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TECHNICAL  
R E P O R T

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Race and the Decision to  
Seek the Death Penalty in  
Federal Cases

Stephen P. Klein, Richard A. Berk, Laura J. Hickman

Prepared for the National Institute of Justice



RAND

INFRASTRUCTURE, SAFETY, AND ENVIRONMENT

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## Preface

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This report describes the procedures that were used and the results obtained in a study that examined possible defendant and victim race effects in capital decisions in the federal system. As per the terms of our grant from the National Institute of Justice (NIJ) to conduct this research, we looked at cases that were handled under the revised Death Penalty Protocol of 1995 and were processed during Attorney General Janet Reno's term in office. We did not examine why cases were processed in the federal system as opposed to the state system because another research team under a different but concurrent NIJ grant addressed that question. There were not enough defendants sentenced to death to support a meaningful investigation of possible race effects in case dispositions.

Our research overlaps but does not directly parallel the two studies conducted by the Department of Justice (DOJ, 2000a, 2001) on the prosecution of capital cases. While our study covers roughly the same time period as the DOJ studies covered, we did not have a direct way of comparing the cases or defendants described in the DOJ reports with those in the case files we reviewed for this report. Thus, we cannot determine why our data may differ in some respects from the results in the DOJ reports.

The findings presented in this report regarding race and district effects in the decision to seek or not seek the death penalty may be of historical interest. However, given that several years have passed since those decisions were made—and most of the key decisionmakers have left office—our results may not be indicative of current or even immediate past practices. Nevertheless, the methods we used to examine possible racial bias in death penalty decisionmaking and what we discovered about the feasibility of doing credible research in this area may prove useful to others who are contemplating carrying out similar studies at the state or federal levels.

### **The RAND Safety and Justice Program**

This research was conducted under the auspices of the Safety and Justice Program within RAND Infrastructure, Safety, and Environment (ISE). The mission of RAND Infrastructure, Safety, and Environment is to improve the development, operation, use, and protection of society's essential physical assets and natural resources and to enhance the related social assets of safety and security of individuals in transit and in their workplaces and communi-

ties. Safety and Justice Program research addresses occupational safety, transportation safety, food safety, and public safety—including violence, policing, corrections, substance abuse, and public integrity.

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# Summary

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## Introduction

In federal capital cases, the U.S. Attorney's Office (USAO) in the district where the case is prosecuted makes an initial recommendation to seek or not to seek the death penalty for defendants who are charged with crimes that carry this penalty. The USAO sends its recommendation to the Attorney General's Review Committee on Capital Cases (AGRC). The AGRC reviews the USAO's recommendation and the case file, occasionally gathers additional information about the case, and makes a recommendation to the U.S. Attorney General (AG) about whether to seek the death penalty. The AG then makes the final decision.

Questions have been asked about this process. Are the USAO's recommendations and the AG's decisions racially neutral, or are they affected by the race of the victim, the race of defendant, or both? Are the USAO and AG decisions predictable? Are they capricious (e.g., are they rationally related to the facts of the case and the law or are they affected by the whims of key decisionmakers)? Is the federal death penalty more likely to be sought in some areas of the country than in others?

The research described in this report examines these questions about race, predictability, capriciousness, and geographic effects by investigating whether USAO recommendations and AG decisions are related to case characteristics, including the geographic location of the USAO prosecuting the case, the defendant's race, and whether any of the defendant's victims were white.

## Approach

### Creating the Database

We began this study by reviewing previous research findings on state- and federal-level capital cases and by examining a sample of Department of Justice Capital Case Unit (CCU) case files. Each of these files contained documents submitted by the USAO, a copy of the indictment, a copy of the AGRC's draft and final memorandum to the AG, and a copy of the AG's decision letter.

Next, we created a list of the types of data that would be feasible and desirable to collect. We constructed a case abstraction form and coding rules for recording data on victims, defendants, and case characteristics from the CCU's hard-copy case files. Five specially trained



coders (who worked under the direction of a field data collection supervisor) used the case abstraction forms to record salient information that was in the CCU hard-copy files. We obtained victim- and defendant-race data from the CCU's electronic files. The end product of this effort was the creation of an extensive database that could be used by different research teams.

### **Characteristics of the Database**

The study's database contained 312 cases for which defendant- and victim-race data were available. These cases were received by the CCU between January 1, 1995, and July 31, 2000, and the AG at the time (Janet Reno) made a decision about whether to seek the death penalty for these cases prior to December 31, 2000. The 312 cases contained a total of 652 defendants. These cases were often quite complex. For example, they frequently involved multiple defendants, multiple victims, and ongoing criminal enterprise activities. The AG made a seek/not-seek decision for 600 defendants. The difference between the two counts (i.e., between 652 and 600) stems mainly from defendants pleading guilty prior to the AG making a charging decision.

The 94 USAOs recommended seeking the death penalty for 23 percent of the 652 defendants charged with capital offenses. The AG decided to seek the death penalty for 25 percent of the 600 defendants she considered. USAOs in the southern region of the country forwarded more cases to the AG for review than any other region, and this region accounted for about one-half of all the recommendations to seek the death penalty.

Most homicides were within racial groups (e.g., white defendants were usually charged with killing white victims and nonwhite defendants were usually charged with killing nonwhite victims). White defendants had a higher percentage of seek decisions than did black or Hispanic defendants. Regardless of their race, defendants who murdered whites were more likely to have a seek decision than were defendants who murdered nonwhites. Consequently, before there was any adjustment for aggravating and mitigating factors and other case characteristics, white defendants who killed white victims were much more likely to have a seek decision than were nonwhite defendants who killed nonwhite victims.

### **Research Strategy**

Three independent teams investigated whether these racial differences could be explained by differences in the heinousness of the crimes. The three teams were (1) Dr. Stephen Klein from RAND; Professor David Freedman from the University of California, Berkeley; and Dr. Roger Bolus from the Research Solutions Group; (2) Professor Richard A. Berk and Dr. Yan He at the University of California, Los Angeles; and (3) Dr. Matthias Schonlau at RAND.

All three teams received a copy of the study's database. Each team then independently constructed its own analysis variables and files. For example, each team created its own rules for determining whether a defendant killed a "vulnerable" victim. Each team next designed and conducted its own analyses, drew its own conclusions, and wrote its own chapter for this report. Only then did the teams come together to discuss their procedures and findings.

## What the Three Teams Found

The three teams arrived at essentially the same conclusions, despite substantial differences in their analytic methods. What follows is a synopsis of their findings about race effects, predictability, capriciousness, and district effects. We quote relevant passages from each team's conclusions. The complete analyses for Klein, Freedman, and Bolus (KF&B); Berk and He (B&H); and Schonlau can be found in Chapters Four, Five, and Six, respectively.

### Race Effects

When we look at the raw data and make no adjustment for case characteristics, we find the large race effects noted previously—namely, a decision to seek the death penalty is more likely to occur when the defendants are white and when the victims are white. However, these disparities disappear when the data coded from the AG's case files are used to adjust for the heinousness of the crime. For instance, B&H concluded, "On balance, there seems to be no evidence in these data of systematic racial effects that apply on the average to the full set of cases we studied" (see Chapter Five, p. 58). The other two teams reached the same conclusion. KF&B found that, with their models, ". . . after controlling for the tally of aggravating and mitigating factors, and district, there was no evidence of a race effect. This was true whether we examined race of victim alone . . . or race of defendant and the interaction between victim and defendant race" (see Chapter Four, p. 48). Schonlau reported that his "analysis found no evidence of racial bias in either USAO recommendations or the AG decisions to seek the death penalty" (see Chapter Six, p. 113).

KF&B noted that "previous research at the state level suggests that if a race-of-victim effect is present, it is most likely to appear among defendants with a middling probability of a seek decision (e.g., in the 0.40 to 0.60 range)" (see Chapter Four, p. 48). For such defendants, they found that the number of white-victim and nonwhite-victim cases with an AG seek decision was almost identical to the number that would be expected to have this decision based on nonracial factors. This finding, and results from the full set of cases, led them to conclude that after controlling for the heinousness of the crimes, "there was no sign of a race-of-victim effect overall, or in the cases with middling probabilities" (see Chapter Four, p. 48). B&H reached the same conclusion about the various subsets of defendants they studied.

All the teams would agree that race may be a factor in a particular case. However, because there does not appear to be any overall effect of race, the teams would also agree that a bias in one direction in one case must usually be offset by a bias in the opposite direction in another case. It is unlikely that offsetting biases occur frequently because, as discussed below, seek decisions can be predicted with good accuracy without considering victim or defendant race. The three teams did not examine why their findings about victim race differ from those in many past state-level studies (see Chapter One and GAO, 1990). There is some evidence that the state-level studies suffered from methodological deficiencies. (See the discussion in Chapters Four and Five and Berk, Li, and Hickman, 2005, about concerns with the statistical methods often used in the past.) However, differences could also result from the nature of the cases

prosecuted at the state versus federal levels (see Chapters One and Two), prosecutor and defendant decisionmaking practices in state versus federal cases, or some combination of these or other factors.

### **Predictability**

KF&B noted that “[f]ew systems as complex as the criminal justice system lend themselves to high-accuracy statistical modeling” (see Chapter Four, p. 40). Nevertheless, all three teams found that their statistical models predicted seek decisions with surprisingly good accuracy, in the range of 85 to 90 percent. These accuracy rates were obtained without considering defendant or victim race.

KF&B found that adding defendant and victim race to their models did not improve predictive accuracy. Moreover, their models fit the data quite well. For example, without considering defendant or victim race, the actual number of defendants with a seek decision corresponded very closely with the expected number at all 10 levels of predicted probability, including the middling levels.

### **Capriciousness**

B&H appeared to equate capriciousness with unpredictability. KF&B disagreed on the grounds that, although prediction errors may result from capricious behavior, such errors “may also result from imperfections in the data and the models” (see Chapter Four, p. 40). Prediction errors also may stem from special circumstances; for example, the AG may have agreed to not seek the death penalty for an offender with a high probability of a seek decision because she wanted to extradite that person from another country or arrange for that offender’s capture. (The Unabomber is an example.) The high level of predictability led Schonlau to conclude that “the decision to seek the death penalty is not capricious” (see Chapter Six, p. 109). Similarly, B&H concluded that “whether or not a capital charge will occur can, for the system as a whole, be forecasted with considerable skill. In that sense, there is little evidence of capriciousness” (see Chapter Five, p. 58). Nevertheless, B&H contend that there would still be capriciousness if a large percentage of cases had middling probabilities of a seek decision (e.g., probabilities between 0.40 and 0.60), because “probabilities in the middle ranges imply that the capital-charge decision is little more than a coin flip” (see Chapter Five, p. 77). B&H reported that according to their models, 10 to 25 percent of the defendants had probabilities in this range.

However, when KF&B used their own models to investigate B&H’s alternative definition of capriciousness, they found that only about 6 percent of the defendants had probabilities in the 0.40 to 0.60 range (“probabilities” were defined by a logistic regression model based on case characteristics other than race of victim or defendant). KF&B found no relationship between seek decisions and race for the cases in this range. These findings are consistent with B&H’s conclusion that “there is no evidence that race plays an important role in which cases are faced with significant capriciousness. The fraction of cases with index values between 0.40 and 0.60 is about the same regardless of the race of the victim or race of the defendant” (see Chapter Five, p. 77).

## Area Effects

The 94 federal districts differ substantially in the number of capital cases filed. For example, the eight districts with the most defendants account for about half of all the defendants that had an AG seek/not-seek decision. Most of the other 86 districts had fewer than 10 defendants apiece.

Schonlau reported that after aggregating the districts to census region and controlling for various other case characteristics, there was a slightly greater tendency for USAO districts in the South to seek the death penalty and slightly less tendency for districts in the Northeast to seek it, but within a region, the odds of a defendant having a seek decision were not related to defendant or victim race. B&H found “substantial variation across districts in the likelihood of a seek decision and a modest tendency overall for districts with a larger proportion of white-victim cases to be more inclined to recommend seeking the death penalty” (see Chapter Five, p. 75). They note that, at least in part, this is “because the number and mix of cases handled by a given district can vary enormously” (see Chapter Five, p. 75).

KF&B did not find a significant race-of-victim or race-of-defendant effect in any of the several models they constructed for the AG seek decision. They did find a significant race-of-victim effect in predicting USAO seek recommendations with a model that only adjusted for aggravating and mitigating factors (i.e., the model did not include district or defendant race). KF&B then controlled for district by including a dummy variable for each of the eight districts that had the most defendants (which implicitly compared each of these districts to all the other districts combined). The addition of this control for districts eliminated the race-of-victim effect.<sup>1</sup>

Like the other teams, KF&B found disparities among districts. However, including districts in their models had only a very small effect on the estimated probability of a seek decision. For example, there was a 0.95 correlation between (1) estimated probabilities from a model that considered only aggravating and mitigating factors and (2) estimated probabilities from a model that considered those factors plus district. In short, including districts in the model did not seem to matter much in terms of estimated probabilities. B&H also found that controlling for district made race effects disappear.

## Conclusions

The main question addressed by this research is whether the USAO’s recommendations and the AG’s final charging decisions were related to defendant or victim race after taking into account case characteristics, such as aggravating and mitigating factors. The research also examined whether recommendations and decisions were predictable, capricious, or related to geographic area. There are large race effects in the raw data that are of concern. However, all three teams found that controlling for case characteristics eliminated race effects. This finding supports the view that seek decisions were driven by heinousness of crimes rather than race.

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<sup>1</sup> Controlling for race-of-defendant also eliminated the race-of-victim effect. The latter control is especially important to implement because of the correlation between defendant and victim race.

Nevertheless, the three teams agreed that their analytic methods cannot provide definitive answers about race effects in death-penalty cases. Analyses of observational data can support a thesis and may be useful for that purpose, but such analyses can seldom prove or disprove causation.

Determining whether bias is present in federal charging decisions is an especially difficult and complex problem. There is simply no way to identify and measure all the factors that may influence these decisions. Factors that have a substantial influence in just a few cases cannot be detected by statistical methods. For example, arranging for the murder of a federal judge does not occur often enough to show up by itself as a statistically significant factor, even though it may carry great weight in the decisionmaking process in a particular case. Moreover, a factor may behave one way in one type of case and another way in a different type of case. For example, being a prominent member of a gang may increase the likelihood of a decision to seek the death penalty when the defendant refuses to accept a plea bargain, but decrease the likelihood when the defendant is willing to plea bargain and provide information about other gang members. For these reasons among others, statistical models are at best crude approximations of a complex reality.

Moreover, potentially important information about defendants, victims, and case characteristics are often not present in the case files (prosecutor assessments of witness credibility are an example). These problems are particularly acute with typically complex federal capital cases.

In summary, given the inherent problems in using statistical models under these circumstances, our results need to be interpreted cautiously. There are many reasonable ways to adjust for case characteristics, but no definitive way to choose one approach over another. Bias could occur at points in the process other than the ones studied, such as the decision by federal prosecutors to take a case. Results could be different with other variables, methods, and cases. Extrapolating beyond the data we analyzed here to other years, other defendants, other points in the decisionmaking process, or other jurisdictions would be even more problematic.

## Acknowledgments

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## Abbreviations

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AG	U.S. Attorney General
AGRC	Attorney General’s Review Committee on Capital Cases
AIC	Akaike information criterion
AUSA	Assistant U.S. Attorney
B&H	Berk and He
CART	classification and regression trees
CCE	continuing criminal enterprise
CCU	Capital Case Unit
D	defendant
D#	defendant, where # represents a number differentiating each defendant in a case
DOJ	U.S. Department of Justice
FDPA	Federal Death Penalty Act
ISE	Infrastructure, Safety, and Environment
KF&B	Klein, Freedman, and Bolus
NCOVR	National Consortium on Violence Research
NIJ	National Institute of Justice
NRC	National Research Council
ROC	receiver operating characteristic
SE	standard error
SRG	Survey Research Group
UCLA	University of California, Los Angeles



USAO      U.S. Attorney's Office  
V          victim  
V#        victim, where # is a number differentiating each victim in a case

## Introduction and Background

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The research described in this report examined recommendations made by the 94 U.S. Attorneys' Offices (USAO) and decisions by the U.S. Attorney General (AG) about whether to seek the death penalty for defendants who committed federal capital crimes. As per the terms of our grant, we examined all potential capital cases submitted by USAOs for AG review between January 1, 1995, and July 31, 2000, and were decided by the AG by December 31, 2000.

This research focused on whether the USAOs' recommendations and the AG's final charging decisions were related to defendant or victim race. It also examined whether the USAOs' penalty recommendations and the AG's final decisions were related to (1) the case characteristics documented in the AG's files and (2) geographic area. If controlling for case characteristics eliminated the defendant- or victim-race effects that were present in the unadjusted data, this would support the hypothesis that prosecutor decisions were driven by the heinousness of the crimes rather than by defendant or victim race. Similarly, if statistically significant race effects were present even after controlling for case characteristics, that would support the hypothesis that race affected prosecutor decisions.<sup>1</sup> However, neither finding would be definitive because of well-known difficulties in determining causation by statistical modeling of observation data (see Freedman, 2005). Thus, our studies should be classified as exploratory and descriptive.

We conducted our research in three phases. The first phase involved identifying the types of data that were appropriate and feasible to gather on each case that met the inclusionary criteria noted previously. The second phase consisted of coding the information from the files of the Department of Justice Capital Case Unit for these cases and converting that information into quantifiable and machine-readable form. This phase also included obtaining defendant and victim race information and other relevant data from electronic files. In the third phase, three independent research teams conducted their own analyses of the hand-coded and electronic data. Although these teams used a common database, they constructed different variables to characterize the cases and they used different methods to analyze the data. The teams also differed with respect to their prior findings regarding racial bias in death-penalty cases (see Appendix A).

The project benefited from the recommendations of two advisory committees (see Appendix B). The Technical Advisory Committee was comprised of individuals with relevant techni-

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<sup>1</sup> An estimated effect is "statistically significant" when it is larger than can reasonably be explained by chance (see Freedman, Pisani, and Purves, 1998, Chapters 26–29).

cal and procedural expertise. After data collection from the federal case files was completed, this committee reviewed the initial data analysis plans and met with the research team to discuss analytic issues. Some of the members of this committee also served as reviewers for the final report. The other committee was the Expert Consultant Panel. It was composed of well-known researchers who had conducted studies that examined possible racial bias in death-penalty charging and sentencing practices at the state level. This panel also reviewed the initial data-analysis plans and later reviewed a draft of the final report.

The remainder of this chapter summarizes the federal death-penalty process and prior federal- and state-level research on this topic. Chapter Two describes the data collection methods used. Chapter Three presents summary statistics on the defendants whose data were coded and analyzed. Chapters Four, Five, and Six describe the analytic procedures that were used and the results obtained by each of the analysis teams. Chapter Seven presents the joint conclusions from this research, including their methodological implications.

## Brief History of the Federal Death Penalty

The death penalty has existed (with a brief interruption) at both the federal and state levels in the United States since the nation's birth. Currently, 38 states as well as the federal government and the U.S. military have death-penalty statutes. In 1972, the U.S. Supreme Court in *Furman v. Georgia* overturned the death penalty on the grounds that the manner in which it was applied violated both the "cruel and unusual punishment" clause of the Constitution's Eighth Amendment and the "due process" rights afforded by the Fourteenth Amendment. This finding invalidated the state and federal death-penalty statutes that existed at the time. Several states subsequently revised their statutes to include the specific aggravating circumstances under which capital punishment could be imposed. In 1976, the Supreme Court upheld the revised statutes in Georgia, Florida, and Texas, clearing the way for the return of the death penalty in other jurisdictions.

Prosecution in the federal system is decentralized into 94 USAOs. These offices are responsible for investigating and prosecuting violators of federal law.<sup>2</sup> Capital punishment was reintroduced into the federal system in 1988 under the Anti-Drug Abuse Act (also known as the Drug Kingpin Act). This act provided death sentences for certain continuing criminal enterprise and drug trafficking crimes in which a death resulted. The list of federal capital crimes was expanded in 1994 with the Federal Death Penalty Act (FDPA).<sup>3</sup>

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<sup>2</sup> U.S. Attorneys are appointed by the President for a four-year term (as opposed to being elected officials like county district attorneys).

<sup>3</sup> The FDPA made death a possible punishment for the following crimes (under a condition that a death results from the nonmurder offenses): first-degree murder; genocide; murder-for-hire; murder in the aid of racketeering; murder by a federal prisoner; drive-by shooting; foreign murder of U.S. nationals; murder by escaped prisoners; killing persons assisting federal investigations; retaliatory killings of witnesses, victims, and informants; kidnapping; hostage-taking; destruction of aircraft, motor vehicles, or facilities; transportation of explosives; destruction of property by fire or explosives; mailing injurious articles; wrecking trains or railroad property; bank robbery; carjacking; violence against maritime navigation and fixed platforms; and violence at international airports.

The federal death penalty was expanded again in 1996 with the Antiterrorism and Effective Death Penalty Act. This act included the death penalty if a death resulted as a consequence of crimes involving terrorism, use of weapons of mass destruction, acts of terrorism transcending national boundaries, and use of chemical weapons.

In order to resume federal capital sentencing, new procedures had to be established. One change involved separating the guilt phase from the sentencing phase, i.e., juries first decide on the defendant's guilt. If they find the defendant guilty of a capital offense and if the prosecution is seeking the death penalty for that crime, the same jury (usually) must then decide whether or not to impose the death penalty. This is done in a separate trial during which the prosecution and defense present evidence and arguments about whether a sentence of death is warranted.

Another major change in the handling of federal death-penalty cases was the establishment of the "death-penalty protocol" for pursuing death-penalty charges. The initial version of this protocol required that the 94 USAOs seek approval from the U.S. AG before pursuing capital charges against a defendant. Thus, from 1988 to 1994, the death penalty was only sought if the USAO handling the case recommended it and the AG concurred.

### **The 1995 Revision of the Federal Death-Penalty Protocol**

In January 1995, the death-penalty protocol was revised to require that federal prosecutors submit for AG review all cases in which capital charges could be pursued, regardless of whether the USAO wishes to pursue them. To facilitate this process, the Attorney General's Review Committee on Capital Cases (AGRC) was also established. With the administrative support of the Capital Case Unit (CCU), the AGRC reviews detailed information about each case submitted by the USAO (and its recommendation regarding whether or not to seek the death penalty), any defense submissions, and then arrives at a recommendation to forward to the AG for a final decision.

A "case" may involve one or more defendants and one or more victims. The USAO and AGRC make a separate seek or not-seek recommendation for each defendant, and the AG makes the final decision. (Additional details about this review process are discussed in Chapter Two of this report; see also DOJ, 2000a).

By policy, information about defendant and victim race is excluded from the materials submitted to the AGRC and AG, but this information may be available if it is submitted as relevant by the defense.<sup>4</sup> Race information is collected from the USAOs by the CCU and maintained separately for analytic purposes.

As a result of the revised death-penalty protocol, the number of defendants whose charging recommendations were reviewed by the AG increased from 52 between 1988 and 1994 to

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<sup>4</sup> Despite this step to make the process "race blind," in our review of AGRC case files (discussed in the next chapter), we observed that defendant or victim race could sometimes be surmised from the USAO submitted materials. For example, a defendant may be described as a member of the Latin Kings or a group of victims may be described as illegal immigrants who died while being smuggled across the U.S.-Mexico border.

682 between 1995 and 2000 (DOJ, 2000a). A total of 20 offenders were sentenced to death in the federal system between 1988 and 1999. By July 2005, the number had risen to 36. Three of those sentenced to death since 1988 have been executed.

These numbers are substantially smaller than those at the state level. For example, there have been over 1,000 post-*Furman* executions at the state level. As of July 1, 2005, there were 2,371 prisoners on state death rows (DPIC, undated).

### Federal Jurisdiction

An important question is why certain cases find their way into the federal system while others are prosecuted in state systems. The answer is obvious for treason and espionage because there is no state-equivalent offense. For other offenses, such as murder, kidnapping, and drug trafficking, both state and federal law may apply depending on specific circumstances.<sup>5</sup>

For cases with concurrent jurisdiction, the *U.S. Attorneys' Manual* describes considerations for determining federal versus state prosecution, including the “relative strength of the State’s interest in prosecution” (DOJ, 1997, Title 9, Section 10.070, “Substantial Federal Interest,” paragraph A), whether the “criminal activity reached beyond the local jurisdiction” (DOJ, 1997, Title 9, Section 10.070, “Substantial Federal Interest,” paragraph B) and “the relative ability and willingness of the State to prosecute effectively” (DOJ, 1997, Title 9, Section 10.070, “Substantial Federal Interest,” paragraph C). Prior to Attorney General Ashcroft’s term (beginning in January 2001), the manual also specified: “In states where the imposition of the death penalty is not authorized by law, the fact that the maximum Federal penalty is death is insufficient, standing alone, to show a more substantial interest in Federal prosecution” (DOJ, 2000b, Title 9, Section 10.070, “Substantial Federal Interest”).

Early research (e.g., Frase, 1980) suggested that USAO decisions to accept a case for federal prosecution could be traced to several factors, including evidentiary obstacles, alternatives to federal prosecution (e.g., state or local prosecution), and policy considerations. While sponsoring the present study, the National Institute of Justice (NIJ) concurrently funded an investigation of the factors associated with whether death penalty-eligible cases are chosen to be prosecuted through the federal or state systems, including whether bias in case selection may be present. The results of that study are expected to be released by NIJ simultaneously with the release of our report.

### Factors Related to Capital Charges and Sentences

To our knowledge, only three studies have examined possible defendant- or victim-race effects in the prosecution of capital cases at the federal level. The U.S. Department of Justice (DOJ) conducted two of these studies (DOJ, 2000a, 2001). The third is David Algranati’s (2002)

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<sup>5</sup> A total of 66 federal agencies are authorized to arrest violators of federal law, after which suspects are transferred to the custody of the U.S. Marshals Service for processing, transportation, and detention. Federal law enforcement, however, need not be involved in the detection of crimes or apprehension of suspects. Municipal-, county-, and state-level law enforcement agencies may alone or in cooperation with federal law enforcement identify, investigate, and arrest individuals ultimately prosecuted in the federal system.

doctoral dissertation. There are several published studies of race effects in death-penalty decisionmaking at the state level. However, as discussed later in this chapter, the applicability of those studies to the federal system is questionable because of the often-substantial difference between the characteristics of state and federal cases.

### **Research at the Federal Level: Race Effects**

In September 2000, the DOJ released a report (DOJ, 2000a) on the prosecution of capital cases in the federal system. That report provided summary statistical data for cases processed from 1988 to 1994 and for cases processed from January 1995 through July 2000 (i.e., under the revised protocol). During the 1988 to 1994 period, USAOs were expected to refer to the AG only those cases in which they recommended seeking the death penalty. However, the data on those cases are not particularly informative about processing decisions because (1) there were only 52 of them and (2) there was no comparison group (i.e., cases without a seek recommendation).

The second time period covered January 27, 1995, to July 20, 2000, which corresponded to Janet Reno's tenure as Attorney General. During this period, the USAOs were directed to submit for AG review all cases that were eligible for capital charges regardless of whether or not the USAO recommended seeking the death penalty. The DOJ report has several tables that contrast the seek/no-seek recommendation or final decision with defendant and victim race. Data on USAO recommendations were reported for 682 defendants, AGRC recommendations were reported for 618 defendants, and the AG made final decisions for 588.

The report shows a high level of agreement overall (88 percent) between the recommendations of the USAO and AGRC and the AG final decisions. The rate of agreement between the USAO recommendation and AG final decision was 87 percent. There was 97-percent agreement between the AGRC recommendation and AG decision.

Ultimately, the AG decided to seek the death penalty for 38 percent of the 115 white defendants but for only 24 percent of the 473 nonwhite defendants. The report also found that defendants who killed Hispanic victims were less likely to have a seek decision than were defendants who killed non-Hispanic victims. Further, the report found that the AG decided to seek the death penalty for 69 percent of the 833 victims who were killed by the 588 defendants whose cases were reviewed by the AG. This victim count may be misleading because it includes all the victims of mass murders, such as the Oklahoma City bombing. With the exception of considering whether or not the defendant killed multiple victims, the DOJ report did not control for any case characteristics that were likely to affect charging decisions, such as the number of aggravating and mitigating factors that were present.

The 2001 DOJ study contained data on another 291 defendants, representing "(1) any cases that should have been, but were not, submitted to the capital case review procedure, (2) cases exempted from submission because the defendant pled to a noncapital offense, and (3) cases that could have been brought as death eligible cases but were not" (DOJ, 2001, p. 31, footnote 10). The 291-case total also included 60 defendants whose cases "had gone or were going through the review process, or involved fugitives" (DOJ, 2001, p. 31, footnote 10). The 2001 DOJ report concluded that no more racial bias was evident in the cases that were referred for AG review than in those that were not referred, but again, the report did not control for



case characteristics. The results of this analysis led DOJ to conclude that the relatively large number of minority defendants with a seek decision was due to their overrepresentation among perpetrators of capital-eligible crimes.

Algranati (2002) disagreed with DOJ's conclusion that the submitted cases were similar to the nonsubmitted cases. He found a statistically significant difference between the racial makeups of the 682 defendants whom the USAOs submitted for review and the 291 defendants in DOJ's 2001 study. For example, most of the defendants in the first group were black, whereas most in the second group were Hispanic. White defendants comprised 20 percent of 682 submitted cases but only 11 percent of those in the second group of 291 defendants.

Algranati relied on publicly available data to estimate defendant- and victim-race effects in the population of cases studied in the DOJ (2000a) report. Using a variety of statistical techniques, he found defendant- and victim-race effects under some conditions but not others. However, the interpretation of his results is problematic because of (1) the considerable data problems he faced (such as having to impute values for missing data), (2) his use of only a single variable—whether or not there were multiple victims—that dealt with the heinousness of the crime, and (3) his decision to model race as if it could be independently manipulated. Thus, the Algranati study provides little additional insight into whether defendant or victim race is related to death penalty charging decisions in the federal system.

#### **Research at the Federal Level: District Effects**

DOJ's 2000 study also reported the relationship between USAO charging recommendations, AG charging decisions, and the federal districts from which the cases originated. This analysis found that for the 1995–2000 period, 22 of the 94 USAOs did not submit any cases and four districts accounted for 36 percent of all the cases submitted.<sup>6</sup> The 2001 follow-up report suggested that some of these differences were due to special situations.

For example, of the 66 defendants whose cases came from the Eastern District of Virginia, 29 percent involved homicides at the Lorton federal prison and another 51 percent were attributable to large-scale drug-trafficking organizations. Likewise, 72 of the cases were submitted for review from Puerto Rico; the 2001 DOJ report indicated that this unusually large number stemmed in part from the USAO agreeing to handle all carjacking cases in this district. However, Algranati (2002) takes issue with DOJ's conclusion. He points out that only 26 of the 72 Puerto Rico cases involved carjacking charges. The Eastern and Southern Districts of New York also submitted a substantial number of cases for review (58 and 50, respectively), but the 2001 DOJ report did not offer explanations for these especially large numbers.

In discussing the findings of the 2000 study, the 2001 DOJ report acknowledges the geographic disparities in the distribution of death-eligible cases that were forwarded for AG review. However, it goes on to say that the structure and function of the federal system makes such disparities unavoidable and perhaps even desirable. In essence, the report attributes the differences between federal districts to differences in state and local law enforcement priorities and interest in federal prosecution.

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<sup>6</sup> The number reported here is taken from the data displayed in Table 5A of the 2000a report. The text of the report states that 21 USAOs submitted no cases.

### Research at the State Level

State cases are those that are handled by county-level prosecutors within a state's criminal justice system in response to violation of state law. These cases often differ in nature from those prosecuted at the federal level. For instance, federal cases tend to be much more complex, they frequently have multiple defendants and multiple victims, and they often involve elaborate ongoing criminal enterprises that cross state and even national borders. Nevertheless, some types of cases are similar and some of the issues about race and predictability at the state level correspond to those at the federal level.

One of the major obstacles to conducting research on the death penalty is the need to convert descriptions of the defendants, victims, and case characteristics into quantifiable variables that are unambiguous and amenable to statistical analysis. Coding rules must be developed to abstract data from case files, and there is no standardized set of rules for constructing variables. This can lead to problems for interpretation and comparisons across studies. For example, Morton and Rolph (2000) obtained different results in a study of black and white murder victims depending on whether they defined a "white victim case" as one involving only white victims versus one involving at least one white victim.

State-level studies have employed a variety of data sets, variable definitions, and statistical approaches. Most but not all of the studies that do not control for case characteristics find that prosecutors are more likely to seek the death penalty (and juries are more likely to impose it) when the victims are white and the defendants are not white (GAO, 1990). Most (but not all) studies report that the defendant (but not the victim) race effects disappear when there is control for several case characteristics. There is also some evidence to suggest that when there are race-of-victim effects, they are most likely to be found when there is a middling probability of the death penalty, i.e., when the case could be processed either way and the prosecutor has more discretion in which penalty to seek.

Some studies also report that similar cases may have different outcomes depending on where they are prosecuted within the state, such as in a rural or urban area. We discuss some of the literature on race and geographic effects below to provide some background for the analyses that are discussed later in this report.

### Charging Decisions

Can charging decisions in state cases be predicted based on case characteristics? Weiss, Berk, and Lee (1996) examined this question using data from 427 homicides in San Francisco County, California. They found that available case characteristics could account for the majority of the variation (two-thirds) in charging practices but the remaining one-third could not be explained with the available data. Thus, this study suggests that case characteristics are important considerations, but charging decisions are unlikely to be perfectly predictable because it is not feasible to assess all of the factors and combinations of factors that may influence these decisions.

Several studies have shown that the prediction of charging decisions can be improved by considering the circumstances of the offense. Such factors include whether the offense was particularly heinous, cruel, or involved torture (Paternoster, 1984), and whether there was more than one aggravating factor or felony committed along with a homicide (Balduis, Pulaski, and



Woodworth, 1983; Paternoster, 1984; Keil and Vito, 1990). The presence of one or more mitigating factors tends to reduce the likelihood of the death penalty being sought (e.g., Baldus, Pulaski, and Woodworth, 1983; Baldus, Woodworth, and Pulaski, 1990). In contrast, the likelihood increases in the presence of aggravating factors, such as whether the crime was intentional and undertaken for personal gain (e.g., Keil and Vito, 1990), whether there were multiple victims (e.g., Paternoster, 1984; Keil and Vito, 1990), and whether the offender used a firearm (e.g., Baldus, Pulaski, and Woodworth, 1983; Paternoster, 1984).

Prior research has found differences in charging decisions between as well as within states. For example, Bureau of Justice Statistics data show that state capital charges and sentences are more likely to occur in the South than elsewhere (Snell, 2000). Additionally, Paternoster (1983) studied 1,686 non-negligent homicide acts in South Carolina between 1977 and 1981. He found a significant variation in the likelihood of a death request by geographic region of the state, including substantially more death requests in rural than in urban areas. In a recent study in Maryland, Paternoster and Brame (2003) found a strong geographic relationship with charging decisions in the population of all cases eligible for capital charges between 1978 and 1999. That is, certain counties within the state were more likely to pursue capital charges than were others.

Characteristics of defendants and victims also have been shown to be related to charging decisions. For example, defendants who were strangers to their victims are more likely to face death penalty charges than are those who were acquainted or related to their victims (Baldus, Pulaski, and Woodworth, 1983; Paternoster, 1984). Several studies have found that prosecutors are more likely to seek the death penalty when the victim is female (Baldus, Pulaski, and Woodworth, 1983; Paternoster, 1984) and when the defendant has a criminal record of serious crimes (e.g., Baldus, Pulaski, and Woodworth, 1983).

Several studies have reported that charging decisions are related to both defendant and victim race (GAO, 1990). While defendant-race effects usually disappear when there is control on several case characteristics (e.g., Jacoby and Paternoster, 1982; Paternoster, 1984; Paternoster and Brame, 2003), the role of victim race is more ambiguous. For example, the General Accounting Office's (1990) review of the literature on the effect of victim race found that it was related to state case-processing decisions in 23 of the 28 post-*Furman* studies it reviewed. The relationship was particularly strong at the prosecutorial stage (charging and plea-bargaining decisions) rather than at later stages, such as sentencing, when there is arguably less discretion afforded to decisionmakers. These findings suggest that, when crime victims are white, defendants are more likely to be charged with capital crimes than when none of the victims are white (e.g., Bowers, 1983; Paternoster, 1983, 1984; Radelet and Pierce, 1985; Bienen et al., 1988; Keil and Vito, 1990). Other studies have found race-of-victim effects in Kentucky (Vito and Keil, 1988) and South Carolina (Paternoster, 1984). One set of researchers found a victim-race effect in Maryland using simple logistic regression (Paternoster and Brame, 2003) but another set of analysts (Berk, Li, and Hickman, 2005) could not replicate these findings using the same data set with the recently developed random-forests algorithm (Berk, 2006).

## Sentencing Decisions

As in the research on prosecutorial charging decisions, circumstances of the offense have also been shown to be related to death-penalty sentencing. These circumstances include whether the offense involved more than one offender (Brock, Sorensen, and Marquart, 2000); was particularly heinous, cruel, or involved torture (Klein and Rolph, 1991; Morton and Rolph, 2000); and whether there was more than one aggravating factor or felony committed along with a homicide (Baldus, Pulaski, and Woodworth, 1983; Keil and Vito, 1990; Radelet and Pierce, 1991; Williams and Holcomb, 2001). Research suggests that the likelihood of a death sentence increases if the crime took place in a store or other business (Morton and Rolph, 2000), if it was intentional and undertaken for personal gain (Keil and Vito, 1990; Morton and Rolph, 2000), if there were multiple victims (Keil and Vito, 1990; Radelet and Pierce, 1991; Morton and Rolph, 2000; Williams and Holcomb, 2001), and if the offender used a firearm (Baldus, Pulaski, and Woodworth, 1983; Morton and Rolph, 2000).

With regard to geographic region, some studies have found that death sentences are more likely to be imposed in some counties than in others (Paternoster and Brame, 2003), and in rural jurisdictions compared to urban ones (Bowers and Pierce, 1980; Pierce and Radelet, 2002; Baldus, Woodworth, Grosso, and Christ, 2002–2003).

Several studies report that defendants are more likely to be sentenced to death if they were strangers to their victims than if they were related to or acquainted with their victims (Baldus, Pulaski, and Woodworth, 1983; Morton and Rolph, 2000). Regarding defendant characteristics, death-penalty sentences have been associated with the defendant's criminal record (Baldus, Pulaski, and Woodworth, 1983; Morton and Rolph, 2000; Brock, Sorensen, and Marquart, 2000) and age (older defendants are more likely than younger ones to receive the death penalty) (Williams and Holcomb, 2001). Defendants whose victims are female (Baldus, Pulaski, and Woodworth, 1983; Gross and Mauro, 1989; Radelet and Pierce, 1991; Williams and Holcomb, 2001) or on-duty police officers or firefighters are also more likely to receive death-penalty sentences (Baldus, Pulaski, and Woodworth, 1983).

Early studies that did not account for legally relevant case characteristics usually found that defendant race was related to capital-case sentencing (see Kleck, 1981). However, subsequent research that did control for other variables found that defendant race was not related to sentencing decisions (e.g., Bowers and Pierce, 1980; Radelet, 1981; Gross and Mauro, 1984; Barnett, 1985; Baldus, Woodworth, and Pulaski, 1990; Klein and Rolph, 1991; Morton and Rolph, 2000; Pierce and Radelet, 2002).

There does not appear to be consensus about the relationship between victim race and sentencing decisions. Some studies have found that defendants are more likely to be sentenced to death when at least one of their victims is white. These race-of-victim effects have been reported in Florida (Lewis, 1979; Arkin, 1980; Bowers and Pierce, 1980; Radelet, 1985; Radelet and Pierce, 1991), Georgia (Bowers and Pierce, 1980; Baldus, Pulaski, and Woodworth, 1983; Baldus, Woodworth, and Pulaski, 1990), Illinois (Pierce and Radelet, 2002), Kentucky (Vito and Keil, 1988; Keil and Vito, 1990), Maryland (Paternoster and Brame, 2003), North Carolina (Unah and Boger, 2001), Ohio (Bowers and Pierce, 1980), Pennsylvania (Baldus, Woodworth, Zuckerman, and Weiner, 1997–1998), and Texas (Bowers and Pierce, 1980).

Perhaps the best-known study finding race-of-victim effects was conducted by Baldus, Pulaski, and Woodworth (1983) in Georgia. They examined a sample of over 1,000 post-*Furman* death-penalty cases. Overall, the authors found that sentencing decisions were significantly related to victim race before but not after controlling for case characteristics. They found a greater (although still not significant) race-of-victim effect for defendants who had a middling probability of the prosecutor seeking the death penalty than they did for cases with relatively high or low probabilities, i.e., where the probabilities were based on the heinousness of the crime. Baldus and his colleagues concluded that victim race is most influential in cases that fell within this “gray area.” Barnett (1985) obtained similar findings (but not nearly as strong) in his reanalysis of the Georgia data.

Other studies have also found that victim-race effects in sentencing disappear after there is control on case characteristics (Klein and Rolph, 1991; Morton and Rolph, 2000; Baldus, Woodworth, Grosso, and Christ, 2002–2003; Baime, 2002; Paternoster and Brame, 2003). The differences in findings across studies could be related to the researchers investigating cases from different states, using different control variables, and employing different statistical methods.

In sum, previous research has identified several factors that are related to some of the observed racial disparities in death penalty charging and sentencing decisions. These past studies are limited mainly to cases processed in state courts and, just like the studies discussed in this report, they cannot account for all of the variables that might influence case processing decisions. Moreover, the state-level cases are generally not as complex as those prosecuted at the federal level, and thus many of the variables that are important for state cases may not be applicable to federal cases (and vice versa).

## Data Collection Methods

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Patricia A. Ebener

This chapter describes the procedures we used to construct the data files that were given to the three analysis teams. The initial phase of this activity involved identifying the kinds of data that would be desirable and feasible to collect on each case and the best sources for these data. Next, we developed, pilot tested, and revised the forms the coders used to record the information in the hard-copy case files. We then selected and trained the coders. Finally, we coded the information in the case files, entered and merged these data with information from relevant electronic files, and prepared an integrated database for processing by the analysis teams.

### Data Sources

As noted in Chapter One, the USAO makes a recommendation to seek or not to seek the death penalty for every defendant who is charged with a federal crime that can be punishable by death. The procedures for death-eligible case prosecution are described in the *U.S. Attorneys' Manual* (DOJ, 1997). Appendix C lists the capital-eligible offenses.

The USAO sends this recommendation, a memo describing the basis for it, and usually other supporting documentation to the CCU. This unit removes information about defendant and victim race from these materials and prepares a file for each case. In this context, a “case” refers to one or more related incidents or crimes and may involve one or more defendants who are accused of killing one or more victims. The CCU staff, who also may receive information from the defense, reviews the materials (and possibly consults with the USAO that submitted the case) and prepares a summary of the case. This summary is given to the AGRC.

The AGRC hears from interested parties, reviews the summary material prepared by CCU staff, and makes a recommendation to the AG as to whether or not the death penalty should be sought for each defendant who is charged with committing a capital offense. The AG informs the USAO by letter of the final decision (which almost always conforms to the AGRC’s recommendation). A copy of this letter is placed in the hard-copy case file. The final AG decision also is entered in an electronic database maintained by the CCU.

Information about defendants, victims, and case characteristics were obtained from the electronic and hard-copy files described below.

**Electronic data.** The CCU’s electronic database contains the federal judicial district number where the case was filed; date received by CCU; case ID number; defendants’ names,

genders, and races; victims' names, genders, and races; death-eligible charge(s); and the AG's decision, decision date, subsequent decision if any, and date of subsequent decision(s). RAND used this database to create a master list of cases. It then replaced defendant and victim names with numbers (e.g., D1 and D2 for defendants 1 and 2, and V1 and V2 for victims 1 and 2).

We obtained the disposition (e.g., sentence imposed) for all but 50 of the defendants in our database from the Public Access to Court Electronic Records system that is run by the Administrative Office of the U.S. Courts. Analysts at the U.S. Bureau of Justice Statistics used data from the Federal Bureau of Prisons, SENTRY database; the Executive Office for U.S. Attorneys, central system file; and the Administrative Office of the U.S. Courts' criminal master file. This process obtained the sentences for 38 of these 50 cases.

**Hard-copy data.** Each CCU case-level record in the database has a CCU case file. This file is created when the case is received at the CCU. The case file contains all the documents submitted by the USAO and defense counsel, a copy of the AGRC's draft and final memoranda to the AG, and a copy of the AG's decision letter.

The USAO materials include a memorandum about the details of the case and the Assistant U.S. Attorney's (AUSA's) evaluation and recommendation regarding whether or not to seek the death penalty. The format and content of this memorandum is specified in the AUSA manual and is therefore fairly standardized across districts. The AUSA also is required to submit a Factors Evaluation Form that describes the AUSA's assessment of the aggravating and mitigating factors that were present in the case.

