Race and Death Sentencing for Oklahoma Homicides Committed Between 1990 and 2012

Glenn L. Pierce
Michael L. Radelet
Susan Sharp

Follow this and additional works at: https://scholarlycommons.law.northwestern.edu/jclc

Part of the Criminal Law Commons, Criminal Procedure Commons, and the Criminology and Criminal Justice Commons

Recommended Citation
https://scholarlycommons.law.northwestern.edu/jclc/vol107/iss4/5

This Article is brought to you for free and open access by Northwestern University School of Law Scholarly Commons. It has been accepted for inclusion in Journal of Criminal Law and Criminology by an authorized editor of Northwestern University School of Law Scholarly Commons.
RACE AND DEATH SENTENCING FOR OKLAHOMA HOMICIDES COMMITTED BETWEEN 1990 AND 2012*

GLENN L. PIERCE¹
MICHAEL L. RADELET²
& SUSAN SHARP³

This Article examines 4,668 Oklahoma homicide cases with an identified suspect that occurred during a twenty-three year period between January 1, 1990, and December 31, 2012. Among these, we identified 153 cases that ended with a death sentence. Overall we found that while the defendant’s race did not correlate with a death sentence, there was a strong correlation with the race of the victim, with cases with white victims significantly more likely to end with a death sentence than cases with non-white victims. Homicides with female victims were also more likely to result in a death sentence than other cases. We then examined whether the homicide included multiple victims and/or additional felony circumstances, and coded each case to indicate whether it included zero, one, or two of these “additional legally relevant factors.” Using logistic regression analysis,

* We thank Melissa S. Jones and Amy D. Miller for their assistance in helping to build the Oklahoma death row data set and two anonymous reviewers for this journal for their helpful suggestions. The three authors are listed alphabetically; each made equal contributions to this project.

¹ Glenn L. Pierce is Principal Research Scientist in the School of Criminology and Criminal Justice and the Co-Director of the Institute for Security and Public Policy, Northeastern University, 435 Cushing Hall, Boston, MA 02115. Contact: g.pierce@northeastern.edu, 617-373-3702. His research has focused on capital punishment and broader issues of societal security.

² Michael L. Radelet is Professor of Sociology and Faculty Associate in the Institute of Behavioral Sciences, University of Colorado-Boulder, Campus Box 327, Boulder, CO 80309. Contact: Radelet@Colorado.edu, 303-735-5811. His research over the past forty years has focused on various aspects of the death penalty.

³ Susan F. Sharp is the David Ross Boyd Professor Emerita of Sociology at the University of Oklahoma, 780 Van Vleet Oval, Norman, OK 73019. Contact: ssharp@ou.edu. Her research focuses on the impact of criminal justice policies on families of offenders, women prisoners, and capital punishment.

733
where the effects of each predictor variable can be isolated, the data indicate that 1) having a white female victim, 2) having a white male victim, 3) having a female victim from a minority race or ethnicity, 4) having one additional legally relevant factor, and 5) having two additional legally relevant factors present are statistically significant predictors of a death sentence. Overall, the data show that the odds of a death sentence for those with white female victims are 9.59 times higher than in cases with minority male victims. The odds of a death sentence for those with white male victims are 3.22 times higher than the odds of a death sentence with minority male victims. Finally, the odds of a death sentence for those with minority female victims are 8.68 times higher than the odds of a death sentence with minority male victims. All these race/gender effects are net of our two control variables (multiple murder victims and the presence of additional felony circumstances).

TABLE OF CONTENTS
INTRODUCTION ..................................................................................734
I. PREVIOUS RESEARCH .................................................................738
II. METHODOLOGY ............................................................................741
   A. Homicide Data Set .................................................................741
   B. Death Row Data Set ..............................................................743
III. RESULTS .....................................................................................746
   A. Frequencies and Cross-Tabulations .......................................746
   B. Multiple Logistic Regression Analysis .....................................748
CONCLUSION ...................................................................................750
APPENDIX .......................................................................................751

INTRODUCTION

In the first sixteen years of the twenty-first century, we have seen several indicators that the use of the death penalty is in sharp decline in the United States. According to the Death Penalty Information Center, between 1996 and 2000 an annual average of 275 new prisoners arrived on America’s death rows, but by 2016 this figure decreased to thirty (a drop of almost 90%). In addition, the average number of executions per year has also fallen over 50%

---


since the last five years of the twentieth century, from seventy-four executions between 1996–2000, to thirty-three in the last five years, 2012–2016. In just the past ten years, seven states have abolished the death penalty, including Delaware in 2016, the most recent. Four more states—Washington, Oregon, Colorado and Pennsylvania—have seen their governors impose formal or informal moratoria on executions. A September 2016 poll by the Pew Research Center found that slightly less than half of Americans (49%) supported the death penalty, the lowest level of support in more than forty years. A 2015 poll by Quinnipiac indicates that more Americans (48%) now prefer a sentence of life imprisonment without parole (which is available in all death penalty jurisdictions) to a death sentence (43%).

The research reported in this article focuses on Oklahoma, a state that hosted 112 executions between 1976 and 2016, a tally second only to Texas. Even in Oklahoma, a November 2015 poll found that the majority of the population (52%) prefer a sentence of life plus restitution rather than the

---

alternative of the death penalty. A second poll taken in July 2016 found that 53% of the “likely voters” in the state prefer life sentences without parole and mandatory restitution instead of the death penalty. These results, coupled with national data, clearly indicate a changing climate around death penalty debates: apparently more Americans now prefer long prison terms rather than the death penalty.

