
<td>6.50%</td>
</tr>
<tr>
<td>Palm Beach</td>
<td>10.00%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>6.80%</td>
<td>4.50%</td>
<td>2.30%</td>
</tr>
<tr>
<td><strong>D. Maine</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangor</td>
<td>0.25%</td>
<td>0.00%</td>
<td>0.25%</td>
<td>0.27%</td>
<td>0.31%</td>
<td>-0.04%</td>
</tr>
<tr>
<td>Portland</td>
<td>0.34%</td>
<td>0.00%</td>
<td>0.34%</td>
<td>0.43%</td>
<td>0.31%</td>
<td>0.12%</td>
</tr>
<tr>
<td><strong>M.D. Pennsylvania</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrisburg</td>
<td>4.00%</td>
<td>1.62%</td>
<td>2.38%</td>
<td>1.20%</td>
<td>0.28%</td>
<td>0.92%</td>
</tr>
<tr>
<td>Scranton</td>
<td>0.90%</td>
<td>0.36%</td>
<td>0.54%</td>
<td>0.70%</td>
<td>0.45%</td>
<td>0.25%</td>
</tr>
<tr>
<td>Williamsburg</td>
<td>1.30%</td>
<td>0.16%</td>
<td>1.14%</td>
<td>0.70%</td>
<td>0.08%</td>
<td>0.62%</td>
</tr>
<tr>
<td>D. Vermont</td>
<td>0.30%</td>
<td>0.00%</td>
<td>0.30%</td>
<td>0.70%</td>
<td>0.30%</td>
<td>0.40%</td>
</tr>
</tbody>
</table>
For Hispanics, the use of a combined source list seems to improve representation, but when the aberrant result from the Fresno Division is removed from the average, the average absolute disparity in both the Southwest region and the heavily Hispanic states is significantly lower when only voter registration lists are used. Removing the aberration, the average absolute disparity for those districts in the Southwest region that use only voter registration lists is 5.87% as compared to 6.48% for those districts in the Southwest region that use a combined source list. Making the same correction for the heavily Hispanic states, using only voter registration lists produces an average absolute disparity of 4.74% as compared with an average absolute disparity of 6.48% when both voter and driver's license lists are used. Although the average absolute disparity for all the districts considered is lower when a combined source list is used, no conclusion should be drawn from this fact. The population in the nine districts listed that use supplemental source lists is only 5.72% Hispanic, while the population in the nine districts listed that do not supplement is 11.52% Hispanic, a more than 50% difference. The different character of the underlying population makes this comparison less valid. Thus, more importance should be placed on the results from the Southwest region and the heavily Hispanic states where the Hispanic community is more prominent, and the underlying populations are more alike.

The comparative disparity measure can also be used to standardize the comparison between different underlying populations. As previously discussed, comparative disparity accounts for a group’s rela-

---

149 As shown in Table A, the absolute disparity for the Fresno Division was 14.40%, almost 8 percentage points larger than the next largest absolute. Only the absolute disparity in the Lubbock Division in the Northern District of Texas approaches this magnitude. Thus, for the purposes of the comparison, this result was considered an aberration and excluded from the average.

150 See supra note 147.

151 In the Southwest region, the population is 14.89% Hispanic in the districts that use multiple source lists and 16.78% Hispanic in the districts that use only voter registration lists. The difference of 1.89% constitutes only an 11.26% change in the composition of the population. In the heavily Hispanic states, the population is 14.89% Hispanic and 16.53% Hispanic respectively. This amounts to a difference of 1.64% and only a 9.92% change.

152 For a discussion of comparative disparity, see supra Part I.C and notes 73-79.
tive size in the underlying population and measures the percentage by which a member of the group's chances of being selected for jury service are reduced by the underrepresentation.\textsuperscript{153} Table C, which shows comparative disparities, even more convincingly demonstrates that the use of driver's license lists does not improve minority representation in the jury selection process. Using comparative disparity as the measure, in every instance except one, the representation of African-Americans and Hispanics is better when only voter registration lists are used. On an overall basis, using a combined source list, the chances of an African-American being placed on the master jury wheel are 49.88% less than they should be if the source list used were a perfect cross-section of the community. Using only voter registration lists, an African-American's chances are decreased by 39.13%. A member of the Hispanic community's chances of selection are reduced by 51.28% when voter registration lists are supplemented with driver's license lists. On the other hand, although the chances of selection are less than they should be, they are only diminished by 39.78% when voter registration lists alone are used. As Table C illustrates, similar results occurred in the Northeast region, the Southwest region, and the heavily Hispanic states for both African-Americans and Hispanics.

