THE Z-TEST FOR PERCENTAGES: A STATISTICAL TOOL TO DETECT PRETEXTUALLY NEUTRAL JUROR CHALLENGES

*Marvin L. Longabaugh**

Cite as: Marvin L. Longabaugh, *The Z-Test for Percentages: A Statistical Tool to Detect Pretextually Neutral Juror Challenges*, 13 RIC. J.L. & TECH. 6 (2006), http://law.richmond.edu/jolt/v13i2/article6.pdf.

I. INTRODUCTION

[1] In June 1999, Sandy Murphy and Rick Tabish were arrested and charged with murder, robbery, burglary, and grand larceny related to the death of Las Vegas casino mogul Lonnie "Ted" Binion.[1] The subsequent trial provided a captivated public with the elements of murder, greed, betrayal, torture, and extortion.[2]

[2] Magellan Research (a public opinion research firm owned by the author of this article) was contacted by members of the defense team to conduct public opinion polls on their behalf. Magellan conducted three polls during the trial.[3] The first poll was conducted just days before jury selection. It questioned a random sample of the general public and collected their answers to key questions from completed jury

* J.D. Boyd School of Law, magna cum laude, University of Nevada Las Vegas 2001. B.B.A., Management Information Systems, Texas Tech University, 1982. The author is a practicing attorney and President/CEO of Magellan Research, a Las Vegas-based public opinion research firm.

[1] Jeff German, *Murphy, Tabish Jailed in Binion Murder Case*, LAS VEGAS SUN, June 25, 2000, http://www.lasvegassun.com/sunbin/stories/archives/1999/jun/25/508975973.html (last visited Oct. 6, 2006).

[2] *Id.*

[3] This article is only concerned with the first poll conducted by Magellan. The second poll questioned people watching the trial on television regarding the believability of witnesses and the effectiveness of counsel and the judge. The third poll, conducted immediately prior to closing arguments, questioned these same viewers on the verdicts they would issue if they were on the jury. Members of this "electronic jury" indicated that they, too, would have returned "guilty" verdicts on nearly all counts.

questionnaires. The defense then compared the poll results to the responses of the prospective jurors.[4]

[3] The defense applied the poll results to the jury questionnaires to determine which jurors would be most advantageous to the defense. The defense devised a rating scale (based on key questionnaire answers and demographic data) and ranked 296 members of the jury venire. Although these efforts were ultimately unsuccessful (both defendants were convicted),[5] the defense selected a jury 97% certain (if the jurors were indeed representative of the public at large) that the defendants were guilty that nevertheless needed eight days of deliberation to return guilty verdicts.

[4] Though the polling was valuable to the defense, a lingering question remained: is the use of polling and questionnaires in jury selection fair and proper? The propriety of using polling and questionnaires to select a jury should be evaluated with a careful eye toward the potential for conflict with the U.S. Supreme Court decisions in *Batson v. Kentucky*[6] and *J.E.B. v. Alabama ex rel T.B.*[7] These cases dealt with race and gender based discrimination, respectively, in jury selection. The Court held in these cases that use of peremptory challenges to strike jurors for discriminatory reasons was unconstitutional.[8] It became apparent during the *Binion* trial that the techniques employed by the defense might be used to circumvent *Batson* and its progeny. An overzealous attorney could conceivably use

[4] The first issue considered involved change of venue. The data indicated that, if the defense wanted a change of venue, it would likely succeed using the poll results as a barometer of public sentiment. Over 97% of the 624 people polled believed that Murphy and Tabish were guilty of murder.

[5] While both Murphy and Tabish were convicted of several charges including first-degree murder, the Supreme Court of Nevada reversed all those convictions and remanded for a new trial because the trial court failed to sever additional charges brought against Tabish alone. Tabish v. State, 119 Nev. 293, 296, 314 (Nev. 2003). On retrial, a jury found Murphy and Tabish not guilty of murder, robbery, and conspiracy to commit murder and robbery, but guilty of conspiracy to commit burglary, burglary and grand larceny (Lisa Sweetingham, *Former Lovers Cleared of Casino Mogul's Murder*, COURTTV.COM, Nov. 23, 2004, http://www.courttv.com/trials/binion/112304_verdict_ctv.html (last visited Oct. 9, 2006)).

[6] Batson v. Kentucky, 476 U.S. 79 (1986).

[7] J.E.B. v. Alabama *ex rel.* T.B., 511 U.S. 127 (1994).

[8] *J.E.B.*, 511 U.S. at 143; *Batson*, 476 U.S. at 82-83.

information attained by an opinion poll or jury questionnaire to disguise a conscious effort to eliminate potential jurors because of their race or gender.

[5] For example, a venireman might be asked if he had ever owned a handgun. At first glance, such a question might not seem discriminatory at all. But what if, in a particular community, 92% of all black males owned handguns while only 14% of the rest of the population owned handguns? An attorney armed with this knowledge (which could be collected by either public opinion polls or jury questionnaires) could conceivably strike veniremen based on the response to this question, essentially excluding black males from the jury in violation of both *Batson* and *J.E.B.* The discriminatory intent and effect would remain even if the attorney was forced to exclude a few handgun owners who were not black males (to preserve the illusion). Therefore, it is possible that knowing too much about the venire and the surrounding community could actually increase the likelihood of discrimination in jury selection.

[6] The Texas Court of Appeals recently encountered this issue in *Shelling v. State*.[9] There, the Defendant was convicted of murdering a friend of his estranged wife by shooting him five times, stabbing him 11 times, and cutting his throat.[10] The Defendant appealed his conviction on several grounds, including a *Batson* claim.[11] During the trial the State asked veniremen if they believed the O. J. Simpson murder trial verdict was correct.[12] The State then used its peremptory challenges to strike members of the panel that believed that the verdict was proper.[13]

[7] The State did not dispute that the Defendant established a prima facie case that there was a discriminatory effect against African-Americans under *Batson*.[14] The State, however, rebutted the presumption that there was purposeful discrimination by providing race-neutral reasons why each of the strikes were made, and by noting that a white member of the venire

[9] Shelling v. State, 52 S.W.3d 213 (Tex. App. 2001).
[10] *Id.* at 217.
[11] *Id.* at 218.
[12] *Id.*
[13] *Id.*
[14] *Id.*

was struck who also believed that the Simpson verdict was correct.[15] The Court of Appeals, by a 6-3 vote, affirmed the judgment of the trial court in that the State satisfied its burden of demonstrating that the strikes were not racially motivated.[16]

[8] The *Shelling* decision highlights the problem now confronting courts throughout the nation. Is it enough for a party to present a race-neutral explanation to justify a peremptory strike? Are there questions that may be posed to veniremen that serve as a pretext for discrimination against a class of citizens? Can the court apply a test to determine whether such a question has a discriminatory effect, whether intentional or accidental? Part I of this article examines the series of cases that have established the constitutional limits on the use of peremptory challenges. Additionally, tools such as public opinion polls and jury questionnaires are examined insofar as they might be employed in jury selection. Part II discusses the problem of using questions that are merely a pretext for discrimination in voir dire. Part II further offers a test for scientifically evaluating whether a proposed question for the venire is appropriate and fair, or whether it is, instead, merely a pretext designed to justify the use of peremptory challenges based on race or gender. This proposed solution involves the use of public opinion polls and/or juror questionnaires to help determine whether particular responses are so closely associated with race, ethnic origin, or gender that to use them as a basis for peremptory challenge would be, in fact, discriminatory.