One reason for the decline in support for, and the use of, the death penalty is growing concern that the penalty is not reserved for the worst of the worst. In a nationwide Gallup Poll taken in October 2015, 41% of the respondents expressed the belief that the death penalty was being applied unfairly, and a 2009 Gallup Poll found that 59% of the respondents believed that an innocent person had been executed within the preceding five years. This concern is undoubtedly on the minds of many Oklahomans, where ten inmates have been released from its death row since 1972 because of (at least) serious doubts about guilt.

In this article, we examine another question related to the contention that
the death penalty is reserved for the worst of the worst: the possibility that the race of the defendant and/or victim affects who ends up on death row. To do so, we will study all of the homicides that occurred in Oklahoma from January 1, 1990 through December 31, 2012 and compare those cases with the subset that resulted in the imposition of a death sentence.

Oklahoma is home to some 3.75 million citizens, of whom 72% are white, with the African-American, Native American, and Hispanic population each constituting about 7 to 8% of the population.¹⁹ Racial and ethnic minorities are over-represented among those on death row, which housed forty-six men and one woman as of July 1, 2016 (twenty-three white, twenty African-American, two Native American, two Hispanic).²⁰ However, to say that African-Americans are 8% of the Oklahoma population and 42.6% of those on death row (20/47) does not tell us much because the number of African-Americans convicted of homicide, or especially the most aggravated homicides (and not the number in the state’s population), is the relevant denominator.

Between 1972 and March 1, 2017, Oklahoma conducted 112 executions (with the first occurring in 1990), which ranks second among U.S. states behind Texas and gives Oklahoma the highest per capita execution rate in the U.S.²¹

Of the 112 executed inmates, sixty-seven were white (60%), thirty-five African-American, two Native American, one Hispanic, and one whose race was classified as “Other.”²² These 112 people were put to death

---

²² See Searchable Execution Database, supra note 21. This does not include Timothy McVeigh, executed under federal authority in June 2001 for murdering 168 people in the explosion of the Alfred P. Murrah Federal Building in Oklahoma City in April 1995. Jim
for killing 116 victims. Eighty-three of the 112 executed inmates were convicted of killing at least one white victim (74.1%), nineteen at least one African-American victim, seven at least one Asian victim, five at least one Hispanic victim, one at least one Native American victim, and one who killed two people whose races are classified as “Other” (both the assailant and his two victims were Iraqi).

I. PREVIOUS RESEARCH

Concerns about the impact of the defendant’s and/or victim’s race on death penalty decisions have a long history in the U.S. Soon after the 1976 decision in Gregg v. Georgia that breathed new life into death penalty statutes by reaffirming the constitutionality of capital punishment, researchers, led by the late University of Iowa legal scholar David Baldus, began to study the possible relationships between race and the death penalty. The most comprehensive study by Baldus and his team focused on Georgia. The twenty-eight race studies conducted prior to 1990, including the Baldus study, were reviewed by the U.S. government’s General Accounting Office in 1990, which produced a report concluding that in 82% of the twenty-eight studies reviewed, “race of victim was found to influence the likelihood of being charged with capital murder or receiving the death penalty.”

23 These tallies were calculated with data obtained from Searchable Execution Database, supra note 21. Because four executed inmates were convicted of killing multiple victims who had different races, one execution can fit two or more of these criteria, giving us a total for these tallies of 116. In 2001, Sahib Al-Mosawi was executed for stabbing to death his wife, Inaam al-Nashi, and her uncle, Mohammad al-Nashi. Rochelle Hines, Iraqi National Executed for City Double Slaying, NEWSOK (Dec. 7, 2001), http://newsok.com/article/2765160.

24 428 U.S. 153 (1976) (affirming death sentence for petitioner Troy Gregg, sentenced to death under a Georgia statute that was enacted after its previous death penalty statute was invalidated by the Supreme Court in Furman v. Georgia, 408 U.S. 238 (1972)). This was the first death penalty statute approved by the Supreme Court after Furman.


In 2003, Baldus and George Woodworth in effect updated and expanded the GAO Report, reviewing eighteen studies on race and death sentencing that had been published or released after 1990.\(^{27}\) Their conclusions are worthy of a lengthy quote:

> Overall, their results indicate that the patterns documented in the GAO study persist. Specifically, on the issue of race-of-victim discrimination, there is a consistent pattern of white-victim disparities across the systems for which we have data. However, they are not apparent in all jurisdictions nor at all stages of the charging and sentencing processes in which they do occur. On the issue of race-of-defendant discrimination in the system, with few exceptions the pre-1990 pattern of minimal minority-defendant disparities persists, although in some states [African-American] defendants in white-victim cases are at higher risk of being charged capitally and sentenced to death than are all other cases with different defendant/victim racial combinations.\(^{28}\)

Overall, Baldus and Woodworth concluded that the studies displayed four clear patterns: (1) with few exceptions, the defendant’s race is not a significant correlate of death sentencing, (2) primarily because of prosecutorial charging decisions, those who kill whites are significantly more likely than others to be sentenced to death, (3) African-American defendants with white victims are especially likely to be treated more punitively, and (4) counties with large numbers of cases with African-American defendants or white victims show especially strong death sentencing rates for African-American defendants and those with white victims.\(^{29}\)

Professor Baldus passed away in 2011, but one of his students, Catherine Grosso, has taken the reigns and assembled a team that has continued Baldus’s work.\(^{30}\) Among the Grosso team’s publications is one that recently updated the Baldus literature review.\(^{31}\) Published in 2014, the Grosso team identified thirty-six studies that were completed after the 1990 GAO Report.\(^{32}\) Their review identified four patterns:


\(^{28}\) *Id.*

\(^{29}\) *Id.* at 214–15.


