When Lightning Strikes Twice:

Capital Punishment Disparities from Sentencing to Execution in the United States

By

Ben Neill

Senior Honors Thesis

Department of Political Science

University of North Carolina at Chapel Hill

April 7, 2025

Approved:

Dr. Frank R. Baumgartner, Thesis Advisor

Dr. Kaneesha R. Johnson, Reader

Abstract

This thesis examines disparate outcomes in death sentencing and executions in the United States in the post-*Furman* era based on legally irrelevant factors (primarily race and gender). By determining the conditional probability of execution for death-sentenced offenders, this thesis reveals how disparities shift from the sentencing stage to the execution stage. Using nationwide aggravated homicide data and a death sentence database consisting of all post-Furman death sentences complete with case outcome and victim information data, death sentence and execution rates based on offender demographics, victim demographics, and the combination of the two, were calculated. At the sentencing stage, the results indicate disproportionate death sentencing of offenders with white and female victims, particularly for Black offenders with these victim types. At the execution stage, these disparities are significantly mitigated and—at times-reversed. These results suggest that the evidentiary standard and level of aggravation needed to sentence Black offenders and offenders with white and/or female victims to death is lower than for white offenders and those with nonwhite victims. Ultimately, this thesis adds a new dimension to the understanding of disproportionality and discrimination in capital punishment in the United States.

Table of Contents

Introduction	
Theory	5
Literature Review	9
Hypotheses	15
Research Design	16
Data	16
Methods	20
Concerns	
Results	
Discussion	
Suggestions for Further Research	35
References	
Appendix	41

Introduction

Despite its nonexistence in comparable nations, the use of the death penalty in the United States persists. There is, perhaps, no greater punishment and no higher stakes than the state killing one of its own. Beyond questions of morality, the United States' unpredictable, disproportionate, and arbitrary use of the death penalty may explain its absence in other nations. Over fifty years ago, when it first ruled capital punishment unconstitutional, the Supreme Court likened the randomness of homicide offenders receiving a death sentence to being "struck by lightning" (Furman v. Georgia, 1972). Further, as this thesis will show, just 18.57% of offenders who are sentenced to death end up being executed. This startlingly low execution rate has led some in the judicial community to instead refer to a sentence of death as "life in prison, with the remote possibility of death" (Jones v. Chappell, 2014). Who, then, gets struck by lightning twice? The answer, which this thesis reveals, changes from sentencing to execution. More sinisterly, some offenders hold a lightning rod, making them disproportionately likely to be sentenced or executed. The probability of being death-sentenced and executed can be vastly different depending on the race and gender of an offender and the race and gender of their victim(s). These disparate outcomes for legally irrelevant factors are an indictment of the discriminatory nature of capital punishment and call into question the application of the state's ultimate punishment: execution.

In the United States, the death penalty is reserved strictly for those who commit first-degree murder, with few exceptions such as treason and espionage. In states where capital punishment is legal and the District Attorney seeks the death penalty, trials are split into two phases, in a practice called bifurcation. First, in the guilt phase, a jury determines whether or not a defendant is guilty of the crime with which they were charged. If the defendant is found guilty,

a jury then determines whether or not to recommend the death penalty for the defendant in the sentencing phase. This determination is largely based on an assessment of factors that increase or reduce the severity of a crime, known as aggravators and mitigators. These factors vary from state to state but are typically similar across jurisdictions. Common aggravators include murder committed for pecuniary gain, murder of a child, the presence of sexual assault, multiple victims, and whether or not the victim was a law enforcement officer, among others. Common mitigators include whether or not the offender was under the influence of drugs or alcohol at the time of their crime and whether or not the offender suffers from mental illness or disability. While these factors are legally relevant and used to determine whether or not an offender receives the death penalty, the literature suggests that legally non-relevant factors—particularly race and gender—often impact the sentence an offender receives. These legally irrelevant demographic factors are the focus of this paper.

This paper determines the conditional probability of execution for death-sentenced individuals based on legally irrelevant—and a few relevant—factors. I analyze disparities in sentencing and among executions, before comparing those disparities to each other. In doing so, I track how disparities shift as the stakes get higher, ultimately adding to a body of literature that details the deep disproportionality, capriciousness, and discrimination in death sentencing in the United States. To produce my results, I conducted quantitative analyses using detailed data on all death sentences in the United States since 1972. Through this analysis, I determined the death sentencing rates and execution rates for offenders based on their race and gender, the race and gender of their victims, and the combination of the two. Additionally, I calculated rates for certain legally relevant factors, such as the number of victims in a given case and whether or not the victim was a law enforcement officer. Death sentencing rates serve as a baseline of

disproportionality, while execution rates serve to augment sentencing disparities and produce their own. Disparities found among legally irrelevant factors support the grave reality of unequal treatment under law, and evidence a system rife with injustice.

This thesis will lay out possible theories for the method of selection for executions before reviewing the history of the death penalty in the United States and introducing the large body of previous literature that has circled the question I seek to answer but has yet to address it directly. Based on the possible theories for selection and evidence from previous literature, I will then construct a hypothesis regarding the conditional probability of execution for death-sentenced offenders. Next, I will describe my research methods in detail, discussing the data I analyzed and how I utilized it to produce compelling results. Finally, I present my results and explore the possible implications of my findings. By the end of this thesis, readers will have a clear idea of the climate of capital punishment in the United States and the existence—or lack thereof—of disparate outcomes in sentencing and executions.

Theory

Before constructing a hypothesis for the conditional probability of execution for death-sentenced offenders, considering possible methodologies for each state's selection of who is next to be executed is crucial. In this section, I lay out five possible theories for how states select which death-sentenced offenders to execute. These theories aid in hypothesizing trends in the conditional probability of execution, but may also explain the results once probability is determined. Importantly, there are no broad, legally consistent criteria for which death-sentenced offenders are executed. State-to-state, the party responsible for determining who is next to be executed varies and is often—seemingly intentionally—quite vague. In theory, all death-sentenced offenders will be executed, so the selection process is simple; everyone is

selected. However, when an increasingly slim minority of offenders are actually executed, the selection process becomes intriguing. Thus, considering who is selected and why is fundamental to this puzzle.

The first theory is that the selection process is completely random both state-to-state and within jurisdictions. In this case, significant disparities across identity and case characteristics of those executed would be rare and inconsistent across jurisdictions when present. Quite simply, there is no rhyme or reason to who is selected to be executed; after all each offender will be selected at some point. Unless an offender is still in the midst of the appellate process and ineligible to be executed, anyone could be next. If this theory is true, the anticipation and uncertainty for offenders would be excruciating, but broad discrimination and disparate impact would be notably absent.

