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# The Expanding Definition Of Crime And Its Effect On The Individual: A Multilevel Modeling Analysis

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THE EXPANDING DEFINITION OF CRIME AND ITS EFFECT ON THE  
INDIVIDUAL: A MULTILEVEL MODELING ANALYSIS

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A Dissertation

Presented to

the Morgridge College of Education

University of Denver

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In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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by

Teresa A. Dalton

August 2010

Advisor: Professor Kathy Green

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## ABSTRACT

Incarceration is one of the most extreme exercises of state power. For the past twenty-five years the rates at which states have been locking up their residents have been growing at a distressing pace. While violent crime rates have been declining, arrest rates for lower-level crimes have been steadily rising. Two new indices are developed to explain the relationship between lower-level crime and violent crime—the punitive severity index (PSI) and the punitive progression index (PPI). The PSI is the ratio of low-level crime to violent crime, a static indicator of punitiveness, while the PPI is a measure of the rate of growth towards or away from a more punitive approach to law enforcement. The PSI and probation rates are two important factors for predicting incarceration rates, explaining 98.6% of the variation in incarceration rates.

Hierarchical modeling was used to test hypotheses about the influence of the PSI, the PPI, and other state-level contextual variables on sentence length. At the individual level, the model suggests the race of the inmate has some, though nonsignificant, influence on sentence length. At the state level, PPI is significant ( $p = .011$ ) for predicting states' average sentence length. Type of state probation system oversight, either judicial or executive, also significantly affected length of sentence, with judicial oversight associated with shorter periods of incarceration.

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## **Chapter One: Introduction**

### **A Case**

On Thursday June 18, 2009, Harvard University Professor Henry Lewis Gates Jr. was arrested in his home in Boston, near Harvard Square, handcuffed, and booked for disorderly conduct (Jan, 2009).

Quite unremarkable in some regards and extraordinary in other ways, this incident provides a backdrop for this research study. Unremarkable because the arrest of an individual (even in their own home) for disorderly conduct is not inconsistent with the approach to crime control this country has been experiencing over the past thirty years (Coffee, 1991). Additionally, the fact that Professor Gates is a black male increased the likelihood of his arrest for any infraction (Thompson, 2008).

What occurred after his arrest represents the more interesting aspect of this case. The charge against Professor Gates was dropped, this despite the insistence from the arresting officer that it was an appropriate arrest (Zezima & Goodnough, 2009). At no point did anyone allege that the arresting officer fabricated the details of the incident or was otherwise negligent in his duties. Indeed, the arrest report appears on its face to outline just such an infraction as Professor Gates was charged with, disorderly conduct (Cambridge Police Department Incident Report #9005127, July 16, 2009; for convenience provided in Appendix A).

Not only was the charge against Professor Gates dropped but U.S. President Barack Obama was involved in the fray and hosted a beer and chat session with the Professor and arresting officer at the White House (Wallsten & Dorning, 2009). Professor Gates is not like most of the individuals that are caught up in the criminal justice system in the United States every day—his charge was dropped and he went on to some celebrity status. Along with such luminaries as Meryl Streep and Stephen Colbert, he appeared on the PBS television show *Faces of America* on February 10, 2010. Additionally, Gates donated the handcuffs used in the arrest to the Smithsonian, these having been given to him by the arresting officer (Solomon, 2010). For those citizens who have been arrested in handcuffs, this magnanimous act—gifting Gates the handcuffs he was arrested in—on the part of law enforcement may have appeared surreal. The dropping of the ‘good arrest’ charge was a highly unusual event. While a study looking at the factors involved in the differential treatment of Professor Gates would prove interesting, the impact would be minimal as so few others will find themselves in similar situations. This research study focuses on what would have happened to the Professor had he not been pulled from the jaws of justice; if he had become another statistic in the war on crime that has been waged against U.S. citizens since the 1970s (Beale, 2003). Specifically, the problem addressed in this study is the expanding inclusion of minor bad behaviors in the states’ definition of crimes and the corrections systems response to this phenomenon. Such a study will have a much greater impact since many more individuals are involved in the corrections system—specifically in the year of Professor Gate’s arrest, about 7.3 million people, or roughly 1 in every 31 citizens (Bureau of Justice Statistics, 2010).

## **Purpose of the Study**

The purpose of this research study was, first, to develop two indices measuring the trend in state propensity to define crime downward—a trend noted by numerous authors (see, e.g., Coffee, 1991; Coleman, Sim, Tombs, & Whyte, 2009; Higgins, 1999; Levitt, 1996; Lynch & Sabol, 1997; Richards & Ross, 2001; Welch, 2005)—using data collected over a ten year period, and to provide preliminary validation evidence regarding the indices, and second, to analyze the impact of this trend to define crime downward and other state level variables on penal policies as measured by sentence length for those incarcerated by each state. Such an analysis will provide an objective measure of the trend in the state governments' approach to crime, enforcement, and corrections in the U.S., allow for better-informed state policy makers, and reveal the source of much of the increase in incarceration rates experienced by states across the U.S. This study used an inmate survey response database compiled by the Bureau of Justice Statistics, a government agency, for data on inmate sentence length and other inmate level variables. This study used data from male inmates only due to the large difference in average length of sentence by gender (males 15.89 years, females 12.74 years) and research suggesting that females are processed through the criminal justice system differently than males (Britt, 2000; Crow & Johnson, 2008; Weidner, Frase, & Schultz, 2005). The methodology employed was ordinary least squares regression and multilevel linear modeling. The models included important incarceration variables for each subject (inmate) and state variables that may be associated with certain punishment policies. Of specific interest was the influence of race and socioeconomic factors on sentence length for the individuals incarcerated. At the state level, variables of interest include the arrest rate for

lesser level crimes (including disorderly conduct), the arrest rate for violent crimes, probation rate, and percent blacks in the state population. Additionally, at the state level a variable was constructed to reflect the type of probation system oversight (judicial or executive). The dependent variable was the time to which an inmate was sentenced, as measured in years.

