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## Assessing the Issue of Arbitrariness in Capital Sentencing in North Carolina: Are the Effects of Legally Relevant Variables Racially Invariant?

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Assessing the Issue of Arbitrariness in Capital Sentencing in North Carolina:  
Are the Effects of Legally Relevant Variables Racially Invariant?

by

Judith Kavanaugh Earl

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
Masters of Arts  
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ABSTRACT

This study analyzed case and sentencing data from 632 capital cases involving Black and White defendants and victims, processed in North Carolina from May 1990 through December 2002. Logistic regression analysis of all cases and race-specific data allowed assessment of the variable effects of jury acceptance of statutory aggravating and mitigating factors on capital sentencing outcomes (death versus life). The purpose was to evaluate the role race plays in shaping jury use of legally defined factors in capital sentencing. Significant variance in the effect of jury acceptance of aggravators was observed between Black and White defendants. Black defendants pay a higher premium in terms of the risk of a death sentence than do White defendants whose crimes are comparably aggravated. There was no overall disparity in the effect of jury acceptance of mitigatory factors observed, although certain mitigators reduced the risk of a death sentence significantly more for Black or White. Overall, the aggravators had a statistically significantly stronger effect on sentencing outcomes than did the mitigators, regardless of race, and on cases involving Black defendants, regardless of victim race. Racial invariance was not shown.

## Chapter One

### Introduction

It would seem to be incontestable that the death penalty inflicted on one defendant is "unusual" if it discriminates against him by reason of his race, religion, wealth, social position, or class, or if it is imposed under a procedure that gives room for the play of such prejudices.

*Furman v. Georgia*, 408 U.S. 238 (1972), DOUGLAS, J., concurring.

The primary purpose of this paper is to explore the extent to which the 'guided discretion' approach to death sentencing under the seminal holding in *Furman v. Georgia*, 408 U.S. 238(1972) has achieved racial neutrality in the life-death decision. This is accomplished through statistical analysis assessing the presence or lack of racial invariance in capital jury application of the North Carolina capital sentencing statute from 1990 to 2002. The secondary goal of the paper is to explore the viability of statistical analyses as proof of nonpurposeful racial discrimination, which is potentially actionable as violative of constitutional principles requiring evenhanded punishment, jury impartiality and substantive due process.

To frame the empirical issues, it is necessary first to understand three pivotal United States Supreme Court decisions: 1) *Furman v. Georgia*, 1972 (prohibited standardless death sentencing; commuted all pending sentences to life and placed moratorium on further death sentencing); 2) the combined holdings in *Gregg v. Georgia* (1976), *Proffitt v. Florida* (1976) and *Jurek v. Texas*(1976) (established the two-pronged

‘guided discretion’ paradigm for death sentencing); and *McCleskey v. Kemp* (1987) (rejected statistical showing of group-based racial disparity as evidence of purposeful discrimination against an individual defendant; established undefined ‘constitutional significance’ standard for statistical showing of Eighth Amendment arbitrariness in operation of *Furman*-compliant sentencing procedures).

*Furman v. Georgia* (1972): *The Eighth Amendment Argument*

Ground zero for current capital punishment jurisprudence is the landmark case of *Furman v. Georgia*, 408 U.S. 238 (1972). In *Furman* the Supreme Court rejected the unlimited discretion previously afforded capital juries in making the life-death decision as violative of the Eighth Amendment’s prohibition of excessive, cruel and unusual punishment. This approach to the life-death sentencing choice was based on a new interpretation of what may constitute cruel and unusual punishment under the Eighth Amendment. Only a year before *Furman*, in *McGautha v. California* (1971) and its consolidated companion case, *Crampton v. Ohio* (1971), the Court had rejected Fifth and Fourteenth Amendment deprivation of procedural due process arguments against capital sentencing procedures which employed a single jury for guilt and sentencing and allowed standardless jury discretion under the California and Ohio capital sentencing statutes, finding the procedures adequate and fair within the meaning of those two constitutional provisions and that the exercise of discretion is essential to the sentencing process.

In *Furman*, the Court was presented with the different question of the constitutionality of standardless death sentencing discretion under the Eighth Amendment’s prohibition of excessive, cruel or unusual punishment, regardless of the procedural fairness surrounding the decision. This time a majority of the Court found



that, although unbridled jury discretion may be exercised in a way which meets procedural due process requirements, the lack of meaningful standards for deciding when a death sentence is appropriate amounts to unacceptable arbitrariness under the Eighth Amendment. The lack of standards capable of producing consistent and predictable outcomes for the same crime was found to be excessive, cruel, and unusual punishment, “freakishly imposed,” in the words of Justice Stewart (*Furman*, Stewart, J. concurring).

Among the reasons cited by the concurring plurality, and the dissenters as well, for distinguishing death sentencing was the acknowledgement that ‘death is different’ in its irrevocable finality; and although ‘traditional’ in our system, death is unique as the ultimate penalty and requires maximum care to ensure equitable and correct decisions (*Furman*, 1972). The potential for racial discrimination in death sentencing was not an express basis for the *Furman* holding, but was specifically cited as one of the risks, if not certain result of absolute jury sentencing discretion by Justices Douglas, Brennan, Marshall, and acknowledged by dissenting Justices Burger and Powell. Unlike other potentially legal and illegal bases for discriminatory governmental action, protection from racial discrimination finds its roots in our history and the Constitution itself; the Amendments were all enacted to end slavery and cure its ills by afford Black persons full citizenship and equal protection of our laws. If ‘death is different’, so is race, and where racial disparity is demonstrated in operation of the law, it demands scrutiny by the courts for constitutional acceptability.

It should also be noted that the dissenters did not express a belief that the death penalty as then administered was fair or color-blind, but stressed reluctance under principles of judicial restraint to interfere with what was seen as a state legislative

function, or to expand so broadly the interpretation of the Eighth Amendment. In a foreshadowing of the controversy as to what constitutes proof of racial inequity in capital sentencing to be addressed fifteen years later in *McCleskey*, Justices Burger and Powell also questioned the degree to which the Court should rely on the statistical evidence cited by members of the plurality in support of their positions (*Furman, 1972*, BURGER, J. dissenting, at note 12; POWELL, J. dissenting).

Then there was the question of remedy. Among the concurring plurality, only Justices Brennan and Marshall pressed for absolute rejection of death as a penalty, a position both maintained until their deaths. Justices Douglas, White and Stewart opted for rejection of the death penalty under then extant state statutes but did not rule out the possibility that a statute could be drawn which would limit jury sentencing discretion to impose death in constitutionally acceptable ways while preserving the jury's ability to grant leniency in specific cases (*Furman, 1972*). The result of *Furman*, then, was invalidation of existing state capital sentencing statutes, a moratorium on further imposition of the death penalty under such statutes, and commutation of all pending death sentences to life in prison (*Furman, 1972*). Many believed, or at least hoped, that *Furman* effectively abolished death as a penalty in this country; but that turned out not to be the case (Radelet, 2001).

#### *Furman Implemented: Gregg/Proffitt/Jurek*

The state legislative response to *Furman* was immediate. Within four years, thirty-five (35) states had re-enacted capital sentencing statutes intended to incorporate the *Furman* principles, and five cases had made their way to the Supreme Court: *Gregg v. Georgia*, 428 U.S. 153 (1976), *Proffitt v. Florida*, 428 U.S. 242 (1976); *Jurek v. Texas*,

428 U.S. 262 (1976); *Woodson v. North Carolina*, 428 U.S. 280 (1976); and *Roberts v. Louisiana*, 428 U.S. 325 (1976).

Three of the states, Georgia, Florida and Texas, whose capital sentencing systems were brought before the Court in *Gregg*, *Proffitt*, and *Jurek*, adopted procedures whereby the capital sentencing discretion was appropriately guided in a ‘guided discretion’ model as impliedly acceptable under *Furman*. . The *Gregg/Proffitt/Jurek* holdings collectively represent the second stage – implementation – of the new death sentencing approach announced in *Furman*. Each state statute provided two substantive, interacting criteria to be used by the sentencing entity to decide when the death penalty would be appropriate: 1) standards defining and narrowing the class of crimes for which death could be considered -- the aggravating criteria; and 2) mandatory procedures allowing comprehensive consideration of individual mitigating factors which might justify mercy in a particular defendant’s case (*Gregg/Proffitt/Jurek*).

Each state also provided an acceptable procedural framework for the application of these standards, in the form of bifurcated guilt-penalty proceedings, automatic and expedited appeal of all death sentences to the respective state supreme courts, and mandatory proportionality review.<sup>1</sup> Although different in certain procedural respects, the three statutory schemes approved in *Gregg/Proffitt/Jurek* have provided the template for all state capital sentencing procedures today (Bowers & Foglia, 2003; Holowinski, 2002).

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<sup>1</sup> This last procedure was made optional some ten years later in *Pulley v. Harris*, 465 U.S. 37 (1983), based on the Court’s conclusion that efficient aggravation standards made proportionality review redundant. Some states, notably New Jersey and Florida, have retained proportionality review as an extra procedural safeguard.

The two remaining states, North Carolina and Louisiana, whose statutes were reviewed in *Woodson* and *Roberts*, had also enacted procedures which significantly limited and clearly defined the crimes for which death was an available penalty, but made death mandatory for those few crimes, without allowing consideration of mitigatory factors. The Court emphatically rejected this approach as inconsistent with *Furman*, holding that while the jury's discretion to impose death must be limited, its discretion to grant life to individual defendants based on their unique situation could not (*Woodson*, 1976). The *Furman* approach thus dictates the narrowest of discretion to impose death, while at the same time affords the broadest discretion to grant life. It is in the application of these principles that nonpurposeful racial bias may have the most play – when capital sentencing entities decide objectively whether a defendant's crime deserves death, but subjectively whether the defendant himself deserves life.

Fifteen years after *Furman* and a decade after its new take on the Eighth Amendment notion of punishment was implemented per *Gregg/Proffitt/Jurek*, the Supreme Court was presented squarely with the question of whether *Furman* and its progeny had produced a sentencing procedure which was producing equitable death sentencing – not just among capital defendants generally but between Black and White defendants, in *McCleskey v. Kemp*, 481 U.S. 279 (1987).

*Race Neutrality Under Furman: McCleskey v. Kemp (1987)*

*McCleskey v. Kemp (1987)* is the third of the triumvirate of holdings which have shaped capital sentencing law for the thirty-odd years since *Furman*, and it continues to be the decision most affecting efforts to redress documented racial bias in the capital justice system. Defendant McCleskey was an African-American convicted of the murder

of a White police officer and sentenced to death in Georgia. He brought a habeas corpus proceeding seeking the overturn of his death sentence based on an assertion, that, despite meeting the *Furman* standards per *Gregg*, distortions in the application of the Georgia statute to Black citizens, reflected a racial bias infecting the Georgia capital justice system which 1) violated his rights to equal protection under the Fourteenth Amendment, and 2) resulted in sentencing arbitrariness as to him which violated the Eighth Amendment under *Furman*. No direct evidence of bias against McCleskey personally was claimed or shown.

*Denial of McCleskey's equal protection claim.*

In asserting that his death sentence was a denial of equal protection, McCleskey relied on a theory of disparate impact between Black and White defendants and victims from application of Georgia's capital justice procedures, which was supported by a comprehensive statistical study of the Georgia system (the Georgia Study) by Professor David Baldus and his colleagues (Baldus, Woodworth & Pulaski, 1990). The study used modern logistic regression methodologies like those previously accepted by the Court to prove implied purposeful discrimination based on disparate impact in other non-sentencing situations, such as Title VII employment and housing discrimination cases and jury venire selection (*McCleskey, 1987*).

McCleskey asserted that the Georgia Study established both an increased risk of a death sentence for Black defendants over White defendants who had committed comparable crimes, and for those who killed White victims, indicating an overall devaluation of Black citizens. The study, he argued, showed that the statute as applied placed Black capital defendants such as McCleskey at an unfair and arbitrary, higher risk

of receiving a death penalty than White defendants committing comparable crimes which denied him equal protection under the Fourteenth Amendment and subjected him to punishment violative of the Eighth Amendment. The real issue was what level and type of proof would sustain a denial of equal protection claim based on disparate impact, or an Eighth Amendment arbitrariness claim in a capital sentencing case: “This case presents the question whether a complex statistical study that indicates a risk that racial considerations enter into capital sentencing determinations proves that petitioner McCleskey’s capital sentence is unconstitutional under the Eighth or Fourteenth Amendment.” (*McCleskey, 1987*).

It must be stressed that McCleskey was not challenging the Georgia statute directly; his claim sought to overturn his individual sentence. While the overturn of his sentence on a disparate impact basis may have set precedent applicable to other members of the affected group – Black defendants sentenced to death – the relief he sought was specific to him and this distinction between individual and general remedies is important to understanding the holding in McCleskey (Graines, 2000).

There is an intent element in an equal protection claim which requires proof of purposeful discrimination against an individual or a group to trigger the strictest judicial scrutiny racial classification requires (*Washington v. Davis (1976)*). The purpose to discriminate may be either express – disparate treatment – or inferred from informed tolerance of differences in the impact of facially neutral governmental action on a group. The inference requires a disparity in effect so significant as to imply an intent of adverse effect on the group and its individual members – that is, disparate impact discrimination is actionable only where it is so significant as to support an inference that “... the

decisionmaker selected or reaffirmed a particular course of action ‘because of,’ not merely ‘in spite of,’ its adverse effects upon the identifiable group.” (*Personnel Administrator of Massachusetts v. Feeney*, 1979). Unconscious, but palpable, discrimination is not actionable as a denial of equal protection (*McCleskey*, 1987; Lawrence (1987)).

The *McCleskey* court denied his equal protection claim, holding that the broad discretion inherent in capital sentencing and the myriad of factors which inform that discretion in a jury capital sentencing decision in an individual case prevents use of statistical proof of general racial disparities as sole proof of actionable *purposeful* racial discrimination, within the meaning of the Equal Protection Clause, in imposing the death sentence in an individual case.

The Court relied on its prior decisions holding that statistical or other evidence of disproportionate negative impact of governmental action on one group over another is not enough, standing alone, to support a finding of discriminatory intent (*Arlington Heights v. Metropolitan Housing Dev. Corp.* (1977)) except where the pattern of disparity is “stark”, citing *Gomillion v. Lightfoot* (1960) [redistricting to exclude 395 of 400 Black voters – a 99% disparity] and *Yick Wo v. Hopkins* (1886) [requiring permits for 310 laundries in wooden houses, but declining to issue permits for any of the 200 Chinese-owned laundries – 100% disparity].

In rejecting the use of the proffered statistical proof in *McCleskey*’s case, the Court also noted flexibility in its willingness to consider statistical proof of discriminatory intent in Title VII cases and particularly distinguished its acceptance of statistical proof in jury venire cases (*Castaneda v. Partida* (1977)[2-1 disparity between

Hispanic population and grand jury composition]; *Whitus v. Georgia (1967)*[3-1 disparity between Black population and grand jury composition]; (*Turner v. Fouche (1970)*[1.6 disparity between Black population and grand jury composition], but based this distinction on the level of discretion and number of decisionmakers involved in the allegedly discriminatory action.

The Court held that the more decisionmakers, the more factors affecting the decision, and the larger the number of decisions affecting the group from which the plaintiff seeks to infer discrimination in his individual case, the further his claimed harm is causally from the challenged action and the less acceptable statistics become as sole proof of intent to discriminate (*McCleskey, 1987*). The Court held that “an application of an inference drawn from general statistics to a specific decision in a trial and sentencing [context] simply is not comparable to the application of an inference drawn from ...” these other contexts where the discretion was more defined and exercised by fewer people (*McCleskey, 1987*).

The *McCleskey* Court acknowledged the potential for racial bias skewing capital trial and sentencing decisions, but saw it as the inevitable consequence of the jury system and the broad discretion it requires. The Court noted the framework of procedural safeguards it had constructed by then to keep racial bias below as yet undefined ‘constitutionally acceptable’ levels at other discretionary decision points in the process (*Batson v. Kentucky (1986)*[systematic prosecutorial strikes of Black jurors, or demonstration of venire disproportionate to minority population is prima facie proof of discriminatory intent for equal protection purposes, shifting burden to prosecutor to provide race-neutral explanation for exclusion]; *Irvin v. Dowd (1961)*[widespread racial



bias can require change in venue]; *Ristaino v. Ross (1976)*[significant likelihood of racial biasing influence requires questioning of jurors about racial attitudes]; *Turner v. Murray (1986)* [high potential for racism biasing jurors in Black-on-White murder requires voir dire re racial opinions under Sixth Amendment jury impartiality guarantee] and that effort to perfect procedural fairness continues today (*Miller-El v. Cockrell (2003)*) [prosecutorial intent to discriminate racially in jury selection within meaning of Equal Protection Clause in jury selection may be inferred from practices such as venire ‘shuffling’ and disparate questioning of White and Black jury candidates].

It is reasonable to conclude that *McCleskey* absolutely forecloses the use of statistical evidence of group disparities as sole, competent proof of purposeful denial of equal protection in individual capital sentences; at a minimum it expressly held that something more than the ‘mere correlation’ between race and death sentencing the Court found the Georgia Study produced is necessary (*McCleskey, 1987*). No case has attempted to rely on an equal protection argument proffering solely statistical proof in a sentencing context post-*McCleskey* (Pillai, 2001), and it is questionable whether such a claim could be sustained as to any criminal sentence (Kennedy, 1988). Perhaps *McCleskey* would allow an equal protection claim in a sentencing case, were the statistically demonstrated disparity were sufficiently stark, or a different individual or class-based remedy for denial of equal protection pursued which would allow use of statistical to show racial discrimination in capital sentencing (Graines, 2000). In light of the empirical studies to date, such a stark disparity is unlikely to be found, and continued focus on equal protection theories begs the question of whether the cause of the disparity is actually the result of purposeful discrimination – a required element of an equal

protection claim – or may be caused by nonpurposeful racial bias perhaps violative of other constitutional provisions, such as the Eighth Amendment, also addressed in *McCleskey*.