II. BACKGROUND

A. DISCRIMINATION IN JURY SELECTION

[9] The racial turmoil of the early 1960's and the ratification of the Civil Rights Act of 1964[17] were factors impacting the U.S. Supreme Court's most recent reviews of discrimination based on race in jury selection. Until the 1960's, the law in this area had been relatively well established. For almost a hundred years prior to the Civil Rights Act, the seminal case

[15] *Shelling*, 52 S.W.2d at 219-20.
[16] *Id.* at 220.
[17] *See generally* Civil Rights Act of 1964, 42 U.S.C.A §§ 2000a-2000h-6 (2005).

in this area was *Strauder v. West Virginia*.[18] In 1874 a black man was tried and convicted of murder. Under West Virginia law at the time, white males over the age of 21 were the only citizens eligible for jury service.[19] In its opinion, the Court stated that ending the oppression of the Black race was the purpose of the Fourteenth Amendment.[20] Therefore, the Court held that the West Virginia statute excluding Blacks from serving on juries violated the Equal Protection Clause.[21] The Court further noted that this conclusion did not guarantee that any defendant had a right to a jury comprised (in whole or in part) of persons of similar color, but instead held merely that state law could not, consistent with the Constitution, exclude all persons of a particular race or color from jury service.[22] It is important to note that the Court's decision was based on its concern for the equal protection rights of the defendant, rather than for the rights of prospective jurors excluded from jury service.[23]

[10] For ninety years *Strauder* remained the guiding force behind the selection of grand juries and venire panels. In *Swain v. Alabama*, however, the Court first considered the racially motivated use of peremptory challenges in selecting the juries themselves, rather than in assembly of the venire panel.[24] In *Swain*, the defendant was a black man accused of raping a white woman.[25] During voir dire, the prosecutor used peremptory challenges to exclude six of the eight black men in the venire.[26] Despite this overt act of discrimination, the Court held that the defendant had failed to meet the burden of proving that black jurors had been deliberately excluded.[27] The Court held that peremptory challenges

[18] Strauder v. West Virginia, 100 U.S. 303 (1879).
[19] *Id.* at 305.
[20] *Id.* at 306 (stating "[T]his is one of a series of constitutional provisions having a common purpose; namely, securing to a race recently emancipated, a race that through many generations had been held in slavery, all the civil rights that the superior race enjoy.").
[21] *Id.* at 309.
[22] *Id.* at 305.
[23] *Id.*
[24] Swain v. Alabama, 380 U.S. 202 (1965).
[25] *Id.* at 231.
[26] *Id.* at 205.
[27] *Id.* at 226 (finding that Alabama, while using jury selection procedures that significantly reduced the representation of black males, had not totally excluded them

were, by their very nature, discretionary.[28] Subjecting litigants to Equal Protection Clause scrutiny would weaken the value of discretionary challenges and subject them to "scrutiny for reasonableness and sincerity."[29]

[11] Additionally, the *Swain* Court held that discrimination could only be proven by showing that the prosecutor had consistently excluded black jurors in other cases, regardless of the circumstances, crime, or racial background of the parties.[30] Thus, under *Swain*, a defendant could not rely merely on the peremptory challenges exercised in his own case to show discrimination; instead, he had to show a pattern of discrimination over a series of cases. This seemingly oppressive burden for proving discrimination in jury selection remained the standard for over twenty years, despite the fact that records concerning peremptory strikes were not even kept by most courts.[31]

[12] The Court's decision in *Batson v. Kentucky*[32] relaxed the *Swai* court's "crippling burden of proof."[33] The defendant in *Batson*, a black man, was convicted by an all-white jury of burglary and receipt of stolen goods.[34] After voir dire, the prosecutor exercised his peremptory challenges to exclude all of the blacks in the venire.[35] In considering the defense's objection to these strikes, the trial court held that the parties were entitled to use their peremptory strikes in any manner they chose.[36] As in *Strauder* and *Swain*, the Court analyzed the equal protection issue in terms of the rights of the defendant rather than of prospective jurors.[37] Unlike *Swain*, however, the *Batson* Court held that a defendant need only show that he is a "member of a cognizable group" to show discrimination, rather than

---

from jury service. Had Alabama done so, their jury selection scheme would have violated the Equal Protection Clause of the Fourteenth Amendment).

[28] *Id.* at 221.

[29] *Id.* at 222.

[30] *Swain*, 380 U.S. at 224.

[31] Joel H. Swift, *The Unconventional Equal Protection Jurisprudence of Jury Selection*, 16 N. ILL. U. L. REV. 295, 326 (1996).

[32] *Batson*, 476 U.S. 79 (1986).

[33] *Id.* at 92.

[34] *Id.* at 82-83.

[35] *Id.* at 83.

[36] *Id.*

[37] *Id.*

show the pattern of discrimination required under *Swain*.[38] Hence, a defendant could make a prima facie showing of purposeful racial discrimination solely by using the facts of his own case, rather than having to show a pattern of discriminatory acts.[39]

[13] Equally important is *Batson's* articulation of a three-step, burden shifting mechanism for evaluating claims of discrimination against black jurors. First, the Court established that trial judges can use all relevant circumstances to decide if a prosecutor's use of peremptory challenges forms a prima facie case of discrimination.[40] Once that showing has been made, the burden shifts back to the State to provide a neutral explanation for the challenges.[41] The court must then evaluate the explanation to determine if there has been purposeful discrimination.[42] Note that this burden shifting approach does not preclude the use of peremptory challenges that seem racially motivated, so long as the challenging party can show a race neutral reasoning for the challenge that satisfies the court. Since 1986, the Supreme Court has issued a series of decisions that have broadened the scope of *Batson v. Kentucky*. In *Powers v. Ohio*, the Court held that a defendant could object to racially motivated peremptory challenges even when the defendant and the challenged juror were of different races.[43] Additionally, *Powers* is significant in that the Court, for the first time, considered the equal protection rights of the excluded juror (i.e., every citizen's right to be eligible for jury service) rather than the rights of the defendant.[44]

[14] In *Edmonson v. Leesville Concrete Co.*, the Court considered whether *Batson* should apply to civil actions as well as criminal cases.[45] In this case, a black construction worker brought a negligence action for injuries in a job-site accident. Counsel for Leesville Concrete exercised two of their three peremptory strikes to exclude blacks from the jury.[46] The

[38] *Batson*, 476 U.S. at 96.
[39] *Id.*
[40] *Id.* at 97.
[41] *Id.*
[42] *Id.* at 98.
[43] Powers v. Ohio, 499 U.S. 400, 410 (1991).
[44] *Id.* at 414.
[45] Edmonson v. Leesville Concrete Co., 500 U.S. 614, 616-17 (1991).
[46] *Id.* at 617.