### **Rationale for the Study**

Most current research on national imprisonment analyzes the rate of incarceration (per 100,000) by state (Greenberg & West, 2001). While incarceration rate is important and does vary by state, alone it will not capture the true measure of states' punishment policies. If, for example, a state sends most incarcerated residents to prison for three years, that particular state may be said to be more punitive than one that sends most of their residents to prison for one year, assuming approximately equal seriousness of crimes.

Some studies have used the binary variable of whether or not an individual is sentenced to prison for a year or longer as the dependent variable to study the variation from state to state (Wang & Mears, 2009). This approach, however, will not include what is likely a very important consideration for those incarcerated: For exactly how long? Many studies have already identified the impact of race and poverty on state imprisonment rates; none have studied the association between lesser crime and violent crime as a predictor of incarceration (Steen & Bandy, 2007; Weidner et al., 2005).

This research study shed light on the relationship between certain state law enforcement practices (level 2 variables) and imprisoned residents' personal characteristics (level 1 variables), and the utility of these variables in predicting length of

incarceration. Although multilevel linear modeling is not new as a methodology for analyzing justice data, it had not been applied to inmate survey responses with a focus on examining inmate level and state level covariates.

The amount spent on corrections by all U.S. states exceeded \$47 billion in 2008, with \$9 out of every \$10 going toward prison budgets (Moore, 2009). With little understanding of why incarceration rates continue to rise year after year despite decreases in rates of serious crime, states continue to allocate large parts of their budgets to corrections. State budgets are now being squeezed as revenues have declined (McNichol & Johnson, 2010). This research study provides needed insight into the relationships among state policing activities and ever increasing corrections spending.

### **Theory and Research Hypotheses**

In this research study the focus was on identifying factors that help to explain, in a linear fashion, variation in sentencing lengths by individual inmate characteristics (level 1). Also of interest was the degree to which state variables can account for the variation in sentencing lengths (level 2). Using the arrest of Professor Gates and the more likely outcome for him (probation) as a mechanism to view the criminal justice system, this study examines the most common crimes to be charged (disorderly conduct is the second most frequent), how these lesser crimes have been met with increasing police action (a downward defining of crime), the likelihood of entering a plea of guilty (90% of all criminal cases are resolved with such a plea), the sentencing structure, and how all of these factors impact the sentencing imposed by states. The analysis is structured to enable a simultaneous look at both of these levels of variables, hence the use of multilevel modeling, also known as hierarchical linear modeling (HLM).

*Hypothesis 1:* U.S. probation rates explain a significant proportion of the variation in incarceration rates and are a better predictor of incarceration rates than other corrections-related variables including various crime rates.

*Hypothesis 2:* Both the education level (as a surrogate measure for socioeconomic level) and race of the incarcerated are significant level 1 predictors of sentence length.

*Hypothesis 3:* The ten-year growth in the ratio of lower-level to violent crimes (the punitive progression index), the ten-year average ratio of lower-level crime to violent crime (ten-year average punitive severity index), the type of probation (executive or judicial oversight), and percent of blacks in the state are significant level 2 predictors of states' incarceration sentencing lengths.

*Hypothesis 4:* The ratio of number of lesser crimes to number of more serious crimes is significantly correlated with probation and incarceration rates and significant in a model to predict incarceration in the presence of probation.

## **Dissertation Overview**

This introductory Chapter presented the case of Professor Gates, which serves as a contextual reference point throughout this research study. Additionally, some topics associated with penal system policies were introduced and research hypotheses to be tested were delineated.

Chapter Two further develops the background for this study with a review of current literature as it relates to the use of variables, both state and individual levels, to predict such criminal policy variables as incarceration rates, sentencing structure, and imprisonment variation by race and socioeconomic levels. Additionally, Chapter Two places this research study in the context of similar studies.

Chapter Three addresses the methodology used in this research study with an emphasis on sampling design, metric development, variable selection, and statistical analysis. Multilevel modeling is described and validated as appropriate for this study. The findings of this study are presented in Chapter Four. The final chapter, Chapter Five, provides a discussion of the findings, conclusions drawn, limitations of the study, and implications for future research and policy.

## **Chapter Two: Literature Review**

### **Incarceration and Crime Rates**

The United States has been experiencing an unprecedented growth in imprisonment of its citizens over the past thirty years (Austin, Bruce, Carroll, McCall, & Richards, 2001; Costelloe, Chiricos, & Gertz, 2009; Hanser, 2010). Incarceration has reached the highest level in U.S. history with no sign that things will be changing (Lawson, 2004). Of those citizens born in 1974, there was a 1% chance of incarceration; 5.2% chance for those born in 1991, and if nothing changes the probability of spending some time in prison for those born in 2001 will be 6.6% (11.3% for males). In 2001, 17% of all black males were currently or formerly incarcerated (Bonczar, 2003). From the mid- 1920s to the 1970s incarceration rates held steady at about 110 per 100,000. As of 2001, the rate was 478 per 100,000 and if jailed prisoners were included it rises to 699 (Beale, 2003; Lawson, 2004). This represents the highest incarceration rate in Western nations. According to Beale (2003), in 2001 the rates in these other nations ranged between 125 per 100,000 in the United Kingdom to 60 per 100,000 in Sweden. As of year-end 2008, the U.S. rate was 754 per 100,000 (Glaze & Bonczar, 2009).

