



Report on North Carolina Jury Selection Study - 2023

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I. Introduction

This report documents the study design, methodology, analysis, and results for our study of the exercise of peremptory challenges during jury selection in 176 capital proceedings tried in North Carolina between 1985 and 2011.¹ The study examined how prosecutors exercised peremptory challenges in capital cases to assess whether potential jurors' race played any role in those decisions.

The primary investigators for the study are professors of law at Michigan State University College of Law. We published the results of our initial study on the prosecutorial exercise of peremptory strikes in North Carolina capital cases in the *IOWA LAW REVIEW*.² According to Google Scholar, this article has been cited more than 120 times as of August 2023, including most recently by two of the leading jury scholars nationally.³

The results presented in detail below support our conclusion overall that prosecutors exercised peremptory strikes at a significantly higher rate against Black venire members than against all other venire members. The statewide analysis presented below estimates that, after controlling for relevant race-neutral factors, Black venire members face odds of being struck by the state that were 2.61 times

¹ This study includes all of the cases included in our December 2011 report and adds cases tried to a death sentence after July 1, 2010, and before April 9, 2011. A complete list of the defendants included in the study is included in Appendix A. Our December 2011 analysis was introduced as evidence in hearings in Cumberland County in January and February 2012 (State of North Carolina v. Marcus Robinson, File no. 91 CRS 2343, Cumberland County, January 30, 2012) and in October 2012 (State of North Carolina v. Tilmon Golphin, Christina Walters, and Quintel Augustine, File Nos: 97 CRS 47314, 98 CRS 34832, 01 CRS 65079, Cumberland County, October 1, 2012 Special Session).

² Catherine M. Grosso & Barbara O'Brien, *A Stubborn Legacy: The Overwhelming Importance of Race in Jury Selection in 173 Post-Batson North Carolina Capital Trials*, 97 *IOWA L. REV.* 1531 (2012).

³ See Shari Seidman Diamond & Valerie P. Hans, *Fair Juries*, 2023 *U. Ill. L. Rev.* 879 (2023) (reviewing research on identifying the phases of the jury trial that are critical to achieving fair criminal and civil juries).

those faced by all other venire members ($p < .001$). Our analysis of District 11 cases estimates that, after controlling for relevant race-neutral factors, an eligible Black venire member had more than twice the odds of being struck by the state than a venire member of another race ($p < .02$). A venire member's race became an even larger predictor of prosecutorial strike decisions in our analysis of strike decisions in the seven cases in Johnston County, where an eligible Black venire member had more than four times the odds of being struck by the state than a venire member of another race, all else being equal ($p < .01$). Finally, in the four cases that Assistant District Attorney Gregory C. Butler tried, an eligible Black venire member faced odds 10.31 times those of similarly situated venire members of another race ($p < .001$).

The remaining sections of this report proceed in the following order. Section II reviews prior research on race discrimination in jury selection in both experimental studies and actual trials. Section III presents our study design including details on our study population, data collection, database development, and steps taken to ensure the accuracy of our data. The next sections present our findings and results, including unadjusted and controlled analyses in each section. Section IV presents our statewide findings. Section V presents findings from the twelve District 11 proceedings. Section VI presents findings from the seven Johnston County proceedings. Section VII presents findings from the four cases that Assistant Attorney Gregory C. Butler tried. Section VIII summarizes our findings.

II. Prior Research on Race Discrimination in Jury Selection

Prior research on race discrimination in jury selection involved experimental studies, as well as studies examining jury selection in actual trials. Studies that examine jury selection in hypothetical settings are limited by the artificial nature of the decision making. Their strength, however, is that they allow researchers greater control over the variables in question in order to identify causal factors. These studies offer substantial evidence that race plays a significant role in jury selection, especially when considered in light of considerable research on jury selection in real trials that reaches the same conclusion.

A. Experimental Research

Experiments conducted both before and after *Batson v. Kentucky* (1986) offered substantial evidence that race plays a significant role in jury selection. For example, Norbert Kerr and colleagues conducted an experiment where attorneys viewed videotaped voir dire of mock jurors in a criminal case, and assigned each the role of judge, defense attorney, or prosecutor—usually based on their current position or past experience in the respective role. They asked participants to rate the desirability

of the potential jurors and to indicate which ones they would strike. The researchers found that attorneys assigned the role of prosecutor were far more likely to strike Black prospective jurors than jurors of another race.⁴

In a second study, Michael Norton and Samuel Sommers presented three groups of study participants—college students, law students, and trial attorneys—with the facts of a criminal case involving a Black defendant.⁵ The researchers told participants to assume the role of the prosecutor, and that they had only one peremptory strike left to use in deciding which of two prospective jurors to strike. The prospective jurors each had qualities that pretesting suggested would be troubling to prosecutors: one was a journalist who had investigated police misconduct and the other had indicated skepticism about statistics relevant to forensic evidence that the state would offer. Participants were randomly assigned to one of two conditions: one in which the first prospective juror was Black and the second white, and another in which the race of the prospective jurors was reversed. Participants challenged the Black juror more often than the white juror, regardless of whether the juror was presented as the journalist or the statistics skeptic. Yet, when asked to explain why they struck the juror they did, the study participants almost never mentioned race; participants tended to offer the first juror's experience writing about police misconduct when striking him, and they cited the second juror's skepticism about statistics when striking him.

Abramowitz and Douglas conducted an experiment that replicated Sommers and Norton's finding that participants were more likely to exercise a peremptory strike on a Black potential juror than an otherwise identical white potential juror.⁶ As Sommers and Norton found, these participants were able to provide race neutral rationales for their strike decisions.

⁴ Norbert L. Kerr, Geoffrey P. Kramer, John S. Carroll & James J. Alfani, *On the Effectiveness of Voir Dire in Criminal Cases with Prejudicial Pretrial Publicity: An Empirical Study*, 40 AM. U. L. REV. 665,692 (1991) (finding that attorney subjects assigned the role of prosecutor in an experiment where subjects view videotaped voir dire of mock jurors in a criminal case were “far more likely to strike black prospective jurors than jurors of another race”).

⁵ Samuel R. Sommers & Michael I. Norton, *Race-Based Judgments, Race-Neutral Justifications: Experimental Examination of Peremptory Use and the Batson Challenge Procedure*, 31 LAW & HUM. BEHAV. 261 (2007) (finding that mock attorneys selecting jurors with their “last peremptory” struck the Black juror more often than the white juror across experiment conditions). *See also* Samuel R. Sommers & Michael I. Norton, *Race and Jury Selection: Psychological Perspectives on the Peremptory Challenge Debate*, 63 AM. PSYCHOLOGIST 527 (2008) (reviewing the literature and concluding that the experimental studies with mock jurors reviewed provided support to a finding that race continues to play a role in jury selection).

⁶ Kate Abramowitz & Amy Bradfield Douglass, *Racial Bias in Jury Selection Hurts Mock Jurors, Not Just Defendants: Testing One Potential Intervention*, 47 LAW & HUM. BEHAV. 153 (2023).

