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Death by Stereotype: Race, Ethnicity, and California's Failure to Implement *Furman's* Narrowing Requirement

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ABSTRACT

The influence of race on the administration of capital punishment had a major role in the U.S. Supreme Court's 1972 decision in *Furman v. Georgia* to invalidate death penalty statutes across the United States. To avoid discriminatory and capricious application of capital punishment, the Supreme Court held that the Eighth Amendment requires legislatures to narrow the scope of capital offenses and ensure that only the most severe crimes are subjected to the ultimate punishment. This Article demonstrates the racial and ethnic dimensions of California's failure to implement this narrowing requirement. Our analysis uses a sample of 1,900 cases drawn from 27,453 California convictions for first-degree murder, second-degree murder, and voluntary manslaughter with offense dates between January 1978 and June 2002. California's death penalty statute requires a finding of one or more enumerated special circumstances for death eligibility. Contrary to the teachings of *Furman*, however, we found that several of California's special circumstances apply disparately based on the race or ethnicity of the defendant. In so doing, the statute appears to codify rather than ameliorate the harmful racial stereotypes that are endemic to our criminal justice system. The instantiation of racial and ethnic stereotypes into death eligibility raises the specter of discriminatory application of California's statute, with implications for constitutional regulation of capital punishment.

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INTRODUCTION

This Article examines the possible racial and ethnic implications of California's expansive death penalty statute in light of the Eighth Amendment's requirement that each state statute narrow the subclass of offenders on whom a death sentence may be imposed. The narrowing requirement derives from the holding in *Furman v. Georgia*¹ over forty-five years ago, when the U.S. Supreme Court ruled that existing death penalty statutes violated the Eighth Amendment's prohibition against cruel and unusual punishments.² Citing statistics demonstrating arbitrary and capricious application of capital punishment, a majority of the Justices concluded that a death sentencing scheme is unconstitutional if it provides "no meaningful basis for distinguishing the few cases in which [death] is imposed from the many cases in which it is not."³

Four years later, in *Gregg v. Georgia*⁴ and its companion cases,⁵ the Supreme Court reviewed the subsequently enacted statutes. In upholding some of the statutes, the Court in a plurality opinion explained, "*Furman* mandates that where discretion is afforded a sentencing body on a matter so grave as the determination of whether a human life should be taken or spared, that discretion must be suitably directed and limited so as to minimize the risk of wholly arbitrary and capricious action."⁶ Thus, "[t]o pass constitutional muster, a capital sentencing scheme must 'genuinely narrow the class of persons eligible for the death penalty and must reasonably justify the imposition of a more severe sentence on the defendant compared to others found guilty of murder.'"⁷ Importantly, the Court stated that the direction and limitation must be provided by statute so that the selection of persons eligible for a death sentence is "circumscribed by . . . legislative guidelines."⁸ This constitutional guidance was designed to limit the discretion of individual

1. 408 U.S. 238 (1972).

2. *Id.* at 239–40 (per curiam).

3. *Id.* at 313 (White, J., concurring); see also *Maynard v. Cartwright*, 486 U.S. 356, 362 (1988); *Godfrey v. Georgia*, 446 U.S. 420, 427–28 (1980) (plurality opinion).

4. 428 U.S. 153 (1976).

5. *Jurek v. Texas*, 428 U.S. 262 (1976); *Proffitt v. Florida*, 428 U.S. 242 (1976).

6. *Gregg*, 428 U.S. at 189 (plurality opinion); see also *Zant v. Stephens*, 462 U.S. 862, 874 (1983) (quoting *Gregg*, 428 U.S. at 189 (plurality opinion)).

7. *Lowenfield v. Phelps*, 484 U.S. 231, 244 (1988) (quoting *Zant v. Stephens*, 462 U.S. at 877).

8. *Gregg*, 428 U.S. at 207 (plurality opinion) (emphasis added).

prosecutors to charge capital defendants and of judges and juries to impose death sentences.⁹

In previous research using the same data, we presented empirical findings regarding California's death penalty scheme.¹⁰ Under California's death penalty statute, a defendant convicted of first-degree murder is eligible for a death sentence if the jury also finds the existence of one or more enumerated special circumstances. We found that the scope of death eligibility under California law following *Furman* was quite expansive: 95 percent of first-degree murder convictions qualify for a death sentence under the California statute in effect in 2008.¹¹ We also found that only a fraction of those eligible for a death sentence were actually sentenced to death: Only 4.3 percent of defendants who committed a factually eligible capital murder were sentenced to death,¹² a rate that is far lower than the 15–20 percent rate that the *Furman* Court viewed as evidence of arbitrariness.¹³

This Article builds on that foundation and shows that, contrary to the teachings of *Furman*, six of California's special circumstances apply unevenly based on the defendant's race or ethnicity. In so doing, the statute

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9. See, e.g., *Lowenfield*, 484 U.S. at 244 (“The use of ‘aggravating circumstances’ is not an end in itself, but a means of genuinely narrowing the class of death-eligible persons and thereby channeling the jury’s discretion.”).
 10. David Baldus, George Woodworth, Catherine Grosso, Michael Laurence, Jeffrey Fagan, & Richard Newell, *Furman at 45: Constitutional Challenges from California’s Failure to (Again) Narrow Death Eligibility*, 16 J. EMP. LEG. STUD. 693 (2019). These findings were previously submitted on behalf of two California death row inmates who challenged the constitutionality of their death sentences in part on the grounds that California’s statute fails to satisfy the narrowing requirements of *Furman*. The inmates, Jerry Frye and Troy Ashmus, are challenging their convictions and death sentences in federal habeas corpus proceedings. *Frye v. Warden*, No. 2:99-cv-0628, 2015 WL 300755 (E.D. Cal. Jan. 22, 2015); *Ashmus v. Davis*, No. 93-cv-0594, 2017 WL 2876842 (N.D. Cal. July 6, 2017).
 11. We also analyzed the cases to determine whether the crimes could have been charged as capital crimes but resulted in noncapital convictions. Of the factually first-degree murder cases, 86 percent are death eligible. Among defendants convicted of second-degree murder or voluntary manslaughter, the death-eligibility rate is 60 percent. Baldus et al., *supra* note 10.
 12. Baldus et al., *supra* note 10, at fig.2 & tbl.6.
 13. The evidence before the Court in *Furman* was that “15% to 20% of those convicted of murder are sentenced to death in States where it is authorized.” *Furman v. Georgia*, 408 U.S. 238, 386–87 n.11 (Burger, C.J., dissenting); *id.* at 435–36 n.19 (Powell, J., dissenting) (citing Hugo A. Bedau, *Death Sentences in New Jersey 1907–1960*, 19 RUTGERS L. REV. 1 (1964) (“[B]etween 1916 and 1955, 157 out of 652 persons charged with murder received the death sentence in New Jersey—about 20%; between 1956 and 1960, 13 out of 61 received the death sentence—also about 20%.”)).

appears to codify rather than ameliorate the harmful racial stereotypes that are endemic to our criminal justice system.¹⁴

Part I presents a closer look at *Furman v. Georgia* and the jurisprudence around race and capital punishment. Part II examines California's capital punishment statutes with special attention to the state's response to the Eighth Amendment narrowing requirements. Part III turns to the academic literature studying *Furman's* mandates before reviewing, in brief, ways in which race and ethnicity have been central to the administration of capital punishment in the United States. Part IV explains the details of our empirical study, including coding decisions and challenges. Part V presents our findings, demonstrating that six of California's special circumstances apply disparately based on race and ethnicity. Finally, the conclusion discusses the importance of these findings in light of *Furman's* goals and requirements.

I. FURMAN, RACE, AND CAPITAL PUNISHMENT

In *Furman v. Georgia*,¹⁵ the U.S. Supreme Court reviewed the application of capital punishment and held that all then-current death penalty statutes violated the Eighth and Fourteenth Amendments' proscriptions against cruel and unusual punishment.¹⁶ Several justices concurring in the judgment concluded that statutes allowing infrequent and seemingly random imposition of the death penalty on only a small percentage of death-eligible criminal defendants violated the prohibition against cruel and unusual punishments because they permitted the death penalty "to be so wantonly and so freakishly imposed."¹⁷

Furman and its progeny made clear that the Eighth Amendment demands that each legislature set forth standards and criteria to regulate its state capital sentencing system to avoid an unconstitutional pattern of arbitrary and capricious sentences.¹⁸ At a minimum, to "avoid [the] constitutional flaw," state death penalty statutes, by rational and objective criteria, "must genuinely narrow the class of persons eligible for the death

14. See generally April D. Fernandes & Robert D. Crutchfield, *Race, Crime, and Criminal Justice: Fifty Years Since The Challenge of Crime in a Free Society*, 17 CRIM. & PUB. POL'Y 397 (2018); THE COLOR OF JUSTICE: RACE, ETHNICITY, AND CRIME IN AMERICA (Samuel Walker, Cassia Spohn & Miriam DeLone eds., 2012).

15. 408 U.S. 238 (1972).

16. *Id.* at 239 (per curiam).

17. *Id.* at 309–10 (Stewart, J., concurring); see also *id.* at 313 (White, J., concurring).

18. See, e.g., *Gregg v. Georgia*, 428 U.S. 153, 189 (1976) (plurality opinion).

penalty and must reasonably justify the imposition of a more severe sentence on the defendant compared to others found guilty of murder.¹⁹

Of concern to several justices in the *Furman* majority were suggestions that death sentences were impermissibly influenced by race. Justice Douglas cited racial disparities as a basis for striking down the statutes.²⁰ Justice Stewart similarly concluded that “if any basis can be discerned for the selection of these few to be sentenced to die, it is the constitutionally impermissible basis of race.”²¹ Justice Marshall noted that racial disparities were still prevalent at the time of *Furman*, but acknowledged the insufficient record before the Court to conclude that there was evidence of discrimination. The same was true in *Maxwell v. Bishop* in which the justices rejected a constitutional challenge to capital punishment statutes and prevented any conclusive holding that racial bias infected all death sentences imposed on nonwhite defendants.²²

Four years after *Furman*, the U.S. Supreme Court reviewed state death penalty statutes enacted in the years after *Furman* that attempted to cure previous constitutional deficiencies.²³ In *Gregg v. Georgia*, the Supreme Court recognized the relevant statistics relied upon in *Furman*²⁴ and reiterated the constitutional rule that legislatures must distinguish “the few

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19. *Zant v. Stephens*, 462 U.S. 862, 877; see also *Gregg*, 428 U.S. at 189 (stating the mandate of *Furman*).
 20. *Furman*, 408 U.S. at 245 (Douglas, J., concurring). Justice Douglas cited a host of statistical analyses finding that race had a significant role in the imposition of death sentences. See, e.g., *id.* at 249–50 (Douglas, J., concurring) (quoting the 1967 President’s Commission on Law Enforcement and the Administration of Justice, which found that “[t]he death sentence is disproportionately imposed and carried out on the poor, the Negro, and the members of unpopular groups.”); *id.* at 250 n.15 (Douglas, J., concurring) (quoting Hugo Bedau’s conclusion that “[a]lthough there may be a host of factors other than race involved in this frequency distribution, something more than chance has operated over the years to produce this racial difference”); *id.* (Douglas, J., concurring) (citing Marvin Wolfgang and his colleagues’ findings that racial bias affected the sentencing and execution of defendants in 439 death cases from 1914–1958).
 21. *Id.* at 310 (Stewart, J., concurring).
 22. 408 U.S. at 449–50 (Marshall, J., concurring) (referring to *Maxwell v. Bishop*, 398 F.2d 138, 147 (8th Cir. 1968), *vacated*, 398 U.S. 262 (1970) (“We therefore reject the statistical argument in its attempted application to Maxwell’s case. Whatever value that argument may have as an instrument of social concern, whatever suspicion it may arouse with respect to southern interracial rape trials as a group over a long period of time, and whatever it may disclose with respect to other localities, we feel that the statistical argument does nothing to destroy the integrity of Maxwell’s trial.”)).
 23. See, e.g., *Gregg v. Georgia*, 428 U.S. 153 (1976); *Jurek v. Texas*, 428 U.S. 262 (1976); *Proffitt v. Florida*, 428 U.S. 242 (1976).
 24. *Gregg*, 428 U.S. at 182 n.26 (plurality opinion).

cases in which [the death penalty] is imposed from the many cases in which it is not.”²⁵ The Court in *Gregg* upheld the revised Georgia statute, finding that it adequately “narrow[ed] the class of murderers subject to capital punishment by specifying 10 statutory aggravating circumstances,” which channeled the jury’s discretion and protected against “a jury wantonly and freakishly impos[ing] the death sentence; it is always circumscribed by the legislative guidelines.”²⁶

In his concurrence in *Gregg*, Justice White, joined by Chief Justice Burger and Justice Rehnquist, explained the rationale for the statutory narrowing requirement:

As the types of murders for which the death penalty may be imposed become more narrowly defined and are limited to those which are particularly serious or for which the death penalty is peculiarly appropriate . . . it becomes reasonable to expect that juries—even given discretion not to impose the death penalty—will impose the death penalty in a substantial portion of the cases so defined. If they do, it can no longer be said that the penalty is being imposed wantonly and freakishly or so infrequently that it loses its usefulness as a sentencing device.²⁷

Thus, the Supreme Court relies on the Eighth Amendment’s narrowing principle to assure that the selection of defendants actually sentenced to death is regulated by legislatively prescribed criteria of sufficient certainty to guard against arbitrariness and caprice.²⁸

In 1987, in *McCleskey v. Kemp*,²⁹ the U.S. Supreme Court reviewed the application of the Georgia death penalty statute in light of statistical evidence that Georgia death sentences were impermissibly influenced by racial considerations. The Court reaffirmed its holding in *Furman* that the Eighth Amendment is violated where “the death penalty [is] so irrationally

25. *Id.* at 188 (plurality opinion) (quoting *Furman*, 408 U.S. at 313 (White, J., concurring)).

26. *Id.* at 196–97, 207 (plurality opinion). In contrast, the Court invalidated statutes that required the mandatory imposition of a death sentence precisely because they do not permit individualized sentencing decisions. *Woodson v. North Carolina*, 428 U.S. 280, 304 (1976).

27. *Gregg*, 428 U.S. at 222 (White, J., concurring); *cf.* *Zant v. Stephens*, 462 U.S. 862, 878 (“Our cases indicate, then, that statutory aggravating circumstances play a constitutionally necessary function at the stage of legislative definition: they circumscribe the class of persons eligible for the death penalty.”).

28. See Chelsea Creo Sharon, *The “Most Deserving” of Death: The Narrowing Requirement and the Proliferation of Aggravating Factors in Capital Sentencing Statutes*, 46 HARV. C.R.-C.L. L. REV. 223, 247 (2011).

29. 481 U.S. 279 (1987).

imposed that any particular death sentence could be presumed excessive [and] . . . there was no basis for determining in any particular case whether the penalty was proportionate to the crime . . .”³⁰ Similarly, a “capital punishment system [that] operates in an arbitrary and capricious manner” violates the U.S. Constitution.³¹

The Court began its Eighth Amendment analysis of McCleskey’s statistical evidence by reviewing the procedural safeguards adopted by the Georgia legislature to avoid such unconstitutional application.³² The Court found that these features, including provisions in the statute that “narrow[] the class of murders subject to the death penalty,” alleviated the concerns articulated in *Furman*.³³ As a result of these protections, the Court “lawfully may presume that McCleskey’s death sentence was not ‘wantonly and freakishly’ imposed, and thus that the sentence is not disproportionate within any recognized meaning under the Eighth Amendment.”³⁴ Applying this presumption, the Court declined to accept statistical evidence proffered by McCleskey as a “constitutional measure of an unacceptable risk of racial prejudice influencing capital sentencing decisions.”³⁵ In the more than thirty years since the *McCleskey* ruling, the Court has rarely visited the

30. *Id.* at 301.

