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SACRED VICTIMS: FIFTY YEARS OF DATA ON VICTIM RACE AND SEX AS PREDICTORS OF EXECUTION

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In this essay, we update and expand David Baldus's famous study of Georgia homicides in the 1970s to uncover the impact of the race and sex of homicide victims on whether a defendant was sentenced to death and ultimately executed. We show that the odds of a death sentence were sixteen times greater if the victim was a White woman than if the victim was a Black man, even when other factors that might explain the disparity were taken into account. Furthermore, we identified a clear hierarchy among victims with regard to whether a death sentence was ultimately carried out. Among the defendants who were sent to death row for killing a White woman, 30% were executed. But the share drops to 19% if the victim was a White man, 10% if the victim was a Black woman, and 0% if the victim was a Black man. We then use contemporary, nationwide Supplemental Homicide Report (SHR) data to show that the effect we identified in Georgia in the 1970s generalizes to the nation as a whole and to the present day. We argue that these disparities, which cannot be explained by factors extrinsic to the victim's race and sex, are further evidence that the ultimate question of who lives and

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dies in our criminal justice system remains unconstitutionally tainted by outdated notions of chivalry and White supremacy.

INTRODUCTION

Any sensible discussion of criminal law must foreground the role that racial discrimination plays in the administration of justice in this country. Criminologists and lawyers who study American crime and punishment have urged us to "interrogate the system at every" level "in order to expose where racial bias lives in the criminal law."[1] In fact, leading scholars have rightly declared that it is impossible to understand any aspect of the "American criminal justice [system] without taking account of race."[2] The death penalty is no exception.

In one sense, the role that race plays in capital punishment has been well-documented. In the most famous study of the American death penalty, David Baldus, George Woodworth, and Charles Pulaski examined Georgia homicides and demonstrated that, controlling for other possible explanatory

[1] JODY ARMOUR, N*GGA THEORY: RACE, LANGUAGE, UNEQUAL JUSTICE, AND THE LAW 21 (2020).

[2] DAVID A. SKLANSKY, A PATTERN OF VIOLENCE: HOW THE LAW CLASSIFIES CRIMES AND WHAT IT MEANS FOR JUSTICE 61 (2021).

factors, the odds of a death sentence were 4.3 times greater in White victim cases than Black victim cases.[3] In a previous article, Phillips and Marceau returned to the Baldus data and demonstrated that the pattern that Baldus identified with regard to the imposition of death sentences persevered throughout the appeals process—those who kill White victims are not just more likely to be charged with capital crimes and sentenced to death, but also more likely to have those death sentences upheld on appeal and ultimately carried out.[4] The race of the victim has been shown to be a key predictor of both death sentences and executions. But race is not alone as a social category that predicts privilege and oppression.

This article takes the next step and considers the combined impact of both the race *and* the sex[5] of the victim on the likelihood of a death sentence and eventual execution. Previous scholarship has documented that a death sentence is more likely in a female victim case than a male victim case.[6] But this project provides the most comprehensive look at the intersection of race and sex in predicting death sentences and executions.[7]

We deploy a variety of methods to study the intersection of race and sex in the operation of the death penalty. First, in Part I, we revisit the Baldus data, showing that the criminal justice system treats a murder very differently when a White woman is among its victims. This dataset is older than others we use, but it is a critical foundation insofar as it is the most comprehensive set of data studying all homicides in a jurisdiction over a period of years. We make a number of novel findings, including that there is a clear hierarchy of murder victims when it comes to capital sentencing; a death sentence was

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[3] DAVID C. BALDUS, CHARLES A. PULASKI & GEORGE WOODWORTH, EQUAL JUSTICE AND THE DEATH PENALTY: A LEGAL AND EMPIRICAL ANALYSIS 316, 401 (1990); McCleskey v. Kemp, 481 U.S. 279, 287 (1987).

[4] Scott Phillips & Justin Marceau, *Whom the State Kills*, 55 HARV. C.R.-C.L. L. REV. 585, 642 (2020).

[5] It might make more sense to study the relevance of gender in predicting death penalty outcomes, but we have used the term sex because the data we rely on uses sex to classify victims.

[6] "While past studies have examined gender-of-defendant disparities, gender of-victim disparities have only been noted in passing in studies focused on other issues. However, the gender-of-victim disparities found in the present study are striking." Steven F. Shatz & Naomi R. Shatz, *Chivalry Is Not Dead: Murder, Gender, and the Death Penalty*, 27 BERKELEY J. SEX, L. & JUST. 64, 107 (2011).

[7] Other scholars have considered the role that capital punishment plays in elevating the importance of White female victims and denigrating the worth of Black male victims. But these projects are not primarily empirical. *See, e.g.*, Daniel S. Medwed, *Black Deaths Matter: the Race-of-Victim Effect and Capital Punishment*, 86 BROOK. L. REV. 957 (2021). The empirical work on this topic is quite limited. *See infra* note 16.

imposed in 17% of all cases involving a White female victim but only 0.9% of cases involving only Black male victims.

By following the Baldus cases through the appellate process, we also find that this same hierarchy persisted through to the execution stage. While 30% of those who were sentenced to death for killings that included a White female victim were ultimately executed, none, not a single defendant in Baldus's database, was executed after being sentenced to death for killings that involved only Black male victims.

The Baldus data is the most complete, most in-depth study of any capital system, and thus our findings here are more robust than any other quantitative project in this realm. However, the data is limited to a single state during a single era. Accordingly, in Part II, we use the FBI Supplemental Homicide Reports (SHR) to demonstrate that the findings in Part I are not isolated either to Georgia or to the time period studied by Baldus and his co-authors. The SHR provide the most recent and comprehensive data compiled from reported killings around the country, and allow us to roughly estimate the total number of death-penalty-eligible killings and to break down this finding based on the race and sex of the victim. Using this data, we compare the patterns of death eligibility to data on executions compiled by the Death Penalty Information Center. Our SHR findings confirm what we observed in the Baldus data from Georgia during the 1970s: the criminal justice system—whether in Georgia or elsewhere, whether in the 1970s or the present day—punishes murderers more seriously when White women are among their victims.

Finally, in Part III we explain the implications of these findings for the death penalty in the United States. The Supreme Court has refused to invalidate the death penalty based solely on evidence of discriminatory impact, and we have no reason to believe it will change course in the foreseeable future. But the Court has also expressed a concern that the death penalty should not be imposed in a way that produces either random or discriminatory results. Our findings demonstrate that many death sentences are imposed not because of the defendant's moral culpability or the relevant details of his crime, but because of outdated notions of chivalry and White supremacy.

I. GEORGIA HOMICIDE DATA AND THE PROTECTION OF WHITE WOMEN

Considered the seminal study in the field of empirical death penalty research, the Charging and Sentencing Study (CSS) authored by David Baldus and colleagues was at the heart of the Supreme Court's 1987 decision

in *McCleskey v. Kemp*.[8] The CSS is a careful statistical analysis of a random sample of all the defendants convicted of murder or voluntary manslaughter in Georgia between 1973 and 1979.[9] Baldus showed that while the defendant's race was not a reliable predictor of whether a death sentence was imposed in a particular case, the race of the *victim* was highly predictive of whether a defendant would be sentenced to death.[10] The central conclusion of the study is by now familiar to students of the death penalty and racial discrimination: "The odds of a death sentence, after controlling for other factors, were 4.3 times greater for persons who murdered [W]hite people than persons who murdered Black people."[11]

The Justices rejected a constitutional challenge based on the Baldus findings by explaining that disparities—even dramatic racial disparities—cannot be assumed to impugn the integrity of the process: "we decline to assume that what is unexplained is invidious."[12] In effect, disparate racial outcomes in the justice system, without more, do not amount to unconstitutional procedures. Perhaps the most striking feature of this holding is the Court's willingness to accept Baldus's findings as accurate. Indeed, the Court questioned neither the correctness of Baldus's empirical findings nor the soundness of his methodologies. To this day, despite constant academic and judicial scrutiny, Baldus's work has largely survived unscathed, and has been described as "among the best empirical studies on criminal sentencing ever conducted."[13]

A. EXAMINING DEATH SENTENCES THROUGH AN INTERSECTIONAL LENS

Given how comprehensive the Baldus dataset is, it is surprising how few scholars have returned to the data to expand on it or conduct additional studies. One exception is the work of Phillips and Marceau, who recently

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[8] McCleskey v. Kemp, 481 U.S. 279 (1987).

[9] BALDUS ET AL., *supra* note 3, at 2–3. Underlying data for the CSS is available at David C. Baldus, George Woodworth & Charles A. Pulaski, *Charging and Sentencing of Murder and Voluntary Manslaughter Cases in Georgia, 1973-1979 (ICPSR 9264)*, NAT'L ARCHIVE OF CRIM. JUSTICE DATA, https://www.icpsr.umich.edu/web/NACJD/studies/9264# [https://perma.cc/LA5P-R3QG] (last visited June 2, 2024), or via email request to Scott Phillips (scott.phillips@du.edu).

[10] BALDUS ET AL., *supra* note 3 at 314–32.

[11] Phillips & Marceau, *supra* note 4, at 590–91.

[12] *McCleskey*, 481 U.S. at 313.

[13] Samuel R. Gross, *David Baldus and the Legacy of* McCleskey v. Kemp, 97 IOWA L. REV. 1905, 1916 n. 61 ("A brief filed in the Supreme Court by several of the country's preeminent criminologists described the Baldus study as 'among the best empirical studies on criminal sentencing ever conducted.'").

showed that defendants who killed a White victim were not only more likely to be sentenced to death but were also more likely to ultimately be executed than were other defendants.[14] That is, the racial disparities that Baldus discovered in the sentencing stage not only survived but were actually exaggerated in the appellate process. Indeed, Phillips and Marceau found that the overall execution rate was 17 times greater in White victim cases within Baldus's dataset than in Black victim cases.[15]

Previous research has tended to disaggregate race and sex in the analysis of capital punishment. Researchers have shown disparities in executions based on the sex of the victim.[16] And a large body of scholarship has documented that those who kill White victims are more likely to be sentenced to death than those who kill persons who are Black.[17] The jumping off point

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[14] Phillips & Marceau, *supra* note 4, at 642.

[15] *Id.* at 606.