The hard-copy case file usually includes a copy of the indictment. Some of the other types of information that were occasionally (but not typically) included in the file were the defendant's criminal history, psychological assessment reports, medical examiner and arrest reports, letters or memoranda from other DOJ divisions with which the AUSA had corresponded about the case, witness statements, photos, and copies of media coverage of the crime.

According to procedures for review of death-eligible cases, the defense has the option of submitting material to the CCU and presenting at the AGRC meeting on the case. Most CCU files did not include a defense submission. When material from the defense was included, it was usually a detailed memorandum or letter to the AG or a request to present the defense position at the AGRC meeting on the case. In a few cases, amendments and revised or resubmitted materials were included as well.

The hard-copy file included a detailed memorandum of the case details that was written by the CCU staff, an executive summary that included an analysis of the aggravating and mitigating factors, and a letter from the AG to the AUSA documenting her decision for each capital-eligible defendant/victim pair.

Certain types of information, such as defendant education and employment, were often missing from the case file, especially in gang-related killings, whereas in other cases they were mentioned prominently, such as in the kidnap and killing of innocent bystanders, particularly youth. The AUSA memorandum typically provided information that he or she considered pertinent to the case and part of the rationale for recommending to seek or not seek the death penalty. CCU staff sometimes included information about the case in its memorandum to the AGRC that was not in the USAO memorandum.

The volume of materials in a file varied as a function of the number of defendants, victims, and offenses in the indictment. A few files contained little more than the USAO and CCU memoranda, the Factor Evaluation Form, and the AG's letter. Other files were several inches thick.

## Study Population

As per the terms of our grant, we reviewed the files for all the cases that were received by the AGRC beginning on January 1, 1995, and were decided by December 31, 2000.<sup>1</sup> This six-year period generally corresponds to the one used in the Department of Justice report (DOJ, 2000a) discussed in Chapter One. The January 1995 start date coincides with the inception of the AG's requirement that all death-eligible cases (i.e., not just cases with a USAO recommendation to seek the death penalty) had to be submitted to the AGRC.

We eliminated the two cases and 10 defendants from this population that were missing a USAO seek/not-seek recommendation, such as because the defendant was a fugitive or awaiting extradition from another country. This left 315 cases and 657 defendants. Only 297 of these 315 cases had an AGRC recommendation, largely because some cases were settled after the USAO submitted them but before the AGRC made its recommendation to the AG (e.g., a plea agreement was accepted in the interim). We eliminated the three espionage cases that together contained five defendants because these cases could not be coded as being white- or nonwhite-victim cases.

This left us with 312 cases, 652 defendants with a USAO seek/not-seek recommendation, and 600 defendants with an AG seek/not-seek charging decision.

We coded information for 488 unique victims in our population of 312 cases with a USAO recommendation and for 469 victims in our population of 294 cases with an AG decision. These counts reflect our policy of not counting victims in incidents of terrorism involving mass murders (e.g., we did not code data for Timothy McVeigh's victims in the Oklahoma City bombing because his case file did not contain information about individual victims). The first World Trade Center and the Oklahoma City bombings were classified as white-victim cases. The other mass murders were classified as nonwhite-victim cases because almost all of those killed or injured in these incidents were not white.

## Data Elements

The project team made a wish list of the defendant, victim, and case characteristics to be coded. This list was based on the types of data that were available in the described CCU electronic and hard-copy files and the findings from previous research regarding the factors that

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<sup>1</sup> We used a cutoff date of July 31, 2000, for receipt at the CCU to try to ensure that cases included would be decided by December 31, 2000. However, a few of the cases received by July 31, 2000, were decided after December 31, 2000. The electronic CCU database was missing date of receipt before 1996. To include 1995 cases, we used the CCU AG decision date as an alternative and included cases decided in 1995.



were reported to be related to charging and sentencing decisions in state capital cases. We also solicited suggestions from National Institute of Justice staff, the project's advisory committees, and a former AUSA.

## **Instrument Development**

Project staff used the described wish list and their experiences in reviewing sample hard-copy files to develop a set of draft data collection instruments. We used these draft forms to code the data for a few cases. This pilot test led us to revise the forms and procedures, e.g., we developed a separate form for each defendant and victim within a case so as to reflect better which defendants were involved with which victims and what the nature of that involvement was (e.g., pulled the trigger, drove the getaway car). For example, in a case in which three defendants were charged with killing two victims, there was one form for each victim and one form for each defendant plus a form for the case as a whole.

We pilot tested the revised forms, made a few changes, and prepared the final forms and detailed coding rules and instructions. The final coding forms and rules (see Appendix D) are designed to record salient information about defendants, victims, case characteristics, and the circumstances of the crime. To that end, the forms contain data about defendants and victims, such as age, employment, and education; the relationship between the defendant and victim—such as friend, crime partner, stranger; the place and nature of the killing; coperpetrators, weapons, injuries, witnesses, and forensic and other evidence. We also coded the USAO and the AGRC's assessment of aggravating factors (such as torture, endangerment of others, or victim vulnerability) and mitigating factors (such as youth of defendant, lack of criminal history, or mental illness or retardation).

Our pilot testing indicated that the case files often contained different and sometimes conflicting information about an incident. For example, Defendant A might claim that he was not at the scene while another defendant or a witness claimed that Defendant A pulled the trigger. To accommodate the uncertainty about the facts, we constructed the coding forms so that both claims were captured. Coders were not asked to resolve discrepancies.

## **Record Abstraction**

### **Abstractor Selection**

A team of six record abstractors was recruited from local universities and law schools. Candidates for the positions completed several screening exercises, e.g., a reading-comprehension assessment and a personal interview followed by a background check. All staff signed confidentiality agreements and agreed to comply with the project's Data Safeguarding Plan.

### **Training**

The coders received a one-week training course and several refresher training sessions during the five months they coded case files. The training agenda is attached in Appendix E. Training

consisted of an overview of the death-eligibility procedures of the Department of Justice and a briefing by a former AUSA to familiarize staff with the CCU procedures and documents in the CCU case files, and detailed instruction regarding the record abstraction procedures. The item-by-item specifications are in the coding form in Appendix D. Several practice cases were used throughout training and intercoder agreement was developed by having all the coders abstract a common set of case files and then discuss and resolve any differences that emerged. All the trainees completed a test case and a final checkout before beginning fieldwork. Five of the six trainees completed the training successfully and were retained to do the actual coding.

## Coding

The CCU offices where the case files were housed did not have space for a team of record abstractors, so the case files were moved in batches to and from RAND's Arlington, Virginia, office for coding. The CCU and RAND agreed on a case-batching and transmittal process to document the location of the cases at all times. RAND's fieldwork manager in Virginia and a CCU staff member oversaw the packing and courier service used to move the cases.

Fieldwork lasted approximately 20 weeks. Coders were all part-time consultants and averaged 23 hours per week on the project. As described previously, case characteristics and complexity varied and the production time per case for record abstraction reflects that variation. The time required to code a case ranged from 35 to 1,030 minutes. The average was 152 minutes.

Coders worked on only one case at a time. They were given a Case Summary Form (see Appendix F) that provided information about the case from the CCU database. The form listed the federal district, the case name, defendants and victims, the capital-eligible charges, and the CCU database AG decision. This form also provided an orientation to the materials in the case file and an opportunity to verify or flag cases with a different number of parties or AG decision that could then be verified by the fieldwork supervisor. The record abstractors did not have access to information about defendant or victim gender or race.

As an initial step, the coders inventoried the documents in the file and recorded the contents of the case file on the Case Summary Form. Next, they read the indictment, the USAO memorandum, and the AG and defense documents. They then began the coding process, which included reviewing all the documents and marking the sections of them that contained information required to complete the different sections of the coding forms. Any problems encountered in coding were noted on a problem log and referred to the fieldwork supervisor and other project staff for resolution.

## Supervision

A full-time field supervisor worked with the coders throughout the data collection period. The supervisor assigned cases and monitored productivity, fielded questions and forwarded them to the study director and principal investigators for resolution, provided training updates and



problem resolutions to the abstractors, and participated in refresher training sessions. Every form was reviewed and where necessary edited for completeness and legibility before transmittal to data entry. For quality assurance, approximately one-third of each coder's cases were validated. This step involved an independent summary review of the case file using the AGRC executive summary document and comparing the information it contained with that coded in the form. Any discrepancies triggered a more thorough review of the case file and coding forms. Coders met weekly with their supervisor to review problem resolutions, retrain, and further enhance coding consistency and accuracy.

## Sample Cases

Federal law permits the death penalty for several types of relatively rare offenses that are not processed in state courts, such as murders that violated a victim's civil rights, espionage, terrorism, and alien smuggling. The most common federal crimes for which the death penalty is sought involve homicides related to racketeering, "drug kingpin" crimes, and continuing criminal enterprises (CCEs). For the most part, the racketeering and CCE cases are complex, multijurisdictional, and involve multiple defendants, victims, and criminal incidents.

We describe briefly below a few of the drug- and gang-related homicides that were in the database.

1. Defendant (D2) was the leader of the local chapter of a violent criminal group involved in drug trafficking. Another defendant (D3) was the warlord of the chapter, and a third (D1) was a low-ranking member on probation. Victim 1 (V1) was a new member of the group who had recently switched his affiliation from a rival gang. D2 had given V1 a bulletproof vest and a gun for his protection, which V1 sold for drugs. At a group meeting, D2 ordered that V1 should be taken care of for what he had done, possibly concerned about V1 being an informant to the rival gang or just because he was a heavy drug user and a liability to the group. D3 construed this as an order to find V1 and kill him, and he enlisted D1, who still had to prove his loyalty. D1 and D3, together with another group member (who was then cooperating), picked up V1, retrieved the bulletproof vest, and drove to a cemetery. There, D1 shot and killed V1 with a bullet to the head, and he and D3 disposed of potential evidence against them.
2. D1, D2, and V2 are half-brothers. D1 and V2 ran a cocaine-distribution network. D1 and V2 often argued about the business; D1 decided to have V2 killed and take over. D1 hired V1 to kill V2. Four unidentified men subsequently shot V2. However, D1 felt remorse, so when V1 appeared to collect his payment, D1 and D2 shot him.
3. D1 had been indicted for drug sales he had made to V1 (who was cooperating with the authorities in the investigation of several drug dealers). D1 found out from his attorney that V1 was the main witness against him in his upcoming trial. Two weeks before his trial, D1 saw V1 driving his car outside a store where D1 had just gone with some friends to buy alcohol. D1 ran up to the car and shot V1 several times. A passenger in the car was injured in the foot.

4. D5 killed V1 and V2 because they arranged a hit on a friend of theirs. D1, D4, D5, and D6 with a now-cooperating coperpetrator killed V1 at his home. D1 was the shooter. D1, D3, D4, D5, D6, V1, and two noncooperating coperpetrators killed V2 in a carjacking/homicide. D2, D3, and D4 allegedly kidnapped and killed V3 (an informant) because “she knew too much.” V3 was poisoned and the role of the defendants (Ds) in that is not clear, though it is claimed that D2 and D4 burned her body.
5. All three Ds were members of two crack cocaine–distribution gangs that were closely associated and operated as a unit. They pooled their resources and dominated the drug trade in a certain area of New York. D1 and a later-deceased coperpetrator shot and killed V1, because V1 had shot and injured D1 and killed a friend of his four years earlier. D2 and D3 shot and killed V3 and D3 killed V2 in two separate incidents during a turf war with other rival gangs. V3 was shot in a restaurant in front of his 12-year-old nephew, and V2 was chased and shot (in front of several bystanders) by D3 in an open area in the housing project where they all lived.

By contrast with these drug trafficking and gang-related violence cases, alien-smuggling cases usually involved deaths that occurred in transportation accidents, such as attempts by smugglers to evade or escape pursuing border patrol agents. There was no intent to kill in such deaths and consequently they did not result in seeking the death penalty. Similarly, the death penalty was not sought in some cases because of national security concerns or circumstances related to extradition of defendants from countries that do not permit the death penalty or a sentence of life in prison.

Other death-eligible cases with federal interest included killings on federal property, such as on military bases or in prisons and hospitals; and some arson-, robbery-, kidnapping-, and carjacking-related homicides. Some of these cases were very gruesome, including the murder of an inmate by two of his cell mates who sliced the victim’s body into pieces. In one arson case, adults set their house on fire for insurance reasons and let their children die in the fire to keep them from reporting on their drug-distribution business (one older child was drugged to ensure that she would remain in the house when the fire started).

Other cases involved homicides that were more typical of cases prosecuted in state jurisdictions, such as the case that involved one defendant who, for no apparent reason, shot V1 in the head as V1 sat fishing with two friends. The lone defendant was a drug-addict member of a local motorcycle gang, and likely would have shot V1’s friends if his gun had not jammed. The defendant and victim were strangers.



## Description of Data on Key Variables

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This chapter describes some of the key characteristics of the database that was provided to the three analysis teams. Each team made its own decisions as to which cases had sufficient data to be included in its analysis. For example, all the teams excluded the five espionage defendants whose cases were processed during the study period because they did not have any victims in the file and therefore could not be classified as having killed white or nonwhite victims.

### Number of Cases, Defendants, and Victims

The database assembled for this study is complex. A “case” consists of one or more defendants whom the USAO charged with one or more of the offenses that carry the death penalty, i.e., they are “capital-eligible” crimes. More than one defendant may be charged with killing a given victim. Over half of the cases involved two or more defendants and nearly 80 percent of the defendants were in multiple-defendant cases. Cases also often involved multiple victims.

As noted in Chapter Two, our study period covered cases received by the CCU between January 1, 1995, and July 31, 2000, and were decided by the AG prior to December 31, 2000.<sup>1</sup> During this time, the 94 USAOs forwarded for review 312 death-eligible cases (excluding espionage). Data were coded for 652 defendants and 488 victims. The latter count did not include the roughly 400 victims in the first World Trade Center, Oklahoma City, Dar es Salaam, and Nairobi bombings because the CCU files did not contain individual-level data for the victims in these bombings.

The analysis teams examined two stages in the federal prosecution process, namely the USAO recommendation to seek or not to seek the death penalty and the final AG charging decision. The AG did not make a charging decision for 54 of the defendants whose cases were submitted for review by the USAO, usually because there was a guilty plea before the AG issued a final death-penalty charging decision. Two of the 600 defendants whose cases

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<sup>1</sup> There were two cases in which one or more defendants had an AG charging decision before December 31, 2000, but one or more other defendants in the same case had an AG charging decision after that date.

were reviewed by the AG did not have a USAO recommendation. This occurred because the USAO was awaiting the outcome of an extradition decision from a foreign country to which the defendants had fled.<sup>2</sup>

Table 3.1 shows the number of defendants and number of victims in the 312 cases the USAOs submitted. For example, there were 114 cases in which there was just one defendant and one victim. Table 3.2 shows the corresponding data for the 294 cases the AG reviewed. Both of the cases in Table 3.1 that involved nine defendants and two victims became eight-defendant cases by the time the AG was asked to make a charging decision. Five cases involved “terrorist” acts.

**Table 3.1**  
**Defendants and Victims in Cases Submitted by the USAOs**

Number of Defendants	Number of Victims											Total
	1	2	3	4	5	6	7	10	13	14	Terror	
1	114	12	4		2	1	1		1		4	139
2	64	16	5	1				1			1	88
3	33	6	4		1							44
4	10	5			3							18
5	8	2	1			1						12
6		1	2		1		2	1		1		8
7			1									1
9			2									2
Total	229	42	19	1	7	2	3	2	1	1	5	312

<sup>2</sup> These two defendants were of a group of drug smugglers who were confronted by two border patrol agents. One of the defendants allegedly shot and killed one of the agents. The defendants then fled over the border to Mexico.

**Table 3.2**  
**Defendants and Victims in Cases Decided by the AG**

Number of Defendants	Number of Victims											Total
	1	2	3	4	5	6	7	10	13	14	Terror	
1	110	14	4			1	1		2		4	136
2	57	14	5	1	1			1			1	80
3	31	5	4		1							41
4	10	4			2			1				17
5	6	3	1			1						11
6	1		3				2			1		7
7												0
8			2									2
Total	215	40	19	1	4	2	3	2	2	1	5	294

### USAO Recommendations and AG Decisions

Table 3.3 shows the number of defendants for whom the USAOs recommended a seek/not-seek decision and the AG made a seek/not-seek decision. Overall, the USAOs recommended seeking the death penalty for 23 percent of the 652 defendants whose cases they submitted for review and the AG decided to ask for the death penalty for 25 percent of the 600 defendants she reviewed. In the group of 598 defendants who were common to both data sets, the AG agreed with 118 of the USAOs' seek recommendations and 426 of their not-seek recommendations. Thus, the USAOs and the AG came to the same conclusion for 544 (91 percent) of the 598 defendants they considered in common.<sup>3</sup>

**Table 3.3**  
**AG Decision Agreement with USAO Recommendations**

AG Decision	USAO Recommendation		Total
	Seek	Not Seek	
Seek	118	31	149
Not seek	23	426	449
Not reviewed	11	43	54
Total	152	500	652

NOTE: The USAO submitted the case files for two defendants to the AG without making a seek/not-seek recommendation. The AG did not seek the death penalty for either of these defendants.

<sup>3</sup> The USAO and AG agreed on the seek/not-seek decision for the five espionage defendants not included in the analyses.

## Geographic Distribution of Cases

Each USAO is located within a single state, but some states have more than one USAO. Using the geographic regions defined by the U.S. Census Bureau, Table 3.4 shows the number of defendants submitted for review by the USAO by geographic region. The USAOs in the South submitted the most defendants (40 percent). The region with the second largest number of defendants was the Northeast (24 percent), followed by the Midwest (13 percent), West (11 percent), Puerto Rico (11 percent), and the Virgin Islands (0.5 percent).

Given that they submitted the most defendants to the AG for review, it is not surprising that the USAOs in the South had the largest share of seek recommendations (53 percent) and AG seek decisions (50 percent). The South also led the nation in the percentage of cases in which they recommended a seek decision (31 percent), but this rate was followed closely by the West (27 percent) and Midwest (25 percent) regions. The other regions had much lower rates. The AG seek decisions exhibited the same pattern.

**Table 3.4**  
**Defendants with a USAO Seek Recommendation and an AG Seek Decision, by the U.S. Census Region in Which the USAO District Is Located**

U.S. Census Region	USAO Recommendation			AG Decision		
	Defendants (N)	Seek (N)	Seek (%)	Defendants (N)	Seek (N)	Seek (%)
South	263	81	31	234	74	32
West	75	20	27	73	20	27
Midwest	85	21	25	79	22	28
Puerto Rico	70	10	14	65	11	17
Northeast	156	20	13	146	22	15
Virgin Islands	3	0	0	3	0	0
Total	652	152	23	600	149	25

NOTE: South consists of Alabama, Arkansas, the District of Columbia, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. Northeast consists of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Midwest consists of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. West consists of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

## Defendant Race

Table 3.5 shows the number of defendants by race in the USAO and AG databases and the percentage of these defendants who had a USAO seek recommendation and an AG seek decision. Throughout this report, non-Hispanic whites are designated as whites (although most Hispanics are in fact white) and African-Americans are designated as blacks. Most of the defendants in both the seek and not-seek categories were black. White defendants were about twice as likely as Hispanic defendants to have a USAO seek recommendation and an AG seek decision.

Almost all (95 percent) of the defendants in both data sets were male. In terms of age, 20 percent were under 21, 49 percent were 21 to 30, 15 percent were 31 to 40, and 8 percent were over 40.

Previous research at the state and federal levels usually defines “white-victim cases” as those that involve at least one white victim. Thirty percent of the defendants in both the USAO and AG databases were charged with killing at least one white victim.

**Table 3.5**  
**Defendants, by Race and Percent with a USAO Seek Recommendation and an AG Seek Decision**

Defendant Race	Defendants (N)		Seek (%)	
	USAO	AG	USAO	AG
White	120	114	32	38
Black	319	293	23	24
Hispanic	188	169	17	17
Other	25	24	36	33
Total	652	600	23	25



## Victim Race

As noted, there were 488 homicide victims (not counting victims of “terrorist” acts as defined) in the set of the 312 cases the USAOs submitted to the AG for review. Table 3.6 shows that about half of these victims were black and that a seek decision was more likely to be associated with a white victim than with a black or Hispanic victim.

The USAO and AG databases contained defendant but not individual victim data for four terrorist attacks. These cases and the number killed in each were the first World Trade Center (seven victims), Oklahoma City (168 victims including one rescue worker), Dar es Salaam Tanzania (11 victims), and Nairobi (over 200 victims). The CCU electronic database did not contain gender or race data for the roughly 400 fatalities in these attacks and they are therefore not included in the counts in Table 3.6.

**Table 3.6**  
Victims, by Race and Percent with a USAO Seek Recommendation and an AG Seek Decision

Victim Race	Victims (N)		Seek (%)	
	USAO	AG	USAO	AG
White	140	130	43	49
Black	238	229	33	34
Hispanic	92	92	20	35
Other	18	17	44	53
Total	488	468	34	39

NOTE: Victims were classified as “seek” if any of their associated defendants were classified that way.

### Federal Statute Offense Type

There are 33 federal statutes that allow for capital charges (but there are many subcategories of charge type within these statutes). Table 3.7 shows the number defendants in the USAO and the AG data sets that had at least one charge under one or more of the 33 statutes. For example, 334 of the 652 defendants in the USAO database had at least one 18 U.S.C. 924 charge (although many of these 334 defendants had multiple counts under this statute) (U.S. Code, 2004j). Column totals exceed the total number of defendants because a defendant could be charged under more than one statute. The most frequently charged statutes were those involving gun murders during a violent or drug-trafficking crime, racketeering murder, or CCE.

**Table 3.7**  
**Defendants, by Charge Type Under Federal Death Penalty Statutes**

Federal Statute	Title	USAO Ds	AG Ds
18 U.S.C. 924	Penalties	334	299
18 U.S.C. 1959	Violent Crimes in Aid of Racketeering Activity	162	150
21 U.S.C. 848	Continuing Criminal Enterprise	132	121
18 U.S.C. 1111	Murder	83	81
18 U.S.C. 1512	Tampering with a Witness, Victim, or an Informant	73	68
18 U.S.C. 2119	Motor Vehicles	68	65
18 U.S.C. 1958	Use of Interstate Commerce Facilities in the Commission of Murder-for-Hire	41	37
18 U.S.C. 1201	Kidnapping	38	35
18 U.S.C. 1513	Retaliating Against a Witness, Victim, or an Informant	27	27
18 U.S.C. 2113	Bank Robbery and Incidental Crimes	25	24
18 U.S.C. 844	Penalties	25	23
18 U.S.C. 1114	Protection of Officers and Employees of the United States	18	17
8 U.S.C. 1324	Bringing in and Harboring Certain Aliens	16	16
18 U.S.C. 1203	Hostage Taking	15	15
18 U.S.C. 241	Conspiracy Against Rights	11	10
18 U.S.C. 242	Deprivation of Rights Under Color of Law	11	10
18 U.S.C. 36	Drive-by Shooting	10	4
18 U.S.C. 1503	Influencing or Injuring Officer or Juror Generally	6	6
18 U.S.C. 245	Federal Protected Activities	6	6
18 U.S.C. 930	Possession of Firearms and Dangerous Weapons in Federal Facilities	5	5
18 U.S.C. 1121	Killing Persons Aiding Federal Investigations or State Correctional Officers	4	4
18 U.S.C. 2332	Criminal Penalties	4	4

**Table 3.7—Continued**

Federal Statute	Title	USAO Ds	AG Ds
18 U.S.C. 3591	Sentence of Death	3	1
18 U.S.C. 37	Violence at International Airports	3	3
18 U.S.C. 1116	Murder or Manslaughter of Foreign Officials, Official Guests, or Internationally Protected Persons	2	2
18 U.S.C. 1118	Murder by a Federal Prisoner	2	2
18 U.S.C. 1716	Injurious Articles as Nonmailable	2	2
18 U.S.C. 2245	Sexual Abuse Resulting in Death	2	2
18 U.S.C. 32	Destruction of Aircraft or Aircraft Facilities	2	2
18 U.S.C. 247	Damage to Religious Property; Obstruction of Persons in the Free Exercise of Religious Beliefs	1	1
18 U.S.C. 33	Destruction of Motor Vehicles or Motor Vehicle Facilities	1	1
49 U.S.C. 46502	Aircraft Piracy	1	0

NOTE: Columns do not sum to the total number of defendants because defendants may be charged under multiple statutes. Defendants also can face multiple counts for each charge type. The table shows the number defendants with at least one charge of each type. There also were five defendants charged with espionage.

### Case Dispositions

After the AG decides whether or not to seek the death penalty, the case proceeds to trial with the USAO. A plea bargain may be reached at any time before or during the trial. Table 3.8 shows the final disposition for each defendant. These data indicate that almost 90 percent of the defendants studied were convicted of some crime (we could not find the disposition for 3 percent of the defendants). Four percent of the defendants were found not guilty at trial.

“Years or life” refers to whether the defendant was sentenced to a specific number (or range) of years in prison (or jail) or sentenced to life in prison (with or without the possibility of parole). Over 75 percent of the defendants in the “other” category had their cases dropped or dismissed.

Eighteen defendants were sentenced to death, which is not enough to provide a reliable basis for an analysis of the relationship between capital-sentencing decisions and other variables. The next three chapters therefore only examine whether defendant and victim race were related to the USAO’s recommendation and the AG’s decision to seek or not to seek the death penalty.

**Table 3.8**  
**Case Disposition by USAO Recommendation and AG Decision**

Case Disposition	USAO Recommendation				AG Decision			
	Seek (N)	Not Seek (N)	Total		Seek (N)	Not Seek (N)	Total	
			N	%			N	%
Guilty at trial								
Death	17	1	18	3	18	0	18	3
Years or life	60	213	273	42	47	216	263	44
Plea agreement								
Years or life	47	212	259	40	51	179	230	39
Probation/other	13	10	23	4	18	4	22	4
Not guilty at trial	5	21	26	4	6	17	23	23
Other	8	24	32	5	5	21	26	4
Missing	2	19	21	3	4	14	18	3
<b>Total</b>	<b>152</b>	<b>500</b>	<b>652</b>	<b>100</b>	<b>149</b>	<b>451</b>	<b>600</b>	<b>100</b>



## A Statistical Analysis of Charging Decisions in Death-Eligible Federal Cases: 1995–2000

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As discussed in Chapter One, the USAO investigates and prosecutes violations of federal law. If an offender is charged with a crime that can carry the federal death penalty, the USAO makes a recommendation to the AG's office on whether or not to seek that penalty. The AG (who does not have access to information about defendant or victim race) reviews the case file, including the USAO recommendation, and makes the final decision on whether to seek death or a lesser penalty.<sup>1</sup> The case can then go to trial, although it is sometimes settled sooner, such as by a plea agreement.

In this chapter, we examine whether the USAO recommendations and the AG decisions are related to defendant and victim race. The relationship is studied with and without statistical controls for the heinousness of the crime, and the federal district in which the defendant is prosecuted. We investigate how well charging decisions can be predicted on the basis of case characteristics, and the degree to which considering defendant and victim race improves predictive accuracy. We pay particular attention to the AG charging decisions because they are the final ones. However, as discussed below, results for the USAO recommendations are very similar to those for the AG decisions. We start by looking at the raw data, with no statistical controls.

### Charging Decisions Analyzed Without Statistical Controls

Between 1995 and 2000, the USAOs and the AG were more likely to recommend the death penalty when defendants or victims were white.<sup>2</sup> For example, the AG sought the death penalty for 37 percent of the white defendants, but only for 22 percent of the nonwhite defendants, a difference of 15 percentage points (Table 4.1, right column). The AG sought the death penalty for 36 percent of the defendants who killed whites, but only for 20 percent of the defendants whose victims were all nonwhite, a difference of 16 percentage points (Table 4.1, bottom row).

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<sup>1</sup> As noted previously, for some cases, the AG may be able to make an educated guess about a victim's or defendant's race from other information in the case file.

<sup>2</sup> White is shorthand for non-Hispanic white. In this terminology, nonwhites include Asians, blacks, and Hispanics. Of course, most Hispanics are, in fact, white. In Tables 4.1 and 4.2, the "white" column refers to defendants with at least one white victim; the "nonwhite" column, to defendants with no white victims.

When defendant and victim race are considered together, white defendants who kill white victims are almost twice as likely to have a seek decision as nonwhite defendants whose victims were all nonwhite (39 versus 20 percent, respectively).

Table 4.2 shows the number of white and nonwhite defendants who killed white and nonwhite victims, making it clear that murderers and their victims were generally of the same race. Indeed, white defendants were roughly nine times more likely to have murdered white than nonwhite victims, and nonwhite defendants were five times more likely to have murdered nonwhites than whites. Tables 4.1 and 4.2 also show that data are limited. For instance, although the AG made a charging decision for 600 defendants, there were only 12 white defendants with no white victims, and the AG made a seek decision for only three of them (25 percent of 12 is 3). These are very small samples. Thus, changing a few decisions could easily have a large impact on some of the percentages in Table 4.1.

The remainder of this chapter examines whether disparities like those in Table 4.1 can be explained by differences in case characteristics. In other words, were cases with white defendants or white victims generally more heinous than other cases? We also examine the strength of the relationship between charging decisions and case characteristics, i.e., are these decisions fairly predictable? Finally, to develop a better understanding of charging decisions, we review pairs of cases in which (according to the statistical modeling) the two cases in the pair had very similar probabilities of having a seek decision, but the actual charging decisions were different.

**Table 4.1**  
Percentage of Defendants with an AG Seek Decision, by Defendant and Victim Race

Defendant Race	Victim Race		Total
	White	Nonwhite	
White	39	25	37
Nonwhite	32	20	22
Total	36	20	25

**Table 4.2**  
Number of Defendants with an AG Charging Decision, by Defendant and Victim Race

Defendant Race	Victim Race		Total
	White	Nonwhite	
White	103	12	115
Nonwhite	82	403	485
Total	185	415	600

## Analysis Samples

We used all the defendants whose case files were coded, except the five accused of espionage. We did not use the espionage defendants because no victim data were coded for them and therefore we could not classify them as white- or nonwhite-victim cases. One of our two samples consisted of the 652 defendants for whom the USAO recommended seeking the death penalty or a lesser sentence. The other sample was the 600 defendants for whom the AG decided whether or not to seek the death penalty. Most of the difference between the 652 and the 600 reflects defendants whose cases were resolved after the USAO made its recommendation but before the AG (Janet Reno) made her decision. For example, some defendants accepted a plea agreement in the interim.

## Model Building

In preliminary multivariate analyses, we found that results were quite sensitive to the choice of explanatory variables. Although a majority of the models we fitted showed no race effects, some did. With over 100 possible explanatory variables and only 652 defendants in the USAO sample, we saw no satisfactory way of choosing explanatory variables.

This difficulty led us to examine which factors were strongly related to charging decisions in univariate analyses. A factor that is strongly and positively related to the seek decision is an “aggravating factor.” Killing three or more victims is an example. A factor that is strongly but inversely related to the seek decision is a “mitigating factor.” An example is the victim abusing or antagonizing the defendant in the past.

To explore the effects of different variables, we divided the AG sample into two groups on the basis of whether the defendants did or did not have a seek decision. Next, we computed the mean for each variable in each group and then the ratio of these means. Variables with large ratios were classified as aggravators. Those with small ratios were classified as mitigators. For example, “killing three or more victims” was classified as an aggravator because 30 percent of the defendants in the seek group but only 15 percent of those in the no-seek group had this characteristic (i.e., a ratio of  $30 / 15 = 2.0$ ). In contrast, the variable “the defendant was abused or antagonized by the victim in the past” was classified as a mitigator because 3 percent of the defendants in the seek group but 11 percent of those in the no-seek group had this characteristic (i.e., a ratio of  $3 / 11 = 0.27$ ).

We eliminated certain factors that made no substantive sense. For example, the death penalty was sought more often when the defendants said they were remorseful, perhaps because expressions of remorse were viewed as a last-ditch effort to reduce penalties. We added some aggravating and mitigating factors suggested by previous research (see Chapter One for a review of this literature). We ensured that the final list of factors was the same for the AG models as it was for the USAO models.<sup>3</sup>

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<sup>3</sup> Technically, this is not quite right. For example, for the AG, we used the variable `agghcceaagr_any` and for the USAO we used `agghccea_sao_any`. These are similar in concept, but differ in detail. See the data dictionary for the project’s public-use file for the definitions of these variables.



We summed the aggravating factors for each defendant to obtain an overall score called “aggr.” Likewise, we summed the mitigating factors for each defendant to obtain another score called “mitg.” Tables 4.3 and 4.4 list the factors that went into each score and their public-use database labels. We did not weight the separate factors within score type.<sup>4</sup>

One measure of the degree to which a murder is heinous is the difference between the aggr and mitg scores. Table 4.5 shows the mean of this difference for the defendants whose cases were reviewed by the AG, cross-classified by defendant and victim race. The pattern of means in this table corresponds with the pattern of seek decisions in Table 4.1. For example, Table 4.5 shows that regardless of their race, defendants who killed whites had a noticeably higher mean heinousness score than defendants who killed nonwhites and Table 4.1 shows that defendants who killed whites were much more likely to have seek decisions than defendants who killed nonwhites. Overall, the data in Table 4.5 suggest the race-of-victim and race-of-defendant effects in Table 4.1 may stem at least in part from white-defendant and white-victim cases generally being more heinous than other cases.<sup>5</sup> We use statistical modeling to explore this idea.

**Table 4.3**  
**Mitigating Factors**

Variable	Description
bkstarted_anyr	Coded 1 if V started the incident with D (e.g., shot first or attacked D), 0 if not
crimedoer	Coded 1 if V was engaged in a criminal activity or working in a criminal enterprise or organization at the time of the offense, 0 if not
mfagrc_sumwm	Number of mitigating factors
mfeqdefagrc_any	Coded 1 if Ds were equally culpable, 0 if not
mfminpartagrc_any	Coded 1 if D had minor participation, 0 if not
offaid_any	Coded 1 if D offered aid to a V, 0 if not
vfabusedd_any	Coded 1 if V abused or antagonized D in the past (includes domestic abuse)

<sup>4</sup> However, three factors in Table 4.3 are themselves sums and differences of other factors, so these more basic factors may, in effect, be weighted.

<sup>5</sup> One extreme example is the Oklahoma City bomber Timothy McVeigh. He killed 168 people, including 19 children.

**Table 4.4**  
**Aggravating Factors**

Variable	Description
agghcceaagrc_any	Coded 1 if CCE involved distribution to minors, 0 if not
agghcruelagrc_any	Coded 1 if D committed homicide in a heinous, cruel, or depraved manner; 0 if not
agghduringagrc_any	Coded 1 if death occurred during commission of another crime, 0 if not
agghpayagrc_any	Coded 1 if D procured homicide by payment, 0 if not
agghplanagrc_any	Coded 1 if there was substantial planning and premeditation, 0 if not
agghprevdthagrc_any	Coded 1 if D was previously convicted of an offense for which a sentence of death or life imprisonment was authorized, 0 if not
agghprevofagrc_any	Coded 1 if D was previously convicted of other serious offenses, 0 if not
agghagrc_sumwm	Sum of aggravating factors of homicide, espionage, and treason
agghvulagrc_any	Coded 1 if V was vulnerable, 0 if not
akconceal_anyr	Coded 1 if D attempted to hide or dispose of V's body after the killing, 0 if not
akfire_anyr	Coded 1 if V was set on fire after being killed, 0 if not
akmutilate_anyr	Coded 1 if V was mutilated or dismembered after being killed, 0 if not
bkplead_anyr	Coded 1 if V pled for life before being killed, 0 if not
csgruesome_anyr	Coded 1 if gruesome crime scene (e.g., large amount of blood) was found, 0 if not
csnoclothes_anyr	Coded 1 if V was not clothed when found at the crime scene, 0 if clothed
evidforensic_any	Coded 1 if there was forensic evidence against D (e.g., DNA or fingerprints), 0 if not
idcnt4	Coded 1 if there were three or more victims, 0 if not
mfimpcapagrc_any	Coded 1 if D had impaired capacity, 0 if not
nsaggagrc_sumwm	Sum of nonstatutory aggravating factors
subagrc	Sum of aggravating factors minus mitigating factors
sympvic1	Coded 1 if V was sympathetic, 0 if not
vmilitary_any	Coded 1 if V is reportedly a current or former member of the U.S. military, including the reserves; 0 if not
vulvic1	Coded 1 if V was vulnerable, 0 if not
vunder17	Coded 1 if V was under the age of 17, 0 if not

**Table 4.5**  
**Mean Difference in Aggravating and Mitigating Scores for Defendants with an AG Charging Decision, by Defendant and Victim Race**

Defendant Race	Victim Race		Total
	White	Nonwhite	
White	5.3	3.3	5.1
Nonwhite	5.0	3.2	3.5
Total	5.1	3.2	3.8

In the models, race of defendant was coded “0” if the defendant was white and “1” if the defendant was not white. Race of victim was coded “1” if any of the defendant’s victims were white and “0” if none were white. These two variables are referred to as “defendant race” and “victim race,” respectively.

We also created a dummy variable for each of the eight USAO districts that had at least 15 defendants for whom the AG made a charging decision. Taken together, these eight districts accounted for about half of all the capital cases in the nation’s 94 federal judicial districts. Table 4.6 lists abbreviations used throughout this chapter.

We used logistic regression to examine the relationship between charging decisions, race, and other case characteristics. This methodology, which is discussed in Technical Note 4.A, is often used in death-penalty studies. However, we construct models with the aggr and mitg scores rather than following the usual practice of putting a large number of aggravators and mitigators in the equation as separate variables.

We constructed two sets of logistic regression equations. One set explained the USAO’s recommendation and the other set explained the AG’s decision. All the models included the aggravating and mitigating scores. The models differed as to whether they also included victim race, defendant race, the interaction between victim and defendant race, and the eight district dummy variables.

**Table 4.6**  
**Explanation of Abbreviations**

Abbreviation	Explanation
USAO	U.S. Attorney’s Office, i.e., the local federal prosecutor
AG	U.S. Attorney General
aggr	Sum of aggravating factors in Table 3
mitg	Sum of mitigating factors in Table 4
mindefdt	Coded 1 if nonwhite defendant, otherwise 0
whtvic	Coded 1 if at least one white victim, otherwise 0
Interaction	Interaction between whtvic and mindefdt, i.e., whtvic × mindefdt

NOTE: The variable “usaodp” in the public-use database was coded 1 if the USAO recommended death and 0 if it did not recommend death. The variable “agrcdp” was coded similarly for the AG decision. These are the dependent variables in our statistical models. mindefdt is called “dnonwhite” in the public-use database.

## Charging Decisions Analyzed with Statistical Controls

We focus on the AG’s charging decision because it overrides the USAO’s recommendation. Table 4.7 reports our full model for AG charging decisions. According to this model, there is no statistically significant relationship between charging decisions and defendant or victim race, when there is control on the tally of aggravating factors, the tally of mitigating factors, and district. The  $p$ -values for victim race, defendant race, and the interaction term were 0.637, 0.304, and 0.185, respectively. These  $p$ -values did not even come close to the 0.05 level needed for statistical significance.<sup>6</sup> Very similar results were obtained with the corresponding 13-variable USAO model (Technical Note 4.C).

**Table 4.7**  
**Thirteen-Variable Model for the AG Charging Decision**

Variable	Estimate	SE	$p$
Intercept	-4.21	0.94	0.000
aggr	0.43	0.04	0.000
mitg	-0.53	0.12	0.000
whtvic	0.20	0.43	0.637
mindefdt	0.87	0.84	0.304
Interaction	1.26	0.95	0.185
Puerto Rico	-0.25	0.48	0.611
Eastern Virginia	0.89	0.46	0.052
Eastern New York	-2.31	1.08	0.032
Southern New York	-1.16	0.56	0.037
Maryland	-1.13	0.63	0.075
District of Columbia	-1.00	0.85	0.242
Central California	1.87	0.67	0.006
Eastern Michigan	-0.45	0.98	0.645

<sup>6</sup> In Table 4.7 and all subsequent tables, SE refers to the standard error, which is a measure of the statistical uncertainty in the corresponding estimate. The test statistic is the estimate divided by the SE. The  $p$ -value or significance level indicates the chance of obtaining a test statistic as extreme as, or more extreme than, the test statistic computed from the data. The computation of the  $p$ -value is based on the null hypothesis that the coefficient in question is truly zero. Regression estimates and standard errors are reported to two decimal places,  $p$ -values are reported to three decimal places, and  $p$ -values that are less than 0.0005 are reported as 0.000. All tests are two-sided. For a discussion of hypothesis and significance testing, see Chapters 26–29 in Freedman, Pisani, and Purves (1998).

We think it is appropriate to include all three race variables (i.e., race of victim, race of defendant, and the interaction term) in the model, because of concerns that have been raised about whether the system is fair to minority defendants, particularly when they kill whites, and the fact that—when there are no statistical controls—federal prosecutors are more likely to seek death for white defendants than for nonwhite defendants (Table 4.1).

Some analysts disagree. They believe that only victim race should be included in the model. We therefore constructed models with only one race variable, namely *whtvic*. Tables 4.8 through 4.10 show that the race-of-victim effect was not significant in any of these models. In fact, it did not even approach significance when we controlled for district (Table 4.9) or defendant race (Table 4.10). In short, the race-of-victim effect is not significant once we control for heinousness.

**Table 4.8**  
**Three-Variable Model for the AG Charging Decision**

Variable	Estimate	SE	<i>p</i>
Intercept	-3.42	0.38	0.000
aggr	0.40	0.04	0.000
mitg	-0.44	0.11	0.000
whtvic	0.42	0.28	0.131

**Table 4.9**  
**Eleven-Variable Model for the AG Charging Decision**

Variable	Estimate	SE	<i>p</i>
Intercept	-3.38	0.46	0.000
aggr	0.42	0.04	0.000
mitg	-0.50	0.12	0.000
whtvic	0.41	0.33	0.218
Puerto Rico	-0.25	0.48	0.610
Eastern Virginia	0.90	0.46	0.049
Eastern New York	-2.32	1.07	0.031
Southern New York	-1.25	0.55	0.024
Maryland	-1.12	0.63	0.074
District of Columbia	-1.03	0.85	0.225
Central California	1.78	0.66	0.007
Eastern Michigan	-0.51	0.97	0.595

**Table 4.10**  
**Five-Variable Model for AG Charging Decision**

Variable	Estimate	SE	<i>p</i>
Intercept	−4.18	0.90	0.000
aggr	0.40	0.04	0.000
mitg	−0.46	0.11	0.000
whtvic	0.13	0.38	0.734
mindefdt	0.78	0.81	0.337
Interaction	1.34	0.89	0.131

There is some previous research suggesting race-of-victim effects and the absence of race-of-defendant effects. This research may not be entirely relevant because it was based primarily on state cases. We are using federal cases, which are typically very different from state cases. Federal cases usually involve several defendants and victims. Crimes are often on a large scale, sometimes cutting across state and even national borders.

There is a more technical argument against models with race of victim as the only race variable. In univariate analysis, white defendants are at higher risk of a seek decision than nonwhite defendants, presumably because their crimes are more heinous (Tables 4.1 and 4.5). Most crime is within-race, so white victims are more likely to be murdered by whites than by nonwhites (Table 4.2). Thus, putting race of victim into the model without race of defendant might well confound race-of-victim effects with race-of-defendant effects.

For example, suppose we put race-of-victim into the model but not race-of-defendant, and defendants with white victims turn out to be more likely to have seek decisions. One explanation may be bias against all defendants who murder whites—but an alternative explanation is bias against white defendants. The alternative is viable because white victims are generally murdered by whites (Table 4.2). To rule out this alternative, we have to control for race-of-defendant. At least for the AG, these issues are moot: There is no race-of-victim effect after we control for heinousness.<sup>7</sup>

Results for USAO charging decisions were generally similar (Technical Note 4.C). The only difference of note was that the race-of-victim effect was significant ( $p = 0.05$ ) in the three-variable USAO model. However, as we discussed previously, that model is unsatisfactory because it does not control for defendant race. Victim race is not significant in the other USAO models.

<sup>7</sup> Further support for this conclusion comes from the 0.993 correlation between the probabilities generated by a two-variable model (which only included the aggr and mitg scores) and those generated by the five-variable model (which also included the race variables). These two sets of probabilities had identical means and nearly identical standard deviations.

## District Effects

In this section, we explore the size of the district effect on charging decisions. We continue to focus on the models for the AG charging decision. Results for the USAO models are very similar (Technical Note 4.C).

In Table 4.7, the eight districts with the most cases are implicitly compared to the omitted category, namely, the pool of cases from all of the other districts combined. The table shows that the probability of seeking the death penalty is significantly higher in Central California than in the pool of other districts. The probability is significantly lower in the Eastern District of New York. Such differences may be due to differences in case mix across districts that are not captured by our tallies of aggravating and mitigating factors. Prosecutor decisions about whether to seek the death penalty also may be influenced by differences in jury attitudes about this penalty across districts.