31. *Id.* at 306.

32. The statistical analysis, conducted by David C. Baldus, Charles Pulaski, and George Woodworth, examined over 2,000 murder cases that occurred in Georgia during the 1970s. *Id.* at 286. The Court summarized the findings as follows:

Baldus subjected his data to an extensive analysis, taking account of 230 variables that could have explained the disparities on nonracial grounds. One of his models concludes that, even after taking account of 39 nonracial variables, defendants charged with killing white victims . . . [faced] 4.3 times [the odds of] . . . receiv[ing] a death sentence as defendants charged with killing blacks. According to this model, black defendants were 1.1 times as likely to receive a death sentence as other defendants. Thus, the Baldus study indicates that black defendants, such as McCleskey, who kill white victims have the greatest likelihood of receiving the death penalty.

Id. at 287.

33. *Id.* at 302.

34. *Id.* at 308 (citations omitted).

35. *Id.* at 309. The Court also held that the statistical evidence did not establish an equal protection violation. *Id.* at 298. Noting its finding in *Gregg v. Georgia* that the Georgia capital sentencing scheme could be fair and neutral, the Court concluded that there was no evidence that the Georgia legislature enacted the death penalty statute for a racially discriminatory purpose. *Id.*

question of racial bias in death sentencing other than in narrow holdings to correct case-specific, egregious expressions of racial animus at trial.³⁶

II. CALIFORNIA'S RESPONSE TO THE COURT'S EIGHTH AMENDMENT PROSCRIPTIONS

California, like several other states,³⁷ addresses the narrowing requirement by broadly defining capital offenses and then requiring the trier of fact to find at least one statutory aggravating factor that makes the defendant's crime subject to a death sentence.³⁸ The California death penalty statute defines death eligibility as the commission of a first-degree murder with the presence of one or more enumerated special circumstances.³⁹ California defines first-degree murder as all murder that is perpetrated by means of:

- A destructive device,
- Any other kind of willful, deliberate, and premeditated killing,

36. See, e.g., *Buck v. Davis*, 137 S. Ct. 759, 776–77 (2017) (finding defense counsel rendered deficient and prejudicial representation by introducing expert testimony that Mr. Buck, the defendant, was statistically more likely to act violently in the future because he was Black).

37. See, e.g., ARIZ. REV. STAT. ANN. § 13-751 (2019); FLA. STAT. § 921.141 (2019); GA. CODE ANN. § 17-10-30 (2019).

38. See, e.g., CAL. PENAL CODE §§ 189, 190.2 (West 2019) (requiring a finding of the presence of an enumerated “special circumstance” before a defendant is subject to a capital sentence). Although California uses the term special circumstances to define death eligibility, other states use the terms aggravating factors or aggravating circumstances for statutory provisions that define death eligibility. As the California Supreme Court held in *People v. Bacigalupo*, 826 P.2d 808 (Cal. 1993), under the California death penalty law, “the section 190.2 ‘special circumstances’ perform the same constitutionally required ‘narrowing’ function as the ‘aggravating circumstances’ or ‘aggravating factors’ that some of the other states use in their capital sentencing statutes.” *Id.* at 468; see also *id.* at 477 (emphasizing that the section 190.3 aggravating factors used in the selection phase of the California death penalty scheme “do not perform a ‘narrowing’ function”); *People v. Visciotti*, 825 P.2d 388, 537 (Cal. 1992) (rejecting that under *Furman* and *Maynard*, the aggravating factors in section 190.3 must limit “open-ended discretion” in the selection phase of the California death penalty scheme because it is instead the special circumstances in section 190.2 that function “to channel jury discretion by narrowing the class of defendants who are eligible for the death penalty”); *People v. Cornwell*, 117 P.3d 622, 657 (Cal. 2005) (“The state death penalty scheme meets Eighth Amendment requirements through its listing of special circumstances; the aggravating and mitigating circumstances referred to in section 190.3 do not and need not perform a narrowing function.”).

39. CAL. PENAL CODE §§ 189, 190.2 (West 2019).

- Committed in the perpetration of arson, rape, carjacking, robbery, burglary, mayhem, kidnapping, train wrecking, torture, sodomy, or one of several sex crimes, or
- Discharging a firearm from a motor vehicle, intentionally at another person outside of the vehicle with the intent to inflict death.⁴⁰

The development and application of special circumstances unfolded in several discrete stages to create unprecedented levels of death eligibility.⁴¹ In 1977, the California legislature enacted a relatively narrow statute that enumerated several murders as capital crimes.⁴² A year later, the Briggs Initiative⁴³ significantly expanded the scope of California's special circumstances.⁴⁴ Its drafters intended for California's death penalty to apply to "all homicides committed while the defendant was engaged in, or was an accomplice in, the commission of, the attempted commission of, or the immediate flight after committing or attempting to commit serious felonies, as well as all willful and intentional homicides," including all first-degree murders.⁴⁵ Donald Heller, the attorney assigned to draft the initiative, complied with Senator John Briggs's instruction to be "as broad and inclusive as possible" and did not apply the narrowing requirement

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40. CAL. PENAL CODE § 189 (West 2019). One of the most interesting features of the California statute, which is part of its breadth, is its treatment of premeditation: "To prove that the killing was 'deliberate and premeditated,' it is not necessary to prove the defendant maturely and meaningfully reflected upon the gravity of his or her act." *Id.* at § 189(d).
 41. After *Furman*, the California legislature enacted a death penalty statute in 1973 that mandated imposition of the death penalty for individuals found guilty of first-degree murder when one of ten special circumstances were present. 1973 Cal. Stat. 1297, §§ 1–5. In 1976, the California Supreme Court invalidated the mandatory statute pursuant to the decision in *Woodson v. North Carolina*, 428 U.S. 280 (1976). *Rockwell v. Superior Court*, 556 P.2d 1101 (Cal. 1976).
 42. Initiative and Measure Proposition 7, Nov. 7, 1978 (codified at CAL. PENAL CODE § 190.2 (West 2019)); *see also* Historical Note in CAL. PENAL CODE § 190.2 (West 2019). The 1977 statute contained several felony-murder special circumstances but limited those circumstances to cases in which the murder was "willful, deliberate, and premeditated." *People v. Frierson*, 599 P.2d 587, 606 (Cal. 1979).
 43. *See, e.g.*, Gerald F. Uelman, *California Death Penalty Laws and the California Supreme Court: A Ten Year Perspective*, SANTA CLARA L. DIGITAL COMMONS, Apr. 22, 1986, at 2, <https://digitalcommons.law.scu.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1800&context=facpubs> [<https://perma.cc/8PDT-4DQL>].
 44. *See, e.g., id.* at 32–33.
 45. Declaration of Donald H. Heller, at 1–2, submitted as Exhibit 183 in *Ashmus v. Wong*, No. 3:93-CV-00594-TEH (N.D. Cal. Feb. 17, 1993) (statement of drafter of Briggs Initiative); *see also* W.E. Barnes, *Sen. Briggs: 'Your Life is in Danger'*, S.F. EXAMINER & CHRON., April 2, 1978, at A10.

recognized in *Furman*.⁴⁶ Accordingly, the Briggs Initiative's sponsors promised California voters in campaign and ballot materials that the statute would expand the applicability of the death penalty to "every murderer."⁴⁷

The Briggs Initiative "sought to achieve this result" in two ways: first, by "more than doubl[ing] the number of special circumstances" delineated in the prior law; and second, by "substantially broaden[ing] the definitions" of the prior law's special circumstances.⁴⁸ This first stage of expanding death eligibility following the approval of the Briggs' Initiative lasted about six years.

In 1983, the California Supreme Court's ruling in *Carlos v. Superior Court*⁴⁹ created an interim stage that lasted nearly four years and temporarily narrowed the application of capital punishment. The court held that the felony-murder special circumstances required the state to prove that a defendant possessed the intent to kill during the commission of the felony.⁵⁰ The *Carlos* ruling, however, applies only to murders committed between December 12, 1983, the date on which *Carlos* was decided, and October 13, 1987, the date on which it was overruled by *People v. Anderson*.⁵¹

The current stage is the post-*Carlos* period. Both before and after *Carlos*, the panoply of special circumstances expanded over the course of three decades,⁵² eventually reaching the current thirty-two special circumstances.⁵³

46. Declaration of Donald H. Heller, *supra* note 45, at 1–2.

47. Declaration of Gerald F. Uelmen, at 7, submitted as Exhibit 33 in *Ashmus v. Wong*, No. 3:93-cv-00594-TEH (N.D. Cal. Feb. 17, 1993).

48. Steven F. Shatz & Nina Rivkind, *The California Death Penalty Scheme: Requiem for Furman?*, 72 N.Y.U. L. REV. 1283, 1311–13 (1997); *see also* CAL. PENAL CODE § 190.2 (West 1988). The 1978 expansion of capital punishment's applicability in California evoked widespread concern about the constitutionality of the Briggs Initiative, even among those involved in its enforcement. "Members of the law enforcement community and those charged with prosecuting offenders of the laws of California expressed constitutional concerns about the breath of the proposed initiative, with its expansive list of death-eligible crimes." Declaration of Gerald F. Uelmen, *supra* note 47, at 7–8.

49. 672 P.2d 862 (Cal. 1983).

50. *Id.*

51. 742 P.2d 1306 (Cal. 1987) (holding that intent to kill is not a requirement to find a felony-murder special circumstance for a defendant who is the actual killer).

52. *See generally* Jonathan Simon & Christina Spaulding, *Tokens of Our Esteem: Aggravating Factors in the Era of Deregulated Death Penalties*, in *THE KILLING STATE: CAPITAL PUNISHMENT IN LAW, POLITICS AND CULTURE* 81 (Austin Sarat ed., 1999).

53. CAL. PENAL CODE § 190.2 (West 2019). The special circumstances are enumerated in twenty-two paragraphs, one of which, paragraph 17, contains twelve subparagraphs each defining an independent basis for death eligibility. *Id.* Although Penal Code section 190.2 contains thirty-three special circumstances, the California Supreme Court

The addition of several special circumstances in the mid-1990s and 2000 are of particular concern in this study. In 1995, the California legislature added special circumstances to Penal Code section 190.2, including murders occurring during the commission of carjackings⁵⁴ and drive-by shootings.⁵⁵ The author of Senate Bill 9 justified the expansion of the death penalty as necessary to combat gang violence, arguing that “[i]n today’s society, gang-related shootings have become commonplace. Frequently, the victim is an unintended target, such as a child, a productive high school student with no gang affiliation, or a young mother who happens to live in the neighborhood targeted by drive-by shooters.”⁵⁶

Opponents to these provisions warned the California legislature that “the broader the cases that are eligible for the death [penalty] as a punishment, the greater the risk that the death penalty will be applied in an arbitrary and unconstitutional manner.”⁵⁷ The California Attorney General’s Office expressed concern that the cumulative expansions of eligibility for the death penalty resulted in few crimes not being covered by the California scheme.⁵⁸

invalidated section 190.2(a)(14) as unconstitutional. *People v. Superior Court (In re Engert)*, 647 P.2d 76 (Cal. 1982).

54. 1995 Cal. Stat. 3554 § 1(a)(17)(L) (S.B. 32). California voters approved Senate Bill 32 with the passage of Proposition 195, effective March 27, 1995. As a result, the felony-murder carjacking special circumstance and the juror killing special circumstance were added to the Penal Code as sections 190.2(a)(17)(L) and 190.2(a)(20), and the felony-murder kidnapping special circumstance was expanded to include murders resulting from kidnapping in Penal Code section 190.2(a)(17)(B).
55. 1995 Cal. Stat. 3561 (a)(20) (S.B. 9).
56. ASSEMB. COMM. ON PUBLIC SAFETY, BILL ANALYSIS, S.B. 9, 1995–1996 LEG., REG. SESS., at 3 (Cal. June 27, 1995), http://leginfo.ca.gov/pub/95-96/bill/sen/sb_0001-0050/sb_9_cfa_950626_093857_asm_comm.html [https://perma.cc/U8GB-QNUH]. Senate Bill 9 was approved by voters with the passage of Proposition 196, effective March 27, 1995. The drive-by murder special circumstance was added as Penal Code section 190.2(21). *Id.*
57. S. COMM. ON CRIMINAL PROCEDURE, BILL ANALYSIS, S.B. 32, 1995–1996 LEG., REG. SESS., at 7(b) (Mar. 7, 1995) (citing opposition submitted by the American Civil Liberties Union), http://leginfo.ca.gov/pub/95-96/bill/sen/sb_0001-0050/sb_32_cfa_950221_155939_sen_comm.html [https://perma.cc/8W5C-QFLP].
58. Mike Lewis, *Death Penalty Quietly Moves Into Broader Territory*, S.F. DAILY J., Mar. 20, 1996, at 1, 1, 7 (quoting Attorney General’s Death Penalty Coordinator as “it is conceivable, although unlikely, that those who seek to further modify the law eventually could run out of legal territory to carve out.”); Mike Lewis, *Expansion of Capital Crimes Nears Passage*, HERALD RECORDER, Sept. 19, 1995, at 1, 15 (“‘In the abstract, you could toss a bunch more crap in there, but you have to know your constitutional limits,’ said George Williamson, chief of the criminal division in the attorney general’s office. ‘You have to be very careful.’”).

Opponents of these measures were concerned about the potential for racial disparities in the operation of California's capital punishment statute.⁵⁹ To avoid these unconstitutional results, the American Civil Liberties Union urged the California legislature to amend both statutes to prohibit the execution of a death sentence that was the product of racial discrimination.⁶⁰ Although the legislature rejected the proffered amendments, the author of Senate Bill 32 committed to examining whether provisions should be enacted to "avoid unequal enforcement of the death penalty."⁶¹

Despite these concerns, five years later, voters expanded the statute again by approving Proposition 21, which, inter alia, added the gang-related murder special circumstance.⁶² A ballot pamphlet argument urging its passage stated, "Proposition 21 ends the 'slap on the wrist' of current law by imposing real consequences for GANG MEMBERS, RAPISTS AND MURDERERS who cannot be reached through prevention or education."⁶³ In effect, the statute delegated discretion for death penalty eligibility to the police definitions of gang-related crime and rosters of persons thought to be gang members.⁶⁴ In response to the expansions of Penal Code section 190.2,

59. See, e.g., American Civil Liberties Union, Opposition to Senate Bill 9, at 1 (June 14, 1995) (citing Justice Blackmun's observation that "the death penalty remains fraught with arbitrariness, discrimination, caprice and mistake."); American Civil Liberties Union Opposition to Senate Bill 32 (Mar. 1, 1995) (same); Friends Committee on Legislation Opposition to Senate Bill 9 (Feb. 2, 1995) (citing Justice Blackman's belief that the death penalty "permits the issue of race to determine who lives and who dies"); Friends Committee on Legislation Opposition to Senate Bill 32 (June 14, 1995) (same).