[16] *See* Shatz & Shatz, *supra* note 6, at 107 ("[T]he gender-of-victim disparities found in the present study are striking. Women were the victims in 21.9% of the single-victim capital cases. In those cases, the death-sentence rate was 10.9%, more than seven times the rate when men were the victims (1.5%)."). There is a limited body of prior research examining the overlapping import of race and sex in capital punishment. *See* Jefferson E. Holcomb, Marian R. Williams & Stephen Demuth, *White Female Victims and Death Penalty Disparity Research*, 21 JUST. Q. 877, 902 (2004) (finding that a death sentence was more likely to be imposed in cases with a White female victim in Ohio from 1981 to 1997); Marian R. Williams, Stephen Demuth & Jefferson E. Holcomb, *Understanding the Influence of Victim Sex in Death Penalty Cases: The Importance of Victim Race, Sex-Related Victimization, and Jury Decision Making*, 45 CRIMINOLOGY 865, 879 (2007) (in a reanalysis of the Baldus data focusing on single-victim cases, the authors report no significant difference in the handling of cases with White female victims and White male victims); Scott Phillips, Laura Potter & James E. Coverdill, *Disentangling Victim Gender and Capital Punishment: The Role of Media*, 7 FEMINIST CRIMINOLOGY 130, 145 (2012) (finding that the District Attorney in Houston was more likely to seek death if the victim was a White female even after controlling for media coverage of the case); Glenn Pierce, Michael L. Radelet & Susan Sharp, *Race and Death Sentencing for Oklahoma Homicides Committed Between 1990 and 2012*, 107 J. CRIM. L. & CRIMINOLOGY 733, 756 (2017) (reporting that cases with minority male victims were less likely to result in a death sentence than any other victim race-sex combination); FRANK R. BAUMGARTNER, ARVIND KRISHNAMURTHY, KANEESHA R. JOHNSON, MARTY DAVIDSON & COLIN P. WILSON, DEADLY JUSTICE: A STATISTICAL PORTRAIT OF THE DEATH PENALTY 72 (Oxford Univ. Press 2018) (finding that 14% of homicide victims in the United States between 1975 and 2005 were White women, but 38% of the defendants who were executed between 1976 and 2015 were convicted of killing a White woman; see Table 4.2 on page 72); Scott Phillips & Trent Steidley, *A Systematic Lottery: The Texas Death Penalty, 1976 to 2016*, 51 COLUM. HUM. RTS. L. REV. 1043, 1071 (2020) (finding that 13% of death-eligible defendants in Texas killed a White woman, but 36% of condemned defendants were convicted of killing a White woman).

[17] *See* BALDUS ET AL., *supra* note 3; Phillips & Marceau, *supra* note 4, at 586 ("By combining Baldus's sentencing data with original execution data, we demonstrate that the overall execution rate is substantially greater for defendants convicted of killing a white victim than for those convicted of killing a Black victim.").

for the present project was our hypothesis that the victim-based disparities in death sentences and executions documented in previous work, including Baldus's, are driven not by race alone, but by the combination of the victim's race and sex. Our findings, set out below, provide strong support for this conclusion. We show that the seminal *race-of-victim disparity* Baldus discovered was driven by the presence of *White female victims*. Moreover, the disparity got worse at each stage of a case. If the victim was a White woman, the District Attorney (DA) was more likely to seek death, the jury was more likely to impose death, and the condemned defendant was more likely to be executed than if there was no White female victim. It turns out that intersectionality—the interaction of victim race and sex[18]—is the major driver of the racial differences that Baldus uncovered.[19]

1. Prior Intersectional Work on the Baldus Dataset

Prior researchers, criminologists Marian Williams, Stephen Demuth, and Jefferson Holcomb, considered and rejected the primacy of White female victims.[20] Using the Baldus dataset, the authors concluded that "the likelihood of receiving a death sentence is not statistically different for cases that involve white male victims versus white female victims."[21] Put simply, the authors concluded that White victims are a monolithic group. But this research has an important (and understandable) limitation. Namely, the authors' analysis omitted the thirty-eight cases in the Baldus dataset involving multiple victims. Because Baldus used sampling weights, the

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[18] *See* Michael L. Radelet & Glenn L. Pierce, *Race and Prosecutorial Discretion in Homicide Cases*, 19 L. & SOC'Y REV. 587, 612 (1985) (finding Florida prosecutors to be more likely to selectively upgrade a case to justify the death penalty when the victim is White); Kimberle Crenshaw, *Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color*, 43 STAN. L. REV. 1241, 1244 (1991); William J. Bowers, Benjamin D. Steiner & Marla Sandys, *Death Sentencing in Black and White: An Empirical Analysis of the Role of Jurors' Race and Jury Racial Composition*, 3 U. PA. J. CONST. L. 171, 241 (2001) (finding all-White juries to be more likely to impose death upon Black defendants in cases with White victims than when one or more Black males are on the jury).

[19] Baldus was only focused on studying racial disparities in the operation of the death penalty system. BALDUS ET AL., *supra* note 3, at 319–20 (of the forty-one variables in the core model presented to the Supreme Court, none addressed the gender of the victim, only that of the defendant). In the early 1980s the notion of an intersectional analysis—the idea that separating race from sex insufficiently accounted for social norms and biases—was unheard of. *See* Kimberle Crenshaw, *Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics*, 1989 UNIV. OF CHI. LEGAL F. 139, 140 (1989). Kimberly Crenshaw coined the term intersectionality in 1989. *Id.*

[20] Williams, Demuth & Holcomb, *supra* note 16, at 857.

[21] *Id.*

thirty-eight cases "count" as sixty-three cases.[22] Considering that the dataset includes thousands of cases, this omission might appear relatively insignificant at first blush. However, because cases with multiple victims were more likely to result in a death sentence than were single-victim cases, the exclusion of these cases can impact the final analysis. Thus, by excluding cases with multiple victims, prior researchers omitted from the analysis a sizeable number of the most relevant cases. Indeed, the omission was enough to change the central finding, as we illustrate below.[23]

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[22] The CSS includes a stratified random sample of 1,066 defendants: 1,028 defendants killed a single victim, 38 defendants killed multiple victims. Given the stratified random sample, Baldus used inverse probability sampling weights. That means each case is weighted—counted—as the inverse of its probability of being included in the sample. If a case had a one in two chance of being included in the sample then it counts as two cases, if a case had a one in three chance of being included in the sample then it counts as three cases, and so forth. Once sampling weights are applied, the number of cases in the sample equals the number of cases in the population. Thus, a researcher can use the sample data to estimate population parameters. In the Baldus study, the 1,028 defendants who killed a single victim were weighted to 2,420 cases, and the 38 defendants who killed multiple victims were weighted to 63 cases. In total, the data include 2,483 weighted cases. Describing the sampling weights, Baldus notes: "Because of the different sampling rates between circuits and between murder and voluntary manslaughter cases within individual circuits, it was necessary to weight the cases for the purpose of obtaining estimates of the characteristics of the entire universe of cases." BALDUS ET AL., *supra* note 3, at 68 n.10. For a more detailed discussion of these inverse probability sampling weights, see Phillips & Marceau, *supra* note 4, at 602 n.93. *See also* George G. Woodworth, *Analysis of a Y-Stratified Sample: The Georgia Charging and Sentencing Study*, in PROCEEDINGS OF THE SECOND WORKSHOP ON LAW AND JUSTICE STATISTICS 1983, at 18 (using the term "reciprocal of the sampling fraction" for "inverse probability").

[23] To be fair, the decision to exclude multiple-victim cases was reasonable under the circumstances. In a single victim case, the original Baldus data could be used by a subsequent researcher to determine the race and sex of the victim. But in a multiple-victim case, the original Baldus data could not be used by a subsequent researcher to determine the race and sex of each victim. In a single victim case, the variable for White victim (coded 0 for Black, 1 for White) and the variable for female victim (coded 0 for male, 1 for female) could be combined by a subsequent researcher to code whether the lone victim was: a White female (1,1), a White male (1,0), a Black female (0,1), or a Black male (0,0). However, a subsequent researcher could not use the same strategy in a case with multiple victims. Consider two potential problems: (1) In a multiple victim case, assume that the White victim variable was coded 1 and the female victim variable was coded 1. A subsequent researcher might assume that the case included a White female victim, but that is not necessarily so. The case could include a White male victim and a Black female victim. The White male victim would cause the White victim variable to be coded 1, and the Black female victim would cause the female victim variable to be coded 1. Yet there was no White female victim in the case. (2) In a multiple victim case, assume that the White victim variable is coded 0 and the female victim variable is also coded 0. Here, a subsequent researcher might assume that the case included two (or more) Black male victims. But that is not necessarily true either. The case could

2. Auditing and Expanding the Baldus Data Set

Recognizing the shortcomings of research that fails to account for multiple-victim cases, we looked beyond Baldus's original data and searched for more information. Specifically, we investigated the 38 cases from Baldus's dataset with multiple victims. We determined: the name of the defendant, the name of each victim, and the race-sex of each victim (see Table 1). Doing so required employing two strategies:

In twenty-five cases, we were able to match Baldus's anonymous case number to the defendant's name using a list provided by the National Death Penalty Archive (NDPA), the custodian of Baldus's records.[24] With the defendant's name in hand, we searched appellate opinions (and, if necessary, newspaper articles) to identify the names of the victims. Next, we located each victim in the Georgia death index—a database that includes the race and sex of the deceased.[25] To be certain that we had identified the correct decedent, we compared the date/location of the murder in the Baldus study to the date/location of death in the index.

In thirteen cases, the list provided by the NDPA could not be used to match Baldus's anonymous case number to a particular defendant. In those cases, we used clues from the data to locate newspaper articles about the killing published in the Atlanta Journal Constitution or a local Georgia paper. Doing so was possible because the media focuses on murder cases (especially those involving multiple victims) and the Baldus data include a treasure trove of details about each case. Key details included: the location of the murder,[26] the date of the murder, the date of arrest, the date of sentencing, the murder weapon, the age of the defendant, the age of the victim, and the relationship between the parties. Indeed, those are the very facts that tend to be reported by a newspaper—who, what, when, where, and how. Once we verified that the facts in the newspaper matched the facts in the Baldus data, we knew the

include a Black male victim and a Black female victim, as the codebook does not indicate which sex is prioritized in coding mixed-sex cases. That is, it is not clear from the record whether a case containing both men and women is classified as including a female victim or as including a male victim under Baldus's original coding methodology.

[24] M.E. Grenander Department of Special Collections and Archives, *National Death Penalty Archives*, UNIV. ALBANY, https://archives.albany.edu/description/catalog/apap329 [https://perma.cc/LAB3-BJ7A]. The list matching case numbers to defendants is also available from Scott Phillips via email request at scott.phillips@du.edu.

[25] The Georgia death index is included in the library edition of ancestry.com. *Georgia, U.S., Death Index, 1919–1998*, ANCESTRY (2022) (searchable index available at https://www.ancestry.com/search/collections/5426 [https://perma.cc/5V6H-NCSR]).

[26] The data specified the county and specific location of the murder (e.g., park, road, convenience store). *Id.*

names of the defendant and victims. We then used the Georgia death index to determine the race and sex of each victim (as described above).