\textbf{Table C}

\textit{Master Jury Wheel Average Comparative Disparity}

<table>
<thead>
<tr>
<th></th>
<th>African-Americans</th>
<th>Hispanics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Voter/Driver</td>
<td>Voter Only</td>
</tr>
<tr>
<td>Overall (all districts)</td>
<td>49.88%</td>
<td>39.13%</td>
</tr>
<tr>
<td>Northeast Region</td>
<td>59.52%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Southwest Region</td>
<td>43.36%</td>
<td>12.75%</td>
</tr>
<tr>
<td>Heavily Hispanic States</td>
<td>49.98%</td>
<td>20.98%</td>
</tr>
</tbody>
</table>

Perhaps the best way to evaluate the impact of using multiple source lists is to compare a group's representation in a given district before and after the district began using multiple source lists. Assuming no major population shifts occur during the period in question, using data from the same district virtually eliminates the problem of differences in the underlying population. Unfortunately, because districts are not required to retain race and ethnicity information for more than four years (unless ordered by a court),\textsuperscript{154} and districts are only required to refill their master jury wheel once during this time

\textsuperscript{153} See \textit{supra} Part I.C.
period,\textsuperscript{155} these data are not readily available.\textsuperscript{156} However, in those instances when data were available, the available data confirmed that using multiple source lists does not necessarily increase minority representation.

The use of driver's license lists actually increased the underrepresentation of African-Americans on the master jury wheel in the Buffalo Division from 0.53\% to 1.33\%. Although at a 95\% level of confidence this increase is not statistically significant,\textsuperscript{157} the use of supplemental source lists clearly did not have its intended effect. With Hispanics, the addition of driver's license lists as a potential source of jurors did increase their representation on the Buffalo Division's master jury wheel. But again, at a 95\% level of confidence, the 0.36\% improvement is so slight that there is no way to conclude that it did not simply result from random sampling.\textsuperscript{158} Although the use of driver's license lists may have improved the representation of Hispanics on the Buffalo Division's master jury wheel, the results are, at best, inconclusive.


\textsuperscript{156} The Administrative Office of the United States Courts used to require each district court to file government form JS-12 with the Office each time its master jury wheel was refilled. Presently, the Administrative Office only requires that the form be completed and retained by the court in compliance with the relevant provisions of the Jury Selection and Service Act. Memorandum from Duane R. Lee, Chief, Court Administration Division, to All Clerks, United States District Courts 1 (Oct. 23, 1992).

\textsuperscript{157} Proportions can be compared using procedures based on the normal approximation and on standardizing the difference. DAVID S. MOORE & GEORGE P. MCCABE, INTRODUCTION TO THE PRACTICE OF STATISTICS 590 (2d ed., W.H. Freeman and Co. 1993). To determine if the proportions differ significantly, a confidence interval can be drawn using the formula

\[ (p_1 - p_2) \pm z^* \text{SD} \]

where 

- \( p_1 \) = proportion of successes in the first group
- \( p_2 \) = proportion of successes in the second group
- \( n_1 \) = size of the first sample
- \( n_2 \) = size of the second sample

\[ \text{SD} = \sqrt{\frac{p_1(1-p_1)}{n_1} + \frac{p_2(1-p_2)}{n_2}} \]

and, \( z^* \) is standard normal critical value.

\textit{Id.} at 591. If the confidence interval contains zero, one can be confident that the proportions do not differ significantly. \textit{Id.} at 592.

Since the absolute disparity before supplementation equals \( d_1 = p_1 - \text{pop} \), and the absolute disparity after supplementation equals \( d_2 = p_2 - \text{pop} \), and in every case the population (\textit{pop.}) remained constant, \( d_1 - d_2 = p_1 - p_2 \). Thus, the accepted method for comparing proportions can be used to draw conclusions about the change in the absolute disparities.

5\% or a 95\% level of confidence is the cutoff probability used in most industrial and scientific applications. Kairys, supra note 5, at 792 (citing M. DECROOT, PROBABILITY AND STATISTICS 380 (1975)). At a 95\% level of confidence, 95 out of 100 times a random sample is drawn the result will fall within the confidence interval. For a more general discussion of statistical significance, see supra Part I.C and notes 80-85.