60. See, e.g., ACLU, Proposed Amendments to Senate Bill 32 (Mar. 6, 1995).

61. SENATE BILL 32 ANALYSIS WORKSHEET at 4 (undated).

62. Historical Note in CAL. PENAL CODE § 190.2(a)(22) (West 2019). This was approved by voters on March 7, 2000. 2000 Cal. Legis. Serv. Prop. 21 (West).

63. CAL. SEC'Y OF STATE, VOTER INFORMATION GUIDE FOR 2000, PRIMARY 48 (2000), https://repository.uchastings.edu/cgi/viewcontent.cgi?article=2187&context=ca_ballot_props [<https://perma.cc/FFR5-GBZV>].

64. See, e.g., Anita Chabria, *A Routine Police Stop Landed him on California's Gang Database. Is It Racial Profiling?*, L.A. TIMES (May 9, 2019, 10:35 AM), <https://www.latimes.com/politics/la-pol-ca-california-gang-database-calgang-criminal-justice-reform-20190509-story.html> [<https://perma.cc/GWL3-YVDJ>] (showing that the CalGang database is "filled with errors and lack[s] accountability" and therefore may be "a vehicle for racial profiling"); ELAINE M. HOWLE, THE CALGANG CRIMINAL INTELLIGENCE SYSTEM: REPORT 2015-130 12, 66 (2016), <https://auditor.ca.gov/pdfs/reports/2015-130.pdf> [<https://perma.cc/QV2U-7SCB>] (showing that the racial composition of CalGang database is racially disparate from state population); see also Alice Speri, *New York Gang Database Expanded by 70 Percent Under Mayor Bill De Blasio*, THE INTERCEPT (June 11, 2018, 7:49 AM), <https://interc.pt/2y2f1VB> [<https://perma.cc/S68M-R4R2>] (discussing the expansion of New York's Gang Database); *People v. Cramer*, No. H034348, 2016 WL 7494889 (Cal. App. 2016 Dec. 30, 2016) (reversing a conviction for drug sales because

preeminent California legal scholar Gerald Uelmen testified that California death penalty law “imposes no meaningful limitations on the broad discretion of prosecutors and juries to seek and impose the death penalty for first degree murders in California.”⁶⁵ He observed, “[t]here is nothing ‘special’ about the special circumstances in California’s death penalty law; they have been deliberately designed to encompass nearly all first degree murders.”⁶⁶

Defendants facing the death penalty have regularly challenged the constitutionality of California’s death penalty law throughout its evolution.⁶⁷ The California Supreme Court has consistently held that the statute satisfies the constitutionally required narrowing function by the use of the special circumstances set forth in Penal Code section 190.2(a).⁶⁸

III. OVERBREADTH, RACE, AND CAPITAL PUNISHMENT

This Part provides a brief context in the relevant literature for the findings presented below.⁶⁹ We first review the literature on measuring the success of capital punishment statutes in fulfilling the narrowing mandate arising from *Furman*. We then turn to the history of race and capital punishment in the United States and discuss some of the many ways in which racial bias is manifested in the administration of capital punishment.

of the trial court’s admission of unduly prejudicial gang evidence proffered by police officers based on gang roster data).

65. Declaration of Gerald F. Uelmen, *supra* note 47, at 27.

66. *Id.*

67. As of March 8, 2019, Westlaw reports almost 2,000 opinions relating to CAL. PENAL CODE § 190.2 have been published by the California Supreme Court alone and more than 800 cases have been brought in federal courts.

68. CAL. PENAL CODE § 190.2 (West 2019); *see also, e.g.*, *People v. Bacigalupo*, 826 P.2d 808 (Cal. 1993); *People v. Visciotti*, 825 P.2d 388, 430–31 (Cal. 1992) (rejecting the application of the requirement of *Furman* and *Maynard* that the section 190.3 aggravating factors in the selection phase of the California death penalty scheme must limit “open-ended discretion” because they do not perform a narrowing function; rather, under California’s death penalty statute, special circumstances in section 190.2 function “to channel jury discretion by narrowing the class of defendants who are eligible for the death penalty”); *People v. Cornwell*, 117 P.3d 622, 657 (Cal. 2005) (“The state death penalty scheme meets Eighth Amendment requirements through its listing of special circumstances; the aggravating and mitigating circumstances referred to in section 190.3 do not and need not perform a narrowing function.”).

69. *See infra* Part V.

A. *Furman*'s Failure: Overbreadth in Capital Murder Charging

Furman, *Gregg*, and subsequent cases should have produced, across the states authorizing capital punishment, a narrow set of cases that clearly identifies crimes that are readily distinguished from ordinary murders. The evidence to date, however, suggests that the narrowing requirement has not been satisfied.⁷⁰ Relatively few studies estimate the rate of death eligibility using case law research because of the vast scope of such an undertaking. The studies that have been conducted, however, raise serious questions about the ability of the post-*Furman* statutory schemes to narrow meaningfully the class of cases identified as death eligible.⁷¹ A second set of studies provides an estimate of death sentencing among death-eligible homicides, again suggesting that the substantial narrowing requirements of *Furman* and *Gregg* have not been applied successfully.⁷²

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70. See Baldus et al., *supra* note 10 (showing high rates of death-eligibility in recent narrowing studies).
71. See, e.g., Shatz & Rivkind, *supra* note 48, at 1328–29, 1332 (finding that 86.5 percent of first-degree murder cases in California were death eligible under the statute, and that 9.6 percent of those cases resulted in a death sentence); DAVID C. BALDUS, GEORGE WOODWORTH & CHARLES A. PULASKI, JR., EQUAL JUSTICE AND THE DEATH PENALTY: A LEGAL AND EMPIRICAL ANALYSIS 268 n.31 (1990) (finding that 86 percent of murder cases in Georgia in the first five years of the post-*Furman* regime (1988–1992) were death eligible); Justin Marceau & Wanda Fogila, *Death Eligibility in Colorado: Many Are Called, Few Are Chosen*, 84 U. COLO. L. REV. 1069, 1107 (2012) (finding that Colorado's capital sentencing system defined 90 percent of factually or actually first-degree murder cases as death eligible); Raymond Paternoster, Robert Brame, Sarah Bacon & Andrew Ditchfield, *Justice by Geography and Race: The Administrative of the Death Penalty in Maryland, 1978–1999*, 4 U. MD. L.J. ON RACE, RELIGION, GENDER, & CLASS 1, 18–19, 52, fig.1 (2004) (finding that approximately 21 percent of first- and second-degree murder cases between August 1978 and September 1999 were death eligible (1,311 of approximately 6,000)); David C. Baldus, George Woodworth, Catherine M. Grosso & Aaron M. Christ, *Arbitrariness and Discrimination in the Administration of the Death Penalty: A Legal and Empirical Analysis of the Nebraska Experience (1973–1999)*, 81 NEB. L. REV. 486, 541 & n.181 (2002) (finding that 25 percent of homicides (175/689) were death eligible under the Nebraska death sentencing system between 1973 and 1999). *But see* George Brauchler & Rich Orman, *Lies, Damn Lies, and Anti-Death Penalty Research*, 93 DENV. L. REV. 635, 637 (2016) (presenting the article as “in part, a rebuttal to” Marceau and Kamin).
72. See, e.g., Barbara O'Brien, Catherine M. Grosso, George Woodworth & Abijah Taylor, *Untangling the Role of Race in Capital Charging and Sentencing in North Carolina, 1990–2009*, 94 N.C. L. REV. 1997, 2024 tbl.2 (2016) (estimating that death-eligible murder cases in North Carolina during the 1990–2009 study period resulted in a death sentence in an estimated 6 percent of the cases); John J. Donohue III, *An Empirical Evaluation of the Connecticut Death Penalty System Since 1973: Are There Unlawful Racial, Gender, and Geographic Disparities?*, 11 J. EMPIRICAL LEGAL STUD. 637, 641 (2014) (reporting that the Connecticut capital sentencing scheme between 1973 and 2007 starts from the universe of death-eligible homicides and estimates that 5.8 percent

Most importantly for this Article, our previous findings report that California's death penalty statute fails to comply with the Eighth Amendment's narrowing requirement. First, we found that the death-eligibility rate among California homicide cases was the highest in the nation during the study period. We found that 95 percent of all first-degree murder convictions and 43 percent of all second-degree murder and voluntary manslaughter convictions were death eligible under the California statute in effect in 2008. Second, we documented that a death sentence is imposed in only a small fraction of the death-eligible cases. As a result, the California death-sentencing rate of 4.3 percent of all death-eligible cases is among the lowest in the nation and over two-thirds lower than the death-sentencing rate in pre-*Furman* Georgia.⁷³

Although a number of studies of charging and sentencing outcomes have identified racial disparities arising from post-*Furman* capital punishment schemes, we are not aware of any previous study that has closely examined racial disparities in the application of individual factors in a state death-eligibility statute. We address this question by analyzing the application of specific statutory special circumstances in California's death penalty statute. The extent to which this promiscuously broad statute creates room for arbitrary and capricious charging decisions—which themselves are racially biased—is the focus of our study.

B. Race and Capital Punishment

As a starting point, it is useful to review the death penalty's long association with racism in the United States. This history informs both our analysis of the statutes and the implications of our findings. As noted above, opponents to the expansion of the California death penalty statute expressly

of death-eligible homicides resulted in a death sentence (12/205)); Katherine Beckett & Heather Evans, *Race, Death, and Justice: Capital Sentencing in Washington State, 1981–2014*, 7 COLUM. J. RACE & L. 77, 90 (2016) (estimating a death-sentencing rate among death-eligible homicides of 11.7 percent (35/298)); David C. Baldus, Catherine M. Grosso, George Woodworth & Richard Newell, *Racial Discrimination in the Administration of the Death Penalty: The Experience of the United States Armed Forces (1984–2005)*, 101 J. CRIM. L. & CRIMINOLOGY 1227, 1229 (2011) (reporting an approximately 15 percent death-sentencing rate for cases between July 16, 1984, and October 13, 2005); Scott Phillips, *Continued Racial Disparities in the Capital of Capital Punishment: The Rosenthal Era*, 50 HOUS. L. REV. 131, 144 (2012) (estimating a 3–5 percent death sentencing rate based on carefully curated Supplemental Homicide Reports on Texas homicides as estimates).

73. See generally Baldus et al., *supra* note 10.

invoked this history in their interventions. Racial disparities have been endemic to the administration of capital punishment since the nation's founding.⁷⁴ Although much of the literature focuses on discrimination against black defendants and victims, a growing body of literature has begun to document and analyze the deep and pervasive history of discrimination against Latinx defendants and victims.⁷⁵

The disparities can be traced in part to overtly racist criminal laws from the eighteenth and nineteenth centuries. Before the Civil War, many Southern states explicitly legislated that slaves—and sometimes free blacks—could be sentenced to death for crimes punishable by lesser penalties when committed by whites.⁷⁶ Although the Fourteenth Amendment prohibits the imposition of differential penalties by race for the same crime—and explicitly prohibits “the hanging of a black man for a crime for which the white man is not to be hanged”⁷⁷—the death penalty has continued to be

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74. See CAROL S. STEIKER & JORDAN M. STEIKER, *COURTING DEATH: THE SUPREME COURT AND CAPITAL PUNISHMENT* 78 (2016); FRANKLIN E. ZIMRING, *THE CONTRADICTIONS OF AMERICAN CAPITAL PUNISHMENT* 89–118 (2003); Stuart Banner, *Traces of Slavery: Race and the Death Penalty in Historical Perspective*, in *FROM LYNCH MOBS TO THE KILLING STATE* 96 (Charles J. Ogletree, Jr. & Austin Sarat eds., 2006); JAMES W. MARQUART, SHELDEN ECKLAND-OLSON & JONATHAN SORENSEN, *THE ROPE, THE CHAIR, AND THE NEEDLE: CAPITAL PUNISHMENT IN TEXAS, 1923–1990* (1994); Stephen B. Bright, *Discrimination, Death, and Denial: Race and the Death Penalty*, in *THE MACHINERY OF DEATH: THE REALITY OF AMERICA'S DEATH PENALTY REGIME* 45 (David R. Dow & Mark Dow eds., 2002).
75. See Richard Delgado, *The Law of the Noose: A History of Latino Lynching*, 44 HARV. C.R.-C.L. L. REV. 297, 304–07 (2009) (exploring why the history of Latinx lynching is not better known); Martin G. Urbina, *A Qualitative Analysis of Latinos Executed in the United States Between 1975 and 1995: Who Were They?*, 31 SOC. JUST. 242, 242 (2004) (noting that prior research has followed a black/white dichotomous approach); see generally JOHN MACK FARAGHER, *ETERNITY STREET: VIOLENCE AND JUSTICE IN FRONTIER LOS ANGELES* 263–280 (2016) (documenting the use of lynching to punish and terrorize Latinx people in Los Angeles and Northern California); Camilo M. Ortiz, *Latinos Nowhere in Sight: Erased by Racism, Nativism, the Black-White Binary, and Authoritarianism*, 132 RUTGERS RACE & L. REV. 29 (2012) (collecting evidence of discrimination against Latinxs).
76. See, e.g., STUART BANNER, *THE DEATH PENALTY: AN AMERICAN HISTORY* 140–42 (2002); WILLIAM BOWERS ET AL., *LEGAL HOMICIDE: DEATH AS PUNISHMENT IN AMERICA, 1864–1982* 139–40 (1984); DAVID GARLAND, *PECULIAR INSTITUTION* 172 (2010).
77. See ERIC FONER, *RECONSTRUCTION: AMERICA'S UNFINISHED REVOLUTION 1863–1877* 244–47, 256–59 (1988) (observing that Civil Rights Act supporters in the 39th U.S. Congress “rejected the entire idea of laws differentiating between Black and white in access to the courts and penalties for crimes. The shadow of the Black Codes hung over these debates, and [Congressman Lyman] Trumbull began his discussion of the Civil Rights Bill with a reference to recent laws of Mississippi and South Carolina, declaring his intention ‘to destroy all these discriminations.’”).

applied predominantly to black defendants as well as those convicted of crimes against white victims throughout the country's history.⁷⁸

A robust literature confirms that racial disparities have infected capital punishment in the modern era.⁷⁹ Between 1930, when official statistics on capital punishment were first issued, and the moratorium in executions in 1972 following *Furman v. Georgia*, almost half the persons executed for murder and 90 percent of those executed for rape were African American, despite their much lower share of the defendant population for each of those crimes and their share of the U.S. population.⁸⁰ Those same racial disparities in capital punishment animated the majority concurrences of three of the justices in *Furman*.

Race as a contested jurisprudential factor in death sentencing and execution reached a watershed in *McCleskey v. Kemp*.⁸¹ Although the Court concluded that the proof of arbitrariness arising from race in death sentences was inadequate to prove a constitutional violation, forty years of continued study since then have demonstrated that the system is indeed arbitrary. Despite the strong evidence of interracial and intraracial sentencing disparities,⁸² evidence that the Court did not contest, the *McCleskey* majority required a showing of discriminatory *purpose* to satisfy the evidentiary demands of a discrimination claim.⁸³

78. See Stephen B. Bright, *Discrimination, Death, and Denial: The Tolerance of Racial Discrimination in Infliction of the Death Penalty*, in *FROM LYNCH MOBS TO THE KILLING STATE: RACE AND THE DEATH PENALTY IN AMERICA* 211, 212 (Charles J. Ogletree, Jr. & Austin Sarat eds., 2006).