\(^{32}\) *Id.* at 538.
• Four of the studies did not discover any race effects.
• Four found independent effects of the race of the defendant (that is, effects that remained after statistically controlling for other relevant variables).
• Twenty-four studies in fifteen jurisdictions found significant race-of-victim effects.
• Nine found that black defendants with white victims were more harshly treated than other homicide defendants.33

Unfortunately, none of these post-1990 studies focused on Oklahoma, and only one credible study has explored the possibility of racial disparities in Oklahoma in the post-\textit{Furman} years.34 In that study, first published in \textit{Stanford Law Review},35 Samuel Gross and Robert Mauro studied all homicides and death sentences in Oklahoma during a fifty-three month period, August 1976 through December 1980.36 Thus, these data are almost forty years old. Of the 898 homicide cases in which the police identified a suspect over this period, a death sentence was imposed in forty-three cases (4.8%).37 Initially the researchers found that death sentences were imposed in 16.7% of the cases in which an African-American was suspected of killing a white (B-W), 6.6% of the cases where a white was suspected of killing a white (W-W), and 1.3% of the African-American on African-American (B-B) cases.38

If the homicide was accompanied by other felony circumstances, no cases with African-American victims resulted in a death sentence, compared to 30.6% of the white victim cases.39 If the victim and defendant were strangers, 21.8% of the white victim cases resulted in a death sentence, compared to 3.4% of such cases with African-American victims.40

In 2016, a second study of death sentencing in Oklahoma was published.41 The paper attempted to look at death sentencing in Oklahoma

\footnotesize{33 \textit{Id.} at 538–39. Because some of the studies reached more than one of these conclusions, the sum of these findings (forty-one) is greater than the total number of studies (thirty-six).


36 GROSS \& MAURO, supra note 34, at 233.

37 \textit{Id.} at 235.

38 \textit{Id.}

39 \textit{Id.} at 236.

40 \textit{Id.}

in a sample of 3,395 homicide cases over a thirty-eight year time span, 1973–2010. Unfortunately, some of the data presented by the authors in that paper are fundamentally flawed, so the paper is not credible. For example, Appendix B states that 8% of the white-white homicides contained “capital” or “first-degree” (as opposed to “second-degree”) murder charges (137/1,696), compared to 53% of the African-American-African-American cases (348/659). It also states that the data set includes 1,030 cases “charged capital” in which whites were accused of killing Native Americans, although the authors contradict themselves by stating (on the same line) that there were only forty-two white-Native American cases in their sample. In an email to Radelet dated August 18, 2016, the study’s lead author, David Keys, acknowledged the contradictions, saying that he undoubtedly got bad data from the state of Oklahoma.

II. METHODOLOGY

For the present study, we examined all cases in which the death penalty was imposed for Oklahoma homicides that occurred between January 1, 1990, and December 31, 2012. Using twenty-three years of homicide data allowed us to use a sample with enough cases in it to detect patterns. We ended our project with homicides committed in 2012 because we found only one death penalty case for a 2013 murder, and any homicides that occurred in 2013 or later might still be awaiting final disposition. During those twenty-three years, the state recorded some 5,090 homicides, for an annual average of 221.

A. HOMICIDE DATA SET

To begin, we assembled a data set on all Oklahoma homicides with an identified perpetrator over the twenty-three year study period. We obtained

Maratea eds., 2016). We mention this study only to show our awareness of it and to alert future students of the death penalty in Oklahoma that its data are faulty, prohibiting any conclusions that are based on them.

42 Id. at 127.
43 Id. at 142.
44 Id.
45 This email exchange is available from Prof. Radelet.
47 This is similar to the methodology used in other studies that Pierce and Radelet have conducted using information from the Supplemental Homicide Reports. See Glenn L. Pierce & Michael L. Radelet, Death Sentencing in East Baton Rouge Parish, 1990–2008, 71 LA. L. REV. 647 (2011); Michael L. Radelet & Glenn L. Pierce, Race and Death Sentencing in North
these data from the FBI’s “Supplemental Homicide Reports,” or “SHRs.” SHRs are compiled from data supplied by local law enforcement agencies throughout the United States who report data on homicides to a central state agency, which in turn reports them to the FBI in Washington, D.C., for inclusion in its Uniform Crime Reports. While the SHRs do not list the suspects’ or victims’ names (and only the month and year of the offense—not the specific date), they do include the following information: the month, year, and county of the homicide; the age, gender, race, and ethnicity of the suspects and victims; the number of victims; the victim-suspect relationship; weapon used; and information on whether the homicide was accompanied by additional felonies (e.g., robbery or rape). Local law enforcement agencies usually report these data long before the case against the defendant has been adjudicated, so offender data are for “suspects,” not convicted offenders.