The second possibility is a first-in, first-out theory. This selection process is simple: executions are chronological. Executions take place in the order in which offenders arrive on death row. This is not to say that executions are timely or consistent, but simply that they are carried out in order. If this is the case, we could predict the next offender to be executed in each state and predict whether or not an offender would be executed based on the frequency and expediency of executions in a given state. If sentencing practices in a particular time period were disparate or discriminatory, executions would reflect those trends and disparities would be reproduced. In this case, offenders would have little ambiguity in wondering when they'd be executed outside of when the next execution would be, they would know their place in line. Even with a surface-level exploration of recent executions, it is clear that executions do not take place chronologically and the first-in, first-out theory of selection falls flat.

Third is a theory of aggravation. This theory holds that disparate sentencing outcomes hold steady or, more likely, are aggravated in executions. If discrimination occurs in sentencing, it is logical to assume that those discriminated against may be further discriminated against at the execution stage. Instructing the idea that disparities exist in sentencing is a large body of previous literature, none more notable than David Baldus, Charles Pulaski, and George Woodworth's 1983 study "Comparative Review of Death Sentences: An Empirical Study of the Georgia Experience." Known as the "Baldus study," it served as the basis for the landmark McCleskey v. Kemp Supreme Court case. In McCleskey, Baldus was cited as finding that "prosecutors sought the death penalty in 70% of the cases involving black defendants and white victims; 32% of the cases involving white defendants and white victims; 15% of the cases involving black defendants and black victims; and 19% of the cases involving white defendants and black victims." Resulting from this disparity, their study found the death-sentencing rate was 0.06 (15/246) for black victim cases versus 0.24 (85/348) for white victim cases." The theory of aggravation expects these disparities to become more pronounced in executions and that offenders with white victims, particularly Black offenders, would be overrepresented among those executed.

The final two theories are interconnected and, if true, would produce counterintuitive execution outcomes in which sentencing disparities flip and—at times—create the appearance of reverse racism. The fourth theory is informed in part by the outcome test, developed by economist Gary Becker. Fundamentally, the outcome test seeks to determine whether discrimination exists in a given context based on outputs. A primary context in which Becker discussed the outcome test was racial discrimination in law enforcement searches for contraband. Becker argued that the output of contraband searches (whether or not contraband was found, also

known as the 'hit rate') was an indicator of possible discrimination against those who were being searched. If the hit rate for white individuals and nonwhite individuals is the same, there may not be reason to suspect disparate or discriminatory search rates. However, if there is a higher hit rate for white individuals than for nonwhite individuals, there may be a reason to think that search rates are disparate and discriminatory across racial lines. The lower proportion of nonwhite individuals found with contraband might suggest a disproportionate propensity to search those individuals, possibly resulting from discrimination. Some scholars (Ayres, 2002) have argued that Becker's theory suffers from an inframarginality problem, furthering that average outcomes cannot distinguish between discrimination and genuine group differences in marginal decisions. However, when tested in the context of traffic stops, existing literature indicates "there is no inframarginality problem because average and marginal hit rates are similar" (Feigenberg & Miller, 2021).

Becker's theory may have merit when it comes to capital punishment. In this context, disparities in executions (the output) could be evidence of inverse disparities in sentencing (the input). Under Becker's framework, the disproportionate execution of white offenders might indicate significant discrimination against Black offenders in sentencing. Indeed, Baldus raised this concern in 1983, writing that "Georgia juries appear to tolerate greater levels of aggravation without imposing the death penalty in black victim cases; and, as compared to white victim cases, the level of aggravation in black victim cases must be substantially greater before the prosecutor will even seek a death sentence." If the threshold of heinousness in which Black offenders are sentenced to death is lower than that of white offenders, the white offenders on death row would have comparatively 'worse' crimes than non-white offenders on death row.

the least questions surrounding their guilt has critical implications for the selections of executions. Perhaps states select executions based on who committed the most heinous crime or based on which cases are the most 'open and shut' in order to avoid controversy. In either case, the method of selection for execution is extralegal but would result in the disproportionate execution of white offenders.

Flowing from this heinousness threshold theory is a possible fifth scenario, in which the death-sentenced white offenders are cherry-picked for execution in order to avoid controversy, public scrutiny, and allegations of racism. In this case, the heinousness of the crime or assuredness of guilt are not proxies for race and states explicitly select executions along racial lines. If a state can point to executions—the most severe punishment possible—and show that white people are being executed (perhaps disproportionately so), it then becomes difficult for allegations of discrimination against Black and other minority individuals to gain traction. Strategically and sinisterly, states may use death-sentenced white offenders as sacrificial lambs to enable a broader justice system that protects whites and persecutes non-whites.

Literature Review

Despite an ever-growing body of literature surrounding disparities in capital sentencing, gaps remain in the literature regarding execution trends and disparities. More notably, literature comparing disparities between sentencing and executions nationally has not yet been published. Research into disparities in both sentencing and executions has additionally been limited by a lack of centralized and nationally representative data. Due to this, the majority of existing scholarship is made up of state-level analyses and studies with small samples of a limited number of cases. However, previous literature provides strong evidence to inform this thesis' hypothesis and serve as a model for its research design. This thesis takes elements of studies

examining sentencing and those examining executions, combining them into a centralized study that further demonstrates disparities in capital punishment. First, though, it is vital to understand the modern history and context of capital punishment in the United States.

In 1972, the United States Supreme Court ruled that the death penalty was unconstitutional, violating the Eighth and Fourteenth Amendments due to its arbitrary and capricious application. The case, *Furman v. Georgia* (1972), led to states reconstructing their capital punishment systems and the introduction of a bifurcated trial with an assessment of aggravating and mitigating circumstances. These adjustments, among others, led the Court to reaffirm the death penalty four years later in *Gregg v. Georgia* (1976), ruling that the issues raised in *Furman* had been sufficiently addressed. The Court's decision in *Furman* marked the beginning of the modern era of the death penalty and was further ushered in by *Gregg*. This post-*Furman* timeframe serves as the basis for my analysis.

As of 2024, twenty-three states have abolished the death penalty. Some states abolished the death penalty long before *Furman*, as early as 1846 when Michigan abolished its death penalty. Others abolished far closer to today, as recently as 2021 when Virginia abolished its death penalty. Of the twenty-seven states where the death penalty remains, five currently have gubernatorial holds on executions (California, Pennsylvania, Oregon, Ohio, and Tennessee). Crucially, a hold on execution does not mean a hold on sentencing, as offenders can still be sentenced to death despite execution moratoria.