B. Studies Examining Jury Selection in Actual Trials

Our article published in 2012 reviewed five studies that examined how parties exercise peremptory challenges in actual trials. All five studies found that prosecutors struck Black prospective jurors at disparate rates.⁷ For example, David Baldus and colleagues examined strike decisions over a seventeen-year period in 317 Philadelphia County capital murder trials. They found that prosecutors struck on average 51% of the Black jurors they had the opportunity to strike, compared to only 26% of comparable non-Black jurors. The disparate effect of race on jury selection held even when the researchers controlled for various non-racial characteristics of the jurors, such as age, occupation, education, and responses to certain questions asked in voir dire.⁸

Since 2012, scholars and investigative journalists have conducted additional empirical studies with different datasets and methods. The studies consistently identified racial disparities in peremptory strike rates.⁹ Several looked at both race and gender, identifying a gender disparity in the strike rates

⁷ See Billy M. Turner, Rickie D. Lovell, John C. Young & William F. Denny, *Race and Peremptory Challenges During Voir Dire: Do Prosecution and Defense Agree?*, 14 J. CRIM. JUST. 61 (1986) (examining strikes by both the prosecution and defense in 121 criminal trials in one Louisiana parish from 1976-1981 and inferring that jury selection was not race neutral from the gap between percentage of struck jurors who were Black and the percentage of Black citizens); John Clark, Marcus T. Boccaccini, Beth Caillouet & William F. Chaplin, *Five Factor Model Personality Traits, Jury Selection, and Case Outcomes in Criminal and Civil Cases*, 34 CRIM. JUST. & BEHAV. 641 (2007) (finding that race was a statistically significant predictor of both prosecution and defense strikes, but in reverse patterns: the state struck disproportionately more Black potential jurors while the defense struck disproportionately fewer in 28 trials in two adjacent counties in a southeastern state); Mary R. Rose, *The Peremptory Challenge Accused of Race or Gender Discrimination? Some Data from One County*, 23 LAW & HUM. BEHAV. 695 (1999) (examining peremptory strike decisions in thirteen non-capital felony trials in North Carolina and finding that prosecutors used 60% of their strikes against Black jurors, who constituted only 32% of the venire); David C. Baldus et al., *The Use of Peremptory Challenges in Capital Murder Trials: A Legal and Empirical Analysis*, 3 U. PA. J. CONST. L. 3, 10 (2001) (examining strike decisions over a seventeen-year period in 317 Philadelphia County capital murder trials and finding that prosecutors struck on average 51% of the Black jurors they had the opportunity to strike, compared to only 26% of comparable non-Black jurors, a disparity that persisted even after introducing controls); Steve McGonigle et al., *A Process of Juror Elimination: Dallas Prosecutors Say They Don't Discriminate, but Analysis Shows They Are More Likely to Reject Black Jurors*, DALL. MORNING NEWS, Aug. 21, 2005, at 1A, available at 2005 WLNR 24658335 (presenting part of the findings of the study) (finding that prosecutors in 108 non-capital felony trials in Dallas County, Texas, excluded eligible Blacks from juries at more than twice the rate they rejected eligible whites, even after controlling for non-racial characteristics of the jurors).

⁸ David C. Baldus et al., *The Use of Peremptory Challenges in Capital Murder Trials: A Legal and Empirical Analysis*, 3 U. PA. J. CONST. L. 3, 70-72 (2001).

⁹ Will Craft, *Peremptory Strikes in Mississippi's Fifth Circuit Court District*. APM Reports (2018). https://features.apmreports.org/files/peremptory_strike_methodology.pdf (analyzing 225 trials conducted by Doug Evans or his assistants from the Fifth Circuit Court District of Mississippi from 1992 to 2017 which found the prosecution struck 49.81% of strike eligible Black venire members compared to only 11.21% of white venire members); Whitney DeCamp & Elise DeCamp, *It's Still About Race: Peremptory Challenge Use on Black Prospective Jurors*, 57 J. RES. CRIME & DELINQ. 3 (2019), <https://doi.org/10.1177/0022427819873943> (conducting analysis using propensity score matching on 89 of the cases in Craft's dataset and finding Black venire members were 4.51 times more likely to be peremptorily struck by the prosecution after accounting for measured variables); Ann M. Eisenberg, *Removal of Women and African-Americans in Jury Selection in South Carolina Capital Cases, 1997- 2012*, 9 NE. U.L. REV. 299 (2017) (analyzing 23 cases from 1997 to 2012 in South Carolina that resulted in death sentences finding the prosecution used 36% of its strikes on Black individuals even though Black venire members made up only 15% of the pool eligible to be struck, in contrast, the defense used 99%

of Black venire members, which led to an underrepresentation of Black men.¹⁰

Will Craft for American Public Media (APM) collected jury selection data from actual criminal trials that took place between 1992 and 2017 in the Fifth Circuit District Court of Mississippi. Craft used the voir dire transcripts in 89 of these cases to track the jurors on 65 different variables and built “a logistic regression model to test the importance of the different variables on the likelihood of being struck.”¹¹ The results showed that racial disparities held even when controlling for other race-neutral factors, with Black jurors being 6.67 times more likely to be struck than their white counterparts.¹²

DeCamp and DeCamp used propensity score matching to control for race-neutral factors impacting the relationship between race and peremptory strikes using the same dataset. Based on the constructed “quasi-experimental data with racially different counterfactuals,” they found that prosecutors were 4.51 times as likely to use a peremptory challenge against a Black juror than others.¹³

In sum, prior experimental research and prior research using data from actual trials are consistent with a finding that race is a significant factor in the exercise of peremptory strikes.

of its peremptory strikes on white venire members); Ann M. Eisenberg, Amelia C. Hritz, Caisa E. Royer & John H. Blume III, *If It Walks like Systematic Exclusion and Quacks like Systematic Exclusion: Follow-up on Removal of Women and African-Americans in Jury Selection in South Carolina Capital Cases, 1997-2014*, 68 S.C. L. REV. 373 (2017), <https://doi.org/10.31228/osf.io/tq75y> (analyzing a larger dataset of 29 capital cases in South Carolina between 1997 and 2014 and finding that the prosecution struck 29% of strike-eligible Black venire members compared to striking 12.5% of eligible white venire members); Thomas W. Frampton, *The Jim Crow Jury*, 71 VAND. L. REV. 1593 (2018) (analyzing dataset of criminal jury trials in Louisiana between 2011 and 2017 and finding prosecutors struck Black potential jurors with 175% of the frequency expected if striking in a racially balanced way and struck white potential jurors at only 69% of the frequency); Jacinta M. Gau, *A Jury of Whose Peers? The Impact of Selection Procedures on Racial Composition and the Prevalence of Majority-White Juries*, 43 J. CRIME & JUST. 593 (2015), DOI: 10.1080/0735648X.2015.1087149 (reviewing data collected by public defenders in one judicial circuit in an unspecified southeastern state between 2013 and 2014 and finding the prosecution struck 60.9% of the Black venire members removed by peremptory strike compared to the defense which struck 60.8% of the white venire members removed by peremptory strike); Ronald F. Wright, Kami Chavis & Gregory S. Parks, *The Jury Sunshine Project: Jury Selection Data as a Political Issue*, 2018 U. ILL. L. REV. 1407 (2018) (analyzing more than 1,300 North Carolina felony trials from 2011 and finding that prosecutors struck Black venire members at twice the rate they excluded white venire members); Anna Effenberger, John H. Blume & Martin T. Wells, *Quantifying Disparate Questioning of Black and White Jurors in Capital Jury Selection*, 2023 J. EMPIR, LEG. STUD. 609 (2023) (presents findings from a quantitative study of jury selection using computational natural language processing methods and concluding that prosecutors pose very different types of questions to Black venire members than their white peers).

¹⁰ Eisenberg et al., *supra* note 7; Wright et al., *supra* note 7; Frampton, *supra* note 7.

¹¹ Craft, *supra* note 7.

¹² *Id.* at 9, 10.

¹³ DeCamp & DeCamp, *supra* note 7, at 21; *see also* Jack Dunn & Ying Daisy Zhuo, *Detecting Racial Bias in Jury Selection*, 3 SN OPERATIONS RES. F. 1, 37 (2022), <https://doi.org/10.1007/s43069-022-00151-x> (concluding, “Our model selected all of the features used in the original model, along with four additional features that make intuitive sense. We found that race is consistently selected as one of the most predictive variables of juror strike outcome regardless of the number of features selected.”).