The U.S. locks up its citizens at a rate five to eight times that of most developed countries (Mauer, 1999). This unprecedented growth in incarceration is the result of sentencing reform. The targets of the get tough on crime laws were the dangerous offenders but the result of the sentencing reform was to greatly increase the population of

non-violent prisoners (Lynch & Sabol, 1997). With 5% of the world population, the U.S. has 25% of the world's prisoners. In the U.S. in the past 25 years, incarceration rates have increased 500% (Lawson, 2004) and most tough on crime policies adopted during the last 25 years were done so without concern for the fiscal and social cost (Chen, 2008).

The percent of those tagged as offenders with strong connections to mainstream social organizations such as labor markets and education systems has increased dramatically (Lynch & Sabol, 1997). Professor Gates would have been just such an offender and would have added to the increase in non-violent 'criminals' swept up in the tough on crime policies.

The increases in sentencing have not brought about the planned outcomes (Cullen, Gilbert, & Cullen, 1983). Crime rates have gone down, or in some cases remained stable over the past twenty years (Blumstein, 1998). America's criminal justice system is "remarkably ineffective, absurdly expensive, grossly inhumane and riddled with discrimination" (Rothman, 1995, p. 29). States are increasingly generous in their use of incarceration (Greenberg & West, 2001). Over time, changes in sanctioning policies are unlikely to bring about significant changes in crime rates (Tonry & Farrington, 1995). No association between measures of crime rates and measures of arrest rates has been found significant (Chamlin & Meyer, 2009). Rising incarceration rates over the past thirty years cannot be explained by an associated rise in crime rates (Carroll & Cornell, 1985; Marvell & Moody, 1994; Sorensen & Stemen, 2002). This increase is not likely to be due to changes in offender behavior (Padfield & Maruna, 2006).

If the sentencing policies worked, crime should have fallen as a consequence of harsher penalties, but it did not (Austin et al., 2001). A study by Mauer (1999) revealed

that under California's three strikes to a habitual criminal life sentence, in nine of the ten largest cities a reduction in crime would have occurred without this policy. Tough on crime laws are the reason for the tremendous increases in both incarceration and corrections (Altheide & Coyle, 2006). Economic inequalities have had a strong indirect effect on incarceration rates; levels of crime are insufficient to explain the variation in these rates (Arvanites & Asher, 1995). Tough sentencing laws such as the three strikes policies have not reduced crime (Chen, 2008).

A Marxist view would suggest the penal policies, specifically the changes witnessed over the past thirty years in the U.S. are developed and enforced to control the poor and disadvantaged (Garland, 1996). The increase in incarceration has less to do with crime and more to do with efforts at social control (Bachman & Schutt, 2007; Welch, 2005). Who do the penal policy changes of the past thirty years affect most? Acceptance that incarceration rates reflect crime rates deflects attention from social and demographic factors germane to the discussion (Selke & Andersson, 1992). Social and geographic variables have a great influence on incarceration rates (Barker, 2006). Social programs for the poor and marginalized, intended as anti-crime, have been decreasing over this same thirty year period; with that comes a removal of poverty as a condition of an individual and in its place, level of income becomes a matter of free-choice (Chevigny, 2003). A meta-analysis of 116 studies supports the theory that blacks are sentenced more harshly than whites (Mitchell, 2005). In the Chevigny study the association was positive for incarceration rate and income inequality – the lower the inequality, the lower the incarceration rate. Increased imprisonment rates in the U.S. have transformed the welfare state into the security state. Racial and ethnic disparities are apparent in imprisoned

populations (Bridges & Crutchfield, 1988). The war on drugs has put more blacks in prison than all other offenses added together (Yates & Whitford, 2009).

Hogeveen (2005) writes of the ‘valorizing’ of victims in the U.S. and suggests the belief held by many is anything that harms the offender helps the victim by extension, so greater punishment of the offender will be associated with greater benefits to the victims. The public has limited knowledge of the criminal justice system (except of course those brought in to it, such as Professor Gates); most people overestimate crime rates (Roberts, 1992). Equating tough on crime with mass incarceration, the media has contributed to the growth of the police state over the past thirty years, (Altheide & Coyle, 2006). Crime is a staple of the media; they control and develop public response to crime rates (Cavender, 2004). The number of redemption movies such as “The Shawshank Redemption” (Marvin & Darabont, 1994) and “Law Abiding Citizen” (Foster et al., 2009) may be a result of the increase in awareness of high incarceration rates and large numbers of ex-offenders in the population (Nellis, 2009). The public may be beginning to understand not all offenders should be locked up (Petersilia, 1997).

In a 1998 article in *The Atlantic*, Eric Schlosser interviewed Michael Tonry, a professor of Public Policy and Law at the University of Minnesota and an expert on sentencing policy, about his opinion of the extraordinarily high U.S. incarceration rates. Tonry opined that if one were to take the same number of individuals incarcerated today and randomly selected others from the population to replace those now serving time, you would also see crime decline (Schlosser, 1998; Tonry & Farrington, 1995). In other words it is the sheer *number* of people locked up that is associated with crime reduction, not *who* these people are. Above all else, the U.S. system of justice has diminished the

commitment to human rights and values (Tonry, 2009). Getting tough has become synonymous with getting rough (Welch, 2005). One author goes as far as to state that the American response to crime and criminals is cruel and expensive, and wastes the lives of disadvantaged black men (Tonry).