Supreme Court expanded the holding in *Batson* to include civil cases, noting that racial discrimination in a civil case "harms the excluded juror no less than discrimination in a criminal trial."[47]

[15] The Supreme Court next looked to peremptory challenges that, while facially neutral, had a disparate impact upon certain racial groups. In *Hernandez v. New York*, a juror was challenged on the basis of his ability to speak Spanish in a case where some of the witnesses were expected to testify in Spanish, given the juror's conceded reluctance to accept only the interpreter's version of the testimony.[48] In a plurality opinion, Justice Kennedy noted that, unless discriminatory intent is inherent in the challenger's actions, the reasoning offered will be deemed race neutral.[49] Justice O'Connor concurred and went even farther, stating that the reason for the challenge must not be the juror's race itself, but for matters related to the juror's race (*e.g.*, fluency in Spanish as in *Hernandez*).[50]

[16] The *Batson* decision regarding race was revisited by the Court in *Georgia v. McCollum*.[51] Here, the Court further expanded *Batson* to prohibit the use of racially motivated challenges by criminal defendants (thus placing defense counsel under the same restrictions as prosecutors).[52] Even after *McCollum*, the issue of gender-based discrimination remained. Attempts to apply *Batson* analysis to gender discrimination were initially unsuccessful. For example, in *United States v. Hamilton*, a defense attorney cited *Batson* in his claim that the prosecution's challenges of three potential jurors were racially motivated (since all three were African-American).[53] The prosecutor countered that race was not the reason – instead, he struck the jurors because they were women.[54] The trial court held that there were no constitutional difficulties so long as the reasons for striking the jurors were *racially* neutral.[55] On appeal the Fourth Circuit

[47] *Id.* at 619.
[48] Hernandez v. New York, 500 U.S. 352 (1991).
[49] *Id.* at 360.
[50] *Id.* at 375.
[51] Georgia v. McCollum, 505 U.S. 42, 47 (1992).
[52] *Id.* at 59.
[53] United States v. Hamilton, 850 F.2d 1038, 1040 (4th Cir. 1988).
[54] *Id.* at 1041.
[55] *Id.* at 1040.

agreed, finding that neither the Sixth Amendment nor the Equal Protection Clause prohibited gender-based peremptory challenges.[56]

[17] Shortly thereafter, the Supreme Court seized the opportunity to address the issue of gender-based peremptory challenges in *J.E.B. v. Alabama ex rel T.B.*.[57] In *J.E.B.*, a father challenged the state's use of peremptory challenges to exclude men from juries in paternity actions.[58] Though the Court had traditionally evaluated gender-based discrimination with a lesser degree of scrutiny than race-based discrimination,[59] it held in *J.E.B.* that gender-based peremptory challenges were constitutionally prohibited as well.[60]

[18] The Court based its decisions in *Batson* and its progeny on the rights of both litigants and prospective jurors under the Fourteenth Amendment. Defendants, however, have an additional Sixth Amendment right to select a jury from a pool of citizens that represents a fair cross-section of the community.[61] In determining what constitutes a fair cross-section, courts

---

[56] *Id.* at 1043.

[57] *J.E.B. v. Alabama ex rel T.B.*, 511 U.S. 127, 128-29 (1994).

[58] *Id*. at 129.

[59] Jere W. Morehead, *When A Peremptory Challenge is no Longer Peremptory: Batson's Unfortunate Failure to Eradicate Invidious Discrimination from Jury Selection*, 43 DEPAUL L. REV. 625, 633 (citing Craig v. Boren, 429 U.S. 190 (1976) (holding gender-based classifications receive a lesser degree of scrutiny than do those based on race)). *See also* Mississippi University for Women v. Hogan, 458 U.S. 718, 724 (1982) (holding an important governmental objective is sufficient reason for gender discrimination).

[60] *J.E.B.*, 511 U.S. at 141-42. *See also* Swift, *supra* note 31 at 338. The *J.E.B.* Court did not go so far as to equate gender-based challenges with race-based challenges; instead, the difference in philosophy between these types of challenges is best described as follows:

> The *J.E.B.* Court thus simply declared, without any doctrinal support, a principle of jury selection/equal protection doctrine: challenges based on assumptions of group thinking among groups typically or traditionally subject to stereotyping are unconstitutional notwithstanding the body of doctrine holding that the justification for gender discrimination need not rise to the level of importance as that offered for racial discrimination; challenges based on arbitrary and capricious judgments about group thinking with regard to all other classifications are valid notwithstanding the body of doctrine holding that governmental classifications may never be arbitrary. *Id.*

[61] United States v. Grisham, 63 F.3d 1074, 1078 (7th Cir. 1995), *cert. denied*, 516 U.S. 1084 (1996); *see also* 28 U.S.C. § 1861 (2001) ("[Parties] have the right to grand and

have typically limited the right to "cognizable groups" (i.e., groups that are already protected to a greater degree under the Equal Protection Clause).[62] To summarize, the Sixth Amendment provides that the venire must be a fair cross-section of the community, while the Fourteenth Amendment guarantees both defendants and jurors that discriminatory practices will not be permitted when selecting jurors from the venire. This distinction will be particularly important when the Court's decision in *Purkett v. Elem*[63] is explored later in this article.

[19] In the future, it is likely that the Court will be presented with further opportunities to broaden the *Batson* decision by deciding that "cognizable group" status be extended to religious affiliation,[64] age,[65] level of education,[66] physical handicap,[67] and other distinguishing characteristics

petit juries selected at random from a fair cross section of the community in the district or division wherein the court convenes"); *see also* Andrew W. Leopold, *Constitutionalizing Jury Selection in Criminal Cases: A Critical Evaluation*, 86 GEO. L.J. 945, 949 (1998) (citing Holland v. Illinois, 493 U.S. 474, 480 (1990)) [hereinafter Leopold]; *Id. at n. 16* (quoting *Grisham*, 63 F.3d at 1079-80 ("The 'community' from which the potential jurors are drawn can be as broad as the judicial district in which the crime occurred.")).

[62] Leopold, *supra* note 61, at 967-69.

[63] Purkett v. Elem, 514 U.S. 765 (1995).

[64] *See* United States v. Gelb, 881 F.2d 1155, 1161 (2d Cir. 1989) (determining that Jews were a cognizable group for the purpose of Sixth Amendment protection of their right to representation in the venire). *But see also* Grech v. Wainwright, 492 F.2d 747, 750 n.3 (5th Cir. 1974) (requiring proof that the Jewish population was substantial enough in the community before acknowledging that Jews were a cognizable group. The proof was not critical, however, as the judge had merely provided Jewish veniremen with the option to exclude themselves from jury duty to observe Yom Kippur; the judge had not purposefully excluded all Jews from the venire).

[65] Efforts to have particular sectors of the population defined as cognizable groups based on age have thus far been unsuccessful. *See* Willis v. Kemp, 838 F.2d 1510, 1516-17 (11th Cir. 1988) (stating that in a murder trial, the defendant alleged that persons age 18 to 29 were a cognizable group for Sixth Amendment cross-section claim purposes); State v. Blunt, 708 S.W.2d 415, 418 (Tenn. Crim. App. 1985) (stating that in a murder trial, the defendant alleged that his Sixth Amendment rights were violated by the granting of exemptions from jury service for members of the venire that were over 65 and desired such exemption). One group of people over the age of 65 did succeed in State v. Williams, 342 So.2d 1325, 1326 (Ala. App. 1976) (holding persons over 65 were systematically excluded from the venire without providing them with the opportunity to serve).

[66] *See* United States v. Potter, 552 F.2d 901, 905 (9th Cir. 1977) (holding that in a marijuana importation case, neither persons 18-34 nor persons whose education was

for the purpose of asserting the defendant's (and prospective juror's) Sixth Amendment rights.

B. USE OF PUBLIC OPINION POLLS IN JURY SELECTION

[20] As public opinion survey technology has improved, and polls have become more generally accepted, the courts have become more receptive to their use in trials. Although as late as the 1950's, courts were generally dubious about the usefulness of surveys; in recent years, courts have been more receptive to the use of polling results in the courtroom.