\textsuperscript{158} The 0.36\% increase which falls within the 95\% confidence interval is an observation that could occur in 95 out of 100 cases due solely to the effects of random sampling.
Information from the District of Connecticut about the effects of supplementation on the resulting qualified pool is similarly inconclusive. As Table D illustrates, although the improvement in the representation of Hispanics in each of the three divisions is statistically significant at a 95% confidence level, so is the 1.72% decrease in the representation of African-Americans in the Bridgeport Division. Moreover, in the New Haven Division, the addition of driver’s license lists as a source of potential jurors had zero impact on the representation of African-Americans.

The Buffalo Division experienced a similarly ambiguous result with respect to its qualified jury pool. The use of driver’s license lists increased the representation of both African-Americans and Hispanics in the qualified jury pool. The overrepresentation of African-Americans was increased by 2.20% and the underrepresentation of Hispanics reduced by 0.2%. However, neither change is statistically significant at a 95% confidence level, and both could have resulted from random sampling.

**Table D**

<table>
<thead>
<tr>
<th>African-Americans</th>
<th></th>
<th></th>
<th>Hispanic</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absolute Disparity</td>
<td></td>
<td>Absolute Disparity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
<td>Change</td>
<td>Significant</td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>D. Connecticut</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridgeport</td>
<td>-0.86%</td>
<td>0.86%</td>
<td>-1.72%</td>
<td>Yes</td>
<td>4.78%</td>
<td>3.38%</td>
</tr>
<tr>
<td>Hartford</td>
<td>3.26%</td>
<td>1.74%</td>
<td>1.52%</td>
<td>Yes</td>
<td>4.30%</td>
<td>2.77%</td>
</tr>
<tr>
<td>New Haven</td>
<td>1.28%</td>
<td>1.28%</td>
<td>0.00%</td>
<td>No</td>
<td>2.93%</td>
<td>2.04%</td>
</tr>
<tr>
<td>W.D. New York</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buffalo</td>
<td>-0.90%</td>
<td>-3.10%</td>
<td>2.20%</td>
<td>No</td>
<td>1.20%</td>
<td>1.00%</td>
</tr>
</tbody>
</table>

Taken as a whole, the empirical evidence presented refutes the claim that using multiple source lists improves minority representation, at least when the second list is a list of licensed drivers. Not only does a large underrepresentation persist after adding driver’s license lists, but in most instances, the underrepresentation increases. The comparison of the average absolute and comparative disparities from those districts that use only voter registration lists with the average disparities from those that supplement their source list clearly evidences this fact. Moreover, the examination of the effects, before and after, of using multiple source lists confirms this result on a division-by-division basis. Thus, although using multiple source lists aims at achieving a worthy goal, courts must use other means if they are going to solve the problem of minority underrepresentation in the jury selection process.
III

ALTERNATIVES FOR IMPROVING MINORITY REPRESENTATION

Although supplementation does not achieve its intended result, this does not mean that courts do not have an affirmative obligation to improve minority representation in the jury selection process. The Jury Selection and Service Act states that source lists should be supplemented when necessary, but does not state that other steps may not be taken to ensure that the policies of the Act are achieved. In fact, § 1863(a) specifically requires each court to "devise and place into operation a . . . plan . . . that shall be designed to achieve the objectives of [the Act]." The remainder of the Act simply lays out particular provisions aimed at achieving greater minority representation on juries, but is not intended to limit a court's flexibility in reaching the goals of the Act.

A. Re-designing the Jury Questionnaire

The first step in correcting the problem of minority underrepresentation in the jury selection process is to ensure that courts have complete and accurate information about the racial and ethnic composition of their jury pools. Courts need complete and accurate information to measure the size of the problem, to assess the effectiveness of potential remedies, and to monitor the solution once one has been implemented. A study of returned jury questionnaires in the Eastern District of Pennsylvania, however, shows that currently 74.0% of the individuals who return their jury questionnaire fail to indicate their ethnicity. On average, in the eighteen districts listed in Table A, the race of the juror was unknown in 7.72% of the cases and the ethnicity of the juror was unknown 20.55% of the time. With such high non-response rates, correcting the problem of underrepresentation becomes more difficult.