### **Political Reasons for Penal Policy**

Fear of crime is defined as an anxious emotional state that reflects the mindset that one is in danger of criminal victimization (Wakefield & Fleming, 2009). In an examination of incarceration rates in developed countries from 1975-2000, Tonry (2009) found an inverse relationship between levels of imprisonment and three important measures – trust in government, perceived legitimacy of government, and strength of welfare programs. The appeal to public safety is used as a source of legitimizing government power to control citizens (Chevigny). Incarceration is one of the most extreme forms of state power (Mears, 2006).

An immense amount of federal funding was made available for broad-based state law enforcement efforts in the 1960s and 1970s. The effect of this significant funding was to impact state enforcement policies. In the 1980s the funding was expanded to include low-level, routine criminal offenses with the same effect of impacting enforcement policies. As Yates and Whitford (2009) describe, programs that represented a joint undertaking of state law enforcement and federal law enforcement officials, such as multijurisdictional task forces, allowed the President of the United States to garner influence over state penal policy with little state oversight. Explicitly stated in the U.S. Constitution, criminal law enforcement has traditionally been a matter of state control (Mengler, 1995). The federal government encouraged punitive state policies by providing

funding incentives to adopt and enforce certain laws (Steen & Bandy, 2007). In 2008, states spent a total of approximately \$52 billion on corrections, approximately 10% of that came from money the federal government infused in local law enforcement agencies (Scott-Hayward, 2009).

In 1970 Congress voted to eliminate most federal mandatory minimum sentencing for drug offenses, calling prisons barbaric and ineffective as a means of control (Schlosser, 1998). As governor of New York in 1973, with an eye towards the goal of vice presidency, Nelson Rockefeller decided to try a bold political experiment. He called for an immediate increase in harsh sentencing which met with great public support with the new rhetoric the public received about the increasing crime dangers to the average New York resident. His gamble paid off and he became the Vice President of the United States in 1974. In other states the politically ambitious followed suit. Ultimately the repealed federal drug laws were reenacted and the race to toughness had begun (Schlosser, 1998).

In 1980s and 1990s the U.S. criminal justice system shifted to a more punitive model. The political system rewarded tough on crime positions from the late 1970s to today (Beale, 2003). As Mauer (1999) observes:

The primary goal of harsher sentencing policies is to satisfy the needs of the politician in their seemingly insatiable desire to appear tougher on crime...Perhaps nowhere in the realm of public policy is there a greater disjunction between research and policy. (pp.12-13)

Candidates from both major parties compete to be tougher on crime than their opponents, tougher on crime being a uniting cause (Chevigny, 2003). The right wing of

the Republican Party was most successful at infusing and legitimizing the pervasive paranoid mentality (Tonry, 2009). Penal policies are ultimately driven by political motivations (Smith, 2004). Politicians govern through crime; state power is extended through tough sanctions (Fleury-Steiner, B. D., Dunn, & Fleury-Steiner, R., 2009).

Although the stated objective of greater punitive policies is crime control, a competing objective has been political gain (Mauer, 1999). The main character in Franz Kafka's 1925 classical literary short novel *The Trial* recognizes politics are ultimately behind his arrest and trial (Kafka, 1998). Political context influences sentencing (Weidner et al., 2005). As a demonstration of state power, imprisonment is extraordinary, and the exercise of this state power is often motivated by personal political advancement (Smith, 2004, p. 930).

Crime legislation can be viewed as symbolic politics used to deliberately exploit the public fear of crime (Beale, 2003). Rhetoric and symbols are used to reinforce the fear factor rather. The current system valorizes expressed crime control policies in preference to more rational analyses (Newburn & Jones, 2007). No politician wants to appear soft on crime by questioning the usefulness of the more punitive penal policies (Rhodes, 1990). An endless inventory of recent penal policies has been designed to inflict increasing amounts of pain on the offender (Cullen, Fisher, & Applegate, 2000).

Comprehensive studies have raised serious doubts as to the relationship between the decrease in crime rates and tough on crime policies of the last thirty years (Lawson, 2004). Elected officials' beliefs about public support for harsher sentencing influences their criminal justice policies. The lack of public knowledge about trends in crime rates, criminal laws, and what citizens' rights are under the Constitution is substantial and

pervasive. People will report their belief that crime is increasing despite that fact it has fluctuated over the past fifty years (Roberts, 1992). According to the best research available, prisons do not deter crime but they do fulfill emotional needs (Maruna, 2007).

A survey of 2,250 Floridians found an association between fear of crime and punitive inclinations (Costelloe et al., 2009). The strongest relationship was shown between punitiveness and economic insecurity with white males of low education tending to be the most punitive. The media feeds on this fear, as crime has become a staple of that industry; the blurring of news and entertainment are relevant to media depiction of crime (Cavender, 2004).

The fear of crime makes for illogical policies. For example, neighborhood watch programs have been found to be ineffective at crime control but that fact has not diminished the enthusiastic support for them as a crime control technique (Tonry & Farrington, 1995). With regard to sex offenders, all are required to register with their state of residence; in most states this period is at least ten years. In Virginia, along with many other conditions of probation, offenders are required to report to the local police station every Halloween eve, take a drug test, and remain at the police station during the time children go trick-or-treating, despite the fact that not one incident has ever occurred on Halloween anywhere in the United States (Robbers, 2009). Most sex offender incidents occur with a child known to the offender, not a stranger; only 17% of all reported sex offender crimes were with strangers and all of those came from internet contacts (Craun & Theriot, 2009). The public information of sex offenders' residences can serve to reduce what should be heightened vigilance when it comes to children's vulnerability with those adults known to them. The United States and the United

Kingdom have very similar histories with regard to penal policies up to the 1970s, yet the U.K. does not make sex offender residence location public. The U.S. public registry is viewed by some as too punitive and ineffective at reducing repeat offending (Jones & Newburn, 2002).