*McCleskey's Eighth Amendment claim.*

Having rejected McCleskey's equal protection claim as unproven, the Court next looked at the sufficiency of the Georgia Study to demonstrate arbitrariness in McCleskey's sentencing result, violative of the Eighth Amendment under *Furman*. The Court accepted the Georgia Study as valid for purposes of the Eighth Amendment claim as it had for the equal protection claim, but where it may rejected the Georgia Study more as being incompetent to sustain an inference of discriminatory intent in a sentencing context, it rejected it in the Eighth Amendment context as being insufficient to document a racial bias strong enough to rise beyond constitutionally acceptable levels, holding the disparity demonstrated in the study lacked the 'constitutional significance' to be arbitrary or capricious within the meaning of the Eighth Amendment.

The Court noted that McCleskey could not say his death sentence was disproportional to his crime, as it involved aggravating circumstances the Georgia statute had defined in sufficiently precise terms to qualify it for the death penalty. Nor could he say that the Georgia statute was defective in allowing the jury broad discretion to considering mitigatory factors when deciding life or death in his or any other case, since it had been upheld already in *Gregg*, no racial bias had been asserted in its application to him personally, and *Woodson* required jury discretion in sentencing. The only possible basis for an Eighth Amendment claim was showing constitutionally significant disparity

– and this is the puzzle the *McCleskey* decision poses: What level of racial prejudice must be shown to trigger constitutional significance?

Without explaining what level it might have found constitutionally unacceptable, the *McCleskey* court took more of a ‘we’ll-know-it-when-we-see-it’ approach, and did not see it in *McCleskey*’s case. The Court noted that the jury is the criminal defendant’s “fundamental ‘protection of life and liberty against race or color prejudice (*McCleskey* (1987), citing *Strauder v. West Virginia* (1880)) and that the purpose of requiring that the composition of a capital sentencing jury reflect the criminal’s community is to assure ‘diffused impartiality (citing *Taylor v. Louisiana* (1975)). The Court acknowledged again that individual jurors bring to the sentencing decision their personal attitudes, experience and other qualities which cannot be reduced to range of factors to which legislation can apply. Still, the Court rejected any argument that the broad discretion to be lenient is per se constitutionally unacceptable, and confirmed that the broad discretion for mercy is absolutely essential to the capital sentencing decision provided it is exercised in the facially fairest possible setting.

Having accepted that *McCleskey*’s sentence was proportional and the result of scrupulously fair procedures for the exercise of the sentencing discretion, but agreeing that racial prejudice is always a risk in sentencing situation, the Court examined the Georgia Study to determine “exactly” what it showed and whether it rose to the level of constitutional significance requiring further inquiry. The Court relied heavily on the trial court’s analysis of the study, which had resulted in a rejection of the findings as flawed by problems with the methodology, such as sample size and selection, coding problems, variable selection and missing data: “It is a major premise of a statistical case that the

data mirrors reality. If it does not in substantial degree mirror reality, any inferences empirically arrived at are untrustworthy” (McCleskey, at footnotes 5-7). The Supreme Court elected to accept the study as valid, as had the appellate court, but held that the results did not rise to constitutional significance within the meaning of the Eighth Amendment.

The Court focused on two points: 1) logistic regression analysis quantifies only the degree to which the risk of the outcome occurring is increased or decreased by the factor analyzed and the study failed to produce statistically significant racial disparities in the risks of a death sentence; and 2) the instability and lack of predictive efficiency in the models used, as evidenced by low  $R^2$  values, weaken the validity of any inference of constitutionally unacceptable race-based sentencing disparities.

The unadjusted data showed a notable race-of-victim effect (11% of White victim cases resulting in a death sentence versus 1% of Black victim cases) and a slight, reversed race-of-defendant effect (4% Black defendants versus 7% White defendants with death sentence). When the data was subjected to logistic regression analysis, the only racial effect demonstrated was a significant increase [a multiplier of 4.3] in the risk of any defendant receiving the death penalty if his victim was White, but a Black defendant was almost as likely to receive a death sentence as a White defendant, his risk being only 1.1 times higher. The highest fit was for a 230-variable model which attempted to incorporate all possible influences on a capital sentencing decision, with an  $R^2$  of “between .46 and .48”, meaning it predicted the sentencing outcome in less than 50% of the cases (McCleskey at footnote 6).

Thus it can be concluded that 4.3 multiplier of the risk of death sentencing, at least based on the race of a victim, was not significant enough in the eyes of the *McCleskey* court to be constitutionally significant for Eighth Amendment purposes. It can also be concluded that logistic regression models with a predictive value of less than 50% are not sufficiently predictive to rely on their results for a finding of constitutionally unacceptable levels of race bias in a capital sentencing context. What higher disparities and predictive efficiencies might trigger the Eighth Amendment or the Sixth Amendment protections against ‘constitutionally significant’ racial bias are unknown, but the levels shown in *McCleskey* were not enough.

No case has since reached the Court relying solely on statistical evidence for a challenge to the death penalty. Unfortunately, despite three decades of fine-tuning these models and the construction of a complex system of ‘super due process’ safeguards around them, the empirical research still finds significant unexplained disparities between Black and White citizens in the administration of capital justice. (Baldus & Woodworth, 2004; Bowers & Foglia, 2003; Howe, 2004). What remains in dispute is whether this research is sufficient to raise constitutional red flags as to the continued legality of the death penalty. It is also likely that any significant disparity found is not intentional, but the result of unconscious racial attitudes, in light of the continued integration of society.

#### *Latent Racism versus Blatant Racism*

Open racism is no longer politically correct, and it can fairly be said that *Furman* and its progeny have largely eliminated purposeful racism from death sentencing (Howe, 2004), although it may still exist in certain, defined geographic areas (Baldus & Woodworth, 2003; Paternoster & Brame, 2003). Many argue that latent racism still

infects capital justice, not in the form of open prejudice, but as the cultural relic of three centuries of slavery and Jim Crow (Howe, 2004; Lawrence, 1987). The *McCleskey* court acknowledged that race-based sentencing disparities exist, citing various studies and noting Congress' development of sentencing guidelines for criminal cases to reduce unguided discretion arising out of individual predispositions not just in capital cases but in all criminal cases (*McCleskey* at footnotes 35, 38), while at the same time accepting some level of racism as an unavoidable by-product of the jury system.

As we have moved further from the 1970's, and the civil rights movement has cooled from confrontation to implementation of the laws intended to cure racial discrimination, the nature of racism has changed. Critical race theorists maintain that although open racism has dwindled, latent racism is still a pernicious and pervasive negative force in society (Lynch & Patterson, 1996). The source of latent racism is a topic for theoretical debate with the so-called 'idealists', who have most affected the legal system in this country, viewing racism as attitudinal – and thus capable of change over time as the law forces social change and acceptance of disparate groups (Lawrence, 1987). The 'realists' among post-modern theorists view racism as the product of the continuing struggle between the classes in a capitalist society, with those in power always consciously and unconsciously acting to maintain their status and suppress those below by keeping them in their place (Delgado, 2001). Both sides agree that racism, both latent and blatant, is still an active force in our culture.

Intentional racism is relatively easy to eliminate because it is the result of conscious personal choices and thus can be addressed through education and the threat of legal consequences. Latent racism is unintentional and nonpurposeful; it just happens as

part of the social, cultural, geographical, religious and even political conditioning which occurs in development of individual personalities and attitudes (Lawrence, 1988; Lenhardt, 2004). It thus is not subject to traditional legal remedies applicable to intentional, purposeful conduct, such as equal protection claims, and can only be cured by time and proximity to the object of the unconscious negative attitudes.

To fear those of a different race and thus different from one's self is human, apparently a learned survival reaction which can be unlearned through proximity (Öhme, 2005). The unconscious attribution of negative traits to Black persons may occur among White capital jurors who still make up the majority of juries, despite even the most conscientious effort at intellectual racial neutrality because the trial and sentencing experience is filtered through each individual jurors viewpoint, life experience and attitudes, including racial attitudes of both Black and White jurors (King, 1993; Eisenberg, Garvey & Wells, 2001).

Other factors which affect jury decision making are internal to the process itself, a process in which many capital jurors misunderstand their role so that their decision may be premature, arise out of incomprehension of the instructions given, or an erroneous belief that a guilty decision requires the death penalty or that a life decision may result in release of the defendant, and so on (Bowers & Foglia, 2002; Foglia, 2003). The effect of these factors will also interact with racial attitudes, although none of these factors can be attributed to a conscious desire to discriminate against a defendant based on his race. All can be attributed to individual juror characteristics, including unconscious racial bias, which cannot be standardized by additional due process but may still significantly undermine the fairness of the sentencing process.

The difficulty lies in detecting and quantifying unconscious and thus nonpurposeful racism in order to determine the degree to which it may affect capital sentencing decisions under *Furman*. To date the issue of nonpurposeful discrimination resulting in racially variance in capital sentencing has not been raised before the Supreme Court. If such bias exists there are no directly applicable legal standards to cure it.

The primary empirical objective of this study was to detect and measure racial variance in application of the *Furman* standards as embodied in a *Furman*-compliant state capital sentencing law, in this case, that of North Carolina. Evidence that the apparently neutral application of the *Furman*-based, legally relevant sentencing standards – the aggravating and mitigating circumstances accepted by a capital jury – to similarly situated defendants -- is not racially invariant casts doubt on the legality – and the morality -- of continuing to use the *Furman* model to send defendants to their death more because of their race than their crime. A finding of racial variance may indicate, as Justice Blackmun concluded towards the end of his life<sup>2</sup>, that the *Furman* experiment has failed, and that the Constitution demands a different approach to punishment of the most serious crimes. It may also be indicative of latent nonpurposeful racism still skewing the process which cannot be addressed by additional procedural fix-its. The results provide a basis for alternative constitutional arguments under which the Supreme Court may be willing to consider supporting statistical evidence in evaluating the racial disparity in

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<sup>2</sup> As one of his last acts on the Court, Justice Blackmun receded completely from his position in *Furman* and voted to abolish the death penalty: “Rather than continue to coddle the Court’s delusion that the desired level of fairness has been reached ... I feel morally and intellectually obligated to concede that the death penalty experiment has failed.” ( *Callins v. Collins* (1994), BLACKMUN, J. dissenting).



capital sentencing procedures and find such disparities constitutionally unacceptable and repugnant to fundamental concepts of racial equity.

This introductory chapter has outlined in the broadest terms the legal setting for the discussion. Chapter Two presents a more detailed summary of the constitutional and legal issues at play in death sentencing and the effect of the *McCleskey* decision on the use of statistical analyses to prove racial disparities. Chapter Three provides an overview of the extant empirical studies on the influence of race on capital justice in this country and defines the research problem presented and the hypotheses tested. Chapter Four describes the North Carolina data and the logistic regression methodology used. Chapter Five presents the results of the logistic regression analyses performed. Finally, Chapter Six discusses the results and draws conclusions as to the meaning and possible use of the findings in the continuing effort to maximize race-blind decision-making in capital sentencing.

## Chapter Two

### Legal Overview

Chapter One explained the import of *Furman*, *Gregg/Proffitt/Jurek* and *McCleskey* on the continued use of the death penalty in this country, despite the potential for race-based disparity. It is important to note several things about these cases. First, they are all capital *sentencing* cases and do not apply directly to the other discretionary decisions which lead a defendant to the life-death decision and might be racially-biased. Thus studies showing racial bias at the prosecutorial decisions may inform these sentencing holdings, and vice-versa, but are not directly on point insofar as their legal reasoning.

Secondly, although *McCleskey* held that only purposeful discrimination may be redressed under equal protection principles and rejected the use of statistical proof to imply intent, it did not require intent to discriminate in an Eighth Amendment context, nor did *Furman* or *Gregg*. Rather the question posed – and left unanswered -- was what level of racial disparity would be constitutionally significant. Thirdly, no case has yet decided what level of statistically demonstrated race-based disparity in capital sentencing would trigger constitutional protections under doctrines other than equal protection, although *McCleskey* provided guidance as to what won't.

The final major issue raised by these cases is the choice of remedy. For example, *McCleskey* was a habeas corpus proceeding seeking to overturn a specific defendant's

sentence as a denial of equal protection under the Fourteenth Amendment, where *Furman* and *Gregg/Proffitt/Jurek* sought to answer the broader legal question as to whether the death penalty statutes then administered in Texas and Georgia – and echoed in other capital states – resulted in cruel and unusual punishment under the Eighth Amendment. While all of these cases sought specific relief from death sentences, relief in McCleskey’s case would have been specific to him – that his particular sentence was unconstitutional - - and involved a very individual burden of proof of purposeful harm to him as an individual notwithstanding the fact that his success would have effectively invalidated the Georgia statute. *Furman* and *Gregg* were appeals of state supreme court decisions, petitions for writ of certiorari seeking the answer to broad legal questions of general applicability, and thus affected directly all death sentences reached prior to their holdings.

The choice of remedy affects the burden of proof and the weight accorded the statistical evidence. A habeas proceeding is an original proceeding, and the Court is not limited to the record and legal questions as in certiorari proceedings, but the burden of proof is heavier. *McCleskey* applied habeas corpus evidentiary standards [‘exceptional’, ‘clear and convincing’ proof] to an individual equal protection and Eighth Amendment claim seeking individual relief. Because of the uncertainty in any statistical analysis and the fact this McCleskey’s claim was supported only by statistical proof implying the necessary discriminatory purpose and arbitrariness, he simply did not meet his burden of showing purposeful discrimination. Had he raised claims in a proceeding with a lesser evidentiary requirement, or which did not have an intent element, or had the statistics been stronger, he may have fared better and certainly would have a lower bar to jump.

Racial disparity, be it intentional or not, which skews so irrevocable a decision as the life-death decision in a capital case, raises a Constitutional alarm to which the court must at some point respond. Since the only way to prove systemic bias is through statistical studies – which are by definition only estimates, not absolute fact -- *McCleskey* seems to have eliminated equal protection as a basis for challenging racially disparate capital sentencing by requiring a showing of racially discriminatory intent. Whether any statistically proven level of substantive latent racism in the capital justice system is or is not acceptable under our Constitution is beyond the scope of this analysis, except to frame the issues and suggest possible alternative legal vehicles to resolve them in the courts – but there are arguments to be made.

#### *Alternative Constitutional Principles*

There are four constitutional provisions pertinent to the issue of significant racial disparity in application of the death penalty. The Fifth and Fourteenth Amendments guarantee substantive and procedural due process of law before any governmental deprivation of life, liberty, or property. It has been argued that substantive due process requires racial equity in capital sentencing (Bird, 2003) and it would seem fundamental that the Constitution would abhor – as a matter of substance over form -- a demonstrably racially inequitable result of application of a law, regardless of how procedurally perfect it may be.

As to Sixth and Eighth Amendment concerns, the Court has already indicated that some level of racial disparity in capital sentencing outcomes is unavoidable, but at an as yet undefined point such disparity may reach levels unacceptable under Sixth Amendment guarantees of trial and sentencing impartiality or amount to arbitrary and

capricious action violative of the Eighth Amendment. The Court has already expressly acknowledged that Black-on-White crime poses the greatest risk for play of racial prejudice (*Turner (1986); McCleskey (1987)*). Statistical analysis is the only means to measure racial disparity – inter- or intra-racial -- when looking at the overall, long term operation of a statute As discussed in Chapter One, there is no guideline beyond the Court’s consideration of the Eighth Amendment argument in *McCleskey* as to what level of disparity would be unacceptable other than it should reach statistical significance and be the product of a better-than-50% predictive model which incorporates appropriate variables to allow reasonable comparison of similar levels of criminal culpability among the defendants. Once a statistically significant disparity is demonstrated, these two constitutional protections are arguably triggered and thus may provide a basis to challenge the race-neutrality of a statute. What the Court would make of such a disparity, or what degree of disparity might offend constitutional sensibilities is unknown. As to the possibility of a substantive due process claim, several legal and proof obstacles would have to be surmounted, but such a claim may also be viable.

#### *Race-based Sentencing Disparity as Denial of Substantive Due Process*

Legal scholars have argued that substantive due process principles might sustain for a challenge to the death penalty because of the higher, strict scrutiny the Court must afford to claimed deprivations of ‘fundamental’ rights (Bedau, 1996; Bird, 2003) and the heavier burden placed on the state to show a compelling interest which cannot be protected through other means other than the discriminatory action which also must be shown to be tailored as narrowly as possible to do so. Once the claimant demonstrates the existence of the ‘fundamental right’ – a legal question -- and the fact that it is being in

some way infringed upon by the state action in question – a mixed question of law and fact -- the primary burden of proof and persuasion shifts to the state. The viability of a substantive due process claim based on racial disparity has yet to be explored by the Court in a death penalty case, primarily because other constitutional protections have been available to redress racial discrimination in the past. If, however, none of the other constitutional provisions are adequate to support a claim, because of proof or procedural issues peculiar to a capital sentencing situation, a substantive due process claim might suffice.

Substantive due process is a judicially created doctrine which holds that in addition to the rights specifically enumerated in the Constitution, certain rights are so fundamental to life and liberty that they are inherently protected by the Constitution despite the lack of guidance from the more specific provisions of the Constitution (Crump, 1996). No ‘fundamental’ right to life has yet been fully recognized by the Court (Bird, 2003). Most of the cases touching on this issue have been based in fundamental liberty interests, such as the right to privacy (*Griswold v. Connecticut (1967)* [establishing a woman’s privacy right to birth control]; *Roe v. Wade (1973)* [woman’s privacy right to chose whether to be pregnant or not]; *Washington v. Glucksburg (1997)*[no privacy right to die, even for terminally ill patients Other liberty interests recognized by the court are freedom of unwarranted governmental infringement of personal movement (*County of Sacramento v. Lewis (1998)*) and travel (*Kent v. Dulles(1958)*), and bodily integrity (*Rochin v. California (1952)*). The right to life has been discussed in the context of excessive force cases which resulted in death, from a police chase, and the Court has said it requires “something more than negligence and less

than intent to harm (*County of Sacramento v. Lewis*, 1998). There is also a murky question of what, if any, substantive due process rights exist in constitutionally fair procedures. In *Albright v. Olivier*, 510 U.S. 266 (1994), the Court held that there was no substantive due process liberty interest in the prosecutorial charging decision being based on probable cause in a case where a defendant was arrested and charged, but later released by the court upon a finding of no probable cause for either. A distinguishing factor, however, was that there had not been a “palpable” consequence to the defendant, who had turned himself in voluntarily (*Albright*, 1998). Here the harm is palpable, finite and irreparable.