[21] Historically, public opinion survey evidence was subject to exclusion because it is, by its very nature, hearsay. In 1953, for example, the Florida Supreme Court upheld the trial court's exclusion of a poll that showed that a black defendant accused of raping a white woman could not get a fair trial in the county where the crime allegedly occurred.[68] This decision greatly diminished the potential for use of polling data in trials, as proponents were forced in some cases to parade dozens of interviewers and respondents to the witness stand in order to overcome the inevitable hearsay objections.[69]

[22] Introduction of survey evidence through the testimony of the participants was indeed cumbersome. Recognizing this, one court took a significant step toward allowing admission of polling evidence in *Zippo Manufacturing Co. v. Rogers Imports, Inc.*[70] There, the manufacturer of a popular cigarette lighter sued an importer for trademark infringement and

limited to high school or below qualified as a cognizable group for jury selection purposes).

[67] *See* State v. Spivey, 700 S.W.2d 812, 814 (Mo. 1985) (holding, in a trial in which a deaf defendant was accused of murder, that since deafness can occur to persons in all walks of life, the defendant's right to a fair trial was not impaired by a jury pool that had no deaf members).

[68] Irvin v. State, 66 So.2d 288, 291 (Fla. 1953) (*en banc*). The defendant in this case attempted to introduce the survey results into evidence through the testimony of the polling company executive who supervised the survey. Because the executive had not actually conducted the polling himself, the court excluded his testimony as "hearsay upon hearsay." *Id.*

[69] Standard Oil Co. v. Standard Oil Co., 252 F.2d 65, 75 (10th Cir. 1958). *See also* Quaker Oats Co. v. General Mills, Inc., 134 F.2d 429 (7th Cir. 1943).

[70] Zippo Mfg. Co. v. Rogers Imports, Inc., 216 F. Supp. 670 (S.D.N.Y. 1963).

unfair competition.[71] In order to prove their claim, Zippo attempted to introduce the results of surveys that showed respondents were so confused by the appearance of Rogers' lighters that they mistakenly identified them as "Zippo" lighters.[72] The court, while admitting that survey evidence was hearsay, allowed it nevertheless and stated:

> Regardless of whether the surveys in this case could be admitted under the non-hearsay approach, they are admissible because the answers of respondents are expressions of presently existing state of mind, attitude, or belief. There is a recognized exception to the hearsay rule for such statements, and under it the statements are admissible to prove the truth of the matter contained therein.[73]

[23] Thus, the procedural obstacles regarding admissibility of survey evidence have been significantly reduced. Recently, recognition of the validity of survey evidence was demonstrated in *Schering Corp. v. Pfizer Inc.*[74] There the court discussed the history of excluding survey evidence[75] in a case alleging false advertising in violation of a prior settlement agreement between the parties,[76] and held that the weight granted to survey evidence should be based on whether:

> 1) the "universe" was properly defined, (2) a representative sample of that universe was selected, (3) the questions to be asked of interviewees were framed in a clear, precise and non-leading manner, (4) sound interview procedures were followed by competent interviewers who had no knowledge of the litigation or the purpose for which the survey was conducted, (5) the data gathered was accurately reported, (6) the data was analyzed in accordance with accepted

[71] *Id.*
[72] *Id.* at 680-81.
[73] *Id.* at 683.
[74] Schering Corp. v. Pfizer Inc., 189 F.3d 218 (2d Cir. 1999).
[75] *Id*. at 224. *See generally* DuPont Cellophane Co. v. Waxed Prods., 6 F. Supp. 859, 884-85 (E.D.N.Y. 1934); Elgin Nat'l Watch Co. v. Elgin Clock Co., 26 F.2d 376, 376-77 (D. Del. 1928).
[76] Schering Corp., 189 F.3d at 221.

> statistical principles and (7) the objectivity of the entire process was ensured.[77]

[24] Today, survey evidence is generally accepted under certain conditions. For example, in *Liberty Financial Management Corp. v. Beneficial Data Processing Corp.*, an employee survey was entered into evidence in a breach of contract lawsuit.[78] The lawsuit concerned the implementation of a computer system that ultimately proved faulty.[79] The plaintiff, Liberty, entered into evidence the results of a survey of its employees.[80] The survey was conducted to determine how much time employees spent on computer problems both before and after the implementation of the faulty system.[81] In ruling on the survey's admissibility, the court stated:

> [W]e recognize that statistically reliable surveys are an accepted tool used regularly in formulating highly sophisticated business decisions. They are an accepted method of determining truth as perceived through the collective judgment of enormous segments of the population. Given the verity that surveys are accorded in everyday life, we see no reason to exclude them from the consideration of the trier of fact in a complex case such as the one at hand.[82]

[25] Survey evidence has been admitted as relevant to a variety of issues such as ruling on the constitutionality of federal statutes[83] and contradicting poor election results to show a favorable reputation among

[77] *Id.* at 225.
[78] Liberty Fin. Mgmt. Corp. v. Beneficial Data Processing Corp., 670 S.W.2d 40, 44 (Mo. Ct. App. 1984).
[79] *Id.* at 46.
[80] *Id.* at 53.
[81] *Id.*
[82] *Id* at 55.
[83] Meese v. Keene, 481 U.S. 465, 473-75 (1987). A United States citizen appealed a decision that classified films he was showing as "political propaganda." The appellee (Keene) introduced the results of a Gallup poll that showed that the public would be less inclined to vote for him if the films were classified as such.

colleagues.[84] It is important to note, however, that the use of polling data as evidence is still subject to the same scrutiny as other forms of expert testimony and standards of documentation.[85]

C. USE OF JURY QUESTIONNAIRES IN JURY SELECTION

[26] Questionnaires have been used in the courtroom for at least forty years. Written questionnaires are often provided to prospective jurors to quicken the subsequent voir dire and to provide a forum for asking delicate questions that members of the venire are unlikely to be comfortable answering in a courtroom setting in the presence of others.[86] *Silliphant v. Sheriff of New York*, decided in 1959, is one of the earliest instances in which a court ruled on the use of questionnaires.[87] The questionnaire in that case was not being used for jury selection; instead, it was being used by a grand jury as a supplement for grand jury testimony.[88] The court concluded that witnesses could be compelled to answer questionnaires being utilized as a supplement for grand jury testimony.[89]

[27] The court in *People v. Carter* considered whether the use of questionnaires was discriminatory in an appeal of a conviction for the murder of a California highway patrolman.[90] The jury commissioner in this case routinely sent 2,500 jury questionnaires each year to randomly selected persons chosen from registered voter lists and local telephone directories.[91] The questionnaires did not inquire as to the racial classification of the respondents, and the jury commissioner did not conduct interviews with the respondents and therefore did not have visual

[84] Ollman v. Evans, 713 F.2d 838, 851-52 (D.C. Cir. 1983), *aff'd on rehearing*, 750 F.2d 970 (D.C. Cir. 1984).
[85] Robert G. Sugarman & Nancy S. Scherer, *The Use of Experts and Survey Evidence in Copyright, Trademark and Unfair Competition Litigation*, 395 PLI/PAT 413, 428 (Oct. 1994). Generally, survey evidence must provide in discovery detailed records of the vendor's methods and practices and is subject to cross-examination on these practices once the evidence has been introduced.
[86] *See* Matthew L. Larrabee & Linda P. Drucker, *Adieu Voir Dire: The Jury Questionnaire*, 21 NO. 1 LITIG. 37 (1994).
[87] Silliphant v. Sheriff of New York, 160 N.E.2d 890, 891 (N.Y. 1959).
[88] *Id.* at 890.
[89] *Id.* at 892.
[90] People v. Carter, 364 P.2d 477, 479 (Cal. 1961).
[91] *Id.* at 489.