79. See Sheri Lynn Johnson, *Race and Capital Punishment*, in *BEYOND REPAIR?: AMERICA'S DEATH PENALTY* 121 (Stephen P. Garvey ed., 2003); see generally Symposium, *Race to Execution*, 53 *DEPAUL L. REV.* 1401 (2004); Stephen B. Bright, *Discrimination, Death and Denial: The Tolerance of Racial Discrimination in Infliction of the Death Penalty*, 35 *SANTA CLARA L. REV.* 433 (1995); Benjamin Fleury-Steiner, Paul Kaplan & Jaime Longazel, *Racist Localisms and the Enduring Cultural Life of America's Death Penalty: Lessons from Maricopa County, Arizona*, 66 *STUD. L., POL., & SOC'Y* 63 (2015); O'Brien et al., *supra* note 72; Bryan A. Stevenson & Ruth E. Friedman, *Deliberate Indifference: Judicial Tolerance of Racial Bias in Criminal Justice*, 51 *WASH. & LEE L. REV.* 509 (1994).

80. Anthony G. Amsterdam, *Opening Remarks: Race and the Death Penalty Before and After McCleskey*, 39 *COLUM. HUM. RTS. L. REV.* 34, 35–37 (2007) (“A cardinal feature of the death penalty in the United States has always been its racially biased use.”).

81. 481 U.S. 279, 306 (1987).

82. See generally Baldus et al., *EQUAL JUSTICE AND THE DEATH PENALTY*, *supra* note 71 (presenting the studies underlying *McCleskey*'s claim, in full).

83. 481 U.S. at 292. In a conversation with John Jeffries, Justice Powell's biographer, shortly after he left the Court, Justice Powell expressed his regrets at having written the majority opinion in *McCleskey*. Justice Powell said that given a second chance, he would now join the four dissenters in that case and reverse the majority of death sentences in the United States. Justice Powell went further, asserting that “capital

Both before and after the *McCleskey* decision, research on racial disparities in capital punishment focused on charging decisions by prosecutors and sentencing decisions by judges and juries, finding robust and consistent evidence of disparate racial treatment of black or Latinx defendants or victims.⁸⁴ Studies with varying levels of detail and methodological sophistication have been conducted in numerous states.⁸⁵ Although not universal, the overwhelming majority of these

punishment should be abolished.” John C. Jeffries Jr., *A Change of Mind that Came Too Late*, N.Y. TIMES (June 23, 1994), <https://www.nytimes.com/1994/06/23/opinion/a-change-of-mind-that-came-too-late.html> [https://perma.cc/426T-RNN2].

84. See Catherine M. Grosso et al., *Race Discrimination and the Death Penalty, in AMERICA’S EXPERIMENT WITH CAPITAL PUNISHMENT: REFLECTIONS ON THE PAST, PRESENT AND FUTURE OF THE ULTIMATE PENAL SANCTION* 525, 540 (James R. Acker, Robert M. Bohm & Charles S. Lanier eds., 3d ed. 2014) (reviewing the literature).
85. In alphabetical order by state: PEG BORTNER & ANDY HALL, CTR. FOR URBAN INQUIRY, COLL. OF PUB. PROGRAMS AT ARIZ. STATE UNIV., *ARIZONA FIRST-DEGREE MURDER CASES SUMMARY OF 1995–1999 INDICTMENTS: DATA SET II, RESEARCH REPORT TO ARIZONA CAPITAL CASE COMMISSION* (2002); Stephen P. Klein & John E. Rolph, *Relationship of Offender and Victim Race to Death Penalty Sentences in California*, 32 JURIMETRICS J. 33 (1991); Glenn L. Pierce & Michael L. Radelet, *The Impact of Legally Inappropriate Factors on Death Sentencing for California Homicides, 1990–1999*, 46 SANTA CLARA L. REV. 1 (2005); Steven F. Shatz & Terry Dalton, *Challenging the Death Penalty with Statistics: Furman, McCleskey, and a Single County Case Study*, 34 CARDOZO L. REV. 1227 (2012) (California); Scott Anderson, *As Flies to Wanton Boys: Death-Eligible Defendants in Georgia and Colorado*, 40 TRIAL TALK 9–16 (1991); Stephanie Hindson et al., *Race, Gender, Region and Death Sentencing in Colorado, 1980–1999*, 77 U. COLO. L. REV. 549 (2006); Meg Beardsley et al., *Disquieting Discretion: Race, Geography & the Colorado Death Penalty in the First Decade of the Twenty-First Century*, 92 DENV. U. L. REV. 431 (2015) (Colorado); Donohue III, *supra* note 72 (Connecticut); Sheri Lynn Johnson, John H. Blume, Theodore Eisenberg, Valerie P. Hans & Martin T. Wells, *The Delaware Death Penalty: An Empirical Study*, 97 IOWA L. REV. 1925 (2012); BALDUS ET AL., *EQUAL JUSTICE AND THE DEATH PENALTY*, *supra* note 71 (Georgia); Sherod Thaxton, *Disentangling Disparity: Exploring Racially Disparate Effect and Treatment in Capital Charging*, 45 AM. J. CRIM. L. 95 (2018) (Georgia); Glenn L. Pierce & Michael L. Radelet, *Race, Region and Death Sentencing in Illinois, 1988–1997*, 81 OR. L. REV. 39 (2002); Thomas J. Keil & Gennaro F. Vito, *Race and the Death Penalty in Kentucky Murder Trials: 1976–1991*, 20 AM. J. CRIM. JUST. 17 (1995); Glenn L. Pierce & Michael L. Radelet, *Death Sentencing in East Baton Rouge Parish, 1990–2008*, 71 LA. L. REV. 647 (2011) (Louisiana); Raymond Paternoster & Robert Brame, *Reassessing Race Disparities in Maryland Capital Cases*, 46 CRIMINOLOGY 971 (2008); Katherine Barnes et al., *Place Matters (Most): An Empirical Study of Prosecutorial Decision-Making in Death-Eligible Cases*, 51 ARIZ. L. REV. 305 (2009) (Missouri); Michael Lenza et al., *The Prevailing Injustices in the Application of the Missouri Death Penalty (1978–1996)*, 32 SOC. JUST. 151 (2005); Baldus et al. *Arbitrariness and Discrimination*, *supra* note 71, at 486 (Nebraska); State v. Marshall, 613 A.2d 1059 (N.J. 1992); Leigh Bienen et al., *The Reimposition of Capital Punishment in New Jersey: The Role of Prosecutorial Discretion*, 41 RUTGERS L. REV. 27 (1988); DAVID S. BAIME, REPORT TO THE SUPREME COURT: SYSTEMIC PROPORTIONALITY REVIEW PROJECT 2000–2001 TERM (JUNE 1, 2001) (New Jersey); O’Brien et al., *supra* note 72 (North Carolina); David C. Baldus, George Woodworth, David Zuckerman & Neil Alan Weiner, *Racial Discrimination and the Death Penalty in the Post-Furman Era: An Empirical and Legal Overview, with Recent*

studies indicate that a defendant's likelihood of receiving the death penalty is enhanced if the victim is white as opposed to black, Latinx, or another race.⁸⁶ Subsequent charging and sentencing studies find lower odds but consistent and statistically significant disparities.⁸⁷

For example, a recent study of capital charging and sentencing decisions in North Carolina between 1990 and 2009 was modeled on the Baldus study of Georgia.⁸⁸ The primary model analyzing death sentencing among all death-eligible cases showed that—even after controlling for multiple measures of culpability—defendants in cases with at least one white victim faced odds of receiving a death sentence that were 2.17 times the odds faced by defendants in all other cases. The evidence further suggested that this effect arises primarily in charging decisions, when prosecutors systematically disregard cases in which black defendants kill black victims. The odds of a black defendant/black victim case advancing to a capital trial were 2.6 times lower than the odds faced by all other cases. The study found that white victim cases and black defendant/black victim cases pulled

Findings from Philadelphia, 83 CORNELL L. REV. 1638 (1998) (Pennsylvania); Raymond Paternoster & AnnMarie Kazyaka, *The Administration of the Death Penalty in South Carolina: Experiences Over the First Few Years*, 39 S.C. L. REV. 245 (1988); Michael J. Songer & Isaac Unah, *The Effect of Race, Gender, and Location on Prosecutorial Decisions to Seek the Death Penalty in South Carolina*, 58 S.C. L. REV. 161 (2006); John M. Scheb II et al., *Race, Prosecutors, and Juries: The Death Penalty in Tennessee*, 29 JUST. SYS. J. 338 (2008); Deon Brock et al., *Arbitrariness in the Imposition of Death Sentences in Texas: An Analysis of Four Counties by Offense Seriousness, Race of Victim, and Race of Offender*, 28 AM. J. CRIM. L. 43 (2000); Sheldon Ekland-Olson, *Structured Discretion, Racial Bias, and the Death Penalty: The First Decade after Furman in Texas*, 69 SOC. SCI. Q. 853 (1988); Phillips, *supra* note 72 (Texas); Scott Phillips, *Racial Disparities in the Capital of Capital Punishment*, 45 HOUS. L. REV. 807 (2008) (Texas); JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION OF THE VIRGINIA GENERAL ASSEMBLY, REVIEW OF VIRGINIA'S SYSTEM OF CAPITAL PUNISHMENT (2002).

86. See Catherine Lee, *Hispanics and the Death Penalty: Discriminatory Charging Practices in San Joaquin County, California*, 35 J. OF CRIM. JUST. 17, 22 (2007) (reviewing the literature and reporting that “[t]he results replicated previous findings, discovering that defendants in White victim cases . . . faced much greater odds of being charged with a death-eligible offense than did defendants in Black victim cases. This investigation also permitted Hispanic/White comparisons. Defendants in White victim cases faced greater odds of being charged with capital homicide than defendants in Hispanic victim cases.”); Michelle A. Petrie & James E. Coverdill, *Who Lives and Dies on Death Row? Race, Ethnicity, and Post-Sentence Outcomes in Texas*, 57 SOC. PROBS. 630, 630 (2010) (reporting that “cases involving minorities—with black or Latinx offenders or victims—have lower hazards of execution than cases in which both offenders and victims are white”); Shatz & Dalton, *supra* note 85, at 1246–51 (reviewing the literature on race and capital punishment).

87. See *infra* notes 89–93.

88. See BALDUS ET AL., EQUAL JUSTICE AND THE DEATH PENALTY, *supra* note 71, at 44–46, 313–32 (presenting the charging and sentencing study).

strongly in opposite directions. In both instances, race—a factor unrelated to culpability and repugnant to the criminal justice system—played a significant role.⁸⁹

Recent research has documented additional ways that race infects capital decisionmaking. For example, scholars have tied increased exposure to capital punishment for Latinx defendants to “the pervasive, dehumanizing political rhetoric surrounding immigration reform.” Maritza Perez collects evidence of negative contacts between Latinos and the criminal justice system to build her case. For example, she documents that Latinos face “[a]pproximately 60 percent of hate crimes motivated by race or ethnicity,” “are more likely than their white peers to be arrested,” “are more likely than white people to be denied bail, required to pay bail, or obligated to pay a higher bail to be released,” and “during plea bargaining, prosecutors are more likely to offer Latinos punitive deals—which often include a custodial sentence—compared to their white counterparts.” Jennifer Eberhardt and colleagues used the data from the Baldus study of charging and sentencing in Philadelphia to show that among defendants convicted of murdering a white victim, defendants whose appearance was more stereotypically black (e.g., darker skinned, with a broader nose and thicker lips) were sentenced more harshly and, in particular, were more likely to be sentenced to death than defendants with less stereotypically black features. This finding held even after the researchers controlled for the many nonracial factors that might account for the results.⁹⁰ Analogous stereotypes about Latinx defendants, including stereotypes about dangerousness, create a risk of similar outcomes.⁹¹

89. O'Brien et al., *supra* note 72, at 1998.

90. Jennifer L. Eberhardt et al., *Looking Deathworthy: Perceived Stereotypicality of Black Defendants Predicts Capital-Sentencing Outcomes*, 17 *PSYCHOL. SCI.* 383, 384 (2006) (reporting results of an experiment on race using data from Baldus et al., *EQUAL JUSTICE AND THE DEATH PENALTY*, *supra* note 71).

91. See Benjamin Fleury-Steiner & Victor Argothy, *Lethal 'Borders': Elucidating Jurors' Racialized Discipline to Punish in Latino Defendant Death Cases*, 6 *PUNISHMENT & SOC'Y* 67, 70 (2004) (“The image of Latin[x] Americans as ‘dangerous’ and ‘immoral’ goes back at least as early as Columbus’s voyage to the Greater Antilles in the late 15th Century. Chronicling a series of observations of the New World, Columbus’s grossly inaccurate descriptions of early indigenous peoples as ‘fierce’, ‘immoral’, and ‘cannibalistic’, served as important ‘seeds for the development of racialized stereotypes.’”) (citing Diego O. Castro, “*Hot Blood and Easy Virtue*”: *Mass Media and the Making of Latino/A Stereotypes*, in *IMAGES OF COLOR, IMAGES OF CRIME* 135 (Coramae Richey Mann & Marjorie S. Zatz eds., 1998)); FARAGHER, *supra* note 75 (documenting the use of lynching to punish and terrorize Latinx people in Los Angeles and Northern California).

Recent research has documented additional ways in which race infects capital decisionmaking. Similarly, studies of jury decisions find evidence of racial bias. Benjamin Fleury-Steiner and Victor Argothy analyzed Capital Jury Project juror interviews from capital cases involving Latinx defendants in Texas and California. The scholars examined responses in which jurors in Latinx defendant death cases referred to the defendant's or the family of the defendant's appearance and courtroom behavior. The intention was to evaluate how jurors "drew on cultural understandings of Latinx identity in describing their punishment decisions."⁹² In one exchange, a juror described the defendant's family in the courtroom in a manner that invoked stereotypes of "threatening Latinos," thereby silently "locating the defendant among the 'hard looking Hispanic' group."⁹³ The scholars observed that "[j]udging a defendant they know nothing or very little about, former white and Latin[x] capital jurors import . . . a racialized discourse from the outside *in*."⁹⁴

Researchers have consistently found racial disparities in jury selection in capital trials throughout the United States.⁹⁵ The most recent study examined race-based juror selection in trials held from 1992 to 2017 in Mississippi's Fifth Circuit Court District and found racial disparities in peremptory strike decisions, even after controlling for race-neutral factors.⁹⁶ A team of data experts and reporters analyzed juror responses in thirteen capital trials using about sixty-five different variables, including the juror's

92. Fleury-Steiner & Argothy, *supra* note 91, at 74 (describing the analytical focus of the research).

93. *Id.* at 77–78.