Although there is a certain optimism reflected in the legal literature about the viability of a fundamental ‘right to life’ in a challenge to the death penalty (Bird, 2003), it seems unrealistic in today’s political climate, and may be unnecessary. An alternative and perhaps more politically palatable argument could be made that there is a fundamental liberty interest in a non-arbitrary, racially neutral capital sentencing, which is not protected by application of the *Furman* standards – that is, that liberty within the meaning of our law requires racial neutrality – or at least statistically significant equity -- in punishment. What is the point of perfect procedural due process if the results are still markedly unfair, regardless of the lack of purposeful discrimination because the bias is culturally based, not consciously applied? This would seem especially important when dealing with a protected classification such as race and a permanent and irrevocable loss of liberty and body.

There is also a level of proof issue: the Supreme Court has held that the governmental action asserted to violate due process must be “egregious” or “shock the

conscience” (*County of Sacramento*, 1997; *Rochin*, 1952). Would continued execution of citizens in the face of documented and statistically significant racial disparity in the imposition of the death penalty shock the conscience? The level of proof in a substantive due process claim would possibly have to be as ‘stark’ as the *McCleskey* court implied for Eighth Amendment arbitrariness – and if so, could be resolved under that provision. Another obstacle to pursuit of a substantive due process analysis is that the Court will not consider it if any other protection specifically afforded under the Constitution also applies (*Graham v. Connor* (1989)). Substantive due process violations can be pled, but will not be addressed by the Court if any other constitutional principle is directly raised and applies. To the extent, then, that the Sixth or Eighth Amendment arguments are raised and found to apply – regardless of whether the Court finds the action in question violates them – the substantive due process argument may never be reached. The *Graham* court suggested, although it has not yet been conclusively held, that all post-conviction complaints about the death penalty as ‘excessive’ or ‘unjustified’ must be brought under the Eighth Amendment. Since it is unknown whether either the Sixth or the Eighth Amendments can support a challenge to racial inequity in death sentencing caused by nonpurposeful racial bias proven with statistical studies, it is also unknown whether a substantive due process argument is available at all, but *Graham* seems to make it the argument of last resort.

### *Remedies*

Finally, even where a constitutional violation can be shown, the choice of remedy will affect how the Supreme Court will interpret the Constitution in particular cases, as the *McCleskey* case shows. This is particularly important when the only basis for the



claim of a constitutional violation is a statistical analysis producing general results as to a group which is being asserted as evidence of harm to an individual. That is one reason why remedies such as habeas corpus and other appellate remedies seeking individual relief from a death sentence may not be the best vehicle to challenge an individual death sentence, as *McCleskey* demonstrated (Graines, 2000; Vetter, 2004).

Habeas corpus [literally ‘let you have the body’] is an attack by a person in custody on the legality of his confinement, and is the appropriate remedy where a prisoner is attacking the fact or duration of his custody (*Preiser v. Rodriguez (1973)*). Habeas is a procedure particularly unsuited for a challenge to a death sentence based on statistical evidence of a pattern of racial disparity in sentencing decisions. The level of proof is high requiring “exceptionally clear” proof of an abuse of the sentencing discretion, and may not be too ‘speculative’ (*Bracy v. Gramley, (1997)*). Discovery rights are limited and individual state and federal post-conviction remedies must first be exhausted (Graines, 2000).

It has been suggested that Title 42, United States Code, Section 1983 (2004) [“Section 1983”], which affords a remedy for constitutional injuries arising under state statutes (‘color of state law’), might prove a better vehicle to present race-based discrimination claims as to death sentencing and that a class action might be more appropriate where statistical analyses are the only proof of such disparity (Graines, 2000). A Section 1983 action is a civil action – a kind of constitutional tort action -- brought in federal or state court, and is thus subject to the more relaxed procedural and evidentiary standards afforded in civil cases which particularly lend credence and weight to valid statistical evidence of the type found wanting in *McCleskey* (Graines, 2000). It also

offers systemic relief in the form of injunction, declarations as to the constitutionality of the state action or law, recovery of attorney's fees on success, and possibly money damages.

Unlike habeas or an individual appeal, Section 1983 claims may be brought either individually or on behalf of a class of similarly harmed claimants – for example, all death row defendants sentenced under a sentencing statute asserted to be unconstitutional. No one has tried a class action to raise racial discrimination in death sentencing and there are limits as to the kind of claim a convicted prisoner may assert in a Section 1983 action (Graines, 2000) and a question of when such a claim might ripen in the procedural path a death sentence follows post-conviction. However, recently, in *Nelson v. Campbell*, 541 U.S. 637 (2004), the Supreme Court reaffirmed the viability of an individual death row inmate using Section 1983 to challenge the method of his impending execution. In *Nelson* the prisoner sought Section 1983 relief from the use of the painful open-cut method used by Alabama for lethal injection, where the prisoner's arm is slit open to reveal a vein, insuring proper insertion of the needle.

Nelson sought injunctive relief against the use of that procedure in his execution, and preliminary injunctive relief from execution by lethal injection so long as that procedure was used by Alabama, claiming it was cruel and unusual under the Eighth Amendment. A deciding factor in the Supreme Court's approving the use of a Section 1983 action in this case was the defendant's prior unsuccessful completion of the habeas corpus process and other state remedies. Section 1983 thus may not be available to an individual before he has sought habeas corpus relief and any state remedies, including administrative relief, and has failed, unless he can show that such remedies would have

no chance of success (*Nelson, 2005*). This may apply to class actions as well – the members of the class may be limited to those death row inmates who have exhausted other remedies.

Section 1983 cannot be used to challenge a death sentence directly (*Nelson, 2005*). A key factor noted by the *Nelson* court for the allowing a Section 1983 claim in a death sentence context was the fact he was not attacking his conviction or sentence, only the method of execution. Thus the claim could not assert that the defendant or class was innocent, or that the death penalty was not proportional to or even appropriate for the crime. A claimant, or claimants, would have to concede guilt and the death-worthiness of their crime, and attack not their sentence but the statute and how it was applied, seeking not a reversal but alternative relief from application of the statute challenge in the form of life sentence – without parole -- instead of death, as a punishment

It is unlikely that the current Court would totally abolish the death penalty, even should it find the *Furman* approach to be lacking. An action raising questions of racial bias skewing application of the *Furman* standards and thus the imposition of the death sentence would more likely be successful seeking preliminary injunctive relief from executions until factual questions as to the existence and degree of racial disparity produced by application of a state's death sentencing statute was settled. Should the claimant demonstrate constitutionally unacceptable levels of racial disparity in who has received the death penalty and who has not, all that should be sought or granted is invalidation of the state statute in question, commutation of all death sentences it produced to life-without-parole, and at a minimum a moratorium on further death

sentencing in the state until a way is found to prevent constitutionally significant disparity – i.e., the *Furman* remedy.

Alternatively, a preliminary injunction could seek a nationwide comprehensive exploration of the issue of racism to determine if latent bias can be sufficiently reduced or eliminated in capital sentencing under *Furman*, and request a moratorium on further sentencing or executions pending the outcome. A litigant would have to be prepared not only to present strong evidence to support any preliminary relief, but also a plan to complete such a study in a defined and not overly long time frame. The focus would not be the *Furman* standards themselves, but the question of whether any legal standard is sufficient, at this point in time, to remove significant but unconscious racial bias from the capital sentencing decision.

The details pro and con for this remedy are beyond the scope of this discussion, but such an action could provide a forum for full study of the efficacy of the *Furman*, unhindered by the more stringent, narrow evidentiary and procedural constraints on individual appeals or remedies such as habeas corpus. The research presented here provides a good starting point because the North Carolina statute is an excellent embodiment of the *Furman* principles, and there is a thorough and reliable database available for capital penalty proceedings post-*Furman*.

#### *Section 15A-2000, NC General Statutes*

Under the North Carolina sentencing statute (Section 15A-2000, NC General Statutes (2003)) capital juries have only two options, a death sentence or a sentence of life in prison, currently one without the possibility of parole except by executive clemency. North Carolina uses a bifurcated guilt-penalty procedure and is a weighing

state. It is a three step process: the jury first determines whether based on the evidence sufficient aggravators, limited to the eleven enumerated in the statute, exist – unanimously and beyond a reasonable doubt – which are sufficiently substantial to justify a death sentence. Once one or more aggravators have been found by the group, the jury next decides individually but based on the evidence if there are mitigating circumstances or circumstances applicable to the defendant. If so, each juror then decides if they are sufficient to outweigh the aggravating circumstance or circumstances found, and they vote (Section 15A-2000(e), NC General Statutes (2003)). A single juror thus can hang a jury – and ensure a life sentence -- by finding a single mitigator justifies – at least to him or her – mercy for that defendant.

There are eight mitigators specified in the statute, which also has a ninth, catch-all provision allowing jurors to consider any other circumstance arising from the evidence which the jury deems to have mitigating value (Section 15A-2000, NC General Statutes (2003)(f)). The final decision the jury must reach, unanimously, is whether, based on the first two findings the defendant should be sentenced to death or to imprisonment in the State's prison for life (Section 15A-2000, NC General Statutes (2003)). The statute also requires, per *Gregg/Proffitt/Jurek*, automatic and immediate appeal of death sentences to the North Carolina Supreme Court, which reviews for errors and also for proportionality to other similar crimes and defendants (Section 15A-2000(d), NC General Statutes (2003)). The North Carolina statute thus provides an excellent framework in which to employ empirical analysis of the degree to which *Furman* has produced fair – and racially equitable – death sentencing.

## Chapter Three

### Empirical Research and Statement of the Problem

The intuitive question of whether there is racial disparity in the application of the death penalty in America has been the subject of numerous scientific studies, of varying degrees of sophistication and validity. The research can be best be understood organized in three time frames: Studies of cases from the years pre-*Furman*, studies of cases after *Furman* went into effect through 1990 when a comprehensive federal study of racial disparity in capital sentencing was released (GAO Report, 1990), and the research since 1990.

#### *Pre-Furman Research*

Studies of capital sentencing in cases before *Furman* showed a significant bias against Black defendants, particularly in the South. Guy Johnson's 1941 study, *The Negro and Crime*, looked at the comparative frequency of death penalty sentences between Black and White defendants between 1940-1940, and found that 32% of Black murder defendants received the death penalty, compared to only 13% of White defendants. He also found a race-of-victim effect, with the death penalty being imposed in 17.5% of White victim cases, but in only .4% of the Black victim cases (Johnson, 1941). Garfunkel (1949) found similarly disparate racial effects in his study of death sentencing patterns in ten North Carolina counties for the years 1930-1941. In 1969, however, a study of first-degree murder trials pre-*Furman* in California produced no

evidence of either a race-of-defendant or race-of-victim effect (Stanford Study, 1969). Wolfgang and Reidel's 1973 study of racial patterns in death sentencing between 1945 and 1965 in several Southern states, including North Carolina, discerned patterns similar to those found earlier by Johnson and Garfunkel, which were also consistent among the other states examined (Wolfgang & Reidel, 1973). As noted earlier, by 1972, the possibility of racial bias in sentencing practices resulting in unfair death sentences had already been considered by the Supreme Court in *McGautha/Crampton*, in which the process was upheld. In *Furman*, however, the Court decided that death, as the punishment produced from the procedurally fair process was not substantively fair or acceptable under the Eighth Amendment, and the law of death sentencing changed.

#### *Post-Furman Studies to 1990*

The thrust of the next stage in the empirical research was to see if the *Furman* principles, as implemented in procedures established under *Gregg/Proffitt/Jurek* changed the racial distribution of death sentencing. In 1981, five years after *Furman*-compliant processes began to be implemented, Gary Kleck reviewed the published literature on racial effects on capital sentencing, and reached the conclusion that there no general racial bias was shown against Black defendants, except in Southern states; but that the death penalty was imposed less when the victim was Black, than when the victim was White (Kleck, 1981). Six years later, Nakell and Hardy published a study of the initial post-*Furman* years, 1977-1978, and application of the *Furman*-based sentencing models. Unlike earlier studies, they controlled for case seriousness and found a race-of-defendant effect at the prosecutorial charging decision, but not at the sentencing stage – where a race-of-victim effect was noted (Nakell & Hardy, 1987). In 1989, Gross and Mauro

published a study of death sentencing patterns from 1976-1980, using FBI and law enforcement data from eight states. Like Nakell and Hardy, they controlled broadly for case characteristics and found a statistically significant increase in the likelihood of a defendant receiving the death sentence when the victim was White, which remained consistent, although reduced when race-of-defendant was added to the analysis (Gross & Mauro, 1989).

The debate as to the existence of racial effects on capital sentencing outcomes continued in the first two decades after *Furman*, to the point that in 1990, the United States Senate authorized the General Accounting Office (GAO) to examine the issue. Rather than conducting a time-consuming and expensive new analysis, the GAO elected to perform an evaluative synthesis of the twenty-eight studies of post-*Furman* sentencing patterns, six of which were also post-*McCleskey* (GAO, 1990).

Included were the studies of Gross and Mauro, Kleck, Nakell and Hardy, and Wolfgang and Riedel (GAO,1990), as well as studies of death sentencing patterns generally (Berk & Lowery, unpublished 1985; Bowers, 1983; Foley & Powell, 1982; Keil & Vito, 1989; Klein, Abrahamse & Rolph, unpublished, 1989; Radelet & Pierce, 1985; Radelet, 1981; Riedel, 1976) and studies state specific to Georgia (Baldus, Woodworth & Pulaski, 1990; Barnett, 1985); Texas (Ekland-Olson, 1988); Louisiana (Klemm, 1986); Smith, 1987); Florida (Arkin, 1980; Foley, 1987; Lewis, Mannie & Vetter, 1979; Radelet & Vandiver, 1983; Zeisel, 1981), California (Klein, 1989), , South Carolina (Paternoster & Kazyaka, 1988), Kentucky (Gennaro & Keil, 1988; Keil & Vito, 1990), New Jersey (Benin et al., 1988), Illinois (Murphy, 1984), and Mississippi (Berk & Lowery, unpublished 1985) (GAO, 1990).



The GAO assessed and rated the studies for quality in terms of design, selection of variables and statistical methodology (GAO, 1990). The evaluation was not limited to sentencing, where *Furman* applies, but encompassed the entire capital justice process, looking at the potential for racial bias at each discretionary decision point (GAO, 1990). The GAO found a consistent race-of-victim effect, although it acknowledged that some studies, such as the Kiel and Vito (1990) study found race-of-defendant effects, and that Paternoster and Kazyaka (1988) found regional race-of-defendant effects (GAO, 1990). As a result, the GAO concluded that while there was evidence to support a finding of a main race-of-victim effect, any race-of-defendant effect was “equivocal” and varied “across a number of dimensions” (GAO, 1990).

The South Carolina study by Paternoster and Kazyaka looked at South Carolina prosecutorial charging decisions beginning in 1977, when South Carolina’s *Furman*-based statute went into effect (Paternoster and Kazyaka (1988) The study was important in that it demonstrated an urban-rural effect at the prosecutorial level which had a racial component – all defendants were at more risk of being charged with a crime in rural areas than in urban areas, Black defendants were at most risk, and those Black defendants who killed White victims were at the highest risk of all (Paternoster & Kazyaka, 1988). This intrusion of racial bias at the charging stage, it was argued, had little possibility of being corrected at the sentencing or appellate stages if the defendant was found guilty. One of the shortcomings of the study for purposes of examining the effect of race on the sentencing decision, however, was that neither defendant characteristics beyond race and gender, nor case-seriousness factors were controlled for in the analysis. Since *Furman* applies only at the sentencing stage, and requires consideration both of case seriousness

as defined by the aggravators and defendant's individual situation for purposes of mitigation, this study is not as valuable for assessment of bias in the sentencing process alone.

Gross and Mauro's examination of racial disparities in capital sentencing is more pertinent to the limited issue of whether *Furman* as implemented through *Gregg/Proffitt/Jurek* produces color-blind results. They looked at homicide data from eight states, most in the South: Arkansas, Florida, Georgia, Illinois, Mississippi, North Carolina, Oklahoma, and Virginia, between 1976 and 1980. Like Paternoster and Kazyaka, they were looking at urban-rural differences in treatment of Black and White crime. Unlike the South Carolina study, however, Gross and Mauro attempted to control for crime seriousness as well, incorporating variables felony homicide, stranger murder, multiple victims, victim female gender, and the method of killing (shot versus bludgeoning, strangling, stabbing), which they use to scale the cases roughly by aggravation level. They also controlled for urban-rural, defendant and victim race, and interactive effects of race (Gross & Mauro, 1989). Their study showed that the rural-urban effect was strongest in the Southern states, particularly Georgia and Florida; and a similar geographic bias occurred for race-of-victim effects. As noted earlier, no main race-of-defendant effect was shown except where the race of the victim was White.