Despite the significance of the dummies, differences among districts have only a small impact on the probabilities that are estimated by the models. We will now quantify this impact. To begin, we eliminate race from the model because we did not find the race variables to have a significant effect (Tables 4.7 to 4.10); leaving race in the models would not change the results to any appreciable extent, as discussed below. The simplest model has only the aggravating and mitigating scores, with no geography (Table 4.11). We add the eight district dummies, to get the 10-variable model shown in Table 4.12.

The two-variable model had a mean predicted probability of 0.25, but so did the 10-variable model. The standard deviations of these probabilities were also alike: 0.30 and 0.31, respectively. Moreover, the correlation between the two sets of probabilities was 0.95. In short, the two-variable model (without districts) generated probabilities that were nearly identical to those from the 10-variable model (with districts).<sup>8</sup> These findings (and other results discussed later in this chapter) indicate that there is not much difference across districts in estimated probabilities of seeking a death sentence.

**Table 4.11**  
**Two-Variable Model for the AG Charging Decision**

Variable	Estimate	SE	<i>p</i>
Intercept	-3.28	0.37	0.000
aggr	0.40	0.04	0.000
mitg	-0.46	0.11	0.000

<sup>8</sup> There also was a 0.95 correlation between the probabilities generated by the two-variable and 13-variable models. These are the two extreme models that we considered, in terms of the number of variables. The correlation between the probabilities generated by the 10-variable model (with district but without any of the race variables) and the 13-variable model (with district and all the race variables) was 0.995. The means and standard deviations of the estimated probabilities were nearly identical for the two models.

**Table 4.12**  
**Ten-Variable Model for the AG Charging Decision**

Variable	Estimate	SE	<i>p</i>
Intercept	-3.16	0.42	0.000
aggr	0.43	0.04	0.000
mitg	-0.52	0.12	0.000
Puerto Rico	-0.45	0.46	0.325
Eastern Virginia	0.71	0.43	0.099
Eastern New York	-2.48	1.07	0.021
Southern New York	-1.39	0.54	0.010
Maryland	-1.27	0.62	0.040
District of Columbia	-1.12	0.84	0.179
Central California	1.63	0.65	0.012
Eastern Michigan	-0.59	0.97	0.542

### Comparing Models to Data

We find that the models fit the data quite well. For example, we used the 10-variable model in Table 4.12 to generate a predicted probability of seeking the death penalty for each defendant. We divided the defendants into 10 groups. The defendants in a group had nearly equal probabilities, and all the groups had nearly the same number of defendants (we could not assign exactly equal numbers to groups because defendants were not spread out evenly across the distribution of probabilities). Next, we computed the sum of the probabilities within each group to obtain the expected number of defendants for whom the death penalty would be requested. Finally, we compared the expected values to the actual values.

Table 4.13 shows close agreement between the expected and observed numbers. For example, all 59 of the defendants in Group 1 had probabilities that were less than 0.0054. The sum of the probabilities in this group was less than 0.1. The AG sought the death penalty for just one of these defendants. Group 10 had 58 defendants, all of whom had probabilities greater than 0.8058. The sum of the probabilities in this group (i.e., the expected number of seek decisions) was 53.6. The actual number was 51. The two-variable model had similar consistency between expected and observed values.



**Table 4.13**  
**Expected Versus Observed Number and Percent of AG Decisions to Seek the Death Penalty**

Group	Number of Defendants	Number		Percent	
		Expected	Observed	Expected	Observed
1	59	0.1	1	0.2	1.7
2	59	0.5	1	0.8	1.7
3	63	1.2	1	1.9	1.6
4	59	2.2	2	3.7	3.4
5	57	3.5	1	6.1	1.8
6	63	7.4	6	11.7	9.5
7	60	13.3	11	22.2	18.3
8	63	25.5	27	40.5	42.9
9	59	41.6	48	70.5	81.4
10	58	53.6	51	92.4	87.9
Total	600	148.9	149	24.8	24.8

## Predictability

Some analysts have suggested that charging decisions are capricious unless they can be predicted from case characteristics with a high degree of accuracy through a statistical model. We disagree. Prediction errors may result from capricious behavior, but they may also result from imperfections in the data and the models. Few systems as complex as the criminal justice system lend themselves to high-accuracy statistical modeling. That said, however, our simple statistical models managed to predict charging decisions surprisingly well.

We illustrate the point with the 10-variable model for the AG decision. We say the model predicts the seek decision for a defendant when the estimated probability of the seek decision is greater than or equal to 0.5. Otherwise, the model predicts a decision to seek a lesser sentence. Table 4.14 compares the predictions to the actual decisions. When the model predicts death, it is right 82 percent of the time ( $104 / 127 = 82$  percent). When it predicts a lesser sentence, it does so correctly 90 percent of the time. In the aggregate, the model is right 89 percent of the time.

**Table 4.14**  
**Actual Versus Predicted Seek Decisions Based on the 10-Variable Model**

Charging Decision	Probability < .5	Probability > .5	Total
Death	45	104	149
Lesser sentence	428	23	451
Total	473	127	600

NOTE: Overall accuracy rate =  $(428 + 104)/600 = 89$  percent.

Some analysts assess the unique effect of race by seeing how much predictive accuracy improves when race is added to the model. We examined this issue by comparing the results with the 10-variable model (that did not include race) to that of the 13-variable model (that did include race). A priori, little difference is expected, since all the models produce essentially the same estimated probabilities. Perhaps surprisingly, the 13-variable model was slightly less accurate than the 10-variable model (Table 4.15).<sup>9</sup>

We also considered the predictive accuracy of the two-variable model (Table 4.11). In the aggregate, this simple model is right 87 percent of the time.

We conclude that (1) the decision to seek the death penalty can be predicted with a high degree of accuracy by tallying the aggravating and mitigating factors, (2) considering the district in which the case is filed makes only a small improvement in predictive accuracy, and (3) adding defendant and victim race to the model does not improve predictive accuracy. The second finding is consistent with the earlier observation that putting districts into the model makes little difference to the estimated probabilities. The third finding is consistent with the earlier observation that race effects are not significant.

**Table 4.15**  
**Actual Versus Predicted Seek Decisions Based on the 13-Variable Model**

Charging Decision	Probability < .5	Probability > .5	Total
Death	50	99	149
Lesser sentence	429	22	451
Total	479	121	600

NOTE: Overall accuracy rate =  $(429 + 99)/600 = 88$  percent.

<sup>9</sup> Technically, the logistic regression model is optimized for estimating probabilities, not for deciding whether these probabilities are on one side or the other of 0.5 (see Technical Note 4.B). This may help explain the apparent paradox.

## Middling Probabilities

Some analysts argue that charging decisions are capricious when the case has a “middling probability” of a seek decision, e.g., if the probability is between 0.4 and 0.6, then the decision is like a toss of a coin. According to this view, the system is capricious if there are many cases with middling probabilities. Although we do not agree with the reasoning, we used the 10-variable model (with district but without race, Table 4.12) to see how many of the AG’s cases had probabilities of 0.4 to 0.6. There were 37 cases in this range, comprising only 6 percent of the 600 defendants. Results were similar with the two-variable model.

Some investigators also contend that if racial or ethnic bias occurs, it is most likely to be found among cases with a middling probability of a seek decision. To investigate this thesis, we split the 37 AG cases noted previously into two groups on the basis of whether there was a white victim. We then compared the actual number of defendants within each group that had a seek decision to the number that would be expected to have this decision: The expected number is the sum of the estimated probabilities from the 10-variable model that did not include defendant or victim race. Bias would be indicated if there was more than the expected number of decisions to seek the death penalty when the victims were white and fewer than expected when the victims were not white.

Table 4.16 shows there were 10 white-victim cases and 27 nonwhite-victim cases with a 0.4 to 0.6 probability of a seek decision. The table also shows that the number of white- and nonwhite-victim cases in which there was a seek decision was nearly the same as the expected number.<sup>10</sup> This was true for both white- and nonwhite-victim cases. In short, even for cases with middling probabilities, there was no race-of-victim effect.

In Table 4.16, the total number of cases having a seek decision was almost the same as the expected number (19 versus 18). This is further evidence that the model fits the data.

**Table 4.16**  
**Number of Actual and Expected Seek Decisions in White- and Nonwhite-Victim Cases That Had a Middling Probability of a Seek Decision**

Victim Race	Defendants	Decision to Seek Death	
		Actual	Expected
White	10	4	4.63
Nonwhite	27	15	13.14
Total	37	19	17.77

<sup>10</sup> The differences between observed and expected values are insignificant and go in the opposite direction to what the bias hypothesis predicts.

## Case-Control Studies

We conducted three case-control studies to explore the possibility of capriciousness and bias, and to develop a better understanding of why seemingly similar cases had different charging decisions. Each study examined several pairs of defendants in which (according to the statistical modeling) both of the defendants in the pair had very similar probabilities of a seek decision, but only one defendant in the pair actually had a seek decision.

Members of the project team reviewed the coding forms for each pair of defendants without knowing which defendant in the pair had the seek decision. Reviewers were also blinded as to the race of defendants and victims. The review was post hoc, and sample sizes were small. Still, the results were informative.

Study 1 looked at six pairs of defendants. The probability of a seek decision for one defendant in a pair was identical or nearly identical to the other defendant in that pair. All the pairs had below-average probabilities of a seek decision (i.e., less than 0.25). Usually, the reason for disparate charging decisions was clear. For example, one defendant murdered a police informant who was scheduled to testify against the defendant. The defendant stalked the victim, and shot him in front of innocent bystanders. The defendant then stole the victim's car and had it detailed to remove the blood. The other defendant in the pair paid a fellow gang member to kill a witness. The defendant was not the triggerman (the defendant was in jail when the victim was killed) and the only evidence of a payoff was the killer's testimony. There was a seek decision for the first defendant but not the second one.

Study 2 looked at 10 pairs of defendants with probabilities of a seek decision around 0.67. In each pair, one defendant murdered at least one white victim and there was a seek decision. The other defendant had no white victims and there was no seek decision. Again, the reason for disparate charging decisions was usually clear—and the reason did not involve race. For example, one defendant in a pair was in jail. He was the ringleader of gang and he paid someone to kill a witness who was going to testify against him at trial. The payment was a motorcycle. The other defendant in the pair started a fire at a hotel out of anger, but then ran into the building to rescue the victim. (The victim later died; hence the murder charge.) The hotel also was found responsible for contributory negligence. There was a seek decision for the first defendant but not the second one.

Study 3 was motivated by a univariate analysis that found that defendants who killed U.S. citizens were far more likely to have a seek decision than defendants who killed aliens.<sup>11</sup> To investigate the source of this disparity, we formed six pairs of defendants with virtually the same probability of a seek decision, but death was recommended for the defendant who killed citizens and a lesser sentence was recommended for the defendant who killed aliens. The probabilities of a seek decision varied substantially across pairs (from 0.01 to 0.64).

Alien-victim cases typically involved persons who died while being smuggled into the country (e.g., they were left in a locked truck in the desert). Even though some of these cases

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<sup>11</sup> Murdering an alien was highly protective against the death penalty in univariate analysis and insignificant in multivariate. However, significance levels may be problematic: They are obtained from asymptotic formulas that may be questionable because there are few cases with an alien victim and in none of these was there a decision to seek the death penalty. See Technical Note 4.C.

had several victims, none of them had a seek decision because there was no intent to kill. Indeed, the defendants' goal was to keep the victims alive. That is why there was no seek decision.

We looked at a total of 22 pairs of defendants across the three studies. The reason one defendant had a seek decision and the other not was fairly evident in 16 of the pairs. We could not explain the disparate charging decisions in the other six pairs. For these studies, we did not have access to the case files. We only had access to the coding forms.

## Impaired Capacity

In univariate analysis, the impaired-capacity variable (i.e., the defendant was classified as having impaired capacity) appeared to be an aggravating factor: It doubled the risk of a seek decision. That is why impaired capacity is counted as an aggravator in Tables 4.7 to 4.16. However, this variable is a statutory mitigating factor and counts as such in *subagrc* (the sum of aggravating factors minus mitigating factors; see Table 4.4). With our definition of *aggr*, impaired capacity therefore cancels out and does not affect results in Tables 4.7 to 4.16. As a sensitivity test, we reran the key models, deleting the impaired capacity variable from the list of aggravators. Generally speaking, not much changed. In the three-variable model, for example, the significance level for the race-of-victim effect went from 0.13 to 0.10.

To see whether impaired capacity was an aggravator or a mitigator in multivariate analysis, we entered it as an additional variable to our 11-variable model.

Race of victim was not significant ( $p = 0.22$ ) and impaired capacity remained an aggravator but lacked significance ( $p = 0.24$ ). There were only 22 defendants with impaired capacity; the AG made a seek decision for nine of them. This is a small sample, so  $p$ -values derived from asymptotic formulas may not be entirely trustworthy.<sup>12</sup>

We examined the coding forms for all 22 defendants with impaired capacity. We think the AG recommended the death penalty for many of these defendants because they committed especially heinous crimes. In one case, the defendant beat and dragged an 86-year-old man to death in a carjacking. The defendant was a heroin addict and was classified as having impaired capacity for that reason. In another case, two defendants set fire to their home with their five children inside; some of the children were drugged to keep them asleep. There were two motives: (1) to get insurance money, and (2) to keep the children from revealing the defendants' drug dealing. Both defendants were classified as having impaired capacity because of drug use.

The cases with impaired capacity that did not have a seek decision were quite different. One defendant killed a 15-year-old female victim, but there were evidentiary problems, and the defendant was borderline retarded. In another case, the defendant, who was an alcoholic, confessed to killing the victim in order to end her relationship with his stepson.

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<sup>12</sup> In the USAO models, deleting impaired capacity from the list of aggravating factors had no noticeable effects. See Technical Note 4.C on asymptotic results.

The reason for the seek decision in one case and not in another was evident from the information on the coding forms for all but two of the 22 defendants who were designated by the AG as having impaired capacity.

## Other Sensitivity Analyses

We tried several modifications of the aggravating and mitigating scores, e.g., adding some variables suggested by multivariate analysis. We also tried dropping a few of the weaker predictors. Results seemed robust to the changes we considered. The preceding discussion of the impaired-capacity variable illustrates one such analysis.

In response to one reviewer's suggestions, we ran a five-variable model that contained the aggr and mitg scores, and dummy variables for white, black, and Hispanic defendants. The hold-out group was all others. We also ran a six-variable model that contained these same variables plus victim race. We ran both types of models with the AG sample and with the USAO sample. The racial variables were not even close to being statistically significant in any of these four models.

Other sensitivity tests we conducted involved deleting the number of mitigating factors from the mitg score and the following three derived variables from the aggr score: number of aggravating factors, number of nonstatutory aggravating factors, and number of aggravating factors minus the number of mitigating factors. Thus, the remaining variables are completely unweighted. We reran the tables for the AG decision, but there were no substantive changes. For example, in the three-variable model, the significance level for whtvic went from 0.13 to 0.42 while in the 13-variable model, the significance level went from 0.64 to 0.24. The models based on the modified scores generally fit worse according to the maximum log likelihood criterion, but this criterion is not readily interpretable for models with overlapping sets of explanatory variables.

The models based on the modified scores had the same predictive accuracy as those based on the original scores (Tables 4.14 and 4.15). The match between expected and observed counts (like those in Table 4.13) was just as good. Thus, on the whole, it makes little difference whether the derived variables are or are not included in computing the aggr and mitg scores.

We also considered using just one measure of heinousness, namely, the difference between the aggr and mitg scores. Results are very similar. For example, take the 13-variable model (Table 4.7). Replace the aggr and mitg scores with the simple difference between them (i.e., aggr – mitg), getting a 12-variable model. The correlation between the estimated probabilities from the two models is 0.9992; means and standard deviations are virtually identical.

## What Does “Probability” Mean?

In principle, the logistic regression model for charging decisions estimates probabilities from case characteristics: With a defendant like this one, there is a 1-percent chance that the AG will seek the death penalty; with a defendant like that one, the chance is 40 percent (Technical

Note 4.A). However, we do not seriously imagine AG charging decisions to be probabilistic. In our view, the model is a simple approximation to a complex reality. AG charging decisions may well differ across cases due to flaws in the model and the data (see caveats below).

## Caveats

In this section, we consider the most serious limitations to our statistical methods; some of these have been mentioned earlier.

**Data quality.** Some important variables are omitted because they were not available, such as witness credibility. Some variables in the data set are, no doubt, poorly measured.<sup>13</sup>

**Dependence.** The AG made a separate charging decision for each defendant. This led to using individual defendants as the units of analysis, and treating defendants as if they were independent. However, more than 75 percent of the 600 defendants reviewed by the AG were in multiple-defendant cases (Table 4.17).

Combining defendants into cases creates dependence, if—as seems highly likely—the AG considered case characteristics not captured by our scores, or the model is otherwise misspecified. The net impact might be large (e.g., it could cut the effective sample size in half). As a result, significance may be inflated (i.e., the *p*-values are too small). Maximum likelihood estimates in logit models may be biased, though it is unclear which way the bias would go.

**Table 4.17**  
**Most Defendants Are in Multiple-Defendant Cases**

Number of Defendants in the Case Reviewed by the AG	Number of Such Cases Reviewed by the AG	Percent of All 600 Defendants
1	136	23
2	80	27
3	41	21
4	17	11
5	11	9
6	7	7
7	0	0
8	2	3
Total	294	100

<sup>13</sup> Any large-scale data-abstraction process is likely to have some coding problems. Coders make mistakes, and two coders may disagree on how the forms should be completed for a case. Different analysts may prefer coding rules that are different from the ones we used. RAND staff reviewed the case files, coded the information, wrote the documentation, and prepared the data files. All of the teams used these files to construct their own set of variables.



**Modeling.** As noted previously, the logit model is at best an approximation. Furthermore, standard errors and significance levels are computed using asymptotic methods that are only valid with large samples. In the present context, with 600 defendants and many variables, these methods may not be entirely reliable. Similarly, estimated coefficients have some degree of systematic error with finite samples.

**Variable selection.** There is no secure way to choose explanatory variables. Some variables, because they are important in only a few cases, will not be detected by any conventional statistical technique. Furthermore, it is not at all clear that a variable always operates in the same way across cases—as logistic regression assumes. The usual way to handle interactions—putting in a few multiplicative terms—only begins to scratch the surface: Real interactions can be far more complex. Different variables are likely to play different roles, according to facts specific to the case. The Supreme Court recognized the problem in *McCleskey v. Kemp* (1987, p. 294) when it said that “the Constitution requires that [the jury’s] decision rest on consideration of innumerable factors that vary according to the characteristics of the individual defendant and the facts of the particular capital offense.”

**Multiple testing.** Multiple testing complicates the interpretation of significance levels. Again,  $p$ -values are likely to be too small if analysts search for significance, and there is no good way to adjust for the impact of fitting multiple models. Conversely, if analysts search for insignificance,  $p$ -values may be too large. A neutral analyst who fits several models with multiple explanatory variables can expect to achieve significance for 5 percent of the coefficients, just due to the operation of chance; 10 percent will be barely significant, and 1 percent will be highly significant. When many tests are run, “significant” findings can easily be artifacts of chance.

Despite the problems already noted, and somewhat to our surprise, our simple models seem to give reasonable descriptions of the data (Tables 4.13 to 4.16). To a degree, our scorecard approach (which combines aggravators into one score and mitigators into another score) addresses concerns about variable selection. It also addresses concerns about asymptotic methods by drastically reducing the number of variables in the model. Finally, the sensitivity analyses discussed previously suggest the approach is fairly robust against changes in the definition of the scorecard.

## Possible Responses

Some analysts will take issue with our findings. They may argue that bias is likely to occur at earlier stages of the case, e.g., in deciding whether to prosecute, determining what resources will be devoted to investigating the crime, or even which offenses to charge. These concerns cannot be addressed with the data that were available to us. It also may be argued that bias occurs when the USAO and the AG specify which aggravating and mitigating factors are present. This is a possibility, although many of the factors seem relatively objective and racially neutral.

Critics may point to the fact that our analysis is based on files prepared by prosecutors: Files prepared by the defense might tell a different story. In principle, we agree. Critics may



also say that biases are masked by the operation of other factors, e.g., defendants with more resources can afford better lawyers. Again, in principle, we agree: See the caveats. In practice, of course, we would have to look at the data. These are vivid illustrations of problems that may be created by omitted variables. The net impact of omitted variables on estimates for defendant- and victim-race effects is, of course, unknown.

Critics may reanalyze our data and fit models with significant race effects. This would come as no surprise. We fitted one such model ourselves (see preceding discussion of the three-variable USAO model). For us, the balance of evidence in the modeling and tables suggests that race effects are not significant. Others may differ.

Finally, proponents of the death penalty may feel that we are explaining away a negative finding. Not at all. Our caveats apply equally to studies that suggest bias is present.

## Conclusions

The AG was more likely to seek the death penalty when the defendant was white. The same was true when there was at least one white victim. However, these disparities disappeared when we controlled for case characteristics. For example, after controlling for the tally of aggravating and mitigating factors and district, there was no evidence of a race effect. This was true whether we examined race of victim alone (Table 4.9), or race of defendant and the interaction between victim and defendant race (Table 4.7).

Previous research at the state level suggests that if a race-of-victim effect is present, it is most likely to appear among defendants with a middling probability of a seek decision (e.g., in the 0.40 to 0.60 range). Our analysis of the 37 AG defendants in this range found that the number of white- and nonwhite-victim cases with a seek decision were almost identical to the number that would be predicted on the basis of nonracial factors (Table 4.16). In short, with our models, there was no sign of a race-of-victim effect overall, or in the cases with middling probabilities.

Our models fit the data surprising well. For example, charging decisions can be predicted with a high degree of accuracy (Tables 4.14 and 4.15). Moreover, the expected number of seek decisions matches the observed number (within the limits of chance variation) across the full range of estimated probabilities (Table 4.13).

There appear to be only modest differences in the estimated probabilities of a seek decision across districts. For example, there is a very high correlation ( $r = 0.95$ ) between the probabilities of an AG seek decision that were generated by the two-variable model (i.e., the one that only contained the tally of aggravating and mitigating factors) and those generated by the 10-variable model (i.e., the one that also contained districts). In addition, including districts in the model makes only a modest improvement in predictive accuracy—which is already very high with just two variables in the model (namely, the aggravating and mitigating scores).

The models we present, like the models developed by others, have many limitations. The variables are only proxies for the rich variety of factors that influence charging decisions, including factors that may not be documented in the files RAND was able to review. We suspect there are factors that are very important to a given case but do not occur often enough to

be detected by statistical analysis. Other factors may operate one way in one case and another way in another case. The logit models are at best simple approximations of a complicated reality in which many factors interact in different ways to influence charging decisions. Significance tests are difficult to interpret given the dependencies created by using the defendant as the unit of analysis—over 75 percent of the 600 defendants in our AG database were in multiple-defendant cases.

Other investigators may reanalyze our data and come to different conclusions about race effects, district effects, and the predictability of charging decisions. Given the problems discussed in this report, there is no definitive way to resolve the issue. Statistical techniques may not be up to the task of determining—with reasonable certainty—whether bias is present. Unexplained differences between charging decisions may indeed reflect bias. Differences may also reflect incomplete adjustment for variation in case characteristics. That is what the Supreme Court held in *McCleskey* (1987, p. 313): “Where the discretion that is fundamental to our criminal process is involved, we decline to assume that what is unexplained is invidious.”



## Supporting Data for Klein, Freedman, and Bolus

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### 4.A. Simulations

We ran several simulation studies to test our models, using maximum log likelihood and a variation on the chi-squared statistic for validation tables like Table 4.13 to measure goodness of fit. Generally, our test statistics were in the middle of their reference distributions (e.g.,  $p = 0.3$  or  $p = 0.6$ ). By these criteria, our models fit the data, and overfitting due to preliminary data analysis is not a problem.

The simulations were conducted before we knew each defendant's district. As Table 4.7 shows, districts are significant. In other words, despite the results from the simulation studies, our initial model failed to capture a significant feature of the data—although one whose impact on estimated probabilities is small. It is difficult, if not impossible, to validate complex statistical models using the data on which the models are developed; the usual cross-validation techniques are at best palliative, and have some real drawbacks (such as reduction of effective sample size). All knowledge is fallible, but policy analysis based on statistical modeling may be more fallible than is commonly recognized.

### 4.B. Some Detail on Logistic Regression

This section explains, for readers unfamiliar with the technique, how to interpret the coefficients in a logistic regression model.<sup>1</sup> By way of example, take the two-variable model for AG charging decisions (Table 4.11). The model considers each defendant in turn. Suppose, for instance, that a defendant has  $\text{aggr} = 5$  and  $\text{mitg} = 2$ . These are typical values. How does the model estimate the probability of a seek decision for this defendant?

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<sup>1</sup> For more detail, see Freedman (2005, Chapter Six). That text also discusses current formalism for causal inference from observational data and the difficulties attendant on this enterprise.

1) The model computes a linear function of *aggr* and *mitg* using the intercept and the coefficients listed in Table 4.11:

$$\begin{aligned} -3.28 + 0.40 \times \text{aggr} - 0.46 \times \text{mitg} &= -3.28 + .40 \times 5 - 0.46 \times 2 \\ &= -3.28 + 2 - 0.92 = -2.2 . \end{aligned}$$

2) Then it computes  $e^{-2.20} = 0.11$ , where  $e = 2.718282\dots$  is the base of the “natural logarithms.”

3) The estimated probability of a seek decision for this defendant is  $0.11 / (1 + 0.1) = 0.1$  .

For a second example, take a defendant with *aggr* = 10 and *mitg* = 0. This is a defendant who has committed a relatively heinous crime. The linear combination is

$$\begin{aligned} -3.28 + 0.40 \times \text{aggr} - 0.46 \times \text{mitg} &= -3.28 + 0.40 \times 10 - 0.46 \times 0 \\ &= -3.28 + 4 - 0 = 0.7 . \end{aligned}$$

The estimated probability is  $e^{0.72} / (1 + e^{0.72}) = 0.6$  .

Even more technically, the model views charging decisions as independent events across defendants, conditional on the covariates. The conditional probability of a seek decision (for the two-variable model) is

$$e^\lambda / (1 + e^\lambda),$$

where

$$\lambda = a + b \times \text{aggr} + c \times \text{mitg}.$$

In the last display,  $a$ ,  $b$ , and  $c$  are parameters. For the three-variable model,

$$\lambda = a + b \times \text{aggr} + c \times \text{mitg} + d \times \text{whtvic}.$$

Now the parameters are  $a$ ,  $b$ ,  $c$ , and  $d$ . The remaining models may be interpreted in similar ways.

Due to the independence assumption, the likelihood function is a product, with one factor for each defendant. That is where the independence assumption comes into play. The parameters in the models are estimated by maximizing the likelihood of the data given the model. The preliminary univariate analysis estimated the *aggr* and *mitg* scores in the model—a complication not fully accounted for in the standard errors.

#### 4.C. Asymptotic Results

“Asymptotic” results hold when the sample is sufficiently large. Most of the formulas used to analyze logit models, including procedures for computing standard errors and  $p$ -values, are asymptotic. The performance of such procedures with small samples is questionable. The relevant measure of sample size may be the total number of cases studied, or the number of seek decisions for white defendants with white victims, or the number of seek decisions for defendants with impaired capacity, depending on the model.

#### 4.D. Variables in the USAO Aggr and Mitg Scores

The variables used to create the aggr and mitg scores for the USAO models are listed below. These variables’ definitions correspond to those in Tables 4.3 and 4.4 for the AG models. The dependent variable for the USAO models was usaodp.

aggr	sum of	agghusao_sumwm, agghcceusao_any, agghcruelusao_any, agghduringusao_any, agghpayusao_any, agghplanusao_any, agghprevdthusao_any, agghprevofusao_any, agghvulusao_any, akconceal_anyr, akfire_anyr, akmutilate_anyr, bkplead_anyr, csgruesome_anyr, csnoclothes_anyr, evidforensic_any, idcnt4, mfimpcapusao_any, nsaggusao_sumwm, subusao, sympvic1, vfmilitary_any, vulvic1, vunder17
mitg	sum of	bkstarted_anyr, crimedoer, mfusao_sumwm, mfeqdefusao_any, mfminpartusao_any, offaid_any, vfabusedd_any

#### 4.E. USAO Models

Tables 4.E.1 through 4.E.6 show variables used in Klein, Freedman, and Bolus' USAO models.

**Table 4.E.1**  
**Thirteen-Variable USAO Model**

Variable	Estimate	SE	<i>p</i>
Intercept	-3.50	0.80	0.000
aggr	0.30	0.03	0.000
mitg	-0.39	0.10	0.001
whtvic	0.38	0.39	0.323
mindefdt	0.61	0.72	0.395
Interaction	0.50	0.81	0.537
Puerto Rico	-0.84	0.47	0.075
Eastern Virginia	0.26	0.42	0.536
Eastern New York	-2.74	1.11	0.013
Southern New York	-0.46	0.54	0.390
Maryland	-0.60	0.57	0.287
District of Columbia	-1.39	1.09	0.201
Central California	1.34	0.68	0.050
Eastern Michigan	-0.20	0.79	0.795

NOTE: whtvic = 1 if at least one white V, 0 if no white Vs.

**Table 4.E.2**  
**Three-Variable USAO Model**

Variable	Estimate	SE	<i>p</i>
Intercept	-3.14	0.34	0.000
aggr	0.29	0.03	0.000
mitg	-0.37	0.09	0.000
whtvic	0.51	0.26	0.050

**Table 4.E.3**  
**Eleven-Variable USAO Model**

Variable	Estimate	SE	<i>p</i>
Intercept	-2.91	0.40	0.000
aggr	0.30	0.03	0.000
mitg	-0.38	0.10	0.001
whtvic	0.33	0.31	0.274
Puerto Rico	-0.83	0.47	0.080
Eastern Virginia	0.29	0.42	0.485
Eastern New York	-2.71	1.11	0.014
Southern New York	-0.50	0.54	0.348
Maryland	-0.57	0.56	0.313
District of Columbia	-1.35	1.08	0.212
Central California	1.28	0.68	0.058
Eastern Michigan	-0.17	0.78	0.829

**Table 4.E.4**  
**Five-Variable USAO Model**

Variable	Estimate	SE	<i>p</i>
Intercept	-3.65	0.80	0.000
aggr	0.29	0.03	0.000
mitg	-0.37	0.09	0.000
whtvic	0.53	0.35	0.132
mindefdt	0.51	0.73	0.481
Interaction	0.49	0.80	0.539

**Table 4.E.5**  
**Two-Variable USAO Model**

Variable	Estimate	SE	<i>p</i>
Intercept	-2.99	0.33	0.000
aggr	0.30	0.03	0.000
mitg	-0.39	0.09	0.000



**Table 4.E.6**  
**Ten-Variable USAO Model**

<b>Variable</b>	<b>Estimate</b>	<b>SE</b>	<b>p</b>
Intercept	-2.75	0.36	0.000
aggr	0.30	0.03	0.000
mitg	-0.40	0.10	0.000
Puerto Rico	-1.00	0.44	0.025
Eastern Virginia	0.13	0.39	0.743
Eastern New York	-2.88	1.10	0.009
Southern New York	-0.59	0.53	0.268
Maryland	-0.70	0.55	0.206
District of Columbia	-1.45	1.08	0.179
Central California	1.17	0.67	0.080
Eastern Michigan	-0.24	0.77	0.755

## Race and the Federal Death Penalty

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### Introduction

The purpose of this analysis is primarily to explore the role of race in the decision to seek or not to seek the death penalty for defendants charged with federal capital crimes. Chapter Two describes the data that were collected for this purpose. What follows is a brief report of the analyses undertaken. We begin with a short summary.

We started with the kind of model one finds in the analysis of state-level data. In particular, we tried to approximate the models used by Paternoster and Brame (2003) in their analysis of Maryland data. This is the most recent effort of which we are aware and one of the most competently done. The usual race-of-victim effects were found.

We undertook several statistical analyses of our federal database in which our race-of-victim variable was regressed on a large number of variables with which it might be related. Race-of-victim was substantially related to many other predictors. None especially stood out and there were not just a few key confounders. As a result, there was no obvious way to adjust for the confounding that would be simple and easily justified in subject-matter terms. The confounding was complicated.

We then turned to data-mining procedures. Using random forests, we regressed the USAO's seek recommendation on virtually all of the predictors in the data set. The fit and forecasting skill was good. Race or ethnicity contributed to forecasting skill at a level that required further study, but was also not one of the most powerful predictors.

To explore the role of race in a more familiar manner, we regressed the USAO seek recommendation on virtually all of the predictors in the data set except for the race variables. We used random forests and generated the predicted probability of a seek recommendation (although it is really not a probability in the usual sense). Then, using logistic regression, we regressed whether or not a defendant received a seek recommendation on this predicted probability and race of victim. The question was whether race added anything to the fit. Possible race-of-victim effects were found that were, at best, modest and could vary substantially depending on the covariate adjustments made and other features of the data analysis. Moreover, it was impossible to tell whether the association was solely with the race of the victim, the race of the defendant, or some combination of the two.

To explore this further, the index values of a seek recommendation produced by random forests were ordered from low to high and the data sets divided at the 33rd and 67th percentiles. Separate analyses were run for each third of the data. Possible race-of-victim effects were found only for the highest third.

We then considered that jurisdictional differences in the proclivity to seek the death penalty might play some role. For example, if jurisdictions with higher proportions of cases with white victims were more inclined to seek the death penalty, one might see race-of-victim effects overall even if, within such jurisdictions, seeking was race-neutral. Adding indicator variables for all of the federal districts (and various collapsed versions of them) to analyses of the full data set suggested that the Southern and Western districts were a bit more inclined to seek the death penalty than were districts in the Northeast, but no evidence of racial effects surfaced. When the indicators were added to the analysis in which the data were partitioned into thirds, the race-of-victim effects for the top third of the USAO cases were eliminated. But overall, the strategy of partitioning the data based on index values is not likely to produce stable and credible results with these data. The sample sizes become too small and subsetting on suspect index values is difficult to justify to begin with.

Finally, we found that, for the system as a whole, the USAO's seek recommendation and the AG's seek decision could be forecasted with considerable skill. In that sense, there is little evidence of capriciousness. However, even before looking at the data, it is clear that there are homicide cases for which prosecutor decisions could easily go either way. That is, were a second, independent seek decision made, it could well be different from the first decision. In an ideal world, such cases would be rare, with most cases being either clear death-penalty cases or clear incarceration cases. The empirical question, therefore, is what fraction of the federal cases falls in the middle.

It is not apparent how to determine with our data how common the more ambiguous cases are. The index values of a seek recommendation or decision are only as good as the model. And while the model forecasts prosecutor decisions with high accuracy, there is no way to determine if the full distribution of the index values is credible. If one takes the range of 0.4 to 0.6 as representing cases whose outcomes are difficult to anticipate, one can find between about 10 percent and 25 percent that qualify. But even if these figures are taken seriously, capriciousness of this form was not associated with the race of the defendant or victim.

In summary, it is difficult to determine definitively whether there is any meaningful association between race or ethnicity and prosecutor recommendations and decisions to seek or not to seek the death penalty in federal capital cases. On balance, there seems to be no evidence in these data of systematic racial effects that apply on the average to the full set of cases we studied.

However, past work on the role of race and our work assume a very simple mechanism by which racial effects are produced. Prosecutors are able to organize a heterogeneous collection of homicide cases into sets. The cases in each set are similarly situated with respect to factors that could affect the charging decision. The one exception is race. For each white-victim case, the prosecutor, in effect, adds a constant that increases the chances of a seek decision. For each black-defendant case, the prosecutor, in effect, subtracts a constant that decreases the chances

of a seek decision. In either instance, the constant is the same regardless of past decisions and regardless of other factors characterizing the case. For example, the same constant is added to white-victim cases no matter what the level of heinousness.

There can be modest variants on this basic formulation, sometimes involving two or more different constants depending on certain case features, but the formulation remains very simple. There typically is no allowance for different prosecutors to apply different constants. There is typically no allowance for a prosecutor's constant to change over time. There is typically no allowance for the role of case, defendant, and victim characteristics to weigh in differently depending on the victim's or defendant's race or even for their role to vary across different kinds of homicides.

There are good reasons for such omissions. The available data cannot be used to address complications of this sort with any degree of credibility. And even if the data could, there is little a priori theory that could guide in model development. The result would be unfettered data snooping, i.e., treating model building as if it were model testing.

One implication is that should race play a more complicated or subtle role, no racial effects will be found. For example, all other things being equal, if some prosecutors are more aggressive with black defendants and other prosecutors are more aggressive with white defendants, then race plays a role. But a data analysis is unlikely to find it. Likewise, if race plays a role but only in certain, uncommon situations, no race effects are likely to be found.

Another implication is that unless prosecutors use race in a very simple fashion, future work on the role of race in death-penalty cases will likely be fruitless. The only relevant data will be observational, and the chances of obtaining an appropriate and well-measured complement of predictors are slim. The prospects for substantially better theory are no better. Although similar problems exist for other research areas in criminology, they are a matter of degree. Also, a lot depends on how much data snooping occurs. For the study of racial effects in death-penalty cases, where there is usually a large number of variables but a relatively small number of cases, the conditions are ripe for snooping that could undermine the validity of the results obtained.

## Some Preliminaries

The variables used in the analyses that follow can be found in the technical notes for Chapter Five. Where possible, variable names used in the text and tables are labeled so that their content is reasonably clear.

We begin with a consideration of the kinds of analyses commonly found in state-level data. In particular, we build on the analysis done for the state of Maryland. We start with some cross-tabulations exploring the role of race and ethnicity in federal cases.

Table 5.1 shows the proportion of defendants with a USAO seek recommendation by defendant race. Table 5.2 shows that white and "other" defendants are at somewhat greater risk to a seek recommendation. A very similar pattern is found if the response variable is the AG's seek decision.

**Table 5.1**  
**Defendants, by Racial or Ethnic Group and USAO Seek Recommendation**

Recommendation	White		Black		Hispanic		Other		Total	
	N	%	N	%	N	%	N	%	N	%
Not seek	82	68	246	77	256	83	16	64	500	77
Seek	38	32	73	23	32	17	9	36	152	23
Total	120	18	319	49	188	29	25	4	652	100

**Table 5.2**  
**White and Nonwhite Defendants with a USAO Seek Recommendation**

Recommendation	Nonwhite		White		Total	
	N	%	N	%	N	%
Not seek	418	79	82	68	500	77
Seek	114	21	38	32	152	23
Total	532	82	120	18	652	100

Perhaps the most telling comparison is between whites and all others. Therefore, Table 5.2 addresses whether white defendants are more likely to have a USAO seek recommendation. About 32 percent of the white defendants receive this recommendation compared to 21 percent of the other defendants. The risk ratio is about 1.5 to 1. As before, using the AG variables effectively produces the same result.

Any analysis of race-of-victim effects must carefully consider what to do in multiple-victim cases when the victims are not of the same race or ethnicity. Prior research sometimes claims that the “worth” of the victim or sympathy the victim evokes is a key feature in seeking the death penalty. Very young or very old victims tend to be seen in a highly sympathetic light, and murders of white victims tend to be treated more harshly. We began with four race-of-victim indicator variables: white, black, Hispanic, and other. Then, for each homicide, an indicator variable was coded as “1” if any victim was of that background. In multiple-victim cases, therefore, the four indicator variables were not necessarily mutually exclusive.

Tables 5.3 through 5.6 show how a victim’s race is related to the likelihood of a USAO seek recommendation. The results are about the same when the AG’s decision is used as the response variable. If any victim is white, the percentage with seek roughly doubles from 18 percent to 34 percent. When any victim is black or Hispanic, the chances of a seek recommendation are reduced, although not dramatically. However, all of these tables need to be examined taking into account that when a given indicator is equal to “0,” all of the racial or ethnic groups not coded “1” are the comparison group. For example, black-victim cases are being compared to cases with white, Hispanic, and other racial categories. These might not be the most instructive comparisons.

In summary, there is clearly an association between the race of the defendant and the race of the victim in terms of the chance of a capital charge. But the precise nature of the association, let alone what it might mean, is not apparent. First, there are confounders whose

impacts need to be addressed. Second, because people tend to kill people like themselves, the race-of-defendant indicator variables are at least moderately correlated with the race-of-victim indicator variables. For example, the indicator for (any) white victim is correlated 0.63 with the indicator for white defendants. One result is that it can be difficult to disentangle their separate relationships with the response. Matters get even more difficult if interaction effects are considered. In other words, even if, in the end, there is some evidence that race matters, it may still be very unclear which race variables are responsible.

**Table 5.3**  
Number and Percentage of Defendants with a USAO Seek Recommendation, by Whether at Least One Victim Was White

Victim Race	USAO Seek Recommendation					
	Seek		Not Seek		Total	
	N	%	N	%	N	%
White victim	66	34	130	66	196	30
All other victims	82	18	372	82	454	70
Total	148	23	502	77	650	100

**Table 5.4**  
Number and Percentage of Defendants with a USAO Seek Recommendation, by Whether at Least One Victim Was Black

Victim Race	USAO Seek Recommendation					
	Seek		Not Seek		Total	
	N	%	N	%	N	%
Black victim	53	19	224	81	277	43
All other victims	95	26	278	74	373	57
Total	148	23	502	77	650	100

**Table 5.5**  
Number and Percentage of Defendants with a USAO Seek Recommendation, by Whether at Least One Victim Was Hispanic

Victim Race	USAO Seek Recommendation					
	Seek		Not Seek		Total	
	N	%	N	%	N	%
Hispanic victim	30	17	145	83	175	37
All other victims	118	25	357	75	475	73
Total	148	23	502	77	650	100

**Table 5.6**  
**Number and Percentage of Defendants with a USAO Seek Recommendation, by Whether at Least One Victim Was Not White, Black, or Hispanic**

Victim Race	USAO Seek Recommendation					
	Seek		Not Seek		Total	
	N	%	N	%	N	%
Other victim	9	33	18	67	27	4
All other victims	139	22	484	78	623	96
Total	148	23	502	77	650	100

## A Conventional Logistic Regression Analysis

Table 5.7 shows the results from a routine logistic regression using USAO seek recommendation as the response. As is the convention in this literature, we have undertaken the usual tests on each of the regression coefficients even though the justification for such tests is highly suspect. For now, two race variables are included: the indicator for white defendants and the indicator variable for white victims. In effect, we compare white-defendant cases to minority-defendant cases and white-victim cases to minority-victim cases.

The predictors are defined in Table 5.8.

We do not think much should be made of the reported  $p$ -values. They depend on seek recommendations and decisions that are determined by a binomial process, conditional on the included predictors entered as shown, and on the logistic functional form. It is very unlikely that seek recommendations and decisions are made in substantially this manner. If the model is wrong, conventional standard errors and  $p$ -values are wrong as well.

However, if one assumes here that the  $p$ -values are legitimate when the null hypothesis is rejected, the signs of the associations generally makes sense. By these criteria, there is a race-of-victim effect in the predicted direction, but no relationship between the defendant's race and a capital charge. The odds multiplier (i.e., the exponentiated regression coefficient) for a white victim is large at 2.39.

Table 5.9 cross-tabulates predictions from the logistic regression against whether a death sentence was actually sought. Index values greater than 0.50 are treated as a prediction of a capital charge. The model does a very good job of prediction when a capital charge is not recommended. In only about 5 percent of the cases is that prediction incorrect. The model does a respectable job of predicting when a capital charge is sought. In only about 30 percent of the cases is that prediction incorrect. It is important to be very clear, however, that these are not true forecasting results. The data used to build the model are being used to test the model. As a result, prediction performance is likely to be overestimated.

**Table 5.7**  
**A Logistic Regression Model for USAO Seek Recommendations Including Race of Defendant and Race of Victim**

Variable	Estimate	SE	z value	p
Intercept	-2.81965	0.83694	-3.369	0.000754
akconceal	0.76967	0.37262	2.066	0.038869
motiveelim	0.59577	0.33164	1.796	0.072424
skilljob	1.30280	0.43980	2.962	0.003054
pastabuse	-1.24947	0.63373	-1.972	0.048652
vsarms	1.24698	0.35921	3.471	0.000518
bkbeaten	0.56268	0.38756	1.452	0.146540
csgruesome	0.91546	0.45048	2.032	0.042137
csfamwit	0.67915	0.43108	1.575	0.115151
csothwit	0.95725	0.31983	2.993	0.002763
relation	-2.22592	0.79230	-2.809	0.004963
omfusaosum	-0.32066	0.15255	-2.102	0.035555
mfusaosum	-0.89004	0.19023	-4.679	2.89e-06
nsaggusaosum	0.69372	0.10331	6.715	1.88e-11
agghusaosum	0.69882	0.11113	6.288	3.21e-10
white	-0.01248	0.44439	-0.028	0.977595
vwhite	0.86970	0.38235	2.275	0.022928

NOTE: Akaike information criteria (AIC) = 392. N = 640.