Table 1. Cases with Multiple Victims: Identifying the Defendant and Victims

Case	Defendant	Victims	Code
13	Willie James Seay	Eddie Lee Green (BM); Betty Mae Green (BF)	BF
74	Gary Michael Floyd	Lenora Anne Martin (WF); Ginger Anne Martin (WF)	WF
250	Edward Ward	Edward Surgalski (WM); Sharynn Denise (WF)	WF
279	Troy Gregg	Fred Edward Simmons (WM); Bob Durwood Moore (WM)	WM
352	Ricky Lee Sheppard	Brandon Sanford (BM); Roger Carzell (BM)	BM
353	Gordon O'Kelley	Joyce Anderson O'Kelley (WF); Inez Anderson (WF)	WF
379	Michael Charles Brannen	Don Cross (WM); James Walter Scott (WM)	WM
425	Matthew Wessner	Linda Wessner (WF); George Kistemaker (WM)	WF
431	Ricky Burdette	James Edwin Whitten (WM); George Ernest Motz (WM)	WM
509	Willie Calvin Sutton	Latoya Gould (BF); Latoshia Gould (BF)	BF
518	Lucious Adams	Lillian Joann Newton (BF); Leotha Hunter Newton (BF)	BF

(table continued on next page)

Table 1. Cases with Multiple Victims: Identifying the Defendant and Victims			
Case	Defendant	Victims	Code
549	John Elden Smith	Joseph R. Akins (WM); Juanita Knight Akins (WF)	WF
553	Jack C. House	Robert Eugene Dunn (WM); Johnny Ray Smith (WM)	WM
562	Bobby Burger	Sandra Burger (WF); Charles Leland Brooks (WM)	WF
571	John Young	Coleman Brice (WM); Gladys Brice (WF); Katie Davis (WF)	WF
572	Roy Patterson	James David Young (WM); William R. Haralson (WM)	WM
573	Jerry Banks	Marvin King (WM); Melanie Hartsfield (WF)	WF
586	David Peek	Grady Peek (BM); James Jones (BM)	BM
610	Joseph Mulligan	Patrick A. Doe (BM); Marion Jones Miller (BF)	BF
625	Danny Martin	Gerald Martin (WM); Charlotte Patricia Roberson (WF)	WF
651	Ernest Garnto	William Henry Evans (WM); Ruby Garnto (WF); William Bobby Garnto (WM)	WF
736	John T. Anglin Jr.	Benjamin Harry Tygart (WM); Johnny Waugh Luke (WM)	WM
743	Eddie W. Finney	Thelma Kalish (WF); Ann Kaplan (WF)	WF
769	Jerome Howell	Denise Burse (BF); Stacy Burse (BM); Marie Burse (BF); Timothy Burse (BM)	BF
812	Lemuel Anderson	Larry Bullock (WM); Phil Foster (WM)	WM
824	William Herbert Oglesby	Lola Bell Johnson (WF); Allen Dale “George” Giles (WM)	WF
980	Marcus Chenault	Alberta King (BF); Edward Boykin (BM)	BF

(table continued on next page)

Table 1. Cases with Multiple Victims: Identifying the Defendant and Victims			
Case	Defendant	Victims	Code
C83	Johnny Mack Westbrook	Thelma Kalish (WF); Ann Kaplan (WF)	WF
C92	Kim Withrow	Ozle Withrow (WM); Sarah Hurlean Withrow (WF)	WF
D03	Kermit E. Holton	Clayton D. Pickrel (WM); Helen S. Pickrel (WF)	WF
E05	John H. Downs	Henry L. Boyce (BM); Jaqueline (Jackie) Pace (BF)	BF
E16	Jesse A. Whittaker	James Garmon (WM); Rufus Wells (WM); Dan Harrison (WM)	WM
E18	Raymond Lee Coleman	Dennis D. Weaver (BM); Willie Eugene Bryant (BM)	BM
L89	Harvey Coleman Peacock	Joseph Allen Lejune (WM); Darrell Lavon Brookings (WM)	WM
N76	Carl Westberry	Shirley Davis (WF); Karen Davis (WF)	WF
Z15	Robert F. Godfrey	Mildred Godfrey (WF); Chessie Wilkerson (WF)	WF
Z24	Fred Marion Gilreath	Linda Gilreath (WF); Gerrit Van Leeuwen (WM)	WF
Z27	Robert William Strickland	Eddie Lee Carroll (WM); Lester Lee Carroll (WM); Bonnie Mae Carroll (WF)	WF

In compiling this additional information, we also discovered two minor coding errors in the Baldus data. Such errors are inevitable in a large-scale research project and do not threaten Baldus's central conclusion. Indeed, Baldus's key finding is actually strengthened when these corrections are taken into account. Both cases involved death sentences for killings that included White female victims, yet neither was coded that way by Baldus.[27]

[27] Baldus coded Edward Ward as receiving a life sentence. BALDUS ET AL., *supra* note 3. (Baldus's codes can be found in the study dataset, *supra* note 9.) However, Ward was ultimately sentenced to death for the murders of Edward Surgalski, a White man, and Sharynn Denise, a White woman. Jim Stewart, *Convicted Killer Ward is Sentenced to Die*, ATLANTA

Thus, his conclusion that the presence of a White victim made a death sentence more likely is made more robust, rather than less, by the inclusion of these two cases, both of which confirm that result.

Having compiled additional information about multiple-victim cases and corrected the coding errors, an important question remained: How should we code mixed cases, meaning those cases with multiple victims who are not the same race-sex? Baldus faced a similar question in the CSS: How should he code a case with multiple victims who are not the same race? Because he was focused exclusively on the impact of race rather than sex, Baldus coded mixed cases according to the presence of a White victim.[28] For example, a case with three victims—two Black, one White—was coded as a White victim case. Thus, Baldus coded mixed cases according to what was perceived as the "highest ranked" victim: the victim whose presence was hypothesized to increase the chance of a death sentence.

In mixed race-sex cases, we followed Baldus's approach of coding cases according to the ranking of victims—that is, based on which victim was most likely to drive the imposition of a death sentence. But we did not use our own intuition to decide which victim we thought would be privileged. Instead, we let the data decide the rankings. Specifically, we examined the 2,420 cases with a single victim to determine how the race and sex of the victim affected the likelihood of receiving the death penalty. Table 2, Panel A, reveals a clear hierarchy in these cases: a death sentence was imposed in 14% of the cases with a single White female victim, 9% of the cases with a single White male victim, 2% of the cases with a single Black female victim, and 1% of the

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CONST., Apr. 17, 1976, at 2A; *Death Certificate of Sharynn Denise*, Certificate No. 019498, GA. HEALTH DEP'T OFF. OF VITAL RECORDS (available through *Georgia, U.S., Death Index, 1919–1998*, ANCESTRY, https://www.ancestry.com/search/collections/5426/ (last visited June 10, 2024)); *Death Certificate of Edward W. Surgalski*, Certificate No. 019499, GA. HEALTH DEP'T OFF. OF VITAL RECORDS (same). At the initial trial, Ward received a life sentence. *Id.* After the conviction was overturned, the second trial ended in a hung jury and the third trial ended in a death sentence. *Id.*; *Sword Killer Escapes Death in Split Verdict*, ATLANTA CONST., June 10, 1977, at 13D. We coded Ward as a death sentence in a case involving a White female victim. Baldus coded William Henry Hance as killing a Black woman: Gail Jackson. BALDUS ET AL., *supra* note 3. However, during the same crime-spree, Hance also killed another Black woman, Irene Thirkield, and a White woman, Karen Hickman. Phillips & Marceau, *supra* note 4, at 609. The additional murders were adjudicated in military court. *Id*. However, the state prosecutor knew that Hance had killed Hickman—a White woman serving in the military—when he sought the death penalty for the murder of Jackson, a Black prostitute. *Id.* We coded Hance as killing multiple victims, including a White female. For a detailed discussion, see Phillips & Marceau, *supra* note 4, at 607–12.

[28] *See* BALDUS ET AL., *supra* note 3, at 320, 456.

cases with a single Black male victim.[29] Even these single-victim cases make clear that both race and sex are relevant to understanding disparities in the way the death penalty was applied in Georgia during the period under study.[30]

We then used this result to code the mixed cases. Of the combinations that could have occurred in multiple-victim cases, the following actually occurred (see Table 1 for details):

- WF, WM: Coded as WF
- WF, WF, WM: Coded as WF
- WF, WM, WM: Coded as WF
- BF, BM: Coded as BF
- BF, BF, BM, BM: Coded as BF[31]

Taking multiple-victim cases into account, the pattern is even more pronounced. Table 2, Panel B, reports our findings in detail.[32] We show that a death sentence was imposed in 17% of the cases with a White female victim, compared to just 9% of the cases with a White male victim, 2% of the cases with a Black female victim, and 1% of the cases with a Black male

[29] Describing the same phenomenon, Baumgartner and colleagues note: "[t]his hierarchy places a premium on White lives over Black, and female victims over males." BAUMGARTNER ET AL., *supra* note 16, at 72.

[30] Our findings as to single victim cases are identical to Williams, Demuth & Holcomb, *supra* note 16. But once we expanded the data to include multiple victim cases, the reality that White victims are not all treated the same is revealed.

[31] It is worth noting that all the multiple-victim cases coincidentally involved victims of the same race.

[32] Replicating our models requires minor modifications to the Baldus data. Focusing on the defendants who were sentenced to death, Baldus assigned a sample weight of 1.0 in 122 cases and a sample weight of 1.2 in five cases. But the data includes the entire population of condemned defendants. Thus, each condemned defendant should be weighted as 1.0 (meaning unweighted). For details, see Phillips & Marceau, *supra* note 4, at 603 n.94. To replicate our models, change the case weight (CASEWGT) from 1.2 to 1.0 for the following defendants: Z24, Z26, 515, 516, 593. Then recode Edward Ward (case 250) as a death sentence (change DSENTALL from 0 to 1). After doing so, the data includes 128 condemned defendants. Recall, too, that we treat William Henry Hance (case D51) as killing a White female victim.

victim.[33] This result is statistically significant.[34] Of more than 1,000 killings involving a Black male victim, just nine death sentences were imposed; by contrast, forty-eight death sentences were imposed in the "mere" 281 cases involving a White female victim.

[33] Technically, a death sentence was imposed in 17% of the cases that had a White female victim (including thirteen cases that also had a White male victim), 9% of the cases that only had a White male victim, 2% of the cases that had a Black female victim (including 5 cases that also had a Black male victim), and 1% of the cases that only had a Black male victim. Table 1 lists the thirteen cases with both a White female victim and a White male victim (250, 425, 549, 562, 571, 573, 625, 651, 824, C92, D03, Z24, Z27) and the five cases with both a Black female victim and a Black male victim (13, 610, 769, 980, E05). In total, eighteen of the 2,483 cases had mixed race-sex victims and thus were coded according to the "highest ranked" victim—White female over White male, Black female over Black male.

[34] Table 2 is based on 4x2 crosstabulations (four categories of victim race-sex predicting a death sentence). In a 4x2 crosstabulation, chi-square provides an omnibus test of statistical significance. Thus, the *p* value for the crosstabulation indicates the probability of committing a Type I error if one rejects the null hypothesis of equal treatment across all groups. The *p* value does not indicate whether specific differences are significant (e.g., White female victim versus White male victim). To address the issue, we estimated logistic regression models. The logistic regression models in Table 5 provide specific paired comparisons (White female victim is compared to each of the remaining categories by rotating the reference group). *See* Todd Michael Frank, Timothy Ho & Christina A. Christie, *The Chi-Square Test: Often Used and More Often Misinterpreted*, 33 AM. J. EVALUATION 448, 454 (2012) (noting that post-hoc tests are needed to compare specific groups).

Table 2. Death Sentences by Victim Race-Sex: Unadjusted Disparities

	Panel A: Death Sentences in Single Victim Cases[1] (2,420 Cases)			Panel B: Death Sentences in All Cases[2] (2,483 Cases)		
	Actual Death Sentences	Possible Death Sentences	Percent	Actual Death Sentences	Possible Death Sentences	Percent
White Female Victim	36	256	14.06%	48	281	17.08%
White Male Victim	59	686	8.60%	61	700	8.71%
Black Female Victim	9	485	1.86%	10	498	2.01%
Black Male Victim	8	993	.81%	9	1004	.90%

Notes:

[1] $p < 0.001$; chi-square = 80.390 with 3 DF (percentages are based on the weighted data, but chi-square is based on the unweighted data because it assumes independent observations).

[2] $p < 0.001$; chi-square = 99.152 with 3 DF (percentages are based on the weighted data, but chi-square is based on the unweighted data because it assumes independent observations).