In 1988, Bienan et al. examined all homicide cases committed in New Jersey from August 1982 -- when New Jersey's *Furman*-compliant sentencing statute went into effect -- through the end of 1986, to assess which factors affected the sentencing outcome. The study was not limited to the penalty stage -- few penalty cases were used -- and its main focus was on the probability that a case progressed from the charging decision to capital

trial (Bienen et al., 1988). Unlike the two earlier studies, this New Jersey study included not only case characteristics related to aggravation and defendant and victim characteristics such as gender, age and race (Black, White, Hispanic) but also socio-economic factors such as income class, employment and relative physical disability. The study produced what was characterized as ‘substantial differences’ based on racial differences, across geographic jurisdictions, including a significant race-of-victim effect (Bienen et al., 1988). Here again, however, the primary stage in the process examined was the pre-sentencing stage, which may indicate a possibly pervasive racial bias in the capital justice system as a whole, but cannot be used to assess the race neutrality of the *Furman* sentencing process itself.

#### *Post-1990 Studies*

The post-1990 studies also generally document a race-of-victim effect on capital sentencing and less so a race-of-defendant effect (Baldus & Woodworth, 2003). In a 1991 study, Klein and Rolph found race-of-victim disparity in California capital penalty trials, with an unadjusted result showing a 9 percentage point race-of-victim disparity. The authors acknowledge that the effect shown was limited to the penalty stage and did not take into account earlier discretionary decision point where race could have an effect, such as the prosecutorial charging decision (Klein & Rolph, 1991). The subsequent CART analysis<sup>3</sup>, including multiple case characteristics, showed race-of-victim to be a significant predictor of sentencing outcomes (Klein & Rolph, 1991).

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<sup>3</sup> Baldus and Woodworth have reservations about the use of the CART methodology (Baldus & Woodworth, 2003), and the advantage of a CART analysis over a logistic regression analysis was the subject of a recent study by Berk, Li and Hickman (2004) in which they re-analyzed the Maryland capital sentencing data used by Paternoster and Brame in their 2003 empirical study. Berk and his colleagues argue that the CART methodology produces more valid results than the conventional logistic regression model most often used in assessing racial effects and capital sentencing (Berk,

In 1991, Radelet and Pierce published an analysis of Florida homicides between 1976 and 1987, including 415 death cases. The unadjusted results showed a race-of-victim disparity of nearly 13 percentage points, notwithstanding similar aggravating circumstances. A logistic regression analysis which included pertinent case characteristics such as victim sex and the location of the crime still produced a significant race-of-victim effect, with White victim crimes being 3.42 times more likely to end in a death sentence (Radelet & Pierce, 1991).

In 1995, two studies were published, one from Connecticut (*State v. Cobb, 1995*) and one from Kentucky (Keil & Vito, 1995). The Connecticut study was small, examining 66 cases of capital murder guilt trials in 1973-1994. The study was submitted in a direct appeal of a death sentence as support for a defendant-comparative [as opposed to a case-comparative] proportionality review (*State v. Cobb, 1995*). The unadjusted data indicated a higher capital murder conviction rate for Black defendants than for White and lower conviction rate where the victim was Black. In a lengthy opinion, the Connecticut Supreme Court rejected the study as insufficient overall, and also rejected the concept of defendant-comparative proportionality review (*State v. Cobb, 1995*).

The second study by Keil and Vito in Kentucky, examined death eligible cases in 1976-91, and assessed the combined effect of racial influences at the prosecutorial charging decision and jury sentencing decision in a logistic regression analysis that controlled for case and crime characteristics. They found that Kentucky capital justice system was the most punitive of Black defendants who killed White victims, whose odds of receiving the

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Li & Hickman, 2004). Logistic regression, however, remains the methodology most often used in racial studies of capital sentencing, and is the method used here.

death penalty increased by 1.41 over other defendant-victim combinations, and who suffered a similar increase in the odds of being charged with a capital crime in the first place (Keil & Vito, 1995).

By 1999, the New Jersey Supreme Court became about the validity of the methodology it employed for comparative proportionality review which had been developed by Professor Baldus and his colleagues in 1988. They had been retained by the state of New Jersey to develop a state-of-the-art method of assessing proportionality in capital sentencing, and developed a complex, multivariate model using what came to be known as an index-of-outcomes approach. This was adopted by New Jersey in 1991 and applied initially in 1992 (*Marshall v. Loftin*, 1992). The predictive value of the Baldus model came under scrutiny by the New Jersey Supreme Court beginning in 1996, when it initiated a review of the model, and lead in 1999 to the Proportionality Review Project (*In re Proportionality Review Project*, 1980), under the supervision of a Special Master, Judge David S. Baime.

The purpose of the study was to assess the continued viability and utility of the system of proportionality review developed for the New Jersey by Professor Baldus, a system which had proven unwieldy and unreliable (Baime, 2003). With the assistance of Professors Weisburd and Naus, Judge Baime examined the Baldus methodology for proportionality review and in his report to the Court in 2001 found the Baldus model to be unreliable because of the small sample of cases on which it was originally based – a defect which Professor Baldus had noted himself – and because of the unwieldy number of variables used in the logistic regression analysis (Baime, 2001; Weisburd & Naus, 2001).

In the same report, the first of continuing annual reports monitoring proportionality review in New Jersey, Baime and his colleagues recommended a three strategy analysis: bivariate analysis using a revised ‘salient factors’ selection, regression analysis, and case-sorting techniques, looking at three decision points in the capital sentencing process – penalty stage, life-death outcomes over all death eligible cases, and prosecutorial election to seek the death penalty. When the results of the three analyses converge, it can be safely assumed that the results are valid (Baime, 2003). The 2001 report utilizing these three methods showed no direct statistically significant race-of-defendant or race-of-victim effect at any stage. The study did find a geographic effect, with counties with a higher rate of Black victims – the more urban counties -- advancing fewer cases to a penalty trial than less urban counties with more White victims (Baime, 2001; Baime, 2003).

In 1998, Professor Baldus and his colleagues completed a comprehensive study of capital cases in Philadelphia, Pennsylvania. “The most important influence on our [Baldus and colleagues’] methodology” in developing the Philadelphia study was the ongoing New Jersey project (Baldus, Woodworth, Zuckerman, Weiner & Broffitt, 1998). The Philadelphia study acknowledges the two primary shortcomings of the original New Jersey work: 1) the small sample size on which it relied and 2) the unwieldy number of variables used to try to capture case characteristics (Baldus et al., 1998). The sample size issue was resolved in the Philadelphia study by the collection of data on 672 cases, 384 of which went to the penalty stage, including cases where the jury hung and an automatic life sentence resulted.

The number of factors used in the core analysis of the Philadelphia data was limited to on the number of statutory aggravators and mitigators as found by the jury, or present in the case if not found by the jury (Baldus et al. 1998). Other logistic regression models were run incorporating additional variables such as socio-economic status and other case seriousness factors, and examining other decision points, such as the charging decision. At the aggravator-mitigator weighing stage they found a statistically significant race-of-defendant effect based on the total aggravators and mitigators accepted – an odds multiplier of 29.0, significant at the .01 level, for Black defendants receiving the death penalty. This effect was reduced, but still significant, when hung jury cases were included in the core model (Baldus et al., 1998). Although more complex and evaluating many more dimensions of the sentencing decision, this study of Philadelphia cases has provided the approach for the study presented here.

In 2000, Brock and his colleagues published an ex post facto analysis of charging and sentencing decisions in homicides in specified jurisdictions within Texas in 1980-1996. Using ratios they compared arrest to sentence results overall to selected jurisdictions which had the highest numbers of both homicide arrests and death sentences, all urban counties. The initial ratios analysis showed a rural-urban effect, with more homicides and fewer death sentences in all urban areas except Houston/Harris County. They also conducted ratio analyses controlling for defendant and victim race legitimate case characteristics, using an additive scale of case seriousness from 0 to 4. A White-victim effect was found to be strongly associated with defendant culpability as measured by the aggravation scale (Brock et al., 2001).

During the same time frame, the United States Department of Justice, in 2000 and 2001, released reports presenting unadjusted race-of-victim and race-of-defendant effects in charging rates by federal prosecutors. These reports present essentially descriptive analyses, but Baldus and Woodworth re-analyzed the data using logistic regression techniques and confirmed a statistically significant race-of-victim effect (Baldus & Woodworth, 2003).

In 2001, Professors Unah and Boger released their preliminary findings of an analysis of racial disparities in capital sentencing in North Carolina (Unah & Boger, 2001). Using Baldus-type multiple regression analyses and logistic regression methods, they examined all ‘potentially capital cases’ in North Carolina between 1993 and 1997 with the stated purpose of taking a “systematic look for patterns of racial discrimination in capital sentencing in the South, employing data more recent than 1984” (Unah & Boger, 2001). Because they were looking at all stages of the capital justice process, included in their sample were all ‘death potential’ cases, including homicides that resulted in a charge of murder, first degree murder or second degree murder, for the period from January 1, 1993 to December 31, 1997.

The sample included 402 first degree homicides which went to a penalty phase and resulted in a life or death sentence. A multistage sample technique was used to create an additional group of cases of second degree murder resulting in life or term of year sentences, for a total of 502 cases in the core dataset (Unah & Boger, 2001). The independent variables included were not only the North Carolina statutory aggravating and enumerated mitigating factors, but also factors reflecting other case, crime and



demographic factors, for a total of thirty-six variables. The model did not include non-statutory catch-all mitigating factors.

They ran models using all cases in the sample, only cases that went to trial, all death eligible cases, cases where the prosecutor sought the death penalty, and cases where there was a penalty trial. As the literature would predict, they found a statistically significant race-of-victim effect – those murdering White victims were 3.4 times more likely to receive the death penalty. They also found notable – but not statistically significant -- differences in the death sentencing rate for Black defendants murdering White victims, versus White defendants – at 6.4% versus to 2.6% and overall that Black-on-Black homicides resulted in the lowest death sentencing rate of any combination (Unah & Boger, 2001).

Also in 2001, the Joint Legislative Audit and Review Commission of Virginia released an analysis of the charging decisions in a sub-sample selected from a larger sample of death eligible cases to reflect various geographic regions in Virginia. The unadjusted data reflected a race-of-victim effect at the charging stage, but no race-of-defendant effect. In a logistic regression model of charging decisions which controlled for case characteristics reflecting crime seriousness, no statistically significant main racial effect was observed, although an increased effect of two case characteristics – defendant-victim relationship and crime jurisdiction – was seen when the victim was White (Joint Legislative Audit and Review Committee, 2001).

Five studies were published in 2002, from Arizona (Bortner & Hall, 2002), Illinois (Pierce & Radelet, 2002), Indiana (Ziemba-Davis & Myers, 2002), South Carolina (MCord, 2002), and Nebraska (Baldus, Woodworth, Grosso, & Christ, 2000).

Baldus and his colleagues looked at the rates of death sentencing in 189 death eligible prosecutions in Nebraska, only 89 of which had progressed to the sentencing stage. The logical regression analysis of these cases produced no racial effect, neither race-of-defendant nor race-of-victim (Baldus, Woodworth, Grosso, & Christ, 2000). The original Arizona study did not analyze for race effects (Bortner & Hall, 2002). Baldus and Woodworth performed a separate analysis of the data, taking into account crime death worthiness to the extent allowed by the data, and found a race-of-victim effect (Baldus & Woodworth, 2003). Unadjusted race-of-victim effects were also found in the Indiana study of 224 murder convictions. Only a rates analysis was performed, although a multivariate regression analysis is proposed for the future (Ziemba-Davis & Myers, 2002).

Pierce and Radelet looked at over 4000 murder convictions in Illinois between 1988 and 1997, during which time only 76 death sentences were imposed. They looked at unadjusted data, and performed a logistic regression analysis controlling for 28 variables in addition to race. No statistically significant race-of-defendant effect was seen, there was a significant race-of-victim effect and a geographic effect seen in the models (Pierce & Radelet, 2002). A limited analysis of South Carolina sentencing rates in eleven homicide cases in 1998, selected by McCord for their extreme 'depravity' (McCord, 2002) also produced no race-of-defendant effect, but demonstrated a substantial race-of-victim effect.

The most recent studies, in 2003 and 2004 continue the pattern. In 2003, Raymond Paternoster and Robert Brame published an analysis of 1,311 Maryland death cases death noticed and tried between July1, 1978 and December 31, 1999, including 180

cases which progressed to penalty trial (Paternoster & Brame, 2003). The unadjusted results showed race-of-victim disparities which reached significance, but no significant racial differences in sentencing, nor significant geographic disparities in sentencing. The logistic regression results controlling for relevant case characteristics, however, showed no significant race effects at the sentencing stage (Paternoster & Brame, 2003), although a race-of-victim and geographic effect were significant at the charging and death-noticing stages. As previously noted, in 2004, Berk, Li and Hartman re-analyzed the Maryland data used by Paternoster & Brame using a CART analysis instead of logistic regression, and maintain that it produces more reliable results – in this case, no racial effects at all (Berk, Li, & Hartman, 2004).

Finally, Baldus and Woodworth have cited a third, smaller but ‘instructive’ analysis of race in capital sentencing by Professor James McAdams, a supporter of the death penalty (Baldus & Woodworth, 2003). McAdams concludes that, despite increased sophistication in the analyses performed to assess racial disparity in capital sentencing, the results remain the same: 1) race-of-defendant is not, in and of itself, a statistically significant ‘main effect’ in death sentencing; 2) race-of-victim is a significant factor in death sentencing, with *all* defendants being more likely to receive the death penalty if their victim is White; 3) Black defendants who kill White victims have the highest rate of death sentence; and 4) Blacks who kill Black victims have the lowest rate of death sentence (McAdams, 1998).

#### *Research Problem*

All of the studies noted above focused on whether there are main racial effects showing racial disparity in capital sentencing outcomes, and most looked at sentence

outcome as the product of racial bias in the entire capital justice process. None examined the sentencing decision solely as a product of application of the *Furman/Gregg* standards. This may be because of an unwillingness to abandon the argument lost in *McCleskey* and a continued desire to prove a denial of equal protection and an inference of purposeful discrimination in the form of the disparate impact of the entire capital justice system on Black citizens (Baldus, 2004; Howe, 2004) There may be no statistically significant disparity in the number or distribution of death sentences between the races sufficient to demonstrate purposeful discrimination in violation of the Fourteenth Amendment equal protection clause. Even so, significant race-based disparity in how the *Furman* sentencing standards – the aggravating and mitigating circumstances – are applied may be indicative of unconscious racial bias which offends other constitutional principles.

This nonpurposeful form of bias may be incapable of cure through legal process yet still skew the sentencing process against Black citizens in a way repugnant to other constitutional principles requiring jury impartiality, predictability in death sentencing and protection from irrational sentence disparity. Identical aggravators may be applied more harshly to one race or the other, or vary disproportionately based on the race of the victim. Similarly, the mitigators may work better in reducing the chances of a death sentence based on a defendant's or the victim's race – they might be more mitigatory for White defendants than Black, despite comparability of the crime.

Earlier studies were not designed to look at latent, nonpurposeful racial discrimination in the application of the *Furman* standards, but that is not to say that the methodology cannot be used for such research. The studies fall generally into three

approaches: 1) the use of unadjusted and case characteristic-adjusted data in rates analyses and logistic regression models per Baldus, Paternoster and others; 2) the use of CART methodology to analyze case data proposed by Berk et al. (2004) and used earlier by Klein and Rolph (1991), and 3) the three stage combination of methods used by Baime, Weisburd and Naus in New Jersey.

The Baldus-type model is generally considered the most reliable and cost-effective, although the number of variables, the size of the case sample and the decision point modeled will greatly affect the outcome (Unah & Boger, 2001; Baldus & Woodworth, 2003). It is also the most flexible in terms of ease of use, and the ability to use available information and produce meaningful results. For that reason, it has been selected as the best methodology to assess racial invariance in the application of the North Carolina *Furman*-based standards, as proposed here.

Logistic regression analysis of racial disparities in the facially neutral application of *Furman*-based standards is a logical way to test for latent racism in jury decision-making under the *Furman/Gregg* design (Baldus & Woodworth, 2004). The Philadelphia study suggests that the total number of aggravating circumstances – as measure of crime seriousness and defendant culpability -- and to a lesser degree, mitigating circumstances which a capital jury accepts may be the best predictors of capital sentence outcome (Baldus & Woodworth, 2004; Baldus et al. 1998). If there are statistically significant differences in the effect of jury acceptance and application of the same number of aggravating and/or mitigating circumstances on sentencing outcomes among similarly situated Black and White defendants, it arguably reflects unconscious racial attitudes of jurors.

To assess whether the *Furman* capital sentencing model is working in a race-neutral way, it is appropriate to look only at the sentencing stage; that is where the *Furman/Gregg* factors operate. The question of race infecting other stages of the capital justice process is important overall to the question of racial neutrality in the administration of capital justice, but irrelevant to the question of whether capital juries are color-blind. Indeed, studies have shown the largest racial bias effect appears at the prosecutorial charging phase, and that it can be a function of politics and geography, as well as race (Bienen, Weiner, Denno, Alison & Mills, 1988).

As discussed earlier, other studies have demonstrated extra-*Furman* influences, such as geography and socioeconomic differences, which may be important in *explaining* racial variance in capital sentencing results, but may be irrelevant to whether the *Furman* standards are producing constitutionally acceptable results. The same can be said for studies examining the jury panel itself, its racial composition and the lack of understanding of its role in the sentencing process (Bowers, Sandys & Steiner, 1998; Bowers, Steiner, & Sandys, 2001; Bowers & Foglia, 2003). While informative as to the dynamics of the jury decision-making process, these do not address the core question of whether the *Furman* model is working in a racially fair and equal way.

These studies are relevant to the question of juror unconscious predispositions to impose the death penalty, overall and based on race – their own, the defendants’ or the victims’ -- but are too limited to allow conclusions as to racial invariance in application of the *Furman* standards universally or under a specific state’s standard. A meaningful test of the *Furman* model would encompass a long time frame post-*Furman*, all or most of the capital cases which reached the penalty stage during that time, under a specific

statutory scheme compliant with the *Furman* standards implemented through *Gregg/Jurek/Proffitt* statutory schemes. That is the study presented here, of most, if not all, of the capital penalty decisions made by juries under North Carolina's capital sentencing statute over a period extending of more than ten years.