94. *Id.* at 80. In related research, Cynthia Willis-Esqueda and Russ K.E. Espinoza found that European American mock jurors recommended the death penalty significantly more often for low socioeconomic status Latinx defendants in a weak mitigation evidence condition. Russ K.E. Espinoza & Cynthia Willis-Esqueda, *The Influence of Mitigation Evidence, Ethnicity, and SES on Death Penalty Decisions by European American and Latino Venire Persons*, 21 CULTURAL DIVERSITY & ETHNIC MINORITY PSYCHOL. 288 (2015). Additionally, Justin Levinson found that death-qualified jurors—those who are neither categorically opposed to capital punishment nor believing that a death penalty must be imposed in all instances of capital murder—harbored stronger racial biases than jurors excluded on these bases. Justin D. Levinson et al., *Devaluing Death: An Empirical Study of Implicit Racial Bias on Jury-Eligible Citizens in Six Death Penalty States*, 89 N.Y.U. L. REV. 513 (2014).

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

96. WILL CRAFT, PEREMPTORY STRIKES IN MISSISSIPPI'S FIFTH CIRCUIT COURT DISTRICT, APM REPORTS (2018), https://www.apmreports.org/files/peremptory_strike_methodology.pdf [<https://perma.cc/9BGA-3VWK>].

race, whether the juror was accused of a crime, and whether the juror was hesitant about the death penalty. These researchers estimated a logistic regression model to determine the odds that individual variables affected the likelihood that a juror was removed by a prosecutor's peremptory challenge. The report determined that a black juror in a capital murder trial was 8.65 times more likely to be struck than a similarly situated white juror. In fact, "[b]eing Black was the greatest predictor of being struck in capital trials, even more than expressing hesitation about imposing the death penalty."⁹⁷ Experimental evidence shows much of the same bias shown in the actual juror studies.⁹⁸

Race may also infect capital decision making before the selection of jurors, as early as the arrest of a suspect by police. A recent study examines homicides reported in the Federal Bureau of Investigation's Supplementary Homicide Reports between 1976 and 2009, finding that homicides with white victims were more likely to be cleared by the arrest of a suspect than homicides with nonwhite victims. The study also finds that counties with large nonwhite populations have lower clearance rates than predominantly white counties.⁹⁹ Racial disparities in police responses to potentially death-eligible murders raise serious doubts as to whether the death penalty can be equitably applied. If implicit bias in police agencies produces a biased pool of death-eligible defendants, the race-infected charging and prosecution of death-eligible defendants is likely to multiply those biases.¹⁰⁰

In the past decade, research on racial disparities has been dispositive of constitutionally impermissible practices in charging and sentencing under state constitutional law. The Connecticut Supreme Court relied on empirical evidence of racial disparities in charging and sentencing to find the death penalty statute in that state to be infected by invidious racial

97. *Id.* at 12.

98. Samuel R. Sommers & Michael I. Norton, *Race-Based Judgments, Race-Neutral Justifications: Experimental Examination of Peremptory Use and the Batson Challenge Procedure*, 31 LAW & HUM. BEHAV. 261 (2007) (reviewing the literature and presenting new research).

99. Jeffrey Fagan & Amanda Geller, *Police, Race, and the Production of Capital Homicides*, 24 BERKELEY J. CRIM. L. 261, 266 (2019).

100. See Ronald J. Tabak, *Is Racism Irrelevant? Or Should the Fairness in Death Sentencing Act be Enacted to Substantially Diminish Racial Discrimination in Capital Sentencing?*, 18 N.Y.U. REV. L. & SOC. CHANGE 777, 793-94 (1990) (discussing how the composition of cases produced by police can multiply the biases of prosecutors and jurors in charging and sentencing death-eligible cases).

discrimination, ruling it unconstitutional in 2015.¹⁰¹ Similarly, the Washington Supreme Court invalidated the state death penalty statute based on empirical research showing that death sentences were imposed in an arbitrary and racially biased manner in violation of state constitutional law.¹⁰²

IV. DATA AND METHODS

This Article reports the second set of findings from a research project designed to evaluate the extent to which the California death penalty law satisfies the constitutional narrowing requirements.¹⁰³ The earlier research concludes that the enormous breadth of California's statutory special circumstances combined with the state's extremely low death-sentencing rate among death-eligible cases fails to comply with *Furman's* narrowing requirement.¹⁰⁴ This Article focuses on the application of individual special circumstances and evaluates the extent to which special circumstances apply disparately to defendants by race or ethnicity. Such racial and ethnic heterogeneity in death eligibility only rarely has been identified, but clearly was on the minds of the *Furman* majority.¹⁰⁵ This analysis is essential to

101. *State v. Santiago*, 122 A.3d 1, 70 (Conn. 2015) (“[F]our members of this court likewise have concluded that the degree of factfinder discretion required by the federal constitution means that the death penalty in Connecticut has been and inevitably will continue to be imposed with a degree of discrimination that is impermissible under the state constitution. . . . [I]nvidious discrimination . . . pave[s] a smoother path to execution for a subset of the population.”) (italics and citations omitted). In a subsequent 2015 opinion, the Connecticut Supreme Court denied a stay and allowed the ban on capital punishment to apply retroactively. *State v. Santiago*, 125 A.3d 520 (Conn. 2015).

The court relied on evidence provided by John J. Donohue, who studied the 205 death-eligible murders that led to homicide convictions in Connecticut from 1973–2007. See Donohue, *supra* note 72, at 641. Donohue found statistically significant evidence that minority defendants who kill white people are more likely to receive a death sentence than white defendants in comparable cases. *Id.* at 647–50. Donohue’s findings speak to overbreadth as well as race discrimination. He found that only one of the nine death sentences sustained during the study period actually fell among the most egregious death-eligible cases. For the eight other cases in which defendants were sentenced to death, the median number of equally egregious death-eligible cases in which the defendant did not receive a death sentence was thirty-five or forty-six, depending on the measure of egregiousness used. *Id.* at 676–79.

102. *State v. Gregory*, 427 P.3d 621, 627 (Wash. 2018). The Washington Supreme Court relied on evidence provided by Katherine Beckett and Heather Evans showing that jurors are between 3.5 and 4.6 times more likely to impose a death sentence when the defendant is black. *Id.* at 633; Beckett & Evans, *supra* note 72 at 101–04.

103. CAL. PENAL CODE § 190.2 (West 2019).

104. Baldus et al., *supra* note 10.

105. See, e.g., Thaxton, *supra* note 85.

identify the extent of the limitations—if not failures—of states to satisfy *Furman*'s narrowing requirement.

A. The Universe and Sample of Cases

To conduct our analysis of the narrowing effect of California's post-*Furman* law, we examined the universe defined as all defendants convicted of first-degree murder, second-degree murder, and voluntary manslaughter, using a machine-readable database produced by the California Department of Corrections and Rehabilitation (CDCR).¹⁰⁶ This database includes information on 27,453 cases with a date of offense between January 1, 1978, and June 30, 2002.¹⁰⁷ The database includes 32 percent first-degree murder cases, 29 percent second-degree murder cases, and 39 percent voluntary manslaughter cases.

From this universe, we derived a 6.9 percent (1,900/27,453) sample. We stratified the sample on three dimensions to produce a more representative sample of the cases than would have been produced by a random sampling method. The first dimension, the crime of conviction, provides proportionate representation for first-degree, second-degree, and voluntary manslaughter conviction cases.

The second dimension is the population density of the county of prosecution.¹⁰⁸ We designed this dimension with four levels to obtain a representative sample of smaller and more rural counties. Our goal was to include 25 percent of the sample from Los Angeles (which accounts for 42 percent of the cases in the universe) and 25 percent of the sample from each of the three other groups of counties ranked in terms of population density.¹⁰⁹

106. The state was directed by the federal district courts in the underlying habeas corpus proceedings to produce the database used to construct the stratified random sample and probation reports for the cases that we identified as part of the sample.

107. For each case, the California Department of Corrections and Rehabilitation (CDCR) database includes information on the date of offense, crime of conviction, county of prosecution, county court case number, CDCR case number, date of conviction, and the gender and age of the defendant.

108. County population per square mile was calculated by the authors for the year 2000 using the following data source: CAL. DEP'T OF FINANCE, CALIFORNIA STATISTICAL ABSTRACT, SEC. A, TABLE A-1 (county land square miles), SEC. B, TABLE B-3 (county population) (2001).

109. The counties in the four population density levels from low (1) to high (4) density are as follows. Level 1 has forty-one counties with a population density per square mile of fewer than 200 people: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Imperial, Inyo, Kern, Kings, Lake, Lassen, Madera,

For the third dimension, we stratified the sample based on four time periods that would enable us to overrepresent cases from the *Carlos Window*,¹¹⁰ during which time the two habeas corpus petitioners raising the narrowing challenge to the California statute were sentenced to death. Our goal was to create a sample with 57 percent of the cases from this time period.

Our methods produced a stratified random sample of cases consisting of forty-eight strata: three offense categories by four county population density categories by four time periods. For each stratum, we weighted the cases in the sample based on the ratio of the number of cases in the universe and the sample. For example, if a stratum contained one hundred cases in the universe and twenty cases in the sample, the weight for each case in the sample from that stratum would be 5.0 (100/20).

Table 1 presents the final sample and estimated universe, by conviction and by sentence outcome. Each row of information includes the number of cases in the 1,900-case sample and in the 27,453-case estimated universe. Row 1 reports that the sample includes 61 death-sentenced cases, 193 resulting in life without parole (LWOP), and 1,646 resulting in a sentence less than LWOP. Rows 2–4 report the distribution of these sentencing outcomes by conviction. Column F reports that 764 of the cases in the sample resulted in a first-degree murder conviction, 491 in a second-degree murder conviction, and 645 in a voluntary manslaughter conviction.

Mariposa, Mendocino, Merced, Modoc, Mono, Monterey, Napa, Nevada, Placer, Plumas, San Benito, San Bernardino, San Luis Obispo, Santa Barbara, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuba. Level 2 has nine counties with a population per square mile larger than 200 and smaller than 700: Marin, Riverside, San Diego, San Joaquin, Santa Cruz, Solano, Sonoma, Stanislaus, and Ventura. Level 3 has seven counties with a population per square mile between 700 and 3,400 people: Alameda, Contra Costa, Orange, Sacramento, San Francisco, San Mateo, and Santa Clara. Level 4 is Los Angeles.

110. See *supra* note 50–51 and accompanying text (providing details on the legal basis for the *Carlos Window* and providing details on the underlying legal cases). The four time periods are January 1, 1978 to December 11, 1983, December 12, 1983 to October 13, 1987 (the *Carlos Window*), October 14, 1987 to December 31, 1992, and January 1, 1993 to June 30, 2002.

Table 1: Description of the Sample by Sentence Outcome

A	B	C		D		E		F
		<i>Death</i>		<i>LWOP</i>		<i>Term of Years</i>		<i>Total</i>
		%	n	%	n	%	n	n
Total	<i>Sample</i>	3%	61	10%	193	87%	1,646	1,900
	<i>Weighted</i>	3%	705	9%	2,364	89%	24,384	27,453
First-degree murder conviction	<i>Sample</i>	8%	61	25%	193	67%	510	764
	<i>Weighted</i>	8%	705	27%	2,364	65%	5,642	8,711
Second-degree murder conviction	<i>Sample</i>	-	0	-	0	100%	491	491
	<i>Weighted</i>	-	0	-	0	100%	7,900	7,900
Voluntary manslaughter conviction	<i>Sample</i>	-	0	-	0	100%	645	645
	<i>Weighted</i>	-	0	-	0	100%	10,842	10,842

B. Data Sources for Cases

The primary source of information on each case was the probation report prepared by the county probation officer with jurisdiction over the case. California law requires the preparation of a probation report for each homicide regardless of the crime of conviction and sentence.¹¹¹ The purpose of the report is to justify the probation officer's recommendation on the appropriateness of probation as a sentencing alternative in the case. These reports, routinely relied on by California courts, are subject to examination and correction by both the prosecuting authorities and defendants.¹¹²

One limitation of the probation reports is that they are often prepared pretrial so that the ultimate crime of conviction may not be noted in the report. When that occurred, we consulted the crime of conviction reported in the CDCR database. On other occasions, the probation report contained insufficient procedural information because it failed to report the crime charged or the basis of the conviction (by guilty trial verdict or guilty plea) or both, information that may be essential to assess the death eligibility of a case.

Some probation reports also included insufficient substantive information about the facts of the crime. Missing procedural or substantive information occurred in 16 percent of the cases for which we received a probation report from the state. The Habeas Corpus Resource Center

111. CAL. PENAL CODE § 1203 (West 2019).

112. CAL. PENAL CODE § 1203.01 (West 2019).

(HCRC) cured the insufficiency in 106 cases, thus reducing the percentage of cases with missing information to 11 percent.¹¹³

The state's obligation to provide probation reports was defined by court orders. Some reports, however, were not produced by the state or contained no usable information. When we encountered these situations, we replaced the probation report with a substitute report that was randomly selected from the sampling lists.

C. The Coding Process for Individual Cases

Each case was coded into the data collection instrument (DCI) based primarily on the probation reports. The information in the probation reports provided the basis for the final coding decisions unless an information insufficiency was present and we obtained additional information from HCRC. We also consulted appellate judicial opinions where applicable. The coding of the DCI was conducted by thirteen University of Iowa law students and eight recent University of Iowa law graduates.¹¹⁴

The DCI documents charging and sentencing decisions and, if the case was capitally charged, any special circumstances alleged, found, or rejected. It further documents any sentencing outcomes reported in the probation report. The DCI also assesses liability for first-degree murder and the factual presence of each special circumstance under pre-*Furman* Georgia law, post-*Furman* *Carlos* Window California law, and 2008 California law.¹¹⁵ A final section of the DCI summarizes the coder's judgment of each case's death eligibility under each of the three legal regimes. We evaluate the application of special circumstances in this Article under the third regime—2008 California law.

113. The Habeas Corpus Resource Center (HCRC) represented one of the underlying petitioners in the federal habeas corpus proceedings. HCRC consulted trial and appellate court records in the case and reported the missing information if it was available. When the HCRC was able to provide us with documents containing the information needed about a case, it was coded accordingly, and the case was returned to the active sample of cases.

114. The University of Iowa law students were Sadad Ali, Peter D'Angelo, John Magana, Jacob Natwick, Fangzhou Ping, Thomas Farrens, Folke Simons, Erin Snider, Jason Stoddard, James Vaglio, Porntiwa Wijitgomen, Fei Yu, and Weiyan Zhang. The recent law graduates were Rebecca Bowman, Edward Broders, Theresa Dvorak, David Franker, Luke Hannan, Beth Moffett, Amanda Stahle, and Kristen Stoll.

115. See *infra* Part II for a discussion of each time period.

1. Identifying Liability for First-Degree Murder and the Factual Presence of Special Circumstances in the Cases

The HCRC provided a detailed summary of the law concerning the elements of murder liability to the Iowa coding team.¹¹⁶ When legal questions arose under the terms of the coding protocol, the coders certified legal questions to HCRC counsel to which HCRC replied in writing.

We applied two core principles of interpretation to assess the factual death eligibility of each case. The first principle is the controlling factfinding rule, which limits the coders' discretion to override authoritative fact findings of juries and judges in particular cases.¹¹⁷ The rule stipulates that if an authoritative fact finder (judge or jury) with responsibility for finding a defendant liable for first-degree murder convicts the defendant of second-degree murder or voluntary manslaughter, that finding is considered to be a controlling fact and the coder must code the case at the reduced level of homicidal liability in the absence of overwhelming evidence of jury nullification. The rule also holds that an authoritative fact finding of first-degree murder or a first-degree murder guilty plea is a controlling fact, and the case will be coded at that level of liability. The same rule applies with respect to allegations and findings of the presence or absence of special circumstances in the case and defendant admissions of their presence.¹¹⁸

The second core principle of interpretation, known as the legal sufficiency standard, assesses whether a California appellate court would affirm a jury conviction for first-degree murder or a jury's finding of the presence of a special circumstance in the case if a jury had made either of those findings and the finding was challenged on appeal for a lack of sufficient evidence. In the application of this principle, exculpatory evidence offered by the defendant is given no weight, but incriminating evidence offered by the defendant is credited.