The SHRs include information on all murders and non-negligent manslaughters, but they do not differentiate between the two types of homicides. They define murders and non-negligent manslaughters as “the willful (non-negligent) killing of one human being by another. Deaths caused by negligence, attempts to kill, assaults to kill, suicides, and accidental deaths

---


49 The racial designations used in the UCR are defined as follows:

[1] White. A person having origins in any of the original peoples of Europe, North Africa, or the Middle East. [2] Black. A person having origins in any of the black racial groups of Africa. [3] American Indian or Alaskan Native. A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition. [4] Asian or Pacific Islander. A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa. [5] Unknown.


52 Id.
are excluded." In addition, the SHRs have a separate classification for justifiable homicides, which are defined as "(1) the killing of a felon by a law enforcement officer in the line of duty; or (2) the killing of a felon, during the commission of a felony, by a private citizen." These justifiable homicides were removed from our analysis.

For our project, a total of 4,813 homicide suspects were identified from Oklahoma SHR’s for homicides committed during the period 1990 through 2012. Only those SHR cases that recorded the gender of the homicide suspect were included in the sample, effectively eliminating those cases in which no suspect was identified. In other words, for SHR homicide cases where no suspect gender information was recorded, we assumed that the police had not been able to identify a suspect for that particular homicide incident, rendering sentencing decisions irrelevant.

To better pinpoint the race differences, we also dropped eighty-two cases in which there were multiple victims who were not all the same race and an additional sixty-four cases where either the victim or offender was Asian. This resulted in a reduction of 146 homicide cases (3% of the original sample of 4,813 homicide cases), for a subtotal of 4,667 cases (4,813 minus 146).

In addition to the race of the victim, the SHR data include information on the number of homicide victims in each case and on what additional felonies, if any, occurred at the same time as the homicide. These variables are key to the analysis reported below.

B. DEATH ROW DATA SET

Unfortunately, there is no state agency, organization, or individual who maintains a data set on all Oklahoma death penalty cases. Thus, we had to start from scratch in constructing what we call the “Death Row Data Set.”

To do this, we used data compiled by the NAACP Legal Defense and Educational Fund, Inc. and issued in a (usually) quarterly publication called

---


54 Id.

55 We dropped the cases with Asian defendants or victims because there was only a small number of such cases, prohibiting reliable analysis of any unique patterns among this group.

56 We later added one additional case; see infra p. 746 to come up with the final total of 4,668.

Death Row USA.58 This highly-respected source lists (by state) the name, race and gender of every person on America’s death rows.59 Unfortunately, it contains no other information about the defendant (e.g., age), victim (e.g., name, age, race), or crime (e.g., date, location, or circumstances), but with the state and the name of the death row inmate, it gave our efforts to construct a data base a useful start.

Copies of most back issues of Death Row USA are available online,60 and other issues are available in hard copy in many law libraries, including the University of Colorado’s Law library. From these sources, we made copies of all the Oklahoma inmates listed in the eighty-three issues of Death Row USA published in the years 1990–2015. From those we identified the additions to the lists of those under a death sentence in Oklahoma, since the additions would give us a preliminary list of those sentenced to death for homicides committed on or after January 1, 1990.61 We were not interested in the names of inmates who were already on death row when the first issue we examined was published, since all of those inmates were convicted of murders from the 1970s or 1980s. We were only interested in the additions, and then only those sent to death row for murders committed on or after January 1, 1990. Therefore, we went through all issues of Death Row USA that were published after January 1, 1990, identifying names of new inmates who were added to the list.

With that list of people sentenced to death, we conducted Internet searches for information about the crime, such as specific date, county of offense, name of victim(s) (and age, sex, and race), and similar information on the offender. All those on the Death Row USA lists who were convicted of homicides that occurred in the 1980s or after December 31, 2012 were deleted. We also used a website maintained by the Oklahoma Department of Corrections to confirm the inmate’s race and gender, as well as the county of conviction and the inmate’s date of birth.62 Because the Oklahoma Department of Corrections provides only the date of the conviction, not the date of the offense, information on the date of that offense had to be obtained

59 See id.
60 See id.
61 The number of death sentences imposed in Oklahoma has been declining since the 1990s, from an annual average of nine in 1990–1994, to 12.6 (1995–1999), to six (2000–2004), to 4.6 (2005–2009), to 0.8 (2010–2014), and an average of two per year for 2015–16. See Death Sentences in the United States From 1977 By State and By Year, supra note 5.
from other sources (primarily newspaper articles and published appellate decisions in the case).

In the end, we identified 153 death sentences imposed against 151 offenders for homicides committed from 1990–2012. Two men, Karl Myers and Darrin Lee Pickens, had two separate death sentences imposed in two separate trials for two separate homicides, so these two defendants are counted twice.\(^\text{63}\)

We then identified the SHR case that corresponded with each case in which the death penalty was imposed. We constructed one new SHR case and added it to our data set for one death penalty case with no corresponding case in the existing SHR data. This resulted in a final sample size of 4,668 homicide suspects, of whom 153 were sentenced to death.

On multiple victim homicides, we counted the homicide cases with at least one female victim as cases with female victims. We report patterns by the four largest categories of race/ethnicity in the data for suspects and victims: white, African-American, Hispanic, and Native American.