Our findings demonstrate that race matters, but the combination of race and sex matters more. To understand why, consider the outcome in the multiple-victim cases that were added to the analysis following our detective work:

- Of the twenty-five new cases with a White female victim, twelve resulted in a death sentence.
- Of the fourteen new cases with a White male victim, two resulted in a death sentence.
- Of the thirteen new cases with a Black female victim, one resulted in a death sentence.
- Of the eleven new cases with a Black male victim, 1 resulted in a death sentence.

Nearly all the death sentences in the multiple-victim cases (12/16) occurred in cases with a White female victim. It is easy to see, therefore, why the inclusion of these cases makes the pattern identified in single-victim cases even starker when all cases are considered. While death sentences were imposed in only 10.5% of multiple-victim cases without a White female victim (4/38), that punishment was imposed in nearly half (12/25) of all multiple-victim cases with a White female victim. Based on prior research that has consistently demonstrated the rarity of death sentences,[35] finding a death sentence rate of nearly 50% among *any* class of cases is striking.

[35] *See* DEATH PENALTY INFO. CTR., FACTS ABOUT THE DEATH PENALTY 1, 3 (2022), https://documents.deathpenaltyinfo.org/pdf/FactSheet.pdf [https://perma.cc/4BYH-ZTKK]; *States with No Recent Executions*, DEATH PENALTY INFO. CTR. (Nov. 17, 2021), https://deathpenaltyinfo.org/executions/executions-overview/states-with-no-recent-executions [https://perma.cc/X5AS-NFG8].

Table 3. Penalty Trial and Death Sentence by Victim Race-Sex: Unadjusted Disparities			
Panel A: Penalty Trial[1] (2,483 Cases)			
	Actual Penalty Trials	Possible Penalty Trials	Percent
White Female Victim	65	281	23.13%
White Male Victim	127	700	18.14%
Black Female Victim	17	498	3.41%
Black Male Victim	33	1004	3.29%
Panel B: Death Sentence Given Penalty Trial[2] (242 Cases)			
	Actual Death Sentences	Possible Death Sentences	Percent
White Female Victim	48	65	73.85%
White Male Victim	61	127	48.03%
Black Female Victim	10	17	58.82%
Black Male Victim	9	33	27.27%

(table continued on next page)

Table 3. Penalty Trial and Death Sentence by Victim Race-Sex: Unadjusted Disparities (cont.)

Panel C: Overall Death Sentence Rate[3]
(2,483 Cases)

	Actual Death Sentences	Possible Death Sentences	Percent
White Female Victim	48	281	17.08%
White Male Victim	61	700	8.71%
Black Female Victim	10	498	2.01%
Black Male Victim	9	1004	.90%

Notes:

[1] $p < 0.001$; chi-square = 127.081 with 3 DF (percentages are based on the weighted data, but chi-square is based on the unweighted data because it assumes independent observations).

[2] We do not present a test of statistical significance because the calculation is based on population data (see text for discussion).

[3] $p < 0.001$; chi-square = 99.152 with 3 DF (percentages are based on the weighted data, but chi-square is based on the unweighted data because it assumes independent observations).

This result encouraged us to dive deeper still into the multiple-victim cases. Table 3 combines the previous finding—that when multiple-victim cases are included, the use of the death penalty to protect White female victims becomes even more profound—with other available data about the prosecution of murder cases in Georgia. This combination allowed us to study the two major decisions that lead to a death sentence: the prosecutor's decision to seek death and the jury's decision to impose death.

Table 3, Panel A, shows that prosecutors sought death in nearly a quarter of all White female victim cases and 18% of White male victim cases, but only 3% of both Black female and Black male victim cases. In other words, the presence of a White female victim makes a case far more likely to be charged as a capital crime in the first place; in 92% (2,025/2,202) of all cases without a White female victim, a death sentence was never on the table.

Table 3, Panel B, focuses on the subset of cases that advanced to a penalty trial.[36] Interestingly, we discovered a slightly different pattern for juries who were more likely to impose a death sentence in a case with a Black female victim than a White male victim. Panel C demonstrates that once the prosecutor's decision to seek death and the jury's decision to impose death are combined, the familiar hierarchy of victims returns. The preference of jurors for a death sentence in cases involving a Black female victim as compared to a White male victim is washed out by the overwhelming refusal of prosecutors to seek death in those cases.[37]

Most significantly, the ultimate combined impact of race and sex is beyond dispute. Table 4 summarizes our key finding. It treats Black male victims as the comparison group, and it considers the combined impact of the prosecutor's decision to seek death and the jury's decision to impose death, based on the identity of the victim. The pattern is stunning: compared to a case with a Black male victim, the chance of a death sentence was *nineteen times greater* if the victim was a White female, *ten times greater* if the victim was a White male, and *two times greater* if the victim was a Black female.

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[36] GA. CODE ANN. § 17-10-30 (West, Westlaw through 2023 Ga. Gen. Assem. Reg. Sess.) (effective July 1, 2017). Under the Georgia statute, a jury must find at least one aggravating factor to qualify the defendant for capital punishment. Assuming one such aggravating factor has been found, however, the decision whether to actually impose the death penalty is left to the unfettered discretion of the jury. *See* Zant v. Stephens, 462 U.S. 862, 874 (1983) (finding that in Georgia, unlike in other death penalty states, "the finding of an aggravating circumstance does not play any role in guiding the sentencing body in the exercise of its discretion.").

[37] What explains this disparity between charging and sentencing bears further investigation. It may be that in the rush to charge killings of White male victim cases as capital crimes, prosecutors advanced a number of weaker cases in which the jury did not find death to be an appropriate response.

Table 4. Ratio of Death Sentences	
White Female Victim compared to Black Male Victim	17.08 / .90 = 19
White Male Victim compared to Black Male Victim	8.71 / .90 = 10
Black Female Victim compared to Black Male Victim	2.01 / .90 = 2

One might respond to these findings by noting that it is conceivable (though extremely unlikely) that cases that included a White female victim were more likely to result in a death sentence for legitimate reasons rather than impermissible ones. Perhaps White women tended to be killed in a more gruesome manner than other victims. Or perhaps the defendants who killed White women tended to have more serious criminal records than other defendants. In order to test this critique, we considered alternative explanations.

To do so, we used weighted logistic regression to replicate Baldus's approach (substituting the race and sex of the victim for the race of the victim). Utilizing the 40 control variables in Baldus's core model, we sought to determine whether the impact of victim race-sex on death sentences remained after controlling for rival explanations.[38] Baldus noted that this core

[38] The forty original control variables from Baldus's study are included in the adjusted models described here, but not shown (full models are available upon request). These variables (and descriptions) are: ARMROB_FB (armed robbery involved); AVENGE_FB (motive was to avenge role by judicial officer, D.A., lawyer); BLACKD (defendant was Black); BLVICMOD_FB (family, lover, liquor, or barroom quarrel); COPERP (one or more co-perpetrators involved); CPLESSEN_FB (co-perpetrator received a lesser sentence); DEFADMIT_FB (defendant admitted guilt and no defense asserted); DLEADER_FB (defendant primary mover in planning homicide or contemporaneous offense); DRGHIS_FB (defendant had a history of drug or alcohol abuse); DROWN (victim was drowned); FEMDEF (defendant was a female); HATE (hate motive); INSMOT_FB (defendant motive was to collect insurance); JEALOUS (jealousy motive); KIDNAP_FB (kidnapping involved); LDFB1_FB (defendant prior record for murder, armed rob, rape, or kidnapping with bodily injury); LDFB3 (defendant caused death risk in public place to two or more people); LDFB4 (pecuniary gain motive for self/other); LDFB6_FB (murder for hire); LDFB7D_FB (rape/armed rob/kidnap plus silence witness, execution, or victim pleaded for life); LDFB8 (victim was a police or corrections officer on duty); LDFB9_FB (defendant was a prisoner or escapee); LDFB10_FB (killing to avoid, stop arrest of self, other); MENTORT_FB (mental torture involved); MITDFFN (defendant was retired, student, juvenile, housewife); MULSH_FB (multiple shots); MULTSTAB_FB (multiple stabbing); MURPRIOR (prior murder conviction); NOKILL_FB (defendant was not the triggerman); NONPROPC_FB

model: "captured the essence of the charging and-sentencing-system. It is the result of our extensive efforts to reflect accurately the most relevant and important influences in the system."[39] Thus, the core model considers many of the factors that prosecutors routinely cite in their decision on whether or not to impose the death penalty; these factors include the heinousness of the murder, the defendant's motive, the defendant's role in the murder, the defendant's prior criminal record, whether the victim was vulnerable, whether the victim was a police officer or corrections officer, whether the victim was a child, whether the defendant and victim were strangers, and more.[40]

Table 5 presents a logistic regression model evaluating the influence of victim race-sex on death sentences while controlling for these measures of aggravation. In other words, each model calculates the increased likelihood of a death sentence, given a particular victim, while holding all other factors constant. The three models rotate the reference category so that we can compare each group to each of the other groups. Our finding can be clearly stated: even after controlling for other factors that might explain the race and sex effects described above, statistically significant disparities remain:

(non-property related contemporaneous crime); PRISONX (number of prior defendant felony prison terms); RAPE_FB (rape involved); SMYOUTH (defendant was under seventeen years of age); STRANGER_FB (victim was a stranger); TORTURE_FB (victim was tortured physically); TWOVIC_FB (defendant killed two or more people); VBED (victim bedridden/handicapped); VICCHILD_FB (victim was twelve or younger); VPCARBR_FB (one or more convictions for a violent personal crime, burglary, or arson); VWEAK (victim weak or frail). BALDUS ET AL., *supra* note 3, at 319–20 (Table 52).

[39] *Id.* at 457.

[40] Based on modern guidance that was not available at the time Baldus conducted the research, it is now apparent that the core model includes too many variables. For a detailed discussion of the issue, see Phillips & Marceau, *supra* note 4, at 646 n.298. To construct a more parsimonious model, we used a forward selection and backward elimination method based on the Akaike Information Criterion (AIC). The twenty-five variables that were selected in either the forward or backward algorithm are labeled FB in footnote 38. Testing the robustness of our sentencing model, we found that the substantive findings were the same regardless of whether we controlled for all forty variables in the core model or the subset of twenty-five variables designated as essential by the AIC procedure. Because the findings were the same, we presented the results from Baldus's full core model.

Model 1: The odds of a death sentence are about sixteen times greater if the victim is a White woman, as compared to a Black man ($p < .01$).

Model 2: The odds of a death sentence are about six times greater if the victim is a White woman, as compared to a Black woman ($p < .05$).

Model 3: The odds of a death sentence are about three times greater if the victim is a White woman, as compared to a White man ($p < .05$).

Table 5. Replicating Baldus's Core Model: Odds Ratios from the Weighted Logistic Regression of Death Sentence on Victim Race-Sex (n = 2,483)[1]

	Model 1	Model 2	Model 3
White Female Victim	15.99***	5.70**	2.91**
White Male Victim	5.50***	1.96	Reference Category
Black Female Victim	2.80	Reference Category	.51
Black Male Victim	Reference Category	.36	.18***

Notes:
[1] Control variables included, but not shown.
* $p < .10$
** $p < .05$
*** $p < .01$

These results are robust and statistically significant; they dispel the argument that some other factor explains why cases involving White female victims are so much more likely to lead to a death sentence.