116. These summaries were provided to the California Attorney General's Office, which represents California in federal habeas corpus proceedings, and were also entered into evidence at the evidentiary hearing conducted by the district court in *Ashmus v. Wong*, No. 3:93-cv-00594-TEH (N.D. Cal. Feb. 17, 1993).

117. David Baldus, George Woodworth, David Zuckerman, Neil Alan Weiner & Catherine M. Grosso, *Empirical Studies of Race and Geographic Discrimination in the Administration of the Death Penalty: A Primer on the Key Methodological Issues*, in *THE FUTURE OF AMERICA'S DEATH PENALTY AN AGENDA FOR THE NEXT GENERATION OF CAPITAL PUNISHMENT RESEARCH* 153, 164–65 (C. Lanier, W. Bowers & J. Acker eds., 2009) (explaining the rationale of the controlling factfinding rule).

118. Prosecutors are not viewed as controlling fact finders in the same way as jurors and judges.

Coders relied on three forms of authority to support their judgments on whether the facts satisfied the legal sufficiency test. The strongest level of authority was a factually comparable case in which a jury or trial court's first-degree murder or special circumstance finding of fact was sustained or reversed by a California appellate court when challenged with a claim of evidentiary insufficiency. The second level of authority was a factually comparable case in this study in which a fact finder returned a finding of fact on first-degree murder liability or the presence of a special circumstance that was not disturbed on appeal. The third level of authority was the case law and legal memorandum provided by HCRC.

We measured the presence of individual special circumstances under each of the three legal regimes. (The analysis in this Article relies on the assessments under 2008 California law.) Coding assessments allowed coders to identify situations in which the presence of a special circumstance was a close call. Close call classifications arose when the special circumstance classification was not determined by a controlling finding of fact and the circumstances of the offense were not sufficiently well understood to support clear coding. When we were uncertain how an appellate court would rule on finding a special circumstance in the case, we coded it a close call.

These distinctions produced two measures of death eligibility—a conservative measure that limited death eligibility to clearly present classifications and a liberal measure that classified a case as death eligible if that status was either clearly present or a close call. For the purposes of this Article, we rely only on the liberal measure. That is, the analysis below considers a special circumstance present when the coders coded it as clearly present or found a close call.¹¹⁹

2. Coding Defendant and Victim Race and Ethnicity

Limited and missing information for race or ethnicity presented a significant issue in this study. The original sources used to code this database did not regularly report race or ethnicity of the defendants or the name, race, or ethnicity of the victims. The coders were instructed to code race and ethnicity when it was available in the probation reports. HCRC consulted trial and appellate court records and identified victim names, and defendant and victim race and ethnicity, where available. As a starting

119. In Baldus et al., *supra* note 10, we note these distinctions and report both the conservative and liberal estimates. They did not make a substantive difference in that analysis.

point, the initial coding here reflects all the limitations in the race or ethnicity designations by the court and prison officials.¹²⁰

The initial coding process identified 81 percent of defendant race or ethnicity (1,546/1,900) but only 33 percent of victim race or ethnicity (630/1,900). As noted, the probation reports often omitted victim name, race, and ethnicity. This was particularly true for second-degree murder and voluntary manslaughter cases.

In 2018, we employed seven Columbia Law School students to search for missing victim names.¹²¹ The students were provided lists including defendant names, county, sentencing and offense dates, and case numbers. We instructed them to find the missing names using internet search engines, online newspapers local to the underlying homicide, Westlaw, Lexis, the California Department of Corrections websites, and San Francisco Homicides, 1849–1993, compiled by Kevin J. Mullen at the Ohio State University Criminal Justice Research Center.¹²² This effort identified missing victim names in 134 cases, leaving 129 cases with no information on the name of the victim.

With a more complete list of names, our next step was to estimate missing race by applying a verified and commonly used method that assigns the probability of a person being a particular race or ethnicity using census data.¹²³ The U.S. Census Bureau used self-reported race or ethnicity data to

120. See Urbina, *supra* note 75, at 247 (2004) (“Not all states keep race and ethnicity of inmates under a sentence of death, other than ‘whites’ and ‘blacks,’ and most states do not differentiate between the different Latino groups. Record-keeping methods also vary widely across states. As a result, information on Latinos, especially for specific Latino groups, is scant and unreliable.”); see also Barbara O’Brien, Klara Stephens, Maurice Possley, & Catherine M. Grosso, *Latinx Defendants, False Convictions, and the Difficult Road to Exoneration*, 66 UCLA L. REV. 1682 (2019).

121. The Columbia Law School student researchers were Greg Bernstein, Melissa Castillo, Ed Costikyan, Andrew Howard, Mary Marshall, Olivia Morrison, and Andrew Pai.

122. Available from the authors upon request.

123. The current analysis used the 2010 Census surname list B. See UNITED STATES CENSUS BUREAU, FREQUENTLY OCCURRING SURNAMES FROM THE CENSUS 2010, FILE B: SURNAMES OCCURRING 100 OR MORE TIMES (2010), https://www.census.gov/topics/population/genealogy/data/2010_surnames.html [<https://perma.cc/Q2V6-A6M4>].

This method has been applied and accepted to identify Hispanic ethnicity in a 2013 case in the U.S. District Court for the District of Arizona alleging racial discrimination under the Equal Protection Clause of the Fourteenth Amendment. See Findings of Fact and Conclusions of Law, Doc. 579 at 79, *Melendres v. Arpaio*, 989 F. Supp. 2d 822 (D. Ariz. 2013) (No. 07-CV-02513). “Dr. Taylor’s statistics in this respect were, apparently, more sophisticated than those provided in the 1980 census list of Spanish surnames.” *Id.* at 79 n.69.

Dr. Taylor relied on independent U.S. Census data correlating the likelihood that a person with any given name self-identified as Hispanic. He did a differential analysis

compile a list of over 160,000 surnames occurring one hundred or more times from the 2010 Census. Combining these names with the self-reports of race and ethnicity, the Census Bureau computed the probability of a person living in the United States with that name being white, black, Native American or Pacific Islander, Asian, or Latinx.¹²⁴ Studies comparing this procedure with other algorithms for assigning race or ethnicity suggest comparably high accuracy, sensitivity, and positive predictive value when compared with self-reports.¹²⁵

For each of these racial or ethnic groups, we coded the classifications at three levels of probability: 60, 75, or 90 percent. There were no overlaps; that is, if a person's name had a probability of 60 percent or more of being Latinx, they had no other probability above 60 percent. Accordingly, that person was classified as Latinx. We did the same for each of the other categories. Persons whose names did not meet the 60 percent threshold for any of the population groups were coded as missing on the race or ethnicity variable. Our main estimates of race and ethnicity effects for defendants used the 60 percent classification threshold. At this threshold, we reduced the rate of missing defendant race to 4 percent (81 cases).¹²⁶ The other thresholds were used in sensitivity analyses.

Even after undertaking this level of effort to identify the missing information, however, we continued to have 20 percent missing information for victim race or ethnicity (400 cases) at the 60 percent probability level.¹²⁷

that focused particularly on names whose owners identified as Hispanic more than 90 percent of the time, more than 80 percent of the time, and more than 70 percent of the time. He also included names whose owners self-identified as Hispanic at a 60 percent threshold as "a type of robustness analysis."
Id. at 79 (citations omitted).

124. U.S. CENSUS BUREAU, *supra* note 123.

125. See Mikhail Bautin & Steven Skiena, *Concordance-Based Entity-Oriented Search*, 7 WEB INTELLIGENCE & AGENT SYS.: AN INT'L J. 303 (2009); Francis P. Boscoe et al., *Heuristic Algorithms for Assigning Hispanic Ethnicity*, PLOS ONE, Feb. 2013, at 1, <https://doi.org/10.1371/journal.pone.0055689> [<https://perma.cc/SU8C-VDJV>]; see also David L. Word et al., *Demographic Aspects of Surnames from Census 2000* (2008) (unpublished manuscript), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.192.3093&rep=rep1&type=pdf> [<https://perma.cc/7LPK-SY3R>]; Anurag Ambekar et al., *Name-Ethnicity Classification from Open Sources*, in PROCEEDINGS OF THE 15TH ACM SIGKDD INTERNATIONAL CONFERENCE ON KNOWLEDGE DISCOVERY AND DATA MINING 49–58 (2009), <https://www3.cs.stonybrook.edu/~skiena/lydia/names.pdf> [<https://perma.cc/C7CL-JY6H>].

126. The 75 percent threshold yielded 9 percent missing (173 cases), and the 90 percent threshold yielded 14 percent missing (267 cases).

127. The 75 percent threshold yielded 36 percent missing (686 cases), and the 90 percent threshold yielded 50 percent missing (965 cases).

V. FINDINGS ON THE ROLE OF RACE AND ETHNICITY IN THE REACH OF SPECIAL CIRCUMSTANCES

Table 2 presents the study sample and weighted universe by conviction (in rows) and race and ethnicity of the defendant (in columns). The top row presents the sample overall, with the next three rows showing the distribution among first- and second-degree murder and voluntary manslaughter cases. Columns A, B, and C show that black, white, and Latinx defendants compose roughly equal and large portions of the sample, and combined account for 92 percent of the sample.

Table 2: Description of the Sample by Race or Ethnicity of Defendant and Conviction

		A		B		C		D		E		F
		<i>Black</i>		<i>White</i>		<i>Latinx</i>		<i>Other</i>		<i>Missing</i>		<i>Total</i>
Total	<i>Sample</i>	26%	498	37%	696	28%	540	4%	80	4%	86	1,900
	<i>Weighted</i>	30%	8,374	29%	7,873	33%	9,030	4%	1,178	3%	999	27,453
M1 conviction	<i>Sample</i>	28%	212	39%	301	24%	184	4%	29	5%	36	764
	<i>Weighted</i>	33%	2,486	31%	2,595	27%	2,269	5%	391	5%	382	8,711
M2 conviction	<i>Sample</i>	21%	103	39%	192	30%	146	5%	26	5%	25	491
	<i>Weighted</i>	26%	2,041	31%	2,430	35%	2,760	5%	397	3%	272	7,900
VM conviction	<i>Sample</i>	28%	183	31%	203	33%	210	4%	25	4%	25	645
	<i>Weighted</i>	32%	3,436	25%	2,762	36%	3,934	4%	390	3%	320	10,842

Note: Rows and columns may not sum to total due to weighting.

We next estimate the scope of the special circumstances identified in the California statute by race and ethnicity. Although many of the special circumstances appear to apply evenly across race and ethnicity, we identified six that do not. The analyses below focus on those six circumstances—multiple victims,¹²⁸ lying in wait,¹²⁹ robbery/burglary,¹³⁰ torture,¹³¹ drive-by

128. CAL. PENAL CODE § 190.2(3) (West 2019).

129. CAL. PENAL CODE § 190.2(15) (West 2019).

shooting,¹³² and gang membership¹³³—and identify racial and ethnic disparities associated with each. The results demonstrate how the California death penalty statute’s expansive special circumstances not only fail to meaningfully narrow death eligibility but also do so in a manner that applies to defendants of some races or ethnicities differently than others.

We base our conclusions on four levels of analysis presented in three Subparts. Part V.A presents the simple distribution of the cases in which each of the six special circumstances is found or present by race or ethnicity. Part V.B focuses more sharply on the risk faced by each race or ethnicity regardless of the number of cases in the study. The results report the percent of the total cases in which each special circumstance is present or found for each race or ethnicity. Neither of these results consider the possibility that relative culpability of cases would explain the disparate application of the special circumstance. Part V.C presents the results of two sets of analysis in which we introduce culpability and time controls.

130. CAL. PENAL CODE § 190.2(17)(A) & (17)(G) (West 2019). Although these two special circumstances may be separately charged and found, given the overlapping nature of the two, we combined them for the purposes of this Article.

131. CAL. PENAL CODE § 190.2(18) (West 2019).

132. CAL. PENAL CODE § 190.2(21) (West 2019).

133. CAL. PENAL CODE § 190.2(22) (West 2019).

Table 3: Sample Distribution by Race and Selected Special Circumstances

Special Circumstance	Black	White	Latinx	Other	Unknown	Total
1 Representation in the Sample Overall	30% 498 8,374	29% 696 7,873	33% 540 9,029	4% 80 1,177	3% 86 942	1,900 27,453
2 Multiple Victims ($p < .04$)	24% 25 396	34% 55 544	23% 32 366	10% 6 160	9% 10 149	128 1,616
3 Lying in Wait (n.s.)	27% 134 2,188	29% 236 2,363	37% 188 3,014	4% 21 289	3% 24 244	603 8,098
4 Robbery/Burglary ($p < .01$)	43% 160 2,400	26% 166 1,462	24% 97 1,338	3% 16 179	5% 17 260	456 5,639
5 Torture ($p < .01$)	24% 42 570	44% 96 1,027	19% 35 455	6% 13 150	6% 13 132	199 2,334
6 Drive-by Shooting ($p < .02$)	30% 21 365	6% 8 71	53% 26 633	8% 4 99	3% 2 35	61 1,203
7 Gang Membership ($p < .001$)	32% 46 990	6% 8 199	57% 69 1,756	4% 5 125	1% 1 27	129 3,097

Each column presents representation rate, then number of observations, and finally weighted count. The statistical significance value reports the corrected weighted Pearson chi square statistic from Stata survey tabulate for each line of the table.

A. Distribution of Cases in Select Special Circumstances by Race or Ethnicity

Table 3 lists these special circumstances and presents the distribution of the cases in the sample and the weighted universe by race or ethnicity for each one. The first row presents the overall distribution of cases in the sample from Table 2. This distribution provides one useful point of comparison to the distribution of individual special circumstances in the remaining rows of the table. Rows 2–7 present the distributions among cases where each special circumstance was present or found.

Row 2 shows that white defendants represent 34 percent of the cases involving multiple victims,¹³⁴ whereas black defendants represent 24 percent and Latinx 23 percent of the cases. The white defendant representation is higher than the white defendant representation in the study and statistically significantly higher than the representation of other race or ethnicities in the study ($p < .04$). Row 5 shows a similar but greater disparity among cases in which the torture special circumstance was found or present.¹³⁵ White defendant cases compose 44 percent of this population, compared to 24 percent of black defendants and 19 percent of Latinx defendants. The white defendant representation in cases where this special circumstance is present or found is more than twice that of black and Latinx defendants, in contrast to the roughly equal representation in the study overall.

Row 4 combines cases in which the special circumstance for robbery or burglary was found or present.¹³⁶ Here, black defendant cases represent a disproportionate share of the cases, at 43 percent, compared to 26 percent for white defendant cases and 24 percent for Latinx defendant cases. Black defendants are overrepresented in these felony-murder cases in comparison to their representation in the study in row 1 (43 percent versus 30 percent).