Finally, we also included two control variables in our analysis that measure “aggravating factors” or what we call “Additional Legally Relevant Factors.” The first aggravating factor is the number of homicide victims in the case, and the second is whether the homicide event included felony circumstances in addition to the homicide itself. The latter variable captures circumstances such as a rape-murder or a robbery-murder, which are often important factors in justifying the imposition of a death sentence. Unfortunately, with “only” 143 cases in our analysis (see Table 2), there are limits on how many control variables we can introduce. For example, we would have too few cases if we tried to compare cases with African-American vs. white victim cases in rape-murders while also looking for cases in which the defendants had similar prior records of criminal activity. Our focus on number of victims and contemporaneous felony circumstances is consistent with our approach in previous studies,\(^\text{64}\) and even in those studies in which we have statistically controlled for such factors as the offender’s


\(^{64}\) See, e.g., The Impact of Legally Inappropriate Factors on Death Sentencing for California Homicides, supra note 47, at 46; Race and Death Sentencing in North Carolina, supra note 47, at 2139–40.
prior record of criminal activity\textsuperscript{65} or victim-defendant relationship,\textsuperscript{66} the effects of the victim’s race on death sentencing remained strong.

III. RESULTS

A. FREQUENCIES AND CROSS-TABULATIONS

Table 1 displays descriptive statistics from our data. There are a total of 4,668 homicides included. Of the 4,668 cases, 2,060 (44.1\%) involved both white suspects and white victims, and 1,266 (27.1\%) involved African-American suspects and African-American victims. There are 427 cases with an African-American suspect and white victim (9.1\%), and 143 cases with a white suspect and an African-American victim (3.1\%).

Table 2 shows that overall, 143 (3.06\%) of the homicides with known suspects resulted in a death sentence. Homicides with white victims are the most likely to result in a death sentence. Here 106/2,703 resulted in death (3.92\%), whereas 37/1,965 of the homicides with non-white victims resulted in death (1.88\%).\textsuperscript{67} More specifically, the probability of a death sentence was highest for those who were suspected of killing whites, followed by those suspected of killing Hispanics, with the fewest death sentences found among those suspected of killing African-American or Native American victims.

Table 3 looks at only those homicides with male victims. Here there are a sufficient number of cases to make conclusions only for cases with either white or African-American victims.\textsuperscript{68} Of the white male victim cases, 2.26\% resulted in a death sentence, but only 0.77\% of the cases with African-American male victims. Thus, homicides with white male victims are 2.94 times more likely to result in death than cases with African-American male victims (2.26/.77).

Table 4 looks at homicide cases with female victims. The data show that homicides with at least one female victim are 4.6 times more likely to result in a death sentence (7.21\%) than the homicides with no female victims.


\textsuperscript{67} These thirty-seven suspects were implicated in twenty-seven cases with black victims, 6 with Hispanic victims, and 4 with Native American victims. The 1,965 victims included 1,445 cases with African-American victims only, 225 with Hispanic victims only, and 295 with Native American victims only.

\textsuperscript{68} That is, there are so few cases with Hispanic or Native American victims that small fluctuations in the number of death sentences will result in large proportional differences. Only one case with a Hispanic male victim resulted in a death sentence and only two with male Native American victims.
shown in Table 3 (1.57%). There are 1,235 cases in the data with at least one female victim, and again we focus on differences between cases with white victims and African-American victims and do not look at the other race/ethnicity categories that have low sample counts. The data show only small differences in death sentencing rates among cases with at least one female victim between white (7.57%) and African-American (6.67%) victims. Clearly, race makes less of a difference when women are killed than when men are killed.

Table 5 examines the percentage of cases that resulted in a death sentence by the race of the defendant. Here we combine races into two categories: white and non-white (African-American, Hispanic, and Native American). The data show there is virtually no difference in the probability of a death sentence by race of defendant, with 3.2% of the white offenders sentenced to death and 3% of the non-white defendants.

However, there is much more to this story. Table 6 looks at the percentages of death penalty cases by the race of the victim. Here we see that 1.9% of those who were suspected of killing non-whites were ultimately sentenced to death (37/1965), whereas 3.9% (106/2703) of those suspected of killing whites ended up on death row. The probability of a death sentence is therefore twice as high (2.05 times) for those who are suspected of killing whites than for those suspected of killing non-whites.

Table 7 combines both suspect’s and victim’s race/ethnicity. The percentages of non-white defendant/non-white victim and white defendant/non-white victim cases ending with death sentences are similar, with 1.9% and 1.8% death sentence respectively. In sharp contrast, 3.3% of the white-on-white homicides resulted in a death sentence, compared to 5.8% of the non-whites suspected of killing white victims.

The gender of the victim also makes a very large difference in who ends up on death row. As Table 8 shows, 1.6% of the defendants suspected of killing males (no female victims) were sentenced to death, compared to 7.2% of those who were suspected of killing one or more women.

Table 9 shows the likelihood of a death sentence by the race and gender of the victim. Among those suspected of killing white males, 2.3% end up on death row, whereas among those suspected of killing non-white males, only 0.8% are sentenced to death. On the other hand, 7.6% of those suspected of killing white females are sentenced to death, as are 6.4% of those suspected of killing non-white females.