By maintaining high rates of incarceration, states seek legitimacy at the expense of the socially and economically marginalized (Barker, 2006). The criminal justice system is used as a device to maintain socio-economic segregation of those that 'have' from those that 'do not have' (Arvanites & Asher, 1995). Given the U.S. demographics of blacks and non-blacks, the fact that the percent of blacks imprisoned is significantly greater than the percent of non-blacks imprisoned suggests that discriminatory practices are employed (Selke & Andersson, 2003). The greater the proportion of disenfranchised, poor, and marginalized, the greater the perceived threat to others (Smith, 2004). The penal harm movement policies were enacted explicitly to do greater harm to offenders (Clear, 1994). Criminal punishment schemes are associated with socio-economic stratification (Bridges & Crutchfield, 1988) and result in differences in enactment and implementation of penal policies (Barker, 2006). And yet there is a belief that criminal tendencies emanate from life experiences—remove the negatives and crime goes away (Gideon, 2009).

### **Downward Expansion of Crime Definition**

Crime is a definition of human conduct created by authorizing agents in a politically organized society (Quinney, 1970). Reforms in the correctional system brought with them a new approach to social control (Welch, 2005). Vigorous law enforcement responses to lesser crimes and disorder are associated with an increase in

labeling lower-level incivilities as crimes (Newburn, 2009). The profile of the defendant as a dangerous offender has been significantly expanded to now include a large number of non-violent and not so dangerous offenders (Lynch & Sabol, 1997). Welch (2005) acknowledges the role authorities play in defining crime. Certain behaviors are defined, labeled, and policed by the state (Coleman et al., 2009).

With the increase in policing and shrewder management of policing have come increases in the number of individuals charged with crimes (Zimring, 2007). United States Senator Daniel Moynihan, in a speech in 1992, suggested the need to expand the definition of unacceptable individual standards and lowering the bar for which individuals actions are criminalized (Karmen, 1994). Garland (1996) notes that criminalization is often an evil in itself.

Criminal laws have been, for some time, encroaching on areas previously considered to be civil in nature. Coffee (1991) asserts that this over-criminalization is associated with the improper use of criminal sanctions to enforce regulations and that criminal laws should be focused on the state of mind of the accused (*mens rea* – guilty mind), a standard which has no basis in civil laws.

Acts that are criminalized are generally those of the poor (Reiman & Leighton, 2009). Net widening, the practice that ensnares an increasing number of offenders of non-violent and lower-level crimes has become increasingly inflexible and punishing (Welch, 2005). The decisions prosecutors make about whom to prosecute and what punishment to exact are virtually unassailable (Higgins, 1999).

The vastly expanding incarceration policies that include minor offenders are not advisable policy; funds are necessarily diverted from actual needs of societal protection

(Levitt, 1996). The less serious offenders that enter prisons under longer sentences associated with the tough on crime reforms could yield no crime control benefits (Lynch & Sabol, 1997). The criminal laws are being used as a socializing system of moral brainwashing (Richards & Ross, 2001). The real problem with these correctional reforms is finding ways to control the abuses of legal authority (Richards & Avey, 2000). The over-criminalization represents a “knowing and cynical manipulation of the symbols of state power and emotions of fear and insecurity which give these symbols their potency” (Garland, 1996, p. 460).

Capturing the criminal before any real crime occurs as a type of selective law enforcement is a procedure that ignores empirical validation and theoretical rationalization. (Miller & Morris, 1986,). Increases in incarceration during the war on crime have not been the result of increased criminal rates but rather adjustment to the new criminal justice policies (Hallett, 2002); that is, expansion of the definition of crime.

One of the unintended consequences of the growing use of imprisonment has been a growing number of criminologists who have experienced incarceration (Austin et al., 2001). In a prediction made in 2001 that was to come true for Professor Gates in Boston, Richards and Ross (2001) posited that a dramatic increase in arrests guarantees that the number of professors with firsthand experience with the criminal justice system will rise. In fact, the crime for which Professor Gates was arrested (disorderly conduct) represented the second most frequent non-violent arresting crime in the U.S. The most frequent is drug abuse, which for the most part means any use of street drugs. In 2006 the total number of individuals charged with drug abuse was 1,889,810; for disorderly conduct the total was 703,504 (Hagan, 2011). Out of a total of 14.4 million arrests for crimes in the

U.S. in 2006, only 4.3% were for violent crimes and 68.2% were for lower-level crimes such as disorderly conduct, suspicion, curfew violations, and vagrancy (Federal Bureau of Investigation, 2007).

### **Plea Bargaining**

The majority of all criminal cases, greater than 90%, do not go to trial. Most are resolved under a plea of guilty, known as taking a plea. The process occurs as follows: a person is charged with a crime (typically arrested) and before the trial date the prosecutor will offer some deal to the individual charged if the individual will forgo their right to a trial. This bargaining typically happens very early on but sometimes a plea is arranged on the day of the trial (Bergman & Berman, 2008; Chemerinsky & Levenson, 2008; Kadish, Schulhofer, & Steiker, 2007). The procedure is fairly institutionalized—indeed the courts across the U.S. would come to a screeching halt if most people accused of crimes demanded their right to a trial (Bogira, 2005). Plea bargains make the criminal justice system more efficient by allowing the flow of an ever-growing population of accused to receive their punishment without using valuable judicial resources (Kadish et al.).

Standard protocol is to inflate the number and gravity of the charges against an individual in the hope of scaring him or her into accepting a plea. This procedure is known as puffing or bluffing and is a common tactic (Bibas, 2004). This scheme works particularly well when used on innocent defendants as such individuals tend to be more adverse to risk than defendants that are guilty (Bibas, 2004; Bogira, 2005). As Bibas (p. 2495) reports; “The danger that bluffing, fear, or ignorance will skew innocent defendants’ bargaining is one of the most palpable injustices of plea bargaining.”