III. Study Design

The North Carolina Racial Justice Act of 2009 specified that a capital defendant could state a claim upon a finding that, “[r]ace was a significant factor in decisions to exercise peremptory challenges during jury selection.”¹⁴ Our goal was to design and conduct a study that would rigorously analyze the role of race in the exercise of peremptory challenges in capital cases so as to evaluate the availability of claims under the Act.

We developed this study in three phases: Phase 1 coded and analyzed race and strike information for all venire members in the study. Phase 2 added coding and analysis of race-neutral descriptive information for a randomly selected statewide sample of venire members. Phase 3 added race and strike information, as well as race-neutral descriptive information for three recent cases.¹⁵ It also added complete coding of race-neutral descriptive information for every case in District 11, including those in Johnston County and those tried by Assistant District Attorney Gregory C. Butler.

Several earlier jury selection studies informed our study design. The most influential among these examined strike decisions over a 17-year period in 317 Philadelphia County, Pennsylvania, capital murder trials.¹⁶

A. Study Population

This study examined jury selection in at least one proceeding for each inmate who resided on North Carolina’s death row as of July 1, 2010, and those sentenced to death between July 1, 2010, and April 9, 2011, for a total of 176 proceedings.¹⁷ For each proceeding, we sought to include every venire member who faced peremptory challenges during jury selection. For the purposes of this report, a “venire member” includes anyone who was subjected to voir dire questioning and not excused for cause, including alternates.

Each proceeding involved an average of 42.8 venire members, producing a database of 7,554 strike decisions. Of these, 7,532 were eligible to be struck by the state. The state had exhausted its available strikes when the remaining 22 venire members were seated or struck by the defense.

¹⁴ N.C. Gen. Stat. § 15A-2011 (b) (3) (2011).

¹⁵ The three new cases are Stephen Buckner, Timothy Hartford, and Tony Summers.

¹⁶ David C. Baldus, George Woodworth, David Zuckerman, Neil Alan Weiner & Barbara Broffitt, *The Use of Peremptory Challenges in Capital Murder Trials: A Legal and Empirical Analysis*, 3 U. PA. J. CONST. L. 3 (2001).

¹⁷ We were unable to include Jeffrey Duke’s 2001 trial because the case materials are unavailable. We included every other proceeding.

Among the state strike eligible venire members, 4,013 (53.3%) were women, and 3,519 (46.7%) were men. The venire members' racial composition was as follows: white (6,136, 81.5%); Black (1,240, 16.5%); Native American (80, 1.1%); Latino (21, 0.3%); mixed race (20, 0.3%); Asian (15, 0.2%); other (11, 0.1%); Pacific Islander (2, 0.03%), and unknown (7, 0.1%).

B. Data Collection

We created an electronic and paper case file for each proceeding in the study. The case file contains the primary data for every coding decision. The materials in the case file typically include some combination of juror seating charts, jury summons lists, individual juror questionnaires, and attorneys' or clerks' notes. Each case file also includes an electronic copy of the jury selection transcript and documentation supporting each race coding decision.

C. Overview of Database Development

Staff attorneys completed all coding and data entry under the direct supervision of the primary investigators at Michigan State University College of Law in East Lansing, Michigan. As set forth more fully below, staff attorneys received detailed training on each step of the coding and data entry process.

i. Development of Data Collection Instruments

Data collection instruments (DCIs) are forms that staff attorneys completed based on the primary documents and transcripts. We used the following data collection instruments for coding data in this study:

1. Defendant Level Data Collection Instrument (D-Level DCI),
2. Venire Member Level Data Collection Instrument (VM-Level DCI),
3. Supplemental Venire Member Level Data Collection Instrument (VM-Level Race Coding DCI),
4. Supplemental Venire Member Descriptives Data Collection Instrument (VM-Level Double Coding DCI), and
5. Miscellaneous Supplemental DCIs.¹⁸

In the first phase of the study, staff attorneys completed the D-Level DCI, questions 1-14 and 24 of the VM-Level DCI, and the VM-Level Race Coding DCI.¹⁹ In the second phase of the study, staff attorneys

¹⁸ These instruments are included in Appendix B. As explained more fully below, supplemental DCIs were sometimes used to allow for double coding of certain information as a way to verify the reliability of coding decisions.

¹⁹ Before they began coding, each staff attorney met with one or both of the primary investigators for training in North Carolina capital jury selection procedures and in how to work with the case materials. In some instances, a senior staff attorney assisted in the training. Coding instructions are set forth in the Jury Study Coding Protocol in Appendix C.

coded the remaining questions in the VM-Level DCI, the VM-Level Double Coding DCI, and any supplemental DCIs applicable to a particular venire member.

The D-Level DCI collected information about the proceeding generally, including the number of peremptory challenges used by each side, and the name of the judge and attorneys involved in the proceeding. The data from the D-Level DCI was used only to aid in data cleaning; none of these data was used in any analysis.

Questions 1-14 of the VM-Level DCI documented basic demographic and procedural information specific to each venire member.

Question 5 of the VM-Level DCI required the staff attorney to determine strike eligibility for each potential juror. “Strike eligibility” refers to which party or parties had the chance to exercise a peremptory strike against a particular venire member. For instance, if the prosecution struck someone before the defense had a chance to question that person, that juror would be strike eligible to the prosecution only. Likewise, if a party had exhausted its peremptory challenges by the time it reached a potential juror, the failure to strike reveals nothing about how that party exercised its discretion. This determination refines the analysis of strike decisions to examine only those instances in which that party actually had a choice to pass or strike a juror, and excludes those when the decision was out of the party’s hands.²⁰

Question 14 documents the race of the venire member. Staff attorneys completed this question with reference to the VM-Level Race Coding DCI. The VM-Level Race Coding DCI was used to code the race of each venire member, the quality of the match for race coding from public records, and the source of the race information. Details on race coding are provided below.

In the second phase of the study, staff attorneys coded Questions 15-23 on the VM-Level DCI for a random sample of venire members. Using juror questionnaires (when available) and jury selection transcripts, staff attorneys coded questions relating to the following: (1) demographic characteristics (e.g., age, marital status, employment, educational background); (2) prior experiences with the legal system (e.g., prior jury service, experience as a criminal defendant or victim); and (3) attitudes about potentially relevant matters (e.g., ambivalence about the death penalty²¹, skepticism about—or greater

²⁰ In one case (Gary Trull), the defense successfully challenged the prosecution’s exercise of a peremptory strike against a Black venire member (Rodney Foxx) and the court seated him as an alternate juror. Thus, although this venire member ultimately served on the jury, we treated him as struck by the prosecution in the analysis.

²¹ Venire members who expressed their unwillingness to impose the death penalty under any circumstances and who were removed for cause under *Lockhart v. McCree*, 476 U.S. 162 (1986), *Witherspoon v. Illinois*, 391 U.S. 510 (1968), and *Witt v. Wainwright*, 470 U.S. 1039 (1985), are not included in our analysis. Sometimes, however, a venire member expressed reservations or ambivalence about the death penalty that fell short of outright opposition. Such a venire member would still

faith in—the credibility of police officers). This “descriptive” information was coded on the VM-Level DCI using codes set forth in the Descriptive Characteristics Appendix and the Employment Coding Appendix.²² As explained below, staff attorneys verified the descriptive coding using the VM-Level Double Coding DCI.