notice of race.[92] The defendant claimed that the use of questionnaires for jury selection excluded "persons with the same racial, economic, social, and geographic background as the defendant."[93] However, the defendant lacked facts to support his contention that the questionnaires were mailed unfairly, while the jury commissioner's affidavit described the methods employed to distribute the questionnaires.[94] The court held there was neither evidence of discriminatory intent on the part of the state, nor evidence that the empanelled jury was not a representative cross-section of the community.[95]

[28] A similar complaint of discrimination regarding the use of questionnaires met with an equally disdainful response in *United States v. Hoffa*.[96] There, the defendant, Jimmy Hoffa, claimed that the jury panel assembled with the aid of jury questionnaires was not ethnically representative of the community.[97] His claim was dismissed with little discussion, since there were no ethnic questions included in the questionnaire and the defendant's complaint was based merely on the visual inspection of the jury panel immediately prior to voir dire.[98]

[29] In recent years, the use of jury questionnaires has become commonplace.[99] In fact, Cathy E. Bennett, a leading jury and trial consultant, has written that her "experience has shown that the advantages of a questionnaire dramatically outweigh any and all disadvantages."[100] These disadvantages affect both sides of the aisle in criminal proceedings. Some defense lawyers resist the use of jury questionnaires for fear that the

[92] *Id.*
[93] *Id.*
[94] *Id.*
[95] *Id.*
[96] United States v. Hoffa, 235 F. Supp. 611, 615 (E.D. Tenn. 1964).
[97] *Id.* at 613.
[98] *Id.*
[99] The use of jury questionnaires has been the subject of numerous articles and notes in law reviews and magazines. *See Jury Questionnaire Assists Defense in Intentional Tort Trial*, 8 NO. 8 INSIDE LITIG. 7, 9 (1994); *see also* Cathy E. Bennett, Robert B. Hirschborn & Heather R. Epstein, *How to Conduct a Meaningful Voir Dire in Criminal Cases*, 46 SMU L. REV. 659, 662 (1992) [hereinafter Bennett]; Robert B. Sykes & Francis J. Carney, *Attorney Voir Dire And Jury Questionnaire: Time For a Change*, 10 UTAH B.J. 13 (1997).
[100] Bennett, *supra* note 99, at 662.

answers contained therein will identify and expose a juror with atypical attitudes that might create a hung jury if seated.[101] Alternatively, prosecutors worry that the use of a questionnaire might similarly expose jurors who are pro-law enforcement.[102]

[30] It is important to note that these same concerns exist where no questionnaire is used at all, because oral voir dire can just as easily expose the juror predispositions outlined above. The court, however, usually places stringent restrictions on voir dire.[103] Often, attorneys cannot even question the panel; judges control the voir dire process and do all of the questioning.[104] Even if attorneys are allowed to actively participate, there are usually strict limitations on time and question content.[105] The use of questionnaires makes it more likely that relevant attitudes will be discovered, since many more questions can be asked in a questionnaire than can be asked in the compressed timeframe offered by oral voir dire.[106] Moreover, the use of a questionnaire eliminates the possibility that the jurors that remain will harbor ill will toward an attorney, or the judge, for asking probative and delicate questions because in a questionnaire jurors are unaware which of the parties proposed the question.[107]

[31] An important consideration involves where to draw the line on venire questioning. How much information is too much? Some attorneys, and some judges as well, subscribe to the "any 12 in the box" theory, which provides that nearly any venireman is an appropriate juror, so long as she believes that she can consider the case fairly.[108] At the opposite end of the spectrum are those attorneys who feel that jurors are substantially affected

[101] *Id.*
[102] *Id.*
[103] *See* Beverly Petersen Jennison, *Trial Court Discretion in Conducting the Voir Dire Subjected to More Stringent Scrutiny:* Cordero v. United States, 33 CATH. U. L. REV. 1121, 1134 (1984).
[104] *See* Valerie P. Hans & Alayna Jehle, *Avoid Bald Men and People With Green Socks? Other Ways to Improve the Voir Dire Process in Jury Selection*, 78 CHI.-KENT L. REV. 1179, 1183-84 (2003).
[105] Jennison, *supra* note 103, at 1123.
[106] Larabee, *supra* note 86, at 662.
[107] *See* Lin S. Lilley, *Let Jurors Speak the Truth, in Writing*, 41 TRIAL 64, 65-66 (2005).
[108] *See* Abbe Smith, *Nice Work if You Can Get It: "Ethical" Jury Selection in Criminal Defense*, 67 FORDHAM L. REV. 523, 525 (1998).

in deliberations by their life experiences and social attitudes.[109] It is safe to presume, with the ever increasing use of questionnaires and opinion surveys, that today's litigator will inevitably be placed in a position where he or she will need to understand how best to use these new jury selection tools.

III. ANALYSIS

[32] There is a substantial danger, given the Court's holdings in *Batson* and its progeny, that parties will develop voir dire or jury questionnaire questions that merely serve as a subterfuge for their true intent – discrimination on the basis of race or gender. The analysis which follows examines recent decisions providing counsel great latitude during voir dire. In order to honor the fundamental premise of the *Batson* decision, it is important to develop a procedure employing public opinion polling and jury questionnaires to help the trial court discern when a question has the potential for being used with discriminatory intent. This article proposes a procedure, the "Z-Test," which will provide the trial court with a method to differentiate between questions asked with discriminatory intent and questions that may have a legitimate role in voir dire.

A. PUBLIC OPINION POLLS VS. JURY QUESTIONNAIRES

[33] In order to determine whether any proposed question is potentially discriminatory, the court must consider whether responses to the question are closely associated with certain racial, ethnic, or gender groups.[110] To perform this assessment, the court must first decide whether the use of a public opinion poll or a jury questionnaire is most appropriate.[111] The key factor in making this determination involves the size of the sample (in this

[109] *See* Larabee, *supra* note 86, at 37-38.
[110] *See* J. Vincent Aprile II, *More Extensive Voir Dire: A Supreme Court Mandate?*, 9 CRIM. JUST. 43, 45 (1994).
[111] For clarity, it is important to define the meaning of "public opinion polls" and "jury questionnaires." For purposes of this note, public opinion polls will be considered to be the interviewing of citizens outside the venire. Jury questionnaires, on the other hand, will refer to those instruments distributed to the venire, and collected back from the veniremen, prior to voir dire to streamline the jury selection process. *See* Joseph F. Flynn, *Prejudicial Publicity in Criminal Trials: Bringing* Sheppard v. Maxwell *into the Nineties*, 27 NEW ENG. L. REV. 857, 875 (1993).

case, the venire). Public opinion polls typically strive to collect at least 400 responses in order to achieve a confidence level of 95 percent that the results will be within "plus or minus" 5 percent of the true opinion on any issue. Thus, any meaningful results from a jury questionnaire used to gauge public opinion would require at least 400 responses.

[34] Does this mean that the venire must be at least 400 members? Absolutely not. Instead, this only requires that at least 400 completed questionnaires be returned to the jury administrator. Thus, a jury administrator could send the questionnaires to all potential jurors for a variety of cases, compiling the results for use in the case proposing the potentially discriminatory question. Sophisticated jury panel managers could even archive the poll results for future use when similar questions are evaluated for their potential discriminatory effect.

[35] Public opinion polling remains an option, albeit an expensive one, to determine the likelihood of discriminatory effect of a voir dire question. If the polling option is employed, perhaps at the expense of the party wanting to use the suspect question, polling firms can typically return results in a matter of days.