69 When the analysis examines the potential effect of more than one independent variable on the likelihood of a death sentence, we combine the separate racial/ethnic minority categories (i.e., African-American, Hispanic, and Native American) into a single minority category.
Finally, Table 10 displays the percent of death penalty cases broken down by the presence of zero, one, or two “Additional Legally Relevant Factors” (ALRFs). The factors we included are (1) whether the homicide event also included additional felonies and (2) whether there were multiple victims. All cases had zero, one, or two of these factors present. Table 10 shows that these variables are strong predictors of a death sentence: 1.7% of the cases with no additional legally relevant factors ended with a death sentence, 6.2% of the cases with one factor, and 30.2% of the cases with two factors. These factors therefore allow us to identify the most aggravated homicide cases — the ones in which a death sentence would be most expected.

We now turn our attention to pinpointing the effects of each of our predictor variables.

B. MULTIPLE LOGISTIC REGRESSION ANALYSIS

Table 11 presents the results from a statistical technique called logistic regression.70 This is the statistical technique of choice used to predict a dependent variable that has two categories, such as whether or not a death sentence is imposed.71

70 In logistic regression, the dependent variable is predicted with a series of independent variables, such as gender, income, etc. The model predicts the dependent variable with a series of independent variables, and the unique predictive utility of each independent variable can be ascertained. As we have explained elsewhere:

Logistic regression models estimate the average effect of each independent variable (predictor) on the odds that a convicted felon would receive a sentence of death. An odds ratio is simply the ratio of the probability of a death sentence to the probability of a sentence other than death. Thus, when one’s likelihood of receiving a death sentence is .75 (P), then the probability of receiving a non-death sentence is .25 (1-P). The odds ratio in this example is .75/.25 or 3 to 1. Simply put, the odds of getting the death sentence in this case are 3 to 1. The dependent variable is a natural logarithm of the odds ratio, y, of having received the death penalty. Thus, y=P / 1-P and; (1) \( \ln(y) = \alpha + \sum \beta_iX_i \) where \( \alpha \) is an intercept, \( \beta_i \) are the coefficients for the i independent variables, X is the matrix of observations on the independent variables, and \( \epsilon \) is the error term. Results for the logistic model are reported as odds ratios. Recall that when interpreting odds ratios, an odds ratio of one means that someone with that specific characteristic is just as likely to receive a capital sentence as not. Odds ratios of greater than one indicate a higher likelihood of the death penalty for those offenders who have a positive value for that particular independent variable. When the independent variable is continuous, the odds ratio indicates the increase in the odds of receiving the death penalty for each unitary increase in the predictor.

Pierce & Radelet, supra note 65, at 59.

71 Logistic regression is a statistical method to predict the value of one variable with a series of other variables. The technique is regularly used in studies of race and death sentencing. See, e.g., David C. Baldwin, George Woodworth & Charles A. Pulaski, Jr., Equal Justice and the Death Penalty 78 n.55 (1990) (explaining how logistic regression models can be used to calculate the odds of a death sentence); Samuel R. Gross & Robert Mauro, Death and Discrimination: Racial Disparities in Capital Sentencing 248–52
Table 11 shows that there are five variables in our model that are associated with who is sentenced to death in Oklahoma: (1) having a white female victim, (2) having a white male victim, (3) having a female victim from a minority race or ethnicity, (4) having one additional legally relevant factor (a homicide event with more than one victims or one in which there were additional felony circumstances present), and 5) having two additional legally relevant factors present (both a homicide event with more than one victim and one in which there were additional felony circumstances present). The reference category for the latter two variables is “no additional factors.” We also included a variable measuring the race of the defendant (white vs. minority), but that factor was not statistically significant.

It is no surprise that having one or both legally relevant factors increases the odds of a death sentence dramatically. Let us focus on the column labeled $\text{Exp } \beta$. The $\text{Exp } \beta$ for “one additional aggravator” is 3.439 (rounded to 3.4), which is also the odds ratio. This indicates that after controlling for all the other variables in the model, the odds of receiving a death sentence are 3.4 times higher in cases with one additional legally relevant factor (compared to cases with no additional legally relevant factors). When the two additional legally relevant factors are both present, the $\text{Exp } \beta$ tells us that the odds of a death sentence are 12.847 (12.8) times higher than cases where no additional factors are present. This is what would be expected—clearly those cases are highly aggravated.

More interesting are the effects of race and gender. Here, the excluded category (the comparison group) includes cases with male victims who are members of ethnic or racial minorities (African-American, Hispanic, or Native American). The $\text{Exp } \beta$ in Table 11 shows that the odds of a death sentence for those with white female victims are 9.59 time higher than in cases with minority male victims. The odds of a death sentence for those with white male victims are 3.22 times higher than the odds of a death sentence with minority male victims. Finally, the odds of a death sentence for those with minority female victims are 8.68 times higher than the odds of a death sentence with minority male victims. And all these race/gender effects are net of our two control variables (multiple murder victims and the presence of additional felony circumstances), and all are statistically significant.