This tendency for the innocent to plead guilty to a charge is precisely why researchers caution that one should not assume all prisoners are criminals and that committing a crime has anything to do with going to prison, even for those with multiple admissions (Richards & Ross, 2001). For those charged with a crime that insist on exercising their rights to a trial and forgo a plea agreement, studies have shown there is a differential (harsher) sentencing structure if found guilty (Brereton & Casper, 1981). As Lynch (2003) notes:

There is no doubt that government officials deliberately use their power to pressure people who have been accused of a crime, and who are presumed innocent, to confess their guilt and waive their right to a formal trial. We know this to be true because prosecutors freely admit that this is what they do. (p. 24)

In fact, prosecutors (and judges) are quite aware that people are admitting to crimes they did not commit. Taking the charge against the individual at face value, if the prosecutor offers a different charge (lesser charge) to plead guilty to in order to barter away the right to a trial, it is almost always the case the individual is admitting guilt to a crime not committed. This is true whether or not the individual is really guilty of the originally charged crime; indeed, this practice is institutionalized (Bogira, 2005). There exists virtually no oversight in the prosecutorial discretion to determine how and when to load-up charges (Bach, 2009).

When prosecutors can bargain away cases, they are able to hide dubious confessions and questionable police tactics from public scrutiny. When credible claims of innocence are bought off with the coercive practice of plea bargaining, there is no exposure of wrongfulness (Bibas, 2004). To make matters worse, for those individuals charged with a crime and lacking sufficient funds for an attorney, the court-appointed

counsel tends to push clients towards taking a plea because the lawyers can generate the most money by quickly dispensing with a case (Bergman & Berman, 2008; Bibas, 2004; Bogira, 2005).

Our criminal justice system admits mistakes only when it has to and attempts to cast doubt on correctness of guilt are set aside unless the defendant can prove innocence (Baumgartner, De Boef, & Boydston, 2008). Once a guilty plea is entered there is rarely any effort at investigating the appropriateness of the finding of guilt. Indeed, the best evidence available to consider the fallibility of the judicial system comes mostly from those pleading guilty to murder and/or rape for which DNA testing evidence was not available at the time of the entered plea and now serves to exonerate. These data reveal a greater than 2.3% chance of a wrongful death sentence and up to 10% chance of an erroneous criminal conviction by a jury (Gross & O'Brien, 2008). As Gross and O'Brien (2008) point out, most false confessions (revealed through post trial investigation and evidence) lead to false convictions; unfortunately there is virtually no data for erroneous findings of guilt for misdemeanors and non-violent felonies. Consider the plight of Professor Gates. Had the charge against him not been dropped the most likely outcome would have been a plea agreement whereby he would have pled guilty to a lesser charge (Bogira, 2005). Where would be the evidence to prove he did not commit the crime? As Gross and O'Brien (2008) further note, the vast majority of all criminal convictions are for misdemeanors and non-violent crimes and this group probably includes the majority of all false criminal convictions.

## **Increase in Probation**

Probation is defined as the procedure by which a defendant found guilty of a crime is released by the court without imprisonment, subject to conditions imposed by the court and under the supervision of a probation officer (Gifis, 2003). The status of a probationer lies somewhere between a prisoner and a free citizen (Filcik, 1990). In 1878 a Boston cobbler by the name of Augustus began to assist certain individuals charged with crimes, saving them from incarceration by agreeing to the court to take responsibility for their non-reoffending. This was the first unofficial recorded probation act (Greenberg, 1981). All states have probation statutes (laws) but few give a definition for it (Horwitz, 2000; Mackenzie & Li, 2002).

From 1980 to 2004 the U.S. experienced a 270% increase in the number of individuals sentenced to probation; during that same period of time the U.S. population grew by approximately 24% (Altheide & Coyle, 2006; Kadish et al., 2007). The new criminal justice approach is to expand the use of probation as an affirmative correctional device and sentence (Filcik, 1990). As of 1997, 80% of all those convicted of a misdemeanor were sentenced to probation (Petersilia, 1997). Probation, then, would be the likely sentence for the misdemeanor for Professor Gates had the authorities not decided to drop the charge; the probable length of the sentence may be a year or more.

Typically when an individual takes a plea and agrees to probation, the terms are loosely unspecified. Certainly without the assistance of counsel (and often even with such assistance) the defendant won't understand that they have given away all rights to the presumption of innocence and a violation of any of the numerous conditions imposed on them could result in a quick trip to prison (as the court now has an admission of guilt of a

crime) (Bogira, 2005; Hanser, 2010). This process is euphemistically called the delayed entry program. While some prosecutors still cling to the notion that the probation agreement is essentially a contract which the courts are required to enforce, the U.S. Supreme Court has consistently dismissed that argument, citing in particular the unequal bargaining positions of the parties (Horwitz, 2000).

The U.S. has been experiencing growth of the probation population and a modification of the probation function (Weissman, 1982). State budgetary pressures are causing a reconsideration of the punitive model with regard to incarceration (Beale, 2003). Probation, on the other hand, is being treated as a sentence with all the associated focus on punishment by an increasing number of states. Rehabilitation is being discarded in favor of retribution and such punishment is enhanced if it inflicts disgrace (Filcik, 1990; Weissman, 1982).