[36] Regardless of the method chosen, results of the poll or questionnaires must be compiled and cross-tabulated to report the answers to questions by racial and gender responses. These results would then be used as the basis for application of the Z-Test.

B. When do Apparently Valid Questions Become a Pretext for Discrimination?

[37] Invariably, a party will ask a question during voir dire that is neutral on its face, but in reality, offers an opportunity to be used for a discriminatory purpose or has an unintended discriminatory effect. If that party uses the answer to that question as a basis for exercise of a peremptory strike, opposing counsel may exercise a *Batson* challenge to protest the use of a presumably discriminatory challenge.

[38] *Batson* analysis requires that the challenging party provide the court with a "neutral explanation" for the use of the peremptory challenge.[112] The Supreme Court clarified the definition of "neutral explanation" with its holding in *Purkett v. Elem*.[113] The defendant in this case, a black male, was convicted of robbery in Missouri.[114] Defendant's counsel objected, citing *Batson*, to the prosecution's use of peremptory challenges excluding two black males from the jury.[115] The prosecutor contended that his reason for striking the black male jurors was because they had facial hair.[116] The defendant appealed with no success, until his case reached the Eighth Circuit. There, the court held that the prosecutor's explanation was pretextual and that the trial court had committed clear error by not finding that the challenges were discriminatory.[117] The Supreme Court reversed the Eighth Circuit, finding that a legitimate reason for a challenge under *Batson* was "not a reason that makes sense, but a reason that does not deny equal protection."[118]

[39] At least one court decided that *Batson's* original approach to the determination of pretextual discrimination is preferable to the Court's application of *Batson* in *Purkett*. In *People v. Jamison*, a California appellate court openly disagreed with *Purkett*, calling it a "digression from prior federal law" that would reduce motions alleging discrimination via peremptory challenge to "nothing more than an empty gesture."[119] At this point, it is unclear whether litigants relying on *Batson*'s three-step burden-shifting analysis regarding peremptory challenges are limited by *Purkett*'s holding that even the most ridiculous reasons for challenge are appropriate so long as they are facially neutral.

[40] Based on the Court's holding in *Purkett*, trial courts are now forced to deal with what one court in Illinois has called a "charade:"

[112]Batson v. Kentucky, 476 U.S. 79, 97-98 (1986).
[113]Purkett v. Elem, 514 U.S. 765 (1995).
[114]*See id*. at 766.
[115]*Id.*
[116]*Id.* (citing Petition for Writ of Certiorari, *Purkett*, 514 U.S. at App. 41 (No. 94-802)).
[117]*Id.* at 767 (citing Elem. v. Purkett, 25 F.3d 679, 684 (8th Cir. 1994)).
[118]*Id.* at 769.
[119]People v. Jamison, 50 Cal. Rptr. 2d 679, 686 (1996).

> [W]e now consider the charade that has become the *Batson* process. The State may provide the trial court with a series of pat race-neutral reasons for exercise of peremptory challenges. Since reviewing courts examine only the record, we wonder if the reasons can be given without a smile. Surely, new prosecutors are given a manual, probably entitled, "Handy Race-Neutral Explanations" or "20 Time-Tested Race-Neutral Explanations." It might include: too old, too young, divorced, "long, unkempt hair," free-lance writer, religion, social worker, renter, lack of family contact, attempting to make eye contact with the defendant, "lived in an area consisting predominantly of apartment complexes," single, over-educated, lack of maturity, improper demeanor, unemployed, improper attire, juror lived alone, misspelled place of employment, living with girlfriend, unemployed spouse, spouse employed as school teacher, employment as part-time barber, friendship with city council member, failure to remove hat, lack of community ties, children same "age bracket" as defendant, deceased father and prospective juror's aunt receiving psychiatric care.[120]

[41] Despite the judge's humorous interpretation of the *Purkett* ruling, each of the above reasons would actually survive a *Batson* challenge under *Purkett*. It is likely that such broad latitude was granted by the Court, in part because there was no test apparent to them that would more readily identify pretextual jury challenges. This article presents a workable test to address this problem, inspired by the burden-shifting framework established in *Batson*.

[120]People v. Randall, 671 N.E.2d 60, 65-66 (Ill. App. Ct. 1996) (citing examples from various Illinois cases). This stinging commentary was delivered in reversing a conviction following the prosecutor's use of a peremptory challenge to strike a black prospective juror, justified on the ground that the venireman was a high school principal and that people that work with students are "much more forgiving." *Id.* at 68.

C. A PROPOSED TEST FOR DIFFERENTIATING DISCRIMINATION IN VOIR DIRE FROM ZEALOUS ADVOCACY

[42] The first challenge in implementing the test is determining the extent to which it will be applied. It is easy to see that such a test would be useful in cases of purposeful discrimination. But what about situations where the discrimination is not intentional, but present nevertheless?

[43] In *Washington v. Davis*, the Supreme Court rejected the notion that the standard for identifying invidious discrimination prohibited by the Equal Protection Clause of the Fourteenth Amendment was the same as the standard applied under Title VII.[121] In *Davis*, black applicants seeking jobs as police officers in the District of Columbia claimed that written tests required by the department were discriminatory.[122] Under Title VII, the mere presence of disparate impact is sometimes enough to show that discrimination is present.[123] In *Davis*, however, the Court held that the "purpose to discriminate" was a critical element in determining whether discrimination constituted an equal protection violation.[124] Interestingly, the *Davis* decision carved out a special exception for jury selection cases.[125] The Court held that racial discrimination in jury selection excluded blacks was such an "unequal application of the law as to show intentional discrimination."[126] The Court held that in cases of discrimination related to jury selection traditional disparate impact analysis (similar to Title VII cases), in which the burden shifts to the challenging party to rebut the presumption of discrimination, is appropriate.[127]

[44] This decision seems to be in tension with the Court's subsequent decision in *Purkett*. *Purkett* placed the burden on the party alleging the discriminatory use of a challenge to demonstrate that the reasoning for a

[121] Washington v. Davis, 426 U.S. 229 (1976); 42 U.S.C. § 2000e (1964).
[122] *See Davis*, 426 U.S. at 229.
[123] *See* Griggs v. Duke Power Co., 401 U.S. 424 (1971) (establishing that while the mere presence of discrimination was enough, it allowed for parties to plead business necessity as a defense for their facially neutral, but discriminatory practices).
[124] *See Davis*, 426 U.S. at 247-48 (citing Akins v. Texas, 325 U.S. 398, 403-04 (1945)).
[125] *See id.* at 241.
[126] *Id.* (quoting *Akins*, 325 U.S. at 404).
[127] *See id.* at 242.

peremptory strike was not race-neutral.[128] The test proposed in this article, the Z-Test, offers a mechanism for both parties to determine whether a question that is plausibly neutral is, in fact, discriminatory.