CONCLUSION

The results of this project are straightforward. We do not find evidence that death sentencing in Oklahoma is related to the race of the defendant, at least as a general pattern. On the other hand, the data show that, as one might expect, the odds of a death sentence in Oklahoma are much higher for defendants convicted of multiple murders, and defendants convicted of murders that are accompanied by additional felonies. In addition, there are rather large disparities in the odds of a death sentence that correlate with the gender and the race/ethnicity of the victim. Controlling for other factors—the presence of additional felony circumstances and the presence of multiple victims—cases with white female victims, cases with white male victims, and cases with minority female victims are significantly more likely to end with a death sentence in Oklahoma than are cases with non-white male victims. Conversely, we find that homicide cases that take the lives of male victims who are members of racial and ethnic minority groups are the least likely to receive a death sentence.
2017]  SENTENCING FOR OKLAHOMA HOMICIDES  751

APPENDIX

TABLE 1

Oklahoma Homicides 1990-2012, by Race/Ethnicity of Suspect and Victim

<table>
<thead>
<tr>
<th>Race/Ethnicity of Victim</th>
<th>White Only</th>
<th>Black Only</th>
<th>Hisp. Only</th>
<th>Nat. Am. Only</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Suspect</td>
<td>2060</td>
<td>143</td>
<td>38</td>
<td>99</td>
<td>2340</td>
</tr>
<tr>
<td>Black Suspect</td>
<td>427</td>
<td>1266</td>
<td>42</td>
<td>30</td>
<td>1765</td>
</tr>
<tr>
<td>Hispanic Suspect</td>
<td>65</td>
<td>21</td>
<td>133</td>
<td>8</td>
<td>227</td>
</tr>
<tr>
<td>Nat. Am. Suspect</td>
<td>151</td>
<td>15</td>
<td>12</td>
<td>158</td>
<td>336</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2703</td>
<td>1445</td>
<td>225</td>
<td>295</td>
<td>4668</td>
</tr>
</tbody>
</table>

TABLE 2

Oklahoma Homicides and Death Sentences by Race of Victim

<table>
<thead>
<tr>
<th>Race of Victim</th>
<th>No. of Suspects</th>
<th>No. of Death Sentences</th>
<th>Percentage Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Victim</td>
<td>2703</td>
<td>106</td>
<td>3.92</td>
</tr>
<tr>
<td>Black Victim</td>
<td>1445</td>
<td>27</td>
<td>1.87</td>
</tr>
<tr>
<td>Hispanic Victim</td>
<td>225</td>
<td>6</td>
<td>2.67</td>
</tr>
<tr>
<td>Nat. American Vic.</td>
<td>295</td>
<td>4</td>
<td>1.36</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4668</td>
<td>143</td>
<td>3.06</td>
</tr>
</tbody>
</table>

72 These data include only homicides with an identified suspect in the case.
TABLE 3
Oklahoma Homicides and Death Sentences by Race of Victim
(Only Cases with No Female Victims)

<table>
<thead>
<tr>
<th>Race of Victim</th>
<th>No. of Suspects</th>
<th>No. of Death Sentences</th>
<th>Percentage Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Victim</td>
<td>1857</td>
<td>42</td>
<td>2.26</td>
</tr>
<tr>
<td>Black Victim</td>
<td>1175</td>
<td>9</td>
<td>0.77</td>
</tr>
<tr>
<td>Hispanic Victim</td>
<td>189</td>
<td>1</td>
<td>0.53</td>
</tr>
<tr>
<td>Nat. American Vic.</td>
<td>212</td>
<td>2</td>
<td>0.94</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3433</strong></td>
<td><strong>56</strong></td>
<td><strong>1.57</strong></td>
</tr>
</tbody>
</table>

TABLE 4
Oklahoma Homicides and Death Sentences by Race of Victim
(Cases with At Least One Female Victim)

<table>
<thead>
<tr>
<th>Race of Victim</th>
<th>No. of Suspects</th>
<th>No. of Death Sentences</th>
<th>Percentage Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Victim</td>
<td>846</td>
<td>64</td>
<td>7.57</td>
</tr>
<tr>
<td>Black Victim</td>
<td>270</td>
<td>18</td>
<td>6.67</td>
</tr>
<tr>
<td>Hispanic Victim</td>
<td>36</td>
<td>5</td>
<td>13.89</td>
</tr>
<tr>
<td>Nat. American Vic.</td>
<td>83</td>
<td>2</td>
<td>2.41</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1235</strong></td>
<td><strong>89</strong></td>
<td><strong>7.21</strong></td>
</tr>
</tbody>
</table>
## Table 5

**Probability of a Death Sentence by Race of Defendant**

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Nonwhite</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2266</td>
<td>2259</td>
<td>4523</td>
</tr>
<tr>
<td></td>
<td>.968</td>
<td>.970</td>
<td></td>
</tr>
</tbody>
</table>

**DP Imposed**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Nonwhite</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>74</td>
<td>69</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>.032</td>
<td>.030</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

|       | 2340  | 2328     | 4668  |

Chi Square 1.55; 1 df; NS

## Table 6

**Probability of a Death Sentence by Race of Victim**

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Nonwhite</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>2597</td>
<td>1928</td>
<td>4525</td>
</tr>
<tr>
<td></td>
<td>.961</td>
<td>.981</td>
<td></td>
</tr>
</tbody>
</table>

**DP Imposed**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Nonwhite</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>106</td>
<td>37</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>.039</td>
<td>.019</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

|       | 2703  | 1965     | 4668  |

Chi Square 15.92; 1 df; p<.001
### TABLE 7

**Probability of a Death Sentence by Race of Defendant and Victim**

Defendant-Victim Race/Ethnicity  
(W=White; NW=Nonwhite)