B. RACE, SEX, AND EXECUTIONS

Phillips and Marceau previously demonstrated that race is relevant not only at the sentencing phase, but also in determining who is ultimately executed. The race-of-victim effect that Baldus identified in the imposition of death sentences, in other words, was magnified rather than ameliorated by the post-sentencing review processes.[41] In this project, by contrast, we have so far focused on the combined impact of race and sex in determining who is

[41] For a symposium discussing the findings by Phillips and Marceau on this point, see Scott Phillips & Justin Marceau, *Symposium: Whom the State Kills*, 55 HARV. C.R-C.L. L. REV. 585 (2020).

sentenced to death. In this section, we expand the analysis and consider whether the combination of victim race and sex is predictive of who, among those sentenced to death, is ultimately executed.

To determine whether victim characteristics affected the likelihood of execution or relief, we first had to exclude from our analysis those cases which did not result in either outcome. The previous section noted that there were 128 death sentences imposed in the period examined by the Baldus study. Five of the 128 defendants died of natural causes. In addition, one defendant died following an escape, one was executed in another state, and one, improbably, remains on Georgia's death row to this date.[42] In addition, in re-analyzing the Baldus data we discovered three defendants whose death sentences had not previously been included in the CSS.[43]

Focusing on the 123 (128-8+3) condemned defendants who were ultimately executed or obtained relief, Table 6 demonstrates that the "hierarchy of victims" persists. A full 30% of the defendants who were sent to death row for killing a White woman were executed, compared to 19% of the defendants who were condemned for killing a White man, 10% of the defendants who were condemned for killing a Black woman, and 0% of the defendants who were condemned for killing a Black man. A striking twenty-five of the twenty-six death sentences actually carried out in Georgia during this time involved White victims, and not a single person was executed during this period for a killing that involved only Black male victims. This is despite the fact that Black men suffered a disproportionate share of killings (1,004/2,483 or more than 40% of cases in the CSS).

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[42] Phillips & Marceau, *supra* note 4, at 601–02.

[43] The three cases were those of James Willie Brown, Earl Charles, and codefendants Van Roosevelt Solomon and Brandon Astor Jones. For details, see *id.* at 612–13.

Table 6. Execution by Victim Race-Sex: Unadjusted Disparities			
	Actual Executions	Death Sentences Imposed	Percentage of Death Sentences Resulting in Actual Execution
White Female Victim	14	47	30%
White Male Victim	11	57	19%
Black Female Victim	1	10	10%
Black Male Victim	0	9	0%

Once again, it is important to test these raw results by considering whether other permissible factors explain or partially explain this disparity. As above, we did so by estimating a logistic regression model.[44] However because we are dealing with far fewer event outcomes—twenty-six executions rather than 128 death sentences—we do not have a sufficient number of events to include all of the control variables from Baldus's core model. Instead, we were forced to choose a smaller set of between two and five variables to test whether factors other than the race and sex of the victim could explain the disparate results we observed.[45] First, we controlled for

[44] The cases that Baldus omitted—Brown, Charles, and Solomon/Jones—cannot be included in the logistic regression model because we do not have data regarding the aggravators. Thus, the number of cases drops from 123 in the unadjusted execution model (crosstabulation) to 120 in the adjusted execution model (logistic regression controlling for defendant culpability). The number of executions drops from 26 to 24.

[45] In a logistic regression model, the "event" is the less common outcome. Here, the execution model includes twenty-four events, as executions (n = 24) were less common than post-sentencing relief (n = 96). Standard statistical guidance suggests that five to ten events are required for each variable included in the model. If the number of events per variable (EPV) in a logistic regression model falls below ten, then the regression coefficients can become inaccurate and unreliable. Peduzzi and colleagues note: "the validity of the logistic model becomes problematic when the ratio of the numbers of events per variable analyzed becomes small. The parameter estimates may be biased and the usual tests of significance may not be valid." Peter Peduzzi, John Concato, Elizabeth Kemper, Theodore R. Holford & Alvan R. Feinstein, *A Simulation Study of the Number of Events per Variable in Logistic Regression Analysis*, 49 J. CLINICAL EPIDEMIOLOGY 1373, 1379 (1996). The authors continue: "[p]aradoxical fitting (i.e., associations in the wrong direction) also showed an increased occurrence at low EPV, but the relative frequencies were small." *Id.* at 1377. Vittinghoff and

whether a case had multiple victims or a single victim, because all other things being equal, cases with more victims are inherently more aggravated than those with just one. In addition, we controlled for the defendant's culpability using the aggravating factors set out by Georgia law.[46] That is, we considered how many of the statutory aggravating factors were present in each case. Baldus notes:

> One useful a priori measure assesses relative culpability based on the number of case characteristics that make the defendant death eligible under Georgia's post-Furman legislation. The Georgia death-sentencing statute incorporates the legislature's a priori judgment that the presence of any one of ten case characteristics would justify the imposition of a death sentence. This suggests that the blameworthiness of a given offender may be a function of the number of statutorily designated aggravating circumstances present in his case.[47]

After controlling for the presence of multiple victims and for the number of aggravating factors present, we present the results in Table 7.[48] Once again

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McCulloch also urge caution, but argue that the EPV threshold can be safely reduced from 10 to 5. *See* Eric Vittinghoff & Charles E. McCulloch, *Relaxing the Rule of Ten Events Per Variable in Logistics and Cox Regression*, 165 AM. J. EPIDEMIOLOGY 710 (2006). Given such guidance, our execution model can accommodate two to five variables simultaneously (24/10 = 2.4; 24/5 = 4.8). Recall, too, that including the race and sex of the victim accounts for three of those variables (three included categories and an excluded reference category). That leaves room for two control variables. Thus, we controlled for whether the defendant killed multiple victims and the number of statutory aggravators in the case.

[46] The process for determining who is eligible for a death sentence in Georgia has been described in exhaustive detail by courts and scholars. *See, e.g.*, Zant v. Stephens, 462 U.S. 862, 871 (1983) (describing the process of determining who will be sentenced to death as requiring three phases: (1) the crime must "fall into the category of murder;" (2) the class of all murders is separated into those for which death is a possible punishment based on the "statutory definitions of aggravating circumstances," and (3) finally in the jury's "absolute discretion" they must determine whether death is an appropriate punishment in light of the aggravating and mitigating circumstances). At the time of Baldus's study, the Georgia statute included ten aggravators: B1 through B10. *See* BALDUS ET AL., *supra* note 3, at 34–35 n.18. We controlled for the number of aggravators in the case—meaning how many of the ten aggravating factors were present (as coded by the Baldus team). The current Georgia statute contains twelve aggravating factors. GA. CODE ANN. § 17-10-30 (West, Westlaw through 2023 Ga. Gen. Assem. Reg. Sess.) (effective July 1, 2017).

[47] *See* BALDUS ET AL., *supra* note 3, at 49.

[48] In Table 7, we used Firth logistic regression to address the problem of quasi-complete separation (QCS). QCS occurs if one value of an independent variable is a perfect predictor of the dependent variable. Here, a value of 1 on Black male victim always corresponds to a value of 0 on execution; no defendant was ever executed for killing a Black male. In the presence of QCS, traditional logistic regression does not work: the maximum likelihood estimate of the coefficient may not exist and the model does not converge. But Firth logistic regression can be used to address the problem of QCS. *See* PAUL D. ALLISON, LOGISTIC REGRESSION USING SAS: THEORY AND APPLICATION 46–59 (2d ed. 2012). *See generally*

we run three models to show the increased likelihood of execution when a killing includes a White female victim. And once again, the results are compelling.

Even when controlling for the severity of the crime, the odds of an execution are about ten times greater if the victim is a White female, as compared to a Black male (Model 1); the odds of an execution are about two times greater if the victim is a White female, as compared to either a Black female or a White male (Models 2 and 3, respectively).[49] Simply put, the presence or absence of a White female victim remains an important factor in whether a condemned defendant will ultimately be executed, even when the seriousness of the offense is considered.[50]

George Heinze & Michael Schemper, *A Solution to the Problem of Separation in Logistic Regression*, 21 STAT. MED. 2409 (2002).

[49] We do not present a test of statistical significance because the model is based on population data—the universe of death sentences in Georgia during the period in question. *See* Phillips & Marceau, *supra* note 4, at 602–05, for a detailed discussion of why tests of statistical significance are not relevant for population data.

[50] Some might speculate that the crimes against White female victims were more likely to end in an execution because the victim was raped. Controlling for the number of statutory aggravators partially addresses the issue, as rape is included in three Georgia aggravators: B1, B2, and B7. However, those aggravators also include robbery and kidnapping (consequently, the aggravator could be coded 1 in the absence of rape). Thus, we also estimated a separate logistic regression model controlling for whether the victim had been raped. Our substantive findings remained the same (model available upon request).

Table 7. Odds Ratios from the Firth Logistic Regression of Execution on Victim Race-Sex (n = 120)			
	Model 1	Model 2	Model 3
White Female Victim	9.72	2.05	1.98
White Male Victim	4.90	1.03	Reference Category
Black Female Victim	4.75	Reference Category	.97
Black Male Victim	Reference Category	.21	.20
Multiple Victims	1.87	1.87	1.87
Defendant Culpability: Number of Statutory Aggravators	1.82	1.82	1.82

The magnitude of the relationship between race and sex and executions is illuminated by comparing the odds ratios in Table 7. Each statutory aggravator nearly doubles a defendant's odds of being executed,[51] as does the presence of multiple victims. But the presence of a White female victim has the same impact or an even greater impact on the risk of being executed (depending on the comparison in question). To put the matter plainly, factors

[51] In Table 7, the scale of defendant culpability treats each aggravator as being of equal weight. It is true that the aggravators are equal from a legal perspective—the presence of any aggravator renders a defendant eligible for death. But the aggravators are not equal from a statistical perspective—different aggravators have different effects on the likelihood of execution. Thus, we followed Baldus's lead by also creating a weighted scale of defendant culpability. *See* BALDUS ET AL., *supra* note 3, at 56. Specifically, we estimated a logistic regression model with the aggravators predicting execution and used the resulting coefficients as weights. We then summed across the weights to create a culpability score for each defendant. Such a procedure ensures that the aggravators that are the strongest predictors of execution are weighted the most in assessing a defendant's culpability. Our substantive findings were the same regardless of whether we used the unweighted or weighted defendant culpability scale. Thus, we opted for the simpler and more interpretable unweighted scale depicted in Table 6.

that ought to have no impact on the likelihood of an execution—the race and sex of the victim—matter as much, or more than, permissible considerations.

C. THE PROCEDURAL EXPLANATIONS FOR MORE WHITE FEMALE VICTIM EXECUTIONS

We have shown that defendants who killed a White woman are not only more likely to be sentenced to death, but also more likely to be executed. But we have not yet explored exactly how those disparate results occur. To develop a deeper understanding of the process that led to disparate execution outcomes, we considered two hypotheses that could explain the perseverance of death sentences in cases involving White female victims:

Cases with a White female victim follow a "straight path" from sentencing to execution, meaning the defendant never obtained relief. Under this hypothesis, death sentences involving White female victims are rarely overturned on appeal and move smoothly from trial to execution. Either fewer reversible errors were committed in such cases, or any errors that did occur were more likely to be tolerated by appellate courts.

Cases with a White female victim follow a "winding path" from sentence to execution. Under this theory, cases involving White female victims are more likely to lead to execution because prosecutors persevere in the face of setbacks. If a death sentence was overturned on appeal, the prosecution sought a subsequent death sentence, the jury imposed a subsequent death sentence, that sentence was upheld on appeal, and the defendant was eventually executed. If White women were in fact viewed by the system as more deserving of protection, then perhaps more resources were expended to overcome any errors that occurred at trial.