Rows 6 and 7 present the most recent special circumstances, those marking cases involving drive-by shootings¹³⁷ and gang membership.¹³⁸ Latinx defendants represent more than one-half of the cases in which either of these special circumstances were present or found. More precisely, Latinx defendants represent 53 percent of cases with evidence of a drive-by shooting and 57 percent of cases where the defendant was involved in a criminal street gang. This substantial overrepresentation dwarfs the significantly underrepresented white defendants with a ratio of 8–9: 1 (57 percent/6 percent or 53 percent/6 percent).¹³⁹

134. CAL. PENAL CODE § 190.2(a)(3) (West 2019).

135. CAL. PENAL CODE § 190.2(a)(18) (West 2019).

136. CAL. PENAL CODE § 190.2(a)(17)(A) & (G) (West 2019).

137. CAL. PENAL CODE § 190.2(a)(21) (West 2019).

138. CAL. PENAL CODE § 190.2(a)(22) (West 2019).

139. The discussion and tables in the remainder of the Article present only weighted analyses for ease of presentation. The complete Table 4 above provides a reference point to the size of the underlying sample and the importance of the weights.

B. Rate at Which Select Special Circumstances Are Present or Found by Defendant Race or Ethnicity

Table 4 and Figure 1 present the unadjusted rate at which select special circumstances are found or present controlling for race or ethnicity (the “application rate”). This application rate provides a standard measure of the disparity between the frequency with which each race or ethnicity appears in the overall study and the frequency with which it is present or found in cases with each special circumstance. The measurement of interest is the percent of the cases in each race or ethnicity in which a given special circumstance is present or found. Unadjusted means these findings do not take into consideration, or control for, the relative culpability of the cases.

Table 4: Application Rates: Unadjusted Rate at Which Special Circumstances Are Present or Found, by Defendant Race or Ethnicity

	Black		White		Latinx		p-value
	%	n	%	n	%	n	
Multiple Victims	5%	396	7%	544	4%	366	< .04
Lying in Wait	26%	2,188	30%	2,363	33%	3,014	n.s.
Robbery/Burglary	29%	2,400	19%	1,462	15%	1,338	< .01
Torture	7%	570	13%	1,027	5%	455	< .02
Drive-by Shooting	4%	365	1%	71	7%	633	< .01
Gang Membership	12%	990	2%	199	19%	1,756	< .01
Totals		8,374		7,873		9,030	

Each row in the table reports the application rate for each race or ethnicity (number of cases with that defendant race or ethnicity in which the special circumstance was present or found divided by the total number of cases with a defendant of that race or ethnicity) as reported in a crosstab of the special circumstance and a race variable that separately coded black, white, Latinx, other, and missing. The total defendants by race or ethnicity are reported in row 7. The p-value is based on the chi2.

Figure 1: Application of Special Circumstance by Defendant Race or Ethnicity

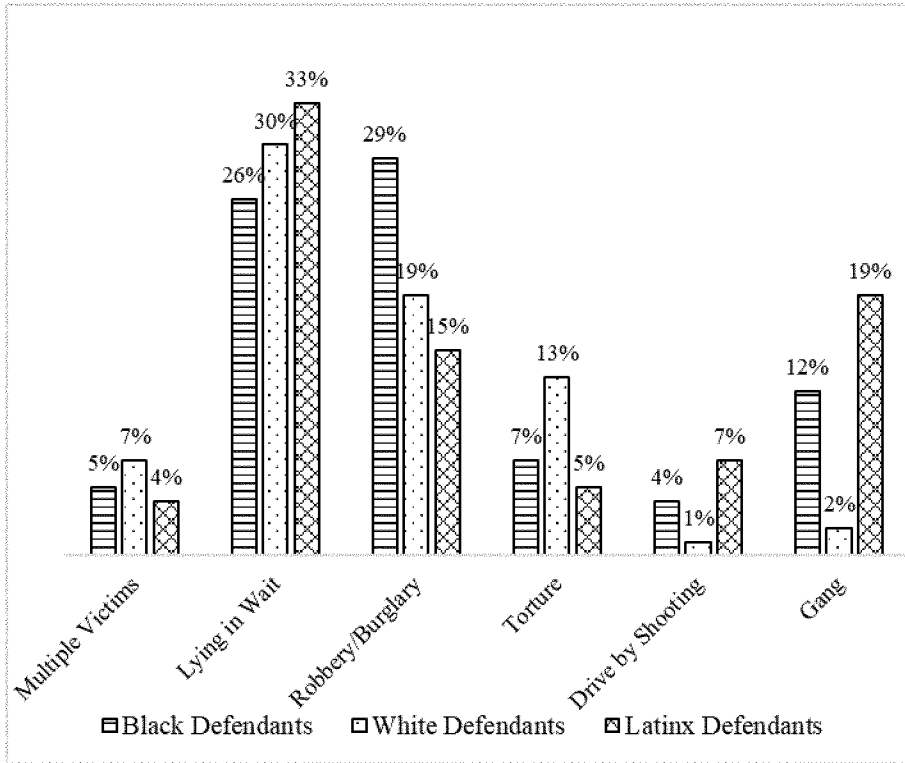


Figure 1 presents the data in Table 4 graphically, showing three bar graphs for each special circumstance, one each for the application rate for black, white, and Latinx defendants. The first set of columns presents application rates by race and ethnicity for cases in which the multiple-victims special circumstance was found or present. The first column reports that 5 percent of black defendant cases have this special circumstance present or found. The second column reports that 7 percent of white defendant cases include this special circumstance. The third column reports that 4 percent of Latinx defendant cases have evidence that the multiple-victims special circumstance was found or present. The underlying numbers for each set of columns appears in Table 4.

These application rates do not account for the culpability of the defendant in the case or the year the case originated. They are unadjusted fractions. Nonetheless, the sets of columns from left to right make clear that race and ethnicity matter. Note that white defendants have the highest

application rate in the first row in Table 4 and first set of columns in Figure 1 for the multiple-victims special circumstance finding and in the fourth row and fourth set of columns for the torture special circumstance finding.

Black defendants have the highest application rate in only the third row and third set of cases which combine cases with the felony aggravator for burglary and robbery. Here, black defendants, at 29 percent (2,400/8,374), face a rate almost twice as high as that of Latinx defendants, at 15 percent (1,338/9,030), and one and one-half times as high as that of white defendants, at 19 percent (1,462/7,873). This finding is consistent with the overrepresentation of black defendants in cases with these special circumstances presented above.

Latinx defendants face the highest application rates in the remaining three sets of columns. The fifth and sixth sets of columns present application rates for the drive-by shooting and street gang murder special circumstances, in which Latinx defendant cases represent the majority of cases. Even when controlling for representation, these special circumstances affect Latinx defendants at a statistically significantly higher rate than black or white defendants.

The drive-by shooting special circumstance was present or found in 7 percent of Latinx defendant cases (633/9,030), compared to 4 percent of black defendant cases (365/8,374) and less than 1 percent of white defendant cases (71/7,873). The street gang murder circumstance was present or found in 19 percent of Latinx defendant cases (1,756/9,030), compared to 12 percent of black defendant cases (990/8,374) and less than 2 percent of white defendant cases (199/7,873).

Finally, our earlier research showed the lying-in-wait special circumstance to expand the reach of the death penalty more than any other special circumstance.¹⁴⁰ The application rates by race or ethnicity are closer for this special circumstance, but Latinx defendants again face the highest rate at 33 percent (3,014/9,030), compared to 30 percent for white defendants (2,363/7,873) and 26 percent for black defendants (2,188/8,374).

The analysis to this point suggested that the selected special circumstances applied disparately by race and ethnicity.¹⁴¹ It remained possible, however, that the disparity could be explained by the relative

140. Baldus et. al, *supra* note 10, at 729 & n.122.

141. We replicated the analysis presented above but limited the universe to factually first-degree murder cases. While application rates were slightly lower, the disparities remained constant. Similarly, we replicated the analyses using race of defendant estimates at the 75 percent and 90 percent thresholds and observed no meaningful differences.

culpability of different sets of cases. The following analyses introduce culpability controls.

C. Controlled Analyses of Disparate Application of Select Special Circumstances by Race and Ethnicity

Part V.C presents two different methods of controlled analysis. The first used logistic regression to control for alternate explanations, in this case culpability. The second used what is commonly referred to as a doubly robust estimation.¹⁴² In both sets of analysis, we introduce a five-level race-purged culpability scale to control for the underlying facts in each case.¹⁴³

For the first analysis, we specified a simple logistic model for each special circumstance identified to show disproportionate racial or ethnic application in our unadjusted analyses. Logistic regressions provide estimates of the odds that a special circumstance will be found or present for a defendant of each race or ethnicity.¹⁴⁴ Logistic regression is well-suited for analysis of dichotomous outcomes, such as selection into a specific category or program. The results show the log odds and 95 percent confidence intervals of being selected into the category of interest, adjusted for the effects of

142. See Greg Ridgeway & John M. MacDonald, *Doubly Robust Internal Benchmarking and False Discovery Rates for Detecting Racial Bias in Police Stops*, 104 J. AM. STAT. ASS'N 661 (2009); Tamar Sofer et al., *Control Function Assisted IPW Estimation with a Secondary Outcome in Case-Control Studies*, 27 STATISTICA SINICA 785 (2017).

143. We created the culpability scale in a multistep process. The scaling process begins by producing a culpability index with a logistic model that generated a predicted probability of a death sentence for each case. This model included variables for the fact of four special circumstances being found or present. CAL. PENAL CODE § 190.2(3) (multiple victims), § 190.2(5) (for the purpose of avoiding arrest), § 190.2(10) (witness victim), and § 190.2(16) (victim race motive)], the number of special circumstances in the case, kidnapping, that defendant was not the killer, the presence of coperspetrators, and a scale for the age of the defendant. The model produced a predicted probability of a death sentence for each pre-*Furman* case. Those cases were ranked according to those predictions and divided into a five-level culpability scale. We then estimated a racial disparity within each cell and combined those disparities to compute a weighted average of the disparities across all the cells. This was used to purge the race effects from the index. The Mantel-Haenszel test is the procedure we use to create these overall estimates. See Nathan Mantel & William Haenszel, *Statistical Aspects of the Analysis of Data from Retrospective Studies of Disease*, 22 J. NAT'L CANCER INST. 719 (1959) (establishing this method).

144. See generally DAVID W. HOSMER & STANLEY LEMESHOW, *APPLIED LOGISTIC REGRESSION* (2nd ed. 2000); see also SCOTT MENARD, *APPLIED LOGISTIC REGRESSION ANALYSIS* (2002) (discussing the assumptions of a logistic regression model and its difference from ordinary multiple (least squares) regression models).

other variables entered into the regression. The odds ratio for each predictor is its exponentiated coefficient.

The model defined the special circumstance as the outcome measure and included the culpability scale, a fixed effect for offense year, three distinct race or ethnicity variables (identifying black defendants, Latinx defendants, and white defendants), and one variable identifying black and Latinx defendants together.¹⁴⁵ We also included a variable measuring the presence of at least one white victim in this analysis when possible.¹⁴⁶ We then specified the model by removing any variable that was not at least marginally statistically significant in the model, starting with the variable the farthest from significance and stopping when all variables showed significance. The culpability scale remained highly statistically significant throughout the analysis.

Table 5: Race Disparities by Special Circumstance, Controlling for Culpability

	A	B	C	D	E	F	G
	<i>Special Circumstance</i>	<i>Freq.</i> ¹⁴⁷	<i>Race of Defendant</i>	<i>Odds Ratio</i>	<i>St. Err.</i>	<i>95% conf. int.</i>	<i>p-value</i>
1	Multiple Victims	1,616	Latinx	0.4	0.20	(0.2, 1.1)	= .10
2	Lying in Wait	8,098	Latinx	1.6	0.30	(0.9, 1.9)	< .02
3	Robbery & Burglary	5,639	Black	2.2	0.42	(1.5, 3.2)	< .01
4	Torture	2,334	White	2.3	0.57	(1.4, 4.3)	< .01
5	Drive-by Shooting (model 1)	1,203	Latinx & Black	3.5	1.6	(1.3, 7.7)	< .01
6	Drive-by Shooting (model 2)	1,203	Latinx	2.5	1.0	(1.2, 5.0)	< .02
7	Gang Membership	3,097	Latinx	7.8	2.9	(3.7, 16.2)	< .01
			Black	4.8	2.0	(2.1, 10.8)	< .01

Each line presents findings from a separate logistic regression model with a single special circumstance as the outcome variable.

145. We evaluated the importance of controlling for county by replicating the analysis for Los Angeles County alone and the study without Los Angeles County cases. Neither analysis produced meaningfully different results. This is not surprising as the study design considered county carefully. See explanation in text and note *supra* note 109.

146. This analysis set the missing information to zero. Doing so undercounted the presence of cases with at least one white victim. Even then, this analysis was only possible on a limited basis. Recall that race of defendant and two special circumstances (multiple victims and gang membership) are statistically significantly related to the likelihood of missing the race of the victim.

147. Frequency reports the number of cases in the estimated universe recorded as having this special circumstance found or present.

Table 5 presents results from the analysis of each special circumstance in which at least one race variable remained in the fully specified model. Column A lists the special circumstances. These are the same special circumstances presented in the unadjusted analysis. Column B presents the frequency with which each special circumstance is present or found in the study. Column C presents the race or ethnicity of defendants found to face disparate treatment. Column D presents the odds ratio for the extent of disparate treatment reported in column C, and columns E–G present measures of significance. The results largely confirm the unadjusted findings.

A number of special circumstances apply disparately by race or ethnicity, but not all point in the same direction. The largest disparities concern the criminal gang member special circumstance in row 7. Both Latinx and black defendants face a disparate exposure to this special circumstance. A model of the likelihood that the gang member special circumstance would be found or present reported that Latinx defendants faced 7.8 times higher odds than other similarly situated defendants, and black defendants faced 4.8 times higher odds than other similar situated defendants, even after controlling for culpability and year.

Rows 5 and 6 reports two different models for the likelihood that the drive-by shooting special circumstance would be found or present. In model one, the combined variable for black and Latinx defendants faced odds 3.5 times higher than the odds faced by similarly situated defendants of other races or ethnicities. In model two, Latinx defendants alone faced odds 2.5 times higher than similarly situated defendants of other races or ethnicities.

Row 1 reports that Latinx defendants face less than half the odds of having a multiple victim special circumstance found or present than other similarly situated defendants. This finding is only marginally significant. Row 2 shows, however, that by holding culpability constant, it becomes clear that Latinx defendants face odds of having the special circumstance for lying in wait found or present that are 1.6 times the odds of similarly situated defendants of other races or ethnicities ($p < .02$).

Rows 3 and 4 report similarly sized disparities for different groups of defendants. Row 3, reporting on the special circumstance for robbery or burglary, shows that black defendants face odds 2.2 times higher than the odds faced by other similarly situated defendants. Row 4, reporting on the torture special circumstance, indicates that white defendants face odds 2.3 times higher than other similarly situated defendants.