Probation conditions typically fall under two broad categories, standard conditions and special conditions. The number and degree of punitiveness of these special conditions of probation have been growing steadily to reflect the perceived punitive mood of the public (Hanser, 2010; Petersilia, 1997). One third of all offenders in the federal courts inform the judge they would prefer prison to probation due to the extreme conditions imposed on them for probation (Petersilia, 1990). Standard conditions typically include staying crime free (this includes some acts not typically considered crimes, such as minor traffic violations), regularly reporting to a probation officer, being gainfully employed, paying all court-imposed fees (including cost of probation), not having access to any firearms, obtaining and paying for treatment if ordered by the court, and in many states not consuming or possessing alcohol as well as possibly submitting to

random urine tests to check for the presence of alcohol or drugs (Bergman & Berman, 2008; Hanser, 2010).

In the case of Professor Gates, Massachusetts does typically include an alcohol clause, and given the charge he would most likely have been required to attend (and pay for) anger management treatment. Horwitz (2000) noted special conditions run the gamut from community service to the wearing of a sign to declare one's guilt and described the scope of the sentencing court's discretion as breathtaking. Probation terms abrogate constitutional liberties such as freedom of speech, freedom of religion, and freedom from unreasonable search and seizure (Weissman, 1982). As Horwitz (2000) observed, while state judges have seen greater restrictions placed on them with regard to incarceration decisions, they exercise increasing discretion in setting conditions of probation.

The greatest impact on probation terms tends to be financial and costs can run into the tens of thousands depending on the number and type of conditions imposed and the length of the sentence (Bergman & Berman, 2008). If a probationer fails to meet all court imposed financial obligations, revocation of probation and sentencing to incarceration is possible. The issue of whether or not a court can revoke probation for an individual lacking means to satisfy court imposed required costs is an unresolved issue; some state courts agree this can be done (Clarke, 1979). The rate of successful completion of probation (completion of all required terms) is falling, not surprisingly, as the number and punitive nature of the conditions are rising. In 1986, 74% of probationers were successful, in 1992 67%, and by 2004, it fell to 60% (Glaze & Palla, 2005; Petersilia, 1997); more than one in three probationers will be on the delayed entry program.

Probation services need to monitor a range of factors to determine what is effective and what is necessary (Nash, 1996). Studies have shown that if after one year on probation there has been no additional offense, then in nine out of ten cases there will not be any further offenses (Neithercutt, 1987). Citing a 1980 study of probation data from northern California, Nethercutt notes that most violations occur within the first six months. One study showed the social controls of probation to have no effect at all on criminal behavior (Horney, Osgood, & Marshall, 1995) while another suggested a decrease in criminal activity associated with probation (Mackenzie & Li, 2002). The latter study, however, used questionable criminal behavior variables such as lack of gun ownership as one of the standard probation conditions (and possibly one not relevant to most individuals). Some researchers in this field believe if there is no need to restrain individuals, probation is not appropriate (Clarke, 1979). One might question the wisdom of putting low risk people on probation given the tight budgets of state probation systems (Petersilia, 1997). Despite these studies, the use of and time on probation sentences continue to rise (Altheide & Coyle, 2006).

If probation was used mostly as an alternative to incarceration, states that imposed greater probation sentences should have lower incarceration rates. There is in fact a *positive* correlation between probation lengths and incarceration rates, the opposite of what would be expected (Petersilia, 1997). An inference can be made that the probation system is used as a method to incarcerate offenders by having them plead guilty with a probation sentence, and then revoke the probation for any reason and sentence to incarceration (Stickels, 2007). Probation officers' discretionary decisions with regard to revocation are partly responsible for rising prison admissions in many states (Reaves,

2005). Probation may be a strategy for disposing of difficult cases with recognition that probation can be revoked on any violation of conditions (Stickels, 2007).

### **Probation Revocation**

Revocation of probation means simply that probation was taken away from an individual before the term of the probation sentence ended (Gifis, 2003). Typically the result of this is some type of incarceration. Recidivism is defined as reoffending. The interpretation of reoffending is fluid and changes based on both the context and purpose of usage (Hanser, 2010). It is common for people to refer to revocation rates of probationers as recidivism rates but that use distorts the true nature of most reasons for probation revocation (Petersilia, 1992).

Within the context of conditions of probation there are two potential types of violation; reoffending and technical. A reoffending violation means the individual committed a criminal act (any violation of a state or federal law) while on probation. Such criminal acts can range from jaywalking to murder. A technical violation would be a non-compliance with any of the other conditions of probation that do not refer to state or federal laws (Morgan, 1993). Technical violations can range from non-payment of probation fees to unsuccessful court ordered 'treatment' outcome and everything in between. Put succinctly, probation widens the net of social control (Morgan, 1993).

With courts and prosecutors moving towards longer probation with greater numbers of conditions, the potential for revocation has increased for the individual probationer (Clarke, 1979), this despite studies showing strictness of supervision has little impact on reoffending rates (Hearnden & Millie, 2003) and the fact that length of probation sentence is inversely related to failures—the longer the sentence the more

likely the failure (Gray, Fields, & Maxwell, 2001). The growth in prisons in recent years comes from supervision violations (Mauer, 2002). Rates of probation could be predicted to increase incarceration rates by providing further opportunities for imprisonment through revocation (Sorensen & Stemen, 2002, p. 461). There are too few procedural safeguards in place for probationers charged with violating conditions of probation (Best & Birzon, 1963).