Since the beginning of the twentieth century, usage of the death penalty has dropped dramatically. After peaking in 1996, when 315 people were sentenced to death (Baumgartner et al. 2017), death sentences have steadily decreased. In 2015, there were 49 death sentences, representing an 84.4% decrease in usage since 1996. Similarly, executions peaked in 1999, when

98 people were executed. In 2015, that number dropped to 28, representing a 71.4% decrease in usage. This decrease in usage can be attributed to numerous factors, including an increasing number of states that have abolished capital punishment, a decrease in the number of jurisdictions that seek death and the frequency with which they do so, and declining public opinion.

Research into this thesis' dependent variable-executions-has largely resulted in rebukes of the United States' practice of capital punishment as a whole. Perhaps this is unsurprising, as studies into the life-or-death implications of execution ultimately serve as a referendum on the state killing one of its own. As referenced in the introduction, only 18.57% of offenders sentenced to death in the modern era have been executed. Reversals are frequently the outcome, as all death sentences are immediately appealed once handed down. Indeed, one of the most troubling realities of capital punishment is the possibility of the state executing an innocent person. An analysis of post-Furman death sentences estimated that at least 4% of those sentenced to death are actually innocent (Gross et al., 2014). Examinations of executions have concluded that not only is the execution of an innocent person inevitable, but it has already happened (Benson et al., 2013; Radelet & Bedau, 1998). There are at least five executed individuals with credible or concrete evidence of their innocence. Carlos De Luna, Ruben Cantu, David Spence, Gary Graham, and Cameron Willingham all had legitimate claims of innocence that materialized after—or in some cases before—they were executed (Benson et al., 2013). Compounding these cases, based on exonerations of those sentenced to death and evidence of credible innocence claims, some have suggested that the number of executed individuals who were innocent is much higher, with as many as five in every one hundred executed individuals having possible legitimacy to claims of innocence (Radelet & Bedau, 1998).

Beyond the grave reality of executing the innocent, existing research—more pertinent to this study-suggests that executions are disproportionate. Initial studies on execution outcomes concluded that Black defendants convicted of killing white victims were disproportionately likely to be executed (Jacobs et al., 2007). While this study employed key geographic and offender control, it was limited to sixteen states, missing large amounts of victim race data, and unable to compare execution disparities to sentencing disparities due to limited data availability. Later literature constrained their analyses to particular states and conducted similar studies on racial disparities (e.g. Baumgartner, 2021; Petrie & Coverdill, 2010). While one study found no racially disparate outcomes in Texas executions (Petrie & Coverdill, 2012), the majority of studies across states (including others in Texas) concluded that among those executed, offenders convicted of killing Black victims were underrepresented and offenders convicted of killing white victims were overrepresented (e.g. Baumgartner, 2021). The Baumgartner studies calculated disparate outcomes by comparing victim race data from executions with victim race data from homicides nationwide. Importantly, while this comparison adds crucial analysis, comparing nationwide non-capital homicide data with state-level execution data makes the analysis somewhat imprecise.

To address the limitations of previous research, Scott Phillips and Justin Marceau (2020) published a study comparing execution disparities to sentencing disparities. The study used data from *Equal Justice and the Death Penalty* (Baldus et al. 1990)—a landmark book that followed the aforementioned Baldus study—and examined the 127 cases from the book that resulted in a death sentence. The findings confirmed significant racial disparities among both those sentenced and those executed, with offenders convicted of killing white victims substantially more likely to be sentenced and executed. More notably, the comparison between these two sets of disparities

had never been conducted before and yielded crucial results. They found that racial disparities were substantially exacerbated between sentencing and execution, with those who killed a white victim more likely to be both sentenced to death and executed. However, while this study conducted a groundbreaking comparison that accounted for the limitations of previous research, it was limited to the incredibly small sample of 127 cases from Baldus' book.

Significantly, there is a nationwide analysis of execution disparities in all states where capital punishment remains. As of 2023, among all executions since 1976, the victims of executed offenders were 75.42% white, while just 15.58% were Black (Legal Defense Fund, 2023). As for offenders themselves, nearly 60% of those executed were white while 34.21% were Black. Combining these factors, 51.67% of executions have resulted from white defendant, white victim cases; 19.26% from Black defendant, white victim cases; 11.75% from Black defendant, Black victim cases; and just 1.35% from white defendant, Black victim cases. The Legal Defense Fund's quarterly report on this data represents the most complete resource on offender and victim race and gender data among executions. However, these statistics are calculated as a fraction of all executions, rather than as a rate of execution based on those sentenced within a given variable. With vastly different raw numbers across these variables, these proportions may not tell us much about executions specifically. Moreover, this means that the outcomes may be more of a reflection of sentencing disparities (who is on death row in the first place) than of execution disparities. For example, if there are precious few cases in which white defendants with Black victims are sentenced to death, then naturally a miniscule fraction of total executions would be made up of cases with that offender and victim race combination. While the above percentages tell part of the story, it is difficult to draw definitive conclusions from them. With complete victim race information for all death sentences, this study alleviates

this blindspot. While the Legal Defense Fund's study lacks the baseline data on death-sentenced offenders, this study compares the disparities in execution to the disparities in sentencing, providing the clearest picture of disparate outcomes in executions to date.

The closest comparison between death sentencing rates and execution rates comes from Baumgartner et al.'s 2018 book, *Deadly Justice*. Both the data and methodology in my study are the product of *Deadly Justice*. While the book did not compare death sentencing rates and execution rates based on the race and gender of the offender, victim, and their combination, it did calculate executions per 10,000 homicides based on victim data. They found that there were 45 executions for every 10,000 homicides, but 66 executions per 10,000 homicides where the victim was white. Meanwhile, there were just 15 executions per 10,000 homicides where the victim was Black. In terms of gender, there were 30 executions per 10,000 homicides where the victim was male, compared to 92 executions per 10,000 homicides where the victim was female. Combining these two factors, there were 124 executions per 10,000 homicides where the victim was a white female, compared to just 10 executions per 10,000 homicides where the victim was a Black male. These rates compare executions to homicides, not death sentences, and they do not contain offender/victim combinations due to a lack of data availability on both fronts. However, their calculation of rates within categories, rather than across categories, is the closest such method to my own on a nationwide scale.

My hypothesis that significant racial disparities will exist in both sentencing and execution and that those disparities will change substantially from sentencing to execution—to be explained in the next section—is informed by this extensive body of previous literature. Beyond the aforementioned studies, a broader body of literature finds further evidence of significant racial disparities in capital sentencing that back my sentencing hypothesis (e.g.