Perhaps surprisingly, we found support in the data for both hypotheses. Table 8, Panel A, demonstrates that 17% (8/47) of the defendants who killed a White woman followed a straight path from sentencing to execution, compared to 12% (7/57) of the defendants who killed a White man, 10% (1/10) of the defendants who killed a Black woman, and 0% (0/9) of the defendants who killed a Black man. This would seem to support the conclusion either that the system was in fact loathe to reverse a death sentence when a White woman was among the defendant's victims, or that there was less error committed in these cases.[52] By contrast there was only

[52] Alternatively, this result might support the theory that the prosecution is more careful in trials involving White female victims than in others; the absence of penalty reversals might be evidence of better trials, rather than of the willingness of appellate courts to overlook trial errors.

one case out of nineteen involving Black victims in which the straight path from sentence to execution was followed.

Table 8, Panel B, investigates the remaining 107 cases—those in which appellate relief *was* initially granted to a condemned defendant. The prosecution was barred from seeking a second death sentence in only four of the remaining thirty-nine cases involving a White female victim and we lack data about one additional case.[53] Thus, there were thirty-four White female victim cases for us to use to evaluate the willingness of the state to seek a subsequent death sentence after reversal. The state sought a subsequent death sentence in twenty of these thirty-four cases, the jury imposed a subsequent death sentence in fifteen of those twenty cases, and the defendant was ultimately executed in six of those fifteen cases. Combining the stages of the case and the decisions of the key actors reveals that the winding path execution rate was 17% (6/35) in cases with a White female victim.[54] Yet the winding path execution rate was just 8% (4/48) in cases with a White male victim, 0% (0/9) in cases with a Black female victim, and 0% (0/7) in cases with a Black male victim. Put simply, the granting of relief in a case involving a White female victim often merely postponed an execution. By contrast, in cases involving Black victims, the granting of relief was sufficient to prevent execution every time. Prosecutors were more likely to persevere to resentencing and ultimately execution in cases involving White female victims than in all other cases.

Our analysis of the Baldus data is complicated; it involves single-victim cases and multiple-victim cases, the different stages of a capital case, and a comparison of basic counts and percentages to odds ratios from logistic regression models. Yet our key findings are simple and powerful: if a White woman was killed, the prosecutor was more likely to seek death, the jury was more likely to impose death, and the defendant was more likely to follow a straight or winding path to execution. Arbitrariness is indeed intersectional.

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[53] Resentencing is prohibited only in those cases where there is no valid death penalty statute or where resentencing would be tantamount to double jeopardy. So, for example, if an appellate court determined that the evidence was insufficient to support a finding of the one alleged aggravating factor, the state has failed in its attempt to prove that the defendant was eligible to receive the death penalty and cannot seek to put the defendant's life in peril a second time.

[54] The denominator is thirty-five cases, as the state was barred from seeking death again in four cases (39-4 = 35).

Table 8. Paths to Execution by Victim Race-Sex

Panel A: Straight Path Execution Rate

	Actual Executions	Death Sentences Imposed	Percent
White Female Victim	8	47	17%
White Male Victim	7	57	12%
Black Female Victim	1	10	10%
Black Male Victim	0	9	0%

Panel B: Winding Path Execution Rate

	Remaining Cases (missing information)[1]	Could Not Seek Death Again[2]	Could Seek Death Again	Sought Death Again	Subsequent Death Sentence	Actual Executions
White Female Victim	39 (1)	4	34	20	15	6
White Male Victim	50 (1)	2	47	16	7	4
Black Female Victim	9 (1)	0	8	4	1	0
Black Male Victim	9	2	7	4	2	0

(table continued on next page)

Table 8. Paths to Execution by Victim Race-Sex (cont.)

Panel B: Winding Path Execution Rate (cont.)

	Actual Winding Path Executions	Potential Winding Path Executions	Winding Path Execution Rate
White Female Victim	6	35	17%
White Male Victim	4	48	8%
Black Female Victim	0	9	0%
Black Male Victim	0	7	0%

Notes:

[1] Among the remaining cases, we are missing information about whether the prosecutor sought death again in one case with a White female victim, one case with a White male victim, and one case with a Black female victim.

[2] The prosecution could not seek death again under two conditions: the pardons and paroles board commuted the defendant's sentence, or the appellate court barred seeking death again.

II. MOVING BEYOND BALDUS: FURTHER PROOF OF A HIERARCHY OF VICTIMS

One could argue that both the Baldus data, and thus our analysis of it, are too dated to be of practical use. Such a suggestion has intuitive appeal in the sense that all of the murders in the Baldus study occurred between 1973 and 1979. Indeed, the oldest of these killings is now nearly fifty years old. But such a view of death penalty data is fundamentally at war with the reality of modern death penalty apparatuses, which generally proceed at a glacial pace over decades. One of the defendants in the Baldus study, Astor Jones, was convicted of a murder in 1979, but he was only executed for that crime in 2016. Another Baldus defendant, Virgil Presnell, remains on Georgia's death row for the 1976 murder of Lori Ann Smith. These two cases and many others like them in the dataset demonstrate exactly how difficult it is to follow a universe of cases from criminal offense through to execution or relief.

Thus, the Baldus data can tell us a great deal about a particular time and a particular place. But they are necessarily limited to that time and that place. Short of cataloguing every killing in a jurisdiction (as Baldus did), and then waiting fifty years to study the outcomes (as we did), we tried to do the next best thing. We used a larger and broader database to confirm our findings

about how the race and sex of homicide victims affects the likelihood of execution.

A. SUPPLEMENTAL HOMICIDE REPORT DATA: GEORGIA

We began where Baldus focused, in Georgia. Collected as part of the FBI's annual Uniform Crime Report (UCR), the SHR data include all homicide incidents reported to police in participating jurisdictions.[55]

The SHR data can be used to approximate death eligibility because the reports include details about each killing. While not as detailed as the Baldus data, the SHR data are up-to-date, covering every reported killing in Georgia from 1976 to 2019. So, what the Baldus data offers in depth, the SHR data offers in breadth.[56]

There were 25,547 homicides reported to the FBI in Georgia during the relevant period.[57] Using the SHR data, we created a measure of death eligibility. Although the SHR does not include information on all of the aggravators that make one eligible for the death penalty under the Georgia statute,[58] it does include information on the following Georgia aggravators that are often the centerpiece of a capital prosecution: murder in the course of arson, rape, robbery, burglary, motor vehicle theft, or a murder that occurs in prison. A case was coded as death-eligible if the murder included at least

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[55] The term homicide incident in the SHR reflects the fact that some homicides have multiple defendants and/or victims. *See* Jacob Kaplan, *Supplemental Homicide Reports*, UNIFORM CRIME REPORTING (UCR) PROGRAM DATA: A PRACTITIONER'S GUIDE, https://ucrbook.com [https://perma.cc/HU8F-RVSM] (last visited Feb. 6, 2024) ("For each homicide incident [the SHR] tells you the age, gender, race, and ethnicity of each victim and offender as well as the relationship between the first victim and each of the offenders (but not the other victims in cases where there are multiple victims).").

[56] *See* Raymond A. Atkins & Paul H. Rubin, *Effects of Criminal Procedure on Crime Rates: Mapping Out the Consequences of the Exclusionary Rule*, 46 J. L. & ECON. 157, 164 (2003) (The UCR has well documented limitations. For example, "it consists only of reported crimes," which means that when victims don't report crimes to police, or when police don't document the crime for the FBI, there is no record. In addition, it is not truly uniform in that the number of cities or jurisdictions reporting does vary over time).

[57] *See* Jacob Kaplan, *Jacob Kaplan's Concatenated Files: Uniform Crime Reporting (UCR) Program Data: Supplementary Homicide Reports, 1976-2019*, INTER-UNIVERSITY CONSORTIUM FOR POL. & SOC. RES., available for download at https://doi.org/10.3886/E100699V10 [https://perma.cc/YH3Z-6ALS] (data downloaded Mar. 24, 2021) (compiling SHR data for Georgia during the relevant time period). Not all of these crimes were charged, indeed many of the suspects were never even arrested. *See id*. But the total number of homicides allows us to examine the nature of killings in Georgia during this time.

[58] Gregg v. Georgia, 428 U.S. 153, 165 n.9 (1976). For a more detailed discussion of statutory death eligibility in Georgia, see *supra* note 46.

one aggravating factor on this list and if the defendant was old enough to be sentenced to death.[59]

Because the SHR contains information on the race and sex of the victim, and because data about executions are a matter of public record, we were able to determine whether the disparities that we observed in the Baldus data have remained present since the new Georgia statute went into effect forty-five years ago. To do this, we compared the distribution of victims in death-eligible murders to the distribution of victims in cases that led to an execution. Presented in Table 9, our findings confirm our conclusion that the valorization of White women remains a critical feature of the modern death penalty in Georgia.

Table 9 breaks the data into three scenarios for ease of presentation. First, in Scenario 1, we show that of the 25,547 homicide incidents that occurred in Georgia between 1976 and 2019, 3,026 defendants were death-eligible based on the information available in the SHR.[60] Among death-eligible defendants in the SHR data, 8.7% (263/3,026) killed a White woman.[61] Yet, 52.6% (40/76) of the defendants who have been executed in Georgia during the modern era were convicted of killing a White woman.[62] The disparity, like those observed in the Baldus data, is stark: from 1976 to the present, a defendant who killed a White woman was six times more likely to be executed than one would expect under a process that is blind to the race and sex of the victim (52.6/8.7 = 6.0).

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[59] Although the age of eligibility was actually 16 until 2005, from 1976 to 2005, just one 16-year-old was executed: Sean Sellers. *See Executions of Juveniles in the U.S. 1976-2005*, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/policy-issues/juveniles/executions-of-juveniles-since-1976 [https://perma.cc/SN3M-YUWJ] (last visited Mar. 9, 2024); *Roper v. Simmons*, 543 U.S. 551, 568 (2005) (banning the death penalty for those under 18); Thompson v. Oklahoma, 487 U.S. 815, 838 (1988) (banning the death penalty for those under 16). So the age of eligibility was effectively 17. Given this, we decided that our findings would be more accurate if we treated 17 as the age of eligibility before *Roper*, as the execution of 16-year-olds was virtually non-existent. Thus, for purposes of the present study, from January 1976 to February 2005, the defendant had to be at least 17 years old at the time of the crime. From March 2005 forward, the defendant had to be 18 years old at the time of the crime based on the Supreme Court's decision in *Roper*. A case with multiple defendants remained death-eligible if at least one was old enough to be condemned.

[60] The true number of death-eligible defendants is almost certainly far greater, as the SHR do not include information about all the aggravators in Georgia. *Cf.* Radelet & Pierce, *supra* note 18, at 597; Steven F. Shatz & Terry Dalton, *Challenging the Death Penalty with Statistics: Furman, McCleskey, and a Single County Case Study*, 34 CARDOZO L. REV. 1227, 1245 (2013); Scott Phillips & Alena Simon, *Is the Modern American Death Penalty a Fatal Lottery? Texas as a Conservative Test*, 3 LAWS 85, 101 (2014).

[61] The race-sex of the victim was unknown in 8 cases.

[62] *Execution Database*, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/database/executions [https://perma.cc/LS3L-M3BS] (last visited June 10, 2024).