Finally, in the second phase, coders also completed various supplemental DCIs when certain codes were present. These supplemental DCIs allowed the coders to capture more nuanced information about a particular venire member characteristic. For example, one supplemental DCI instructed staff attorneys to code additional information for venire members who received a 700 or 800 level descriptive code on Question 23 of the VM-Level DCI. These codes indicated that the venire member had expressed bias or difficulty following the law. The supplemental DCI documented whether the grounds for dismissal suggested a more punitive outcome, a less punitive outcome, or neither.²³ Additional supplemental DCIs were coded when a venire member (or a close friend or family member) had been accused of a crime, a victim of a crime, or was associated with law enforcement. See Appendix B for the DCIs.

ii. Race Coding

In order to analyze potential racial disparities in peremptory strikes, it was necessary to identify the race of each venire member. We implemented a rigorous protocol to produce data in a way that is both reliable and transparent.²⁴ Staff attorneys recorded race coding in the VM-Level Race Coding DCI.

We obtained information about potential jurors’ race from three sources. First, we collected juror questionnaires for many of the venire members in our study. These questionnaires almost always asked the venire member’s race, and the vast majority of respondents provided that information.

be eligible to serve on the jury, but a prosecutor could reasonably base a decision to exercise a peremptory strike on this basis. *See Witherspoon v. Illinois*, 391 U.S. 510, 519-20 (1968). Accordingly, this is one of the many venire member characteristics that we included in our analysis.

²² The Descriptive Characteristics Appendix and the Employment Coding Appendix are included in Appendix B with the data collection instruments.

²³ Our designation of various statements or attitudes as “biased” is necessarily based on something more subtle than what would disqualify a potential juror for cause. For instance, a venire member might say that she thinks the death penalty does no good, but that she would be willing to vote for it if justified under the law. Likewise, a venire member might admit that he would have a hard time ignoring the fact of the defendant’s arrest, but that he would follow the court’s instructions to presume the defendant innocent. In neither case would the venire member likely be removed for cause, but their statements suggest a disposition to see the case in a way that favors one side more than the other.

²⁴ *See* Appendix D.

Researchers generally consider self-reports of race to be highly reliable.²⁵ For a second group of venire members, race was noted explicitly in the trial record when either a party or the court stated the venire member's race during jury selection. Similarly, a court clerk's chart noting the race of potential jurors that was officially made part of the trial record or a statement by an attorney on the record provided race information for some venire members.²⁶

Finally, when we were unable to find a venire member's race from the sources listed above, we used electronic databases to find race information and recorded the race and source of race information in the VM-Level Race Coding DCI. Staff attorneys used the North Carolina State Board of Elections website, LexisNexis "Locate a Person (Nationwide) Search Non-regulated," LexisNexis Accurint, and the North Carolina Division of Motor Vehicles online database. Many of the case files included juror summons lists with addresses, which allowed staff attorneys to match online records to the information about the potential juror with a high level of certainty.

The primary investigators prepared a strict protocol for use of these websites for race coding and trained staff attorneys on that protocol.²⁷ One objective of this protocol was to minimize the possibility of researcher bias. accordingly, staff attorneys who searched for venire members' information on electronic databases were (whenever possible) blind to strike decision.²⁸

Throughout this process we instructed staff attorneys to code a venire member's race as "unknown" unless they were able to meet strict criteria ensuring that the person identified in the public record was in fact the venire member and not just someone with the same name.²⁹ Staff attorneys were not to rely on a record containing information that was not consistent with whatever information we had about a particular venire member. For instance, staff attorneys would not rely on a public record in which the person's middle initial was inconsistent with that of the venire member, unless they were

²⁵ See, e.g., Clara Lu, Rabeeyah Ahmed, Amel Lamri & Sonia S. Anand, *Use of Race, Ethnicity, and Ancestry Data in Health Research*, 2 PLOS GLOB. PUBLIC HEALTH e0001060 (2022), <https://doi.org/10.1371/journal.pgph.0001060> (noting that race classifications should be self-reported wherever possible). In some instances, we received juror questionnaires containing venire member race after completing race coding using other sources. When this occurred, we verified the race of the venire member in the database but did not always update the details on the source of race information.

²⁶ We did not rely on clerks' or attorneys' observations about potential jurors' race unless incorporated into the record and thus subject to objection or where we were able to verify race using public records.

²⁷ See Appendix D for the protocol used in this process.

²⁸ Staff attorneys seeking race information from public sources knew about strikes only when they had to turn to the transcript for information to help them find that venire member's race.

²⁹ Staff attorneys were instructed to use information such as the venire member's middle name or year of birth to link the venire member to records of someone with the same name. When at all in doubt, staff attorneys were instructed to code the venire member's race as unknown.

able to document a name change to account for the discrepancy (e.g., a record that indicated that a venire member started using her maiden name as a middle name). If staff attorneys found someone with the same name as the venire member but with a different address, they were to use that record only if they could trace the person's address back to that of the venire member.

Staff attorneys saved an electronic copy of all documents used to make race determinations. The files are organized by proceeding.

Because of the importance of race coding, we conducted a reliability study on this methodology. Staff attorneys and law students coded a second copy of the VM-Level Race Coding DCI using public records for 1,897 venire members for whom we later received juror questionnaires reporting race or express designations of race in a voir dire transcript.³⁰

We then compared the data from public records to the presumably more reliable self-reported data in the jury questionnaires. Staff attorneys using public records were unable to determine the venire member's race to the level of reliability required by the study protocol in 242 of 1,897 cases (12.8%). In the remaining 1,655 cases, the race extracted from the public records matched that taken from the presumably more reliable sources for 97.9% of the venire members.

In addition, prosecutors reviewed this coding during Racial Justice Act hearings in January and February 2012.³¹ The state also produced prosecutors' affidavits that allowed additional review of race coding. This review identified a small number of errors in race coding, which we corrected.³² Both of these reviews provide evidence that the race coding protocol is highly reliable.

The methods described in this section allowed us to document race for all but 7 of the 7,532 venire members in our study.³³ Our database includes race information for 99.9% of the eligible venire members.

³⁰ The staff attorneys did not have access to these questionnaires or voir dire transcripts when they conducted the public records research.

³¹ *State of North Carolina v. Marcus Robinson*, File no. 91 CRS 2343, Cumberland County, January 30, 2012. Another opportunity for corrections arose in the October 2012 hearings. *State of North Carolina v. Tilmon Golphin, Christina Walters, and Quintel Augustine*, File Nos: 97 CRS 47314, 98 CRS 34832, 01 CRS 65079, Cumberland County, October 1, 2012 Special Session.

³² Prosecutors also reviewed descriptive coding in that manner. We carefully reviewed every proposed correction and updated the database when doing so was consistent with our coding protocol.

³³ We were unable to determine the race of the following seven venire members: Michael Scott (Danny Frogge, 1995); Billy Howard (Danny Frogge, 1995); James F Burgess (James Campbell, 1993); Joyce Bradley (Christopher L. Roseboro, 1997); Barbara Ward (Christopher L. Roseboro, 1997); Timothy Walker (Lesley Warren, 1995); and Judy Farmer (James E. Jaynes, 1999).

iii. Coding Race-Neutral Control Variables (Descriptive Information)

Strike and race information allows for analysis of unadjusted strike rates by race. To account for possible confounding variables, that is, other factors that might bear on the decision to strike, more detailed information about individual venire members must be considered. Thus, in addition to basic demographic information about each eligible venire member, we coded more detailed information for a random sample of venire members.³⁴ In total, we coded descriptive information for a randomly selected sample of 23% of the venire members in the database (1,747/7,532).³⁵ For this report, we also coded complete descriptive information for each of the 521 venire members from the twelve cases in District 11, including the 300 venire members from the seven cases in Johnston County.