Garrett et al., 2017; Phillips, 2012; Williams, 2017). However, existing scholarship has yet to reveal how these disparities shift from sentencing to execution or consider the possibility of my execution hypothesis. This nationwide comparison of execution and sentencing disparities addresses the limitations of existing literature by combining the strengths of each previous study of capital punishment disparities into a single study that reveals disproportionality at every stage of the death penalty process.

Hypotheses

Beginning with those sentenced, I first hypothesize that sentencing disparities revealed by previous literature will hold with a nationally representative sample of cases. While the time, location, race, and gender of the offender will augment disparities, I hypothesize that the race and gender of victims will be the driving force behind disparate outcomes. I expect offenders with white victims and offenders with female victims to be disproportionately sentenced to death. Combining race and gender, I expect offenders with white female victims to be one of—if not the most—overrepresented population among death-sentenced individuals. Conversely, I expect offenders with Black male victims to be underrepresented among death-sentenced individuals. Within this expectation, I hypothesize that Black men with white victims, particularly white females, will be the most likely offenders to be sentenced of any offender/victim race and gender permutation. I expect other victim-related variables, such as number of victims (legally-relevant), will also be a strong predictor of death sentencing.

In examining execution disparities, there are three possible outcomes. Disparities found in sentencing could either be aggravated, mitigated, or remain consistent in executions. Given the previously demonstrated consistent imbalance of justice in capital sentencing and simple

variation between states, I am confident that executions will not be balanced. This leaves two possibilities: aggravation and mitigation.

My initial hypothesis is that disparities will be mitigated in executions. Flowing from the heinousness threshold theory in sentencing and the theory that executions are selected based on open-and-shut cases that minimize controversy, I expect that disparities will shrink, if not flip, at the execution stage. This means that though those with white victims and female victims may still be most likely to be executed, the disparity between them and those with nonwhite, nonfemale victims will shrink. Intersectionally, it may mean that white offenders are executed at a higher rate than Black offenders even among cases with the same victim characteristics. To be clear, a shrinking of disparities would not suggest belated justice. In fact, it would augment our current understanding of disparate outcomes, further evidencing discrimination at the sentencing stage and suggesting new layers of injustice at the execution stage.

Research Design

Data

To test my hypotheses, I analyzed every death sentence handed down in the United States since the Supreme Court struck down the death penalty in *Furman* in 1972. Within this sample, an analysis of the subset of cases in which the offender was executed enabled comparisons between the baseline of sentencing and the outcome of execution. Significantly, this is the first study to use data from all post-*Furman* sentences complete with victim information. No prior research has been conducted using a sample with this size and depth of information. This data was combined with FBI and CDC data on aggravated homicides in the United States over the same period. The FBI and CDC data consists of information on all aggravated homicides across

the United States between 1976 and 2022, including information on the race and gender of both the offender and victim(s) and the number of victims in a particular case.

Crucially, the FBI's Supplemental Homicide Reports (SHR) were incomplete during some years in some states, resulting in underreported or entirely missing homicide data. While some states had entire years with missing data, others numbers were routinely under-reported. With complete death sentencing data, this created a potential problem of over-reporting death sentencing rates. To alleviate this concern and complete the homicide data, estimates were used in states and years where data was missing or under-reported.

After flagging and removing potentially problematic years, which were determined as states in which the FBI number in a given year was over one-half smaller than the average FBI number in that state over that time period, FBI totals were regressed on CDC totals. With high correspondence, this regression calculated that the total number of offenders from the FBI data was 1.086071 times the number of offenders in the CDC data. This equation was applied to each state and year to produce adjustment ratios for each state. These adjustment ratios represented the number needed to multiply FBI numbers by, based on CDC values, to produce an estimate. Overall, this adjustment was less than 10% across all jurisdictions, though the adjustment was over 50% in a few states, including 67.1% in Alabama and 83.7% in Mississippi. An adjusted FBI total was produced by multiplying reported FBI totals by their respective adjustment ratios. With the elimination of under-reporting and a consistent measure created across states, this adjusted FBI total was preferred in this paper.

My primary data came from a database created by Dr. Frank Baumgartner and his research team—including myself—over the last decade plus. The database consists of 9,033 cases, representing every death sentence handed down since the *Furman* decision. Notably, this

number includes individuals who were sentenced to death multiple times, with each sentence represented separately. The data consists of each sentence, not just each offender. Though not matched to the exact case, this sentencing data was matched state-by-state with aggravated homicides from FBI data. This allowed the proportion of aggravated homicides that result in a death sentence based on particular characteristics to be calculated. Of these post-1972 death sentences, there are just 1,609 cases that resulted in an execution. The group of aggravated homicide offenders, group of death-sentenced offenders, and group of executed offenders are compared to each other throughout the analysis.

To construct the database of post-*Furman* death sentences, data was compiled primarily through court records, existing databases with death sentence information, and news publications. Data regarding each case was crosschecked with records in databases from the Death Penalty Information Center for alignment and accuracy. The database contains the following variables for each death-sentenced offender: name, state and county of sentencing, sex, race, disposition (outcome of death sentence), date of birth, date of crime, date of death sentence, date of exit from death row (i.e. execution, removal from death row, natural death while on death row), date of exoneration, and victim information (race, sex, whether or not they were a law enforcement officer).

For offenders, sex and gender were coded with intuitive abbreviations. The sex of offenders was recorded as "M" for male and "F" for female. The race of offenders was coded similarly, with white offenders coded as "W" and Black offenders coded as "B." Race codes for other races and ethnicities were recorded as well, but it is critical to note that this research was constrained to analysis and comparison of Black and white offenders and their victims. This is due to a lack of robust data for many racial groups, particularly at the granular level of execution.

In cases with partial dates for date of birth, date of crime, date of death sentence, date of exit, or date of exoneration, exact dates were estimated. If available data only indicated the year or month of a variable, the date was recorded as the midpoint of the partial date. For example, if the only record of the date of an offender's death sentence was that it was given in 1998, the date of that offender's death sentence was recorded as July 1, 1998. If available data indicated that an offender's death sentence was reversed in May of 2004 but the exact day is unknown, the date of exit was recorded as May 15, 2004. Additional date estimation dummy variables exist for each date variable. For all estimations, the estimation variable was coded with a value of 1.

The disposition variable contains the outcome of a death sentence for each offender. Dispositions are coded numerically from 1 through 10. The values and corresponding outcomes are as follows: 1 = executed, 2 = suicide, 3 = natural death, 4 = resentenced: life, 5 =resentenced: less than life, 6 = exonerated, 7 = commuted, 8 = removed, unspecified reason, 9 =new trial ordered, removed from death row, outcome of new trial unknown, 10 = on death row. Dispositions for death-sentenced offenders are routinely updated through monitoring of court proceedings, executions, and news coverage.