[45] To apply the Z-Test, the court or one of the parties must have posed the potentially discriminatory question to a suitable sample (at least 400 respondents) of either citizens qualified for jury service (via public opinion poll), or the prospective jurors themselves (via jury questionnaire). The results must be compiled and cross-tabulated by race and gender. These results should then be analyzed according to the following test:

[46] All questions offered for voir dire or jury questionnaires are subject to a burden-shifting analysis for discriminatory effect. The opponent to a question has the initial burden. The opponent must demonstrate that the challenged question isolates the members of a classification to the degree that it is a 98% statistical certainty that such isolation is not due to random error. If successful, the question will be considered potentially discriminatory. The burden then shifts to the party offering the question to demonstrate that its significance and importance to the matter at hand substantially exceeds any discriminatory impact. Once both parties have offered their evidence and reasoning, the court makes a determination as to whether strikes based on the answer to the proffered question should be permitted. The court might also find the evidence so compelling as to justify the excusing of jurors for cause based on the answer to a specific question. Admittedly, the 98% threshold outlined in the Z-Test is somewhat arbitrary. As a general rule, the classifications of those offering a specific response to a given question are distributed along a bell curve wherein the majority of all respondents are clustered closest to the mean. By adopting a 98% significance threshold for the Z-Test, classifications that are clustered in the upper 1% or lower 1% of the bell curve are presumed to indicate deviance from the mean with a 98% certainty.[129]

[128] Purkett v. Elem, 514 U.S. 765 ,767 (1995).

[129]The exact mathematical formulas for calculating the Z-Test for percentages can be found in most statistics textbooks and treatises. Philip B. Stark, *SticiGui: Statistics Tools for Internet and Classroom Instruction with a Graphical User Interface*, http://www.stat.berkeley.edu/users/stark/SticiGui/Text/index.htm (discussing the test and its application) (last visited Dec. 13, 2006).

D. PRACTICAL APPLICATION OF THE Z-TEST TO DETECT DISCRIMINATORY QUESTIONS

[47] To illustrate, Magellan Research conducted a survey of 408 potential jurors in Clark County, Nevada.[130] Respondents were asked a series of demographic questions to identify each according to gender, ethnic origin, education, and other factors. Next, each respondent was presented with a set of indicator statements. For each statement the respondent indicated whether they agreed or disagreed with the statement. Last, each respondent was asked a series of background questions in which he provided information regarding previous jury service, termination from employment, etc.

[48] Once this information was collected, it was cross-tabulated to display the responses to each indicator and background question by demographic trait. The Z-Test for percentages was then used to compare the overall results with each demographic trait to determine which demographic traits substantially deviated from the mean. The Z-Test identified demographic traits whose deviation from the mean exceeded the 98% significance threshold (i.e. the deviation was 98% or more certain to be a valid difference, not a random error). Thus, the Z-Test identified any question that could potentially result in a prospective juror with that demographic trait being discriminated against if the answer to the question was used as the basis for a peremptory challenge.

[49] For the purposes of analyzing the polling results, the demographic traits analyzed in this survey can be classified in three groups. The first group (Protected Classes) includes demographic traits that have been found by the Supreme Court to be improper for use in exercising peremptory challenges—namely, gender and race. The second group (Suspect Classes) is comprised of demographic traits which, although not yet considered by the Supreme Court, would likely be considered by most courts as improper for use as a basis for peremptory strike based on public policy. These traits are income, marital status, age, education, and religious preference. The third group (Other Classes) is comprised of traits that would provide insight into jury selection, but arguably fall short

[130] To view the detailed statistical tables used for the conclusions drawn in this paper, see Appendix A at http://law.richmond.edu/jolt/v13i2/article6/AppendixA.pdf.

of qualifying as traits which should not be used based on public policy concerns. These traits are number of children living at home, length of residence in the county, job type, and industry.

1. PROTECTED CLASSES

[50] The following table illustrates the questions and responses which the Z-Test has identified as discriminatory based on gender.

Table 1.1 - Gender

Question	Response	Discriminates Against
People should be allowed to own handguns for personal protection.	Agree	Male
	Disagree	Female
Women who kill abusive husbands should be treated the same as other criminals.	Agree	Male
	Disagree	Female
Have you ever owned a handgun?	Yes	Male
	No	Female
Have you or someone in your household ever been arrested?	Yes	Male
	No	Female
Have you ever witnessed a criminal act of violence?	Yes	Male
	No	Female
Have you ever been fired or laid off from a job?	Yes	Male
	No	Female

[51] To illustrate how the preceding table is interpreted, note that exercising a peremptory strike on prospective jurors who own a handgun, unfairly discriminates against men, while striking those in the venire who never owned a handgun unfairly excludes women. These results are hardly surprising and tend to reinforce many existing perceptions regarding the differences between men and women.

[52] Similarly, the next table displays those questions that result in racial or ethnic discrimination.

Table 1.2 - Ethnic

Question	Response	Discriminates Against
A person charged with murder should have to testify at trial.	Agree	Hispanic Asian/Pac Isl
	Disagree	Caucasian Afr Amer Other
O.J. Simpson was guilty even though he was acquitted in his criminal trial.	Agree	Caucasian
	Disagree	Afr Amer
Defense attorneys will say or do just about anything to get an acquittal.	Agree	Hispanic
	Disagree	Other
Bill Clinton should be judged by his Presidency, not his sex life.	Agree	Afr Amer
	Disagree	Caucasian Hispanic
Marijuana is no worse than alcohol and cigarettes and should be legalized.	Agree	Caucasian Afr Amer
	Disagree	Hispanic
Women who kill abusive husbands should be treated the same as other criminals.	Agree	Hispanic
	Disagree	Caucasian Afr Amer Other
It is impossible to get a fair trial in this county.	Agree	Afr Amer
	Disagree	Caucasian
Parents should be held criminally liable for illegal acts of their teenage children.	Agree	Hispanic
	Disagree	Caucasian Afr Amer
Have you ever owned a handgun?	Yes	Caucasian Afr Amer
	No	Hispanic
Do you or someone in your household own a gun of any kind?	Yes	Caucasian Afr Amer
	No	Other
Has someone in your household ever worked for an attorney, judge or court?	No	Hispanic Other
Have you ever served on a criminal jury?	No	Asian/Pac Isl
Have you ever served on a civil jury?	No	Asian/Pac Isl
Have you ever served on a grand jury?	No	Hispanic Asian/Pac Isl Other

[53] An interesting observation regarding ethnic bias and jury selection in Clark County is that the data shows that often it is Hispanics, not African Americans, who are likely to be discriminated against in jury selection if stricken based on the response to a voir dire question. While African Americans are still susceptible to discriminatory effect–note the O.J. Simpson and fair trial questions—Hispanics appear to be far more likely to be the victims of discriminatory impact during voir dire.

[54] One other area in which there is a remarkably clear discriminatory effect involves prior jury service. Asian American/Pacific Islanders are unfairly excluded if challenges are used to exclude those that have never served on a jury before. The data also demonstrates that exclusion based on lack of previous grand jury service excludes all but Caucasians and African Americans.