**Table 5.8**  
**Predictor Variables**

Variable	Description
akconceal	Coded 1 if, after the killing event, D attempted to conceal the V's body; 0 if not
motiveelim	Coded 1 if D's reported motive against V was to eliminate the suspected informant or witness, 0 if not
skilljob	Coded 1 if person had held a skilled job, 0 if not
pastabuse	Coded 1 if V had reportedly abused, insulted, harassed, or antagonized D in the past; 0 if not
vsarms	Coded 1 if V's arm or hand was injured, 0 if not
bkbeaten	Coded 1 if, before killing, V was clubbed, beaten, or kicked; 0 if not
csgruesome	Coded 1 if gruesome crime scene (e.g., large amount of blood) was found, 0 if not
csfamwit	Coded 1 if V was killed in front of a family member who was not a perpetrator, 0 if not
csothwit	Coded 1 if V was killed in front of another person who was not a perpetrator or family member, 0 if not
relation	Coded 1 if there is any relationship between V and D, 0 if not
omfusaosum	Count of other mitigating factors
mfusaosum	Count of mitigating factors
nsaggusaosum	Count of nonstatutory aggravating factors
agghusaosum	Count of aggravating factors in a homicide offense
white	Coded 1 if D is white, 0 if not
vwhite	Coded 1 if any V is white, 0 if not

Based on the earlier analysis, a decision was made to try dropping race of defendant from the model. Table 5.10 shows the results. Little has changed, but now the  $p$ -value associated with race of victim is less than 0.01, and its odds multiplier is about 2.37. If race of defendant is used instead of race of victim, one cannot reject the null hypothesis of no relationship. But perhaps more to the point (because the tests are highly suspect) is that the odds multiplier is comparable in size to those for a number of indicator variables for important aggregators and mitigators. For example, the odds multiplier is larger than for whether after the killing the perpetrator tried to conceal the body, or for whether the crime scene was especially gruesome, or for whether the motive was to eliminate a witness or an informant.

**Table 5.9**  
**Classification Table for the Logistic Regression with Both Race Variables**

Actual Recommendation	Predicted Not Seek	Predicted Seek	Class Error
Not seek	468	25	0.051
Seek	44	103	0.299

**Table 5.10**  
**A Logistic Regression Model for a USAO Seek Recommendation Using Race of Victim Only**

Variable	Estimate	SE	z value	p
Intercept	-2.8199	0.8367	-3.370	0.000751
akconceal	0.7689	0.3715	2.070	0.038487
motiveelim	0.5953	0.3313	1.797	0.072317
skilljob	1.3017	0.4379	2.972	0.002957
pastabuse	-1.2492	0.6334	-1.972	0.048593
vsarms	1.2462	0.3580	3.481	0.000500
bkbeaten	0.5639	0.3852	1.464	0.143207
csgruesome	0.9155	0.4504	2.033	0.042086
csfamwit	0.6801	0.4297	1.583	0.113485
csothwit	0.9585	0.3165	3.029	0.002457
relation	-2.2264	0.7919	-2.811	0.004932
omfusaosum	-0.3204	0.1522	-2.105	0.035265
mfusaosum	-0.8904	0.1899	-4.688	2.76e-06
nsaggusaosum	0.6938	0.1033	6.719	1.83e-11
agghusaosum	0.6987	0.1110	6.296	3.06e-10
vwhite	0.8633	0.3069	2.813	0.004915

NOTES: AIC = 390. N = 640.

Table 5.11 shows the prediction classification table when race of defendant is dropped. It is literally unchanged. One loses no classification skill by not including the defendant's race.

A variety of routine regression diagnostics were applied to both models. No glaring problems were found and much the same results appeared when the AG seek decision was the response variable. However, subtle difficulties will usually be missed by these diagnostics, so that it is hard to arrive at any firm conclusions about how credible the model really is. Moreover, the predictors used and how they were entered do not begin to exhaust the set of equally plausible models that could have been employed.

Several other species of routine models were tried. The quality of the fit, the signs of the key predictors, and the role of race did not change meaningful amounts. Hence, with the range of model specifications usually employed, nothing new emerged about the role of race.

**Table 5.11**  
**Classification Table for Logistic Regression Model Including Only the Race of Victim**

Actual Recommendation	Predicted Not Seek	Predicted Seek	Class Error
Not seek	468	25	0.051
Seek	44	103	0.299

## Exploring What Race of Victim May Measure

At this point, the strongest and most robust racial predictor is whether or not any of the homicide victims were white. It is useful, therefore, to consider how white-victim cases may differ from other kinds of cases. In effect, we are hunting for potential confounders.

Table 5.12 shows the results of an exploratory stepwise logistic regression in which the white victim is the response variable and virtually all of the other predictors are potential explanatory variables. While the results are, no doubt, subject to substantial overfitting, it is apparent that whether or not there is a white victim is associated with a host of other predictors, sometimes very strongly.

Often these predictors go to the gravity of the crime. For example, when the victim was strangled or suffocated or when the perpetrator was much larger than the victim, the odds that the victim is white are increased by a factor of five or more. At the same time, there are associations that suggest possible mitigators, such as a history of alcohol problems or the absence of aggravators such as mutilation. Further complicating matters is that there are often substantial correlations among the predictors, so the covariance adjustments can lead to counterintuitive signs.

**Table 5.12**  
**Logistic Regression Model to Explore What Predictors Are Correlated with the White-Victim Predictor**

Variable	Estimate	SE	z value	p
Intercept	-3.5879	0.9296	-3.860	0.000114
white	5.5284	0.6819	8.107	5.17e-16
birthplace	1.8216	0.7822	2.329	0.019866
alcoholhistory	-3.4412	0.8592	-4.005	6.21e-05
vfage	1.1012	0.6370	1.729	0.083851
vfsizedif	7.6526	2.0616	3.712	0.000206
vfinformant	0.9621	0.5617	1.713	0.086752
vflaw	2.0946	1.0435	2.007	0.044706
vfdepend	-1.7357	0.7996	-2.171	0.029960
vworkcrim	-1.6334	0.4883	-3.345	0.000822

Table 5.12—Continued

Variable	Estimate	SE	z value	p
vlivchild	2.6735	0.8385	3.189	0.001430
vschest	-1.0538	0.5586	-1.886	0.059251
vstrunk	-2.1580	0.6018	-3.586	0.000336
stranger	2.3162	0.4729	4.898	9.67e-07
partner	2.3422	0.9132	2.565	0.010326
omfvfamagnusao	-2.8038	1.3601	-2.061	0.039257
omfyouthusao	-1.0852	0.5796	-1.872	0.061153
omfnousao	-7.5514	2.0385	-3.704	0.000212
omfvrespusao	-2.1555	1.0991	-1.961	0.049851
omfothusao	-2.4263	0.7338	-3.306	0.000946
nsaggengusao	3.6946	0.9252	3.993	6.51e-05
nsagglackusao	2.4466	0.8907	2.747	0.006016
aggduseminusao	3.4708	1.2230	2.838	0.004541
agghplanusao	-1.5159	0.5068	-2.991	0.002780
omfusao	2.9993	0.5812	5.160	2.46e-07
bkbbeaten	-2.0147	0.7112	-2.833	0.004612
bkbbound	-3.3933	1.1901	-2.851	0.004354
bksexassault	-5.1367	1.7014	-3.019	0.002535
csslow	1.7600	0.4610	3.818	0.000135
csnoclothes	2.4161	1.2950	1.866	0.062095
akmutilate	-5.0170	1.6598	-3.023	0.002506
akconceal	-4.6956	1.8974	-2.475	0.013333
akfire	-4.9637	1.6298	-3.046	0.002322
afterkill	8.0515	2.0513	3.925	8.67e-05
numbervictim	-0.4446	0.1985	-2.239	0.025136
autogun	-1.3597	0.4393	-3.095	0.001968
knife	2.4009	1.0319	2.327	0.019984
stranglerope	6.1132	1.9415	3.149	0.001640
suffocate	4.6208	1.2916	3.577	0.000347

NOTES: AIC = 310. N = 612. afterkill = coded 1 if the event happened after V was killed, 0 if not.

Absent social science theory indicating which confounders are relevant (and in what way), the major conclusion is that trying to construct a plausible and tractable regression model that

would properly adjust for important confounders is extremely daunting. There is a large number of confounders whose roles are difficult to anticipate. Moreover, omitted variables could cause the association between race and seek recommendations and decisions to be underestimated or overestimated. For example, if white-victim cases tend to have some important mitigating factors that are not included or are not well measured, the estimated association when the victim is white could be too small. Likewise, if white-victim cases tend to have some important aggravating factors that are not included or are not well measured, the estimated association when the victim is white could be too large.

Because of these complications and the almost total absence of a strong a priori rationale for any particular model, it would be very risky to handpick a small set of covariates and claim much from the results. Searching over a large range of models is also not likely to produce a convincing outcome because so much depends on the judgment and skill of the data analyst. The model selection process is, therefore, not replicable even if some account could be taken of the consequences of data snooping. As a result of these and other concerns, we decided to proceed in an explicitly exploratory manner that was at least systematic and replicable.

### How Robust Is the Race-of-Victim Effect?

For the goals of this study, it is not really necessary to construct a model of the seek process in which the relationships between all key factors related to seek recommendations and decisions are separately represented. For this study, these relationships are little more than a nuisance. We are concerned with the role of race.

To isolate the role of race, adjustments must be made for potential confounders. The challenge is to make these adjustments without having to commit to a particular conventional regression model. These considerations led us to use the random forests methodology summarized in Technical Note 5.Q and described in detail by Berk (2006).

We proceeded in the following manner.

1. We applied random forests to the data, with the USAO recommendation to seek a capital charge as the response and all predictors (except those that were effectively constants) but the racial or ethnic ones. This was a fitting exercise only. No attempt was being made to estimate the “true” functional relationship between the predictors and the response.
2. We constructed an index, which in random forests is how often a case is classified as “seek.”
3. We applied logistic regression with the recommendation to seek a capital charge as the response and the random forest index as the sole predictor. The equation took the usual form:

$$\log\left(\frac{p}{(1-p)}\right) = \beta_0 + \beta_1 x,$$

where  $x$  denotes the index value from random forests. The output of the logistic regression was saved.

4. We added race or ethnicity and applied logistic regression again.

$$\log\left(\frac{p}{(1-p)}\right) = \beta_0 + \beta_1 x + \beta_3 z,$$

where  $z$  denotes a race variable. And again, the output was saved.

5. We compared the output from the two logistic regressions to explore the role of race.
6. We then applied the same data analysis procedures to three mutually exclusive subsets of the data. Each subset was defined by its random forest index values (from step 2). One subset included cases with the lowest third of the index values, a second subset included cases with the middle third of the index values, and the last subset included cases with the highest third of the index values. The question addressed was whether there would be racial effects when the outcome of a case seemed to be highly uncertain.

The procedure depends on the rationale for the covariance adjustment using the random-forests fitted values. We were able to determine easily that random forests fit the data better, and forecasted better, than conventional logistic regression. So, fitting the data as well as we could with all of our viable predictors except race, we then explored whether any association between race and charging remained. In addition to entering the random-forest output directly as a control variable, we entered it as part of an analysis using the generalized-additive model, through the best-fitting functional form, as determined empirically. The results were essentially the same as for the conventional logistic regression. A key implication was that there was no serious functional form problem with how the random-forests output was used.

There are at least two caveats. First, a better fit does not necessarily lead to less bias. For example, if a predictor is included that does not belong, it may produce an association between seek decisions and race that is adjusted upward or downward inappropriately. Although we think that only highly plausible predictors were included, there are no guarantees. Second, random forests cannot compensate for predictors that are not there. Random forests can merely make good use of the predictors it has. For a fuller explanation of random forests, see Technical Note 5.Q and Berk (2006).

### Results for the Full Sample

For both the USAO recommendation and the AG decision, random forest was able to construct an effective set of index values. We achieved a good balance of forecasting errors for the true positives and true negatives using a 3-to-1 cost ratio of false negatives to false positives. Here, a false negative is failure to forecast a seek decision when there actually was one and a false positive is to forecast falsely a seek decision when there actually was not one. There is certainly nothing sacred about the 3-to-1 cost ratio, and our results varied a bit depending on the choice of relative costs. But the overall conclusions were materially the same. Moreover, ignor-

ing the issue of costs would imply accepting a cost ratio of 1 to 1, which is not necessarily an appropriate choice.

Tables 5.13 and 5.14 show the results for the AG and USAO response variables without any racial predictors. It is clear that we are able to forecast this with about an 85-percent accuracy rate. Note that these are true forecasts based on data not used in the fitting exercise. Classification skill is somewhat higher. Also note that the forecasting skill is effectively the same for both response variables.

The next issue is how to introduce race into the analysis. Before turning to the logistic regression, we examined the importance of race, both race of victim and race of defendant using procedures provided by the random-forest software. Basically, random forest defines importance as the decline in forecasting accuracy if a variable is not allowed to play any role. We sought to determine which race and ethnic variables made the greatest difference in forecasting skill.

With so many predictors, often highly correlated with one another, the decline in forecasting skill attributable to any single predictor is likely to be small. When any predictor is excluded, others are likely to pick up the slack. That is, with so many correlated predictors, no predictor by itself is likely to be terribly important for forecasting. To illustrate, for both the AG and USAO outcomes, the most important predictor was the number of aggravating factors. This is certainly no surprise given the centrality of aggravators built into the process by statute. Yet, in both cases, eliminating this variable's role increased the forecasting error by about 5 percent when a seek outcome was being forecast (e.g., forecasting skill declined from 87 percent correct to 84 percent correct). This is a substantial reduction, but this also the largest reduction observed.

**Table 5.13**  
**Random-Forest Results for an AG Seek Decision**

Actual Decision	Predicted Not Seek	Predicted Seek	Class Error
Not seek	385	66	0.15
Seek	19	124	0.13

NOTE: Cost ratio = 3:1.

**Table 5.14**  
**Random-Forest Results for a USAO Seek Recommendation**

Actual Recommendation	Predicted Not Seek	Predicted Seek	Class Error
Not seek	397	70	0.15
Seek	23	122	0.16

NOTE: Cost ratio = 3:1.

For the AG decision, the indicator for Hispanic defendants was the most important racial variable and the 14th most important predictor out of well over 200 predictors. For the USAO recommendation, the indicator for white victims was the most important racial variable and the 9th most important predictor out of well over the 200. In both cases, they contributed about 1 percent to forecasting accuracy. Moreover, if one added up the contributions of all the race-of-defendant and race-of-victim variables, their combined contribution to forecasting skill for either the AG decision or the USAO recommendation is approximately 2 percent. This is a relatively small value, especially when one considers that it includes all of the main and interaction effects for the four racial groups in the data, many of which were close to zero.

Moreover, the pattern of racial effects was not easily interpreted and because each variable's unique forecasting skill depends on the nature of its competitors, the calculated forecasting skill will vary with the predictors included. For a given predictor, if other variables tapping much the same thing are excluded from the analysis, that variable's forecasting skill will tend to be larger. In other words, if there were a sensible way to reduce (or increase) the list of predictors selectively, the results could well be different.

Nevertheless, from these results we defined two new race variables. For race of defendant, we coded an indicator equal to 1 if the defendant was either white or "other." Blacks and Hispanics were coded equal to 0. The same logic was applied to race of victim (still using the "any" definition). Tables 5.15 through 5.18 show the results when these racial variables were included in a logistic regression along with the index values from the earlier random-forests analysis.

**Table 5.15**  
**AG Decision, Add Race of Defendant**

Variable	Estimate	SE	z value	p
Intercept	-7.1823	0.6166	-11.649	<2e-16
AGDC.phats	11.8512	1.0664	11.113	<2e-16
Defendant white or Asian	0.5764	0.3424	1.683	0.0923

**Table 5.16**  
**AG Decision, Add Race of Victim**

Variable	Estimate	SE	z value	p
Intercept	-7.2261	0.6204	-11.648	<2e-16
AGDC.phats	11.8431	1.0691	11.078	<2e-16
Victim white or Asian	0.5195	0.3044	1.706	0.088



To summarize, the racial effects are, at best, modest over the full set of death-penalty cases. While the associated  $p$ -values should be taken with a very large grain of salt, they do not convey a clear conclusion one way or the other. Moreover, with different cost ratios used in constructing the random-forest index values, the  $p$ -values can be bounced around even more. In short, it is very difficult to make a convincing case that race is importantly related to seeking the death penalty or that it is not. A reasonable conclusion about the racial effects is “cannot tell.”

**Table 5.17**  
**USAO Recommendation, Add Race of Defendant**

Variable	Estimate	SE	z value	$p$
Intercept	-6.4945	0.5188	-12.519	<2e-16
usao.phats	10.6599	0.9102	11.712	<2e-16
Defendant white or Asian	0.3270	0.2961	1.104	0.269

**Table 5.18**  
**USAO Recommendation, Add Race of Victim**

Variable	Estimate	SE	z value	$p$
Intercept	-6.5488	0.5208	-12.573	<2e-16
usao.phats	10.5245	0.9077	11.595	<2e-16
Victim white or Asian	0.5293	0.2766	1.914	0.0556

### Results for the Data Subsets

For the majority of homicide cases, prosecutors are very unlikely to seek the death penalty. There is also a small subset of homicide cases in which prosecutors are almost certain to seek the death penalty. At either of these extremes, death-penalty researchers have argued that race plays no role. If there are racial effects, they are to be found for cases in the middle that could go either way (Tables 5.19 and 5.20).

Using the index values from random forests without race included as a predictor, we subset the data (separately for the USAO and AG response variables) into thirds: the cases with index values in the lowest third, middle third, and highest third. In some cases, the lowest-third subset had far too few cases with a capital charge to allow any analysis. But for all the rest, and for both seek response variables, we applied logistic regression with white victim or white defendant (coded as before) and the index values as explanatory variables. The one-third strategy was chosen to ensure that there were enough cases in each of the three data partitions.

The results are found in Tables 5.21 through 5.26. For the USAO response variable, only for the upper third of the index values, and then only for the race of the victim, do apparent racial effects appear. For the AG response variable, it is again for the upper third and the race of the victim where race plays a role (although a case might be made for race-of-defendant effects for the middle third).

Why the upper third? For these data, the upper third of the index values is dominated by values between about 0.60 and 0.75. These are high probabilities, by some distance from 1.0. What this seems to imply is that for there to be any evidence of racial effects whatsoever, there must be a substantial chance of a seek decision, but not a near certainty.

**Table 5.19**  
**USAO Logistic Regression for Middle Third with Race of Victim**

Variable	Estimate	SE	z value	p
Intercept	-4.79757	1.35340	-3.545	0.000393
usao.phats	7.12030	3.38418	2.104	0.035379
White victim	-0.02017	0.51276	-0.039	0.968622

**Table 5.20**  
**USAO Logistic Regression for Middle Third with Race of Defendant**

Variable	Estimate	SE	z value	p
Intercept	-4.9473	1.3575	-3.644	0.000268
usao.phats	7.2472	3.4108	2.125	0.033603
White defendant	0.3996	0.5187	0.770	0.441120

**Table 5.21**  
**USAO Logistic Regression for Upper Third with Race of Victim**

Variable	Estimate	SE	z value	<i>p</i>
Intercept	-8.4285	1.2500	-6.743	1.55e-11
Usao.phats	13.1895	1.9437	6.786	1.15e-11
White victim	0.7625	0.3543	2.152	0.0314

**Table 5.22**  
**USAO Logistic Regression for Upper Third with Race of Defendant**

Variable	Estimate	SE	z value	<i>p</i>
Intercept	-8.1977	1.2322	-6.653	2.88e-11
Usao.phats	13.2279	1.9433	6.807	9.97e-12
White defendant	0.3439	0.3685	0.933	0.351

**Table 5.23**  
**AG Logistic Regression for Middle Third with Race of Victim**

Variable	Estimate	SE	z value	<i>p</i>
Intercept	-7.1193	1.6434	-4.332	1.48e-05
AG.phats	12.3865	3.8658	3.204	0.00135
White victim	0.1303	0.5453	0.239	0.81119

**Table 5.24**  
**AG Logistic Regression for Middle Third with Race of Defendant**

Variable	Estimate	SE	z value	<i>p</i>
Intercept	-7.5704	1.7046	-4.441	8.95e-06
AG.phats	13.1388	3.9919	3.291	0.000997
White defendant	0.8712	0.6014	1.449	0.147414

**Table 5.25**  
**AG Logistic Regression for Upper Third with Race of Victim**

Variable	Estimate	SE	z value	<i>p</i>
Intercept	-7.6353	1.2954	-5.894	3.76e-09
AG.phats	12.3084	2.0684	5.951	2.67e-09
White victim	0.6898	0.3777	1.826	0.0679

**Table 5.26**  
**AG Logistic Regression for Upper Third with Race of Defendant**

Variable	Estimate	SE	z value	p
Intercept	-7.7862	1.2932	-6.021	1.73e-09
AG.phats	12.7512	2.0559	6.202	5.57e-10
White defendant	0.4632	0.4089	1.133	0.257

There is no compelling reason to work with equal thirds of the data, and it is very likely that by snooping around with other possible splits, larger or smaller associations between race and a capital charge could be found.

To explore the role of the victim's race further, we considered whether the evidence for race-of-victim effects (as thin as it was) might really be a composition effect. For example, if federal districts with a larger proportion of white-victim cases had a tendency to charge with a capital crime, one might see apparent race-of-victim effects even if within districts the seek decision was race-neutral.

Figures 5.1 and 5.2 show that there is substantial variation across districts in the likelihood of a seek decision and a modest tendency overall for districts with a larger proportion of white-victim cases to be more inclined to recommend seeking the death penalty. Where the bulk of the data are (60 percent or less of white-victim cases), the lowest fit indicates a generally positive relationship. However, it is difficult to anticipate what impact the association might have on the earlier race-of-victim effects because the number and mix of cases handled by a given district can vary enormously.

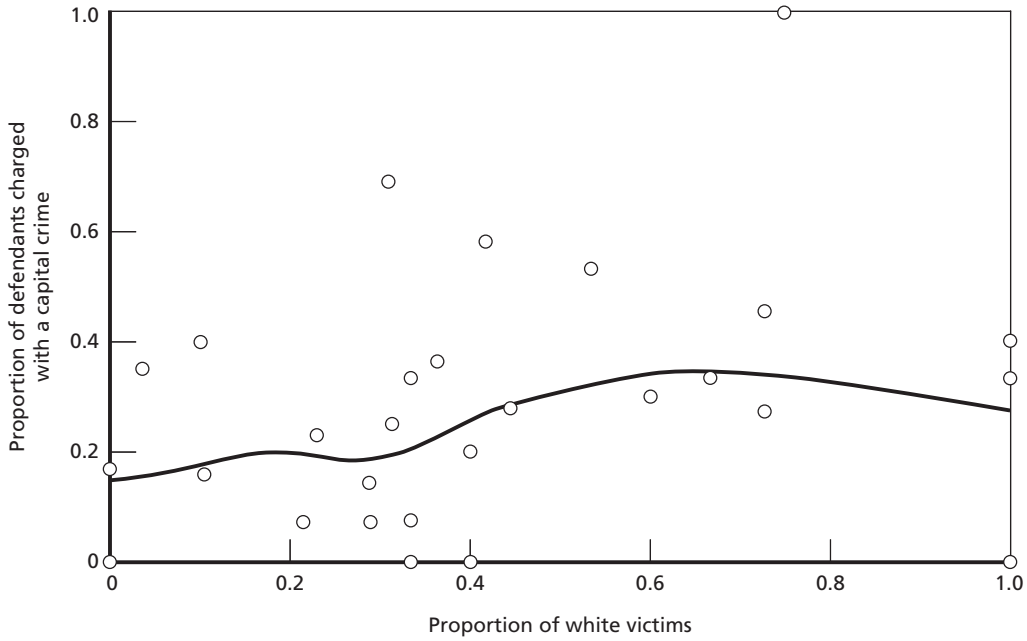
We collapsed the district indicator into six geographical regions (South, Northeast, Midwest, West, Puerto Rico, and Virgin Islands) and treated them as indicator variables. These were first added to analyses of the full data set. There was a slightly greater tendency for southern and western districts to seek the death penalty compared to those in the Northeast, other things equal. There was no evidence of racial effects once the district indicators were included.<sup>1</sup>

We repeated the analyses for the data that were broken up into thirds. For the highest third of the USAO cases, any suggestion of a race-of-victim effect was eliminated. However, for the highest third of the AG cases, modest race-of-defendant and race-of-victim effects surfaced. Both were new results, and given all of the data snooping that had preceded them, we are not inclined to take them seriously.

More generally, it would appear that partitioning the data to look at subsets of homicide cases is a very risky strategy. In addition to the obvious reduction in sample size, we were selecting on index values that are suspect to begin with. Finally, at some point, the complexity of the statistical calculations undertaken begin to undermine credibility by themselves. There are too many ways that undetected artifacts can creep in.

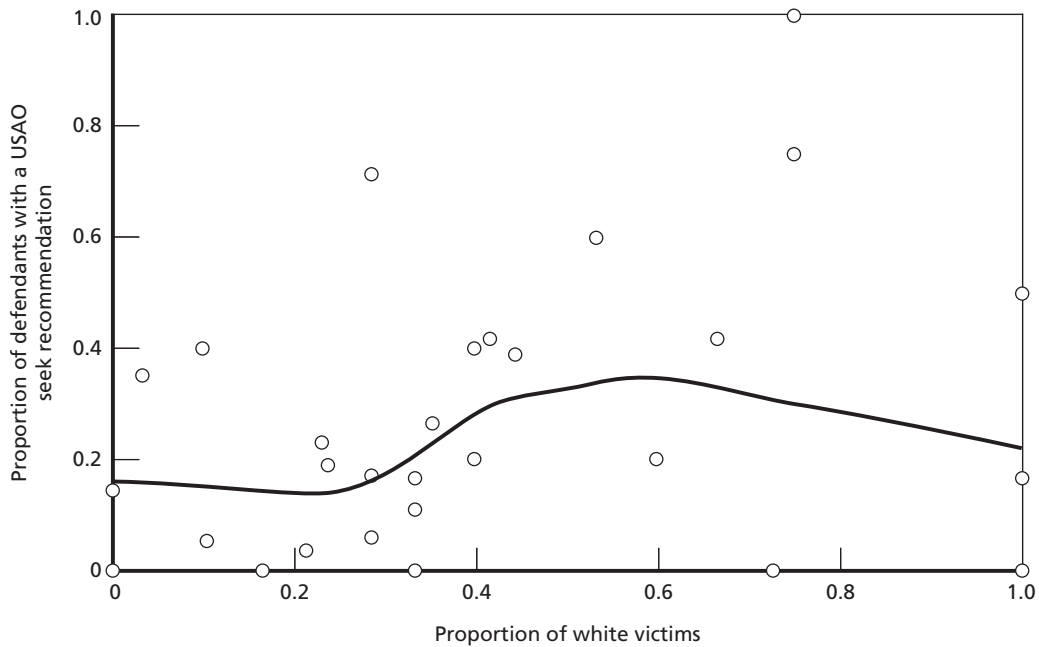
<sup>1</sup> Districts with fewer than five cases were collapsed into a single category.

**Figure 5.1**  
Seek Recommendations by the Race of Victim at the District Level for the AG



RAND TR389-5.1

**Figure 5.2**  
Seek Recommendations by the Race of Victim at the District Level for the USAO



RAND TR389-5.2

## Capriciousness

The preceding analysis has focused on the role of race and, therefore, the possible impact of illegitimate factors in the seek decisions. Another important issue is capriciousness. As explained elsewhere (Weiss, Berk, and Lee, 1996), capriciousness can be considered in two ways. The first way is when one cannot fit well the pattern of seek decisions. In effect, the outcome is not well characterized by the available explanatory variables. This is not the case with the federal analysis. Classification skill (and even forecasting skill) is very high. If you know the values of the explanatory variables used, you have a very good fix on the outcome.

The second source of possible capriciousness comes from the probabilities of a capital charge. Even if a model approximates those well, probabilities in the middle ranges imply that the capital-charge decision is little more than a coin flip. Were there to be very little capriciousness of this kind, the index probabilities would all have to be either near 0.00 or near 1.00. For both response variables, about 20 percent of the cases have index probabilities between 0.4 and 0.6 (at least according to our models). In other words, for a substantial fraction of the cases, there is near the maximum possible capriciousness. We stress, however, that such conclusions make very heavy demands on the model. One must not just forecast a binary outcome decision, but also accurately represent gradations between two outcomes. If a better set of predictors were available, the cases within the 0.40-to-0.60 band might well be moved substantially toward 0 or 1 (see Chapter Four for an example).

Finally, there is no evidence that race plays an important role in which cases are faced with significant capriciousness. The fraction of cases with index values between 0.40 and 0.60 with our models is about the same regardless of the race of the victim or race of the defendant.



## The Predictors Used

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The following sections present the predictors available for the analysis. We note binary variables that were more unbalanced than a 0.05 to 0.95 split. For our procedures, highly unbalanced predictors would lead to serious computational problems. We took the 0.05 to 0.95 splits as a reasonable threshold, and for much of what follows those predictors outside of this range were excluded.

### 5.A. Victim Characteristics

Table 5.A.1 describes the variables used to characterize white victims.



**Table 5.A.1**  
**Victim Characteristics**

Variable	Description
vgender	Coded 1 if first V is male, 0 if not
vfemale	Coded 1 if any V is female, 0 otherwise
vfage	Coded 1 if any V is under the age of 17 or over the age of 60
vrace	Coded 1 if V is white, 2 if V is black, 3 if V is Hispanic, or 0 if V is of another racial or ethnic makeup (Three percent were not applicable. Each V was coded separately.)
vwhite	Coded 1 if any victim is white, 0 if not
pastabuse	Coded 1 if V had reportedly abused, insulted, harassed, or antagonized D in the past; 0 if not
vfsizedif	Coded 1 if there is reportedly a gross difference in size or strength between any V and D, 0 if not
vfpreg	Coded 1 if V is reportedly pregnant, 0 if not
vfphysical	Coded 1 if any V reportedly has a physical handicap or is disabled, ill, or bedridden; 0 if not
vfmental	Coded 1 if any V reportedly has evidence of mental or emotional problems, 0 if not
vfdevel	Coded 1 if any V reportedly is developmentally delayed or has a low IQ or other cognitive or organic brain impairment, 0 if not
vfinformant	Coded 1 if any V reportedly is a police informant or witness, 0 if not
vfprison	Coded 1 if any V is reportedly a prison inmate, 0 if not
vfguard	Coded 1 if any V is reportedly an on-duty prison guard or correctional officer, 0 if not
vfaw	Coded 1 if any V is reportedly an on-duty law enforcement officer (e.g., police, sheriff, FBI, DEA), 0 if not
vfmilitary	Coded 1 if any V is reportedly a current or former member of the U.S. military, including the reserves; 0 if not
vfdepend	Coded 1 if any V reportedly is responsible for dependents, 0 if not
vfschool	Coded 1 if any V was reportedly attending school, including college, at the time of the offense; 0 if not
vfscitizen	Coded 1 if any V is reportedly a good citizen (e.g., family person, provider, hard working, law abiding), 0 if not
vworkcrim	Coded 1 if V reportedly worked in criminal activity, enterprise, or organization at the time of the offense; 0 if not
vlivinst	Coded 1 if V was living in an institution or prison at the time of the offense, 0 if not
vlivfriend	Coded 1 if V was living with friends, acquaintances, or roommates at the time of the offense; 0 if not
vlivrel	Coded 1 if V was living with parents, grandparents, or other relatives at the time of the offense; 0 if not
vlivchild	Coded 1 if V was living with his or her own or his or her spouse's or partner's children, 0 if not
vlivspouse	Coded 1 if V was living with his or her spouse or partner at the time of the offense, 0 if not
vlivalone	Coded 1 if V was living alone at the time of the offense, 0 if not

## 5.B. Defendant Background Information

Table 5.B.1 describes the variables used to characterize defendants' backgrounds.

**Table 5.B.1**  
**Defendant Background Variables**

Variable	Description
age	Coded 1 if D is 17 or younger or 60 or older, 0 if not
gender	Coded 1 if D is male, 0 if not
race	Coded 1 if D is white, 2 if D is black, 3 if D is Hispanic, 0 if D is other. Six were not applicable
white	Coded 1 if D is white, 0 if not
education	Coded 1 if D completed high school, college, graduate school, or professional school; 2 if D dropped out of elementary or high school; or 3 if unknown
marital	Coded 1 if D is married or living with his or her partner; 2 if D is divorced, separated, widowed, or single; 3 if unknown
birthplace	Coded 1 if D is U.S.-born, 2 if not
employhistory	Coded 1 if D never worked, 2 if D works unskilled jobs, 3 if D works skilled jobs
working	Coded 1 if D is working, 0 if not
alcoholhistory	Coded 1 if D has a history of drinking, 0 if not
drugshistory	Coded 1 if D has a history of drug use, 0 if not

## 5.C. Mitigating Factors

Tables 5.C.1 and 5.C.2 describe other mitigating factors.

**Table 5.C.1**  
**Mitigating Factors**

Variable	Description
mfvconsensusao	Coded 1 if victim consented, 0 if not
mfdistusao	Coded 1 if there was a disturbance, 0 if not
mfnpriorusao	Coded 1 if D has no prior criminal record, otherwise 0
mfeqdefusao	Coded 1 if Ds are equally culpable, 0 if not
mfminpartusao	Coded 1 if D had minor participation, 0 if not
mfduressusao	Coded 1 if D was under duress (more than stress), 0 if not
mfimpcapusao	Coded 1 if D had impaired capacity, 0 if not

**Table 5.C.2**  
**Other Mitigating Factors**

Variable	Description
omfprovokeusao	Coded 1 if V provoked D, 0 if not
omfposinstusao	Coded 1 if D has made a positive institutional adjustment, 0 if not
omfvfamagnusao	Coded 1 if V's family is against the death penalty, 0 if not
omfyouthusao	Coded 1 if D is young, 0 if not
omfnousao	Coded 1 if D is not dangerous or violent and has no record, 0 if not
omfpeopusao	Coded 1 if D has dependents or is a role model or if the death penalty would have an effect on his or her family, 0 if not
omfdeprusao	Coded 1 if D has a deprived background, dysfunctional family, prior victimization, or an adverse environment, now or in the past; 0 if not
omfpersusao	Coded 1 if D has other mitigating personal characteristics, such as being young, old, ill, or disabled; 0 if not
omfstblusao	Coded 1 if D is stable, reformed, and employed and has a good record; 0 if not
omfremrsusao	Coded 1 if D shows remorse, 0 if not
omfaddusao	Coded 1 if D has addiction, mental illness, retardation, or other mitigating mental status; 0 if not
omfcoopusao	Coded 1 if D cooperated, confessed, or surrendered; 0 if not
omfledusao	Coded 1 if D is a follower led by others, 0 if not
omfvrespusao	Coded 1 if V was responsible, the incident was V's fault, V had poor character, or the incident was another's fault; 0 if not
omfweakusao	Coded 1 if the case was weak, 0 if not
omfothusao	Coded 1 if there were other uncodable mitigating factors, 0 if not

## 5.D. Factors That Can Be Classified as Mitigating Factors

Table 5.D.1 describes variables that characterize factors that can be classified as mitigating factors.

**Table 5.D.1**  
**Factors That Can Be Classified as Mitigating Factors**

Variable	Description
retarded	Coded 1 if D has a low IQ, 0 if not
mentalhistory	Coded 1 if D is mentally ill, 0 if not
abusehistory	Coded 1 if D was abused as a child, 0 if not
headinjury	Coded 1 if D has a serious head injury, 0 if not

## 5.E. Statutory Aggravating Factors

Table 5.E.1 describes variables that characterize statutory aggravating factors.

**Table 5.E.1**  
**Statutory Aggravating Factors**

Variable	Description
nsaggcruelchilusao	Coded 1 if D was feloniously cruel to children, 0 if not
nsaggmurdtwousao	Coded 1 if D killed two people, 0 if not
nsaggvicimpactusao	Coded 1 if there is victim-impact evidence, 0 if not
nsaggvilenessusao	Coded 1 if crime was vile, 0 if not
nsaggfutdangusao	Coded 1 if D poses future danger, 0 if not
nsaggcontempusao	Coded 1 if D has contemporaneous convictions, 0 if not
nsaggobstrusao	Coded 1 if D obstructed justice, 0 if not
nsaggaddusao	Coded 1 if D participated in additional uncharged murders, 0 if not
nsaggrecusao	Coded 1 if D has a record, other convictions, probation, parole, another sentence, or low likelihood of rehabilitation
nsaggengusao	Coded 1 if D engaged in ongoing criminal behavior or multiple offenses, 0 if not
nsaggvIntusao	Coded 1 if D is a violent person or exhibits violent behavior, 0 if not
nsagglackusao	Coded 1 if D lacked remorse, 0 if not
nsaggothusao	Coded 1 if other aggravating factors were present, 0 if not

## 5.F. Aggravating Factors Related to Drug Offenses

Table 5.F.1 describes variables that characterize drug offense–related aggravating factors.

**Table 5.F.1**  
**Aggravating Factors Related to Drug Offenses**

Variable	Description
aggdlethalusao	Coded 1 if D used a lethal adulterant, 0 if not
aggduseminusao	Coded 1 if D used minors in drug trafficking, 0 if not
aggdschusao	Coded 1 if D distributed drugs near schools, 0 if not
aggdminorusao	Coded 1 if D distributed drugs to persons under 21 years of age, 0 if not
aggdfireusao	Coded 1 if D used a firearm in the offense or furtherance of a CCE
aggdfeldrgusao	Coded 1 if D has a previous serious felony drug conviction, 0 if not
aggdprevothusao	Coded 1 if D has previously been convicted of other serious offenses, 0 if not
aggdprevofusao	Coded 1 if D has previously been convicted of an offense for which a sentence of death or life imprisonment was authorized, 0 if not

## 5.G. Aggravating Factors Related to Homicide

Table 5.G.1 describes variables that characterize homicide-related aggravating factors.

**Table 5.G.1**  
**Aggravating Factors Related to Homicide**

Variable	Description
agghmultusao	Coded 1 if D committed or attempted multiple killings, 0 if not
agghprvsexusao	Coded 1 if D has previously been convicted of sexual assault or child molestation, 0 if not
agghpubusao	Coded 1 if D killed a high public official, 0 if not
agghcceusao	Coded 1 if D engaged in a CCE involving distribution to minors, 0 if not
agghfeddrugusao	Coded 1 if D has previously been convicted of a serious federal drug offense, 0 if not
agghvulusao	Coded 1 if the victim is vulnerable, 0 if not
agghfeldrgusao	Coded 1 if D has previously been convicted of two felony drug offenses, 0 if not
agghplanusao	Coded 1 if D exercised substantial planning and premeditation, 0 if not
agghpecusao	Coded 1 if D committed homicide for pecuniary gain, 0 if not
agghpayusao	Coded 1 if D procured homicide by payment, 0 if not
agghcruelusao	Coded 1 if D committed homicide in a heinous, cruel, or depraved manner; 0 if not
agghgravesusao	Coded 1 if there was a grave risk of death to additional persons, 0 if not
agghprevofusao	Coded 1 if D was previously convicted of other serious offenses, 0 if not
agghprevdthusao	Coded 1 if D was previously convicted of offense for which a sentence of death or life imprisonment was authorized, 0 if not
agghprevfireusao	Coded 1 if D was previously convicted of a violent felony involving a firearm, 0 if not
agghduringusao	Coded 1 if D caused death during commission of another crime, 0 if not

## 5.H. Victim's Injuries

Table 5.H.1 describes variables that characterize victims' injuries.

**Table 5.H.1**  
**Victim Injuries**

<b>Variable</b>	<b>Description</b>
vshead	Coded 1 if V's head was injured, 0 if not
vschest	Coded 1 if V's chest was injured, 0 if not
vsstomach	Coded 1 if V's stomach was injured, 0 if not
vsback	Coded 1 if V's back was injured, 0 if not
vstrunk	Coded 1 if V's trunk was injured, 0 if not
vslegs	Coded 1 if V's leg was injured, 0 if not
vsface	Coded 1 if V's face was injured, 0 if not
vsarms	Coded 1 if V's arm or hand was injured, 0 if not
vsneck	Coded 1 if V's neck was injured, 0 if not

## 5.I. Events That Happened Before Killing

Table 5.I.1 describes variables that characterize events that happen before a killing.

**Table 5.I.1**  
**Events That Happen Before a Killing**

Variable	Description
bfwait	Coded 1 if D lay in wait before killing V, 0 if not
bkburn	Coded 1 if V was burned before being killed, 0 if not
bkkidnap	Coded 1 if V was kidnapped before being killed, 0 if not
bkplead	Coded 1 if V pled for life before being killed, 0 if not
bktorture	Coded 1 if V was tortured before being killed, 0 if not
bkbound	Coded 1 if V was bound or gagged before being killed, 0 if not
bkstarted	Coded 1 if V started incident with D (e.g., shot first or attacked D) before being killed, 0 if not
bkinf	Coded 1 if V was under the influence of drugs or alcohol at the time of the offense, before being killed; 0 if not
bkcoop	Coded 1 if V cooperated with D but was killed anyway, 0 if not
bkfear	Coded 1 if V knew or feared he or she was going to be killed, 0 if not
bkhostage	Coded 1 if V was held hostage before being killed, 0 if not
bkbeaten	Coded 1 if V was clubbed, beaten, or kicked before being killed; 0 if not



## 5.J. Events at Crime Scene

Table 5.J.1 describes variables that characterize events at a crime scene.

**Table 5.J.1**  
**Events at a Crime Scene**

Variable	Description
csstruggle	Coded 1 if V struggled at the crime scene, 0 if not
csgruesome	Coded 1 if gruesome crime scene (e.g., large amount of blood) was found, 0 if not
csnoclothes	Coded 1 if V was not clothed when found at the crime scene, 0 if clothed
csfamwit	Coded 1 if this V was killed in front of a family member who was not a perpetrator, 0 if not
csothwit	Coded 1 if this V was killed in front of another person who was not a perpetrator or family member, 0 if not

## 5.K. Events After the Killing

Table 5.K.1 describes variables that characterize events after the killing.

**Table 5.K.1**  
**Post-Killing Events**

Variable	Description
assexassault	Coded 1 if V was sexually assaulted after being killed, 0 if not
asmutilate	Coded 1 if V was mutilated after being killed, 0 if not
akconceal	Coded 1 if D attempted to conceal V's body after the killing, 0 if not
akfire	Coded 1 if V was set on fire after being killed, 0 if not

## 5.L. Indicators or Counts of Events

Table 5.L.1 describes variables that characterize indicators or counts of events.

**Table 5.L.1**  
**Indicators or Counts of Events**

Variable	Description
beforekill	Coded 1 if the event happened before V was killed, 0 if not
crimescene	Coded 1 if the event happened at the crime scene, 0 if not
afterkill	Coded 1 if the event happened after V was killed, 0 if not
beforekillsum	Count of the events that happened before V was killed
crimescenesum	Count of the events that happened at the crime scene
afterkillsum	Count of the events that happened after V was killed
multivictim	Coded 1 if there were multiple victims, 0 if not
numbervictim	Number of victims

## 5.M. Details on the Weapon

Table 5.M.1 describes variables that characterize details about weapons used in the crime.

**Table 5.M.1**  
**Weapon Details**

Variable	Description
autogun	Coded 1 if D used an automatic weapon, 0 if not
handgun	Coded 1 if D used a handgun, 0 if not
rifle	Coded 1 if D used a rifle, 0 if not
shotgun	Coded 1 if D used a shotgun, 0 if not
sawed	Coded 1 if D used a sawed-off shotgun, 0 if not
othergun	Coded 1 if D used another kind of gun, 0 if not
knife	Coded 1 if D used a knife, 0 if not
otherblade	Coded 1 if D used another kind of sharp object, 0 if not
blunt	Coded 1 if D used a blunt object, 0 if not
beaten	Coded 1 if V was beaten to death, 0 if not
stranglehand	Coded 1 if V was strangled by hand, 0 if not
stranglerope	Coded 1 if V was strangled with a rope, 0 if not
suffocate	Coded 1 if V suffocated, 0 if not
drown	Coded 1 if V drowned, 0 if not
bomb	Coded 1 if V was bombed, 0 if not
burn	Coded 1 if V was burned (as the weapon), 0 if not
othergunspec	Coded 1 if another or unknown weapon was used, 0 if not

## 5.N. Details on the Offense Location

Table 5.N.1 describes variables that characterize the offense location.

**Table 5.N.1**  
**Offense Location Details**

Variable	Description
residence	Coded 1 if the offense occurred at V's residence, 0 if not
vehicle	Coded 1 if the offense occurred in D's or V's vehicle
employment place (V)	Coded 1 if the offense occurred in V's place of business or employment
employment place (D)	Coded 1 if the offense occurred in D's place of business or employment
store	Coded 1 if the offense occurred in a retail store, 0 if not
bank	Coded 1 if the offense occurred in a bank, 0 if not
prison	Coded 1 if the offense occurred in a prison, 0 if not
urban	Coded 1 if the offense occurred in an urban or suburban street, 0 if not
allurban	Coded 1 if the offense occurred in an urban or suburban park or schoolyard, 0 if not
other	Coded 1 if the offense occurred in an urban or suburban outdoor space, 0 if not
federal land	Coded 1 if the offense occurred in a national forest, park, or military base; 0 if not

## 5.O. Relationship with the Victim

Table 5.O.1 describes the variables that characterize defendants' relationships with their victims.