The most arduous data collection—and not coincidentally the data that makes the database one of a kind—was obtaining detailed victim information for each sentence. The offense of each death-sentenced individual was researched to determine the race(s), gender(s), and number of victims in each case. For this data collection, court records, news articles, and Ancestry.com were relied upon heavily. Despite best efforts, victim information for some cases remains missing due to limited coverage and documentation of the cases. In other cases, the gender of the victim(s) was found, but their race remained unclear. Moreover, some difficulties arose from race categorization, with the race of Hispanic victims being listed as white in records.

In totality, victim information was recorded only for cases in which there was strong evidence of race, gender, and number of victims. To code victim demographics, a "VictimsText" variable denoted the number of victims and abbreviations for the race and sex of victims. For example, if the victim in a particular case was one Black male, "BM" would be recorded. If the victims in a particular case were two white females and one white male, "2WF WM" would be recorded. Subsequently, individual variables for each race and gender of victims contained numeric values for the number of victims of a particular race and sex in each case.

Methods

To conduct my analysis, I relied primarily on Stata. R was used supplementally for data exploration and analysis, but nearly all analyses and figures were produced in Stata. The first step in conducting my analysis was appending the CDC and FBI homicide data to the data from the Baumgartner death sentence database. Once appended and FBI totals were estimated, data from these three sources combined to create a dataset with the total number of victims and offenders in each race and gender category in every state in every year for all homicides since 1976 and all death sentences and executions in every state since 1972.

Using this data, I tested my hypotheses by calculating nationwide death sentencing and execution rates to determine the conditional probability of execution for death-sentenced offenders. At both the sentencing and execution stages, I analyzed cases by a variety of demographic factors and a combination of those factors. These variables included the race and gender of the offender, the race and gender of the victim, the number of victims, and whether or not the victim was a law enforcement officer. I combined the race and gender of the offender with the race and gender of the victim to examine disparities within like combinations. In doing so, it became clear not only how the race and gender of the offender influence death sentencing

and executions but, more substantively, how the interplay between the race and gender of the offender and the race and gender of their victim(s) influence outcomes. Across all years and jurisdictions, the total number of death sentences was divided by the total number of aggravated homicides and multiplied by 100 to produce a baseline nationwide death sentencing rate and rates within all variables of interest. Then, the same process was used to calculate the execution rate for each variable of interest. The total number of executions was divided by the total number of death sentences and multiplied by 100, producing the execution rate. Finally, I calculated the same rate but excluded all executions that have taken place after the year 2013. This is because, nationwide, no person has been executed whose death sentence was imposed in 2013 or later, thus evaluating this more recently sentenced batch of offenders who have not yet been 'considered' for execution (a mark of the inefficiency of the system in and of itself) may distort my results. The resulting calculations produced the execution rate pre-2014 for each variable of interest. The pre-2014 rates are the primary rates used to analyze executions in this paper. I then repeated this process to calculate state-by-state rates for every state with a minimum of ten executions in the modern era.

To illustrate these results, I produced two figures for the national level and each state with a minimum of 10 executions since *Furman*. The first shows death-sentencing rates based on various characteristics per 100 aggravated homicides in a given jurisdiction. The second shows execution rates based on various characteristics per 100 death sentences in a given jurisdiction excluding all death sentences imposed after 2013 from the respective rates.

I suspected that geography would influence my results. Controlling for the state and/or county of execution could offer insight into additional disparities and differing disproportionality depending on location. With counties like Harris County, Texas and states like Virginia notorious

for their high execution rates, the story of who is executed may vary based on the execution attitudes of the county and state where offenders are sentenced. Moreover, there may be regional differences in which race/gender combinations are most likely to lead to execution. It is possible that disparities in one direction could exist in one region and disparities in the opposite direction could exist in another region. If only nationwide rates were calculated, these disparities might be lost in national averages. Thus, calculating state-by-state rates elucidated whether disparate outcomes were consistent across jurisdictions or varied between them.

Next, to compare rates of death sentencing and execution between varied variables of interest (e.g. comparing the execution rate for offenders with white victims to the execution rate for offenders with Black victims), I created two-way scatter plots comparing the respective rates. First, I took death sentencing and execution rates in each state for each variable of interest and appended them into a single dataset. Then, I ran regressions with like variables of interest (e.g. female offenders and male offenders) to compare rates of sentencing at the state and national levels. I then produced figures plotting each state's respective death sentencing and execution rate for the comparison of interest while plotting a regression line with the national rate of the two variables. This analysis allowed a direct comparison of outcomes across demographics and put disparate death sentencing rates and execution rates side by side.

Concerns

One major concern is the confounder of heinousness. In other words, are the offenders executed the 'worst of the worst' among the 'worst of the worst'? Importantly, the extent to which a crime is considered heinous or cruel is not a legally recognized reason for certain offenders to be executed before others. No characteristics of a crime or an offender are considered—at least in law—when determining who is executed among those sentenced to

death. Once an offender is sentenced to death, their crime is equal to any other offender with a death sentence. Nonetheless, evidence suggests that victim characteristics significantly influence who is sentenced and who is executed, despite having no legal basis. I expect that heinousness may have a similar 'unofficial' effect on executions, as discussed in the theory and hypothesis sections. Due to the large sample size and the arbitrary nature of ranking heinousness, this study does not control for the perceived severity of a crime and its potential influence on executions.

A potential critique of this study is its broad strokes approach to analysis. While I use geographical controls to help combat this critique, the main objective of this study is to provide a nationwide analysis of capital punishment disparities from sentencing through execution. Similar state-level analyses have been conducted, but a calling card of this study is its singular ability to broaden this analysis to the entire United States. In some sense, this strength is also a weakness. I expect critics to point toward state, county, and case-level factors to call into question the nationwide analysis. Nonetheless, once sentenced to death, all offenders are assigned the same fate. The suggestion that this study's findings lack particularity only further suggests evidence of disproportionality.

Results

My first results focus plainly on determining the death sentencing rate and execution rate for each independent variable of interest. Figure 1 and Figure 2 (Death Sentences per 100 Aggravated Homicides and Executions per 100 Death Sentences, respectively) show these rates for the entire United States. Using the adjusted FBI homicide totals, post-1972 death sentences, and post-1972 executions, death sentencing and execution rates for each variable of interest are displayed.