### *Hypotheses*

The starting point should be the bare application of *Furman* to the facts and the defendant, by the jury, at the sentencing stage using a *Furman*-compliant state capital statute, in this instance that of North Carolina. The goal is to determine whether the North Carolina statute works to channel capital jury discretion in imposing the death sentence in racially invariant and thus constitutionally acceptable ways, as *Furman* and *Gregg* intended. The hypotheses to be tested are:

1. Each unit increase in the level of aggravation a capital jury finds increases a defendant's odds of receiving a death sentence.
2. Each unit increase in the level of mitigation a capital jury accepts decreases a defendant's odds of receiving a death sentence.
3. Jury acceptance of aggravating circumstances increases the likelihood of a death sentence more for Black defendants than similarly situated White defendants.
4. Jury acceptance of mitigating circumstances decreases the likelihood of a death sentence more for White defendants than similarly situated Black defendants.
5. Jury acceptance of aggravating circumstances has a stronger effect on defendants whose victims are White than those whose victims are Black, but whose crimes are comparable, in increasing the odds of receiving a death sentence.

6. Jury acceptance of mitigating circumstances has a stronger effect on defendants whose victims are Black than those whose victims are White, but whose crimes are comparable, in decreasing the odds of receiving a death sentence.

7. Jury acceptance of aggravating circumstances has the strongest effect on increasing the odds of receiving a death sentence where the defendant is Black and his victim is White.

8. Jury acceptance of mitigating circumstances has the strongest effect on decreasing the odds of receiving a death sentence where the defendant is White and his victim is Black.



## Chapter Four

### Methodology

#### *Data*

The analysis is based on information originally compiled from reviews of capital murder trials, including penalty phase proceedings, in North Carolina between 1978 and 2002. *LexisNexis* searches of North Carolina Supreme Court and Court of Appeals cases allowed identification of cases in which the defendants were convicted of or pled guilty to first-degree murder, the state sought the death penalty, the trial progressed to a sentencing phase whereby the jury heard evidence concerning aggravating and mitigating factors, and the jury issued a binding recommendation for a sentence.

There are 1073 cases in the original dataset from trials held during the period 1978-2003. North Carolina sentencing procedures with regard to jury consideration of mitigating factors changed in 1990, as a result of the holding in *McKoy v. North Carolina*, 449 U.S. 433 (1990). Prior to *McKoy* the North Carolina sentencing statute disallowed jury consideration of mitigating factors unless the jury had accepted them as a whole. *McKoy* clarified the role of mitigators, holding that any individual juror could rely on any relevant mitigating circumstance when making the sentencing decision. To eliminate the possible effect of this change in how mitigators are used by North Carolina juries, cases using pre-*McKoy* procedures as to mitigation and decided before May 1, 1990 were deleted. The May date was selected arbitrarily, being about 90 days from the

issuance of the *McKoy* holding, as sufficient time for the *McKoy* principles to have been adequately implemented by North Carolina's trial courts.

The original data reflected the race-of-defendant and victim in three categories: White, Black and 'other'. In order to focus on the defined Black-White race distinction, those cases where either defendant or victim race was coded as 'other' were deleted, leaving a total of 632 cases involving Black or White victims and Black or White defendants for use in the analysis. These cases include 374 Black defendants and 258 White defendants, and 244 Black victim and 388 White victim cases. The breakdown of defendant-victim racial composition is White defendant/White victim = 232 cases; White defendant/Black victim = 26 cases; Black defendant/Black victim = 218 cases, and Black defendant/White victim = 156. Most of the cases (71%, n=450) are intra-racial, fairly evenly distributed between Black-on-Black cases [218] and White-on-White cases [232]. Of the remaining 182 cases which are inter-racial, the small number of White-on-Black cases [26] confounds any analysis of that set of cases or comparison of inter-racial homicides.

Because the focus of the analysis is jury application of the aggravating and mitigating factors in the sentencing decision, the dataset includes all cases where the sentencing phase was conducted, including 'hung jury' cases where the jury declared that they could not reach the required unanimous decision regarding a sentence, resulting in the default sentence of life in prison; and retrials, where two separate juries considered the facts independently and recommended a sentence in the same case. The inclusion of hung jury cases has been found to decrease the effects of aggravators because a hung jury always results in a life sentence (Baldus et al., 1998); however, because that sub-sample

of cases represents application of the North Carolina sentencing statute, those cases have been kept in the sample used for the analysis. As to retrial cases, inclusion of these cases increases sample size of instances where separate juries applied accepted aggravators and mitigators to reach the life-death decision, albeit to the same case, they are thus relevant for purposes of examining racial invariance in this process.

The units of analysis are individual capital cases from the North Carolina Capital Sentencing Project (NCCSP) database, limited to those cases which reached the penalty phase and in which aggravators and mitigators were considered by the jury in penalty trials in North Carolina between 1990 and 2003. The data was collected by M. D. Smith (USF), Beth Bjerregaard (UNC-Charlotte) and Sondra J. Fogel (USF), for the North Carolina Capital Sentencing Project. Because each homicide victim constitutes a separate capital offense requiring separate jury findings and sentencing, each victim case was coded separately, although the defendant was the same.

The data collection instrument [DCI] used was a Baldus-type instrument designed to capture defendant, victim, jury and case characteristics, incorporating over 125 items. The sources of the data were official state records, primarily those of the North Carolina Supreme Court and the North Carolina Courts of Appeal as maintained by the North Carolina Administrative Office of the Courts (AOC), trial courts in the counties, and other state criminal justice related agencies. To the extent possible, missing information was supplemented by media reports and individual interviews.

Materials collected from state appellate records include defendant and state briefs, as well as the jury Issues and Recommendation Form which records jury acceptance or non-acceptance of aggravating and mitigating factors, and concludes with the jury's

sentencing recommendation. Historically, these materials have been published in hard-copy form and placed in two university law libraries in North Carolina, while other locations have microfilm copies. Beginning with decisions returned from cases tried in 1999, hard copies have not been made available, but materials are accessible via an electronic data file (<http://www.ncappellatecourts.org> ). This information was supplemented with newspaper accounts of the trial where such coverage was available through *LexisNexis* or *Newsbank* another electronic databank that includes varying years of stories from eight North Carolina newspapers.

Defendant and crime information was obtained online from the North Carolina Department of Corrections at (<http://www.doc.state.nc.us/offenders>). Through 1996, victims' age, race, and sex were taken from a commercially available CD-ROM, *North Carolina Vita Records: Deaths 1968-1996*. For 1997-2002, victim personal information was determined from some combination of court material (such as reference to the victim in the state's or defendant's appeals briefs), newspaper accounts, or obituaries obtained through World Wide Web search engines. Cases for which this information could not be obtained are not included in the dataset.

The lack of a centralized source of information regarding capital murder trials in North Carolina makes it difficult to determine the exact number of capital murder trials conducted during the period covered in the data. Since appeals of death sentences are automatically referred to the state Supreme Court, all of those cases are included. A large proportion of defendants receiving a life sentence appeal their first-degree murder convictions to the Courts of Appeal, so most of the life sentence cases included in the database were identified in the lower appellate court records, as well as in those cases

subsequently appealed to the North Carolina Supreme Court, although that court has the option of declining to hear the case.

There are two instances where defendants are unlikely to appeal, and therefore their cases may not be included in the dataset. First, if a defendant pled guilty and received a life sentence, there was little basis for appeal. Second, some defendants' convictions were upheld but their death sentences vacated. If, upon retrial of the penalty phase only, the sentence was life, there was no basis for appeal and no means to identify these cases other than a county-by-county search. However, in the former situation no penalty phase jury decision was involved, so such cases are irrelevant to the analysis. As to the latter situation, while these retrial cases are relevant to the analysis of the jury decision-making process, the number is likely to be small, based on the relatively small number [76] of guilt-and-penalty phase retrials, which are included in the database.

A much smaller set of trials not included in the dataset are those that were identified, but whose case materials are not available because hard copies were missing from both libraries or not yet posted in electronic form. Given that the substantial majority of capital cases are appealed to at least one of these courts, we estimate that the available data contain reviews of more than 90% of all sentencing recommendations made by North Carolina capital juries during the ten plus year period. This provides an excellent sample to test racial effects on the sentencing decision under the *Furman* model.

Some data is missing from some cases. If the jury recommendation form is missing, the specific aggravators and mitigators used cannot be determined. Some cases were 'default life' cases where either no aggravator was found or the aggravator was

insufficient to recommend death. However, for the variables used in the instant study – total and individual aggravators and mitigators accepted – only 7 cases were incomplete from the 632 cases available. Comparisons of these missing data cases with those remaining in the dataset revealed an overrepresentation of life sentence cases, suggesting that the reduced dataset overstates the proportion of death sentence cases; however, comparisons of major demographic and legal variables between life sentence cases included and not included in the working dataset revealed no major sources of bias in the cases used for the analysis.

### *Variables*

For purposes of the analysis, the dependent variable is the defendant’s sentence, a dichotomous variable coded 0 = life, 1 = death sentence. There are 302 life sentence cases and 330 death sentence cases for the total 632 cases. There are four (4) classes of independent variables: the two target variables of defendant and victim race and the two *Furman* factors -- the statutory aggravating circumstances (“aggravators”) and statutory and nonstatutory mitigating circumstances (“mitigators”) considered by capital juries at the sentencing phase. These factors are analyzed both as ranges of total factors accepted and as individual factors (Baldus et al. 1998, Baldus & Woodworth, 2004).

The total number of aggravating and mitigating circumstances submitted to, rejected and/or accepted by each jury was coded for each case. Because the number of mitigators which can be considered in a given case is limited only by relevance, as opposed to the statutorily limited number of aggravators which can be considered, the difference between the number of aggravators and mitigators considered can be very large. In order to achieve an approximation of relative low, medium and high levels of

jury-determined aggravation and mitigation, ranges of total aggravators and mitigators accepted were used for comparison purposes (Baldus et al. 1998).

### *Variable Recoding*

Table 1 sets out the variables and their coding and the case frequencies. All independent variables have been dichotomized, with 1 representing the target category. The original race-of-defendant and race-of-victim variables, after deleting the cases where the race designation was 'other', were recoded from the original three categories of 'White'=1, 'Black'=2 and 'other'=3, to White=0 and Black=1, in order to compare the effect of a defendant or victim being Black on the likelihood of receiving the death penalty under similar circumstances, to not being Black.

As noted above, numeric counts for the total number of aggravators and mitigators accepted in each case were re-organized into ranges of total factors accepted which could be compared. The ranges were chosen for rough approximation of levels of aggravation and mitigation, from lowest represented by 1 and 2, mid-range by 3, and 4 and 5 representing the higher levels of case seriousness/defendant mitigation the jury accepted (Baldus et. al, 1998). This also was intended to achieve some standardization in comparative counts because of the very broad range of mitigators [0 to 50] considered compared to the much smaller range of aggravators accepted [0-50]. Counts of aggravating circumstances were recoded from actual counts to 0 aggravators accepted = 1, 1 - 2 aggravators accepted = 2, 3 - 4 aggravators accepted = 3, 5 – 9 aggravators accepted = 4. Counts of mitigators accepted, including both statutory and non-statutory, were coded 0 mitigators accepted = 1, 1-2 mitigators accepted = 2, 3 – 5 mitigators accepted = 3, 6 – 10 mitigators accepted = 4, 11 – 50 mitigators accepted = 5. The ranges

Table 1: Variable Frequencies and Coding.

	All Cases	White D	Black D	White V	Black V	WD/ BV	WD/ WV	BD/ WV	BD/ BV
<b>N</b>	632	258	374	388	244	26	232	156	218
<b>Sentence</b>									
(0)Life	302	118	184	180	122	19	99	81	103
(1)Death	330	140	190	208	122	7	133	75	115
<i>Total Aggravators Accepted</i>									
(1)=0	29	13	16	18	11	0	13	5	11
(2)=1-2	380	168	212	220	160	24	144	76	136
(3)=3-4	176	74	102	120	56	1	73	47	55
(4)=5-9	28	2	26	16	12	0	2	14	12
<i>Total Mitigators Accepted</i>									
(1)=0	23	11	12	17	6	0	11	6	6
(2)=1-2	42	19	24	32	11	0	19	13	11
(3)=3-5	95	37	58	55	40	1	36	19	39
(4)=6-10	174	68	106	99	75	10	58	41	65
(5)=11-50	289	123	166	180	109	15	108	72	94
<i>Aggravators (0=not submitted/ submitted not accepted/missing, 1=accepted)</i>									
Felony murder	241	99	142	168	79	5	94	68	74
Murder	135	52	83	100	35	0	52	48	35
<b>Pecuniary Gain</b>									
HAC	203	97	106	135	68	5	92	43	63
Viol. Conduct	273	105	168	158	115	11	94	64	104
>1 Person Risk	29	11	18	15	14	0	11	4	14
Prior Viol. Fel'y	179	61	118	104	75	3	58	46	72
Murder In Jail	5	3	2	2	3	1	2	0	2
Prior Capitol Off.	18	6	12	10	8	1	5	5	7
Escaping	75	33	42	50	25	3	30	20	22
Kill Law Enf.Officer	5	2	3	4		0	2	2	1
Kill Gov't Officer	21	4	17	3	18	0	4	14	3
<i>Mitigators (0=not submit/submit not accept/individual accept not required/ not accept/missing, 1=accepted)</i>									
Insig.Prior Recd	217	104	113	138	79	15	89	49	64
Men/Em.Distress	299	144	155	180	119	15	129	51	104
D Age	78	26	52	45	33	4	22	23	29
D Capacity	207	102	105	118	89	18	84	34	89
D Minor Accomplice	25	7	18	16	9	0	7	9	9
D Under Duress	48	26	22	30	18	6	20	10	12
D Aid Prosecution	51	20	31	37	14	3	17	20	11
Vic. Consent	8	2	6	1	7	1	1	0	6
D Drink	120	80	40	77	43	13	67	10	30
D Drugs	137	64	73	86	51	10	54	32	41
D Physic. Abuse	103	53	50	64	39	6	47	17	33
D Sexual Abuse	36	17	19	19	17	0	17	2	17
D Broken Home	73	35	38	39	34	7	28	11	27
D Dad Gone	118	32	86	62	56	4	28	34	52
D Mom Gone	51	23	29	35	17	0	23	12	17
Foster Home	20	13	7	17	3	0	13	4	3
Parent Misconduct	127	66	61	80	47	5	61	19	42
D IQ	67	25	42	35	32	2	23	12	30
DSpecificMent.Cond.	101	52	48	67	35	7	45	21	28



were chosen for rough approximation of levels of aggravation and mitigation, from lowest represented by 1 and 2, mid-range by 3, and 4 and 5 representing the higher levels of case seriousness/defendant mitigation the jury accepted (Baldus et al., 1998).

As for each individual aggravating and mitigating circumstance accepted, the coding instrument provided four (4) categories for aggravating circumstances: 1=not submitted; 2=submitted but not accepted; 3=accepted and 4=missing/not found. These were collapsed into two categories: 0 = not accepted [including not submitted, submitted but not accepted, and missing cases] as the default category and 1 = accepted, as the effect being tested.

The NC statutory aggravators are felony murder, murder for pecuniary gain, heinous/atrocious/cruel murder, murder during violent conduct, murder resulting from conduct threatening more than one person, prior violent felony, murder while incarcerated, prior capital offense [adult and certain juvenile], murder of a law enforcement officer, and murder of a court or governmental official in course of their duties (Section. 15A-2000(e), NC General Statutes 2004).

In the specifically enumerated mitigators in the North Carolina sentencing statute are defendant has no significant prior record, defendant acted under emotional or mental distress, defendant's age, defendant lacked capacity to understand his act, defendant was a minor accomplice, defendant acted under duress, defendant aided the prosecution, and the victim consented to the conduct resulting in his death (Section. 15A-2000(e), NC General Statutes, 2004).

The non-statutory mitigators allowed under the 'catch-all' provision at Section 15A-2000(3)(9) and recorded by the DCI are defendant's alcohol abuse, defendant's drug

abuse, defendant was physically abused as a child, the defendant was sexually abused as a child, defendant came from a broken home, defendant's father was absent from the home, defendant's mother was absent from the home, defendant was in foster care, defendant witnessed parental misconduct as a child, defendant's low IQ, and defendant suffers from a specific mental disease.

There were six (6) categories of possible responses in the coding instrument applicable to both the statutory and non-statutory mitigators: 1=not submitted; 2=submitted but not accepted; 3=accepted; 4=acceptance of individual circumstances not required of jury; 5=aggravators not accepted; and 8=aggravating circumstances ruled by jury as not sufficient to justify death penalty. Since the analysis examines only the effect of jury *accepted* aggravating and mitigating circumstances on life-death outcomes, these variables were collapsed like the aggravators, and recoded to reflect acceptance as the targeted effect -- 0=not accepted, encompassing all responses except 'accepted', and 1=accepted.

### *Statistical Analysis*

Logistic regression analysis was employed, using SPSS to assess 1) the effect, if any, of jury acceptance of aggravators or mitigators -- both as to total factors accepted and individual factor effects -- on sentencing outcomes, and 2) whether there is racial invariance of these effects. The core analysis controlled for the effect aggravators and mitigators on sentencing outcomes by ranges of totals accepted, and defendant and victim race and is reported at Tables 1 and 2. The second set of models takes into account the possibility that some factors might have a greater effect on jury decision-making than other factors also accepted in a case, and looks at the individual effect of each aggravator

and mitigator on sentencing outcomes in an effort to sort out possible dilution of effect from the initial grouping of factors in the first model set

The logistic regression analysis for both the total- and individual factor accepted included eight models: all cases, Black defendant cases, White defendant cases, Black victim cases, White victim cases, and defendant-victim race combinations [WhiteD/WhiteV; BlackD/BlackV; BlackD/White V]. If a variable in one model showed a statistically significant effect, the z-test for the statistical significance of differences in effects across other models was used to determine if the difference between the two models, and the subset of cases they represented, was actually significant (Paternoster, Brame, Mazerole & Piquero, 1998). There were two few cases of White defendant-Black victim cases [26] to analyze.