Staff attorneys completed either Questions 15-23 on the VM-Level DCI or the VM-Level Double Coding DCI for venire members in the sample using the complete case file, including juror questionnaires (where available) and the transcripts of voir dire proceedings. Staff attorneys used the search function in Adobe Acrobat to search for venire members by name. This allowed them to find each instance when a particular venire member answered questions reliably and efficiently during the jury selection process. Every question in the DCI provided a code for the staff attorney to indicate that the case file did not contain sufficient information to code the presence or absence of a particular characteristic.

We instituted standard double coding procedures for coding of descriptives. Under these procedures, two different staff attorneys separately coded descriptive information for each venire member to ensure accuracy and intercoder reliability. The first staff attorney filled out the remaining questions on the VM-Level DCI. The second staff attorney repeated the process using a VM-Level Double Coding DCI. A senior staff attorney with extensive experience working on the study compared and reviewed their codes for consistency and either corrected errors or, when necessary, consulted with the primary investigator.

Questions resolved by the primary investigators typically involved differences in judgment. After a primary investigator resolved the issue, the senior staff attorney documented the proper coding for the issue in the coding log as needed.³⁶ All of the staff attorneys had access to the coding log and

³⁴ See Appendix E for the protocol used in this process.

³⁵ A few of the venire members who were randomly selected to be included in the sample could not be coded due to the poor quality or unavailability of the case materials. The transcript for Wayne Laws was too faded to be made searchable and no venire members were coded for descriptive information.

³⁶ See Appendix F.

were responsible for reviewing this document regularly to inform themselves about ongoing coding decisions. This system developed a shared expertise and enhanced intercoder reliability. The number of differences in judgment diminished over time due to staff attorney experience with the data collection instruments, the data itself, and the coding log.

D. Steps for Ensuring Accuracy of Data

This database includes information about 176 proceedings and 7,532 venire members eligible to be struck by the state. As noted above, we took several steps to minimize coding errors. We also developed systematic procedures to catch and correct errors in coding and data entry.

A Microsoft Access database allowed us to transfer the data that staff attorneys coded on paper DCIs into a machine-readable format. The data entry fields accepted only valid responses in order to minimize errors. For instance, if an item on the DCI allowed for only three possible responses (0 = No, 1 = Yes, and 9 = Unknown), then entering anything other than 0, 1, or 9 would be rejected and the person entering the data would be prompted to re-enter an acceptable value for that question. Although this mechanism could not prevent all data entry errors, it provided one line of defense against human error.

We used several other methods to catch and correct other errors in coding or data entry. For example, we identified instances where inconsistencies in data indicated possible errors and established a process for review and, where appropriate, correction.³⁷

IV. Statewide Analysis and Results

This section presents statewide unadjusted racial disparities in prosecutorial strikes, disparities controlling for potentially relevant race-neutral variables one at a time, and disparities that emerge via logistic regression analysis of a randomly selected 23% sample of the study population for whom we coded detailed individual level information.³⁸

Throughout this section and the ones that follow, we report the magnitude of disparities observed as well as a measure of the likelihood that the finding would occur as a result of chance. This measure, called a *p*-value, reflects the probability of observing a disparity of a given magnitude simply by luck of the draw. The lower the *p*-value, the lower the chance that an observed disparity was due

³⁷ For example, we identified all instances in which it appeared that a party exercised fewer than the peremptory strikes usually allotted to determine whether there was an error or if the party failed to use all strikes.

³⁸ We used Statistical Package for Social Sciences (SPSS) to randomly select the venire members. The analyses presented in this report were conducted on SPSS Version 28.0.1.1 (14).

merely to chance.³⁹ We also report standard errors and confidence intervals in all logistic regression tables.

A. Unadjusted Disparities in Statewide Prosecutorial Strike Patterns

As noted above, the statewide database includes information on 7,532 venire members who were eligible to be struck by the state. We analyzed prosecutorial strike patterns only for those venire members who were eligible to be struck by the state. Again, as reported above, among state strike-eligible venire members, the overwhelming majority were either white (6,136, 81.5%) or Black (1,240, 16.5%); just 2.0% (156) were other races. As of the writing of this report, we are missing race information for only 7 (0.1%) venire members.

Prosecutors exercised peremptory challenges at a significantly higher rate against Black venire members than against all other venire members. Across all strike-eligible venire members in the study, prosecutors struck 52.4% (650/1,240) of eligible Black venire members, compared to only 25.8% (1,620/6,285) of all other eligible venire members. This difference is statistically significant, $p < .001$; put differently, there is less than a one in one thousand chance that we would observe a disparity of this magnitude if the jury selection process were actually race neutral.⁴⁰ (See Table 1.) The average rate per case at which prosecutors struck eligible Black venire members is significantly higher than the rate at which they struck other eligible venire members.⁴¹ Of the 169 cases that included at least one eligible Black venire member, prosecutors struck an average of 55.7% of eligible Black venire members, compared to only 24.8% of all other eligible venire members. This difference is statistically significant, $p < .001$. (See Table 2.)

³⁹ See also David A. Kaye & David A. Freedman, *Reference Guide on Statistics*, in FED. JUDICIAL CTR., REFERENCE MANUAL ON SCIENTIFIC EVIDENCE, THIRD EDITION 249-52 (2011) (explaining the role and limits of standard conventions on p-values and noting that interpretation of results depends on the magnitude, i.e., the “practical significance”, of the observed disparities, the size of the underlying sample, and any statistical tests of significance); Guido W. Imbens, *Statistical Significance, p-Values, and the Reporting of Uncertainty*, 35 J. ECON. PERSP. 157, 162 (2021) (noting that often what “is of interest . . . is the magnitude and uncertainty of the estimates, and the robustness to identification concerns, not whether the data allow for the rejection of a zero effect”).

⁴⁰ Several different chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) were used to calculate the p-values, and the results were consistent regardless of the test used.

⁴¹ The analyses presented in Tables 1 and 2 are very similar but differ in their unit of analysis. Table 1 shows strikes against all venire members in the study, pooled across cases (7,525 strike eligible venire members for whom we have race information across 176 cases). Table 2 compares the strike rates calculated per case. Thus, only those cases with at least one eligible Black venire member (169) were included, and each case represents one data point. We present both ways of calculating these disparities to demonstrate that the effect is robust and does not depend on which method is used.

TABLE 1
Statewide Prosecutorial Peremptory Strike Patterns
(Strikes against venire members aggregated across cases)

		A Black Venire members	B All Other Venire members
1.	Passed	590 (47.6%)	4,665 (74.2%)
2.	Struck	650 (52.4%)	1,620 (25.8%)
3.	Total	1,240 (100.0%)	6,285 (100.0%)

*Chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) indicate that these differences in strike rates are significant at $p < .001$.

TABLE 2
Statewide Average Rates of State Strikes
(Average of strike rates calculated in individual cases and number of cases averaged)

	A Average Strike Rate	B Number of Cases Averaged
1 Strike Rates Against Black Qualified Venire Members	55.7% ($SD = 24.3\%$)	169
2 Strike Rates Against All Other Qualified Venire Members	24.8% ($SD = 6.9\%$)	169

*A paired-sample t-test indicates that this difference in strike rates is significant at $p < .001$.

B. Analysis of Strike Disparities Within Subsets of the Study Population

The unadjusted disparities in strike rates against eligible Black venire members compared to others are consistently statistically significant to a high level of reliability. That means that there is a very small chance that the differences observed are due to random variation in the data or chance. The next step was to determine whether these disparities were affected in any way by confounding variables that correlate with race but that may themselves be race neutral. For instance, members of certain racial groups might be more likely than others to express dissatisfaction or ambivalence about the death penalty. If such attitudes are represented fairly frequently in the population and if they bear heavily on the decision to strike, an observed disparity in strike rates against different racial groups may be better explained by other factors that tend to be associated (or correlated) with them.