We conducted additional tests for discrimination in the application of the select special circumstances using four comparisons of race and ethnicity effects.¹⁴⁸ These “doubly robust” estimation tests use a first model to predict “treatment” status and a second model that predicts outcomes based on the adjusted probability of “treatment.” Here, race is regarded as a treatment, a specification common in research on discrimination in law.¹⁴⁹ Criticisms of this approach indict its failure to address the conditions for counterfactual causal reasoning, especially the problem of manipulability of the independent variable and the sensitivity of estimates of discrimination to assumptions about the role of race in decisions by legal actors.¹⁵⁰ Beyond that concern, Issa Kohler-Hausmann argues that race is more than a counterfactual claim in estimating and explaining discrimination; race is a complex concept that is fraught with social history, meaning, and relations that complicate simple categorizations.¹⁵¹ This concern poses a daunting challenge.

The doubly robust estimation method we apply addresses this concern in a basic way by first decomposing “race” based on observable characteristics that themselves reflect the attributions of social meaning that a discriminating actor might apply, and then using those adjusted meanings to predict disparity.¹⁵² This method measures the contribution of each subject in one group, and that contribution is weighted for subjects in the second group by the inverse of its selection probability into the sample.¹⁵³ The models estimate the effects of race on specific special circumstances being found or present. The model applies Augmented Inverse Probability Weighting (AIPW) to estimate the two stages of the analysis.¹⁵⁴ The estimates of

148. See Ridgeway and MacDonald, *supra* note 142.

149. See, e.g., Joseph G. Altonji & Rebecca M. Blank, *Race and Gender in the Labor Market*, in HANDBOOK OF LABOR ECONOMICS 3143, 3192 (1999), <https://ideas.repec.org/h/eee/labchp/3-48.html> [<https://perma.cc/2C78-V9BT>]; Devah Pager & Hana Shepherd, *The Sociology of Discrimination: Racial Discrimination in Employment, Housing, Credit, and Consumer Markets*, 34 ANN. REV. SOC. 181, 184 (2008). See generally Christopher Winship & Steven L. Morgan, *The Estimation of Causal Effects From Observational Data*, 25 ANN. REV. SOC. 659 (1999).

150. Roland Neil & Christopher Winship, *Methodological Challenges and Opportunities in Testing for Racial Discrimination in Policing*, 2 ANN. REV. CRIMINOLOGY 73 (2019).

151. Issa Kohler-Hausmann, *Eddie Murphy and the Dangers of Counterfactual Causal Thinking in Detecting Race Discrimination*, 113 NW. L. REV. 1163, 1172 (2019).

152. See, for example, Thaxton, *supra* note 85 for a similar statistical treatment of the effects of race in disparities in capital punishment.

153. Ridgeway & MacDonald, *supra* note 142; Sofer et al., *supra* note 142.

154. Heejung Bang & James M. Robins, *Doubly Robust Estimation in Missing Data and Causal Inference Models*, 61 BIOMETRICS 962 (2005); see also James R. Carpenter,

disparities are shown as average treatment effects (ATE) for the differences in the probability of application by race (or effect sizes) between the reference and test categories.¹⁵⁵

We estimate four models to identify specific forms of potential discrimination. The first model compares the presence of special circumstances for white defendants compared to all other defendants. The second compares white with black defendants, excluding other racial and ethnic categories. The third compares white with Latinx defendants, excluding all others. And the fourth compares white defendants to both black and Latinx defendants, again excluding all others. Each model estimates first the (inverse) probability of being white in this sample relative to the reference group (others, black, Latinx, black or Latinx), and then the probability of being found or present for each special circumstance. The models also include as a parameter the culpability scale described above.¹⁵⁶ Table 6 shows the results.

Michael G. Kenward & Stijn Vansteelandt, *A Comparison of Multiple Imputation and Doubly Robust Estimation for Analyses with Missing Data*, 169 J. ROYAL STAT. SOC'Y: SERIES A (STATISTICS IN SOCIETY) 571 (2006); Michele Jonsson Funk et al., *Doubly Robust Estimation of Causal Effects*, 173 AM. J. EPIDEMIOLOGY 761 (2011).

155. Alberto Abadie et al., *Implementing Matching Estimators for Average Treatment Effects in Stata*, 4 STATA J. 290 (2004); see also Alberto Abadie & Guido W. Imbens, *Large Sample Properties of Matching Estimators for Average Treatment Effects*, 74 ECONOMETRICA 235 (2006); Keisuke Hirano, Guido W. Imbens, & Geert Ridder, *Efficient Estimation of Average Treatment Effects Using the Estimated Propensity Score*, 71 ECONOMETRICA 1161 (2003).

156. Ridgeway & MacDonald, *supra* note 142; Sofer et al., *supra* note 142.

Table 6: AIPW Estimates of Race and Ethnicity on Charging or Finding of Specific Circumstances (ATE, SE, p)

	(1)	(2)	(3)	(4)
	<i>White-Others</i>	<i>White-Black Only</i>	<i>White-Latinx Only</i>	<i>White-Black or Latinx</i>
Multiple Victims	-.009***	-.003	-.018***	-.011***
	(.002)	(.002)	0.002	(.002)
Lying in Wait	-.010*	-.037***	-.029***	-0.002
	(.006)	(.007)	(.007)	(.006)
Robbery/Burglary	.025***	.103***	.040***	.029***
	(.005)	(.007)	(.006)	(.005)
Torture	-.065***	-.060***	-.081***	-.071***
	(.004)	(.005)	(.004)	(.004)
Drive-By Shooting	.049***	.035***	.061***	.047***
	(.002)	(.002)	(.003)	(.002)
Gang Membership	.122***	.094***	.167***	.133***
	(.003)	(.004)	(.004)	(.003)
N	1,900	1,194	1,236	1,734
Significance: * = p < .05, ** = p < .01. *** = p < .001				
Models show effects compared to whites. All models estimated with fixed effect for offense year and the culpability scale as a covariate.				

Of the twenty-four estimates in Table 6, twenty-two were statistically significant, suggesting robust patterns of differential charging of aggravators by defendant race. These trends that cut across specific special circumstances, suggesting that the architecture of California's death penalty statute may operate in a way to produce racial disparities. Within these overall patterns, two specific trends emerge. First, for each special circumstance, the results are nearly always consistent across the comparisons of whites with either black, Latinx or both race and ethnic groups. That is, there is little differentiation in the differences between these two nonwhite groups. There are disparities for black defendants, Latinx defendants, or the combined population of black and Latinx defendants.

Second, the patterns of discrimination vary by special circumstance. As in the earlier analysis, white defendants are more likely to have the multiple

victim homicides and torture special circumstances found or present in each of the models.¹⁵⁷ Other special circumstances also show patterns that reflect race-specific crime patterns. Black defendants and Latinx defendants are significantly more likely to have the robbery/burglary, drive-by shooting, and gang factors found or present compared to each of the white defendants.

One could ask whether these patterns simply reflect the disparate epidemiology of homicide by race in California in the specific homicide categories. The analytic model that we used is designed to control for that contingency. The model compares outcomes of charging decisions within homicide category, controlling for covariates including defendant culpability, to estimate whether the aggravator is more often found by defendant race. Within categories that are racially skewed toward nonwhites, such as robbery/burglary homicides or gang membership, we still observe disparate treatment by race. In other words, these comparisons are not frequentist based. They are comparative estimates within categories, independent of the incidence of each homicide category. Accordingly, these patterns suggest a disparity that seems to be instantiated into the statute's design and operation.

We tested the sensitivity of the estimates in Table 6 to the inclusion of victim race, especially white victims. In previous studies, estimates of charging and sentencing were sensitive to the inclusion of white victim parameters, with consistent evidence of a greater probability of death sentencing and charging in cases with white victims.¹⁵⁸ This privileging of white victim cases extends to police investigations of potentially capital-eligible murders.¹⁵⁹ To test the sensitivity of the estimates in Table 6 to the inclusion of white victim effects, we reestimated those regressions adding that parameter. The results were nearly identical. Parameter estimates changed only at the third decimal place, and significance remained unchanged.¹⁶⁰

157. Unlike the findings presented in Table 5, however, this analysis also shows white defendants have a higher rate of application to the lying-in-wait special circumstance. Lying in wait describes a very broad special circumstance. Recall that the unadjusted analyses did not find significant disparities in application rates. The tests in the Table 6 models differ in how they define and mathematically contrast nonwhite race or ethnicity with whites. They eliminate the other race or ethnicity from each analysis. It is not a surprise that the results vary depending on the statistical test and the varying construction of the contrasting groups.

158. See Grosso et al., *supra* note 84.

159. Fagan & Geller, *supra* note 99 (reporting findings demonstrating that police clear cases disparately by race).

160. Data available from the authors.

The results overall confirm the heterogeneity of the application of special circumstances, but the disparate treatment model suggests that race and ethnicity affect charging. Given the volume of capital-eligible cases that are racially skewed by homicide category or special circumstance,¹⁶¹ evidence here of disparity and bias within the more frequent categories of robbery and gang homicides suggests that the California statute itself invites disparate treatment of black and Latinx defendants.¹⁶²

CONCLUSION

After *Furman*, in 1977 California enacted a statute reinstating the death penalty that attempted to identify those murders that are “particularly serious or for which the death penalty is peculiarly appropriate.”¹⁶³ As with others across the United States, this new law was intended to rationalize the identification of those murders that merited a death sentence and, in so doing, to guard against arbitrariness and caprice.¹⁶⁴

Less than one year later, the drafters of the Briggs Initiative campaigned with the promise to expand reach of California’s death penalty to “every murderer.”¹⁶⁵ Senator Briggs vilified the narrowing requirements in *Furman* and sought language that was “as broad and inclusive as possible.”¹⁶⁶ The initiative knowingly expanded discretion and ignored any efforts to limit the influence of race on capital punishment. It launched a trajectory through which the California death penalty law has been expanded repeatedly over the course of the last three decades, well beyond even the capacious Briggs Initiative.¹⁶⁷

161. Fagan & Geller, *supra* note 99 (on race and clearance rates); Jeffrey Fagan, Franklin E. Zimring & Amanda Geller, *Capital Punishment and Capital Murder: Market Share and The Deterrent Effects of the Death Penalty*, 84 TEX. L. REV. 1803 (2006) (explaining the importance of distinguishing homicide category when estimating the deterrent effect of capital punishment).

162. This finding also counsels caution in interpreting models that examine nonspecial circumstance-specific racial disparities. Such models may mask statistically significant disparities by race and ethnicity. A rich analysis of racial and ethnic disparities can only accurately identify disparities through a similar attention to disaggregation and decomposition of death eligibility.

163. *Gregg v. Georgia*, 428 U.S. 153, 222 (1976) (White, J., concurring). The original California statute can be found at 1977–78 Reg. Sess. (Cal. 1977).

164. See Sharon, *supra* note 28, at 247 (discussing the purposes of the narrowing requirement).

165. Declaration of Gerald F. Uelmen, *supra* note 47, at 7.

166. Declaration of Donald H. Heller, *supra* note 45, at 1–2.

167. See text accompanying notes 52–66; see also Simon & Spaulding, *supra* note 52.

Opponents of the bills and voter initiatives expanding the California statute regularly warned the California legislature and voters that “the broader the cases that are eligible for the death penalty as punishment, the greater the risk that the death penalty will be applied in an arbitrary and unconstitutional manner.”¹⁶⁸ Opponents even proposed legislation to address anticipated racial discrimination to no avail.¹⁶⁹ The 2000 expansion of the states’ death penalty statute added homicides committed by alleged gang members, a designation known to be deployed in a racially disparate and notoriously imprecise manner.¹⁷⁰

This Article shows the costs to equity of the continuous expansion.¹⁷¹ We found that individual special circumstances apply to defendants disparately by race and ethnicity, even after controlling for case culpability, victim race, and year. The statute appears to codify rather than ameliorate the harmful racial stereotypes that are endemic to our criminal justice system. The statutory expansions that made death-eligible cases involving gang membership or a drive-by shooting apply overwhelmingly more frequently in black and Latinx defendant cases. The largest disparities in application concern the gang member special circumstance, added almost two decades after California reintroduced capital punishment after *Furman*. These special circumstances for gang membership and drive-by shootings fulfill the predictions of previous scholars who raised concerns that they would legislate “vengeance” rather than culpability and run a risk of being “easy to apply to minority defendants.” To ignore that demographic reality suggests a form of racial blindness.

The 1977 California statute provides an interesting point of comparison to the current state of death eligibility. Arguably, it attempted to identify those special circumstances California would preserve as most important for identifying the “particularly serious” murders at that time. The 1977 statute included special circumstances for murder of multiple

168. See, e.g., Senate Committee Bill Analysis, Senate Bill 32 (Mar. 7, 1995) (citing opposition submitted by the American Civil Liberties Union), http://leginfo.ca.gov/pub/95-96/bill/sen/sb_0001-0050/sb_32_cfa_950221_155939_sen_comm.html [<https://perma.cc/DD35-K64X>].

169. See, e.g., ACLU, Proposed Amendments to Senate Bill 32 (Mar. 6, 1995).

170. See *supra* note 64 (collecting sources).

171. Given the demography of murder, and especially these types of murder, any expansion of the death penalty is likely to aggravate the problem of racial equity in the death penalty. Anthony V. Alfieri, *Objecting to Race*, 27 GEO. J. LEGAL ETHICS 1129 (2014); Jeffrey Fagan & Mukul Bakhshi, *New Frameworks for Racial Equality in the Criminal Law*, 39 COLUM. HUM. RTS. L. REV. 1 (2007); Andrew E. Taslitz, *Racial Blindsight: The Absurdity of Color-Blind Criminal Justice*, 5 OHIO ST. J. CRIM. L. 1 (2007).

victims, murder with torture, or murder of a peace officer or a witness, circumstances that aligned with most of the post-*Furman* death statutes across the death penalty states. Notably, it did not include gang membership or drive-by shooting. What about these newer special circumstances identifies a murder that is more dangerous or reprehensible than any other?

This Article also refocuses attention on the cost, in terms of equity, of reliance on felony murder.¹⁷² Adjusted and unadjusted analyses document that the combined felony-murder special circumstance for robbery and burglary applies disproportionately in black and Latinx defendant cases. Steven Shatz previously questioned the constitutionality of “making death-eligible ordinary robbery-burglary murderers.”¹⁷³ He noted, “They are, in every respect, the ‘average’ murderers whose culpability ‘is insufficient to justify the most extreme sanction available to the State.’”¹⁷⁴ In contrast, the special circumstances for multiple murders and for torture murder, both of which apply disproportionately to white defendant cases, ascribe culpability to objective facts about the murder itself—facts frequently associated with the worst of the worst.

Rather than mitigating the influence of race, the overly broad California death penalty statute seems to have fulfilled the predictions of scholars and civil rights activists by incorporating racial stereotypes or at least furthering them, and perhaps giving them a veneer of legitimacy. This Article brings the anticipated disparities to the surface. The instantiation of racial and ethnic stereotypes into death eligibility raises the specter of discriminatory application in the design of California’s statute, with implications for constitutional regulation of capital punishment.

172. See generally Steven F. Shatz, *The Eighth Amendment, the Death Penalty, and Ordinary Robbery-Burglary Murderers: A California Case Study*, 59 FLA. L. REV. 719 (2007) (reporting findings concerning felony murders in California).

173. *Id.* at 770.

174. *Id.* (quoting *Roper v. Simmons*, 543 U.S. 551, 571 (2005) (quoting *Atkins v. Virginia*, 536 U.S. 304, 319 (2002))).