Logistic regression was employed because the dependent variable, life death sentencing outcomes, is dichotomous and linear regression was not appropriate (Baldus et al. 1998). Unlike linear regression, logistic regression does not produce coefficients which predict actual values; logistic regression estimates the effect an independent variable has on the likelihood – the odds – a particular outcome will occur, in this case, a death sentence. The regression coefficient (B) indicates the direction and strength of a variable's effect on the likelihood of receiving a death penalty; the odds ratio, as expressed by the  $\exp(B)$ , indicates the size of the change in the odds of a death sentence a given variable has. Overall model fit was measured by the Wald Chi-square statistic, with variance in sentencing outcomes explained by the model indicated in the Pseudo-R<sup>2</sup> statistic. The unstandardized b coefficient statistical significance for each test variable is reflected in the individual Wald statistic. Statistical significance of an effect is measured

at alpha level .05 [ $p < .05$ ], meaning that there is less than a 5% chance that the variable has no effect on the odds of the outcome occurring in the population given the observed effect for the sample analyzed. For purposes of the final analysis and discussion, only results at alpha levels less than .05 are discussed.

## Chapter Five

### Results

#### *Models of Ranges of Total Aggravating and Mitigating Circumstances Accepted*

Table 2 sets out the results of the first five of the eight models run using the ranges of total aggravators accepted and total mitigators accepted, selected to approximate low, medium and high aggravation and mitigation levels for comparison purposes. These models examined all cases, only Black defendant cases, only White defendant cases, only Black victim and only White victim cases. Table 2 represents the results of the defendant-victim race combination models. In each of the models, legally relevant factors – the aggravating and mitigating circumstances – are statistically significant at  $p < .05$ , and the effect is in the expected direction.

#### *All-cases model.*

The all-cases model shows each that each one unit increase in the range of aggravating circumstances accepted increases the odds of any defendant receiving a death sentence by a multiple of 5.4. Each increase in the range of mitigators accepted decreases the odds of a death sentence by a multiple of .64, or 64%. Across all cases, however, neither defendant nor victim race were significant predictors of a capital sentence. There was an unexpected negative direction in these effects, indicating a slight decrease in the likelihood of receiving a death sentence based on race of defendant or victim, but as noted, neither was statistically significant. The predominance of intra-

racial cases [71% of all cases] may, in part, account for this result. The adjusted  $R^2$  statistic of .407 for the all-cases model indicates substantial variation left unaccounted for by this model. Some of the remaining variation is likely due to the inability to measure differences in the weights a juror might afford different aggravators or mitigators, the “weighing” of aggravating and mitigating circumstances, and the balancing of their respective net weights. It is also possible that legally irrelevant factors omitted from the model may contribute to the unexplained variation.

Nevertheless, looking only at the all-cases model, the North Carolina capital sentencing process appears at first glance to be operating as intended -- death sentences appear to be largely based on legally relevant aggravating and mitigating circumstances and not on irrelevant or extra-legal factors such as defendant or victim race. However, the subsequent models demonstrate that the effects of the level of jury-accepted of aggravating and mitigating circumstances are not racially invariant, and that the dissimilar effects of the level of aggravators accepted produce statistically significant differences in the odds of receiving a death sentence based on defendant and/or victim race.

*Defendant race-specific models.*

The results of the defendant race-specific models, set out in Table 2, demonstrate an increased effect from jury acceptance of aggravators on sentencing for Black defendants – the aggravators are substantially more aggravating for Black defendants, with the odds of receiving a death sentence 2.7 times more than similarly situated White defendants. The odds of a Black defendant receiving the death penalty increase by a multiple of 7.7 with each unit increase in the level of aggravation, compared to an

Table 2.

*Logistic Regression Results (Odds Ratios): All-cases and Defendant and Victim Race-Specific Results Showing Effect of Total Jury-Accepted Aggravating and Mitigating Circumstances on Capital Sentencing Outcomes, North Carolina (May, 1990 - December, 2002).*

Variables	All Cases			White Defendants			z-scores	Black Defendants			White Victims			z-scores	Black Victims		
	B	S.E.	Exp(b)	B	S.E.	Exp(b)		B	S.E.	Exp(b)	B	S.E.	Exp(b)		B	S.E.	Exp(b)
Defendant Race (DRACENEW)	-.348	.232	.706	NA	NA	NA		NA	NA	NA	.562	.267	.570*	z=.31	.386	.506	1.472
Victim Race (VRACENEW)	-.145	.232	.865	.731	.503	2.078		-.443	.276	.642	NA	NA	NA		NA	NA	NA
Total Aggravators (ATOTNEW)	1.679	.198	5.362*	1.057	.304	2.878*	z=2.4*	2.04	.272	7.693*	1.56 2	.242	4.768*	z=.73	1.877	.348	6.535*
Total Mitigators (MTOTNEW)	-1.018	.115	.361*	-1.166	.189	.392*	z=-.95	-.937	.152	.392*	1.05 4	.145	.348*	z=.52	-.929	.193	.395*
Constant	.811			2.069				-.569			1.17 3				-.650		
R <sup>2</sup> =	.407			.391				.445			.421				.397		

\*p < .05

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increase of only 2.9 for White defendants. This is a statistically significant difference [ $z = 2.4, p=.0164$ ], demonstrating considerable variance in the effect of jury-accepted aggravating circumstances on sentencing outcome, across defendant's race. Some of this variance may be attributed to the weights afforded individual aggravators and the collective weighing process by the jury, but there is no data as to these factors. Even so, it appears that although for each unit shift in aggravation level the odds of a death sentence increase for all defendants, Black defendant may pay a higher premium for the level of aggravation found.

As to the effect of mitigating circumstances, the slightly less mitigatory effect of each unit increase in the range of mitigators accepted for a Black defendant [61%], over the odds reduction from mitigation for a White defendant [69%] is essentially racially invariant; there is no statistically significant difference [ $z = .95, p=.177$ ]. In these race-specific models, Black defendants benefit from nearly the same discount enjoyed by White defendants for each increase in the level of mitigation accepted. Moreover, since the number of mitigators which may be considered is limitless, the mitigatory effect of jury acceptance of mitigators is diluted with each additional mitigator accepted. Jury acceptance of aggravators has a statistically significant different effect from acceptance of mitigators [ $z=2.8, p=.0026$ ]. This may be due to a dilution effect based on the relatively small number of aggravating circumstances [11] available to North Carolina juries versus the unlimited number of mitigating circumstances which can be considered, but may also reflect the greater weight an aggravator – which must be found unanimously and beyond a reasonable doubt -- carries for a jury. In any case, it appears that jury



acceptance of aggravating circumstances drives the capital decision-making process, and Black defendants are treated more harshly once aggravating circumstances are accepted. As in the all-cases model, the effect of victim race fails to attain statistical significance regardless of defendant race.

Modeling total aggravating and mitigating circumstances is also more predictive for Black defendants than for White defendants. The  $R^2$  values increased in the Black defendant case model to .445, compared to the .407 in the all-cases model. The White defendant model was slightly less efficient than the all-cases model, with an  $R^2$  of .391. This difference in predictive value -- nearly 45% for Black defendants compared to 39% for White defendants -- is another indication that jury acceptance of aggravating circumstances has an enhanced aggravating effect on sentencing outcomes for Black defendants over White.

There is also a difference in the intercept values between the defendant race-specific models which should be noted. The constant in the White defendant model is positive; it is negative in the Black defendant model. This indicates that omitted variable bias and other sources of systematic error in these models enhance the odds of a capital sentence for White defendants, but decrease them for Black defendants. Here again it is likely that the absence of the weights applied to each factor and the balancing of accepted aggravating and mitigating circumstances account for a considerable portion of this modeling error. However, this may also be evidence of less arbitrariness operating in Black defendant cases than in White defendant cases -- a lack of arbitrariness which may work to the detriment of Black defendants in terms of consistently harsher treatment.

*Victim race-specific models.*

The last two sets of models reported in Table 2 sets out the effects of different ranges of aggravators and mitigators accepted on capital sentencing outcomes in victim race-specific cases. Here again the effects of jury acceptance of additional aggravators and mitigators are statistically significant and in the expected directions for both Black and White victim cases, but the differences in the effects across models are not statistically significant and thus not demonstrative of race-of-victim variation. It should also be noted that the aggravator effect is stronger for Black victim cases [multiplier of 6.5] than for White victim cases [multiplier of 4.7], an unexpected result, but the difference is not statistically significant [ $z = .73$  ( $p = .4645$ )]. This difference may also reflect the skewed distribution of intra- versus inter-racial cases in the sample, in which there are more Black-on-Black cases [ $n=218$ ] than Black-on-White cases [ $n=156$ ].

As to the effects of mitigator acceptance by race of victim, the odds of a defendant whose victim was White are reduced by 65% for each unit increase in the range of mitigators the jury accepts, compared to a reduction of 60% for those whose victims were Black, indicating an unexpected stronger mitigatory effect where the victim was White. This may be because the majority of White victim cases had White defendants [232/388], and thus this may reflect the overall advantage apparently enjoyed by White defendants. In any case, the differences in mitigatory effects between White and Black victim cases is not statistically significant [ $z = .52$  ( $p = .6031$ )]. The race-of-defendant effect is also significant for White victim cases, but not for Black victim cases, but in an unexpected negative direction. The effect is small, decreasing the odds of a

defendant whose victim is White receiving the death penalty by .43, and the difference in the effect of race-of-defendant is not significant between Black and White victim cases [ $z=.73$  ( $p=.4654$ )]. As noted earlier, the negative constant for Black victim cases indicates that omitted variables and systematic errors decrease the odds of a death sentence when the victim is Black, and slightly increase the odds when the victim is White. Although the Black victim model is a slightly better fit, the White and Black victim models perform comparably in predicting sentencing outcomes, with comparative  $R^2$  values of .421 and .397, respectively and neither is as predictive as the Black defendant only case model.

*All defendant-victim racial combination models.*

The lack of a racially different effect from jury acceptance of aggravating factors on capital sentencing outcomes is more clearly seen in the defendant-victim racial combination models set out in Table 3. Analyses for White defendant-Black victim cases could not be undertaken because there were too few cases [ $n=26$ ], so it is not possible to compare inter-racial cases. However, the results of the other three racial combinations show substantial racial variance in aggravation effects.

As to intra-racial cases, the odds of a Black defendant who kills a Black victim receiving a death sentence is increased 6.4 times for each unit increase in the range of aggravators, compared to an increase by 2.8 times for a White defendant who kills a White defendant. This difference is statistically significant [ $z=1.8$ ,  $p=.0359$ ]. Although the multiplier is higher for Black defendants whose victim was White, than for Black-on-White cases, the difference was not statistically [ $z=.8$   $p=.4237$ ]. There is, however, racial

difference in effect between Black and White defendants when the victim is White. The death sentence odds for the Black defendants with White victims increase by 9.8 for each increase in the level of aggravation, compared to only a 2.8 multiplier for the White defendant whose victim is White and killed under similarly aggravated circumstances. This difference – Black defendants being nearly five (5) times more likely to receive a death sentence than White defendants who commit comparable murders of White victims, is statistically significant [ $z=2.4$  ( $p = .0164$ )].

Consistent with the other models, the defendant-victim racial combination models show significant effects of the ranges of mitigators accepted, regardless of defendant and victim race. The odds of receiving the death sentence are reduced 69% in White defendant-White victim cases, 60% in Black defendant-Black victim cases, and 63% in Black defendant-White victim cases for each one unit increase in the range of mitigators accepted. Although there is a slightly higher benefit for White defendants whose victims are White, and the least effect is for Black defendants whose victims are White, the differences are not statistically significant between any defendant-victim racial combinations.

Here again the intercept for Black defendants, regardless of victim race, is negative, indicating that omitted variables and systematic error account for a slight reduction in the odds of receiving a death sentence; which may indicate less arbitrariness operating in Black defendant cases than in White defendant cases, a lack of arbitrariness which works to the detriment of Black defendants in terms of consistently harsher treatment. Even so, the results indicate that Black defendants pay a premium for their

race with each increase in the level of aggravation accepted by a capital jury, regardless of the race of their victim; the highest price may be paid when the victim is White.

The  $R^2$  values show a better fit for the models for Black defendants whose victims are White. The model explains 52% of the variance for Black defendant- White victim cases, versus only 39% in White defendant-White victim cases, and 40% in Black defendant-Black victim cases as well as the all-cases model. The fits for the intra-racial models are slightly lower than for the all-cases model, but comparable.

Finally, it should be noted that the aggravator effect is consistently the stronger effect across all models controlling for comparable levels of aggravation and mitigation. Jury acceptance of aggravating circumstances appears to have the stronger effect on sentencing outcome for Black defendants, regardless of the race of their victim, but is strongest in Black defendant-White victim cases. This supports the conclusion that Black defendants are treated more harshly by juries overall, in terms of the risk of a death sentence, than White defendants whose crimes are comparable. This also supports the conclusion that despite application of the *Furman* principles significant racial invariance has not yet been achieved in capital sentencing, and sentencing bias based on a defendant's race is still a significant factor in capital sentencing.

Table 3.

*Logistic Regression Results (Odds Ratios): Race-of-Defendant and Race-of-Victim Combinations Showing Effect of Total Jury-Accepted Aggravating and Mitigating Circumstances on Capital Sentencing Outcomes, North Carolina (May, 1990 -December, 2002).*

Defendant Race	Victim Race	Variables	B	S.E.	Exp(B)
White Defendant	Black Victim <sup>4</sup>	NA	NA	NA	NA
	White Victim	Total Aggravators Accepted	1.023	.306	2.782*
		Total Mitigators Accepted	-1.182	.196	.307*
		Constant	2.946		
		<b>R<sup>2</sup> =.385</b>			
Black Defendant	Black Victim	Total Aggravators Accepted	1.851	.349	6.367*
		Total Mitigators Accepted	-.931	.199	.394*
		Constant	-.197		
		<b>R<sup>2</sup> =.396</b>			
	White Victim	Total Aggravators Accepted	2.291	.431	9.883*
		Total Mitigators Accepted	-.963	.238	.382*
		Constant	-1.523		
		<b>R<sup>2</sup> =.517</b>			
		<u>z-scores</u>			
	<i>Defendant-Victim Combinations</i>	<i>Total Aggravators Accepted</i>			<i>Total Mitigators Accepted</i>
	WhiteD-WhiteV – BlackD-White V	z= 2.4*			z= .72
	WhiteD-WhiteV -- BlackD-Black V	z=1.8*			z= .9
	BlackD-WhiteV – BlackD-Black V	z=.8			z= .1

\*p < .05

<sup>4</sup> The small number of White-on-Black cases [n=26] prevented analysis of these cases.

*Results of Modeling Accepted Individual Aggravating and Mitigating Circumstances.*

*All-cases models.*

The results of the individual factor models are consistent with the totals accepted models, and are set out in Tables 4 and 5. Table 4 sets out the all-cases and the defendant and victim race-specific models. Table 5 reports the racial combination models. In the all-cases models, there was a significant race-of-defendant effect and a non-significant effect for race-of-victim, both in an unexpected negative direction. The Black defendant race-specific model and both victim race-specific models echo these negative directions for the racial variables. Race-of-victim was negative and significant in the Black defendant model, but positive and not significant in the race-specific White defendant model. The difference in effect was not statistically significant. In the victim race-specific models, the defendant race effect was negative in both the Black and White victim models, but neither was significant, nor was there any statistically significant difference between them.

These unexpected directions are possibly a reflection of the Black defendant and intra-racial crime sample bias. There is a higher percentage of Black defendants in the sample overall, 59% [374/632] of the cases have Black defendants, compared to 41% of the cases with White defendants [258/632]. As previously noted, the distribution based on defendant and victim race is somewhat skewed. The preponderance overall are intra-racial cases [71% (450/632)], of which the majority -- 58% (218/450) -- are Black-on-Black. As to the remaining 29% [182/632] of the cases which are inter-racial, 86% [156/182] are Black-on-White -- only 26 cases involve White defendants and Black

victims. Thus analysis and comparison is only viable as to how juries treated Black defendants overall, and in comparison to White defendants who kill White victims. Thus the race-of-victim effects cannot be fully evaluated, except as to White victims, but the sample is sufficient to assess race-of-defendant effects.

Returning to the all-cases model, shown in Table 4, five (5) aggravators showed strong, significant effects: felony murder [n=241], heinous/atrocious/cruel (HAC) murder [n=203], murder during violent conduct [n=273], prior violent felony record [n=179], and prior capital record [n=18]. HAC showed the strongest effect, with a multiplier for the odds of receiving a death sentence of 5.7, over all cases where accepted. These five aggravators had significant effects where accepted, in most models, and HAC was significant in all models. The small number of cases in which a prior capital record was accepted make the results as to this aggravator less reliable, although it is worth noting that two-thirds [12/18] of the cases where this was a factor had Black defendants.

As to the mitigators, over all cases five (5) statutory mitigators and three (3) nonstatutory mitigators had a significant effect, all in the expected negative direction: no significant prior record [n=217], age [n=78], capacity [n=207], minor participation in the crime [n=25], and duress [n=48]. The nonstatutory mitigators which showed a significant effect were alcohol abuse [n=120], father absent from childhood home [n=118], and defendant had a specific mental illness [n=101]. All were in the expected negative direction. Sample size was an issue as to the mitigation effect overall of defendant as minor accomplice, duress and age, and this issue becomes more pronounced as the models are parsed into racial-specifics and combinations. As would be expected



with the addition of variables, the model fit increased for the all-cases model from .407 using only ranges of aggravation and mitigation accepted, to .516 for the individual factor model of all cases. That is, defendant and victim race, and jury acceptance of individual aggravating and mitigating factors explains almost 52% of the variance in the life-death decision.