163 See supra note 148.
The Census Bureau has studied the non-response issue quite extensively and has found that when answering a questionnaire, the response to one question "conditions" a respondent's answer to later questions. Often, the respondent fails to answer a later question assuming that his or her response can be inferred from a previous answer. Thus, in the case of the jury questionnaire on which question ten asks an individual to indicate his or her race, it is likely that the individual will omit question eleven, which asks "are you Hispanic," if that the answer can be inferred from the response to question ten. However, a Hispanic can be of any race, and the answer is not readily apparent from the response to the previous question.

To combat the non-response problem, the Census Bureau has experimented with separating the race and ethnicity questions on the census questionnaire and placing the ethnicity question three questions prior to the race question. In multiple tests, "[p]lacement of Spanish origin prior to race significantly reduced the nonresponse rate for the Hispanic origin question, while nonresponse for race remained low and fairly stable." Although the 1990 census form did not place the race question prior to the ethnicity question, it, at least,

---


165 Bates, supra note 164, at 13. See also Martin, supra note 162, at 551 ("The effect of question order may derive from the context invoked by prior questions, which may influence respondents' frame of reference or suggest different interpretations of the question."). "The potential for this type of effect is especially pronounced when the concept being measured is somewhat unclear," like in the case of a "self-identified" minority. Martin, supra note 162, at 552. See also discussion supra Part I.C.

166 See Pinal, supra note 164, at 7 ([M]ultiple race-ethnicity questions sometimes confuse respondents. As a consequence they may leave one or more questions unanswered. Respondents may . . . assume the answer can be inferred from answers to previous questions.").

167 See Bates, supra note 164, at 15 ("Presumably, non-Hispanics are more likely to skip the Spanish origin question when race is asked first because they think a "no" response can be inferred from their previous answer to race."); Pinal, supra note 164, at 8 ("[S]ome respondents may only answer the race question and assume the answer to Hispanic origin can be inferred from their response to the race question.").


169 See Bates, supra note 164, at 8-21; Content Determination Report, supra note 164, at 22.

170 Bates, supra note 164, at 19. "The Hispanic origin item nonresponse rates ranged from 20% to 30% when placed immediately after race, compared to 13% to 17% when placed 3 items after race." Martin, supra note 162, at 556.
separated the questions with two unrelated, intervening questions. This is significant, because census data are used as the base line for a jury challenge. If the census form is superior at eliciting a response from "self-identified" minority groups, then it may be difficult to defend a challenge to a jury selection system that, in reality, is fair.

The Census Bureau's experience suggests a simple solution for courts: revise the jury questionnaire. Placing the ethnicity question prior to the race question will not add minorities to the source list, but, at a minimum, courts will have more accurate data with which to assess the problem. The revision may also reveal that underrepresentations are not as severe as they currently appear to be. With minimal effort, courts could take an important first step toward remediying the problem of minority underrepresentation.

B. Mandating that Jury Questionnaires be Returned and Completed

The second step in improving minority representation involves ensuring that those individuals who appear on the source list actually participate in the jury selection process. Any gains made in improving the representativeness of the jury source list can quickly be lost if the individuals who are added to the source list do not ultimately participate in the selection process. Of the 52,242 jury questionnaires mailed to individuals on the Eastern District of Pennsylvania's 1993 master jury wheel, 5,077 questionnaires were returned to the court by the U.S. Postal Service as undeliverable, and another 4,162 questionnaires reached their destination, but were not returned to the court.

172 See, e.g., cases cited supra note 100.
173 See Affidavit of Dr. Samuel Preston, at 7-9, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995) (discussing the problems caused by the inadequate design of the jury questionnaire). See also discussion supra Part I.C.
174 Defending the validity of a jury selection system is made more difficult for a second reason. "[N]ationally about 2.0 percent of respondents did not respond to the race question [on the census] and about 10 percent did not answer the Hispanic-origin item." Pnal, supra note 164, at 7. However, when this occurred on the census, the Census Bureau imputed a race or ethnicity to the respondent based on his or her answers to other questions. Id. Similar information is not available on the jury questionnaire, making it impossible for courts to undertake the same procedure. See also Affidavit of Dr. Samuel Preston, at 14-15, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995) (discussing the problem of trying to compare jury data to a census baseline that contains imputed race and ethnicity).
175 Bates notes that "substantial improvements in the completeness of reporting can be achieved from rather modest revisions to [the questionnaire]." BATeS, supra note 164, at 21.
by the recipient even after three requests.\textsuperscript{176} In other words, 17.69% of the questionnaires were never even considered for jury service.\textsuperscript{177} A similar result was observed in the eighteen districts listed in Table A. On average, 9.12% of the jury questionnaires were returned to the court as undeliverable and 9.83% of the jury questionnaires were not returned to the court at all.\textsuperscript{178}