We first controlled for race-neutral variables by analyzing strike disparities within subsets of the study population. For example, we excluded all of the venire members who expressed any ambivalence about the death penalty and then analyzed the strike patterns for the remaining venire members. Because none of the remaining venire members expressed ambivalence about the death penalty, any racial disparity in strike patterns we observed could not be attributable to the possibility that relevant attitudes vary along racial lines. We looked at five different subsets in this manner,

removing (1) venire members who expressed any reservations about the death penalty, (2) unemployed venire members, (3) venire members who had been accused of a crime or had a close relative accused of a crime, (4) venire members who knew any trial participant, and, finally, (5) all venire members with any one of the first four characteristics. The disparities identified through the unadjusted analysis persisted in each and every subset, as seen in Table 3.

TABLE 3
Strike Patterns when State-Strike Eligible Venire Members with Potentially Explanatory Variables Removed from Equation

Variable	A Number of Venire Members Removed from Analyses	B Strike Rates	C Strike Rate Ratio	D <i>p</i> - value
1. Death Penalty Reservations	199	42.9% (Black VMs) vs. 20.7% (all others)	2.1	<.001
2. Unemployed Venire Member	26	49.4% (Black VMs) vs. 24.8% (all others)	2.0	<.001
3. Venire Member or Close Other Accused of Crime	402	50.0% (Black VMs) vs. 23.9% (all others)	2.1	<.001
4. Venire Member knew a Trial Participant	48	53.5% (Black VMs) vs. 25.5% (all others)	2.1	<.001
5. Venire Member with Any One of Above Characteristics	592	37.8% (Black VMs) vs. 18.3% (all others)	2.1	<.001

The disparities in prosecutorial strike rates against eligible Black venire members persist even when other characteristics one might expect to bear on the decision to strike are removed from the equation. Table 3 provides a simple way of comparing apples to apples. However, the decision to strike or pass a potential juror can turn on a number of factors in isolation or combination. In the following section, we provide the results of a logistic regression model that takes into account a number of potentially relevant factors to examine whether the racial disparities can be explained by some combination of race-neutral factors.

C. Regression Analysis of the Role of Race in the Exercise of Peremptory Strikes

As reported above, we coded individual-level descriptive information for a 23% random sample of all the statewide strike-eligible venire members in the study (1,747/7,532). The demographic profile of this random sample strongly resembled that of the complete study population.⁴² Even after

⁴² We determined the race of all but three jurors in the sample (83.5% non-Black (1,458), 16.4% Black (286), and 0.2% (3) missing). These percentages mirror those in the full sample of jurors eligible to be struck by the state (83.5% non-Black (6,285), 16.5% Black (1,240), and 0.1% missing (7)). The random sample also reflects the relative proportion of men and women: The smaller sample included 51.9% women (906) and 48.1% men (841); the full data set included 53.3% women (4,013) and 46.7% men (3,519).

controlling for other factors potentially relevant to jury selection, a Black venire member had 2.4 times the odds of being struck by the state as did a venire member of another race.⁴³ In other words, while many factors one might expect to bear on the likelihood of being struck did matter, none—either alone or in combination—accounts for the disproportionately high strike rates against qualified Black venire members. (See Table 4.)

For instance, consider the previous example of ambivalence about the death penalty. In our database of randomly selected venire members, 199 venire members (11.4%) expressed some reservation about imposing the death penalty. An expression of this sort dramatically increased the odds that the state would strike that venire member relative to someone who did not express a similar sentiment, holding all else constant.⁴⁴ Likewise, the odds that the state would strike someone who had previously been accused of a crime or had a close friend or family member accused of a crime were much higher than for someone who had not.⁴⁵

The coding process described above produced close to 100 possible control variables potentially relevant to whether a venire member was struck or passed. The code book in Appendix G provides a complete list of variables in the database. The available control variables are included in this directory. We sought to include all variables that consistently and reliably predicted whether the state would strike or pass a potential juror. The resulting model combines those factors to distinguish venire members based on how objectionable or strike-worthy they were.

Using the Logistic Regression command in SPSS, we started the analysis with a simple model including only the venire member's race⁴⁶ and tested the magnitude and significance of each candidate

⁴³ We used a logistic regression model with the dependent variable that the strike-eligible venire member was struck or passed by the state. We considered and rejected the need to use a multilevel model for this analysis. One assumption of logistic regression is that the data are independent. That assumption comes into question in this context, as a party's decision to use one of its strikes is likely to be affected by who else is in the pool. This can present a problem in that it might increase the risk of Type I error; that is, it could increase the chances that the researcher will improperly find a result statistically significant. One way to gauge whether a particular dataset presents such a risk is to look at interclass correlations. If subjects (i.e., venire members) nested within settings (i.e., trials) are in fact more similar to each other than are subjects between settings, the researcher should use a multilevel model. We examined the interclass correlations for the cases in this study and found a negative interclass correlation. That means that venire members within a case were no more alike as to the outcome of interest (struck or passed) than were venire members between cases. In fact, that the interclass correlation was negative suggests that the results of the logistic regression analysis are likely conservative. For this reason, using a multilevel model was unnecessary and a traditional logistic regression model was appropriate. See David A. Kenny, Deborah A. Kashy & Niall Bolger, *Data Analysis in Social Psychology*, in *THE HANDBOOK OF SOCIAL PSYCHOLOGY* 238 (4th ed. 1998) (Daniel T. Gilbert, Susan T. Fiske & Gardner Lindsey eds.).

⁴⁴ Odds Ratio 13.56, $p < .001$.

⁴⁵ Odds Ratio 1.62, $p < .01$.

⁴⁶ Including the race variable in this model helps to identify which variables are potentially significant in the complete model independent of race.

control variable individually and in small groups. This process allowed us to identify the most important control variables for the decision to strike or pass an eligible venire member. This process produced a subset of variables that bore a significant relation (either in isolation or in combination) to the odds of being struck. We then tested the persistent magnitude and significance of these variables in various combinations, both by formally including all variables in a model *a priori*, and, alternately, by directing the computer program to step candidate variables into the model to identify the best fitting model. This iterative process identified the combination of control variables that remain strong and significant in a fully specified model of statewide strike decisions.

Table 4 presents the final logistic regression model for prosecutorial strike decisions. A venire member is coded “1” if struck by the state, and “0” if strike eligible but not struck. The “Black” variable in Row 2 shows the regression coefficient, the standard errors, the odds ratio, the confidence intervals, and the *p*-value for the effect of being a Black venire member on the odds of being struck by the state. This model estimates that, after controlling for several other race-neutral factors, Black venire members faced odds of being struck by the state that were 2.61 times those faced by all other venire members. That difference was statistically significant at $p < .001$; put differently, there is less than one in one thousand chance that we would observe a disparity of this magnitude if the jury selection process were actually race neutral.

The results of the logistic regression model are consistent with the unadjusted disparities we observed looking simply at the relative strike rates against Black and other venire members. None of the factors we controlled for in the regression analysis eliminated the effect of race in jury selection. While we found many non-racial factors that were highly relevant to the decision to strike, none was so closely associated with race or so frequent that it could serve as an alternative explanation of the racial disparities. In other words, the statistically significant influence of race on the odds of being struck was robust; its predictive power did not depend on the inclusion or exclusion of any particular variable or variables in the model.