*Defendant race-specific models.*

Consistent with the all-cases model, there is a negative race-of-victim effect in the Black defendant model, which is significant and indicates a 58% decrease in the likelihood of a death sentence based on victim race – but the difference with the White defendant effect is not statistically significant [ $z=.31, p=.03783$ ]. As to the aggravators, the same five aggravators significant in the all-cases models are also significant in either the Black or White defendant model, and a sixth aggravator – murder for pecuniary gain [For \$\$] shows a significant positive effect on the life-death outcome in both Black and White defendant models. There are race-based differences, some of which are significant and some of which are not.

Felony murder and a prior capital felony record are not significant for White defendants but are for Black defendants -- but the differences in effect are not statistically significant. The effects of a prior violent felony record and murder for pecuniary gain are also significant for Black defendants but not for White, but here the differences are statistically significant. A Black defendant is almost 9 times more likely to receive the death sentence if he has a prior violent felony record than a White defendant with such a record. Where the murder is found by the jury to have been for pecuniary gain, the Black

defendant's odds of receiving a death sentence increase by a multiplier of 3.3, compared to only a multiplier of 1.2 for a White defendant.

Two of the aggravators, HAC and murder during violent conduct, have a significant enhancing effect on the likelihood of a death sentence for both Black and White defendants. There is no significant difference in the effect of violent conduct, and the odds ratios are comparable – a 3.91 increase for White defendants and a 3.95 increase as to Black defendants. HAC shows a much greater and statistically significant different [ $z=2.0, p=.0228$ ] effect on Black defendants – the multiplier for White defendants where HAC has been accepted in aggravation is 4.2, versus 15.8 for Black defendants. As discussed more particularly below, this difference increases dramatically in the racial combination models, showing the greatest effect where the defendant is Black and the victim is White, and the multiplier increases to 83.2.

The significant mitigatory effects were in the expected negative direction and similarly mixed to some degree by race of defendant. Only defendant's age and capacity were significant for both Black and White defendants with age being slightly more mitigatory for Black defendants [ $n=52$ ] than White [ $n=26$ ], and lack of capacity for White defendants [ $n=102$ ] than for Black [ $n=105$ ], but the differences were not significant [age  $z=.2, p=.4207$ ]; capacity  $z=.5, p=.3805$ ]. A defendant's minor role in the crime [ $n=25$ ] significantly reduced a Black defendant's odds of a death sentence by 94% and showed no significant effect for White defendants, but the difference was not statistically significant [ $z=.004, p=.4984$ ], and the result undoubtedly affected by the small sub-sample size.

One interesting result was the effect of the lack of a significant prior record [n=217]. This factor was significant for White defendant cases [104] but not for Black defendant cases [113], reducing the odds of receiving a death sentence by 88%, compared to only 37% if the defendant was Black, and the difference in effect was statistically significant [ $z=2.6, p=.0047$ ]. On the other hand, the effect of a jury's acceptance of a defendant's duress [n=48] was significantly [ $z=1.96, p=.025$ ] greater for Black defendant cases [22] than for White [25], reducing the odds of a death sentence by 92% for Black and only 65% for White defendants.

As in the level of aggravation and mitigation models, the effect of jury acceptance of the HAC aggravator is strongest for Black defendants, and the difference in effect between Black defendants [15.8 multiplier] and White defendants [4.2 multiplier] is significant [ $z = 2.0, p=.0228$ ]. HAC has the strongest effect of all for Black defendants whose victims are White, with a multiplier of 83.2. The difference between the HAC aggravation effect on White defendant-White victim cases and Black defendant-White defendant cases shown on Table 5 was also statistically significant [ $z=2.1, p =.0179$ ], as was the difference in the HAC effect between White and Black intra-racial crime [ $z=1.97, p =.0244$ ]. One interesting result was the lack of statistical significance in the difference of the HAC effect between Black-Black and Black-White cases; it seems that Black defendants are going to be penalized more than White defendants in terms of effect on sentencing from acceptance of the HAC aggravator regardless of the race of their victim, but the greatest effect will be if the victim is White. Again, it must be noted that more [58%] of the Black defendant cases had Black victims.

Felony murder was significant in the all-cases model but not statistically significant for White defendants in the defendant-race specific model or the White-on-White case model. As tables reflect, the effect of this aggravator is comparable across all models, and there was no statistically significant difference among them. This may be in part because felony murder is not usually a stand-alone aggravator unless the defendant is the triggerman, since the holdings in *Enmund v. Florida (1982)* and *Tison v. Arizona (1987)*, and because of the double-dipping issue which prevents counting both the felony itself and felony murder as two separate aggravators. Felony murder had a significant aggravating effect on Black defendant cases overall, but only in the Black intra-racial model. It was significant for Black defendants, but the difference in effect on Black and White defendant cases was not significant. Felony murder was also not significant except where the victim was White. Murder for pecuniary gain [For \$\$] was Four others – felony murder, murder during violent conduct, prior violent felony record and prior capital offense – were also statistically significant in the all-cases model. As to the defendant race-specific models, as would be expected, more individual aggravators were significant for Black defendants than for White. For Black defendants felony murder, murder for pecuniary gain, murder during violent conduct, prior violent felony record, and prior capital offense were all significant, in addition to HAC. For White defendants, only HAC, and murder during violent conduct had a statistically significant effect.

*Victim race-specific models.*

As to the victim race-specific cases, four of the aggravating factors were significant for both Black and White victim cases: felony murder, HAC, murder during

violent conduct, and prior violent felony, but the differences were not statistically significant. Prior capital offense was also significant if the victim was Black, in the small sample of Black victim cases where this aggravator was accepted (n=8). Jury acceptance of the HAC aggravator proved to have a strong increased effect on the odds of a Black defendant receiving the death penalty.

Table 4.

*Logistic Regression Results (Odds Ratios): All-Cases, Defendant and Victim Race-Specific Models Showing Effect of Jury - Accepted Individual Aggravating and Mitigating Circumstances on Capital Sentencing Outcomes, North Carolina (May, 1990 – December, 2002).*

	All Cases			White Defendants			z **	Black Defendants			Black Victims			z	White Victims		
	B	S.E.	Exp(b)	B	S.E.	Exp(b)		B	S.E.	Exp(b)	B	S.E.	Exp(b)		B	S.E.	Exp(b)
Defendant Race	-.683	.307	.505*	NA	NA	NA		NA	NA	NA	-.373	.811	.689	-.627	.367	.534	
Victim Race	-.410	.296	.664	.126	.693	1.134	.94	-.872	.394	.418*	NA	NA	NA	NA	NA	NA	
Felony murder	1.143	.268	3.136*	.795	.477	2.214	1.2	1.520	.395	4.574*	1.305	.492	3.688*	.6	.960	.365	2.611*
For \$\$	.470	.300	1.599	.160	.530	1.174	1.46	1.194	.463	3.299*	1.065	.668	2.900		.541	.390	1.178
HAC	1.748	.271	5.744*	1.428	.447	4.172*	2.0*	2.760	.473	15.796*	2.659	.570	14.282*	1.1	1.934	.369	6.919*
Viol. Conduct	1.045	.257	2.844*	1.364	.515	3.913*	.02	1.375	.386	3.954*	2.021	.538	7.548*	1.7	.892	.360	2.441*
>1 Person Risk	.507	.547	1.661	-.332	1.044	.717		1.196	.808	3.307	1.092	.919	2/980		1.005	.786	2.731
Prior Vio. Fely	.967	.297	2.630*	-.171	.532	.843	2.9*	2.203	.453	9.055*	1.514	.570	.4.543*		1.007	.413	2.737
In jail	-.009	1.449	.992	-.196	1.837	.822		17.359	25592.	34E+07	16.982	26723	2372278		-.813	1.696	.443
Prior Cap. Off.	1.654	.756	5.226*	1.655	1.639	5.232	.44	2.484	1.058	11.994*	3.901	1.477	49.464*		1.268	1.225	3.555
Escaping	.598	.385	1.818	.830	.665	2.294		1.210	.717	3.355	1.507	.897	4.515		.200	.474	1.222
Kill Officer	-.125	1.307	.882	19.914	27292	45E+08		-.821	1.699	.440	20.437	40192	7.5E+08		-1.084	1.624	.338
Kill Gov. Off.	.337	.720	1.401	-.612	1.480	.542		.909	.861	2.482	-.089	1.529	.915		.834	.910	2.032
No SigRec.	-1.163	.269	.313*	-2.129	.493	.119*	2.6*	-.464	.398	.629	-.788	.486	.455	1.56	-1.760	.386	.172*
Mt/Em Dis.	.221	.260	1.247	.144	.463	1.155		.323	.380	1.381	.449	.439	1.567		.010	.366	1.011
D Age	-1.383	.384	.251*	-1.563	.801	.209	.2	-1.751	.550	.174*	-1.166	.711	.312	.9	-1.959	.540	.141*
D Capacity	-1.322	.260	.267*	-1.614	.441	.199*	.5	-1.336	.399	.263*	-1.471	.488	.230*	.02	-1.483	.357	.227*
D Minor Acpl.	-2.598	.768	.074*	-20.30	14013	.000	--	-2.694	.957	.068*	-.755	1.094	.470		-	7983	.000
D Duress	-1.805	.506	.164*	-1.051	.705	.349	2.0	-3.926	1.232	.020*	-4.289	1.511	.014*		-1.250	.618	.287
D Aid Prosec.	-.094	.457	.910	-1.365	.811	.255	.6	2.335	.818	10.328*	.939	1.250	2.559		.273	565	1.314
Vic. Consent	-.745	1.186	.475	.617	2.226	1.853		-19.15	16329.	.000	-19.03	14153	.000		21.183	40193	1.6E+09

\* $p < .05$

\*\* <sup>1</sup> The z-score indicates whether the difference in effect between two models is statistically significant ((Patnoster, Brame, Mazerole & Piquero, 1998).

Table 4, continued.

*Logistic Regression Results (Odds Ratios): All-Case, Defendant and Victim Race-Specific Models Showing Effect of Jury-Accepted Individual Aggravating and Mitigating Circumstances on Capital Sentencing Outcomes, North Carolina (May, 1990 - December, 2002).*

	All Cases			White Defendants			z	Black Defendants			Black Victims			z	White Victims		
	B	S.E.	Exp(b)	B	S.E.	Exp(b)		B	S.E.	Exp(b)	B	S.E.	Exp(b)		B	S.E.	Exp(b)
D Alcohol	-.805	.341	.447*	-.654	.603	.520		-.693	.614	.500	-.062	.645	.940		-.873	.485	.418
D Drugs	.115	.319	1.122	-.302	.603	.739		.302	.494	1.352	.060	.630	1.062		.132	.457	1.141
D Physical Abuse	-.168	.353	.845	-.389	.531	.677		-.461	.630	.631	-.187	.684	.830		-.471	.478	.625
D Sexual Abuse	.124	.543	1.131	-.523	.802	.592		1.345	1.014	3.840	1.350	1.180	3.858		-.482	.716	.618
D Broken Home	-.139	.359	.871	-.283	.580	.754		.493	.563	1.638	-.279	.569	.756		-.235	.535	.790
D Father Absent	-.756	.334	.470*	-1.94	.795	.144*	1.8*	-.395	.424	.674	-.327	.513	.721		-1.217	.525	.296
D Mother Absent	-.144	.467	.866	-1.88	1.074	.153		1.283	.720	3.606	1.465	.934	4.329		-.834	.674	.434
D in Foster Home	.611	.711	1.843	2.682	1.250	14.612*	1.1	.731	1.265	2.078	1.584	1.522	4.873		.872	.860	2.391
D Saw Parent'I Misc.	.067	.306	1.069	.695	.507	2.003		-.694	.510	.500	-.397	.535	.672		.558	.447	1.745
D Low IQ	.231	.395	1.260	.397	.697	1.488		-.385	.595	.681	.279	.708	1.322	.96	.595	.571	1.813
D Spec. Mtl III	-.70	.311	.495*	-.917	.533	.400		-.598	.489	.550	-.624	.607	.536		-.551	.427	.576
Constant	.478			1.301				-1.71			-1.52				.600		
R <sup>2</sup>	.516			.626				.888			.607				.568		

\*p < .05

The strongest effect is seen on Black defendants who commit crimes found by the jury to be heinous, atrocious or cruel (HAC). The odds multiplier for HAC in the all-cases model was 5.7, but in the Black defendant model rose to 15.8, compared to a decrease as to White defendants from the all-cases model to 4.2. The difference in effect of the HAC aggravator on the likelihood of receiving a death sentence, between White and Black defendants was statistically significant [ $z=2.1$  ( $p<.05$ )]. An unexpected result was the disparity in the effect of the HAC aggravator based on victim race. Jury acceptance of the HAC aggravator increased the odds of a death sentence more when the victim was Black – by a multiplier of 14.3 -- than when the victim was White, which increased the odds by a multiplier of 6.9, but the difference between them was not statistically significant [ $z=1.1$ ,  $p=.2713$ ]

As to mitigating circumstances, only one factor was significant in all eight models using the individual aggravating and mitigating circumstances – defendant’s capacity to understand the criminality of his act. The seven mitigators significant at  $p<.05$  over all cases were defendant’s non-significant prior record, age, defendant was a minor accomplice, under duress, abused alcohol, defendant’s father was absent from the childhood home, and defendant suffered a specific mental illness. All of these effects were in the right direction, indicating a mitigatory effect – albeit slight -- on sentencing when accepted. When looking mitigation effects in the defendant race-specific models, in addition to defendant’s capacity, both sets of defendants showed other mitigatory effects significant at  $p<.05$ , although these additional mitigators differed in some respects by race.



The White defendant model showed significant mitigatory effects as to no significant prior record, defendant's age, lack of capacity, duress, defendant aided the prosecution. The Black defendant model showed age, lack of capacity, minor accomplice, duress, and aid to the prosecution as significant. All of the effects were in the right direction, indicating a mitigatory effect, except as to aiding the prosecution, which was significant for Black defendants but in the wrong direction, indicating an *increase* by a multiplier of 10, in the odds of a death sentence for Black defendants who helped the prosecution. The difference between Black and White defendants was not statistically significant [ $z=1.1$  ( $p=.2713$ )]. There was a similar unexpected positive direction for the foster home mitigator as to White defendants, producing a statistically significant multiplier of 14.1, but the difference was similarly not significant [ $z=1.1$  ( $p=.2713$ )]. In fact, there were no significant differences in the mitigatory effects of any of the mitigating factors, between Black and White defendants.

The defendant victim race-specific models showed a reduced number of mitigatory factors where the victim was Black, with only defendant's capacity and duress showing a significant effect. The White victim model produced significant effects from where the defendant had no significant prior record, and based on his age, lack of capacity, duress, and the father being absent from the home. All effects were in the expected direction and none of the differences in mitigatory effects based on victim race were statistically significant.

*Defendant-Victim racial combination models.*

The defendant-victim racial combination models are reported in Table 5 produced mitigatory effects consistent with the all-cases models. Defendant age and lack of capacity were significant for all racial combination, but the differences across models were not significant. The same mitigatory factors were significant for Black defendants in the racial combination models as had been in the defendant race-specific model, except defendant as minor accomplice was not significant in any racial combination model, and duress was only significant in the Black defendant-Black victim cases. The foster home and witnessing parental misconduct mitigators showed as significant in White-on-White crime but not in the Black intra- or inter-racial crimes. There was a statistically significant difference in the mitigatory effect of defendant's duress on intra-racial cases, where the mitigatory effect was stronger for Black-on-Black crime, than for White-on-White crime [ $z=2.4$  ( $p=.0214$ ). Except for the duress mitigator for Black defendants, there were no significant differences in mitigatory effect of other factors and there was no significant differences in the effect of any of the mitigators as between interracial cases where the defendant was Black, or any cases where the victim was White.

As to model fit, the  $R^2$  values increased for all of the individual factor models over the total factors accepted models. The all-cases value went from .407 to .516, explaining 52% of the variance. The White defendant case model  $R^2$  value increased from .391 to .588, indicating that 59% of the variance is explained by the individual aggravating and mitigating factors. The Black defendant model value increased from an  $R^2$  value of .445 to .626, explaining nearly 63% of the variance between sentencing

outcomes. The victim race-specific models also increased from an  $R^2$  value of .421 to .568, increasing in fit by 15 percentage points. The model fit for Black victim cases also improved, the 40% [ $R^2=.397$ ] explained by the all-cases model growing to nearly 61% [ $R^2=.607$ ] of the variance explained in the individual factor Black victim case model.

The use of individual factors improved the fit of the racial combination models. The White-on-White model using individual factors explained about 60% [ $R^2=.598$ ] of the sentencing outcome variance, over only 39% of the variation explained by levels of aggravation and mitigation. The Black-on-Black model improved from 40% using the ranges of factors accepted, to 62% with individual factors accepted. Overall, the models appear to be more efficient in predicting sentencing outcomes for Black defendants, and when individual factor are measured. The largest increase in fit between the aggravation-mitigation level models and individual factor models is for Black-on-White crime, going from explaining 52% to 80% of the variation in sentencing outcome.

The North Carolina statute overall seems to be working efficiently to produce consistent sentencing results, particularly for Black defendants who endure a consistent and predictable disadvantage as to how the aggravating factors affect their sentencing outcome. Most of the unexplained variance is in cases where the defendant is White. While some of the unexplained variance is attributable to unknown factors such missing variables and systemic error, and to the inability to factor in the individual weights of the factors or the weighing of the aggravators and mitigators, it appears that race is playing a role in how the *Furman*-compliant standards are applied, and raising the question of arbitrariness and possible jury bias.

Table 5.