Significantly, Figure 1 (Death Sentences per 100 Aggravated Homicides) is the first assessment of death sentencing outcomes that includes complete, nationwide demographic data for victims in death sentence cases. It does not include a variable for cases in which the victim was a law enforcement officer, as that data is not available for all aggravated homicides, though Figure 2 will include this variable in its examination of executions. The results reveal deep disproportionality in death



sentencing. The baseline rate of death sentencing per 100 aggravated homicides is 1.85. Male offenders are sentenced to death at a rate of 2.80 while females are sentenced at a rate of 0.38 per 100 aggravated homicides. Meanwhile, offenders with male victims are sentenced to death at a rate of 1.73, compared to a rate of 4.44 death sentences per 100 aggravated homicides for offenders with female victims.

In terms of race, white offenders are sentenced to death at a rate of 3.07 per 100 aggravated homicides, slightly higher than for Black offenders who are sentenced at a rate of

2.19. This, though, can be explained by the disproportionate sentencing of those with white victims, as most homicides occur within racial groups (O'Flaherty & Sethi, 2010). Offenders with white victims are sentenced to death at a rate of 3.62, while offenders with Black victims are sentenced at a rate of 1.18.

Combining race and gender, offenders with white female victims are sentenced to death at a rate (5.52) nearly twice as high as the next closest victim race and gender combination. Potentially evidencing whether race or gender is a more powerful predictor, offenders with white male victims are sentenced to death at a slightly higher rate (2.77) than those with Black female victims (2.54). Of all combinations, offenders with Black male victims are the least likely to receive a death sentence (0.81).

Combining offender and victim race, those with Black victims have lower death sentencing rates regardless of offender race (1.38 for white offenders, 1.07 for Black offenders). The rate for white offenders with white victims is higher (3.14), but not nearly as high as the rate for Black offenders with white victims (5.85). Combining both offender and victim race and gender, the white female victim tax is clear, particularly for Black male offenders. The rate for white male offenders with white female victims is 5.86, while the rate for Black male offenders with white female victims is 11.31. Notably, this rate is the highest of any independent variable measured and nearly as high as the legally relevant and particularly heinous "Three or more victims" category (11.83).

These results demonstrate clear and consistent disproportionality across lines of race and gender. Moreover, they show that demographic characteristics can be as powerful of a predictor of a death sentence as even the most heinous of legally relevant factors (cases in which there are three or more victims). However, these disparities do not remain consistent through execution.

Figure 2 shows the rate of execution for death-sentenced offenders across both legally-relevant and irrelevant factors. These rates exclude post-2013 death sentences, only including the offenders on death row long enough to be 'considered' for execution, as discussed previously. The nationwide execution rate for all offenders sentenced to death between 1972 and 2013 is 18.57. This tracks with previous literature and shows just how rare execution is for those promised



said fate. Across variables of interest, disparities from sentencing are severely mitigated or flipped entirely among executions. There is significant disparity mitigation by offender gender, with males executed at a rate of 18.75 and females at a rate of 9.94 per 100 death sentences. Offender race disparities are neither severely mitigated nor aggravated. As previously established, it is victim characteristics that are the more powerful predictor of outcomes, and that is where the stark mitigation reveals itself. Offenders with male victims are executed at a rate of 19.28 per 100 death sentences compared to a rate of 21.46 for offenders with female victims. The rate for offenders with Black victims (15.81) remains lower than those with white victims (22.80), though the disparity is mitigated.

Combining victim race and gender, offenders with white male victims (21.60) are more likely to be executed than both offenders with Black male victims (14.08) and those with Black female victims (17.63). Offenders with white female victims are executed at the highest rate of this subgroup, at a rate of 24.01 executions per 100 death sentences.

Combining offender and victim race, Black-on-Black (14.38) and white-on-Black (16.15) rates are nearly as high as the Black-on-white rate of 16.41 executions per 100 death sentences. The white-on-white rate (22.80) is the highest of this group and by a large margin. Combining both offender and victim race and gender, white males who kill white females (24.51) are, by some distance, more likely to be executed than Black males who kill white females (17.97).

Among legally relevant factors, offenders with one victim (18.34) are curiously slightly more likely to be executed than offenders with two victims (17.66). However, the execution rate jumps to 22.82 for those with three or more victims. For those who killed a law enforcement officer, the rate of execution is 23.61, compared to a rate of 18.25 for those with non-law enforcement victims.

To explore the mitigation of disparities from sentencing to execution, *Figure 3* through *Figure 8* compare independent variables of interest to each other at both the sentencing and execution stages. Each point represents the sentencing or execution rate in each state with a minimum of ten executions in the modern era, while the regression line aggregates these rates to show the overall trend. By directly comparing variables of interest, disparate outcomes come into

full view. The shifting of these disparities from death sentencing to execution changes the landscape of disproportionality and discrimination.



Figure 3 illustrates differences between male and female offenders. In sentencing, states with a minimum of 10 executions since *Furman* sentence male offenders to death at an average rate 7.5 times greater than the rate at which female offenders receive a death sentence. In executions, this disparity flips, but this is likely due to the lack of female offenders on death row. Many states have not executed a single female offender, in large part because they have few to no female offenders on death row. One state has executed 100% of the female offenders on death row.



Figure 4 shows that the average state sentences offenders with female victims to death at over twice the rate that offenders with male victims are sentenced to death (Y = 2.13). However, the execution rate shows that there is little difference between offenders with female victims and those with male victims in executions (Y = 1.09). This is evidence of significant mitigation between sentencing and execution.

Evidence of significant mitigation continues to emerge when plotting the death sentencing rate and execution rate for offenders with white versus Black victims (*Figure 5*, see next page). In death sentencing, offenders with white victims are sentenced to death at nearly three times the rate as those with Black victims in the average state (Y = 2.61). However, among executions, that disparity all but disappears (Y = 1.12). The flattening of the line is a clear illustration of disparity mitigation.





Figure 6 shows that, in states with a minimum of 10 executions post-*Furman*, the average death sentencing rate for Black offenders with white victims is 1.78 times greater than the rate at which white offenders with white victims are death-sentenced. However, this flips at the execution stage, with the average execution rate for white offenders with white victims becoming higher than the average execution rate for Black offenders with white victims (Y = 0.73).

Similarly, the average death-sentencing rate for Black male offenders with white female victims is nearly twice the average death-sentencing rate for white male offenders with white female victims (Y = 1.77), as shown in *Figure 7*. However, this disparity again flips, with the execution rate for white male offenders with white female victims being greater on average than the average execution rate for Black male offenders with white female victims (Y = 0.73).