TABLE 4
Statewide Logistic Regression Model

	A	B	C	E	F	G	H	
	Variable Name	Variable Description	Coefficient	S.E.	Odds Ratio	C.I.		p-value
1.	Intercept		-1.275	.087	0.280			<.001
2.	Black	Venire member is Black	0.957	.153	2.605	1.931	3.513	<.001
3.	DP_Reservations	Venire member expressed reservations about the death penalty	2.619	.203	13.716	9.218	20.407	<.001
4.	Hardship	Venire member worried serving would impose a hardship	0.771	.265	2.163	1.288	3.632	.004
5.	JKnewD	Venire member or venire member's immediate family knew the defendant	2.358	.545	10.572	3.634	30.759	<.001
6.	JKnewW	Venire member knew a witness	-0.459	.178	0.632	0.446	0.896	.010
7.	JKnewAtt	Venire member knew one of the attorneys in the case	0.489	.194	1.630	1.114	2.385	.012
8.	LeansState	Venire member expresses view that suggests view favorable to state (e.g., problems with presumption of innocence, right not to testify)	-1.787	.363	0.168	0.082	0.341	<.001
9.	PolicePros	VM or close other has worked with police or prosecutors.	-1.076	.187	0.341	0.237	0.492	<.001
10.	Accused_all	VM or a close other has been accused of criminal wrongdoing	0.494	.139	1.639	1.248	2.153	<.001

n = 1,719⁴⁷, r² = .22

V. District 11 Analyses and Results

Staff attorneys coded descriptive information for 100% of the strike eligible venire members in the twelve District 11 proceedings in our study. All of the 521 venire members were eligible to be struck by the state. There were 284 (54.5%) women and 237 (45.5%) men. The venire members' racial

⁴⁷ SPSS excludes venire members from the logistic regression about whom we were missing information. In the model in Table 4, SPSS dropped 28 venire members. This analysis omits additional candidate variables for which we were missing a substantial amount, but that were predictive of a state strike. Those variables include: Single or divorced venire members (Odds Ratio = 1.76, $p < .001$); homemakers (Odds Ratio = 2.30, $p < .05$); having gone to graduate school (Odds Ratio = 2.71, $p < .001$); and venire members 22 years of age or younger (Odds Ratio = 2.576, $p < .05$). When those variables are included in the model, the total number of venire members included in the analysis drops to 1,127, removing 620 venire members, but this does not change the effect of race on the decision to exercise a peremptory strike. In a model that includes those additional variables, Black venire members face odds that are 2.406 times those of their non-Black counterparts ($p < .001$).

composition was as follows: white (446, 85.6%); Black (72, 13.8%); Latino (1, 0.2%); mixed race (1, 0.2%); and other (1, 0.2%).

TABLE 5
District 11 Prosecutorial Peremptory Strike Patterns
(Strikes against venire members aggregated across cases)

		A	B
		Black Venire members	All Other Venire members
1.	Passed	35 (48.6%)	323 (71.9%)
2.	Struck	37 (51.4%)	126 (28.1%)
3.	Total	72 (100.0%)	449 (100.0%)

*Chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) indicate that these differences in strike rates are significant at $p < .001$.

TABLE 6
District 11 Average Rates of State Strikes
(Average of strike rates calculated in individual cases and number of cases averaged)

	A	B
	Average Strike Rate	Number of Cases Averaged
1. Strike Rates Against Black Qualified Venire Members	48.5% ($SD = 22.4\%$)	12
2. Strike Rates Against All Other Qualified Venire Members	27.8% ($SD = 4.7\%$)	12

*A paired-sample t-test indicates that this difference in strike rates is significant at $p < .05$.

Out of 72 strike eligible Black venire members, prosecutors struck 51.4% (37/72), compared to only 28.1% of eligible venire members of other races (126/449). This difference is statistically significant at $p < .001$.⁴⁸ The picture is similar when one looks at average strike rates: across twelve cases, prosecutors struck eligible Black venire members at an average rate of 48.5%, compared to 27.8% against venire members of other races. This difference is statistically significant at $p < .05$. (See Tables 5 & 6, above.)

We developed a logistic regression model for District 11 using the same procedures described above. A venire member’s race remained a powerful predictor of prosecutorial strike decisions: an eligible Black venire member had more than twice the odds of being struck by the state than a venire member of another race, all else being equal.⁴⁹ As in the statewide model, factors such as having

⁴⁸ Several different chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) were used to calculate the p -values, and the results were consistent regardless of the test used.

⁴⁹ Odds Ratio 2.17, $p < .02$.

previously been accused of a crime or expressing reservations about the death penalty were strong predictors of being struck by the state, but none could account for the effect of race.⁵⁰ (See Table 7.)

TABLE 7
District 11 Logistic Regression Model

	A	C	D	F	G	H	I
	Variable Name	Variable Description	Coefficient	S.E.	Odds Ratio	C.I.	p-value
1.	Intercept		-1.629	0.222	0.196		<.001
2.	Black	Venire member is Black	0.775	0.330	2.172	1.137 4.147	.019
3.	DP_Reservations	Venire member expressed reservations about the death penalty	2.657	0.307	14.259	7.810 26.032	<.001
4.	JAccused	Venire member accused of crime	0.919	0.347	2.507	1.271 4.946	.008
5.	LeansState	Venire member expresses view that suggests view favorable to state (e.g., problems with presumption of innocence, right not to testify)	-1.703	0.492	0.182	0.069 0.477	<.001
6.	Helping	Venire member works in a helping profession, like nurse, social worker or teacher	1.134	0.330	3.108	1.627 5.936	<.001
7.	JLawEnf_all	Venire member or close other works in law enforcement	-0.691	0.283	0.501	0.288 0.872	.014
8.	JKnewAtt	Venire member knew one of the attorneys	1.096	0.308	2.992	1.635 5.475	<.001
9.	BlueCollar	VM has a blue collar job	0.664	0.262	1.942	1.163 3.243	.011
10.	JVic_All	Venire member or close other has been a crime victim	-0.572	0.258	0.564	0.340 0.936	.027

n = 512⁵¹, r² = .29

VI. Johnston County Analyses and Results

Staff attorneys coded descriptive information for each of the strike eligible venire members in the seven Johnston County proceedings in our study. All 300 venire members were eligible to be struck by the state. There were 172 (57.3%) women and 128 (42.7%) men. The venire members’ racial composition was as follows: white (262, 87.3%); Black (37, 12.3%); and other (1, 0.3%).

Out of 37 strike eligible Black venire members, prosecutors struck 54.1% (20/37), compared to only 28.5% of eligible venire members of other races (75/263). This difference is statistically

⁵⁰ Odds Ratio = 14.26, $p < .001$ (death penalty reservations); Odds Ratio 2.51, $p < .01$ (venire member has been accused of a crime).

⁵¹ As with the statewide analysis, we did not have complete data on every variable. The model presented in Table 7 omits nine venire members. In addition, the model does not include the variable identifying venire members who have children. Venire members with children were less likely to be struck (Odds Ratio = .424, $p < .01$). When the variable Children is included in the model, the total number of venire members analyzed drops to 463, but there is no meaningful difference in the effect of race (Odds Ratio = 2.081, $p < .001$) (Black).

significant at $p < .01$.⁵² (See Table 8.) The picture is similar when one looks at average strike rates: across the seven cases, prosecutors struck eligible Black venire members at an average rate of 52.4%, compared to 28.5% against venire members of other races. This difference is marginally significant at $p = .068$. The consistency and magnitude of the disparity give us confidence, however, in the reliability of the finding. (See Table 9.)

TABLE 8
Johnston County Prosecutorial Peremptory Strike Patterns
(Strikes against venire members aggregated across cases)

		A	B
		Black Venire members	All Other Venire members
1.	Passed	17 (45.9%)	188 (71.5%)
2.	Struck	20 (54.1%)	75 (28.5%)
3.	Total	37 (100.0%)	263 (100.0%)

*Chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) indicate that these differences in strike rates are significant at $p < .01$.