More importantly, this phenomenon does not affect groups equally. Minorities and low-income individuals tend to be more mobile,\textsuperscript{179} and a failure to regularly update jury source lists disparately impacts these groups. In addition, mail delivery tends to be less reliable in urban areas which typically have higher concentrations of minorities.\textsuperscript{180} Finally, in some instances, an inability to speak or read English affects the rate of return of jury questionnaires.\textsuperscript{181} At a minimum, studies show that when minorities respond to a questionnaire, it takes them longer to respond than other groups.\textsuperscript{182} Thus, juries chosen at the beginning of a new master jury wheel tend to be more underrepresentative than those chosen at the end of the wheel.

These observations suggest that courts should adopt some additional measures. First, courts should more strictly enforce the require-

\textsuperscript{176} Affidavit of Dr. Samuel Preston, at 4, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995).
\textsuperscript{177} Id.
\textsuperscript{178} See supra note 148.
\textsuperscript{179} Professor Preston opines:
It is likely that a high rate of movement is mainly responsible for the high fraction of undeliverable questionnaires among Hispanics. My analysis of the 1990 U.S. Census 5% sample for the Eastern District of Pennsylvania shows that 59.9 percent of the Hispanic population 18 years and over had lived in their dwelling less than 5 years, compared to only 37.4 percent of Non-Hispanics.

\textsuperscript{180} See United States v. Ortiz, 897 F. Supp. at 204 ("[D]efendants' expert Ericksen explained that Hispanics were less likely to return the [jury] questionnaire for three reasons. First, many Hispanics are poor. Like other poor people, they are apt to move more frequently than the more affluent, with their mail not being forwarded to their new address.").

\textsuperscript{181} See Affidavit of Dr. Samuel Preston, at 4, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995) ("It is likely that inability to speak or read English is the major reason for the very high non-return rate among Hispanics. My analysis of the 1990 Census 5% sample shows that 6.3 percent of Hispanics aged [sic] 18+ in the Eastern District of Pennsylvania could not speak English at all, and another 15.4 percent could not speak English well.").

\textsuperscript{182} See Affidavit of Eugene P. Ericksen, at tbl.3, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995); Record at TR 1, 63-70, United States v. Ortiz, 897 F. Supp. 199 (E.D. Pa. 1995) (explaining Ericksen's study and concluding that "Hispanics were slower to return the questionnaires.")). Id. at 65.
ment that the jury questionnaire be completed. The Jury Selection and Service Act empowers the jury clerk to return the jury question-
naire to the respondent when answers to questions are omitted or are ambiguous.\textsuperscript{183} Furthermore, the Act empowers the clerk to summon individuals who still fail to respond.\textsuperscript{184} Although summoning non-re-
spondents may not be practical in every case,\textsuperscript{185} courts should, at least, return the jury questionnaire several times in an attempt to receive complete answers. Few courts actually do this.\textsuperscript{186} Requiring completion would have benefits similar to improving the jury question-
naire.\textsuperscript{187}

Second, courts should wait until a third mailing has been com-
pleted and the respondents have been qualified before beginning to select jurors from the new qualified jury pool. This waiting period would compensate for the longer period of time minorities take to respond to questionnaires and ensure that all the juries chosen from a given qualified pool are as representative as they can be.\textsuperscript{188} Along
these same lines, courts should set minimums on the number of indi-

\textsuperscript{183} See 28 U.S.C. § 1864(a) (1994) ("In any case in which it appears that there is an omission, ambiguity, or error in a form, the clerk or jury commission shall return the form with instructions to the person to make such additions or corrections as may be necessary . . . ").

\textsuperscript{184} See 28 U.S.C. § 1864(a) (1994) ("Any person who fails to return a completed juror qualification form as instructed may be summoned by the clerk."). But see 28 U.S.C. § 1869(h) (1994) ("The form shall contain words clearly informing the person that the furnishing of any information with respect to his religion, national origin, or economic status is not a prerequisite to his qualification for jury service, that such information need not be furnished if the person finds it objectionable to do so, and that information concerning race is required solely to enforce nondiscrimination in jury selection and has no bearing on an individual's qualification for jury service."). (emphasis added). The Seventh Circuit in \textit{United States v. Gometz} wrote:

\begin{quote}

[T]he issue under the Act is of course not whether it would be a good thing to follow up on persons who do not respond to a jury questionnaire, . . . but only whether the Act imposes any duty on the clerk or judges of the district court to follow up on the nonresponders.