*Logistic Regression Results (Odds Ratios): Defendant-Victim Racial Combination Models Showing Effect of Jury-Accepted Individual Aggravating and Mitigating Circumstances on Capital Sentencing Outcomes, North Carolina (May, 1990 – December, 2002).*

	White Defendant – White Victim <sup>1</sup>			Black Defendant – Black Victim			Black Defendant – White Victim		
	B	S.E.	Exp(b)	B	S.E.	Exp(b)	B	S.E.	Exp(b)
Felony murder	.823	.512	2.277	1.385	.528	3.996*	1.380	.858	3.974
For \$\$	.014	.546	1.014	.871	.681	2.389	2.627	1.067	13.832*
HAC	1.506	.484	4.510*	3.042	.625	20.952*	4.421	1.246	83.214*
Viol. Conduct	1.287	.543	3.620*	1.999	.571	7.385*	.860	.817	2.363
>1 Person Risk	-.114	1.103	.892	1.450	.983	4.265	3.206	2.004	24.684
Prior Vio. Fely	.024	.583	1.025	1.857	.639	6.403*	4.247	1.154	69.908*
In jail	-.281	2.046	.755	17.080	25916.037	26175712.907	NA	NA	NA
Prior Cap. Off.	.288	1.850	1.333	3.465	1.521	31.971*	19.992	6950.775	481179454.364
Escaping	.292	.675	1.339	1.146	1.014	3.145	1.121	1.679	3.067
Kill Officer	19.775	27229.935	387506038.119	20.187	40192.970	584927857.974	-42.428	24716.259	.000
Kill Gov. Off.	-.573	1.498	.564	-.001	1.628	.999	3.061	1.719	21.340
No SigRec.	-2.205	.553	.110*	-.604	.538	.547	-1.302	.933	.272
Mt/Em Dis.	.160	.527	1.174	.348	.477	1.416	-.848	.941	.428
D Age	-2.349	.898	.095*	-1.654	.780	.191*	-2.797	1.141	.061*
D Capacity	-1.615	.490	.199*	-1.420	.535	.242*	-2.389	.954	.092*
D Minor Acpl.	-21.001	13525.905	.000	-1.146	1.142	.318	-49.299	12440.513	.000
D Duress	-.633	.726	.531	-4.656	1.527	.010*	-17.048	9955.123	.000
D Aid Prosec.	-.507	.906	.602	2.944	1.840	18.997	3.723	1.538	41.39*
Vic. Consent	19.809	40192.970	400870714.217	-18.858	16422.489	.000	NA	NA	NA

*p* .05

Table 5, continued .:

*Logistic Regression Results (Odds Ratios): Defendant-Victim Racial Combination Models Showing Effect of Jury-Accepted Individual Aggravating and Mitigating Circumstances on Capital Sentencing Outcomes, North Carolina (May, 1990 – December, 2002).*

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	<u>White Defendant – White Victim<sup>1</sup></u>			<u>Black Defendant – Black Victim</u>			<u>Black Defendant – White Victim</u>		
	<u>B</u>	<u>S.E.</u>	<u>Exp(b)</u>	<u>B</u>	<u>S.E.</u>	<u>Exp(b)</u>	<u>B</u>	<u>S.E.</u>	<u>Exp(b)</u>
D Alcohol	-1.135	.669	.321	-.527	.722	.591	1.932	2.357	6.903
D Drugs	-.107	.655	.898	.163	.731	1.176	-.396	1.051	.673
D Physical Abuse	-.684	.591	.504	-.569	.831	.566	.822	1.503	2.275
D Sexual Abuse	-.599	.810	.549	1.469	1.328	4.346	18.889	7295.652	159781410.692
D Broken Home	-.188	.670	.828	.316	.649	1.372	.777	1.854	2.176
D Father Absent	-2.334	.916	.097*	-.295	.551	.745	-1.203	1.091	.300
D Mother Absent	-1.595	1.164	.203	1.634	1.001	5.125	-.194	1.544	.823
D in Foster Home	2.541	1.298	12.689	1.387	1.528	4.004	3.054	10.908	21.193
D Saw Parent'l Misc.	1.161	.601	3.192	-.497	.607	.608	-.982	1.667	.375
D Low IQ	.054	.792	1.056	.239	.795	1.270	.214	1.367	1.239
D Specific Mental Illness	-1.069	.588	.343	-.950	.686	.387	1.044	1.016	2.841
Constant	1.562			-2.026			-2.933		
R <sup>2</sup>	.598			.624			.795		

\*p < .05

<sup>1</sup>There were two few cases (26) for SPSS to produce results for the White Defendant-Black Victim cases.

z- scores

		<u>Z-Scores</u>			
<u>White Def/White Victim – Black Def/White Victim</u>		<u>White Def/White Victim – Black Def/Black Victim</u>		<u>Black Def/White Victim – Black Def/Black Vic.</u>	
		Felony Murder	z= .76	Felony Murder	z= .025
Murder for Pecuniary Gain:	z= 2.18*			Murder for Pecuniary Gain	z= .82
HAC	z= 2.1*	HAC	z= 1.97*	HAC	z= 1
During Violent Conduct	z= .44	During Violent Conduct	z= .9	During Violent Conduct	z= 1.14
Prior Violent Felony	z= 3.27*	Prior Violent Felony	z= 2.1*	Prior Violent Felony	z= 1.8*
		Prior Capital Felony	z= 1.32	Prior Capital Felony	z= .0000+
No Sig. Prior Record	z= .83	No Sig. Prior Record	z= 2.07*	No Sig. Prior Record	z= .68
Defendant Age	z= .3	Defendant Age	z= .6	Defendant Age	z= .8
Defendant Capacity	z= .8	Defendant Capacity	z= .4	Defendant Capacity	z= .9
		D Under Duress	z= 2.4*		
Defendant Aid Prosecutn	z= 1.8*			Defendant Aid Prosectn	z= .32
D Father Absent	z= .8	D Father Absent	z= 1.905*	D Father Absent	z= .7

## Chapter Six

### Conclusions

#### *Study Purpose and Results*

The purpose of this study was to assess the degree to which capital sentencing under the guided discretion sentencing standards required by *Furman v. Georgia (1972)* has produced predictable, consistent and racially invariant death sentencing patterns. It was not intended to assess the degree to which racial bias might already have influenced the progress of a case to the life-death decision, but was limited to the penalty stage, where *Furman* applies, in order to look at possible racial influences on the sentencing process itself. Thus, to the extent race entered into the decisions which resulted in the racial composition of the sample reaching the penalty stage, it is not measured or considered here. It is possible, however, that any cumulative racial bias injected into the process during earlier discretionary decisions arguably makes racial variance discovered at the sentencing stage a conservative reflection of race in the capital justice system overall.

To isolate the sentencing decision in order to look at racial disparities or the lack of them, it was logical to compare sentencing outcomes among Black-White race specific cases, defendant-victim racial combination cases and all cases as the product of the application of the only legally-relevant sentencing criteria under *Furman*, the statutorily

expressed aggravating and mitigating circumstances. The aggravators presumably encompass all criteria which make a crime death worthy, and the mitigators allow broad consideration of factors which might offset the crime and justify a life sentence in his particular case. The goal was to determine whether jury sentencing discretion under *Furman* has been sufficiently channeled to avoid or minimize to insignificant levels the influence of extra-legal considerations such as racial prejudice.

The study looked at the sentencing decisions of 632 capital juries in North Carolina between May 1990 and December 2002 after they applied North Carolina's *Furman*-compliant capital sentencing statute (Section 15A-2000, NC General Statutes). By controlling for defendant and victim race and the numeric range of aggravating and mitigating circumstances accepted and applied by the jury – and also the effect of each factor individually -- it was possible to observe the degree to which these factors affected the risk of defendants receiving a death sentence for comparable crimes during the selected time-frame, and the degree to which these effects differed by race. To be conservative, only results at an alpha level of less than .05 are reported, indicating a confidence level of more than 95%.

In other words, the study tried to determine if the North Carolina death sentencing statute has operated to produce the consistent and predictable results which *Furman* held the Eighth Amendment to require, and if it does so in a race-neutral way. A demonstrated, statistically significant lack of racial invariance in how a *Furman*-compliant sentencing statute works when operating in a presumptively race-neutral setting, should call into question the continued validity of the current, *Furman*-based death sentencing model.

Constitutional principles of racial equity, jury impartiality, arbitrariness of punishment, require a death sentencing process which if not completely even-handed is sufficiently consistent and predictable to leave no room for doubt as to its fundamental fairness between the races. Statistically significant racial disparities in how facially race-neutral sentencing standards are applied, regardless of how relatively even the unadjusted life-death sentencing rates may be distributed between Black and White defendants, are indicative of the operation of racial bias in the system which should be just as unacceptable under the law as the stark Black-White disparities seen pre-*Furman*. However, significant bias observed at this point in the societal integration curve is probably not the result of institutionally purposeful denial of equal protection under the law; it is more likely the result of the continued effect of lingering unconscious, culture-based racial stereotypes. The issue is whether any statistically significant racial disparity, intended or not, is an acceptable outcome in the operation of our laws where death is the consequence.

#### *Key Findings*

The results of the study support a conclusion that the *Furman*-based criteria North Carolina has adopted to guide the capital sentencing decision have substantially reduced unpredictability in death sentencing in that state. The results do *not* support a conclusion that *Furman* has worked to eliminate or even reduce race-based arbitrariness to constitutionally insignificant levels in capital sentencing in North Carolina. These are the key findings of the study:

1. The North Carolina statute is moderately efficient in producing consistent and predictable capital sentencing results across all cases.



2. The North Carolina statute is highly efficient in producing consistent and predictable capital sentencing results for Black defendants, particularly as to death sentences.
3. The North Carolina statute is not efficient in producing consistent and predictable capital sentencing results for White defendants.
4. Black defendants pay a significantly higher premium in terms of the risk of a death sentence for increases in the level of aggravation a jury accepts.
5. Black defendants pay a significantly higher premium in terms of the risk of a death sentence where the murder for pecuniary gain, HAC, and prior violent felony record aggravators are accepted.
6. Black defendants pay the highest premium in terms of the risk of a death sentence where their victim was White.
7. The race of the victim makes no statistically significant difference in the risk of receiving the death penalty, except where the defendant is Black and the victim is White.
8. Jury acceptance and application of aggravating circumstances has a much stronger influence on sentencing outcomes, regardless of defendant or victim race, than jury acceptance and application of mitigating circumstances.
9. There is no statistically significant race-based difference in the effect of an increase in the mitigation level of a case.
10. There is no statistically significant difference in the mitigatory effect of individual factors based on victim race.

11. Only two mitigatory factors were significantly different based on defendant race: The lack of a significant prior record decreases the risk of a death sentence more for White defendants versus Black defendants; and jury acceptance that the defendant acted under duress favors Black defendants.

These results indicate that while the North Carolina statute appears to working efficiently overall, there is a statistically significant bias against Black defendants in terms of how aggravating circumstances affect their risk of a death sentence, regardless of the race of their victim, over White defendants whose crimes are comparably aggravated. Where levels of aggravation and mitigation are controlled for, Black defendants are three (3) times more likely to receive the death penalty than White defendants. When looking at the individual aggravators accepted, the odds multipliers increase significantly for Black defendants over White, with HAC – the most subjective aggravator – having a very significantly larger effect for Black defendants, and an enormous effect if the victim was white, compared to White defendants who kill white victims in a heinous, atrocious or cruel way. These disparities are statistically significant at  $p < .05$ , but whether they are enough to demonstrate constitutional significance is unknown.

The analysis shows little, if any, disparity in how the North Carolina statute was applied which can be attributed to the race of the victim. The only statistically significant difference possibly attributable to a race-of-victim effect was the enhanced aggravation effect on Black defendants whose victims were White over the effect on White defendants whose victims were White, but this appears more of a race-of-defendant effect than a race of victim effect because: 1) there was no statistically significant difference

between the way jury-accepted aggravators and mitigators affected a defendant's sentencing outcome based on the victim's race, except between White and Black defendants whose victims were White; and 2) there was no statistically significant difference in how the aggravators influenced sentencing outcomes for Black defendants, period – regardless of the race of their victim.

The comparison of the White defendant-White victim and Black defendant-White victim models produced the largest disparities, thus confirming the fears about Black-on-White murders expressed in *Turner* and *McCleskey*. The Black defendant who killed a White victim was at the highest risk overall, with an odds multiplier 3.5 times higher [9.883] as for a White defendant who killed a White victim [2.782]. Where the victim was White and the HAC aggravator was accepted, a Black defendants' risk of a death sentence was 18.5 times higher than White defendants in the same situation, and if the prior violent felony aggravator was present the risk was 69 times higher for Black defendants than White. *McCleskey* did not find a 4 point disparity in the race-of-victim effect sufficient to raise Eighth Amendment concerns as to *McCleskey*'s individual sentence. Whether the disparities shown in the study presented here are or are not constitutionally significant as showing unacceptable jury bias, arbitrary and capricious sentencing or a violation of substantive due process requirements of racial parity in death sentencing in either an individual or systemic context, is unknown, but the statistical significance and the consistency of these disparities raise a question of whether the death sentence can ever be fair in a Black-on-White crime.

The model fit values underscore the apparent race-of-defendant disparity in how the *Furman* standards have been applied in North Carolina. The all-case model indicates

that the North Carolina sentencing statute is working moderately well overall, with jury acceptance and application of the aggravating and mitigating factors to crimes within comparable aggravation and mitigation ranges explaining 41% of variance in sentencing outcomes, rising to 52% when parsed into individual aggravator and mitigator effects. The defendant race-specific models increase the fit for Black defendants over the all-cases models to 45% of the variance in outcome based on aggravation/mitigation levels and 63% in the individual factor models, compared to a slight decrease in fit from the all-cases model for White defendants to 39% but an increase over the all-cases model where individual factors were used to 59%.

The victim race-specific aggravation/mitigation level models are not far apart in their fit – the Black victim model explained about 40% of the variance and the White victim model 42% of the variance. When individual factors are used, however, the fit becomes slightly better for Black victim cases than White, explaining 61% of the variance in Black victim cases, and 57% in White victim cases. The racial combination models reported at Tables 2 and 5 also demonstrate higher model efficiency for Black defendants than White. The fit for the level of aggravation/mitigation models decreases from the all-cases model in the White-on-White sub-sample indicating only 38% of the variance in sentencing outcomes is explained; evidence that aggravation/mitigation levels operate less efficiently in predicting sentencing outcomes for White defendants.

Where individual factors are used, however, the model fit increases to nearly 60% ( $R^2=.598$ ) The fit increases for Black defendants, regardless of the race of the victim, across all models, reaching the best fit in the Black defendant-White victim cases where the aggravation/mitigation level model explains 52% of the variance, and the individual

factor model explains almost 80% ( $R^2=.795$ ). This is a much higher level of predictive efficiency than the 50% value rejected in *McCleskey*.

#### *Implications of Findings, Limitations of Study, and Need for Additional Research*

The primary implication of these findings is that it does not appear that the *Furman* approach has eliminated race-based arbitrariness under the Eighth Amendment, at least as to the operation of death sentencing procedures in North Carolina. The statistically significant differences in how juries have applied the North Carolina statute to Black and White defendants cannot reasonably be attributed completely to non-racial factors, and may reasonably be accepted as evidence of arbitrariness founded in unconscious juror racial bias which somehow works in favor of White defendants and against Black defendants.

The statute is much less efficient in predicting death sentences for White defendants than for Black. Whether this is the product of unconscious juror bias in weighing the seriousness of the aggravating factors when the defendant is Black, or unconscious bias as to the mitigatory effects favoring White defendants can't be determined. What can be said is that there appears to be inequity, probably race-based, in how the North Carolina juries apply the North Carolina sentencing statutes to Black defendants.

Whether the racial disparities observed in this study reach the level of constitutional significance referenced in *McCleskey* remains to be seen, but seem sufficiently significant to warrant further research to determine whether there is a basis for an Eighth Amendment challenge to the North Carolina statute. Moreover, if it is assumed that these results are caused by the unconscious racial attitudes of jurors

impossible to detect or eliminate through procedural safeguards and curable only by time, then the Sixth Amendment issue is raised: What if it is impossible to select a racially impartial jury in North Carolina because of lingering cultural racial biases? How much, if any, demonstrated racial disparity in jury decisionmaking equals 'impartiality' violative of the Sixth Amendment? The results here thus also support a Sixth Amendment challenge to the North Carolina sentencing statute.

Finally, if it is impossible to eliminate racial disparity in the imposition of the death penalty -- or at least reduce it to insignificant levels -- because it is the product of unconscious social/cultural attitudes, a substantive due process issue is raised. Is it an infringement on liberty interests to allow the happenstance of a person's race to influence in any significant way whether he lives or dies, regardless of his crime? There would seem to be a substantive liberty interest, arising out of constitutional guarantees of due process, to be free from significant racial discrimination period, in the operation of law, as much as there is to be free from purposeful racial discrimination, certainly where the result is death. Thus this study provides a possible basis for a claim of denial of substantive due process to Black defendants sentenced to death in North Carolina.

It must be stressed again, however, that a statistical analysis such as the one presented here is likely not to be found acceptable to prove a claim requiring specific or implied intent to discriminate, as is necessary in an individual equal protection claim seeking individual relief like the *McCleskey* case. An analysis such as this could be used to seek blanket relief from further operation of a specific statute, including enjoining further executions based on sentences produced from the challenged statute.

Further research is needed. The study is limited, intentionally, to the *Furman-Gregg* factors as applied in North Carolina and does not take into account the possible influence of other case characteristics such as urban-rural effects, type of attorney, specific victim vulnerability factors such as age, gender or disability which could also account for the unexplained variance. It is possible that an analysis of aggravator and mitigator submission-rejection patterns could bolster or call into question the conclusion that racial bias is influencing sentencing outcomes. Small sub-set sample sizes may also have confounded the effects. Finally, without another state's sentencing outcome data to compare, it is not possible to conclude from this study that the *Furman* approach has not reduced racial inequity in capital sentencing anywhere, because the study is limited to North Carolina's statute and North Carolina sentencing outcomes. The results raise a red flag, however, and the study offers a valid approach to legal arguments about the lack of racial invariance in death sentencing under *Furman v. Georgia*.

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