In *Figure 8* (see previous page), the lowest offender/victim death sentencing rate (Black male offenders with Black male victims) is compared to the highest offender/victim death sentencing rate (Black male offenders with white female victims). This comparison is the most striking evidence of mitigation. The average state sentences Black male offenders with white female victims to death at a rate nearly 10 times the rate at which it sentences Black male offenders with Black male victims to death (Y = 9.98). However, at the execution stage, this disparity flips and the execution rate for Black male offenders with white female victims in the average 10+ execution post-*Furman* state is lower than the execution rate for Black male offenders with Black male victims (Y = 0.81).

Discussion

The results of this analysis show clear support for my hypotheses regarding death sentencing. Offenders with female victims are significantly more likely to be sentenced to death than offenders with male victims. Similarly, offenders with white victims are significantly more likely than offenders with black victims to receive a death sentence. Combining offender and victim characteristics, Black offenders with white victims are far more likely to receive a death sentence than white offenders with white victims. Intersectionally, Black male offenders with white female victims are more likely to be sentenced to death than any other legally irrelevant variable measured and nearly equal to the rate for the legally relevant 3+ victims variable, the highest rate measured.

These findings track with existing literature and indicate a systematic devaluation of Black bodies in comparison to white bodies, particularly white females, in death sentencing in the United States. Furthermore, compared to white offenders, Black offenders are disproportionately punished for murders of white victims. Disturbingly, the justice system is

quick to punish the rare realization of the racist, age-old American fear of a violent Black man killing an innocent white woman, and sentence said offender to death. The implications of these realities are vast and troubling. Indeed, a Black male who kills a white female is just as likely to be sentenced to death in the United States as an offender with three or more murder victims. When the identities of an offender and their victim are as likely to predict a death sentence as some of the most heinous, legally-relevant factors, the system is failing. The findings of this thesis regarding executions only further suggest that sentencing practices are disparate and discriminatory.

In executions, the harsh disparities in death sentencing are severely mitigated or, in many cases, flipped. The disparity between offenders with female victims and those with male victims and the disparity between offenders with white victims and those with Black victims are both significantly mitigated. Where Black offenders with white victims are sentenced to death at an average rate nearly twice as high as the average rate for white offenders with white victims, they are executed, on average, at a lower rate than white offenders with white victims. The average death-sentencing rate for Black male offenders with Black male victims is 10 times greater than the average death-sentencing rate for Black male offenders with white female victims, yet, on average, their execution rate is lower.

Unmistakably, these findings support the mitigation hypothesis. The almost unfathomable levels of mitigation from death sentencing to execution are far from evidence of reverse racism in executions, rather they are dire evidence of deeply-entrenched racism in sentencing. The theory of a heinousness threshold in sentencing explains this belief. This theory holds that offenders with victims from backgrounds that the court system values particularly highly are sentenced to death at a lower threshold of heinousness than offenders with victims from

backgrounds that the court system undervalues. Moreover, offenders from undervalued backgrounds with victims from overvalued backgrounds will be sentenced to death at an even lower threshold of heinousness. Women and white individuals are regarded as high value, while men and Black individuals are regarded as low value. The intersectionality of these identities compounds these valuations. While no murder is 'better' than another, there are certainly murders that are more heinous than others. Thus, a man who kills another man may be sentenced to death, while a man who kills a woman in a similar fashion may not be sentenced to death. For crimes with similar characteristics, an offender with a white victim may be sentenced to death while an offender with a Black victim is not. A death sentence may be given to a Black man who kills another Black man in a far more heinous way than a Black man who kills a white woman yet receives less than death. Moreover, the evidentiary standard at which Black offenders and offenders with white victims are sentenced to death may be significantly lower than the strength of evidence needed to sentence white offenders or offenders with non-white victims to death. Permutations abound, depending on who you are and who you kill, you will be held to a different standard in the eyes of the law.

The result of these varying thresholds of heinousness is an imbalanced death row. Those with less heinous crimes or those with possible innocence claims will likely receive more appellate support and their case will be continuously scrutinized. Thus, these offenders may be more likely to have their cases overturned on appeal, or at least not be executed. If the heinousness threshold theory holds true, the offenders who fall in this category will disproportionately have female victims, white victims, and be Black. Meanwhile, the offenders with more heinous crimes and more 'open and shut' cases will receive less appellate attention. Thus, these offenders will be left to languish on death row or be executed. The offenders who fall

in this category will disproportionately have male victims, white victims, and be white. Compounding this, it is possible that those selecting who is executed seek out offenders whose execution will cause the least media attention and potential controversy. These cases would be cases with no doubt of guilt and high levels of heinousness. Yet again, this would disproportionately lead back to white offenders, those with male victims, and those with non-white victims, explaining mitigation.

Under this framework, all roads lead back to sentencing and the discriminatory outcomes it produces. This thesis' finding of clear disproportionalities in sentencing suggests a need for a reckoning with sentencing practices within capital punishment, if not a reckoning with the practice itself. While this thesis' finding of mitigation in executions seems positive in the sense that the state may not kill those it discriminates against in sentencing, it does not suggest that the system is working. Instead, it only further evidences disproportionality and a system that scrambles to redress injustice rather than enact justice in the first place. This places an undue burden on the appellate process and unwieldy power in the hands of those scheduling executions, never mind the psychological and often physical torture it inflicts on those sentenced. These results further affirm that, in the United States, it seems capital punishment does not serve as an arbiter of deterrence or retribution, but rather an architect and executioner of injustice.

Suggestions for Further Research

While this thesis offers a new intervention in the field of death penalty research with its findings of mitigation, it lacks hardened evidence for the heinousness threshold theory born out of that mitigation. Further research should focus on operationalizing heinousness. Beyond being a monumental task to code, it will take significant thought to determine criteria for evaluating heinousness. It is likely most feasible in individual states, following the structure of the Baldus

study and its many replications. Research that examines whether or not offenders are sentenced to death at different thresholds of heinousness based on their identities and those of their victim(s) will be key to advancing the theory this thesis posits. Undoubtedly, any such research would go a long way in explaining the phenomenon of mitigation that this thesis uncovered. To that end, a comprehensive review of the execution selection process in each state would be key to explaining mitigation. If the party selecting which offender to execute is forward-facing and electorally accountable, it stands to reason that public perception would play a large role in the selection of executions. Across this additional research, diagnosing the causes of mitigation will explain why, where, and who lightning strikes twice.