**Table 5.O.1**  
**Relationship with the Victim**

Variable	Description
stranger	Coded 1 if V was a stranger to D, 0 if not
friend	Coded 1 if V was D's friend, 0 if not
partner	Coded 1 if V was D's partner, 0 if not
parent	Coded 1 if V was D's parent, 0 if not
sexrival	Coded 1 if V was D's sexual rival, 0 if not
rival	Coded 1 if V was D's rival, 0 if not
otherrelation	Coded 1 if there was any kind of relationship between V and D, 0 if not
family	Coded 1 if V and D were family, 0 if not

## 5.P. Strength of the Prosecutor’s Case

Table 5.P.1 describes the variables contributing to the strength of the prosecutor’s case.

**Table 5.P.1**  
**Contributors to the Prosecutor’s Case**

Variable	Description
evidence	Coded 1 if there was reported evidence pertaining to D in the offense against V in an eyewitness (not coperpetrator) account, 0 if not
motiveelim	Coded 1 if D’s reported motive against V was to eliminate the suspected informant or witness, 0 if not

## 5.Q. Brief Description of the Random-Forests Algorithm

1. Form a model-building sample for the first tree by taking a random sample of size N with replacement from the data. Because some defendants will be chosen more than once, this will result in about two-thirds of the defendants being selected. Put all the remaining defendants into a cross-validation sample for this first tree.
2. Select a random sample without replacement of usually less than five possible predictors of the seek decision (i.e., other than USAO district or defendant or victim race).
3. Use the classification and regression trees (CART) algorithm to identify which of the selected predictors from Step 2 provides the best separation between the defendants who did and did not have a seek decision. For example, whether the defendant killed multiple victims might be the characteristic (among the three considered) that best distinguishes between the defendants who did and did not have a seek decision. Defendants with multiple victims form one group while those with only a single victim form the other group. The groups are called “nodes” for growing more “branches” on the tree.
4. Randomly select another very small set of predictors without replacement and then use CART to find the variable in this set that best distinguishes between the defendants who did and did not have a seek decision for each of the first two nodes. For example, the CART algorithm might split the node that contained defendants with multiple victims on the basis of whether those victims were or were not the defendant’s crime partners, and it might split the node for single-victim cases on the basis of whether or not there also was a sexual assault. A different sample of predictors is selected for each node. The process of forming and splitting nodes to build more branches continues inductively and iteratively until every final node has either all defendants with a seek decision or all without a seek decision, or is too small to split further. A given case characteristic in the database can be used once, several times, or not at all in building the tree.
5. Apply the fully developed model from Step 4 to all of the defendants in the cross-validation sample for the first tree. Assign a score of “1” to all the defendants in this

sample who fall in a final node where 51 percent or more of the defendants in the model-building sample had a seek decision. All other defendants in the cross-validation sample for this tree are assigned a “0” score.

6. Repeat Steps 1 through 5 about 500 times. A given defendant will be in the model-building sample for about two-thirds of these 500 trees and in the cross-validation sample for the remaining third.
7. Using only the trees in which the defendant was in the cross-validation sample, compute the proportion of trees in which the defendant received a score of “1” (as per the rule described in Step 4). For example, if a defendant is in 200 cross-validation samples and receives a score of “1” in 70 of these samples, then the defendant’s proportion is  $70 / 200 = 0.35$ . Defendants with proportions that are greater than 0.50 are classified as being predicted to have a seek decision. The defendant’s proportion also is used in logistical regression analyses.



## Charging Decisions in Death-Eligible Federal Cases (1995–2000): Arbitrariness, Capriciousness, and Regional Variation

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*Matthias Schonlau*

### Introduction

The analyses described below explored three questions:

1. Arbitrariness: Does race affect the recommendation to seek the death penalty?
2. Capriciousness: Is the seek recommendation applied randomly?
3. Regional variation: Is there a racial bias in some geographical regions?

The first question is causal; the second is an exercise in prediction. For capriciousness, predictive accuracy should be better than predicting the modal recommendation of “not seek.” For arbitrariness, a large number of variables (105 covariates for 652 defendants) presents the danger that a possible racial bias is obscured by a combination of other variables that appear to provide an alternative explanation to racial bias.

As discussed in Chapter One, when a crime has been committed that is potentially eligible for the federal death penalty, the case is reviewed by three sets of decisionmakers to determine whether or not that penalty will be sought. The first review is made by the USAO that is prosecuting the case. There are 94 USAOs nationwide. The AGRC at the Department of Justice conducts the second review. Finally, the case is sent to the AG for a final decision as to whether or not the death penalty will be sought. As noted in Chapter Three, there are 54 more defendants with a USAO recommendation than with an AG decision.

In our data set, the USAO recommended seeking the death penalty for 23.1 percent of the defendants and the AG requested it for 24.8 percent of the defendants she reviewed. The USAO’s recommendation agreed with the AG’s decision for 91.0 percent of the defendants they reviewed in common. For 5.2 percent of the defendants, the AG made a seek decision but the USAO recommended not to seek. The opposite disagreement occurred for 3.9 percent of the defendants they both reviewed. The analyses below model each of these decisions.



## Data Preparation

We decided to use the defendant as the unit of analysis, i.e., each observation represents one defendant.<sup>1</sup> Consequently, variables related to individual victims (such as their race) had to be aggregated in multiple-victim cases. We used indicator variables that flagged whether at least one of the defendant's victims had the attribute in question. For example, the indicator for whether there was a white victim means that at least one of the victims was white. Most of the indicator variables report presence or absence of a condition related to the crime. If the condition was not reported, it was initially coded as missing. We then coded it as "absent" because we believe that in this context the condition was not reported because it was not present.

We excluded five defendants who were charged with espionage because there were no victims. The four terrorism cases (Nairobi, Dar es Salaam, the first World Trade Center bombing, and Oklahoma City) involved a total of six defendants and remain in the data. The first World Trade Center and Oklahoma City bombings are coded as having at least one white victim; the others were coded as not having white victims.<sup>2</sup>

Some indicator variables were almost always zero, which is not useful for analysis because it can lead to poor estimates. We excluded variables that had ten or fewer nonzero values. Variables that had more than 30 percent missing values were also excluded, including marital status of the defendant, education of the defendant, and whether or not the defendant was employed. We believe that missing values for indicator variables reflect the absence of the indicator rather than a lack of information. Therefore, missing values for indicator variables were set to zero. Some count variables (mostly various counts of number of aggravating and mitigating factors) had missing values and were also set to zero. After applying these rules, the only remaining variable with missing values was defendant age, which we imputed using a simple hotdeck procedure (Brick and Kalton, 1996).

We computed a number of derived variables, most of them count variables. These include the number of aggravating factors and the number of mitigating factors. We explored the use of both of these aggregate variables as well as the individual variables that formed them. We found that the counts were far more predictive than the individual variables.

As discussed in Chapter Two, the USAO recommendation was missing for 10 defendants and the AG decision was missing for 62 defendants. Observations with missing values for the outcome variables were excluded. Thus, the USAO analyses include 652 defendants and the AG analyses contain 600 defendants.

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<sup>1</sup> Other units we considered but ultimately rejected were the case and the victim-defendant pair.

<sup>2</sup> We coded one case as nonwhite-victim because over 95 percent of the hundreds who were killed or injured were not white.

## Method

### Arbitrariness

**Causal inference in observational studies.** Propensity scoring has been proposed to explore a causal relationship in observational studies (Hirano, Imbens, and Ridder, 2000; Rosenbaum, 2002; Rosenbaum and Rubin, 1983). This framework may be useful for this analysis because whether or not a defendant kills a white victim is observed rather than experimentally controlled. Other possible approaches include multivariate regression and variations on multivariate regression (including nonparametric methods and CART). Multivariate regression accounts for the presence of other covariates but does not explicitly ensure the comparability of the two groups of defendants.

### Propensity Scoring: A Methodology with the Explicit Goal of “Comparing Apples to Apples”

In this section, we summarize the logic, as originally expressed by Rosenbaum and Rubin (1983), for propensity scoring. For readers who find the original logic difficult to follow, we offer this simple heuristic for the form of propensity scoring used in this analysis: Reweight the data so that the cases with nonwhite victims and the cases with white victims look as alike as possible on all of the covariates. In effect, make the data look as much like a randomized experiment as possible given the available data.

For each defendant, there are two potential outcomes: (1) the death penalty recommendation given that a white victim was killed and (2) the recommendation given that no white victim was killed. For each defendant, we observe only one of these two outcomes. The unobserved scenario is called a counterfactual. For example, if one of Defendant A’s victims was white, the counterfactual is Defendant A having committed the same crime without any white victims. Because only one of two potential outcomes is observed for each defendant, the other outcome must be imputed. In Defendant A’s case, the recommendation under the hypothetical circumstance that no victim was white has to be imputed.

One way to impute the missing potential outcome is to find a donor. A donor is another defendant with identical aggravating, mitigating, and other factors. The recommendation for the donor defendant becomes the imputed value for the counterfactual. In Defendant A’s case, one looks for a defendant without a white victim who otherwise had the same aggravating, mitigating, and other factors.

Rather than looking for a defendant who has identical aggravating, mitigating, and other factors, it is sufficient to look for a defendant who has the same probability as Defendant A to have a white victim *given the observed factors*. The probability is estimated via logistic regression, where the presence of a white defendant is used as the response variable. More generally, a mathematical theorem shows that choosing a donor with the same covariate pattern is equivalent to choosing a donor with the same propensity score. A propensity score is the conditional expectation that a defendant had a white victim given all other covariates. The propensity score is estimated via logistic regression.

The goal of propensity scoring is to achieve balance on observed covariates. Balance means that when comparing two groups of defendants—one with white victims and one without—

these two groups should not differ significantly with respect to aggravating, mitigating, or other factors. The essence of the methodology boils down to the simple phrase “comparing apples to apples.”

Rather than matching every defendant with a defendant with the same propensity score, it is also possible to form strata of defendants with similar propensity scores or to use inverse propensity scores as weights.

### **Advantages, Limitations, and Potential Objections to Propensity Scoring**

One advantage of propensity scoring is that there is less risk of overfitting. The goal in propensity scoring is to balance covariates, or to make cases similar, rather than finding the “right” model. For example, a model is balanced with respect to the number of aggravators when defendants *with* white victims have roughly the same number of aggravators as defendants *without* white victims. Compared to traditional regression-based methods, there is less chance of overfitting or tinkering with the selection of covariates in ways that might bias the results.

For a situation in which the counterfactual could never have happened, some statisticians object to the use of propensity scoring on theoretical grounds. If Defendant A killed a white victim, we can imagine the counterfactual outcome: All of the victims were nonwhite. However, if instead of the victim’s race, the defendant’s race were of interest, the counterfactual is harder to imagine. If Defendant A were a white defendant, the counterfactual would be that Defendant A is a nonwhite defendant. The difficulty lies in the fact that Defendant A did not choose to be white; he (or she) was born white. Because of that, some argue, the counterfactual does not exist and one should not speculate about what would have happened if this defendant were nonwhite. (Also see Chapter Five in Blank, Dabady, and Citro, 2004, for another discussion of this topic.)

Here we take the view that ensuring that observations are balanced with respect to covariates is a worthwhile goal even without the theory of potential outcomes. The fact that the defendant’s race is immutable does not detract from the desire to compare apples to apples.

A second potential objection to propensity scoring is that one cannot adjust for unobserved covariates. This is an inherent problem with observational studies and is not unique to the propensity-scoring methodology. The common counterargument is that one must come up with a credible story regarding what kind of variable is unobserved, and how it might change the outcome in a way that is not already accounted for by observed variables that are correlated with the unobserved variable. Nonetheless, we should be clear that important unobserved covariates are a threat to the validity of the analysis presented in this chapter and that propensity scoring does not deal with them. It is encouraging that, in the present study, the number of observed covariates is very large, but the potential for important unmeasured covariates remains.

### **Example: Stratifying on a Single Covariate**

We illustrate how propensity scoring works using one such covariate: the number of aggravating factors. Among defendants with at least one white victim, the USAO recommends seeking the death penalty 34 percent of the time. Among those with no white victims, a seek recommendation occurs only 19 percent of the time. Thus, it would appear that the differential effect

due to the presence of a white victim is 15 percent. However, defendants with white victims had an average of 4.15 aggravating factors, whereas those without white victims had on average 3.65 aggravating factors. Therefore, the differential effect due to “white victim” must be smaller.

Table 6.1 shows the percentage of USAO recommendations to seek the death penalty by the number of aggravating factors and by the presence of a white victim (yes/no). Cells with seven or more aggravating factors were combined. Table 6.1 shows that the differential effect due to a white victim is greater when the number of aggravating factors is at least four. The average difference is only 10 percent (in this example, the unweighted and population-weighted averages happen to round to the same number). One-third of the initial 15-percent differential can be attributed to the larger number of aggravating factors among defendants with white victims. This example is only an illustration because other variables also need to be taken into consideration.

**Table 6.1**  
**Percentage of USAO Recommendations to Seek the Death Penalty by Number of Aggravating Factors and Presence of a White Victim**

Number of Aggravating Factors	Defendants with Seek Recommendations			Percent of Defendants
	No White Victim	At Least One White Victim	Difference	
0	0	0	0	7
1	0	4	4	13
2	1	8	7	14
3	9	10	1	18
4	10	39	29	12
5	34	47	13	12
6	33	50	17	9
≥7	67	79	12	15
Weighted Average Difference			10	100

### Specifics of Our Approach

In our analysis, the propensity scores were constructed using logistic regression. We also tried a nonparametric method, boosted regression (Hastie, Tibshirani, and Friedman, 2001), but found that, on average, logistic regression provided a better balance of the covariates.

We ensured that defendants with at least one white victim had a number of aggravating factors that were not significantly different from those of defendants without white victims.

The inverse propensity scores were then used as weights as follows:

$$w_i = \left\{ \begin{array}{ll} 1 / p_i & \text{if at least one victim was white} \\ 1 / (1 - p_i) & \text{if none of the victims was white} \end{array} \right\},$$

where  $p_i$  is the conditional probability that a victim was white given the covariates, and  $w_i$  is the defendant weight.

Note that there is more than one method to use weights in propensity scoring. The approach taken here reweighted both groups to look like the overall population, estimating a quantity called the population-average treatment effect. It is also possible to reweight both groups to look like the white-victim group. In this case, taking “white” as the treatment, we would estimate the effect of treatment on the treated (McCaffrey, Ridgeway, and Morral, 2004). Later, we explore this option in a sensitivity analysis.

After constructing weights from the propensity scores, we tested the balance with a weighted t-test. We then ran a logistic regression of the recommendation (both AG and USAO) on the victim’s race and any variables that were still unbalanced. Although not necessarily standard practice, this was an attempt to obtain balance on variables that propensity scoring could not balance across the groups. We then test the hypothesis  $H_0: \beta_w = 0$  versus  $H_1: \beta_w \neq 0$  where the coefficient refers to an indicator variable for the presence of at least one white victim. The estimated prediction was computed via recycled predictions.

We used the model to predict the estimated percentage of seeking the death penalty from two slightly altered data sets: one assuming that all defendants had at least one white victim, the other assuming that none of them did. The difference is the estimated difference due to white victim, and a confidence interval was constructed by bootstrapping recycled predictions (Graubard and Korn, 1999). Further sensitivity analysis, including propensity scoring without the additional regression, is described in the Results section of this chapter.

### Capriciousness

We use boosted regression (Hastie, Tibshirani, and Friedman, 2001) to examine whether the USAO recommendation or the AG decision to seek the death penalty was capricious. Boosted regression or “boosting” is a nonparametric method that does not require that the model is prespecified, and in particular does not require the a priori knowledge of which interactions are important. We allowed up to five-way interactions in the boosting model. The so-called shrinkage or step-size parameter that affects whether the boosting model will use a larger or a

smaller number of iterations was set to 0.01 (implying a larger number of iterations). The bagging parameter was set to 0.5, a commonly used value. We used the boosting implementation in Stata<sup>3</sup> software (Schonlau, 2005).

To assess prediction accuracy, we split the data into two sets, training and test. The training set contained two-thirds of the defendants and the test set contained the remaining third. For example, the USAO training set contained 435 observations chosen at random. The test set contained the remaining 217 observations. The boosting model does not use any defendant demographic variables, including race. We performed a boosted logistic regression on the training data and assessed accuracy as a percentage of correct classification on the test data. An observation is classified as “seek death penalty” if the boosted prediction exceeds 0.5, and “not seek” otherwise. Because there are no guidelines as to what level of prediction accuracy constitutes a lack of capriciousness, no formal hypothesis is tested.

## Regional Variation

We tested whether the death penalty was sought more often in some U.S. Census regions than in others (South, West, Midwest, Northeast, and Puerto Rico).<sup>4</sup> We used logistic regression on indicator variables for the regions and covariates that emerged as most influential in the analysis of capriciousness. We did not use all covariates available because of strong multicollinearities and because we know that a small number of covariates suffice to obtain good predictions of the AG decision.

We next tested whether there is a differential region effect by race by adding a white victim/Southern region interaction variable. When adding an interaction, all of its lower-order effects are also included in the model; therefore, we added the covariate indicating presence of a white victim.

## Results

### Arbitrariness

**USAO recommendation.** *(a) Is the decision to seek the death penalty related to the presence of a white victim?* As shown in Tables 6.2 and 6.3, if there is no white victim, the USAO recommends seeking the death penalty in 18.4 percent of the cases. In the presence of a white victim, this percentage rises to 34.7 percent, a difference of 16.3 percent. Without adjusting for any covariates, this difference is statistically significant ( $p = 0.001$ ).

Based on the propensity-scoring analysis, we estimate that, when a white victim is present, the death penalty is sought for 25.1 percent of the defendants and, without a white victim, it is sought for 29.6 percent of the defendants. The difference of 4.5 percent is not statistically significant ( $p = 0.33$ ). The 95-percent confidence interval for the difference (obtained

<sup>3</sup> Stata® is a registered trademark of StataCorp LP.

<sup>4</sup> The Virgin Islands had only three defendants and were not considered in the regional analyses.



by bootstrapping) ranges from –5.0 percent to 14.0 percent. This indicates that we had a good chance (50-percent power) to detect a true (adjusted) difference of 10 percent. In other words, a true racial effect that was much larger than 10 percent is very unlikely.

We compared variable means for defendants with and without white victims before and after the propensity scores. That is, we tested whether the variables were balanced with respect to presence of a white victim. Before propensity scoring, the two groups of defendants were significantly different with respect to 43 variables; afterward, they were only significantly different on five variables. The estimated means and percentages as well as their differences before and after the propensity adjustment can be seen in Technical Note 6.A.

These five variables in addition to defendant gender, defendant age, defendant citizenship, and indicator variables for regions were included in a regression of the recommendation to seek the death penalty on the indicator variable for presence of a white victim. In addition, the total number of aggravating factors was added to the model. The adjusted difference given in Table 6.3 is based on this regression. It is shown in Table 6.4.

*(b) Are there other racial effects?* We looked for evidence of other racial effects in two ways: (1) Is the decision to seek the death penalty related to whether the defendant is white or non-white? (2) After controlling for whether at least one of the victims is white, is the recommendation to seek the death penalty related to whether or not the defendant is white?

We tested this hypothesis by adding an indicator variable “both victim and defendant are white” in the weighted logistic regression in addition to an indicator variable of whether or not the victim was white. This additional indicator variable constitutes an interaction between the race of the victim and race of the defendant. The computation of the propensity scores was as before.

**Table 6.2**  
**USAO Recommendation to Seek the Death Penalty, by Race of Victim Without Adjustment for Case Characteristics**

USAO Recommendation	No White Victim		Any White Victim	
	N	%	N	%
Not seek	372	81.6	128	65.3
Seek	84	18.4	68	34.7
Total	456	100.0	196	100.0

NOTE: N = 652.

**Table 6.3**  
**Adjusted and Unadjusted USAO Recommendation to Seek the Death Penalty, by Presence of a White Victim**

USAO Recommendation	No White Victim (%)	Any White Victim (%)	Difference (%)	<i>p</i>
Unadjusted	18.4	34.7	16.3	0.001
Adjusted	25.1	29.6	4.5	0.33

**Table 6.4**  
**Weighted Logistic Regression of the USAO Recommendation on Predictors**

Description	Variable	Coefficient	<i>p</i>
Any victim is white	whtvic = 1	0.398	0.334
Any victim is reportedly a current or former member of the U.S. military, including the reserves	vmilitary_any = 1	0.163	0.840
Any V reportedly has evidence of mental or emotional problems	vdisabled = 1	-0.421	0.740
V was abused	vabusedd_any = 1	-0.262	0.673
V was bound or gagged before being killed	bkbound_anyr = 1	1.279	0.007 <sup>b</sup>
D has a serious head injury	headinjdum = 1	0.084	0.877
D is female	dfemale = 1	-2.447	0.027 <sup>a</sup>
D is U.S. citizen	citizen_dummy = 1	0.481	0.244
Defendant's age	dagecomb = [years]	0.038	0.026 <sup>a</sup>
Region of jurisdiction was Northeast	region2 = 1	-1.095	0.077
Region of jurisdiction was Midwest	region3 = 1	-1.202	0.084
Region of jurisdiction was West	region4 = 1	-0.823	0.139
Region of jurisdiction was Puerto Rico	region5 = 1	-0.464	0.649
Sum of statutory aggravating factors	aggusao_sumwm = [sum]	0.671	0.000 <sup>b</sup>
Constant		-5.087	0.000 <sup>b</sup>

NOTE: Inverse propensity scores are used as weights.

<sup>a</sup> Significant at 5 percent.

<sup>b</sup> Significant at 1 percent.

Using the same methodology as mentioned, we found no statistically significant differences. Because the coefficients were small in size, the lack of findings was not just due to a lack of statistical power.

### AG Decision

As shown in Tables 6.5 and 6.6, the AG recommends seeking the death penalty in 35.7 percent of the cases when there is a white victim, and in 20.0 percent of the cases when there is no white victim. Without adjusting for any covariates this difference is statistically significant ( $p = 0.001$ ).

Taking covariates into account, we estimate that the AG recommends seeking the death penalty in 27.8 percent of cases when there is no white victim and in 31.1 percent of cases when there is a white victim. The difference is not statistically significant ( $p = 0.46$ ). The 95-percent confidence interval for the difference (obtained by bootstrapping) ranges from -7.0 percent to 13.2 percent. This indicates that we had a good chance (50-percent power) to detect a true (adjusted) difference of 10–11 percent. In other words, a racial difference much larger than 10–11 percent is very unlikely.



**Table 6.5**  
**AG Decision to Seek the Death Penalty, by Race of Victim Without Adjustment for Case Characteristics**

AG Decision	No White Victim		Any White Victim	
	N	%	N	%
Not seek	332	80.0	119	64.3
Seek	83	20.0	66	35.7
Total	415	100.0	185	100.0

**Table 6.6**  
**Adjusted and Unadjusted AG Decision to Seek the Death Penalty, by Presence of a White Victim**

AG	No White Victim (%)	Any White Victim (%)	Difference (%)	<i>p</i>
Unadjusted	20.0	35.7	15.7	0.001
Adjusted	27.8	31.1	3.3	0.466

Because weights are used, the adjustment induces a probability design effect (Kish, 1965). The probability-design effect here is 12.8 and implies an effective sample size of 47. In light of the small effective sample size, one wonders whether the lack of significance for the adjusted results is due to a lack of power. A simple power analysis shows that such a sample size is sufficient to detect a large effect but not sufficient to detect a medium-sized effect according to Cohen's definition of effect sizes. However, such power calculations are of limited importance given that the adjusted difference of 3.3 percent does not appear practically relevant to begin with.

As before, we compared variable means for defendants with and without white victims before and after the propensity scores. The two groups of defendants were significantly different with respect to 48 variables. After propensity scoring, ten imbalances remain. Because propensity scoring failed to eliminate some differences, those variables as well as the defendant-gender, defendant-age, defendant-citizenship, and indicator variables for region were included in a regression of the decision to seek the death penalty on the indicator variable of whether or not a white victim was present. The estimated means and percentages as well as their differences before and after the propensity adjustment can be seen in Technical Note 6.B. Regression results are presented in Table 6.7. The adjusted difference shown in Table 6.6 is derived from the regression in Table 6.7.

There was no evidence of racial effects that were related to whether or not the defendant was white, or whether the defendant and at least one of the victims were of the same race.

Some analysts may be concerned that the control variables themselves might be proxies for race, and so including them as covariates might reduce the effect of interest. If that were so, we would expect substantial correlations between the covariates and the indicator for white victim. We computed correlations between the most influential predictors (variables listed in Table 6.4) and the indicator for "at least one white victim." None of these correlations explained more than 12 percent of the variance.

**Table 6.7**  
**Weighted Logistic Regression of the AG Decision on Predictors**

Description	Variable	Coefficient	p
Any V is white	whtvic = 1	0.354	0.466
Victim is married	vmarried = 1	-0.066	0.884
Any V is reportedly a current or former member of the U.S. military, including the reserves	vfmilitary_any = 1	0.441	0.567
Any V reportedly has evidence of mental or emotional problems	vdisabled = 1	2.061	0.004 <sup>b</sup>
Number of victims = 2	idcnt3 = 1	0.019	0.975
V consented	mfvconsensusao_any = 1	-0.774	0.482
V was bound or gagged before being killed	bkbound_anyr = 1	1.152	0.131
This V was killed in front of a family member who was not a perpetrator	csfamwit_anyr = 1	-0.307	0.653
D has a serious head injury	headinjdisdummy = 1	0.478	0.495
Incident was an accident	offacc_any = 1	-0.605	0.433
There is evidence that D provided weapon	evidprvwpn_any = 1	-0.511	0.449
D is female	dfemale = 1	-0.651	0.578
Defendant is U.S. citizen	citizen_dummy = 1	0.920	0.115
Defendant age	dagecomb = [years]	-0.008	0.720
Region of jurisdiction was Northeast	region2 = 1	-2.329	0.011 <sup>a</sup>
Region of jurisdiction was Midwest	region3 = 1	-0.449	0.568
Region of jurisdiction was West	region4 = 1	-0.774	0.245
Region of jurisdiction was Puerto Rico	region5 = 1	1.484	0.154
Sum of statutory aggravating factors	aggusao_sumwm = [sum]	1.307	0.000 <sup>b</sup>
Constant		-6.028	0.000 <sup>b</sup>

NOTES: Inverse propensity scores are used as weights.

<sup>a</sup> Significant at 5 percent.

<sup>b</sup> Significant at 1 percent.

### Sensitivity Analyses

We conducted several sensitivity analyses for the AG decision. All of these analyses led to similar numerical results, and none had a significant effect for presence of a white victim.

Because a single case can have multiple defendants, observations corresponding to the same defendants may be correlated. Correlated observations may lead to different significance levels. To explore the impact of correlated observations, we reran the regression that follows the propensity scoring adjusted for clustering using the Huber-White sandwich estimator (White,

1980) to estimate standard errors. This estimator derives variance estimates only from *between* cluster variation. That is, the variance estimate is valid even in the event that defendants in the same legal case would tend to get the same AG decision.<sup>5</sup>

Propensity scores can be used in several ways. In the main analyses, we used inverse propensity scores as weights and followed with a regression on unbalanced variables. We also tried the following methods:

1. Use of propensity scores as weights with additional regression, while eliminating non-overlapping propensity scores (i.e., eliminating defendants without a white victim with propensity scores lower than the lowest propensity score of defendants with a white victim)
2. Use of propensity scores as weights without an additional regression
3. Use of propensity scores as weights where the weights are constructed to focus on the population of defendants with white victims (weights for defendants with white victims equal to one, weights of defendants without white victims equal to  $p / (1 - p)$  where  $p$  is the propensity score)
4. Matching defendants without a white victim to defendants with a white victim based on propensity scores (similar to the case-control method used by Klein, Freedman, and Bolus, presented in Chapter Four)
5. Stratification into quintiles to construct four indicator variables. We then regressed the decision of seek/not-see on the four indicator variables and presence of a white victim, as well as on variables that were not used for the propensity scoring (including indicator variables for region, gender of defendant, defendant age, and defendant U.S. citizenship). A close look at the strata revealed that the lowest stratum did not contain any defendants with white victims. The only stratum with substantially different percentages of seek decisions was the middle stratum, in which the percentage of defendants with white victims was 13 percent greater than those without. A separate regression with only the 121 defendants in the middle quintile was inconclusive. Even though some coefficients were reasonably large (odds of around 2), no variable was significant—which may be due to the small sample size.

## Capriciousness

### USAO Recommendation

To compare prediction accuracy, we first establish a baseline prediction. Suppose we have a biased coin with a 76.7 percent chance of turning up heads, and we assign tails to seek the death penalty and heads not to seek. If we use a coin toss to predict the decision to seek the death penalty, we would be correct 64.5 percent of the time. If, instead, for all cases we pre-

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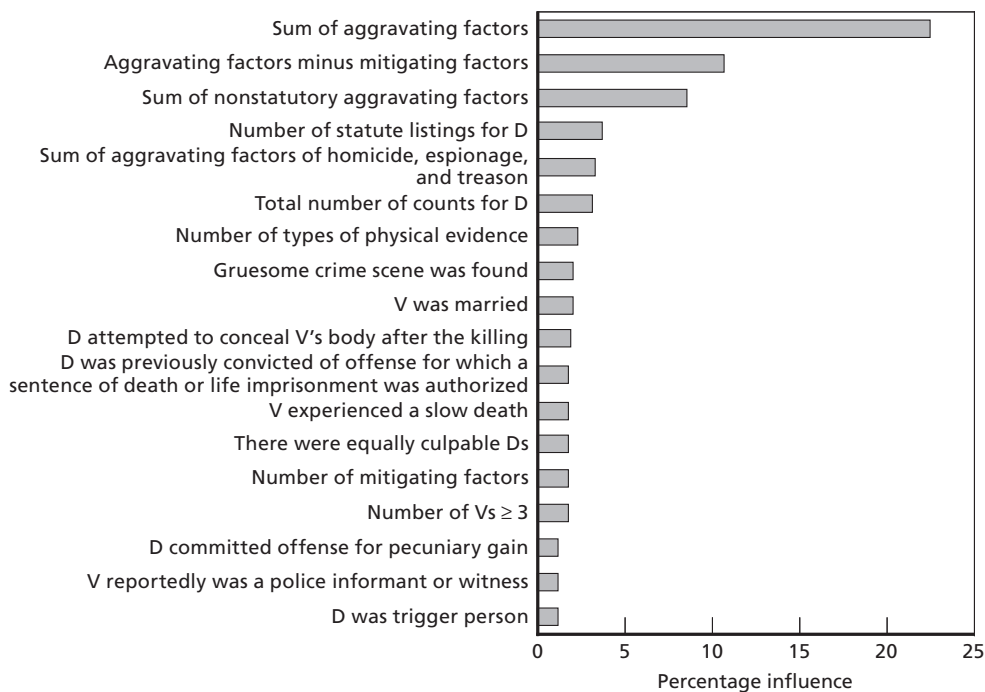
<sup>5</sup> We recognize that within-case dependence may be more complicated; e.g., in some cases, one defendant may accept a lighter sentence in return for testifying against another defendant, which would lead to a negative rather than a positive correlation.

dicted “not seek,” we would be right 76.7 percent of the time. Using boosted logistic regression (excluding defendant characteristics of race, age, gender, and citizenship) on a test (training) data set we are correct 86.6 percent (97.0 percent) of the time—a considerable improvement over that obtained from the biased coin.

Weiss, Berk, and Lee define capriciousness as follows: “*Capriciousness*, as we use the term, refers to the degree of unpredictability or randomness in the output of any social system, *even if the same “inputs” are consistently applied*” (1996, p. 609, emphasis in original). Our model of the USAO recommendation predicts better than a random coin toss. According to the Weiss et al. definition, the decision to seek the death penalty is not capricious. This test is fairly easy to pass. A harder test to pass for saying “not capricious” might involve establishing a threshold of correct predictions that distinguishes capricious from not capricious. Depending on the threshold chosen, one may reach a different conclusion about whether decisions are capricious. In the absence of clear guidelines, we interpret this to mean that the decision is not capricious.

The most influential predictors in determining the seek decision from the boosted regression are the number of aggravating factors and the difference between the number of aggravating and the number of mitigating factors. The relative influence of the variables in the prediction is displayed in Figure 6.1. (As previously mentioned, race and defendant demographics were not included in the prediction model and therefore do not appear in Figure 6.1). “Relative influence” is a measure of how important a variable was in building the model.

**Figure 6.1**  
**Most Important Variables in Predicting the USAO Decision to Seek the Death Penalty**



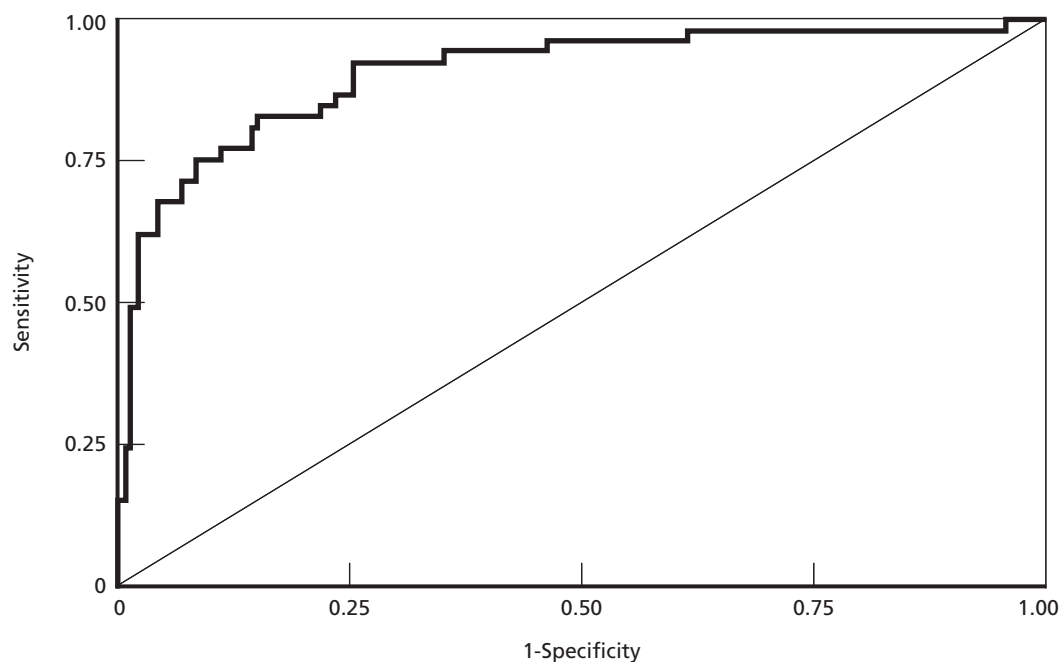
NOTE: All variables with at least 1-percent influence are shown.  
 RAND TR389-6.1

### AG Decision

The AG decision can be correctly predicted 87.4 percent of the time on a test data set and 98.5 percent of the time on a training data set. The corresponding receiver operating characteristic (ROC) curve for the test data set (Figure 6.2) indicates good discrimination between seek and not-seek recommendations. Always predicting the modal value, not seek, would be correct 75.2 percent of the time. The result is comparable to the percentage of correct predications for the USAO recommendation. The most important variables in the prediction are listed in Figure 6.3.

The important predictor variables are very similar to those determined for the USAO recommendation. Notably, the number of aggravating factors remains by far the most important consideration, even though the USAO and AG supply separate counts of the number of aggravating factors. The large number of variables adds little, if anything, to the predictive power. The model predicts similarly when using only the top three variables in Figure 6.3: sum of aggravating factors, difference of aggravating and mitigating factors, and the number of non-statutory aggravating factors.

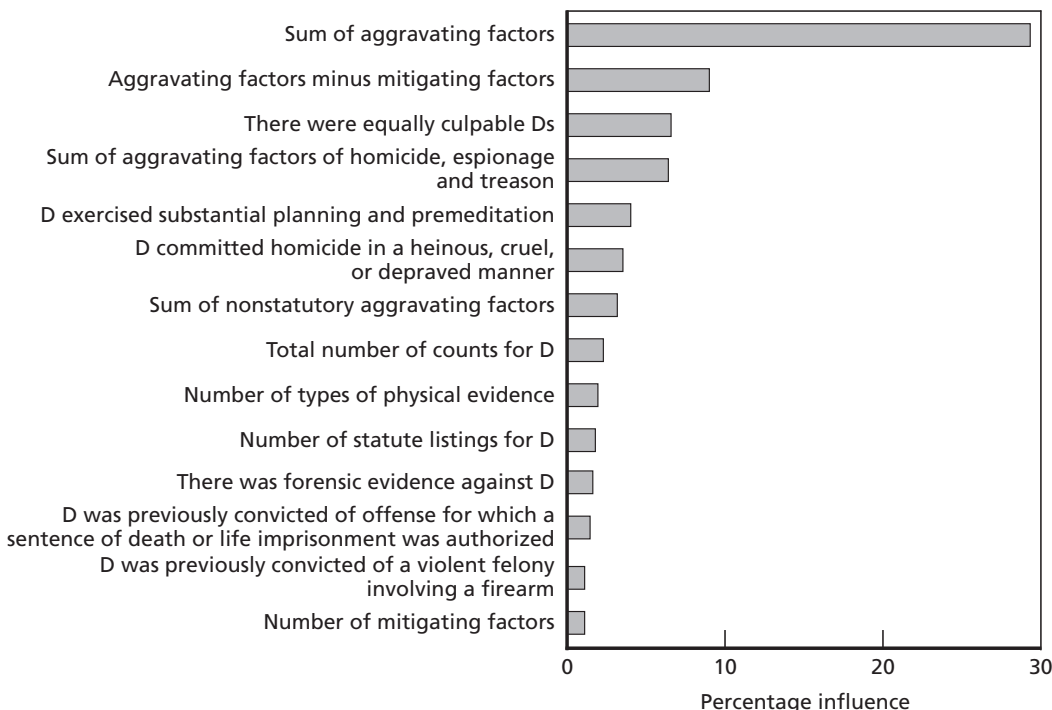
**Figure 6.2**  
ROC Curve for Predicting the AG Decision



NOTE: Area under ROC curve = 0.9067. The area under the ROC curve is large, indicating good discrimination between the seek and not-seek recommendation.

RAND TR389-6.2

**Figure 6.3**  
**Most Important Variables in Predicting the AG Decision to Seek the Death Penalty**



NOTE: Variables with at least 1-percent influence are shown.

RAND TR389-6.3

Because so few variables hold predictive power, we display the percentage of AG “seek” decisions as a function of the number of aggravating factors and the difference between aggravating and mitigating factors in Table 6.8. Cells with no data are empty; those where there were data but a not-see recommendation was made contain a zero. The cells are rounded to one decimal place. The table clearly shows that the probability of a seek decision increases with the number of aggravating factors. The relationship between the seek decision and the difference between aggravating and mitigating factors conditional on the number of aggravating factors is subtler. The probability of a seek decision increases with both variables.

**Table 6.8**  
**AG Seek Decisions as a Function of the Number of Aggravating Factors and the Difference Between Aggravating and Mitigating Factors**

Aggravating Minus Mitigating Factors	Number of Aggravating Factors									
	0	1	2	3	4	5	6	7	8	9
-8					1.0					
-4	0	0	0.0	0.0	0.5					
-3	0	0	0.0	0.0	1.0	0.0				
-2	0	0	0.0	0.0	0.3					
-1	0	0	0.1	0.0	0.3	0.2	0.0		0.0	
0	0	0	0.0	0.0	0.3	0.6	1.0			
1		0	0.1	0.2	0.2	0.5	1.0	1.0	1.0	
2			0.2	0.3	0.3	0.6	0.7	1.0		1.0
3				0.0	0.4	0.5	0.9	1.0	1.0	1.0
4					0.0	1.0	0.5	0.8	0.4	
5							1.0	0.0	1.0	0.0
6									1.0	

## Regional Variation

We regressed the AG seek decision on region and other covariates. The logistic regression is shown in Table 6.9. Table 6.10 computes the adjusted percentage of the AG seek recommendation by region based on the regression. If all defendants were to stand trial in the Northeast, the model predicts the AG would seek the death penalty 17.6 percent of the time. If all defendants were to stand trial in the South, the model predicts the AG would seek the death penalty 28.8 percent of the time. This difference is statistically significant. The regression contains a limited number of covariates. Adding or removing a few of the covariates does not substantively change the findings. Adding a large number of covariates is not feasible because of the extent of the multicollinearity.

We further tested whether there was any differential region effect of defendants with white victims. The estimated odds ratio for the corresponding white victim/South region interaction was large, 3.1, but only marginally significant ( $p = 0.06$ ). Any adjustment for multiple testing would lead to an insignificant  $p$ -value. However, because the odds ratio is large, we are inclined to call the result inconclusive.

**Table 6.9**  
**Logistic Regression of AG Decision on Indicators for Regions and the Top Eight Variables That Predict the AG Decision**

Description	Variable	Odds Ratio	<i>p</i>
Region of jurisdiction was South	region1 = 1	3.487	0.001 <sup>b</sup>
Region of jurisdiction was Midwest	region3 = 1	2.182	0.121
Region of jurisdiction was West	region4 = 1	2.107	0.140
Region of jurisdiction was Puerto Rico	region5 = 1	3.164	0.044 <sup>a</sup>
Sum of aggravating factors	aggagrc_sumwm = [sum]	0.527	0.379
Aggravating factors minus mitigating factors	subagrc = [difference]	1.027	0.817
Sum of nonstatutory aggravating factors	nsaggagrc_sumwm = [sum]	4.644	0.039 <sup>a</sup>
There were equally culpable defendants	mfeqdefagrc_any = 1	0.131	0.000 <sup>b</sup>
There was substantial planning and premeditation	agghplanagrc_any = 1	3.808	0.000 <sup>b</sup>
Number of types of physical evidence	evidcnt = [count]	1.310	0.007 <sup>b</sup>
Sum of aggravating factors of homicide, espionage, and treason	agghagrc_sumwm = [sum]	4.399	0.037 <sup>a</sup>
Total number of counts for defendant	ttlcounts = [count]	1.011	0.626

<sup>a</sup> Significant at 5 percent.

<sup>b</sup> Significant at 1 percent.

**Table 6.10**  
**Adjusted AG Seek Decision Based on Table 6.9**

Region	Adjusted AG Seek Recommendation (%)
Northeast	17.6
South	28.5
Midwest	24.2
West	23.9
Puerto Rico	27.8

## Concluding Remarks

Our analysis found no evidence of racial bias in either USAO recommendations or the AG decisions to seek the death penalty under federal law. Nonetheless, our findings should be interpreted carefully. In the following paragraphs, we note the limitations of the methodology used and statistical hypothesis testing in general.

Propensity scoring can only adjust for bias due to variables that are observed. To the extent that unobserved variables are correlated with observed variables, such variables are par-



tially taken into account. Variables that may be of relevance but were not available in our data set include the quality of defense counsel and whether the defendant expressed remorse. Even though all defendants in federal cases are guaranteed to retain counsel with death-penalty experience, the quality of the defense attorney may still be an important factor. For example, some attorneys may be more skilled in plea bargaining. Despite the fact that additional variables were desirable, we believe that this analysis is nonetheless valuable because it informs and focuses the debate on the potential presence of racial bias.

An indicator that propensity-scoring methodology is not working properly is if balance on observed covariates cannot be achieved. Appendixes A and B show that it was very difficult to achieve balance in this data set; and indeed we were not able to achieve it for a handful of variables. Efforts to manage these variables included accounting for them in a subsequent regression, as well as conducting several sensitivity analyses—none of which led to different conclusions. Overall, we feel that despite the challenges with this data set, there is no reason to distrust the propensity-scoring methodology on the observed variables.

The typical statistical machinery does not discriminate between lack of racial effects and lack of power to detect those effects. Instead, the statistical question involves testing the hypothesis that there are *no* racial effects. This hypothesis can either be rejected or fail to be rejected. In other words, the hypothesis can be disproved; it cannot be proved. We found that the estimated difference in AG seek recommendations for defendants with and without white victims was about 3.3 percent—a nonsignificant difference. Because this difference could have been due to random chance, we are unable to reject the hypothesis, and conclude that there is no evidence of racial effects in the seek decisions.

While there is no quantifiable definition of capriciousness for the federal death penalty, we are inclined to conclude that neither the AG decisions nor the USAO recommendations were capricious. This conclusion is based on our ability to predict the seek decisions and recommendations far better than would be expected if one was always predicting the modal value “not seek.”

Our conclusions with regard to regional variations in the federal death penalty are more tentative. It is clear that the AG is less likely to seek the death penalty when the defendants come from the Northeast. However, in our modeling, there was, at best, inconclusive evidence as to whether or not there was a race effect within regions.