<table>
<thead>
<tr>
<th></th>
<th>NW-W</th>
<th>W-W</th>
<th>NW-NW</th>
<th>W-NW</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>606</td>
<td>1991</td>
<td>1653</td>
<td>275</td>
</tr>
<tr>
<td></td>
<td>.942</td>
<td>.967</td>
<td>.981</td>
<td>.982</td>
</tr>
</tbody>
</table>

DP Imposed

<table>
<thead>
<tr>
<th></th>
<th>NW-W</th>
<th>W-W</th>
<th>NW-NW</th>
<th>W-NW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37</td>
<td>69</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>.058</td>
<td>.033</td>
<td>.019</td>
<td>.018</td>
</tr>
</tbody>
</table>

Total  

<table>
<thead>
<tr>
<th></th>
<th>NW-W</th>
<th>W-W</th>
<th>NW-NW</th>
<th>W-NW</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>643</td>
<td>2060</td>
<td>1685</td>
<td>280</td>
</tr>
</tbody>
</table>

Chi Square 25.48; 3 df; p<.001

### TABLE 8

**Probability of a Death Sentence by Gender of Victim**

(V=Victim)

<table>
<thead>
<tr>
<th></th>
<th>No Female V</th>
<th>1+ Female V</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>3378</td>
<td>1146</td>
<td>4535</td>
</tr>
<tr>
<td></td>
<td>.984</td>
<td>.928</td>
<td>.969</td>
</tr>
</tbody>
</table>

DP Imposed

<table>
<thead>
<tr>
<th></th>
<th>No Female V</th>
<th>1+ Female V</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>54</td>
<td>89</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>.016</td>
<td>.072</td>
<td>.031</td>
</tr>
</tbody>
</table>

Total  

<table>
<thead>
<tr>
<th></th>
<th>No Female V</th>
<th>1+ Female V</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3433</td>
<td>1235</td>
<td>4668</td>
</tr>
</tbody>
</table>

Chi Square 97.07; 1 df; p<.001
**Table 9**

<table>
<thead>
<tr>
<th>Race/Gender of Victim</th>
<th>White Female (W-F)</th>
<th>White Male (W-M)</th>
<th>Nonwhite Female (NW-F)</th>
<th>Nonwhite Male (NW-M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>782</td>
<td>1815</td>
<td>364</td>
<td>1564</td>
</tr>
<tr>
<td></td>
<td>.924</td>
<td>.977</td>
<td>.936</td>
<td>.992</td>
</tr>
<tr>
<td>DP Imposed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>64</td>
<td>42</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>.076</td>
<td>.023</td>
<td>.064</td>
<td>.008</td>
</tr>
<tr>
<td>Total</td>
<td>846</td>
<td>1857</td>
<td>389</td>
<td>1576</td>
</tr>
</tbody>
</table>

Chi Square 104.69; 3 df; p<.001

**Table 10**

<table>
<thead>
<tr>
<th>Number of Additional Legally Relevant Factors (ALRF)</th>
<th>No ALRF</th>
<th>1 ALRF*</th>
<th>2 ALRF**</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>3510</td>
<td>978</td>
<td>37</td>
<td>4525</td>
</tr>
<tr>
<td></td>
<td>.983</td>
<td>.938</td>
<td>.698</td>
<td>.969</td>
</tr>
<tr>
<td>DP Imposed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>62</td>
<td>65</td>
<td>16</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>.017</td>
<td>.062</td>
<td>.302</td>
<td>.031</td>
</tr>
<tr>
<td>Total</td>
<td>3852</td>
<td>1043</td>
<td>53</td>
<td>4668</td>
</tr>
</tbody>
</table>

Chi Square 187.9; 2 df; p<.001

*Either multiple victim homicide or homicide with additional felony circumstances

**Both multiple victim homicide and homicide with additional felony circumstances
TABLE 11  
Logistic Regression Analysis of Victim’s Race/Gender and Number of Additional Legally Relevant Factors on the Imposition of a Death Sentence  
(n=4668)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>β</th>
<th>Sig.</th>
<th>Exp β</th>
</tr>
</thead>
<tbody>
<tr>
<td>WF Victim</td>
<td>2.261</td>
<td>.000</td>
<td>9.592</td>
</tr>
<tr>
<td>WM Victim</td>
<td>1.171</td>
<td>.001</td>
<td>3.225</td>
</tr>
<tr>
<td>Minority F Victim</td>
<td>2.161</td>
<td>.000</td>
<td>8.678</td>
</tr>
<tr>
<td>One additional aggravator (ALRF)*</td>
<td>1.235</td>
<td>.000</td>
<td>3.439</td>
</tr>
<tr>
<td>Two additional aggravators (ALRF)**</td>
<td>2.553</td>
<td>.000</td>
<td>12.847</td>
</tr>
<tr>
<td>Def.’s Race (W vs. minority)</td>
<td>.284</td>
<td>.164</td>
<td>1.328</td>
</tr>
<tr>
<td>Constant</td>
<td>-5.799</td>
<td>.000</td>
<td>.003</td>
</tr>
</tbody>
</table>

*Either multiple victim homicide or homicide with additional felony circumstances

**Both multiple victim homicide and homicide with additional felony circumstances