TABLE 9
Johnston County Average Rates of State Strikes

		A	B
		Average Strike Rate	Number of Cases Averaged
1.	Strike Rates Against Black Qualified Venire Members	52.4% ($SD = 26.4\%$)	7
2.	Strike Rates Against All Other Qualified Venire Members	28.5% ($SD = 3.4\%$)	7

*A paired-sample t-test indicates that this difference in strike rates is marginally significant at $p = .068$.

We developed a logistic regression model for Johnston County using the same procedures described above. (See Table 10.) A venire member’s race remained a powerful predictor of prosecutorial strike decisions: an eligible Black venire member had more than four times the odds of being struck by the state than a venire member of another race, all else being equal.⁵³ As in the statewide model, factors such as having previously been accused of a crime or expressing reservations about the

⁵² Several different chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) were used to calculate the p -values, and the results were consistent regardless of the test used.

⁵³ Odds Ratio 4.12, $p < .01$.

death penalty were strong predictors of being struck by the state, but none could account for the effect of race.⁵⁴

TABLE 10
Johnston County Logistic Regression Model

A	C	D	F	G	H	I
Variable Name	Variable Description	Coefficient	S.E.	Odds Ratio	C.I.	p-value
1. Intercept		-1.611	0.242	0.200		<.001
2. Black	Venire member is Black	1.416	0.458	4.119	1.680 10.100	.002
3. DP_Reservations	Venire member expressed reservations about the death penalty	2.713	0.400	15.072	6.880 33.017	<.001
4. JKnewAtt	Venire member knew one of the attorneys in the case	1.006	0.442	2.734	1.150 6.500	.023
5. LeansState	Venire member expresses view that suggests view favorable to state (e.g., problems with presumption of innocence, right not to testify)	-1.616	0.676	0.199	0.053 0.748	.017
6. Helping	Venire member works in a helping profession, like nurse, social worker, or teacher	1.186	0.428	3.274	1.416 7.569	.006
7. JLawEnf_all	Venire member works in law enforcement	-1.054	0.392	0.349	0.162 0.752	.007
8. Defense	Venire member or close other worked as or with defense attorneys	2.972	1.229	19.525	1.757 216.925	.016
9. JAccused	Venire member accused of a crime	1.061	0.489	2.889	1.107 7.540	.030

n = 297⁵⁵, r² = .30

VII. District Attorney Butler’s Prosecutions Analyses and Results

Finally, we analyzed prosecutorial strike decisions in the four cases in the study that Assistant District Attorney Gregory C. Butler tried (Hassan Bacote, IZIAH BARDEN, Brian Bell, and Johnny Parker). All 193 venire members were eligible to be struck by the state. There were 104 (53.9%) women and 89 (46.1%) men. The venire members’ racial composition was as follows: white (149, 77.2%); Black (39, 20.2%); Asian (1, 0.5%); mixed race (1, 0.5%); Native American (2, 1.0%); and other (1, 0.5%).

Out of 39 strike eligible Black venire members, Butler and his co-counsel struck 74.4% (29/39), compared to only 21.4% of eligible venire members of other races (33/154). This difference is

⁵⁴ Odds Ratio 15.07, *p* < .001 (death penalty reservations); Odds Ratio 2.73, *p* < .05 (venire member knew one of the attorneys).

⁵⁵ SPSS excluded three venire members from this logistic regression model because they were missing information.

statistically significant at $p < .01$.⁵⁶ (See Table 11.) The picture is similar when one looks at average strike rates: across the four cases, prosecutors struck eligible Black venire members at an average rate of 74.2%, compared to 20.3% against venire members of other races. This difference is statistically significant at $p < .01$. (See Table 12.)

TABLE 11
Butler Prosecutorial Peremptory Strike Patterns
(Strikes against venire members aggregated across cases)

		A Black Venire members	B All Other Venire members
4.	Passed	10 (25.6%)	121 (78.6%)
5.	Struck	29 (74.4%)	33 (21.4%)
6.	Total	39 (100.0%)	154 (100.0%)

*Chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) indicate that these differences in strike rates are significant at $p < .001$.

TABLE 12
Butler Average Rates of State Strikes
(Average of strike rates calculated in individual cases and number of cases averaged)

		A Average Strike Rate	B Number of Cases Averaged
3.	Strike Rates Against Black Qualified Venire Members	74.2% ($SD = 9.9\%$)	4
4.	Strike Rates Against All Other Qualified Venire Members	20.3% ($SD = 5.5\%$)	4

*A paired-sample t-test indicates that this difference in strike rates is significant at $p < .01$.

We developed a logistic regression model for these four cases using the same procedures described above. A venire member’s race remained a powerful predictor of prosecutorial strike decisions: an eligible Black venire member had more than ten times higher odds of being struck by the state than a venire member of another race, all else being equal.⁵⁷ While limited by the number of the venire member in the analysis, several other factors maintained a presence as strong predictors of being struck by the state, but none could account for the effect of race.⁵⁸ (See Table 13.)

⁵⁶ Several different chi square tests (Pearson Chi-Square, Continuity Correction, Likelihood Ratio, Fisher’s Exact Test, and Linear-by-Linear Association) were used to calculate the p -values, and the results were consistent regardless of the test used.

⁵⁷ Odds Ratio 10.31, $p < .001$.

⁵⁸ Odds Ratio 8.49, $p < .001$ (death penalty reservations); Odds Ratio 2.34, $p < .05$ (working in a helping profession).

TABLE 13
Butler Logistic Regression Model

A		C	D	F	G	E		I
Variable Name	Variable Description	Coefficient	S.E.	Odds Ratio	C.I.		<i>p</i> -value	
1. Intercept		-1.794	.259	.166			<.001	
2. Black	Venire member is black	2.334	.447	10.314	4.292	24.786	<.001	
	Venire member expressed	2.139	.522	8.495	3.055	23.621	<.001	
3. DP_Reservations	reservations about the death penalty							
	Venire member works in a	.851	.460	2.342	.950	5.773	.037	
4. Helping	helping profession, like nurse, social worker, or teacher							

$n = 193^{59}$, $r^2 = .26$

VIII. Summary of Findings

We have documented the strike decisions and race for more than 7,500 potential capital jurors in 176 cases from 1990 to 2011. Race was consistently a factor in prosecutorial decisions to exercise peremptory challenges in jury selection in these capital proceedings. Regardless of how one looks at the data, a robust and substantial disparity in the exercise of prosecutorial strikes against Black venire members compared to others persists.

In the unadjusted data, a statistically significant disparity persists at a magnitude of roughly two to one whether calculated by looking at all strike decisions pooled across cases, or by comparing the mean strike rates for all cases in which a Black venire member was eligible to serve.

A statistically significant disparity persists at a magnitude of at least two to one when we exclude any potential juror with one of several potentially objectionable qualities (e.g., reservations about the death penalty not strong enough to warrant removal for cause, prior allegations of criminal conduct, unemployment).

A statistically significant disparity persists at odds of more than two to one in the logistic regression model at the state, district, county, and district attorney level. Some of the models produced even higher odds ratios: in Johnston County, Black potential jurors faced odds of being struck more than four times that of their counterparts of other races, and they faced odds of more than ten times those of their counterparts in the cases that Mr. Butler tried.

⁵⁹ As in the previous analyses, an additional variable for which we were missing a substantial amount of was also predictive of a state strike. Venire members who had some college education were less likely to be struck by the state (Odds Ratio = 0.293, $p < .05$), but we are missing information on that variable for 28 venire members. When that variable is included in the model, Black potential jurors faced slightly lower odds of being struck (Odds Ratio = 9.77, $p < .001$).

The robustness of our findings of racial disparities across a variety of analyses provides powerful evidence that race was a significant factor in prosecutorial strike decisions statewide in the 176 cases, the twelve cases in District 11, the seven cases in Johnston County, and in the four cases in which Mr. Butler represented the state.