## Differences Among Defendants

### 6.A. Differences Between Defendants with and Without White Victims and with and Without Propensity Adjustment (USAO Recommendation)

Table 6.A.1 shows estimated differences between defendants with and without white victims. Values in the table are after the adjustment on average differences is reduced. The values in the Differences column may not equal the difference between the values in the No and Yes columns due to rounding.

**Table 6.A.1**  
**Estimated Differences Between Defendants with and Without White Victims for All Variables with and Without the Propensity Adjustment**

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
Any V is female.	v1female = 1	0.14	0.34	0.20	0.35	0.34	-0.00
V was sympathetic.	sympvic1 = 1	0.12	0.29	0.17	0.37	0.29	-0.09
V is or was a criminal.	crimedoer = 1	0.74	0.39	-0.36	0.40	0.39	-0.01
V was under 17 years old.	vunder17 = 1	0.05	0.12	0.07	0.18	0.12	-0.06
V was over 60 years old.	vover60 = 1	0.01	0.10	0.08	0.06	0.10	0.03
V was married.	vmarried = 1	0.25	0.31	0.06	0.27	0.31	0.04
V reportedly worked in criminal activity, enterprise, or organization at the time of the offense.	vworkcrim = 1	0.65	0.31	-0.34	0.31	0.31	-0.01
V was vulnerable.	agghvulusao = 1	0.05	0.16	0.11	0.20	0.16	-0.05
Any V is reportedly a current or former member of the U.S. military, including the reserves.	vmilitary = 1	0.02	0.07	0.04	0.02	0.07	0.05

Table 6.A.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
Any V is reportedly a prison inmate.	vfprison = 1	0.04	0.05	0.01	0.05	0.05	0.00
Any V reportedly has evidence of mental or emotional problems.	vdisabled = 1	0.03	0.05	0.02	0.01	0.05	0.04
V was abused.	vfabusedd = 1	0.10	0.07	-0.03	0.03	0.07	0.04
Any V reportedly is a police informant or witness.	vfinformant = 1	0.12	0.18	0.06	0.21	0.18	-0.03
V was shot.	shotstaball_anym = 1	0.90	0.70	-0.20	0.76	0.70	-0.06
Number of victims = 2	idcnt3 = 1	0.16	0.12	-0.04	0.07	0.12	0.05
Number of victims ≥ 3	idcnt4 = 1	0.24	0.10	-0.14	0.11	0.10	-0.01
D participated in additional uncharged murders.	othvic_dummy = 1	0.35	0.28	-0.08	0.30	0.28	-0.02
Crime location posed public danger.	pubdang = 1	0.28	0.12	-0.16	0.12	0.12	0.00
Crime occurred at a prison.	prisonloc = 1	0.05	0.06	0.01	0.05	0.06	0.01
V has low wounds.	lowwound = 1	0.78	0.61	-0.16	0.74	0.61	-0.12
V's head was injured.	vsfacehead = 1	0.51	0.44	-0.07	0.49	0.44	-0.05
Length of homicide	timelong = 1	0.04	0.03	-0.01	0.01	0.03	0.02
Number of mitigating factors	mfusao_sumwm = [count]	1.06	1.08	0.02	1.03	1.08	0.06
D had impaired capacity.	mfimpcapusao_any = 1	0.04	0.10	0.06	0.11	0.10	-0.01
D had minor participation.	mfminpartusao_any = 1	0.12	0.09	-0.03	0.11	0.09	-0.03
There were equally culpable defendants.	mfeqdefusao_any = 1	0.36	0.31	-0.04	0.29	0.31	0.02
D has no prior criminal record.	mfnopriorusao_any = 1	0.41	0.51	0.1	0.47	0.51	0.04
There was a disturbance.	mfdistusao_any = 1	0.02	0.03	0.02	0.01	0.03	0.02
V consented.	mfvconsentusao_any = 1	0.11	0.03	-0.09	0.03	0.03	-0.01
V was D's rival.	relrival_anyr = 1	0.65	0.31	-0.34	0.33	0.31	-0.02
V was a stranger to D.	relstranger_anyr = 1	0.25	0.44	0.19	0.40	0.44	0.04
V was D's friend, V and D were family, V and D were married, or V and D were sexual rivals.	relnotcrim = 1	0.38	0.48	0.10	0.47	0.48	0.01

Table 6.A.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
V was clubbed, beaten, or kicked before being killed.	bkbeaten_anyr = 1	0.17	0.17	0.00	0.12	0.17	0.05
V was bound or gagged before being killed.	bkbound_anyr = 1	0.14	0.10	-0.03	0.05	0.10	0.05
V cooperated with D but was killed anyway.	bkcoop_anyr = 1	0.11	0.17	0.06	0.19	0.17	-0.02
D lay in wait before killing V.	bkdwait_anyr = 1	0.25	0.18	-0.07	0.15	0.18	0.03
V knew or feared he or she was going to be killed.	bkfear_anyr = 1	0.29	0.30	0.01	0.26	0.30	0.03
V was held hostage before being killed.	bkhostage_anyr = 1	0.19	0.22	0.03	0.20	0.22	0.02
V was under the influence of drugs or alcohol at the time of the offense before being killed.	bkinf_anyr = 1	0.04	0.08	0.04	0.05	0.08	0.03
V was kidnapped before being killed.	bkkidnap_anyr = 1	0.14	0.13	-0.01	0.12	0.13	0.01
V pled for life before being killed.	bkplead_anyr = 1	0.14	0.14	0.00	0.11	0.14	0.03
V was sexually assaulted before being killed.	bksexassault_anyr = 1	0.05	0.04	-0.02	0.02	0.04	0.02
V started incident with D (e.g., shot first or attacked D).	bkstarted_anyr = 1	0.05	0.01	-0.04	0.01	0.01	0.00
V was tortured before being killed.	bktorture_anyr = 1	0.05	0.05	-0.01	0.02	0.05	0.02
V was killed in front of a family member who was not a perpetrator.	csfamwit_anyr = 1	0.09	0.13	0.04	0.10	0.13	0.03
Gruesome crime scene (e.g., large amount of blood) was found.	csgruesome_anyr = 1	0.07	0.12	0.05	0.10	0.12	0.02
V was not clothed when found at the crime scene.	csnoclothes_anyr = 1	0.03	0.04	0.01	0.02	0.04	0.02
V was killed in front of another person who was not a perpetrator or family member.	csothwit_anyr = 1	0.48	0.30	-0.18	0.37	0.30	-0.07
V experienced a slow death.	csslow_anyr = 1	0.15	0.33	0.17	0.28	0.33	0.04

Table 6.A.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
V struggled at the crime scene.	csstruggle_anyr = 1	0.14	0.18	0.03	0.12	0.18	0.06
D attempted to conceal V's body after the killing.	akconceal_anyr = 1	0.13	0.22	0.09	0.17	0.22	0.05
V was set on fire after being killed.	akfire_anyr = 1	0.03	0.04	0.01	0.03	0.04	0.00
V was mutilated or dismembered after being killed.	akmutilate_anyr = 1	0.03	0.03	0.00	0.01	0.03	0.02
Aggravating factors minus mitigating factors	subusao = [difference]	0.49	0.52	0.03	0.43	0.52	0.09
Sum of aggravating factors	aggusao_sumwm = [sum]	3.67	4.20	0.53	4.35	4.20	-0.16
Sum of aggravating factors of homicide, espionage, and treason	agghusao_sumwm = [sum]	2.09	2.29	0.20	2.28	2.29	0.01
Sum of nonstatutory aggravating factors	aggusao_sumwm = [sum]	1.42	1.79	0.36	1.91	1.79	-0.13
D caused death during commission of another crime.	agghduringusao_any = 1	0.09	0.17	0.08	0.24	0.17	-0.07
D was previously convicted of a violent felony involving a firearm.	agghprevfireusao_any = 1	0.13	0.11	-0.02	0.18	0.11	-0.08
D was previously convicted of offense for which a sentence of death or life imprisonment was authorized.	agghprevdthusao_any = 1	0.03	0.02	-0.01	0.02	0.02	0.00
D was previously convicted of other serious offenses.	agghprevofusao_any = 1	0.04	0.07	0.02	0.10	0.07	-0.03
D committed homicide in a heinous, cruel, or depraved manner.	agghcruelusao_any = 1	0.15	0.22	0.07	0.16	0.22	0.06
D procured homicide by payment.	agghpayusao_any = 1	0.11	0.12	0.01	0.11	0.12	0.01
D committed homicide for pecuniary gain.	agghpecusao_any = 1	0.36	0.41	0.05	0.36	0.41	0.05
D exercised substantial planning and premeditation.	agghplanusao_any = 1	0.52	0.44	-0.08	0.36	0.44	0.09

Table 6.A.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
D has previously been convicted of two felony drug offenses.	agghfeldrgusao_any = 1	0.04	0.03	-0.01	0.04	0.03	-0.01
V was vulnerable.	agghvulusao_any = 1	0.10	0.17	0.07	0.21	0.17	-0.04
D engaged in CCE involving distribution to minors.	agghcceusao_any = 1	0.05	0.02	-0.03	0.01	0.02	0.00
defendant reportedly working in criminal activity	dworkcrim_dummy = 1	0.82	0.63	-0.19	0.61	0.63	0.02
D is mentally ill.	mentalill_dummy = 1	0.14	0.28	0.13	0.22	0.28	0.05
D has history of physical or sexual abuse as child.	abuse_dummy = 1	0.13	0.19	0.06	0.18	0.19	0.01
D has history of head injury or trauma.	headinjdis_dummy = 1	0.08	0.12	0.04	0.06	0.12	0.07
D has a history of alcohol abuse.	alcohol_dummy = 1	0.08	0.10	0.02	0.12	0.10	-0.02
D has a history of drug use.	drugs_dummy = 1	0.18	0.26	0.07	0.27	0.26	-0.02
D was ringleader.	drlring_any = 1	0.27	0.24	-0.03	0.24	0.24	0.01
D was trigger person.	drltrig_any = 1	0.55	0.45	-0.09	0.41	0.45	0.04
D paid others to commit crime.	drlpaid_any = 1	0.12	0.10	-0.02	0.11	0.10	-0.01
Number of statute listings for defendant	charges = [count]	4.28	4.21	-0.06	4.37	4.21	-0.16
Total number of counts for defendant	ttlcounts = [count]	6.53	6.67	0.14	7.00	6.67	-0.33
Coperpetrators were reported.	coprpany = 1	0.92	0.77	-0.15	0.75	0.77	0.02
Intent was reported per USAO.	intendusao_any = 1	0.92	0.91	-0.01	0.93	0.91	-0.02
Mistaken identity; D claims innocence, D framed.	innocent = 1	0.25	0.30	0.05	0.36	0.30	-0.06
Any claim was made regarding defendant.	anyclaim = 1	0.23	0.33	0.10	0.29	0.33	0.04
Incident was an accident.	offacc_any = 1	0.08	0.11	0.03	0.06	0.11	0.05
D maintains innocence.	offinn_any = 1	0.24	0.30	0.05	0.36	0.30	-0.06
D expressed remorse.	offrem_any = 1	0.06	0.09	0.03	0.11	0.09	-0.02
D admitted guilt.	offguilt_any = 1	0.20	0.32	0.12	0.29	0.32	0.03

Table 6.A.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
D offered aid to V.	offaid_any = 1	0.02	0.03	0.00	0.02	0.03	0.01
D was ordered to carry out offence.	offorder_any = 1	0.13	0.04	-0.09	0.03	0.04	0.01
D was under the influence of drugs or alcohol.	offinf_any = 1	0.06	0.12	0.06	0.10	0.12	0.03
D cooperated, confessed, or surrendered.	offcoop_any = 1	0.09	0.09	0.00	0.11	0.09	-0.02
There are credible witnesses against D.	wvscredcountflag_any = 1	0.07	0.12	0.05	0.10	0.12	0.02
Number of types of physical evidence	evidcnt = [count]	1.66	1.88	0.22	1.99	1.88	-0.11
There was ballistics evidence.	evidballistic_any = 1	0.23	0.28	0.05	0.31	0.28	-0.03
There was evidence that D brought weapon to crime scene.	evidbrtwpn_any = 1	0.30	0.36	0.07	0.44	0.36	-0.08
There was forensic evidence against D, e.g., DNA or fingerprints.	evidforensic_any = 1	0.16	0.19	0.04	0.17	0.19	0.03
There was evidence of a history of a problem.	evidhist_any = 1	0.32	0.25	-0.07	0.24	0.25	0.01
There was other evidence.	evidother_any = 1	0.52	0.66	0.14	0.62	0.66	0.05
There was evidence that D provided weapon.	evidprvwpn_any = 1	0.08	0.10	0.02	0.09	0.10	0.01
Evidence included a recovered weapon.	evidweapon_any = 1	0.17	0.30	0.13	0.24	0.30	0.06
Evidence included an eyewitness account.	evidwitness_any = 1	0.42	0.39	-0.02	0.5	0.39	-0.11
There was any evidence reported.	evidgrp_any = 1	0.92	0.95	0.03	0.95	0.95	0.00

## 6.B. Differences Between Defendants with and Without White Victims and with and Without Propensity Adjustment (AG Decision)

Table 6.B.1 shows estimated differences between defendants with and without white victims. Values in the table are after the adjustment on average differences is reduced. The values in the Differences column may not equal the difference between the values in the No and Yes columns due to rounding.

**Table 6.B.1**  
**Estimated Differences Between Defendants with and Without White Victims for All Variables with and Without the Propensity Adjustment**

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
V is female.	v1female = 1	0.15	0.35	0.20	0.49	0.35	-0.13
V was sympathetic.	sympvic1 = 1	0.12	0.28	0.16	0.51	0.28	-0.23
V is or was criminal.	crimedoer = 1	0.73	0.39	-0.30	0.31	0.39	0.09
V was under 17 years old.	vunder17 = 1	0.05	0.11	0.06	0.22	0.11	-0.11
V was over 60 years old.	vover60 = 1	0.01	0.10	0.09	0.04	0.10	0.06
V was married.	vmarried = 1	0.25	0.32	0.07	0.16	0.32	0.16
V reportedly worked in criminal activity, enterprise, or organization at the time of the offense.	vworkcrim_any = 1	0.63	0.31	-0.30	0.25	0.31	0.06
V was vulnerable.	agghvulagrc_any = 1	0.05	0.15	0.10	0.24	0.15	-0.09
V was reportedly a current or former member of the U.S. military, including the reserves.	vmilitary_any = 1	0.02	0.07	0.05	0.01	0.07	0.06
V was reportedly a prison inmate.	vfprison_any = 1	0.05	0.05	0.01	0.02	0.05	0.03
V reportedly has evidence of mental or emotional problems.	vdisabled = 1	0.03	0.05	0.02	0.01	0.05	0.04
V was abused.	vfabusedd_any = 1	0.10	0.06	-0.00	0.02	0.06	0.04
V reportedly was a police informant or witness.	vfinformant_any = 1	0.12	0.17	0.06	0.15	0.17	0.02
V was shot.	shotstaball_anym = 1	0.89	0.71	-0.20	0.75	0.71	-0.04
Number of victims = 2	idcnt3 = 1	0.15	0.12	-0.00	0.04	0.12	0.09
Number of victims ≥ 3	idcnt4 = 1	0.23	0.10	-0.10	0.07	0.10	0.03



Table 6.B.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
D participated in additional uncharged murders.	othvic_dummy = 1	0.36	0.27	-0.10	0.31	0.27	-0.04
Crime location posed public danger.	pubdang = 1	0.29	0.12	-0.20	0.09	0.12	0.03
Crime occurred at a prison.	prisonloc = 1	0.05	0.06	0.01	0.03	0.06	0.03
V has low wounds.	lowwound = 1	0.78	0.63	-0.20	0.68	0.63	-0.05
V's head was injured.	vsfacehead = 1	0.52	0.44	-0.10	0.55	0.44	-0.11
Length of homicide	timelong = 1	0.04	0.03	-0.00	0.01	0.03	0.02
Number of mitigating factors	mfagrc_sumwm = [count]	0.83	0.81	-0.00	1.05	0.81	-0.24
D had impaired capacity.	mfimpcagrc_any = 1	0.02	0.08	0.06	0.07	0.08	0.01
D had minor participation.	mfminpartagrc_any = 1	0.08	0.09	0.00	0.05	0.09	0.03
There were equally culpable defendants.	mfeqdefagrc_any = 1	0.35	0.18	-0.20	0.23	0.18	-0.05
D has no prior criminal record.	mfnoprioragrc_any = 1	0.32	0.41	0.08	0.48	0.41	-0.08
There was a disturbance.	mfdistagrc_any = 1	0.01	0.05	0.04	0.14	0.05	-0.08
V consented.	mfvconsentagrc_any = 1	0.04	0.00	-0.00	0.08	0.00	-0.08
V was D's rival.	relrival_anyr = 1	0.63	0.32	-0.30	0.26	0.32	0.06
V was a stranger to D.	relstranger_anyr = 1	0.26	0.43	0.17	0.31	0.43	0.13
V was D's friend, V and D were family, V and D were married, or V and D were sexual rivals.	relnotcrim = 1	0.38	0.48	0.10	0.44	0.48	0.04
V was clubbed, beaten, or kicked before being killed.	bkbeaten_anyr = 1	0.18	0.17	-0.00	0.25	0.17	-0.09
V was bound or gagged before being killed.	bkbound_anyr = 1	0.15	0.09	-0.10	0.04	0.09	0.05
V cooperated with D but was killed anyway.	bkcoop_anyr = 1	0.12	0.18	0.06	0.13	0.18	0.05
D lay in wait before killing V.	bkdwait_anyr = 1	0.25	0.19	-0.10	0.15	0.19	0.05
V knew or feared he or she was going to be killed.	bkfear_anyr = 1	0.31	0.29	-0.00	0.18	0.29	0.11
V was held hostage before being killed.	bkhostage_anyr = 1	0.21	0.22	0.00	0.12	0.22	0.10

Table 6.B.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
V was under the influence of drugs or alcohol at the time of the offense before being killed.	bkinf_anyr = 1	0.04	0.08	0.04	0.05	0.08	0.03
V was kidnapped before being killed.	bkkidnap_anyr = 1	0.16	0.11	-0.10	0.08	0.11	0.04
V pled for life before being killed.	bkplead_anyr = 1	0.14	0.15	0.01	0.10	0.15	0.06
V was sexually assaulted before being killed.	bksexassault_anyr = 1	0.06	0.04	-0.00	0.03	0.04	0.00
V started incident with D (e.g., shot first or attacked D).	bkstarted_anyr = 1	0.05	0.01	-0.10	0.03	0.01	-0.02
V was tortured before being killed.	bktorture_anyr = 1	0.06	0.03	-0.00	0.01	0.03	0.02
V was killed in front of a family member who was not a perpetrator.	csfamwit_anyr = 1	0.09	0.14	0.05	0.04	0.14	0.10
Gruesome crime scene (e.g., large amount of blood) was found)	csgruesome_anyr = 1	0.07	0.11	0.04	0.07	0.11	0.04
V was not clothed when found at the crime scene.	csnoclothes_anyr = 1	0.03	0.04	0.01	0.04	0.04	-0.01
V was killed in front of another person who was not a perpetrator or family member.	csothwit_anyr = 1	0.48	0.30	-0.20	0.28	0.30	0.02
V experienced a slow death.	csslow_anyr = 1	0.16	0.33	0.17	0.26	0.33	0.07
V struggled at the crime scene.	csstruggle_anyr = 1	0.15	0.18	0.03	0.27	0.18	-0.08
D attempted to conceal V's body after the killing.	akconceal_anyr = 1	0.13	0.21	0.09	0.16	0.21	0.06
V was set on fire after being killed.	akfire_anyr = 1	0.02	0.03	0.01	0.03	0.03	0.01
V was mutilated or dismembered after being killed.	akmutilate_anyr = 1	0.03	0.03	0.00	0.02	0.03	0.01
Aggravating factors minus mitigating factors	subagrc = [difference]	0.49	0.64	0.15	0.78	0.64	-0.13
Sum of aggravating factors	aggagrc_sumwm = [sum]	2.95	3.45	0.51	4.39	3.45	-0.93

Table 6.B.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
Sum of aggravating factors of homicide, espionage, and treason	agghagrc_sumwm = [sum]	1.74	2.08	0.33	2.58	2.08	-0.51
Sum of nonstatutory aggravating factors	nsaggagrc_sumwm = [sum]	1.17	1.37	0.19	1.80	1.37	-0.43
D caused death during commission of another crime.	agghduringagrc_any = 1	0.08	0.14	0.06	0.21	0.14	-0.07
D was previously convicted of a violent felony involving a firearm.	agghprevfireagrc_any = 1	0.11	0.08	-0.00	0.07	0.08	0.00
D was previously convicted of offense for which a sentence of death or life imprisonment was authorized.	agghprevdthagrc_any = 1	0.02	0.01	-0.00	0.00	0.01	0.00
D was previously convicted of other serious offenses.	agghprevofagrc_any = 1	0.02	0.03	0.01	0.05	0.03	-0.02
D committed homicide in a heinous, cruel, or depraved manner.	agghcruelagrc_any = 1	0.09	0.16	0.07	0.27	0.16	-0.11
D procured offense by payment.	agghpayagrc_any = 1	0.09	0.10	0.01	0.15	0.10	-0.05
D committed offense for pecuniary gain.	agghpecagrc_any = 1	0.36	0.45	0.10	0.44	0.45	0.01
D exercised substantial planning and premeditation.	agghplanagrc_any = 1	0.51	0.47	-0.00	0.56	0.47	-0.09
D has previously been convicted of two felony drug offenses.	agghfeldragrc_any = 1	0.03	0.02	-0.00	0.02	0.02	0.01
V was vulnerable.	agghvulagrc_any = 1	0.04	0.14	0.09	0.21	0.14	-0.07
D engaged in CCE involving distribution to minors.	agghcceagrc_any = 1	0.02	0.03	0.01	0.03	0.03	0.00
D reportedly worked in criminal activity.	dworkcrim_dummy = 1	0.81	0.63	-0.20	0.67	0.63	-0.04
D is mentally ill.	mentallill_dummy = 1	0.15	0.28	0.13	0.29	0.28	-0.01
D has history of physical or sexual abuse as child.	abuse_dummy = 1	0.13	0.19	0.06	0.32	0.19	-0.12
D has history of head injury or trauma.	headinjdis_dummy = 1	0.09	0.12	0.03	0.03	0.12	0.09

Table 6.B.1—Continued

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
D has a history of alcohol abuse.	alcohol_dummy = 1	0.08	0.09	0.01	0.10	0.09	-0.02
D has a history of drug use.	drugs_dummy = 1	0.19	0.26	0.07	0.20	0.26	0.06
D was ringleader.	drlring_any = 1	0.27	0.24	-0.00	0.23	0.24	0.00
D was trigger person.	drltrig_any = 1	0.54	0.46	-0.10	0.32	0.46	0.14
D paid others to commit crime.	drlpaid_any = 1	0.11	0.09	-0.00	0.15	0.09	-0.06
Number of statute listings for defendant	charges = [count]	4.29	4.23	-0.10	4.74	4.23	-0.50
Total number of counts for defendant	ttlcounts = [count]	6.77	6.77	0.00	6.49	6.77	0.28
Coperpetrators were reported.	coprpany = 1	0.92	0.78	-0.10	0.62	0.78	0.16
Intent was reported per AGRC.	intentagrc_any = 1	0.87	0.85	-0.00	0.91	0.85	-0.06
Mistaken identity, D claims innocence, D framed.	innocent = 1	0.27	0.30	0.03	0.43	0.30	-0.14
Any claim was made regarding defendant.	anyclaim = 1	0.24	0.34	0.10	0.22	0.34	0.12
Incident was an accident.	offacc_any = 1	0.08	0.11	0.03	0.05	0.11	0.06
D maintains innocence.	offinn_any = 1	0.26	0.29	0.03	0.43	0.29	-0.14
D expressed remorse.	offrem_any = 1	0.06	0.09	0.03	0.08	0.09	0.00
D admitted guilt.	offguilt_any = 1	0.19	0.31	0.12	0.39	0.31	-0.08
D offered aid to a V.	offaid_any = 1	0.03	0.03	0.00	0.01	0.03	0.01
D was ordered to carry out offense.	offorder_any = 1	0.13	0.03	-0.10	0.04	0.03	0.00
D was under the influence of drugs or alcohol.	offinf_any = 1	0.07	0.12	0.06	0.06	0.12	0.07
D cooperated, confessed, or surrendered.	offcoop_any = 1	0.07	0.09	0.01	0.06	0.09	0.02
There are credible witnesses against D.	wvscredcountflag_any = 1	0.07	0.13	0.06	0.08	0.13	0.05
Number of types of physical evidence	evidcnt = [count]	1.71	1.89	0.18	2.17	1.89	-0.27
There was ballistics evidence.	evidballistic_any = 1	0.23	0.29	0.06	0.40	0.29	-0.11

**Table 6.B.1—Continued**

Description	Variable	Original			Propensity-Adjusted		
		White Victim			White Victim		
		No	Yes	Diff.	No	Yes	Diff.
There was evidence that D brought weapon to crime scene.	evidbrtwpn_any = 1	0.30	0.36	0.07	0.49	0.36	-0.12
There was forensic evidence against D, e.g., DNA or fingerprints.	evidforensic_any = 1	0.17	0.19	0.03	0.30	0.19	-0.10
There was evidence of history of a problem.	evidhist_any = 1	0.32	0.24	-0.10	0.18	0.24	0.05
There was other evidence.	evidother_any = 1	0.52	0.66	0.15	0.53	0.66	0.13
There was evidence that D provided weapon.	evidprvwpn_any = 1	0.08	0.10	0.01	0.04	0.10	0.06
Evidence included a recovered weapon.	evidweapon_any = 1	0.17	0.31	0.14	0.36	0.31	-0.05
Evidence included an eyewitness account.	evidwitness_any = 1	0.44	0.39	-0.10	0.39	0.39	0.00
There was any evidence reported.	evidgrp_any = 1	0.92	0.95	0.03	0.96	0.95	-0.01

## Summary of Findings and Conclusions

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*Stephen P. Klein and Richard A. Berk*

In federal capital cases, the USAO in the district where the case is prosecuted makes an initial recommendation to seek the death penalty for defendants who are charged with crimes that carry this penalty. The USAO sends its recommendation to the AGRC. This committee reviews the USAO's recommendation and the case file, occasionally gathers additional information about the case, and makes a recommendation to the AG as to whether to seek the death penalty. The AG makes the final decision.

Are the USAO's recommendations and the AG's decisions racially neutral, or are they affected by the race of the victim, the race of defendant, or both? Are the USAO and AG's decisions predictable? Are they capricious? Is the federal death penalty more likely to be sought in some areas of the country than in others?

These questions about race, predictability, capriciousness, and geographic effects were addressed by three teams of researchers. All the teams started with the same data on 312 cases that together involved 652 defendants with a USAO seek/not-seek recommendation and 600 defendants with an AG seek/not-seek decision. Although the teams used somewhat different analytic methods, they came to very similar conclusions.

### **Race Effects**

If there is no adjustment for case characteristics, a decision to seek the death penalty is more likely if the defendant is white than if the defendant is not white. A decision to seek the death penalty also is more likely if at least one victim is white than if no victims are white. Consequently, white defendants who kill white victims are much more likely to have a seek decision than are nonwhite defendants who kill nonwhite victims. On the surface, the unadjusted counts suggest that federal seek decisions are biased against white defendants and against those who kill whites.

However, these disparities disappear when data in the AG's case files are used to adjust for the heinousness of the crime. Berk and He concluded: "On balance, there seems to be no evidence in these data of systematic racial effects that apply on the average to the full set of cases we studied" (see Chapter Five, p. 58). The other two teams reached the same conclusion. Klein, Freedman, and Bolus found that with their models, "after controlling for the tally of aggravating and mitigating factors and district, there was no evidence of a race effect. This

was true whether we examined race of victim alone . . . or race of defendant and the interaction between victim and defendant race” (see Chapter Four, p. 48). Schonlau reported that his “analysis found no evidence of racial bias in either the USAO recommendations or the AG decisions to seek the death penalty” (see Chapter Six, p. 113).

Klein, Freedman, and Bolus noted that “[p]revious research at the state level suggests that if a race-of-victim effect is present, it is most likely to appear among defendants with a middling probability of a seek decision (e.g., in the 0.40 to 0.60 range)” (see Chapter Four, p. 48). For such defendants, they found that the number of white-victim and nonwhite-victim cases with an AG seek decision was almost identical to the number that would be expected to have this decision on the basis of nonracial factors. This finding, and results with the full set of cases, led them to conclude that, after controlling for the heinousness of the crimes, “there was no sign of a race-of-victim effect overall, or in the cases with middling probabilities” (see Chapter Four, p. 48). Berk and He reached the same conclusion about the various subsets of defendants they studied.

All the teams would agree that race may be a factor in a particular case. However, because there does not appear to be any overall effect of race, the teams would also agree that a bias in one direction in one case must usually be offset by a bias in the opposite direction in another case. It is unlikely that offsetting biases occur often because, as discussed below, seek decisions can be predicted with good accuracy without considering victim or defendant race.

We did not examine why our findings regarding victim race differ from those in many past studies at the state level (see Chapter One and GAO, 1990). There is some evidence that the state-level studies may have suffered from methodological deficiencies (see discussion in Chapters Four and Five and Berk, Li, and Hickman [2005] about concerns with the statistical methods often used in the past). However, differences also could be due to differences in the nature of the cases prosecuted at state versus federal levels (see Chapters One and Two), prosecutor and defendant decisionmaking practices in state versus federal cases, or some combination of these or other factors.

## Predictability

Klein, Freedman, and Bolus note that “[f]ew systems as complex as the criminal justice system lend themselves to high-accuracy statistical modeling” (see Chapter Four, p. 40). Nevertheless, all three teams found that their statistical models predicted seek decisions with surprisingly good accuracy, in the range of 85 to 90 percent. These accuracy rates were obtained without considering defendant or victim race.

Klein, Freedman, and Bolus (Chapter Four) found that adding defendant and victim race to their models did not improve predictive accuracy. Moreover, their models fit the data quite well. For example, the actual number of defendants with a seek decision corresponded very closely with the expected number at each decile of predicted probability, including the middling probabilities. Neither defendant nor victim race was in their prediction equation.

## Capriciousness

Berk and He appear to equate capriciousness with unpredictability. Schonlau also focuses on predictability. Klein, Freedman, and Bolus disagree on the grounds that, although prediction errors may result from capricious behavior, errors “may also result from imperfections in the data and the models” (see Chapter Four, p. 40). Prediction errors also may stem from special circumstances, e.g., the AG may agree not to seek the death penalty for an offender with a high probability of a seek decision in order to extradite that person from another country or to arrange the offender’s capture (the Unabomber is an example).

The high level of predictability led Schonlau to conclude that “the decision to seek the death penalty is not capricious” (see Chapter Six, p. 109). Similarly, Berk and He concluded that “for the system as a whole, the USAO’s seek recommendation and the AG’s seek decision could be forecasted with considerable skill. In that sense, there is little evidence of capriciousness” (see Chapter Five, p. 58). Nevertheless, Berk and He contend there would still be capriciousness if a large percentage of cases had middling probabilities of a seek decision (e.g., probabilities between 0.40 and 0.60)—because “probabilities in the middle ranges imply that the capital-charge decision is little more than a coin flip” (see Chapter Five, p. 77). Berk and He reported that according to their models, 10 to 25 percent of the defendants had probabilities in this range.

When Klein, Freedman, and Bolus used their own models to investigate Berk and He’s alternative definition of capriciousness, they found that only about 6 percent of the defendants had probabilities in the 0.40 to 0.60 range (“probabilities” were defined by a logistic regression model, based on case characteristics other than race of victim or defendant). Klein, Freedman, and Bolus found no relationship between seek decisions and race for the cases in this zone. These findings are consistent with Berk and He’s conclusion that “there is no evidence that race plays an important role in which cases are faced with significant capriciousness. The fraction of cases with index values between 0.40 and 0.60 with our models is about the same regardless of the race of the victim or race of the defendant” (see Chapter Five, p. 77).

## Area Effects

The 94 federal districts differ substantially in how many capital cases they file. For example, the eight districts with the most defendants account for about half of all the defendants who had an AG seek/not-seek decision. Most of the other 86 districts had fewer than 10 defendants apiece.

Schonlau reported that after aggregating the districts to census region and controlling for various other case characteristics, there was a slightly greater tendency for USAO districts in the South to seek the death penalty and slightly less tendency for districts in the Northeast to seek it, but within a region, the odds of a defendant having a seek decision were not related to defendant or victim race. Schonlau concluded that the data were “inconclusive” as to whether or not there was a differential race effect by region.



Berk and He found “substantial variation across districts in the likelihood of a seek decision and a modest tendency overall for districts with a larger proportion of white-victim cases to be more inclined to recommend seeking the death penalty” (see Chapter Five, p. 75). At least in part, this is “because the number and mix of cases handled by a given district can vary enormously” (see Chapter Five, p. 75).

Klein, Freedman, and Bolus (Chapter Four) did not find a significant race-of-victim or race-of-defendant effect in any of the several models they constructed for the AG seek decision. They did find a significant race-of-victim effect in predicting USAO seek recommendations with a model that only adjusted for aggravating and mitigating factors, i.e., the model did not include district or defendant race. Klein, Freedman, and Bolus then controlled for district by including a dummy variable for each of the eight districts that had the most defendants (which implicitly compared each of these districts to all of the other districts combined). The addition of this control for districts eliminated the race-of-victim effect. Controlling for defendant race also eliminated the race-of-victim effect.

Like the other teams, Klein, Freedman, and Bolus (Chapter Four) found disparities among districts. However, including districts in their models had a very small effect on the estimated probability of a seek decision. For example, there was a 0.95 correlation between (1) estimated probabilities from a model that considered only aggravating and mitigating factors and (2) estimated probabilities from a model that considered those factors plus district. In short, the inclusion of districts in the model did not seem to matter much in terms of estimated probabilities. Berk and He (Chapter Five) also found that controlling for district made race effects disappear.

## Methodological Considerations

The three teams agreed that their analytic methods could not provide definitive answers about race effects in death-penalty cases. Analyses of observational data can support a thesis and may be useful for that purpose, but such analyses can seldom prove or disprove causation. Proving a negative, that racial bias is not present when it might be, is especially problematic. The possibility of bias in charging decisions in federal capital cases is a particularly complex problem. There is simply no way to identify and measure all the factors that can influence these decisions. Factors that have a substantial influence in just a few cases cannot be detected by statistical methods. For example, arranging the murder of a federal judge does not occur often enough to show up by itself as a statistically significant factor, even though it may carry great weight in the decisionmaking process. A factor may behave one way in one type of case and another way in a different type of case. For example, being a prominent member of a gang may increase the likelihood of a seek decision when the defendant refuses to accept a plea but decrease the likelihood when the defendant is willing to plead and provide information about other gang members. For these reasons among others, statistical models are, at best, crude approximations of a complex reality.

All three teams took steps to mitigate problems in modeling. For example, to reduce concerns about overfitting, one team used a scorecard approach; another used random forests;

and the third used propensity scores. The fact that all three independent teams came to essentially the same conclusions, despite using different methods, provides more confidence in the conclusions.

Prosecutors' charging decisions are affected by many considerations. Moreover, potentially important information about defendants, victims, and case characteristics are often not present in the case files (prosecutor assessments of witness credibility are an example). These problems are particularly acute with the typically complex federal capital case.

In light of these difficulties, all three teams were surprised by how well their models worked. For example, despite the differences in their analytic methods, all the teams could predict the seek decision with 85- to 90-percent accuracy. Nevertheless, given the inherent problems, results need to be interpreted cautiously. There are many reasonable ways to adjust for case characteristics, but no definitive way to choose one approach over another. Bias could occur at points in the process other than the ones studied, such as the decision by federal prosecutors to take a case. Results could be different with other variables, methods, and cases. Extrapolating the data we analyzed to other years, other defendants, other points in the decisionmaking process, or other jurisdictions, would be even more problematic.

## Conclusions

The main question addressed by this research is whether the USAO's recommendations and the AG's final charging decisions were related to defendant or victim race. The research also examined whether recommendations and decisions were related to case characteristics and geographic area. There are large race effects in the raw data that are of concern. However, all three teams found that controlling for case characteristics eliminated race effects. This finding supports the view that seek decisions were driven by heinousness of crimes rather than race. Nevertheless, these findings are not definitive because of the well-known difficulties in determining causation from statistical modeling of observational data.



## About the Authors

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**Stephen Klein**, Ph.D., is a senior research scientist at RAND where he has led large-scale studies in the fields of criminal justice, health, military personnel, and education. His criminal justice research includes studies of stranger- and acquaintance-rape victims; racial-equity issues in the processing and sentencing of defendants in capital and noncapital cases (including cross-jurisdictional comparisons); predicting recidivism based on offender characteristics; examining the likely effects of “three-strikes” laws; and assessing juror, witness, and defendant attitudes toward the criminal justice system. Dr. Klein has published over 250 articles and reports, including a chapter in the *Report to the Nation on Crime and Justice* and an article in *Science* regarding possible racial and ethnic bias in case processing and sentencing. He has served on several National Research Council (NRC) committees, has been an expert witness in both state and federal courts, and was appointed by a federal judge to serve as the court’s technical advisor. Dr. Klein has testified before a congressional committee regarding the methods used to study racial equity and bias in capital and noncapital cases.

**Richard Berk**, Ph.D., is a professor of statistics and sociology at the University of California, Los Angeles (UCLA), where he is also director of the UCLA Statistical Consulting Center. He is an elected fellow of the American Statistical Association, an elected fellow of the American Association for the Advancement of Science, and has served two terms on the NRC Committee on Applied and Theoretical Statistics. Professor Berk has published 12 books and nearly 150 peer-reviewed articles and book chapters. He was one of the statistical experts in the Supreme Court case of *McCleskey v. Kemp* and has since worked on several other death-penalty cases. He recently completed a book for the Rose Monograph series on how regression analysis (including the generalized linear model) has been used inappropriately in a variety of policy settings.

**Laura Hickman**, Ph.D., is a RAND criminologist who has worked on violence and case-processing issues as a research analyst within criminal justice agencies and within academic environments. Her work has focused on the criminal justice response to domestic-violence perpetrators and victims, and the utilization of police services by victims of violence. Dr. Hickman’s work has also included assessments of national trends in prison management and state-level analysis of sentencing under proscriptive sentencing guidelines. She has produced government reports and published articles in the areas of corrections, offender rehabilitation, sentencing, sexual offending, and domestic violence.

**David Freedman**, Ph.D. is professor of statistics at the University of California at Berkeley and a former department chair. He has been Sloan Professor and Miller Professor, and is now a member of the American Academy of Arts and Sciences. Dr. Freedman's prior research includes martingale inequalities, Markov processes, de Finetti's theorem, consistency of Bayes estimates, sampling, the bootstrap, procedures for testing and evaluating models, census adjustment, epidemiology, statistics, and the law. In 2003, he received the John J. Carty Award for the Advancement of Science from the National Academy of Sciences. He has worked as a consultant for the Carnegie Commission, the City of San Francisco, and the Federal Reserve, as well as several departments of the U.S. government—Energy, Treasury, Justice, and Commerce. Dr. Freedman has testified as an expert witness on statistics in a number of law cases, including *Piva v. Xerox Corp.* (employment discrimination), *Garza v. County of Los Angeles* (voting rights), and *City of New York v. U.S. Department of Commerce* (census adjustment).

**Roger Bolus**, Ph.D. is senior partner of the Research Solutions Group, a company that provides statistical and data management services to large-scale research studies in education, health care, and social sciences. Dr. Bolus also serves as director of psychometrics at the Center for Neurovisceral Sciences in the Department of Medicine at UCLA. For the past 25 years, he has consulted with private health care companies (e.g., Pfizer, Value Health Sciences), evaluation firms (e.g., WestEd), and public-policy research institutes (e.g., RAND and Council for Aid to Education), assisting in the design of research projects, development and psychometric validation of project instrumentation, creation and maintenance of complex databases, and the multivariate analysis of project data. Dr. Bolus also provides psychometric and data analysis services to boards of bar examiners in several states. He received his M.A. and Ph.D. in 1981 from the University of California, Los Angeles, with a specialization in measurement, statistics, and evaluation. He is the author or co-author of over 30 articles and technical reports and has spoken at several national conferences on the topics of outcome assessments and applications of innovative analytical techniques to complex research issues.

**Patricia Ebener**, B.A., is a senior behavioral scientist at RAND and a senior survey director with RAND's Survey Research Group (SRG). Throughout her career, Ms. Ebener has focused on survey design and operations issues in public-policy research. She has directed mail, telephone, and in-person surveys and extensive medical, criminal, and civil justice record abstraction studies. She has extensive experience in obtaining high response rates and quality data from surveys involving topics of sensitive behaviors and difficult-to-locate populations. Over the past 20 years, Ms. Ebener has successfully negotiated with many criminal justice agencies to obtain access to case files and administrative databases for use as source materials in data collection. She directed SRG data collection operations for the 1978 RAND Inmate Survey, which involved inmate surveys and record abstraction from criminal histories for 3,000 state and local inmates in three states, and for Dr. Klein's study of prosecutor decisionmaking in 10 jurisdictions nationwide.

**Matthias Schonlau**, Ph.D., is head of the RAND statistical consulting service. Prior to joining RAND, he held positions with the National Institute of Statistical Sciences and with AT&T Labs Research, and taught at Rutgers University. Dr. Schonlau has published a book, 23 peer-reviewed articles and book chapters, and more than 20 RAND and other publications. Publications outlets include *Statistical Science*, *KDD: Proceedings*, *JAMA: The Journal of*

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**Jennifer S. Wong**, M.A., is an ABD doctoral fellow in policy analysis at the Pardee RAND Graduate School. Her work at RAND has included reviews of programs targeting children, youth, and families; an evaluation of an alternative youth-sentencing program in Oregon; a study of recidivism among illegal aliens in the Los Angeles County Jail system; and the application of military planning strategies to police personnel planning. Ms. Wong has also worked as a research associate at the Center for Health Services and Policy Research in Vancouver, Canada, and as an evaluator with the Division of Organizational Strategy and Evaluation at the Claremont Graduate University Research Institute.



## Two Advisory Committees

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### Technical Advisory Committee

**Ilene H. Nagel**, Ph.D., is a professor of sociology and of law and society at the University of California, Santa Barbara. Key publications include “Plea Negotiations Under the Federal Sentencing Guidelines: Guideline Circumvention and Its Dynamics in the Post-Mistretta Period” (with Stephen J. Schulhofer; *Northwestern University Law Review*, 1997); and “Departures Under the Federal Sentencing Guidelines: An Empirical and Jurisprudential Analysis” (with Michael S. Gelacak and Barry L. Johnson; *Minnesota Law Review*, 1996). Dr. Nagel has served as the senior advisor to the provost and senior vice president for academic affairs and to the office of the President of the University of California System, and as the executive vice chancellor at the University of California, Santa Barbara. Prior to joining the University of California, she was the dean of the graduate school and the associate provost for research at the University of Maryland, College Park, and a tenured full professor of law at Indiana University, Bloomington. Dr. Nagel has also held visiting appointments at Yale Law School, Cambridge University, Columbia University School of Law, and George Washington University’s National Law Center.

**Daniel S. Nagin**, Ph.D., is a Teresa and H. John Heinz III Professor of Public Policy and Statistics at the Heinz School, Carnegie Mellon University. His research focuses on the evolution of criminal and antisocial behaviors over the life course, the deterrent effect of criminal and noncriminal penalties on illegal behaviors, and the development of statistical methods for analyzing longitudinal data. Professor Nagin is a member of the MacArthur Foundation Research Network on Economic Inequality and Social Interactions, the MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice, and the National Research Council’s Committee on Law and Justice. He serves on the steering committee of the National Consortium on Violence Research (NCOVR) and on numerous editorial and advisory boards. Professor Nagin is an elected fellow of the American Society of Criminology and of the American Society for the Advancement of Science and is a 1985 recipient of the Northeastern Association of Tax Administrators Award for Excellence in Tax Administration. Key publications include “Trajectories of Change in Criminal Offending: Good Marriages and the Desistance Process” (with John H. Laub and Robert J. Sampson; *American Sociological Review*, 1998), and “Hierarchical Bayesian Analysis of Arrest Rates” (with Jacqueline Cohen, Garrick Wallstrom, and Larry Wasserman; *Journal of the American Statistical Association*, 1998).