References

- Ayres, I. (2002). Outcome Tests of Racial Disparities in Police Practices. *Justice Research and Policy*, 4(1-2), 131-142. <u>https://doi.org/10.3818/JRP.4.1.2002.131</u>
- Baldus, D.C., Pulaski, C.A., & Woodworth, G.G. (1983). Comparative Review of Death Sentences: An Empirical Study of the Georgia Experience. *Journal of Criminal Law & Criminology*, 74, 661. <u>https://www.jstor.org/stable/pdf/1143133.pdf</u>
- Baldus, D.C., Woodworth, G.G., & Pulaski Jr., C.A. (1990). Equal Justice And The Death Penalty: A Legal and Empirical Analysis. Northwestern University Press.
- Baumgartner, F.R. (2022). A Statistical Overview of the Kentucky Death Penalty. https://fbaum.unc.edu/articles/KentuckyDeathPenaltyOverview-Baumgartner.pdf
- Baumgartner, F.R. (2025). Death Sentence Database. UNC-Chapel Hill Department of Political Science
- Baumgartner, F.R., Box-Steffensmeier J.M., Campbell B.W., Caron C., & Sherman H. (2020).
 Learning to Kill: Why a Small Handful of Counties Generates the Bulk of US Death
 Sentences. *PLOS ONE*, *15*(10). https://doi.org/10.1371/journal.pone.0240401
- Baumgartner, F.R., Davidson, M., Johnson K.R., Krishnamurthy, A., & Wilson, C.P. (2018) Deadly Justice: A Statistical Portrait of the Death Penalty. Oxford University Press.
- Bedau, H.A. (1984). *Case Against the Death Penalty*. The American Civil Liberties Union. <u>https://faculty.uca.edu/rnovy/Bedau%20--%20The%20Case%20Against%20the%20Deat</u> <u>h%20Penalty.mht</u>
- Benson, D. H., Hansen, H., & Westfall, P. (2013). Executing the innocent. *Alabama Civil Rights*& Civil Liberties Law Review, 3(2), 1-24.

https://www.law.ua.edu/acrcl/files/2017/04/Benson.ExecutingtheInnocent.Final_.doc.pdf

- Centers for Disease Control (CDC). Annual. National Vital Statistics Reports. *National Center* for Health Statistics, <u>https://www.cdc.gov/nchs/products/nvsr.htm</u>
- Feigenberg, B., & Miller, C. (2021). Would Eliminating Racial Disparities in Motor Vehicle Searches have Efficiency Costs? *The Quarterly Journal of Economics*, 137(1), 49-113. <u>https://doi.org/10.1093/gie/giab018</u>

Furman v. Georgia, 408 U.S. 238 (1972). https://supreme.justia.com/cases/federal/us/408/238/

Garrett, B.L., Jakubow, A., & Desai, A. (2017). The American Death Penalty Decline. Northwestern University Pritzker School of Law, 107(4), 561-642. <u>https://www.jstor.org/stable/48572974</u>

Gregg v. Georgia, 428 U.S. 153 (1976). https://supreme.justia.com/cases/federal/us/428/153/

Gross, S.R., O'Brien B., Hu, C., & Kennedy, E.H. (2014). Rate of false conviction of criminal defendants who are sentenced to death. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(20), 7230-7235.

https://doi.org/10.1073/pnas.1306417111

- Jacobs, D., Qian, Z., Carmichael, J.T., & Kent, S.T. (2007). Who Survives on Death Row? An Individual and Contextual Analysis. *American Sociological Review*, 72(4), 610-632. <u>https://static.prisonpolicy.org/scans/72406-jacobs.q41.pdf</u>
- Jones v. Chappell, 31 F. Supp. 3d 1050 (C.D. Cal. 2014). https://casetext.com/case/jones-v-chappell-6
- Kaplan, J. (2023, November 28). Jacob Kaplan's concatenated files: Uniform Crime Reporting (UCR) Program data: Supplementary Homicide Reports (SHR), 1976–2022 [Data set].

Inter-university Consortium for Political and Social Research.

https://doi.org/10.3886/E100699V14

Kaplan, J. (2023b). Uniform Crime Reporting (UCR) Program Data: A Practitioner's Guide.Chapter 6 Supplementary Homicide Reports (SHR). <u>https://ucrbook.com/shr.html</u>.

Legal Defense Fund. (2023). Death Row U.S.A.

https://www.naacpldf.org/wp-content/uploads/DRUSAWinter2023.pdf

 Lyman, T., Baumgartner, F.R., & Pierce, G.L. (2021). Race and Gender Disparities in Capitally-Charged Louisiana Homicide Cases, 1976-2014. *Southern University Law Review, 49*(1), 153-208.
 <u>https://fbaum.unc.edu/articles/SULR2022-CapitalCharging/SULR-2021-LouisianaCapital</u> <u>Cases-PublishedVersion.pdf</u>

McCleskey v. Kemp, 481 U.S. 279 (1987). https://supreme.justia.com/cases/federal/us/481/279/

Megale, N. (2016). Executing the innocent: How to Remedy a State's Wrong. Journal of Civil Rights and Economic Development, 28(3), 373-398.

https://scholarship.law.stjohns.edu/cgi/viewcontent.cgi?article=1781&context=jcred

- O'Flaherty, B., & Sethi, R. (2010). Homicide in black and white. *Journal of Urban Economics*, 68(3), 215-230. <u>https://doi.org/10.1016/j.jue.2010.06.001</u>
- Petrie, M.A., & Coverdill, J.E. (2010). Who Lives and Dies on Death Row? Race, Ethnicity, and Post-Sentence Outcomes in Texas. *Social Problems*, 57(4), 630-652. <u>https://doi.org/10.1525/sp.2010.57.4.630</u>
- Phillips, S. (2012). Continued Racial Disparities in the Capital of Capital Punishment: The Rosenthal Era. *Houston Law Review*, *50*(1), 131-156.

https://houstonlawreview.org/article/4109

Phillips, S., & Marceau, J. (2020). Whom the state kills. *Harvard Civil Rights-Civil Liberties Law Review*, 55(2), 585-656.

https://heinonline.org/HOL/LandingPage?handle=hein.journals/hcrcl55&div=18&id=&p age=

- Radelet, M.L., & Bedau, H.A. (1998). The Execution of the Innocent. *Duke University School of Law, 61*(4), 105-124. <u>http://www.jstor.com/stable/1192431</u>
- Smith, R.A. (2022). The Execution of Whites for Crimes Against Ethnoracial Minorities. Du Bois Review: Social Science Research on Race, 19(2), 233-255. https://doi.org/10.1017/S1742058X22000091
- Steiker, C.S. & Steiker, J.M. (2006). A Tale of Two Nations: Implementation of the Death Penalty in "Executing" Versus "Symbolic" States in the United States. *Texas Law Review*, 84(7), 1869-1927.

https://www.proquest.com/docview/203718259?pq-origsite=gscholar&fromopenview=tr ue&sourcetype=Scholarly%20Journals

Appendix