730 F.2d 475, 479 (7th Cir.), cert. denied, 469 U.S. 845 (1984). The Seventh Circuit court concluded that the Act:

include[s] no requirement that the district court clerk take measures to correct a low response rate, so long as it is high enough to generate enough names for the qualified jury wheel to enable staffing the required number of juries. The Act empowers—not requires—the clerk to pursue those who fail to return their juror qualification forms . . .

\textit{Id.} at 480.

\textsuperscript{185} Gometz, 730 F.2d at 480 ("Most district court clerks lack the resources to issue thousands of summonses every year . . . nor should our overworked district judges be required to cite nonresponders for contempt . . . [A] person forced . . . to serve on a jury is apt to be an angry juror and that . . . is a bad juror.").

\textsuperscript{186} See, e.g., \textit{United States v. Ortiz}, 897 F. Supp. at 201 ("If a person did not answer the Hispanic ethnicity question, the questionnaire was not sent back as incomplete, since presumably the person had checked another box as to race.").

\textsuperscript{187} See supra Part IIIA.

\textsuperscript{188} See supra note 182 and accompanying text.
individuals that must be in the qualified jury pool before the court will select a jury from the pool. The Jury Selection and Service Act places a minimum on the number of individuals on the master jury wheel, but fails to set a minimum for the qualified pool. Some districts like the District of South Carolina have set minimums on the size of the qualified pool in their jury plans. However, courts have failed to enforce these minimums when the representativeness of juries has been challenged on the ground that the qualified pool did not contain the minimum number of individuals required and was accordingly rendered unrepresentative. To be effective, these minimums must be strictly enforced.

C. Using Stratified Sampling Techniques

Finally, selecting a stratified sample from the qualified pool as the third and final step in remedying the problem of minority under-representation is perhaps the only way to guarantee that the jury chosen will be one chosen from a fair cross-section of the community. Because even a relatively inclusive source list underrepresents certain groups, some districts have experimented with stratified sampling techniques. Stratified sampling can work in a number of ways. The District of Connecticut identifies municipalities with a population that

189 See 28 U.S.C. § 1863(b)(4) (1994) ("The plan shall fix a minimum number of names to be placed initially on the master jury wheel . . . .")


191 Id.

192 See, e.g., United States v. Davenport, 824 F.2d 1511, 1514 (7th Cir. 1987) ("The Act . . . does not require that prospective jurors be conscripted to satisfy some rigid and unrealistic formula."); United States v. Gomez, 730 F.2d 475, 482 (7th Cir. 1984) (finding a 70% non-response rate tolerable), cert. denied, 469 U.S. 845 (1984); United States v. Carmichael, 685 F.2d 903, 911 (4th Cir. 1982) (rejecting a challenge to the jury selection system despite finding that the qualified jury pool contained slightly less than the required 300 names), cert. denied, 459 U.S. 1202 (1983); United States v. Whitley, 491 F.2d 1248, 1250 (8th Cir. 1974); United States v. Daly, 573 F. Supp. 788, 793 (N.D. Tex. 1983) (finding no "substantial violation" resulting from the failure to follow up on non-returned jury questionnaires); United States v. Manbeck, 514 F. Supp. 141, 144 (D.S.C. 1981) (finding the fact that the qualified pool contained 299 names at the time of the first drawing and only 267 names at the time of the second drawing to be a "technical violation" of the Jury Plan which required 300 names and refusing to dismiss the indictments); United States v. Armsbury, 408 F. Supp. 1130, 1142 (D. Or. 1976) ("A low return rate of questionnaires . . . does not amount to a 'substantial violation.'"). Broadway v. Culpepper, 439 F.2d 1253 (5th Cir. 1971), and Berry v. Cooper, 577 F.2d 322 (5th Cir. 1978), the only cases to require that a clerk to follow up with non-respondents, imposed the requirement as a means of correcting proven discrimination. See United States v. Gomez, 730 F.2d at 480; United States v. Maskey, 609 F.2d 183, 191 (5th Cir. 1980), cert. denied, 447 U.S. 921.