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### Expert Consultants

**David C. Baldus**, Ph.D., is a professor of law at the University of Iowa College of Law. Specializing in criminal law and capital punishment, he is the co-author of two books: *Statistical Proof of Discrimination* (with James W. L. Cole, 1980) and *Equal Justice and the Death Penalty: A Legal and Empirical Analysis* (with George Woodworth and Charles A. Pulaski, 1990) and more than 25 articles and book chapters. The principal focus of Professor Baldus' research is on law and social science, and he has conducted several empirical studies of the administration of the death penalty in America. Key publications include "Racial Discrimination and the Death Penalty in the Post-*Furman* Era: An Empirical and Legal Overview, with Recent Findings from Philadelphia" (with George Woodworth, David Zuckerman, and Neil Alan Weiner; *Cornell Law Review*, 1998) and "Race Discrimination in the Administration of the Death Penalty: An Overview of the Empirical Evidence with Special Emphasis on the Post-1990 Research" (with George Woodworth; *Criminal Law Bulletin*, 2003).

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**Raymond Paternoster**, Ph.D., is a professor of criminology and criminal justice at the University of Maryland. He also serves as a research fellow at the National Consortium on Violence Research at Carnegie Mellon University and as director of the Office of Academic Computing Services in the College of Behavioral and Social Sciences at the University of Maryland. Dr. Paternoster’s areas of research include criminological theory, offending over the life course, violence research, and quantitative methods. Among his current research is an examination of the relationship between intensive employment during adolescence and subsequent problem behaviors, such as committing delinquent acts and substance abuse. Recent publications include “Justice by Geography and Race: The Administration of the Death Penalty in Maryland, 1978–1999” (with Brame, Bacon, and Ditchfield; *Margins: Maryland’s Law Journal on Race, Religion, Gender and Class*, forthcoming) and “Does the Perceived Risk of Punishment Deter Criminally Prone Individuals?” (with Bradley R. E. Wright, Avshalom Caspi, and Terri E. Moffitt; *Journal of Research in Crime and Delinquency*, 2004).

**James Q. Wilson**, Ph.D., is Ronald Reagan Professor of Public Policy at Pepperdine University. From 1961 to 1987, Dr. Wilson taught political science at Harvard University, where he was the Shattuck Professor of Government. He was the James Collins Professor of Management and Public Policy at UCLA from 1985 until 1997. He is the author or co-author of 14 books, including *The Marriage Problem: How Our Culture Has Weakened Families* (2002), *Crime and Human Nature* (with Richard J. Herrnstein, 1998), and *Thinking About Crime* (1985). Dr. Wilson has served on several national commissions, including roles as chairman of

the White House Task Force on Crime in 1966, chairman of the National Advisory Commission on Drug Abuse Prevention in 1972–1973, and member of the President’s Foreign Intelligence Advisory Board from 1985 to 1991. In 1990 the American Political Science Association presented him with the James Madison Award for a career of distinguished scholarship, and, in 2001, he was presented with a lifetime achievement award. He has been elected a member of the American Academy of Arts and Sciences and the American Philosophical Society, and has received honorary degrees from six universities (most recently, Harvard University).

**Franklin Zimring**, Ph.D., is William G. Simon Professor of Law at the University of California, Berkeley. He previously served as a member of the University of Chicago Law School faculty as Llewellyn Professor of Law and director of the Center for Studies in Criminal Justice. His major fields of interest are criminal justice and family law, with special emphasis on the use of empirical research to inform legal policy. Dr. Zimring is best known for his studies of the determinants of the death rate from violent attacks; the impact of pretrial diversion from the criminal-justice system; and criminal sanctions. He has been a visiting professor at the University of Pennsylvania and Yale University, and a fellow of the Center for Advanced Studies in Behavioral Sciences. He is a fellow of the American Society of Criminology and a member of the American Academy of Arts and Sciences. Since 1998, he has been member of the U.S. Department of Education’s Safe, Disciplined and Drug-Free Expert Panel and an advisory member for the National Research Council Panel on Juvenile Crime: Prevention, Treatment, and Control. Key publications include *The Contradictions of American Capital Punishment* (2003) and “The Executioner’s Dissonant Song: On Capital Punishment and American Legal Values” (in *The Killing State: Capital Punishment in Law, Politics, and Culture*, edited by Austin Sarat, 1999).

## Capital-Eligible Offenses

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Table C.1 lists portions of the U.S. Code that specify offenses eligible for the death penalty.

**Table C.1**  
**Federal-Offense Code List: Statute Sort**

Code	Description
8 USC	Aliens and Nationality
8 USC 1324(a)	Bringing in and Harboring Certain Aliens: Criminal Penalties
8 USC 1324(a)(1)(A)(i)	[K]nowing that a person is an alien, brings to or attempts to bring to the United States in any manner whatsoever such person at a place other than a designated port of entry or place other than as designated by the Commissioner, regardless of whether such alien has received prior official authorization to come to, enter, or reside in the United States and regardless of any future official action which may be taken with respect to such alien.
8 USC 1324(a)(1)(A)(ii)	[K]nowing or in reckless disregard of the fact that an alien has come to, entered, or remains in the United States in violation of law, transports, or moves or attempts to transport or move such alien within the United States by means of transportation or otherwise, in furtherance of such violation of law.
8 USC 1324(a)(1)(A)(iii)	[K]nowing or in reckless disregard of the fact that an alien has come to, entered, or remains in the United States in violation of law, conceals, harbors, or shields from detection, or attempts to conceal, harbor, or shield from detection, such alien in any place, including any building or any means of transportation.
8 USC 1324(a)(1)(A)(iv)	[E]ncourages or induces an alien to come to, enter, or reside in the United States, knowing or in reckless disregard of the fact that such coming to, entry, or residence is or will be in violation of law.
8 USC 1324(a)(1)(A)(v)	(I) [E]ngages in any conspiracy to commit any of the preceding acts, or (II) aids or abets the commission of any of the preceding acts, shall be punished as provided in subparagraph (B). (B) A person who violates subparagraph (A) shall, for each alien in respect to whom such a violation occurs—(i) in the case of a violation of subparagraph (A)(i) or (v)(I) or in the case of a violation of subparagraph (A)(ii), (iii), or (iv) in which the offense was done for the purpose of commercial advantage or private financial gain, be fined under title 18, imprisoned not more than 10 years, or both; (ii) in the case of a violation of subparagraph (A)(ii), (iii), (iv), or (v)(II), be fined under title 18, imprisoned not more than 5 years, or both; (iii) in the case of a violation of subparagraph (A)(i), (ii), (iii), (iv), or (v) during and in relation to which the person causes serious bodily injury (as defined in section 1365 of title 18) to, or places in jeopardy the life of, any person, be fined under title 18, imprisoned not more than 20 years, or both; and (iv) in the case of a violation of subparagraph (A)(i), (ii), (iii), (iv), or (v) resulting in the death of any person, be punished by death or imprisoned for any term of years or for life, fined under title 18, or both.

**Table C.1—Continued**

<b>Code</b>	<b>Description</b>
18 USC	Congressional, Cabinet, and Supreme Court Assassination, Kidnapping, and Assault
18 USC 32	Destruction of Aircraft or Aircraft Facilities
18 USC 33	Destruction of Motor Vehicles or Motor Vehicle Facilities
18 USC 36	Drive-by Shooting
18 USC 37	Violence at International Airports
18 USC 241	Conspiracy Against Rights
18 USC 242	Deprivation of Rights Under Color of Law

Table C.1—Continued

Code	Description
18 USC 245(b)	<p>Whoever . . . , by force or threat of force willfully injures, intimidates or interferes with, or attempts to injure, intimidate or interfere with—</p> <p>(1) any person because he is or has been, or in order to intimidate such person or any other person or any class of persons from—(A) voting or qualifying to vote, qualifying or campaigning as a candidate for elective office, or qualifying or acting as a poll watcher, or any legally authorized election official, in any primary, special, or general election; (B) participating in or enjoying any benefit, service, privilege, program, facility, or activity provided or administered by the United States; (C) applying for or enjoying employment, or any perquisite thereof, by any agency of the United States; (D) serving, or attending upon any court in connection with possible service, as a grand or petit juror in any court of the United States; (E) participating in or enjoying the benefits of any program or activity receiving Federal financial assistance; or</p> <p>(2) any person because of his race, color, religion or national origin and because he is or has been—(A) enrolling in or attending any public school or public college; (B) participating in or enjoying any benefit, service, privilege, program, facility or activity provided or administered by any State or subdivision thereof; (C) applying for or enjoying employment, or any perquisite thereof, by any private employer or any agency of any State or subdivision thereof, or joining or using the services or advantages of any labor organization, hiring hall, or employment agency; (D) serving, or attending upon any court of any State in connection with possible service, as a grand or petit juror; (E) traveling in or using any facility of interstate commerce, or using any vehicle, terminal, or facility of any common carrier by motor, rail, water, or air; (F) enjoying the goods, services, facilities, privileges, advantages, or accommodations of any inn, hotel, motel, or other establishment which provides lodging to transient guests, or of any restaurant, cafeteria, lunchroom, lunch counter, soda fountain, or other facility which serves the public and which is principally engaged in selling food or beverages for consumption on the premises, or of any gasoline station, or of any motion picture house, theater, concert hall, sports arena, stadium, or any other place of exhibition or entertainment which serves the public, or of any other establishment which serves the public and (i) which is located within the premises of any of the aforesaid establishments. . . . or</p> <p>(3) during or incident to a riot or civil disorder, any person engaged in a business in commerce or affecting commerce . . . or</p> <p>(4) any person because he is or has been, or in order to intimidate such person or any other person or any class of persons from—(A) participating, without discrimination on account of race, color, religion or national origin, in any of the benefits or activities described in subparagraphs (1)(A) through (1)(E) or subparagraphs (2)(A) through (2)(F); or (B) affording another person or class of persons opportunity or protection to so participate; or</p> <p>(5) any citizen because he is or has been, or in order to intimidate such citizen or any other citizen from lawfully aiding or encouraging other persons to participate, without discrimination on account of race, color, religion or national origin, in any of the benefits or activities described in subparagraphs (1)(A) through (1)(E) or subparagraphs (2)(A) through (2)(F), or participating lawfully in speech or peaceful assembly opposing any denial of the opportunity to so participate</p> <p>shall be fined under this title, or imprisoned not more than one year, or both; and if bodily injury results from the acts committed in violation of this section or if such acts include the use, attempted use, or threatened use of a dangerous weapon, explosives, or fire shall be fined under this title, or imprisoned not more than ten years, or both; and if death results from the acts committed in violation of this section or if such acts include kidnapping or an attempt to kidnap, aggravated sexual abuse or an attempt to commit aggravated sexual abuse, or an attempt to kill, shall be fined under this title or imprisoned for any term of years or for life, or both, or may be sentenced to death. As used in this section, the term “participating lawfully in speech or peaceful assembly” shall not mean the aiding, abetting, or inciting of other persons to riot or to commit any act of physical violence upon any individual or against any real or personal property in furtherance of a riot. . . .</p>



Table C.1—Continued

Code	Description
18 USC 247(d)(1)	[I]f death results from acts committed in violation of this section or if such acts include kidnapping or an attempt to kidnap, aggravated sexual abuse or an attempt to commit aggravated sexual abuse, or an attempt to kill, a fine in accordance with this title and imprisonment for any term of years or for life, or both, or may be sentenced to death.
18 USC 794	Gathering or Delivering Defense Information to Aid Foreign Government
18 USC 844	Penalties
18 USC 844(d)	Whoever transports or receives, or attempts to transport or receive, in interstate or foreign commerce any explosive with the knowledge or intent that it will be used to kill, injure, or intimidate any individual or unlawfully to damage or destroy any building, vehicle, or other real or personal property, shall be imprisoned for not more than ten years, or fined under this title, or both; and if personal injury results to any person, including any public safety officer performing duties as a direct or proximate result of conduct prohibited by this subsection, shall be imprisoned for not more than twenty years or fined under this title, or both; and if death results to any person, including any public safety officer performing duties as a direct or proximate result of conduct prohibited by this subsection, shall be subject to imprisonment for any term of years, or to the death penalty or to life imprisonment.
18 USC 844(f)	(1) Whoever maliciously damages or destroys, or attempts to damage or destroy, by means of fire or an explosive, any building, vehicle, or other personal or real property in whole or in part owned or possessed by, or leased to, the United States, or any department or agency thereof, or any institution or organization receiving Federal financial assistance, shall be imprisoned for not less than 5 years and not more than 20 years, fined under this title, or both. (2) Whoever engages in conduct prohibited by this subsection, and as a result of such conduct, directly or proximately causes personal injury or creates a substantial risk of injury to any person, including any public safety officer performing duties, shall be imprisoned for not less than 7 years and not more than 40 years, fined under this title, or both. (3) Whoever engages in conduct prohibited by this subsection, and as a result of such conduct directly or proximately causes the death of any person, including any public safety officer performing duties, shall be subject to the death penalty, or imprisoned for not less than 20 years or for life, fined under this title, or both.
18 USC 844(i)	Whoever maliciously damages or destroys, or attempts to damage or destroy, by means of fire or an explosive, any building, vehicle, or other real or personal property used in interstate or foreign commerce or in any activity affecting interstate or foreign commerce shall be imprisoned for not less than 5 years and not more than 20 years, fined under this title, or both; and if personal injury results to any person, including any public safety officer performing duties as a direct or proximate result of conduct prohibited by this subsection, shall be imprisoned for not less than 7 years and not more than 40 years, fined under this title, or both; and if death results to any person, including any public safety officer performing duties as a direct or proximate result of conduct prohibited by this subsection, shall also be subject to imprisonment for any term of years, or to the death penalty or to life imprisonment.
18 USC 924(j)	A person who, in the course of a violation of subsection (c), causes the death of a person through the use of a firearm, shall— (1) if the killing is a murder (as defined in section 1111), be punished by death or by imprisonment for any term of years or for life; and (2) if the killing is manslaughter (as defined in section 1112), be punished as provided in that section.
18 USC 930(c)	A person who kills any person in the course of a violation of subsection (a) or (b), or in the course of an attack on a Federal facility involving the use of a firearm or other dangerous weapon, or attempts or conspires to do such an act, shall be punished as provided in sections 1111, 1112, 1113, and 1117.

Table C.1—Continued

Code	Description
18 USC 1111	Murder
18 USC 1114	Protection of Officers and Employees of the United States
18 USC 1116(a)	Whoever kills or attempts to kill a foreign official, official guest, or internationally protected person shall be punished as provided under sections 1111, 1112, and 1113 of this title.
18 USC 1118	Murder by a Federal Prisoner
18 USC 1119	Foreign Murder of United States Nationals
18 USC 1120	Murder by Escaped Prisoners
18 USC 1121(a)	Whoever intentionally kills— (1) a State or local official, law enforcement officer, or other officer or employee while working with Federal law enforcement officials in furtherance of a Federal criminal investigation—(A) while the victim is engaged in the performance of official duties; (B) because of the performance of the victim’s official duties; or (C) because of the victim’s status as a public servant; or (2) any person assisting a Federal criminal investigation, while that assistance is being rendered and because of it, shall be sentenced according to the terms of section 1111, including by sentence of death or by imprisonment for life.
18 USC 1121(b)	(1) Whoever, in a circumstance described in paragraph (3) of this subsection, while incarcerated, intentionally kills any State correctional officer engaged in, or on account of the performance of such officer’s official duties, shall be sentenced to a term of imprisonment which shall not be less than 20 years, and may be sentenced to life imprisonment or death. (2) As used in this section, the term, “State correctional officer” includes any officer or employee of any prison, jail, or other detention facility, operated by, or under contract to, either a State or local governmental agency, whose job responsibilities include providing for the custody of incarcerated individuals. (3) The circumstance referred to in paragraph (1) is that—(A) the correctional officer is engaged in transporting the incarcerated person interstate; or (B) the incarcerated person is incarcerated pursuant to a conviction for an offense against the United States.
18 USC 1201(a)	Whoever unlawfully seizes, confines, inveigles, decoys, kidnaps, abducts, or carries away and holds for ransom or reward or otherwise any person, except in the case of a minor by the parent thereof, when— (1) the person is willfully transported in interstate or foreign commerce, regardless of whether the person was alive when transported across a State boundary if the person was alive when the transportation began; (2) any such act against the person is done within the special maritime and territorial jurisdiction of the United States; (3) any such act against the person is done within the special aircraft jurisdiction of the United States as defined in section 46501 of title 49; (4) the person is a foreign official, an internationally protected person, or an official guest as those terms are defined in section 1116(b) of this title; or (5) the person is among those officers and employees described in section 1114 of this title and any such act against the person is done while the person is engaged in, or on account of, the performance of official duties, shall be punished by imprisonment for any term of years or for life and, if the death of any person results, shall be punished by death or life imprisonment.



Table C.1—Continued

Code	Description
18 USC 1203(a)	Except as provided in subsection (b) of this section, whoever, whether inside or outside the United States, seizes or detains and threatens to kill, to injure, or to continue to detain another person in order to compel a third person or a governmental organization to do or abstain from doing any act as an explicit or implicit condition for the release of the person detained, or attempts or conspires to do so, shall be punished by imprisonment for any term of years or for life and, if the death of any person results, shall be punished by death or life imprisonment.
18 USC 1503	Influencing or Injuring Officer or Juror Generally
18 USC 1512(a)	<p>(1) Whoever kills or attempts to kill another person, with intent to—(A) prevent the attendance or testimony of any person in an official proceeding; (B) prevent the production of a record, document, or other object, in an official proceeding; or (C) prevent the communication by any person to a law enforcement officer or judge of the United States of information relating to the commission or possible commission of a Federal offense or a violation of conditions of probation, parole, or release pending judicial proceedings; shall be punished as provided in paragraph (3).</p> <p>(2) Whoever uses physical force or the threat of physical force against any person, or attempts to do so, with intent to—(A) influence, delay, or prevent the testimony of any person in an official proceeding; (B) cause or induce any person to—(i) withhold testimony, or withhold a record, document, or other object, from an official proceeding; (ii) alter, destroy, mutilate, or conceal an object with intent to impair the integrity or availability of the object for use in an official proceeding; (iii) evade legal process summoning that person to appear as a witness, or to produce a record, document, or other object, in an official proceeding; or (iv) be absent from an official proceeding to which that person has been summoned by legal process; or (C) hinder, delay, or prevent the communication to a law enforcement officer or judge of the United States of information relating to the commission or possible commission of a Federal offense or a violation of conditions of probation, supervised release, parole, or release pending judicial proceedings; shall be punished as provided in paragraph (3).</p> <p>(3) The punishment for an offense under this subsection is—(A) in the case of murder (as defined in section 1111), the death penalty or imprisonment for life, and in the case of any other killing, the punishment provided in section 1112; (B) in the case of—(i) an attempt to murder; or (ii) the use or attempted use of physical force against any person; imprisonment for not more than 20 years; and (C) in the case of the threat of use of physical force against any person, imprisonment for not more than 10 years.</p>
18 USC 1513	Retaliating Against a Witness, Victim, or an Informant
18 USC 1716	Injurious Articles as Nonmailable
18 USC 1958(a)	Whoever travels in or causes another (including the intended victim) to travel in interstate or foreign commerce, or uses or causes another (including the intended victim) to use the mail or any facility in interstate or foreign commerce, with intent that a murder be committed in violation of the laws of any State or the United States as consideration for the receipt of, or as consideration for a promise or agreement to pay, anything of pecuniary value, or who conspires to do so, shall be fined under this title or imprisoned for not more than ten years, or both; and if personal injury results, shall be fined under this title or imprisoned for not more than twenty years, or both; and if death results, shall be punished by death or life imprisonment, or shall be fined not more than \$250,000, or both.

Table C.1—Continued

Code	Description
18 USC 1959(a)	<p>Whoever, as consideration for the receipt of, or as consideration for a promise or agreement to pay, anything of pecuniary value from an enterprise engaged in racketeering activity, or for the purpose of gaining entrance to or maintaining or increasing position in an enterprise engaged in racketeering activity, murders, kidnaps, maims, assaults with a dangerous weapon, commits assault resulting in serious bodily injury upon, or threatens to commit a crime of violence against any individual in violation of the laws of any State or the United States, or attempts or conspires so to do, shall be punished</p> <p>(1) for murder, by death or life imprisonment, or a fine under this title, or both; and for kidnapping, by imprisonment for any term of years or for life, or a fine under this title, or both;</p> <p>(2) for maiming, by imprisonment for not more than thirty years or a fine under this title, or both;</p> <p>(3) for assault with a dangerous weapon or assault resulting in serious bodily injury, by imprisonment for not more than twenty years or a fine under this title, or both;</p> <p>(4) for threatening to commit a crime of violence, by imprisonment for not more than five years or a fine under this title, or both;</p> <p>(5) for attempting or conspiring to commit murder or kidnapping, by imprisonment for not more than ten years or a fine under this title, or both; and</p> <p>(6) for attempting or conspiring to commit a crime involving maiming, assault with a dangerous weapon, or assault resulting in serious bodily injury, by imprisonment for not more than three years or a fine . . . under this title, or both.</p>
18 USC 1992	Wrecking Trains
18 USC 2113(e)	<p>Whoever, in committing any offense defined in this section, or in avoiding or attempting to avoid apprehension for the commission of such offense, or in freeing himself or attempting to free himself from arrest or confinement for such offense, kills any person, or forces any person to accompany him without the consent of such person, shall be imprisoned not less than ten years, or if death results shall be punished by death or life imprisonment.</p>
18 USC 2119(3)	<p>[I]f death results, be fined under this title or imprisoned for any number of years up to life, or both, or sentenced to death.</p>
18 USC 2245	Sexual Abuse Resulting in Death
18 USC 2251(d)	<p>(1) Any person who, in a circumstance described in paragraph (2), knowingly makes, prints, or publishes, or causes to be made, printed, or published, any notice or advertisement seeking or offering—(A) to receive, exchange, buy, produce, display, distribute, or reproduce, any visual depiction, if the production of such visual depiction involves the use of a minor engaging in sexually explicit conduct and such visual depiction is of such conduct; or (B) participation in any act of sexually explicit conduct by or with any minor for the purpose of producing a visual depiction of such conduct; shall be punished as provided under subsection (e).</p> <p>(2) The circumstance referred to in paragraph (1) is that—(A) such person knows or has reason to know that such notice or advertisement will be transported in interstate or foreign commerce by any means including by computer or mailed; or (B) such notice or advertisement is transported in interstate or foreign commerce by any means including by computer or mailed.</p>
18 USC 2280	Violence Against Maritime Navigation
18 USC 2281	Violence Against Maritime Fixed Platforms

Table C.1—Continued

Code	Description
18 USC 2332(a)	Homicide.—Whoever kills a national of the United States, while such national is outside the United States, shall— (1) if the killing is murder (as defined in section 1111(a)), be fined under this title, punished by death or imprisonment for any term of years or for life, or both; (2) if the killing is a voluntary manslaughter as defined in section 1112(a) of this title, be fined under this title or imprisoned not more than ten years, or both; and (3) if the killing is an involuntary manslaughter as defined in section 1112(a) of this title, be fined under this title or imprisoned not more than three years, or both.
18 USC 2332(a)(1)	[I]f the killing is murder (as defined in section 1111(a)), be fined under this title, punished by death or imprisonment for any term of years or for life, or both.
18 USC 2332(b)(2)	[I]n the case of a conspiracy by two or more persons to commit a killing that is a murder as defined in section 1111(a) of this title, if one or more of such persons do any overt act to effect the object of the conspiracy, be fined under this title or imprisoned for any term of years or for life, or both so fined and so imprisoned.
18 USC 2340(2)(A)	[T]he intentional infliction or threatened infliction of severe physical pain or suffering.
18 USC 2381	Treason
18 USC 3591(b)(2)	[A]n offense referred to in section 408(c)(1) of the Controlled Substances Act (21 U.S.C. 848(c)(1)), committed as part of a continuing criminal enterprise offense under that section, where the defendant is a principal administrator, organizer, or leader of such an enterprise, and the defendant, in order to obstruct the investigation or prosecution of the enterprise or an offense involved in the enterprise, attempts to kill or knowingly directs, advises, authorizes, or assists another to attempt to kill any public officer, juror, witness, or members of the family or household of such a person.
18 USC 3591(b)(1)	[A]n offense referred to in section 408(c)(1) of the Controlled Substances Act (21 U.S.C. 848(c)(1)), committed as part of a continuing criminal enterprise offense under the conditions described in subsection (b) of that section which involved not less than twice the quantity of controlled substance described in subsection (b)(2)(A) or twice the gross receipts described in subsection (b)(2)(B).
21 USC	Food and Drugs
21 USC 848(e)(1)(A)	[A]ny person engaging in or working in furtherance of a continuing criminal enterprise, or any person engaging in an offense punishable under section 841(b)(1)(A) of this title or section 960(b)(1) of this title who intentionally kills or counsels, commands, induces, procures, or causes the intentional killing of an individual and such killing results, shall be sentenced to any term of imprisonment, which shall not be less than 20 years, and which may be up to life imprisonment, or may be sentenced to death.
21 USC 848(e)(1)(B)	[A]ny person, during the commission of, in furtherance of, or while attempting to avoid apprehension, prosecution or service of a prison sentence for, a felony violation of this subchapter or subchapter II of this chapter who intentionally kills or counsels, commands, induces, procures, or causes the intentional killing of any Federal, State, or local law enforcement officer engaged in, or on account of, the performance of such officer's official duties and such killing results, shall be sentenced to any term of imprisonment, which shall not be less than 20 years, and which may be up to life imprisonment, or may be sentenced to death.
49 USC	Transportation
49 USC 1472	[former statute related to air piracy murder, now sections of Title 49 related to air piracy murder]
49 USC 46502	Aircraft Piracy

## Coding Forms and Rules

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**CASE SUMMARY FORM**

**CASE TIME (HH MM)** \_\_\_\_\_

<b>Case</b>								
<b>RAND csid</b>					<b>District:</b>			
<b>Dcsid</b>	<b>Defendant</b>	<b>Statute/Charge</b>	<b>Vcsid</b>	<b>Victim</b>	<b>AG Dec</b>	<b>Dec Date</b>	<b>Sub Dec</b>	<b>Sub Date</b>

**FORMS COUNT: D. :** \_\_\_\_\_ **VICTIM:** \_\_\_\_\_ **SUPPLEMENTAL D.:** \_\_\_\_\_

<b>Abstractor ID:</b> <input type="text"/>	<b>Abstraction Date:</b> <input type="text"/> / <input type="text"/> /2003
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<b>INVENTORY of Documents included in the case file</b>		
<b>(CHECK ALL THAT APPLY AND ENTER MOST RECENT DATE):</b>		
<input type="checkbox"/> USAO Memo	_____ / _____ / _____	<input type="checkbox"/> Med.Ex./Coroner's Rept(s).
<input type="checkbox"/> Agg/Mit Factors Eval. Form		<input type="checkbox"/> Non-Decisional Info. Form(s)
<input type="checkbox"/> AGRC Memo	_____ / _____ / _____	<input type="checkbox"/> Other DoJ Statement/Memo(s)
<input type="checkbox"/> AG Executive Summary	_____ / _____ / _____	<input type="checkbox"/> Corrections/parole records
<input type="checkbox"/> AG Letter (signed copy)	_____ / _____ / _____	<input type="checkbox"/> Arrest Report(s)
<input type="checkbox"/> Defense Atty. Submission	_____ / _____ / _____	<input type="checkbox"/> Witness statements/interviews
<input type="checkbox"/> Indictment(s)	<input type="checkbox"/> V. Family Submission	<input type="checkbox"/> Photos/Video
<input type="checkbox"/> Rap Sheet(s)	<input type="checkbox"/> D. Family Submission	<input type="checkbox"/> Media Coverage
<input type="checkbox"/> Psych. Assessmnt. Rept.(s)	<input type="checkbox"/> D. Correspondence	

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### **Specifications for the Case Summary Form**

The information about the case printed on the Case Summary comes from our Record Management System.

Before you begin, check that the file contents match the printout in terms of names of the parties AND the final AG decision. Review the charges to familiarize yourself with the type of case, the number of parties to expect, and the dates. If the information is substantially different, e.g. no USAO memo regarding one of the Defendants on the printout, alert your supervisor.

When you edit your work after you finish the case abstraction, check the printout again and be sure you have forms for all the parties listed on the label and check that the final AG decision on the printout matches what you coded. IF IT DOES NOT, ALERT your supervisor to help identify the sources of the discrepancy.

A case will have at least one Defendant and one Victim, but will often have multiple Ds and Vs.

Enter date you began coding the case

Use your Abstractor ID from Roster

**DO NOT USE INFORMATION IN THE PRINTOUT AS A SOURCE FOR CODING**

Do not write in the office use only box

### **Specifications for Inventory of Documents**

Use the Inventory as you sort the materials in the file before you begin coding. The inventory is intended to inform the analysts of whether certain documents were in the file. Several of them are "Key" documents, i.e., the first six listed. You'll need these to work on the case. Look carefully for them, using the case Index often provided in file. Note that a date should appear on 5 of those 6 Key documents and we need to have the box checked indicating the document is in the file AND the most recent date entered. Use the document with the most recent date.

There are often duplicates in the file. Moreover, there are often drafts of AGRC memos in the file and you should be using the final, NOT a draft; thus the emphasis on the most recent date. Occasionally there are unsigned AG letters and even two sets - one authorizing seek and one authorizing not seek. These are made in preparation for AGRC meetings, anticipating the decision in either direction. When there are multiple documents, be sure you determine whether or not they are duplicates and which is the final, e.g. the signed AG letter.

There are often documents in the files other than those that need to be recorded in the inventory.

Do not include duplicates in the inventory.  
documents referenced but not present in the file.

## Defendant Form

CASE ID #x-xxx-xx-xx
NAME
DEFENDANT ID #x-xxx-xxx
NAME

Date:   /   / 2003

Begin Time:   :    
 AM     PM

End Time:   :    
 AM     PM

### Criminal Justice ID Codes:

SSN# .....01	Grand Jury #.....04	Bureau of Prisons #... ..07
NCIC# .....02	FBI Agency Case #.....05	ATF Case# .....08
USAO #.....03	Court Docket #.....06	DEA Case # ..... 09

ID NUMBER	Type

ID NUMBER	Type

Do not code local/state police or corrections IDs; it is not necessary to comb through documents looking for IDs. Use those on the Factors Evaluation Form(FEF). If there are no IDs on the FEF look for some on the Indictment (court Docket #) or on a Rap Sheet (NCIC #) or USAO Memo USAO #. No need to fill all six boxes above. The 9 types above are the only IDs to be coded.

**Provide thumbnail sketch (D1 form only) and describe any problems completing form for this Defendant.**

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## Specifications for Q. 1: All Charges against This D. in the case

First, review the Offense Code List. It is sorted by type of capital charges and by US Code title, part and sub-parts. There are several types of **capital** charges grouped together in our list: alien smuggling murders which fall in Title 8; certain drug felony offenses; espionage, explosives and terrorism which are all unusual cases; civil rights murders; transportation related offenses; and a large group of other specific types of murders. In addition, cases sometimes include non capital charges, which are listed in a separate section and include arson, counterfeiting, drug charges other than those in the list above; rape, robbery, etc.. Use this list as necessary in completing Q.1.

Our Case Summary usually contains all of the capital charges. But it does not include counts. AND, there may be additional charges (capital or non capital) included in the USAO memo or the AGRC memo (which is completed later and may reflect added charges). **Use the executive summary of the AGRC memo, section labeled Nature of Charges, as the definitive source of charges in the case.** It is not necessary, nor should you spend the time, to read long, many count indictments naming many individuals in multiple incidents and offenses, many of which do not involve the victims named in the case of interest. However, in the other primary documents, e.g. the USAO memo and the AGRC memo there may be information about additional charges **IN THIS CASE**, against the Defendant you are completing the form for. Add those to the list. **Although unlikely, if the charges are not listed on either the ACRC memo nor the USAO memo (whether as a statute penal code or a text description of the charges), and an indictment is present in the file, you can look at the indictment making sure that you are looking at the one that lists the capital offense and is the most recent (if more than one present).**

Whenever possible, enter the charges using the exact penal code as provided in the source document, e.g. 21 USC 848 (e)(1)(A). This is the federal crime of Continuing Criminal Enterprise-Drug Felony Intentional Killing. If the charge is referred to only by name, e.g. Racketeering, use the code (Racketeering = 14) from the Other Offenses section included on the Offense Code List. Use code, do not write in names of offenses in the space marked Statute/Code.

Offenses may be victim specific or not. If the charge is narcotics conspiracy, 12 USC 846 there is no particular victim. Leave the victim space blank. However, there may be many counts, e.g. distribution of heroin can be one count, distribution of cocaine another and so on. Be sure to enter counts for each offense. Murder involves a victim and there may be multiple murders, meaning multiple counts. If the victims are named in our case summary, list them by V#. If not, enter their last name in the Victim space associated with the offense.

Often you'll need to look further for the date of the offense because it won't be included in the Nature of Charges description in the AGRC Executive Summary.

If an offense spans a period of time, as conspiracies often do, then enter the begin and end dates of the period using as much information as you have, preferably month, day and year. However, the sources often provide descriptions of a time period only in terms of years, e.g. "from 1994-1997 ...". This can be further complicated by descriptions such as "during most of 1998". Or, "for 18 months during 1997 and 1998 ...". In the former case enter 1998 to 1998. In the second example, enter 1997 to 1998. This will indicate a period of time not a single date.

For offenses **without a penal code** that are called attempted, e.g. "attempted murder", enter an "A" immediately in front of the code number, i.e. A11.

For offenses **without a penal code** that are **not** on the Offense Code list, enter an **98** and write in the name on the bottom of the form. **BE SURE TO FLAG THE CASE FOR YOUR SUPERVISOR WHO WILL ADD CODES TO THE LIST AND REDISTRIBUTE THE CODE LIST.**

If there are more than 10 offenses in the case, enter the 10 most serious. **The goal of listing (whether as a penal code or using the "other offenses" code on the code list) all of the offenses that are charged as part of the indictment in which the capital offense is charged is to alert the researchers that there are other potentially more or less severe charges associated with this case.**

### 1. Charges against **this** Defendant in this case: *(Use Offense Code List) See Page 1a*

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RAND Survey Research Group



All charges that are included in the same indictment in which the capital offense is charged should be listed at Q1.

A. Statute/ Code	B. Counts	C. Victim ID(s) or Name(s)	D. Date(s) of Offense (MM/DD/YR)
a. If there are non-federal charges in the case against this D (which is very rare),			When multiple dates, enter first and last. Leave "to" space blank unless there are multiple dates. ____ ____ ____ [to ____ ____ ____]
b. be sure the initials of the jurisdiction are included w/ the code to distinguish from USC		Record enough of the Name to distinguish among Vs	Fill all 6 spaces, MM,DD,YR, w/ 9s if date is not reported ____ ____ ____ [to ____ ____ ____]
c.			If you only have year enter the two digits in ____ ____ ____ [to ____ ____ ____]
d. A superseding indictment replaces a prior indictment			the year space <b>and leave the remainder of the date spaces blank</b> ____ ____ ____ [to ____ ____ ____]
e.- if the USAO and AGRC list different charges in the capital			____ ____ ____ [to ____ ____ ____]
f. case, <b>use the charges in the AGRC memo, Nature of Charges section.</b>			____ ____ ____ [to ____ ____ ____]
g. case=all charges in the nature of charges section of AGRC memo			____ ____ ____ [to ____ ____ ____]
h.all charges in an indictment make up a case			____ ____ ____ [to ____ ____ ____]

2. Report of <b>other cases</b> pending against this Defendant: -State or Federal cases -not uncharged offenses -a separate indictment is a separate case	1 <input type="checkbox"/> Yes likely in CCE and racketeering cases 2 <input type="checkbox"/> No other cases <b>must be stated</b> 9 <input type="checkbox"/> Not reported
3. Report of prior <b>adult convictions</b> against this Defendant -concluded cases even if on appeal - <u>not</u> arrests only -Do not count convictions you know are for misdemeanors only -code from all case contents, not agg. factor part of Evaluation of Factors Form	1 <input type="checkbox"/> Yes, prior <b>felony</b> convictions 2 <input type="checkbox"/> Yes, prior convictions, <b>type unknown</b> 2 <input type="checkbox"/> No prior felony record <b>must be stated</b> 9 <input type="checkbox"/> Not reported

<b>T is Defendant's Characteristics:</b> <b>Name:</b> _____ include aka if it helps to distinguish	
4. Date of birth (DOB) or age <u>at time of offense</u> :  -sometimes sources provide age at time of prosecution. Use this as a last resort only.	DOB: <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <b>MM      DD      Year</b>  <b>OR, if DOB not reported</b> <input type="text"/> <input type="text"/> years old <u>at time of offense</u> 99 <input type="checkbox"/> Not reported
5. Gender:  Use caution in inferring from name	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Not reported
6. Race/Ethnicity: <u>Codes</u> 01 American Indian/Native American not 02 02 Alaskan Native 03 Asian or Pacific Islander 04 Black/African American, not Hispanic 05 White/Caucasian, not Hispanic 06 Puerto Rican 07 Mexican 08 Cuban 09 Other Hispanic 10 Mixed 11 Some other group (specify): 99 Not Reported	<input type="text"/> <input type="text"/> Race/Ethnicity  Other (specify) _____ specify <b>only</b> when code 11 entered in boxes above _____  Use Mixed, not Other when applicable. Note several Hispanic ethnicities have codes. Others code in 09, e.g. "Dominican"; "Salvadoran". <b>Code "Nigerian" as 04; someone "from Guam" as 03; "Mexican American" as 07; "Hispanic" as 09; code "white hispanic" as 09.</b>
7. <u>Last</u> grade or year that this Defendant was reported in school:  NOTE: If exact grade not reported use: 30 for "elementary/primary school" 32 for "high school"; 33 for "high school dropout"/"did not complete high school"; 34 for "college"; 35 for "graduate/professional school"	<input type="text"/> <input type="text"/> <b>Last Grade/Year</b> 99 <input type="checkbox"/> Not reported - Often the case 32= "known to have attended high school" GED = 12 If only mention is "educated abroad", check Not Reported

This Defendant's Characteristics Contd.	
<p>8. Marital status <u>at time of offense</u>:S  "common law" = Married</p>	<p><input type="checkbox"/> Married  <input type="checkbox"/> Living with partner  <input type="checkbox"/> Divorced, separated, or widowed  <input type="checkbox"/> Never married/Single  <input type="checkbox"/> Not reported</p>
<p>9. Place of birth, citizenship:  Foreign born = anywhere other than 50 statesS</p>	<p><input type="checkbox"/> U.S. born (Go to Q.10) Always follow skipsu  <input type="checkbox"/> Not reported -----check citizenship boxu  <input type="checkbox"/> Foreign born ---check citizenship boxu  <input type="checkbox"/> U.S. citizen  <input type="checkbox"/> Not U.S. citizen  <input type="checkbox"/> Not reported</p>
<p>10. Labor force employment history:  Review examples of each.  -If you know D worked, e.g. "had worked on an off" but can't distinguish between 2-4, use code 2  Labor force = Legal employment w/out regard to immigration status of the workerS</p>	<p><input type="checkbox"/> Never worked (Go to Q.12) must be stated  <input type="checkbox"/> Held mainly unskilled jobs  <input type="checkbox"/> Held mainly skilled jobs -requires special trng./experience  <input type="checkbox"/> Held mainly professional or managerial jobs -S requires advanced schooling/degree  <input type="checkbox"/> Not reportedS</p>
<p>11. Was this Defendant reportedly working in the labor force (full or part time) <u>at the time of the offense</u>?S</p>	<p><input type="checkbox"/> Yes Occupation__enter job, not employer_____  <input type="checkbox"/> No Code No for prisoners/institutionalized; and if source says D was NOT workingS  <input type="checkbox"/> Not reported</p>
<p>12. Was this Defendant reportedly working in criminal activity/enterprise/organization <u>at the time of the offense</u>?S  -e.g. reported drug dealer but doesn't need to be large scale -membership in a gang =Yes, but being "seen w/" "hanging out w/" gang members only does not qualify as membership</p>	<p><input type="checkbox"/> Yes, related to this offense e.g.dealer in drug war killing  <input type="checkbox"/> Yes, unrelated to this offense e.g.drugdealer who murders wife in domestic dispute  <input type="checkbox"/> No **must be stated**  <input type="checkbox"/> Not reported -for prisoners, code based on their in prison activity/membership</p>

<b>This Defendant's Characteristics Contd. Always remember which D you are working on</b>	
<p>13. Defendant's <u>history</u> of alcohol abuse:</p> <p>-history (Qs. 13-16) means it's on the record as having occurred in the past.</p> <p>-"never drank" = No</p> <p>-use code 2 if source is unclear, e.g. UASO says "defense is expected to argue ....."</p>	<p><input type="checkbox"/><sub>1</sub> Yes, evidence from <b>clinical</b> assessment record or history of treatment</p> <p><input type="checkbox"/><sub>2</sub> Yes, evidence of drinking problem (e.g. DUI, D self-report, statement of <b>non-expert</b>)c</p> <p><input type="checkbox"/><sub>3</sub> No <b>must be stated</b></p> <p><input type="checkbox"/><sub>9</sub> Not reported</p>
<p>14. Defendant's <u>history</u> of drug abuse: <b>must be a longer period than bingeing in period immediately leading up to the incident</b></p>	<p><input type="checkbox"/><sub>1</sub> Yes, evidence from <b>clinical</b> assessment record or history of treatment</p> <p><input type="checkbox"/><sub>2</sub> Yes, evidence of drug problem/use (e.g. arrest, D self-report, statement of <b>non-expert</b>)c</p> <p><input type="checkbox"/><sub>3</sub> No <b>must be stated</b>c</p> <p><input type="checkbox"/><sub>9</sub> Not reported</p>
<p>15. Defendant's <u>history</u> of mental illness or emotional problems: e.g. depression; anxiety or personality disorder; psychotic; Schizophrenic; ADHD; PTSD</p> <p>Do not code Q.15 based on "addiction"</p>	<p><input type="checkbox"/><sub>1</sub> Yes, evidence from <b>clinical</b> assessment record or history of treatment</p> <p><input type="checkbox"/><sub>2</sub> Yes, evidence by D self-report or statement of <b>non-expert</b></p> <p><input type="checkbox"/><sub>3</sub> No <b>must be stated</b>c</p> <p><input type="checkbox"/><sub>9</sub> Not reportedc</p>
<p>16. <u>History</u> of physical or sexual <b>abuse</b> as a child, child neglect or a history of <b>foster care</b> placement</p> <p><b>foster care</b> means placement by an agency, not simply living with relatives/others vs. parents. This item if for more than family conflict, or one parent's abandonment.</p>	<p><input type="checkbox"/><sub>1</sub> Yes, evidence from expert assessment or record of foster care placement</p> <p><input type="checkbox"/><sub>2</sub> Yes, evidenced by D self-report, statement from family or other</p> <p><input type="checkbox"/><sub>3</sub> No <b>must be stated</b>c</p> <p><input type="checkbox"/><sub>9</sub> Not reportedc</p>

<b>This Defendant's Characteristics Contd.</b>	
<p>17. History of serious head <b>injury</b>, blow or injury to the head, suffered from a <b>loss of consciousness</b>, fainting, blackouts, <b>seizures</b> or been diagnosed with brain damage, epilepsy, or other <b>organic</b> brain disorder:  <b>Include birth injuries to brain here.</b>  <b>Do not code yes, based on drug addiction/abuse</b></p>	<p><input type="checkbox"/><sub>1</sub> Yes, evidence from a doctor or medical testing/imaging  <input type="checkbox"/><sub>2</sub> Yes, evidence by D. self-report, family statements, investigator statements  <input type="checkbox"/><sub>0</sub> No  <input type="checkbox"/><sub>9</sub> Not reportedT</p>
<p>18. IQ/ intelligence level:   <b>-as in above items, any report should be coded unless it is also retracted by the same source.</b>   <b>-codes 2-6 require report of test results</b></p>	<p><input type="checkbox"/><sub>1</sub> Normal/average (IQ above 90)  <input type="checkbox"/><sub>2</sub> Borderline retarded (IQ 71-90)  <input type="checkbox"/><sub>3</sub> Mildly retarded (IQ 50-70)  <input type="checkbox"/><sub>4</sub> Moderately retarded (IQ 35-49)  <input type="checkbox"/><sub>5</sub> Severely retarded (IQ 20-34)  <input type="checkbox"/><sub>6</sub> Profoundly retarded (IQ under 20)  <input type="checkbox"/><sub>7</sub> Reported low intelligence/retarded but <b>exact IQ is not known</b>  <input type="checkbox"/><sub>9</sub> Not reportedT</p>
<p>19. Claims made in the case:   <b>(Code all that apply)</b>  <u>Codes</u>                      01 = This D. had trouble in school (<b>learning or discipline/social</b>)                      02 = This D. living with spouse <b>at time of incident or later</b>                      03 = This D. supporting young children (<b>i.e. dependents w/out regard to birth</b>) <b>at time of incident or later</b>                      04 = This D. has exhibited appropriate behavior in an institutional setting <b>has a good record since incarcerated</b>                      05 = This D. has reformed since the criminal incident <b>e.g. got out of the gang; moved away from bad influence(s); reunited w/ family; got a job, etc. in the interim; applies in cases w/ significant elapsed time</b></p>	<p><input type="checkbox"/><sub>0</sub> <b>None (Go to Q.20)</b></p> <p>a. <input type="checkbox"/> <input type="checkbox"/></p> <p>b. <input type="checkbox"/> <input type="checkbox"/></p> <p>c. <input type="checkbox"/> <input type="checkbox"/></p> <p>d. <input type="checkbox"/> <input type="checkbox"/></p> <p>e. <input type="checkbox"/> <input type="checkbox"/></p> <p><b>Claim may be refuted by another sourceT</b></p>