2. SUSPECT CLASSES

Table 2.1 – Household Income

Question	Response	Discriminates Against
A person charged with murder should have to testify at trial.	Disagree	35 to 60K 60 to 100K Over 100K
Bill Clinton should be judged by his Presidency, not his sex life.	Agree	Under 20K
	Disagree	20 to 35K
Large corporations never pay their fair share in lawsuits.	Agree	Under 20K 20 to 35K 35 to 60K
	Disagree	Over 100K
Do you or someone in your household own a gun of any kind?	Yes	Over 100K
	No	Under 20K
Have you or someone in your household ever been arrested?	Yes	Under 20K
	No	Over 100K
Has someone in your household ever worked for an attorney, judge or court?	Yes	35 to 60K
	No	Under 20K 20 to 35K
Have you ever served on a grand jury?	No	60 to 100K
Have you ever been fired or laid off from a job?	Yes	Under 20K 20 to 35K
	No	60 to 100K Over 100K
Have you or someone in your household ever worked in law enforcement?	Yes	35 to 60K
	No	Under 20K

Table 2.2 – Marital Status

Question	Response	Discriminates Against
Marijuana is no worse than alcohol and cigarettes and should be legalized.	Agree	Live w/Other
	Disagree	Married
Do you or someone in your household own a gun of any kind?	Yes	Married
	No	Single Live w/Other
Have you ever served on a grand jury?	No	Live w/Other

Table 2.3 – Age

Question	Response	Discriminates Against
A person charged with murder should have to testify at trial.	Agree	18 to 25 26 to 35
	Disagree	46 to 55 Over 55
Women who kill abusive husbands should be treated the same as other criminals.	Agree	26 to 35
	Disagree	46 to 55
It is impossible to get a fair trial in this county.	Agree	46 to 55
	Disagree	18 to 25
Have you or someone in your household ever been arrested?	Yes	18 to 25
	No	Over 55
Have you ever witnessed a criminal act of violence?	Yes	18 to 25 36 to 45
	No	46 to 55 Over 55
Have you ever served on a criminal jury?	Yes	Over 55
	No	Under 56
Have you ever served on a civil jury?	Yes	Over 55
	No	Under 56

Table 2.4 – Education

Question	Response	Discriminates Against
A person charged with murder should have to testify at trial.	Agree	Non HS Grad HS Grad
	Disagree	Coll
O.J. Simpson was guilty even though he was acquitted in his criminal trial.	Disagree	Jr Coll
Large corporations never pay their fair share in lawsuits.	Agree	Non HS Grad Jr Coll
	Disagree	Coll
Women who kill abusive husbands should be treated the same as other criminals.	Agree	HS Grad
	Disagree	Post Grad
Has someone in your household ever worked for an attorney, judge or court?	Yes	Coll Post Grad
	No	HS Grad
Have you ever served on a grand jury?	No	Non HS Grad Post Grad
Have you ever been fired or laid off from a job?	Yes	HS Grad Jr Coll
	No	Post Grad
Have you or someone in your household ever worked in law enforcement?	Yes	Jr Coll
	No	Non HS Grad HS Grad

Table 2.5 – Religion

Question	Response	Discriminates Against
People should be allowed to own handguns for personal protection.	Agree	Protestant Other
	Disagree	Jewish
O.J. Simpson was guilty even though he was acquitted in his criminal trial.	Agree	Catholic None
	Disagree	Other
Bill Clinton should be judged by his Presidency, not his sex life.	Agree	Jewish
	Disagree	Protestant Catholic Other
Prosecutors will try to convict a defendant even if they're unsure if he's guilty.	Agree	None
	Disagree	Protestant Other
Do you or someone in your household own a gun of any kind?	Yes	Other
	No	Jewish

Have you or someone in your household ever sued anyone else?	Yes	Jewish
	No	None
Have you ever served on a civil jury?	Yes	Jewish
	No	None

[55] There are several noteworthy aspects to the data regarding "Suspect Classes." First, there are several questions which could be used to exclude upper-income jurors, senior citizens, and Jewish citizens. Second, there seems to be a fairly clear distinction between respondents with advanced educations and those who do not possess college degrees. Last, it is interesting to note that few questions have a discriminatory impact with respect to marital status.

3. OTHER CLASSES

[56] The third group, referred to in this article as "Other Classes," does not indicate any substantial danger of discriminatory impact based on number of children, length of residence, job, or industry. While the Z-Test identifies some segments which would be potentially singled out—particularly in the employment categories—the data implying discriminatory effects may be somewhat attributable to the limited sampling of the poll and the high number of categories (eight each) that are used for classification.

[57] It is important to note that Clark County, Nevada, is rather unique in several respects. First, with one notable exception, Clark County permits most forms of gambling.[131] Second, it has grown at a tremendous rate over the last twenty years.[132] Thus, its citizens are predominantly people who have relocated from other areas. These differences are noted to illustrate that the findings presented in this article are applicable only to Clark County. Additional polling should be performed independently in other jurisdictions to conduct similar analysis.

[131] *See* About Clark County, http://www.co.clark.nv.us/public_communications/About_clark_county.htm (last visited Oct. 11, 2006).
[132] *Id.* ("Clark County is one of the fastest-growing areas in the country, with more than 5,000 people moving here each month").

[58] A potential obstacle for the Z-Test, or any *Batson* analysis for that matter, occurs when a question both violates the 98% threshold and is substantively applicable to the case at hand. Take the "Have you ever been a victim of a violent crime?" question, for example. In most cases, this question would be excluded because it could, perhaps unfairly, be used to exclude significant numbers of women from the jury. Yet this information would be vital to both defense and prosecution alike in a sexual assault trial.

[59] To overcome this important dilemma, courts employing the Z-Test should apply a burden-shifting framework similar to that advocated by *Batson*.[133] First, the party who wishes to exclude a question from voir dire bears the burden of using the Z-Test to demonstrate its discriminatory effect. Opposing counsel would then be afforded an opportunity to present arguments on why the probative value of the responses to the proffered question substantially outweighs any discriminatory impact. The trial court would then rule on the use of the question in a manner similar to rulings on the admissibility of evidence.[134] Unless the probative value substantially outweighs the discriminatory impact, the question should be excluded from voir dire and peremptory challenges based on response to the question (if asked in a preliminary jury questionnaire) should not be permitted.

[60] There are some obvious shortcomings to the Z-Test. Foremost among these is the requirement that a jury questionnaire be used, or a public opinion poll be conducted, in order for the test to be applied. While the litigants might assume the additional expense of conducting polls or distributing questionnaires, the issue of unequal justice (i.e. wealthy parties could more easily afford the costs associated with employing the Z-Test) would be a legitimate concern. Additionally, the court would be well advised to closely monitor the polling and questionnaire techniques employed to insure fairness and accuracy. Finally, the Z-Test is based on sampling and mathematical reasoning – components that are seldom found in today's courtrooms and even less frequently understood by today's judges and attorneys. Shortcomings aside, the Z-Test offers a meaningful

[133] *See Batson*, 476 U.S. at 94, 97-98.

[134] *See* FED. R. EVID. 403. "[E]vidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice . . . ."

and non-discriminatory method for the court to honor the spirit of *Batson* while remaining within the limitations imposed by *Purkett*.

IV. CONCLUSION

[61] The ultimate goal of the judicial system is a fair and equal trial system for both litigants and jurors. The Supreme Court has made great strides toward this end with its decisions in *Batson* and its progeny. The Court is continually challenged to balance the needs of several groups. Defendants are ultimately concerned with receiving a trial by a jury of their peers that accurately and fairly represents a cross-section of the community. Attorneys are concerned with protecting their time-honored right of peremptory challenge as one of the tools they can employ to zealously represent their client. Judges are justifiably anxious that further complicating the process of jury selection will result in an even more tedious and time-consuming trial calendar. And finally, prospective jurors (the most overlooked of these parties) are collectively concerned that their constitutional right to serve on juries might be restricted by a morass of facially neutral, but discriminatory peremptory challenges exercised by overly zealous attorneys. The Z-Test outlined in this article is not a panacea for the problem of discriminatory challenges; indeed, it is likely that the problem could only truly be solved by the complete abolition of peremptory strikes.

[62] Since the elimination of peremptory strikes is unlikely to occur, the Z-Test provides the court with a mechanism for detecting use of voir dire responses in ways that may facially comply with *Batson*, especially as *Batson* was applied by the Court in *Purkett*, but are nevertheless discriminatory.