193 In his article, Albert Alschuler argues that "quotas" are the only way to end jury underrepresentation. See Albert W. Alschuler, Racial Quotas and the Jury, 44 Duke L.J. 704, 706 (1995).

194 See supra Part II. See also Munsterman, supra note 3, at 74 ("With the understandable frustration of courts which, despite multiple source lists, still do not achieve acceptable
is greater than 10% Hispanic and sends additional jury questionnaires to individuals in those designated municipalities. This approach, however, is insufficient to guarantee that a jury chosen from a fair cross-section of the community will result. The Eastern District of Michigan, on the other hand, assesses the racial and ethnic composition of the population and then removes individuals at random from groups that are overrepresented in the qualified jury pool. Thus, the Eastern District of Michigan achieves a qualified jury pool that represents a perfect cross-section of the community before it sends jury summonses.

Commentators have criticized stratified sampling for practical reasons. Critics complain that courts will begin by trying to create a racially and ethnically balanced qualified jury pool, but will ultimately be tempted to try to create a jury pool based on increasingly narrow classifications. More problematic, however is the constitutionality of a jury selection plan that relies on stratified sampling. Courts have upheld stratified sampling techniques for years as a valid means of achieving geographically balanced juries, but the constitutionality of using these techniques to achieve racial and ethnic balance remains untested. The Third Circuit, in Ramsuer v. Beyer, criticized the trial judge's addition of two African-Americans to the jury venire, even though the judge was not altering the composition of the jury for invidious, racially discriminatory purposes. The Supreme Court has never specifically addressed the issue.

The constitutionality of an affirmative action program, like stratified sampling, often hinges on the level of scrutiny that a court applies. Supporters of affirmative action in the jury context typically

representation of particular cognizable groups, a stratified selection technique could be attractive.


196 Although this technique increases the likelihood that a jury questionnaire will reach a minority recipient, there is still no guarantee that the questionnaire will be returned and qualified. This system suffers from the defects discussed in Part III.B. See supra Part III.B.

197 Eastern District of Michigan, Jury Selection Plan, supra note 4, at 7.

198 Unlike the District of Connecticut's approach, the approach used by the District of Michigan directly affects the composition of the qualified jury pool after all other influences have been accounted for and immediately before jurors are summoned.

199 See Munsterman, supra note 3, at 76.

200 Id.

201 Id. at 60, 74. For an example of the use of stratified sampling to achieve geographic balance, see U.S. District Court, Western District of New York, Jury Plan, supra note 2, at 2.


203 Id. at 1222-25. See also Domitrovich, supra note 30, at 73-74.
make two arguments for exempting their initiatives from strict scrutiny: (1) race-conscious selection practices are not objectionable, because they "include," rather than "exclude" individuals, and (2) these practices do not deprive any group of an opportunity to which it is entitled.\textsuperscript{204} However, in light of recent Supreme Court rulings, it is unlikely that either argument could save such an affirmative action initiative from the rigors of strict scrutiny.

The "inclusion"/"exclusion" distinction originated in \textit{Cassell v. Texas},\textsuperscript{205} the only Supreme Court case to consider an equal protection challenge to an affirmative action program in the jury context.\textsuperscript{206} Proponents of the distinction focus on Justice Frankfurter's statement that "purposeful, systematic non-inclusion because of color" violates the Equal Protection Clause, and argue by implication that the Court would not find race-conscious programs unconstitutional when the ultimate objective is "inclusion."\textsuperscript{207} Although this argument may have been persuasive at one time,\textsuperscript{208} it is now clear that the Court will apply strict scrutiny to a race-conscious program regardless of its objectives.

In \textit{City of Richmond v. J.A. Croson Co.},\textsuperscript{209} the Court applied strict scrutiny to a minority set-aside program, despite the program's intended objective of remedying the effects of past, purposeful discrimination. In rejecting the petitioner's claim for relief, the Court noted that "[a]bsent searching judicial inquiry . . . there is simply no way of determining what classifications are 'benign' or 'remedial' and what classifications are in fact motivated by illegitimate notions."\textsuperscript{210} More recently, the Court reiterated its race-blind approach to affirmative action in \textit{Shaw v. Reno}.\textsuperscript{211} Writing for the majority, Justice O'Connor stated that regardless of the motivation behind them, racial classifications "are by their very nature odious" and must be "narrowly tailored to further a compelling governmental interest."\textsuperscript{212} The Court