Clearly, the SHR analysis is imperfect. One might reasonably argue that we should only include death-eligible defendants who committed murder from 1976 to 2011, because doing so allows at least ten years after the murder for an execution to occur (at the time of writing, we know annual executions in Georgia through 2021).[63] Such an approach would help to better match the death-eligible cases identified in the SHR with actual executions in the same period. But as shown in Scenario 2, removing eight years of cases has almost no effect on the underlying pattern. In Scenario 2, the percentage of death-eligible defendants who killed a White woman rises only slightly, from 8.7% to 9.5% (250/2,633).[64]

Alternatively, one might reasonably argue that we should expand the definition of death-eligibility to include all defendants who committed murder, regardless of the circumstances, between 1976 and 2011. After all, among the things that makes a defendant eligible for death in Georgia is a subjective jury finding that the murder was "outrageously or wantonly vile, horrible or inhuman in that it involved torture, depravity of mind, or an aggravated battery to the victim."[65] Such a broad aggravator could render many defendants death-eligible if a prosecutor can convince a jury that a killing was particularly gruesome.[66] But even in this hypothetical situation in which *every* murder is potentially death-eligible, our data show in Scenario 3 that the underlying pattern remains the same. Specifically, 9.1% (1,845/20,331) of death-eligible defendants killed a White woman, but a full 52.6% of those executed killed a White woman.[67]

The point, then, is fairly simple. Regardless of the time frame or the definition of death eligibility, the disparity ranges from a ratio of 5.5:1 to 6.0:1. White women are relatively unlikely to be victims of murder, but when they are killed, their cases are likely to be the ones in which the full weight of the state is brought down on the defendant. Even taking into account the fact that the SHR are not a perfect match to the Georgia statute, the disparity between the fraction of killings that involve White female victims and the fraction of executions involving such victims is simply too large to be

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[63] *See* Phillips & Marceau, *supra* note 4, at 598 (discussing the value and limits of such an approach).

[64] The race-sex of the victim was unknown in 8 cases.

[65] GA. CODE ANN. § 17-10-30(b)(7) (West, Westlaw through 2023 Ga. Gen. Assem. Reg. Sess.) (effective July 1, 2017).

[66] As a practical matter, the Supreme Court has rejected the idea that this aggravator can operate so broadly as to make any murder death-eligible. *See* Godfrey v. Georgia, 446 U.S. 420, 433 (1980) (examining the aggravating factor and concluding that it provides "no principled way to distinguish this case, in which the death penalty was imposed, from the many cases in which it was not.").

[67] The race-sex of the victim was unknown in fifty-one cases.

fundamentally an artifact of the data. Given the robustness of the result across various measures, we are confident that the disparity that we identified in the Baldus data remains in place in present day Georgia. A perfect accounting of death-eligible defendants (such as the one Baldus conducted) in Georgia during the modern era might result in slightly different numbers, but not in a different conclusion.

Table 9. Georgia Disparities: Different Scenarios, Same Conclusion

	Data: SHR			Data: DPIC		Disparity Between Percentage of DEHI with WFV and Percentage of Executions with WFV
	Total Death-Eligible Homicide Incidents (DEHI)	DEHI with White Female Victim (WFV)	Percent of DEHI with WFV	Total Executed for Killing WFV, 1977 to Present	Percent Executed for Killing WFV	
Scenario 1: Death-eligible cases in Georgia, 1976– 2019	3,026	263	8.7%	40/76	52.6%	**~6.0x**
Scenario 2: Death-eligible cases in Georgia, 1976–2011	2,633	250	9.5%			**~5.5x**
Scenario 3: All Murders in Georgia, 1976–2011	20,331	1,845	9.1%			**~5.8x**

B. SUPPLEMENTAL HOMICIDE REPORT DATA FOR OTHER STATES

Having studied the relationship between executions, race, and sex in Georgia, we expanded our lens again to examine whether the relationships

we found hold true outside of Georgia. Thus, we used national SHR data,[68] and created a model death penalty statute by developing a standardized list of aggravating factors.[69] By using a single statute for analysis, we were able to compare rough death eligibility across states. We used data from 1976 (when the death penalty was re-authorized by the Supreme Court) through 2019 (the last year for which SHR data is available). The aggravating factors we were able to code based on the information contained in the SHR were: (1) killings that occurred in the course of arson, burglary, rape, robbery, or motor vehicle theft; (2) prison killings; and (3) killings with either victims under 12 years old or with multiple victims.[70]

As with the Georgia-specific SHR analysis, we coded a case as death-eligible only if certain criteria were met. For purposes of coding the national data, a defendant was considered death-eligible if:

- the murder included at least one of the aggravating factors listed above;
- at least one defendant was old enough to constitutionally be sentenced to death (age seventeen from 1976 to 2004, age eighteen from 2005 to 2019);[71]
- the murder occurred in a state authorized to impose a death penalty at the time[72] with a valid death penalty on its books;

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[68] The SHR data were downloaded from Jacob Kaplan's open source data website. Kaplan is a Chief Data Scientist at the Princeton School of Public and International Affairs. *Jacob Kaplan's Concatenated Files: Uniform Crime Reporting (UCR) Program Data: Supplementary Homicide Reports (SHR), 1976–2020*, OPENICPSR, https://www.openicpsr.org/openicpsr/project/100699/version/V11/view [https://perma.cc/9EA9-4RSG] (last visited June 10, 2024).

[69] This approach to studying national trends in the death penalty was pioneered by leading empirical scholars. *See, e.g.*, Jeffrey Fagan & Amanda Geller, *Police, Race & the Production of Capital Homicides*, 23 BERKELEY J. CRIM. L. 261, 287–90 (2018).

[70] While these eligibility criteria do not perfectly match any state's death penalty statute, they are factors that are used throughout the states continuing to authorize the death penalty. *See Aggravating Factors by State*, DEATH PENALTY INFORMATION CTR., https://deathpenaltyinfo.org/facts-and-research/crimes-punishable-by-death/aggravating-factors-by-state [https://perma.cc/HE4Y-9V9L] (last visited June 10, 2024) (collecting statutes). Furthermore, there is no reason to think that these factors skew death eligibility based on the race and sex of the victim; there is no reason to think, a priori, that these factors, as opposed to those actually in each state's capital statute, are more or less likely to condemn those killing any particular race or sex.

[71] *See Juveniles*, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/policy-issues/juveniles [https://perma.cc/SN3M-YUWJ] (last visited June 10, 2024).

[72] For the most part, the question of whether a state is authorized to impose a death sentence is synonymous with the question of whether the state's death penalty system is constitutionally valid at the time in question. But there are limited exceptions. For example,

- the state in question executed at least one defendant in the modern era.

In order to assess whether the patterns we identified in Georgia hold outside of the state, we first examined each homicide incident to determine whether it included a White female victim.[73] Next, we used the Death Penalty Information Center (DPIC) execution database to determine the race-sex of victims in cases that led to an execution between 1977 and the present.[74] Finally, as with the Georgia analysis, we compared the percentage of death-eligible killings that included a White female victim with the percentage of executions that included a White female victim.

We created two tables: one for former Confederate states and one for non-former Confederate states, with the states in each group listed in descending order based on the number of executions carried out in the modern era. As Table 10 shows, in every former Confederate state, those who killed a White woman were more likely than other killers to be executed. The lowest disparity was in Florida, where killers of White female victims were executed at about 1.9 times the rate that would be expected based on death eligibility; the highest disparity was 4.2 times the expected rate in Louisiana. In addition, we calculated the aggregate disparity for the former Confederate states as a whole: 18.1% of the death-eligible defendants in the former

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the practice of using judges to determine death eligibility was held unconstitutional in *Hurst v. Florida*, 577 U.S. 92, 94 (2016). One might argue, then, that all of the pre-*Hurst* cases in which a death sentence was imposed in violation of the Constitution should not be included in our dataset. However, most rules regarding the constitutionality of a state's death penalty procedures are not applied retroactively. *See, e.g.*, Schirro v. Summerlin, 542 U.S. 348, 358 (2004) (finding that new rules of procedure generally apply only prospectively and that the Court's decision in *Ring v. Arizona*, 536 U.S. 584 (2002), invalidating judicial fact-finding in capital sentencing proceedings, was no exception. For purposes of this analysis, therefore, we looked at death eligibility in states with a death penalty system that was never retroactively invalidated. By contrast, where a state invalidated its death penalty for part of the study period, we accounted for this and excluded cases accordingly. For example, the Nebraska legislature abolished the death penalty in 2015, but it was reinstated by the voters in November 2016—so Nebraskans who committed murder between 2015 and 2016 were not eligible. *See* Julie Bosman, *Nebraska Bans Death Penalty, Defying a Veto*, N.Y. TIMES (May 27, 2015), https://www.nytimes.com/2015/05/28/us/nebraska-abolishes-death-penalty.html.

[73] A case included a White female victim if at least one victim met the following criteria: the victim was coded in the SHR as (1) White, (2) female, and (3) non-Hispanic, *or* if the victim was coded in the SHR as (1) White, (2) female, and (3) ethnicity unknown. Counting unknown ethnicity as White for these purposes is the most conservative possible assumption. This approach drives up the apparent number of murders that include a White female victim, and thus dampens disparities when comparing the number of death-eligible murders with a White female victim to the number of executions with a White female victim. We stacked the deck against our argument and still found substantial support for it.

[74] *Execution Database*, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/executions/execution-database (last visited June 10, 2024).

Confederate states killed a White female, yet 43.3% of the defendants who were executed in those states killed a White woman, producing a ratio of 2.4:1.

Table 10. Nationwide Disparities: Former Confederate States[1]

State	Data: SHR[1]			
	Total Homicide Incidents	Death-Eligible Homicide Incidents (DEHI)	DEHI with White Female Victim (WFV)	Percent of DEHI with WFV
TX	73,620	11,438	1,850	16.2%
VA	18,598	2,507	589	23.5%
FL	19,512	2,637	657	24.9%
GA	25,547	4,232	512	12.1%
AL	13,129	1,274	252	19.8%
NC	23,035	2,669	571	21.4%
SC	14,471	2,447	481	19.7%
AR	8,299	1,269	336	26.5%
LA	23,871	3,292	477	14.5%
MS	7,902	1,071	166	15.5%
TN	18,366	2,279	463	20.3%
Totals	**246,350**	**35,115**	**6,354**	**18.1%**

(table continued on next page)

Table 10. Nationwide Disparities: Former Confederate States (cont.)

State	Data: DPIC			Disparity Between Percentage of DEHI with WFV and Percentage of Executions with WFV
	Total Executions	Total Executed for Killing WFV, 1977 to present	Percent Executed for Killing WFV	
TX	580	219	37.8%	**~2.3x**
VA	113	54	47.8%	**~2.0x**
FL	99	46	46.5%	**~1.9x**
GA	76	37	48.7%	**~4.0x**
AL	70	34	48.6%	**~2.5x**
NC	43	19	44.2%	**~2.1x**
SC	43	20	46.5%	**~2.4x**
AR	31	17	54.8%	**~2.1x**
LA	28	17	60.7%	**~4.2x**
MS	23	14	60.1%	**~3.9x**
TN	13	8	61.5%	**~3.0x**
Totals	**1,119**	**485**	**43.3%**	**~2.4x**

Notes:

[1] SHR years include 1976 to 2019.