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<p>Q. 19A. CHECK CASE SUMMARY. Are there Reported victims in the case against this D. other than those named in the case summary? E.g. someone injured but not killed or uncharged murder(s) or attempted murder(s) in the incident(s) involving named Vs.</p>	<p><input type="checkbox"/><sub>1</sub> Yes, murdered/died <input type="checkbox"/><sub>2</sub> Yes, injured only</p> <p>OR</p> <p><input type="checkbox"/><sub>9</sub> None Reported</p>
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**OFFENSE AGAINST FIRST VICTIM**

VICTIM ID #x-xxx-xxx
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Victim Name: \_\_\_\_\_ **Only Complete the following for V on label above** \_\_\_\_\_

Fill out a "Supplemental D. Form" for each additional **Case Summary** Victim this D. is charged with an offense against,

<p>20. Co-perpetrators <b>reported</b> in offense against <u>this</u> Victim (charged and not charged): <b>Code 99 = Not Reported</b></p> <p><b>-Co-Perpetrators = anyone involved in making it happen from those who planned/ordered the crime to those who carried it out and those who helped, e.g. as lookouts, lures. Does not include people who merely knew about it or heard about it afterwards or helped afterwards e.g. by hiding the weapon(s). Anyone charged w/ the crime is a co-perp. Non charged coperps are usually easy to identify but not always.</b></p> <p>Code based on some evidence other than just a statement from this D. that "someone else did it". Code based on description by USAO of what transpired during the incident; do not want "accessories after the fact"; count only those who knew about the offense AND were part of the overall plan to carry it out.</p>	<p><input type="checkbox"/> No <b>(If this D. is sole perpetrator go to Q. 22)</b></p> <p><input type="checkbox"/> Yes a. <input type="text"/> <input type="text"/> Total # <b>don't count This D here</b></p> <p>b. <input type="text"/> <input type="text"/> # Pleded/Cooperated</p> <p>c. <input type="text"/> <input type="text"/> # Absconded</p> <p>d. <input type="text"/> <input type="text"/> # Deceased</p> <p>e. <input type="text"/> <input type="text"/> # Others Not Named in case</p> <p><b>e= not in b,c, or d above and not in Case Summary</b></p> <p>Do not count somebody who just heard about it (before or after) but didn't participate in it</p>
<p>21. Claims of <b>this D's</b> role in offense against this Victim: <b>(Code all that apply)</b></p> <p><u>Codes</u></p> <p>01 = Ring leader/Mastermind <b>planned/ordered/decided the crime should be done</b></p> <p>02 = Not at the scene</p> <p>03 = Trigger person/assailant</p> <p>04 = Equal with others <b>D was equally involved as other perp(s)</b></p> <p>05 = <b>Paid other(s)</b> to commit offense against V.</p> <p>06 = Was <b>paid</b> to carry out offense against this D.</p> <p>07 = Was lookout/driver, <b>not assailant but at the scene</b></p> <p>Claim can be made by any party (investigator, USAO, defense, witness, etc.)</p>	<p><input type="checkbox"/> Not reported <b>None of 01-07 were claimed</b></p> <p>a. <input type="text"/> <input type="text"/> b. <input type="text"/> <input type="text"/> <b>code a claim even if another source disagrees</b></p> <p>c. <input type="text"/> <input type="text"/> d. <input type="text"/> <input type="text"/></p> <p>e. <input type="text"/> <input type="text"/> f. <input type="text"/> <input type="text"/></p>

<p>22. <b>Claimed motive</b> of this Defendant in offense against this victim?</p> <p><b>(Check all that apply)</b> story may change over time</p> <p>Motive applies to what is understood about what the <u>Defendant's</u> purpose was/might have been. May come from D. self report or pieced together from witness statements e.g. D kills wife who left him for another; D kills employee for stealing; "disrespected" D so D kills him/her.</p> <p>-indirect financial savings = e.g. to save child care payment</p> <p>Claimed by somebody and is stated in one of the documents in the file; the abstractor should not intuit it but needs to look for a specific statement or mention of this</p>	<p><input type="checkbox"/> Not reported</p> <p><input type="checkbox"/> Win favor with superiors e.g. gang bosses</p> <p><input type="checkbox"/> Punish/set example/right a wrong done by the victim/Tictim's associates specific "wrong" = in D's mindS</p> <p><input type="checkbox"/> Eliminate suspected informant/witness</p> <p><input type="checkbox"/> Gain turf/territory/dominance over rival, gang/ drug war</p> <p><input type="checkbox"/> Pay, financial gain/savings direct or indirect</p> <p><input type="checkbox"/> Rage, lost control needs to be concretely stated by somebody as a motive</p> <p><input type="checkbox"/> Other (specify) _____</p>
<p>23. Which of the following were <b>reported</b> in the offense against this victim?</p> <p><b>(Code all that apply)</b></p> <p><u>Codes</u></p> <p>01 = Incident was an accident</p> <p>02 = This D. acted in self-defense or defense of home or property</p> <p>03 = This D. is a victim of mistaken identity</p> <p>04 = This D. maintains innocence(did not do it)</p> <p>05 = This D. expressed remorse for offense</p> <p>06 = This D. admitted guilt to authorities (i.e. he did the offense)T</p> <p>07 = This D. surrendered within 24 hours</p> <p>08 = This D. aided victim</p> <p>09 = This D. was ordered to carry out offense</p> <p>10 = This D. was under the influence of alcohol or drugs at the time of offense against this V. e.g. "binging on cocaine"; "wild on pills", "had been drinking"</p> <p>11 = This D. cooperated against others in this or another case</p>	<p><input type="checkbox"/> None claimed be sure to check for 01-12 before you code None Claimed.</p> <p>a. <input type="checkbox"/> <input type="checkbox"/> b. <input type="checkbox"/> <input type="checkbox"/></p> <p>c. <input type="checkbox"/> <input type="checkbox"/> d. <input type="checkbox"/> <input type="checkbox"/></p> <p>e. <input type="checkbox"/> <input type="checkbox"/> f. <input type="checkbox"/> <input type="checkbox"/></p> <p>g. <input type="checkbox"/> <input type="checkbox"/> h. <input type="checkbox"/> <input type="checkbox"/></p> <p>01-12 are claims usually made by defense though prosecution may also refer to them.</p> <p>02 pertains to the immediate incident not a feud in which D feared would act first</p> <p>07 is not the same as 06</p> <p>09 = someone else told D to do the crime</p> <p>12 and 04 often will go together</p> <p>write in anything else unique in space below boxes</p>



<p>12 = This D. was framed/set up by others</p>	
<p>24. <b>Reported</b> evidence pertaining to this D. in offense against this Victim:</p> <p><b>(Check all that apply)</b></p> <p>-these do not need to be proven evidence but reported, e.g. someone claims this D gave them the weapon they used</p> <p>-prisoner cases often involve fabricating a "weapon" over time for use in the incident</p> <p>-History... must be specific but apply broadly i.e. cannot apply to V's group, e.g. race or gang membership; but can apply to V's family (e.g. D kills father who had been abusing D's mother); problem can be broad (e.g. V trying to push D out of job; witnesses report repeated arguments between D and V.)</p> <p>- eyewitness is someone who saw the offense or part of it taking place and will so testify</p> <p>-use forensics to cover any physical evidence other than weapon/ballistics</p>	<p><input type="checkbox"/> None Reported <b>(Go to Q 25)</b></p> <p><input type="checkbox"/> Recovered weapon</p> <p><input type="checkbox"/> Ballistics</p> <p><input type="checkbox"/> Eyewitness account (not co-perp.)</p> <p><input type="checkbox"/> DNA/other forensics (e.g. prints)</p> <p><input type="checkbox"/> Brought weapon to crime scene/made in advance</p> <p><input type="checkbox"/> Provided weapon to assailant</p> <p><input type="checkbox"/> History of problem/conflict with this V.</p> <p><input type="checkbox"/> Other (specify)___be sure it's not covered by above before entering here _____</p> <p><small>Do not code "brought weapon" if D was carrying a weapon and happened to use it e.g. police stop someone and D shoots police; code brought weapon when D reportedly took it to the scene in order to kill the V. e.g placed bomb outside V's door. Do not code if there is no report that D came after V, i.e. if drive by shooting w/out aim of finding V.</small></p>

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## Specifications for Question 25

### 25A. Witness Type

Check the box next to each of the witness types in the case. If a witness falls in more than one category code them in the first category they fall in. For example, if a member of the Victim's family is also a member of a rival gang to the D's gang, code as d. not f.

- a.= those coded at 20 who gave statements and are witnesses not anyone who gave a statement but then refuses to so testify or disappears
- b.= someone working w/ a law enforcement agency
- c.= serving time or pending trial
- d.= in same gang, racketeering organization, drug trafficking ring as D.
- e.= those in opposition criminal enterprises to Ds and any known as involved in criminal activity even if unrelated to D's, but not prisoners.
- f. = include a girl/boy friend someone who would be expected to be sympathetic to V. regardless of how they testify.
- g. = family/someone w/ close relationship expected to be sympathetic to this D. Codes h. and i. are different. Code h. involves laboratory testing, e.g. DNA or blood or ballistics or other physical evidence; code i. Involves expertise of a non physical nature such as that of a psychologist or counselor or probation officer.

You are not asked to code for other types of witnesses who may or may not appear in the source material.

### 25B Witness for/against this D

A witness for the Defense is a witness for the D and a witness for the prosecution is a witness against the D. However, at the CCU processing stage of the case often witnesses are referred to only as having given a statement. If the statement is in favor of the D. e.g. offers an alibi or mitigating factor code him/her as for this D (code 1). If the statement of the witness links the defendant to the crime use code 2, Against This D. If the statement is both for and against use code 3 or if the same witness makes two conflicting statements i.e. one for and one against, use code 3. If you have a witness type indicated but not what they said, use code 9, for Not Reported at B.

### 25C Credibility Claim

The third thing we need to know about each witness type coded at A. is whether or not there is a claim that they are a credible or not credible witness. Do not code based on who they are or what you conclude. Code based on what sources in the file claim. If there is only a claim that the witness is credible code 1. If there is only a claim that the witness is not credible, code 2. If one source claims credible and another claims not credible code 3. If all sources are silent as to credibility, code 9. Credibility pertains to believability, e.g. source says "jury will not find witness x believable" is an indication for code 2 for that witness; or if source says "witness x will make a fine witness" that indicates use of code 1.

### 25 D. Witness cooperation

This item applies only to witnesses involved with the criminal justice system (types a. – e.). If there is an indication that they cooperated in their statement in return for reduced charges or a plea agreement, code 1. If it says they did not, code 2. If there is no indication either way code 9. Sometimes the plea or reduced charge is not noted as related specifically to the statement and it may not be, but if there is an indication that the witness obtained a plea agreement or reduction in charges verify code 1.

25. Statements by witnesses <u>for/against</u> this D. in offense against this V? See page 8a			
A. Witness Type (Check all that apply)	B. Witness 1 = for This. D 2 = Against D. 3 = Both 9=Not Reported	C. Claimed 1 = Credible 2 = Not Credible 3 = Both 9 =NotReported	D. Cooperated for Plea/ Reduced Charge 1 = Yes 2 = No 9= Not Reported
<input type="checkbox"/> a. Co-perpetrator(s)	_____	_____	_____
<input type="checkbox"/> b. Paid Informant	_____	_____	_____
<input type="checkbox"/> c. Jail/prison inmate	_____	_____	_____
<input type="checkbox"/> d. Member of D's criminal enterprise	_____	_____	_____
<input type="checkbox"/> e. Member of rival/other criminal enterprise	_____	_____	_____
<input type="checkbox"/> f. Victim(s)' family	_____	_____	_____
<input type="checkbox"/> g. This D.'s family	_____	_____	_____
<input type="checkbox"/> h. Technical expert (ballistics, medical)	_____	_____	_____
<input type="checkbox"/> i. Other expert statement (e.g. clinician)	_____	_____	_____
<input type="checkbox"/> j. Law Enforcement officer	_____	_____	_____
<input type="checkbox"/> k. Corrections official	_____	_____	_____

At B code 2 if "Government Witness"

<p>26. Report of intent by this D. in offense against this Victim:                  you will fine reference to the establishment of intent, necessary for death penalty eligibility, for each source (USAO, AG and defense)                  Codes: 1 = Established                  2 = Unestablished                  3 = Uncertain If uncertain whether 2 or 3 applies use 3.                  9 = Not reported</p>	<p><input type="checkbox"/> a. USAO on the factors form</p> <p><input type="checkbox"/> b. AGRC in exec. summary</p> <p><input type="checkbox"/> c. Defense code 9 if no defense submission or reference to in file</p>
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### Specifications for Questions 27-31 Aggravating and Mitigating Factors

Cases eligible for the death penalty are assessed based on aggravating and mitigating factors. Some of these are provided by statute. They are specifically defined and vary depending on type of offense. The Definitions are included on the Factors Evaluation Form, which will appear in most cases. You should also keep a set of the definitions in your training manual.

Make sure you are using the Factors Evaluation Form for the correct defendant when you reach this section. There is a form for each defendant/victim with a capital charge.

With the inception of the Factors Evaluation Form it is relatively easy to code the USAO assessment of factors. It is the assessment by each of the parties that we need to have recorded, not what is true based on the facts reported, or your own conclusion or what other sources say. We need the factor according to the USAO, the AGRC and the Defense (in the latter case there may not be a submission but either the USAO or AGRC refer to the assessment by the defense. In this situation code the defense assessment referred to by the prosecution under defense). Be careful to code based on the assessment by the source. For example the USAO may disagree with what the defense assessment is but in the column labeled defense we want to know the defense's assessment.

Use the following codes to record the assessment of each factor by each source. Do not be surprised if sources do not all agree.

1 = The factor in question e.g. "procurement of the offense by payment" (factor 27g), is offered by the source. The source believes it is provable to the standard required. The source believes it applies in this case. For the USAO you'll often see an  or a check mark on the evaluation form, which means code 1. The AGRC and the defense assessments are in narrative form and often the USAO writes a narrative in addition to checking off the form.

2 = This is also clear and is the opposite of 1. The source **affirms** that it does not apply, is not offering it as a factor; is clear that it is not provable to the standard. The source may cite case law to demonstrate to the reader that it does not apply. The Factors Evaluation Form will not have a check at this factor. Be careful when reading about defense statements from the prosecution material, for example, "defense will argue... but we disagree" means code 1 for defense and code 2 for prosecution.

3 = This code should be used when a source indicates uncertainty about whether the factor applies. Any question about provability of the factor indicates a 3. For example if the memo cites case law and indicates that it goes in both directions, code 3. Note the difference between code 2 and 3 in the following statement compared to the example above: "Defense may argue... but we are not certain it is provable beyond a reasonable doubt". In the latter example it would mean 3 for prosecution and since it is not stated that D is offering the factor, you would code 9 for defense unless you find an actual assessment of the factor's applicability elsewhere.

9 = Not Reported. As usual, use this code when the source is silent as to the factor's applicability. If the Factors Evaluation Form is used and the factor is blank and there is no statement by the USAO that it does not apply, code 9, not code 2 even if it is obvious that the factor is not applicable. We do not want to confuse an affirmed statement with a not affirmed statement.

27. Which **statutory** aggravating factors were offered by the USAO, the AGRC and the Defense?  
(codes: 1 = Offered/Considered provable; 2 = Not Offered/Not applicable/Not provable;  
3 = Uncertain/Questionable, Possible does not meet standard; 9 = Not Reported)

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<b>27. Aggravating Factors (Homicide):</b>			<input type="checkbox"/> <b>Not Homicide (Go to Q28)</b>
<u>USAO</u>	<u>AGRC</u>	<u>Defense</u>	<b>SEE DEFINITIONS ON FACTORS FORM</b>
<u>code</u>	<u>for each</u>	<u>source</u>	
_____	_____	_____	a. Death during commission of another crime
_____	_____	_____	b. Previous conviction of violent felony involving firearm
_____	_____	_____	c. Previous conviction of offense for which a sentence of death or life imprisonment was authorized
_____	_____	_____	d. Previous conviction of other serious offenses
_____	_____	_____	e. Grave risk of death to additional persons
_____	_____	_____	f. Heinous, cruel or depraved manner of committing the offense
_____	_____	_____	g. Procurement of the offense by payment
_____	_____	_____	h. Commission of the offense for pecuniary gain
_____	_____	_____	i. Substantial planning and premeditation
_____	_____	_____	j. Previous conviction of two felony drug offenses
_____	_____	_____	k. Vulnerability of the victim
_____	_____	_____	l. Previous conviction of serious Federal drug offense
_____	_____	_____	m. CCE involving distribution to minors
_____	_____	_____	n. Offense against high public officials
_____	_____	_____	o. Previous conviction of sexual assault or child molestation
_____	_____	_____	p. Multiple killings or attempted killings
<b>28. Espionage/Treason:</b>			<input type="checkbox"/> <b>Not Espionage/Treason (Go to Q29)</b>
<u>USAO</u>	<u>AGRC</u>	<u>Defense</u>	
_____	_____	_____	a. Prior espionage or treason offense conviction
_____	_____	_____	b. Grave risk to national security
_____	_____	_____	c. Grave risk of death to another person

<b>29. Aggravating Factors (Drug Offense Title 21):</b> <input type="checkbox"/> Not Drug Offense (Go to Q30)			
<u>USAO</u>	<u>AGRC</u>	<u>Defense</u>	
_____	_____	_____	a. Previous conviction of offense for which a sentence of death or life imprisonment was authorized
_____	_____	_____	b. Previous conviction of other serious offenses
_____	_____	_____	c. Previous serious felony drug conviction
_____	_____	_____	d. Use of a firearm in the offense or furtherance of CCE
_____	_____	_____	e. Distribution to persons under twenty-one
_____	_____	_____	f. Distribution near schools
_____	_____	_____	g. Using minors in drug trafficking
_____	_____	_____	h. Lethal adulterant
<b>30. Non Statutory Aggravating Factors:</b> <b>code for ALL case types</b>			
<u>USAO</u>	<u>AGRC</u>	<u>Defense</u>	
_____	_____	_____	a. Participation in additional uncharged murders, .
_____	_____	_____	b. Obstruction of justice.
_____	_____	_____	c. Contemporaneous convictions
_____	_____	_____	d. Future dangerousness
_____	_____	_____	e. Victim impact evidence.
_____	_____	_____	f. Vileness of crime
_____	_____	_____	g. Murder of two persons
_____	_____	_____	h. Felonious cruelty to children
_____	_____	_____	i. Other (specify)
_____	_____	_____	j. Other (specify)
_____	_____	_____	k. Other (specify)

31. Which **mitigating** factors were offered by the USAO, the AGRC and the Defense?  
 (codes: 1 = Offered/Considered provable; 2 = Not Offered/Not applicable/Not provable;  
 3 = Uncertain/Questionable, Possible does not meet standard; 9 = Not Reported)

31. Mitigating Factors:			Code for all Case Types
USAO	AGRC	Defense	
_____	_____	_____	a. Impaired capacity.
_____	_____	_____	b. Duress.
_____	_____	_____	c. Minor participation
_____	_____	_____	d. Equally culpable defendants
_____	_____	_____	e. No prior criminal record .
_____	_____	_____	f. Disturbance
_____	_____	_____	g. Victim's consent.
_____	_____	_____	h. Youth
_____	_____	_____	i. Victim's family against death penalty
_____	_____	_____	j. Positive institutional adjustment
_____	_____	_____	k. Provoked by Victim
_____	_____	_____	l. Other (specify)
_____	_____	_____	m. Other (specify)
_____	_____	_____	n. Other (specify)
32. USAO <u>Final</u> Recommendation			<input type="checkbox"/> <sub>1</sub> Seek <input type="checkbox"/> <sub>2</sub> Not Seek <input type="checkbox"/> <sub>3</sub> Other (Specify) ___ any situation where 1 vs 2 not clear <input type="checkbox"/> <sub>9</sub> Not reported
Record from <b>USAO memo</b> Read language carefully e.g. don't miss "not" in in "Request authority to not seek death penalty"			
33. AG <u>Final</u> Decision			<input type="checkbox"/> <sub>1</sub> Seek <input type="checkbox"/> <sub>2</sub> Not Seek <input type="checkbox"/> <sub>3</sub> Other (Specify) ___ any situation where 1 vs 2 not clear <input type="checkbox"/> <sub>9</sub> Not reported
Record from <b>signed AG letter or Exec. Summary</b>			

## Training Agenda

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## Abstractor Training Agenda

**DAY 1**                    **Monday, August 11, 2003**

### **RAND Washington-Conference Room 4206**

**8:45-9:35**                Introductions of Project Staff  
                              Introductions of Trainees  
                              Training Overview  
                              Training Logistics  
                              Confidentiality Procedures

### **MOVE TO VIDEOCONF ROOM 4306--BREAK**

**9:45-10:45**             Overview of Federal Criminal Jurisdiction  
  
                              Study Overview  
  
                              Review of Case Materials  
                                  - Primary Documents (duplicates, multiple dates)  
                                  - Other documents:

**10:45-11:00**            BREAK—beverages provided d

### **BACK TO CONFERENCE ROOM 4206**

**11:00-12:00**            ACTIVITY  
                              - Teams Review Contents in 4 sample cases  
                              - Code Case Summary Inventory and Recommendation  
                                  and Decision

**12:00-12:30**            Small Groups Summarize Contents of Primary Documents

**12:30-1:15**             LUNCH

**1:15-2:30**              Review Defendant Q x Q Specifications-Case Identifiers and  
                              Offense Codes

                              ACTIVITY-Case Summary Identifiers and Offense Coding from  
                              assigned sample case

**2:30-2:45**              Questions and Review

**2:45- 3:00 d**            BREAK – beverages and snacks providedb

**3:00-3:30 d** Continue Defendant Q by Q's – Personal Characteristics'

**3:30-4:15** ACTIVITY- Code personal/case characteristics from sample case d

**END OF DAY 1**

**DAY 2** **Tuesday, August 12, 2003**

**RAND Washington-Conference Room 4206**

- 9:00-9:30** Review Day 1 Exercise – Personal Characteristics’
- 9:30-10:15 d** Defendant Q by Q Specifications – Aggravating & Mitigating d  
Factors d d d d
- 10:15-10:45** EXERCISE: Code Aggravating & Mitigating Factors from d  
Day 1 sample case d
- 10:45-11:00** BREAK- beverages providedf
- 11:00-11:45** Review Factors Exercise & Questions d
- 11:45-12:30** LUNCHf
- 12:30-1:15 d** Review Victim Q x Q Specificationsf
- 1:15-3:30 d** Practice Coding w/ sample case 2 d
- 3:30-3:45** BREAK – beverages and snacks provided d
- 3:45-4:30 d d** Round Robin Review Practice Sample Case 2 Codingf

**END OF DAY 2**

**DAY 3                      Wednesday, August 13, 2003****RAND Washington-Conference Room 4206**

<b>9:00-9:30</b>		Coding – How to Approach the Case File d
<b>9:30-9:45</b>		Review & Questionso
<b>9:45-10:30</b>		Practice coding with sample case 3 d
<b>10:30-10:45</b>		BREAK – beverages provided d
<b>10:45-12:00</b>		Continue practice coding with sample case 3 d
<b>12:00-1:00</b>	d	LUNCH d
<b>1:00-1:45</b>	d    d	Round Robin Review Practice Sample Case 3 Codingo
<b>1:45-2:00</b>	d    d	BREAK – beverages and snacks provided d
<b>2:00-4:30</b>	d	Practice Coding w/ sample case 4 d    d    d    d    d

**END OF DAY 3**

**DAY 4                      Thursday, August 14, 2003**

**RAND Washington-Conference Room 4206**

- 9:00-9:45**                      Round Robin Review- Sample Case 4 from Day 3 (PM)
- 10:00-10:30**                      How to Get Your Cases and other administrative issues
- 10:30-10:40**    d                      BREAK – beverages provided d
- 10:40-12:45**                      INDIVIDUAL EXERCISE – Coding Sample Case 5 d
- 12:45-1:30**    d                      LUNCH – Trainers eat lunch brought in; review case 5 coding d
- 1:30-2:00** d    d                      Round Robin Review-Case #5 d
- 2:00-4:00** d                      INDIVIDUAL EXERCISE – Coding Sample Case 6 d
- 4:00-4:30**                      Lessons Learned/Shared Discussion d

**END OF DAY 4**

**DAY 5                      Friday, August 15, 2003**

**RAND Washington-Conference Room 4302 & 4304**

**9:00-11:30**                      Morning Abstraction Exercise

**11:30-12:30**                      LUNCH

**1:00-3:30**                      Afternoon Abstraction Exercise

**3:30-4:00**                      Odds and Ends

**END OF TRAINING!**



## Case Summary Form

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**CASE SUMMARY FORM**

CASE TIME (HH MM) \_\_\_\_\_

<b>Case</b>								
<b>RAND csid</b>				<b>District:</b>				
Decsid	Defendant	Statute/Charge	Vesid	Victim	AG Dec	Dec Date	Sub Dec	Sub Date

FORMS COUNT: D. : \_\_\_\_\_ VICTIM: \_\_\_\_\_ SUPPLEMENTAL D.: \_\_\_\_\_

Abstractor ID:        Abstraction Date:   /   / 2003

**INVENTORY of Documents included in the case file**  
**(CHECK ALL THAT APPLY AND ENTER MOST RECENT DATE):**

<input type="checkbox"/> USAO Memo _____/_____/_____	<input type="checkbox"/> Med.Ex./Coroner's Rept(s).
<input type="checkbox"/> Agg/Mit Factors Eval. Form	<input type="checkbox"/> Non-Decisional Info. Form(s)
<input type="checkbox"/> AGRC Memo _____/_____/_____	<input type="checkbox"/> Other DoJ Statement/Memo(s)
<input type="checkbox"/> AG Executive Summary _____/_____/_____	<input type="checkbox"/> Corrections/parole records
<input type="checkbox"/> AG Letter (signed copy) _____/_____/_____	<input type="checkbox"/> Arrest Report(s)
<input type="checkbox"/> Defense Atty. Submission _____/_____/_____	<input type="checkbox"/> Witness statements/interviews
<input type="checkbox"/> Indictment(s) <input type="checkbox"/> V. Family Submission	<input type="checkbox"/> Photos/Video
<input type="checkbox"/> Rap Sheet(s) <input type="checkbox"/> D. Family Submission	<input type="checkbox"/> Media Coverage
<input type="checkbox"/> Psych. Assessmnt. Rept.(s) <input type="checkbox"/> D. Correspondence	

VALIDATED BY:        VALIDATION DATE:   /   / 2003

## References

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- Algranati, David James, "Exploring Racial and Geographic Effects in the Decision to Seek the Federal Death Penalty, 1995–2000," doctoral thesis, Pittsburgh, Pa.: Department of Statistics, H. John Heinz III School of Public Policy and Management, Carnegie Mellon University, 2002.
- Arkin, Steven D., "Discrimination and Arbitrariness in Capital Punishment: An Analysis of Post-Furman Murder Cases in Dade County, Florida, 1973–1976," *Stanford Law Review*, Vol. 33, No. 1, November 1980, pp. 75–102.
- Baime, David S., *Report to the New Jersey Supreme Court: Systematic Proportionality Review Project, 2001–2002 Term*, Trenton, N.J.: New Jersey Supreme Court, 2002.
- Baldus, David C., Charles Pulaski, and George Woodworth, "Comparative Review of Death Sentences: An Empirical Study of the Georgia Experience," *The Journal of Criminal Law and Criminology*, Vol. 74, No. 3, Autumn 1983, pp. 661–753.
- Baldus, David C., George Woodworth, Catherine M. Grosso, and Aaron M. Christ, "Arbitrariness and Discrimination in the Administration of the Death Penalty: A Legal and Empirical Analysis of the Nebraska Experience (1973–1999)," *Nebraska Law Review*, Vol. 81, No. 2, 2002–2003, pp. 486–756.
- Baldus, David C., George Woodworth, and Charles A. Pulaski, *Equal Justice and the Death Penalty: A Legal and Empirical Analysis*, Boston: Northeastern University Press, 1990.
- Baldus, David C., George Woodworth, David Zuckerman, and Neil Alan Weiner, "Racial Discrimination and the Death Penalty in the Post-Furman Era: An Empirical and Legal Overview, with Recent Findings from Philadelphia," *Cornell Law Review*, Vol. 83, No. 6, 1997–1998, pp. 1638–1770.
- Barnett, Arnold, "Some Distribution Patterns for the Georgia Death Sentence," *University of California Davis Law Review*, Vol. 18, No. 4, Fall 1985, pp. 1327–1374.
- Berk, Richard A., *Regression Analysis: A Constructive Critique*, London: Sage Publications, 2003.
- , "An Introduction to Ensemble Methods for Data Analysis," *Sociological Methods and Research*, Vol. 34, No. 3, February 2006, pp. 263–295.
- Berk, Richard, Azusa Li, and Laura J. Hickman, "Statistical Difficulties in Determining the Role of Race in Capital Cases: A Re-Analysis of Data from the State of Maryland," *Journal of Quantitative Criminology*, Vol. 21, No. 4, December 2005, pp. 365–390.

- Bienen, L. B., N. A. Weiner, D. W. Denno, P. D. Allison, and D. L. Mills, "Reimposition of Capital Punishment in New Jersey: The Role of Prosecutorial Discretion," *Rutgers Law Review*, Vol. 41, No. 1, 1988, pp. 27–372.
- Blank, Rebecca M., Marilyn Dabady, and Constance F. Citro, *Measuring Racial Discrimination*, Washington, D.C.: National Academies Press, 2004. Online at <http://darwin.nap.edu/books/0309091268/html/> (as of April 27, 2006).
- Bowers, William J., "The Pervasiveness of Arbitrariness and Discrimination Under Post-'Furman' Capital Statutes," *The Journal of Criminal Law and Criminology*, Vol. 74, No. 3, Autumn 1983, pp. 1067–1100.
- Bowers, William J., Andrea Carr, Glenn L. Pierce, and Negley K. Teeters, *Executions in America*, Lexington, Mass.: Lexington Books, 1973.
- Bowers, W. J., and B. L. Pierce, "Arbitrariness and Discrimination Under Post-Furman Capital Statutes," *Crime and Delinquency*, Vol. 26, No. 4, 1980, pp. 563–635.
- Brick J. M., and G. Kalton, "Handling Missing Data in Survey Research," *Statistical Methods in Medical Research*, Vol. 5, 1996, pp. 215–238.
- Brock, Deon E., Jon Sorensen, and James W. Marquart, "Tinkering with the Machinery of Death: An Analysis of the Impact of Legislative Reform on the Sentencing of Capital Murderers in Texas," *Journal of Criminal Justice*, Vol. 28, No. 5, September–October 2000, pp. 343–349.
- Cohen, Jacob, *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed., Hillsdale, N.J.: L. Erlbaum Associates, 1988.
- Dawes, R. M., "The Robust Beauty of Improper Linear Models in Decision Making," *American Psychologist*, Vol. 34, 1979, pp. 571–582.
- Death Penalty Information Center, "Death Row Inmates by State," undated Web page. Online at <http://www.deathpenaltyinfo.org/article.php?scid=9&cid=188#state> (as of April 27, 2006).
- DOJ. See U.S. Department of Justice.
- DPIC. See Death Penalty Information Center.
- Eisenstein, James, *Counsel for the United States: U.S. Attorneys in the Political and Legal Systems*, Baltimore, Md.: Johns Hopkins University Press, 1978.
- Frase, Richard S., "The Decision to File Federal Criminal Charges: A Quantitative Study of Prosecutorial Discretion," *The University of Chicago Law Review*, Vol. 47, No. 2, Winter 1980, pp. 246–330.
- Freedman, David, *Statistical Models: Theory and Practice*, Cambridge and New York: Cambridge University Press, 2005.
- Freedman, David, Robert Pisani, and Roger Purves, *Statistics*, 3rd ed., New York: Norton, 1998.
- GAO. See U.S. General Accounting Office.
- Graubard, Barry I., and Edward L. Korn, "Predictive Margins with Survey Data," *Biometrics*, Vol. 55, No. 2, June 1999, pp. 652–659.
- Gross, Samuel R., and Robert Mauro, "Patterns of Death: An Analysis of Racial Disparities in Capital Sentencing and Homicide Victimization," *Stanford Law Review*, Vol. 37, No. 1, November 1984, pp. 27–153.

- , *Death and Discrimination: Racial Disparities in Capital Sentencing*, Boston, Mass.: Northeastern University Press, 1989.
- Hastie, Trevor, Robert Tibshirani, and J. H. Friedman, *The Elements of Statistical Learning: Data Mining, Inference, and Prediction*, New York: Springer, 2001.
- Heydebrand, Wolf V., and Carroll Seron, *Rationalizing Justice: The Political Economy of Federal District Courts*, Albany, N.Y.: State University of New York Press, 1990.
- Hirano, Keisuke, Guido Imbens, and Geert Ridder, *Efficient Estimation of Average Treatment Effects Using the Estimated Propensity Score*, Cambridge, Mass.: National Bureau of Economic Research, technical working paper 251, March 2000. Online at <http://papers.nber.org/papers/t0251.pdf> (as of April 27, 2006).
- Jacoby, Joseph E., and Raymond Paternoster, "Sentencing Disparity and Jury Packing: Further Challenges to the Death Penalty," *The Journal of Criminal Law and Criminology*, Vol. 73, No. 1, Spring 1982, pp. 379–387.
- Kautt, Paula M., "Location, Location, Location: Interdistrict and Intercircuit Variation in Sentencing Outcomes for Federal Drug-Trafficking Offenses," *Justice Quarterly*, Vol. 19, No. 4, December 2002, pp. 633–672.
- Keil, Thomas J., and Gennaro F. Vito, "Race and the Death Penalty in Kentucky Murder Trials: An Analysis of Post-Gregg Outcomes," *Justice Quarterly*, Vol. 7, No. 1, 1990, pp. 189–208.
- Kish, Leslie, *Survey Sampling*, New York: J. Wiley, 1965.
- Kleck, Gary, "Racial Discrimination in Criminal Sentencing: A Critical Evaluation of the Evidence with Additional Evidence on the Death Penalty," *American Sociological Review*, Vol. 46, No. 6, December 1981, pp. 783–805.
- Klein, Stephen P., and John E. Rolph, "Relationship of Offender and Victim Race to Death Penalty Sentences in California," *Jurimetrics*, Vol. 32, No. 1, Fall 1991, pp. 33–48.
- Lewis, P. W., "Killing the Killers: A Post-Furman Profile of Florida's Condemned," *Crime and Delinquency*, Vol. 25, No. 2, 1979, pp. 200–218.
- Lochner, Todd, "Strategic Behavior and Prosecutorial Agenda Setting in the United States Attorneys' Offices: The Role of U.S. Attorneys and Their Assistants," *Justice System Journal*, Vol. 23, No. 3, 2002, pp. 271–294.
- McCaffrey, Daniel F., Greg Ridgeway, and Andrew R. Morral, "Propensity Score Estimation with Boosted Regression for Evaluating Causal Effects in Observational Studies," *Psychological Methods*, Vol. 9, No. 4, December 2004, pp. 403–425.
- McCleskey v. Kemp, Superintendent, Georgia Diagnostic and Classification Center*, 481 U.S. 279, 107 S. Ct. 1756, 95 L. Ed. 2d 262, April 22, 1987.
- Morton, Sally C., and John E. Rolph, *Public Policy and Statistics: Case Studies from RAND*, New York: Springer, 2000.
- Murphy, Elizabeth L., "Application of the Death Penalty in Cook County," *Illinois Bar Journal*, Vol. 73, 1984, pp. 90–95.
- Paternoster, Raymond, "Race of Victim and Location of Crime: The Decision to Seek the Death Penalty in South Carolina," *The Journal of Criminal Law and Criminology*, Vol. 74, No. 3, Autumn 1983, pp. 754–785.

- , “Prosecutorial Discretion in Requesting the Death Penalty: A Case of Victim-Based Racial Discrimination,” *Law and Society Review*, Vol. 18, No. 3, 1984, pp. 437–478.
- Paternoster, Raymond, and Robert Brame, *An Empirical Analysis of Maryland’s Death Sentencing System with Respect to the Influence of Race and Legal Jurisdiction*, College Park, Md.: University of Maryland, 2003. Online at <http://www.urhome.umd.edu/newsdesk/pdf/finalrep.pdf> (as of April 27, 2006).
- Pierce, Glenn L., and Michael L. Radelet, “Race, Region, and Death Sentencing in Illinois, 1988–1997,” *Oregon Law Review*, Vol. 81, No. 1, Spring 2002, pp. 39–96.
- Radelet, Michael L., “Racial Characteristics and the Imposition of the Death Penalty,” *American Sociological Review*, Vol. 46, No. 6, December 1981, pp. 918–927.
- , “Rejecting the Jury: The Imposition of the Death Penalty in Florida,” *University of California Davis Law Review*, Vol. 18, No. 4, Fall 1985, pp. 1409–1432.
- Radelet, Michael L., and Glenn L. Pierce, “Race and Prosecutorial Discretion in Homicide Cases,” *Law and Society Review*, Vol. 19, No. 4, 1985, pp. 587–622.
- , “Choosing Those Who Will Die: Race and the Death Penalty in Florida,” *Florida Law Review*, Vol. 43, No. 1, January 1991, pp. 1–34.
- Rosenbaum, Paul R., *Observational Studies*, 2nd ed., New York: Springer, 2002.
- Rosenbaum, Paul R., and Donald B. Rubin, “The Central Role of the Propensity Score in Observational Studies for Causal Effects,” *Biometrika*, Vol. 70, No. 1, April 1983, pp. 41–55.
- Schonlau, Matthias, “Boosted Regression (Boosting): An Introductory Tutorial and a Stata Plugin,” *The Stata Journal*, Vol. 5, No. 3, September 2005, pp. 330–354.
- Smith, Christopher E., *United States Magistrates in the Federal Courts: Subordinate Judges*, New York: Praeger, 1990.
- Snell, Tracy L., “Capital Punishment 1999,” Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, 2000. Online at <http://www.ojp.usdoj.gov/bjs/pub/pdf/cp99.pdf> (as of April 27, 2006).
- Unah, Isaac, and Jack Boger, *Race and the Death Penalty in North Carolina: An Empirical Analysis, 1993–1997*, Raleigh, N.C.: The Commonsense Foundation, North Carolina Council of Churches, 2001.
- U.S. Census Bureau, *Profiles of General Demographic Characteristics 2000: 2000 Census of Population and Housing: United States*, Washington, D.C.: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, 2001. Online at <http://www.census.gov/prod/cen2000/dp1/2kh00.pdf> (as of May 17, 2006).
- U.S. Code, Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 2, Aircraft and Motor Vehicles, Section 32, Destruction of Aircraft or Aircraft Facilities, January 19, 2004a.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 2, Aircraft and Motor Vehicles, Section 33, Destruction of Motor Vehicles or Motor Vehicle Facilities, January 19, 2004b.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 2, Aircraft and Motor Vehicles, Section 36, Drive-by Shooting, January 19, 2004c.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 2, Aircraft and Motor Vehicles, Section 37, Violence at International Airports, January 19, 2004d.

- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 13, Civil Rights, Section 241, Conspiracy Against Rights, January 19, 2004e.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 13, Civil Rights, Section 242, Deprivation of Rights Under Color of Law, January 19, 2004f.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 13, Civil Rights, Section 245, Federally Protected Activities, January 19, 2004g.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 13, Civil Rights, Section 247, Damage to Religious Property; Obstruction of Persons in the Free Exercise of Religious Beliefs, January 19, 2004h.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 40, Importation, Manufacture, Distribution and Storage of Explosive Materials, Section 844, Penalties, January 19, 2004i.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 44, Firearms, Section 924, Penalties, January 19, 2004j.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 44, Firearms, Section 930, Possession of Firearms and Dangerous Weapons in Federal Facilities, January 19, 2004k.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 51, Homicide, Section 1111, Murder, January 19, 2004l.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 51, Homicide, Section 1114, Protection of Officers and Employees of the United States, January 19, 2004m.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 51, Homicide, Section 1116, Murder or Manslaughter of Foreign Officials, Official Guests, or Internationally Protected Persons, January 19, 2004n.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 51, Homicide, Section 1118, Murder by a Federal Prisoner, January 19, 2004o.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 51, Homicide, Section 1121, Killing Persons Aiding Federal Investigations or State Correctional Officers, January 19, 2004p.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 55, Kidnapping, Section 1201, Kidnapping, January 19, 2004q.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 55, Kidnapping, Section 1203, Hostage Taking, January 19, 2004r.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 73, Obstruction of Justice, Section 1503, Influencing or Injuring Officer or Juror Generally, January 19, 2004s.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 73, Obstruction of Justice, Section 1512, Tampering with a Witness, Victim, or an Informant, January 19, 2004t.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 73, Obstruction of Justice, Section 1513, Retaliating Against a Witness, Victim, or an Informant, January 19, 2004u.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 83, Postal Service, Section 1716, Injurious Articles as Nonmailable, January 19, 2004v.



- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 95, Racketeering, Section 1958, Use of Interstate Commerce Facilities in the Commission of Murder-for-Hire, January 19, 2004w.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 95, Racketeering, Section 1959, Violent Crimes in Aid of Racketeering Activity, January 19, 2004x.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 103, Robbery and Burglary, Section 2113, Bank Robbery and Incidental Crimes, January 19, 2004y.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 103, Robbery and Burglary, Section 2119, Motor Vehicles, January 19, 2004z.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 109A, Sexual Abuse, Section 2245, Sexual Abuse Resulting in Death, January 19, 2004aa.
- , Title 18, Crimes and Criminal Procedure, Part I, Crimes, Chapter 113B, Terrorism, Section 2332, Criminal Penalties, January 19, 2004bb.
- , Title 18, Crimes and Criminal Procedure, Part II, Criminal Procedure, Chapter 228, Death Sentence, Section 3591, Sentence of Death, January 19, 2004cc.
- , Title 21, Food and Drugs, Chapter 13, Drug Abuse Prevention and Control, Subchapter I, Control and Enforcement, Part D, Offenses and Penalties, Section 848, Continuing Criminal Enterprise, January 19, 2004dd.
- , Title 49, Transportation, Subtitle VII, Aviation Programs, Part A, Air Commerce and Safety, Subpart IV, Enforcement and Penalties, Chapter 465, Special Aircraft Jurisdiction of the United States, Section 46502, Aircraft Piracy, January 19, 2004ee.
- , Title 8, Aliens and Nationality, Chapter 12, Immigration and Nationality, Subchapter II, Immigration, Part VIII, General Penalty Provisions, Section 1324, Bringing in and Harboring Certain Aliens, January 3, 2005.
- U.S. Department of Justice, *U.S. Attorneys' Manual*, 4th rev., Washington, D.C.: U.S. Department of Justice, 1997. Online at <http://purl.access.gpo.gov/GPO/LPS1220> (as of April 27, 2006).
- , *The Federal Death Penalty System: A Statistical Survey (1988–2000)*, Washington, D.C.: U.S. Department of Justice, September 12, 2000a. Online at <http://purl.access.gpo.gov/GPO/LPS6116> (as of April 27, 2006).
- , *U.S. Attorneys' Manual*, Washington, D.C.: U.S. Department of Justice, 2000b.
- , *The Federal Death Penalty System: Supplementary Data, Analysis and Revised Protocols for Capital Case Review*, Washington, D.C.: U.S. Department of Justice, June 6, 2001. Online at <http://purl.access.gpo.gov/GPO/LPS12622> (as of April 27, 2006).
- U.S. General Accounting Office, *Death Penalty Sentencing: Research Indicates Pattern of Racial Disparities: Report to Senate and House Committees on the Judiciary*, Washington, D.C.: General Accounting Office, Report GAO/GGD-90-57/B-236876, February 1990.
- Vito, Gennaro F., and Thomas J. Keil, "Capital Sentencing in Kentucky: An Analysis of the Factors Influencing Decision Making in the Post-'Gregg' Period," *The Journal of Criminal Law and Criminology*, Vol. 79, No. 2, Summer 1988, pp. 483–503.
- Weiss, Robert E., Richard A. Berk, and Cathrine Y. Lee, "Assessing the Capriciousness of Death Penalty Charging," *Law and Society Review*, Vol. 30, No. 3, 1996, pp. 607–626.

- White, Halbert, "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity," *Econometrica*, Vol. 48, No. 4, May 1980, pp. 817–838.
- Williams, Marian R., and Jefferson E. Holcomb, "Racial Disparity and Death Sentences in Ohio," *Journal of Criminal Justice*, Vol. 29, No. 3, May–June 2001, pp. 207–218.