\begin{thebibliography}{9}
\bibitem{205} 339 U.S. 282 (1950).
\bibitem{206} King, \textit{supra} note 204, at 730.
\bibitem{207} \textit{Cassell}, 339 U.S. at 291 (Frankfurter, J., concurring).
\bibitem{208} \textit{See} Brooks v. Beto, 366 F.2d 1, 4 (5th Cir. 1966) (upholding the jury commissioner's decision to include two African-Americans on a list of prospective grand jurors and noting that "[u]nlike the other cases heard en banc, this one does not challenge the exclusion of Negroes from grand or trial juries. Rather, this case . . . complains of purposeful inclusion."); \textit{cert. denied}, 386 U.S. 975 (1967); United States v. Jenison, 485 F. Supp. 655, 666 (S.D. Fla. 1979) (noting that "[i]t is well recognized that purposeful inclusion of distinct classes on grand or petit juries does not constitute discrimination violative of the federal constitution").
\bibitem{209} 488 U.S. 469 (1989).
\bibitem{210} \textit{Id.} at 493.
\bibitem{211} 509 U.S. 630 (1993).
\bibitem{212} \textit{Id.} at 643.
\end{thebibliography}
reached a similar conclusion in *Miller v. Johnson*, another redistricting case decided last term.

The Court's reasoning in *Shaw* also suggests that the Court could not be persuaded to refrain from applying strict scrutiny, even if a petitioner succeeded in convincing the Court that a system of racial quotas would not have a discernible, detrimental effect on any group's rights to participate in the jury process. In *Shaw*, the Court ignored the petitioners' failure to allege that redistricting deprived them of their right to participate in the political process, and instead concentrated its inquiry on harms that inevitably accompany any racial classification. The Court's reasoning in *Shaw* went even further. Citing *Powers v. Ohio*, Justice O'Connor concluded that, "racial classifications receive close scrutiny even when they may be said to burden or benefit the races equally." Thus, given the current state of the law, neither an objective of "inclusion," nor the lack of a discernible, detrimental effect will shield an affirmative action program from strict scrutiny.

To some commentators, it seems quite clear that a jury selection system like the Eastern District of Michigan's would not survive a challenge under the strict scrutiny standard. For instance, before any of the recent Supreme Court cases were even decided, Munsterman and Munsterman noted that "[w]hile stratified selection solves the representation problem by an affirmative compensation, the resultant unequal probability of selection remains to be tested in the courts. In fact, it can be argued that this affirmative compensation is contrary to the concept of blind selection." Given the Supreme Court's current race-blind approach, the additional burden created by the need for more frequent jury service by members of minority groups would almost certainly rise to the level of a cognizable harm for the Court. Thus, the Court finds itself in a "catch-22." To be true to its race-blind approach, the Court must invalidate stratified sampling. But, the Court must uphold the practice if it wants to protect a criminal defendant's Fifth and Sixth Amendment rights.

**Conclusion**

To obtain juries that represent a fair cross-section of the community, courts strive to compose the most representative source list possi-

---

216 *Shaw*, 509 U.S. at 651.
217 See, e.g., King, *supra* note 204, at 730 (explaining that the Supreme Court has "made it clear that it will apply the most exacting scrutiny to all state-initiated racial classifications, regardless of their alleged purpose or effect").
218 Munsterman, *supra* note 3, at 76.
However, given the failure of using multiple source lists to remedy the problem of minority underrepresentation and the additional costs associated with supplementation, courts should explore alternative means of increasing minority representation in the jury selection process. Although modifying the jury questionnaire would not add minorities to the jury source pool, it would, at least, allow courts to more accurately evaluate the problem. A Supreme Court decision specifying a standard and numeric cutoff by which to evaluate minority underrepresentation would also help. Requiring courts to wait before they begin selecting juries from a new qualified pool, and setting a minimum on the number of individuals that the pool must contain, would guarantee that the pool is equally representative for all defendants. But, in the end, if the ultimate objective is to choose juries from a pool that is a "fair cross section of the community," the most efficient and effective means of reaching the goal is to use a stratified sampling approach like the Eastern District of Michigan's approach. Some constitutional justification for this approach must be found if the Fifth and Sixth Amendments' guarantees are going to survive the Supreme Court's current race-blind jurisprudence.

John P. Bueker