The next logical question is whether this phenomenon is truly a Southern problem. One might expect the answer to be yes, given prior research connecting the former Confederacy to both lynchings and the death penalty.[75] However, our findings suggest otherwise. Table 11 examines non-former Confederate states and shows that disparities between death eligibility and executions range from 1.5 times more likely in Oklahoma to 3.6 times

[75] DAVID GARLAND, PECULIAR INSTITUTION: AMERICA'S DEATH PENALTY IN AN AGE OF ABOLITION 121–22 (Harv. Univ. Press 2010); STUART BANNER, THE DEATH PENALTY: AN AMERICAN HISTORY 139–42 (Harv. Univ. Press 2002). In the South, the death penalty remained a permissible punishment for lesser offenses far longer than in the North. In practice, however, while free Blacks and slaves were regularly executed for lesser offenses, Whites rarely were. *See, e.g.*, GARLAND, PECULIAR INSTITUTION at 124 (giving examples of *de facto* racial differences in the meting out of capital punishment in the South long after the passage of the Civil War Amendments); BANNER, AN AMERICAN HISTORY at 141 ("Blacks were executed for many more crimes than whites were. All of the whites known to have been hanged in Virginia between 1800 and 1860 were hanged for murder. But of the hundreds of blacks hanged in Virginia in the same period, only about half were murderers.").

more likely in Illinois. The aggregate totals for the non-former Confederate states are strikingly similar to that in former Confederate states: 20.0% of the death-eligible defendants outside the former confederacy killed a White female victim, but 49.2% of the defendants who have been executed killed a White female victim. Indeed, the overall aggregate disparity is virtually identical to that in Confederate states: 2.5 times the expected rate (49.2/20.0 = 2.5).[76]

Any study of executions using a nationwide dataset that does not track each case through execution or ultimate relief is imperfect. However, research cataloging every killing in a jurisdiction would only be able to describe the state of the death penalty as it existed decades earlier; given the lag time between a killing and an execution, following individual cases from commission through execution would take several decades. Indeed, the Georgia example demonstrates that fifty years is not (quite) enough time to guarantee that every case will be resolved. But the research methods we have used to study modern day executions are consistent with prior studies and provide an important check on our work with the Baldus dataset. Our findings build on and improve upon prior research conducted with SHR data, and show that the intersection of victim race and sex is central to understanding the operation of the modern death penalty.[77] The SHR data, combined with DPIC execution data, provide the only way to examine nationwide disparities

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[76] Several of the non-former Confederate states do not have enough executions to calculate the disparity (arbitrarily defined here as fewer than ten executions). *See, e.g.*, *Executions by State*, DEATH PENALTY INFORMATION CTR., https://deathpenaltyinfo.org/executions/executions-overview/number-of-executions-by-state-and-region-since-1976 [https://perma.cc/Y2JB-ZCBF] (last visited June 10, 2024) (demonstrating that only twenty states had more than ten executions since 1976). But those states can be (and are) included in the all-important aggregate total for non-former Confederate states.

[77] Our findings, however, build on and improve upon prior research conducted with SHR data. For example, our findings are more robust than those of a preeminent researcher, Frank Baumgartner, because his SHR analysis: (1) did not designate death penalty state-years (Baumgartner included states that did not have the death penalty) and (2) failed to approximate death eligibility (Baumgartner used all the cases in the SHR). For a discussion, see Phillips & Marceau, *supra* note 4, at 598–99 (discussing FRANK R. BAUMGARTNER, MARTY DAVIDSON, KANEESHA JOHNSON, ARVIND KRISHNAMURTHY & COLIN WILSON, DEADLY JUSTICE: A STATISTICAL PORTRAIT OF THE DEATH PENALTY (2018). One of us has used the SHR data to examine the Texas death penalty. Scott Phillips & Trent Steidley, *A Systematic Lottery: The Texas Death Penalty*, 1976–2016, 51 COLUM. H.R. L. REV. 1041, 1053 (2020) (finding that 92% of the defendants who were sentenced to death for murders that occurred between 1976 and 2016 committed a murder that involved at least one of the aggravating factors that is included in the SHR).

in all death penalty states during the modern era.[78] We show that an overall pattern of disparity based on the race and sex of the victim exists in a nearly identical form in both former Confederate and non-former Confederate death penalty states throughout the modern era.

[78] Prior research has demonstrated that the vast majority of death penalty cases are cases with an aggravating factor that can be identified by the SHR information. Scott Phillips, *Continued Racial Disparities in the Capital of Capital Punishment: The Rosenthal Era*, 50 HOUS. L. REV. 131–56 (2012) ("To bolster the reader's confidence that the statutory aggravators which are included in the SHR data account for virtually all death sentences in Texas, I also conducted a separate analysis based on a different data set. Focusing on the 265 inmates executed by the state of Texas from 2000 to 2010, I used case descriptions from the Texas Execution Information Center website to code the statutory aggravators that were present in each capital murder. Remarkably, 249 of the 265 inmates (94%) committed a capital murder that involved one (or more) of the statutory aggravators that *are* included in the SHR data.").

Table 11. Nationwide Disparities: Non-Former Confederate States				
State	Data: SHR[1]			
	Total Homicide Incidents	Death-Eligible Homicide Incidents (DEHI)	DEHI with White Female Victim (WFV)	Percent of DEHI with WFV
OK	10,417	1,758	530	30.1%
MO	18,707	2,691	557	20.7%
OH	23,791	3,581	768	21.4%
AZ	14,950	2,111	448	21.2%
IN	13,761	2,301	553	24.0%
DE	1,317	199	47	23.6%
CA	114,968	18,448	2,800	15.2%
IL	25,465	4,046	475	11.7%
NV	6,722	910	243	26.7%
UT	2,377	432	179	41.4%
MD	16,656	2,451	319	13.0%
SD	548	82	32	39.0%
WA	8,530	1,370	497	36.3%
NE	1,573	267	100	37.5%
ID	1,390	241	120	49.8%
KY	8,811	1,232	351	28.5%
MT	826	140	57	40.7%
PA	29,268	4,863	931	19.1%
OR	4,596	784	304	38.8%
CO	8,016	1,138	402	35.3%
CT	4,744	703	177	25.2%
NM	3,319	461	123	26.7%
WY	724	123	54	43.9%
Totals	**321,476**	**50,332**	**10,067**	**20.0%**

(table continued on next page)

Table 10. Nationwide Disparities: Former Confederate States (cont.)

State	Data: DPIC			Disparity Between Percentage of DEHI with WFV and Percentage of Executions with WFV
	Total Executions	Total Executed for Killing WFV, 1977 to present	Percent Executed for Killing WFV	
OK	120	53	44.2%	**~1.5x**
MO	94	46	48.9%	**~2.4x**
OH	56	29	51.8%	**~2.4x**
AZ	40	19	47.5%	**~2.2x**
IN	20	10	50.0%	**~2.1x**
DE	16	7	43.8%	**~1.9x**
CA	13	7	53.8%	**~3.5x**
IL	12	5	41.7%	**~3.6x**
NV	12	7	58.3%	**~2.2x**
UT	7	3	42.9%	**~3.9x**
MD	5	3	60.0%	**~3.0x**
SD	5	1	20.0%	**Not Enough Executions to Calculate**
WA	5	4	80.0%	
NE	4	2	50.0%	
ID	3	3	100.0%	
KY	3	3	100.0%	
MT	3	3	100.0%	
PA	3	1	33.3%	
OR	2	1	50.0%	
CO	1	1	100.0%	
CT	1	1	100.0%	
NM	1	1	100.0%	
WY	1	0	0.0%	
Totals	**427**	**210**	**49.2%**	**~2.5x**

Notes:

[1] SHR years include 1976 to 2019 with the following exceptions: Delaware (1976-2015), Illinois (1978-2010), Maryland (1978-2012), South Dakota (1979-2019), Washington (1976-2017), Nebraska (1976-2014 and 2017-2019), Oregon (1979-2019), Connecticut (1976-2011), New Mexico (1980-2008), Wyoming (1978-2019).

CONCLUSION: THE RELEVANCE OF OUR RESEARCH TO THE LEGALITY OF THE DEATH PENALTY IN THE UNITED STATES

In recent decades the number of death sentences and executions have declined dramatically.[79] Death sentences are down by more than two-thirds since 2000, and this is true even in some of the states, like Texas, that have most robustly embraced the death penalty during the modern era.[80] An increasing number of states—New Mexico, Illinois, Connecticut, Maryland, New Hampshire, Colorado, and Virginia—have abolished the death penalty in recent years and there is currently a federal moratorium on executions.

We are not going to make broad pronouncements about the doctrinal implications of our research here. We doubt that these findings, on top of those of Baldus and others, will cause this Court to rethink its decision in *McCleskey v. Kemp*. They will not. If the Court was willing to tolerate a "*white lives matter more*" approach in that case, there is little reason to believe that the additional information that "*white women's lives matter most*" will jolt the Court into acknowledging the untenable arbitrariness of the American death penalty.

Accordingly, our ambitions for this research to fundamentally reorient existing legal doctrine are modest. Still, we hope that this project's ability to expose previously undocumented forms of arbitrariness in the system will contribute to a greater understanding of how the death penalty truly operates on the ground. Justice Brennan famously quipped in his dissent in *McCleskey* that the Court was afraid of "too much justice."[81] As more research is done in this area, fair-minded people will increasingly come to realize that the system is plagued with "too much arbitrariness." Phillips and Marceau recently showed that the race-of-the-victim effect Baldus identified persevered, and was in fact magnified during the appellate process through execution. In this project, we show that many of the conclusions about victim race in prior studies, such as Baldus's, are in large part actually driven by a combination of race and sex. The combination of race and sex is even more powerful than race alone, and by demonstrating this through a series of studies, we provide concrete quantitative support for the view that

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[79] *See, e.g.*, BRANDON L. GARRETT, END OF ITS ROPE: HOW KILLING THE DEATH PENALTY CAN REVIVE CRIMINAL JUSTICE 79–106 (Harv. Univ. Press 2017); *see also* DEATH PENALTY INFO. CTR., THE DEATH PENALTY IN 2023: YEAR END REPORT 2 (2023), https://dpic-cdn.org/production/documents/reports/year-end/Year-End-Report-2023.pdf?dm=1701385056 [https://perma.cc/C6MR-2W83] ("This year is the 9th consecutive year with fewer than 30 people executed (24) and fewer than 50 people sentenced to death.").

[80] GARRETT, *supra* note 79, at 79.

[81] McCleskey v. Kemp, 481 U.S. 279, 339 (1987) (Brennan, J., dissenting).

intersectionality is, and always has been, predictive of the death penalty's arbitrariness.

From a distance, the death penalty appears sanitized and fair because of the thick layers of procedural bureaucracy that overlay the system and the fairness implied by multiple layers of judicial, jury, and executive branch review. Prosecutors celebrate their diversity trainings, and certainly the quality of defense representation is much higher than it was in past decades. In the aggregate, these factors have slowed the death penalty machinery almost to a halt. Death sentences and executions are thus a rarity in modern America. But unfortunately, the same problems of arbitrariness that plagued the system before it was struck down in 1972 persist.

Decades ago, it was fair to worry about arbitrariness in the system such that irrelevant factors such as race or class or sex might predict who gets sentenced to death and executed. This project joins a growing body of literature proving that the operation of the modern death penalty continues to be haunted by these problems of arbitrariness at every stage. Rather than getting better, the arbitrariness appears to be at least as bad as it was a half-century ago.