Technical violations constitute the most common type of probation violation (Gray et al., 2001) and the easiest to prove at revocation hearings (Stickels, 2007). While criminal acts require an intention to commit a crime (a guilty mind), courts consistently find probationers' willful or intentional violation of conditions unnecessary; the mere fact that a condition has not been met is sufficient (Miller, Sluder, & Laster, 1999). Consider that one study found 2/3 of employers were unwilling to hire someone with a criminal record (Graffam, Shinkfield, & Hardcastle, 2008) and imagine the difficulty a probationer might have securing employment (as a condition of probation) and paying fees (as an additional condition). Another study found the false positive rate for urinalysis testing ranging between 0.8% and 4.1% (Visher, 1991). This means with 100 tests there may be as many as four mistakes (false positives) that will put the probationer in violation and send them to prison.

In a study of Michigan probationers, only 4.4% of revocations were associated with reoffending while 11.4% were for failure to pay (Gray et al., 2001). A study of probationers in Texas from 1993-2000 revealed the percent of technical violations had increased during this time period from 42% to 55% (Stickels, 2007). Researchers have consistently found influential factors for revocation are not grounded in past, present, or

future criminal behavior (Kerbs, Jones, & Jolley, 2009), and no evidence suggests non-compliance with conditions increase likelihood of criminal activity (Padfield, 2006). A 1987 study identified prior convictions, income at arrest, and living arrangements as the important variables for predicting probation failures (Morgan, 1999). Failure to reintegrate is due to employment and financial difficulties (Polerino, 2009); once placed under probation, none of these variables are within the control of the probationer.

Revocation is, by and large, an administrative decision rather than a legal one (Steen, 2007)—if court involvement is required, the decisions of the probation officers are almost always followed (Bogira, 2008). In Oregon, probation officers have the authority to jail offenders for a positive drug test without a hearing; there is no oversight and no pretense of judicial review (Taxman, 1995). Revocations involving technical violations are more ambiguous than that of reoffending, thus giving the probation officer more discretion (Steen, 2007). In one study of 1,050 probation office practices, 62.5% reported policies requiring formal action for certain violations while only 10.8% had policies to inhibit formal action for certain violations (Kerbs et al., 2009). When probation officers ranked technical violations from the most serious to the least serious, they listed failure to report as the first and failure to pay financial penalties as the second most serious infraction (Taxman, 1995). Money is clearly on the mind of the probation officers and probationers must feel the pressure to find a way to come up with the funds—perhaps any way to get the money to avoid incarceration.

Regarding these revocations for technical violations, while race did not predict new crime (reoffending) it did predict who would have probation revoked (Padfield & Maruna, 2006). Many states show a significant relationship between race and revocation

for technical violations; blacks have a disproportionate share of such revocations (Gray et al., 2001). Higher levels of education are associated with a decrease in likelihood of revocation for a technical violation (Gray et al.), perhaps due in part to the fact that the technical violation is less likely to be of a financial nature. Minority status was associated with revocation more often when the original offense was less serious and the offender had no prior criminal history (Steen & Bandy, 2007). This would have been exactly the profile for Professor Gates had he been placed on probation. There is a certain degree of justice by geography in that southern states are more punitive than non-southern states, and smaller courts more punitive than larger courts (Kerbs et al., 2009).

Most violations are only irresponsible, not criminal; the need to deter crime is not served by revocation for such violations (Clarke, 1979). No significant relationship has been found between re-arrest and technical violations for probationers (Piquero, 2003) and yet one study found 95% of all revocation motions were for technical violations (Stickels, 2007). As Clarke (1979) asserts, the lack of success with a court ordered treatment program, a coerced cure, should not even be considered a violation. With deferred adjudication, a technical violation allows the court to easily convict a defendant of a serious offense and sentence the individual to substantial prison time (Stickels, 2007). As Clarke (1979) argues, revocation should not occur unless restraint is necessary.

### **Criminal Justice Industrial Complex**

The phrase *prison industrial complex* has been in circulation for a while and is used in a manner similar to that of the expression military industrial complex, which refers to the policy relationship between the military and the industrial (private) sector developed during WWII. Use of the phrase military industrial complex is intended to

reflect a critical comment on the too cozy relationship between public services and private enterprise, a relationship fraught with political corruption and moral hazard (Kennedy, 2001). U.S. President Dwight D. Eisenhower, in 1961, warned of the dangers to the American people if this relationship were allowed to dictate policies in the United States (Medhurst, 1994).

Use of the phrase prison industrial complex is meant to imply the same type of dangerous and inappropriate relationship between the public and private sectors, in this case with regard to imprisonment (Altheide & Coyle, 2006; Lapidó, 2001; Schlosser, 1998). Recently, a more inclusive term has surfaced to refer to the entire correctional system—probation, parole, jails, and prisons—in recognition of the expanded list of those in the private sector with financial incentives to keep the system humming along: the *criminal justice industrial complex* (McLennan, 2008; Welch, 2005).

Private sector development promotes and assists the expansion of imprisonment (Garland, 1996). As Newburn (2002, p.178) states, the number of private individuals and corporations with an interest in the growth and profitability of the corrections system is large and expanding. The dependence on correctional policies to exact criminal fines on those of lesser means has been a fundamental part of the U.S. criminal justice system for some time; unemployment will undermine just such a system that relies so heavily on financial penalties (Garland, 1991). “When free market enterprises intersect with a captive market, abuses are bound to occur” (Schlosser, 1998). Many employees and communities rely on the income the correctional system generates and efforts to reduce states’ punitive response to crime will be seen as a threat to their livelihood (Mauer, 2002). As an example, consider the state of New York, in which from 1988 to 2000 the

spending on public universities decreased 29% while funding for prisons increased 79%, this despite a decrease in crime during the same time period (Austin et al., 2001). The restructuring of the public sector has created the new authoritarian state, with traditional notions of public and private sectors becoming unclear (Coleman, et al., 2009).

The criminal justice system seems amazingly unmoved by the treatment of relatively harmless lawbreakers as threatening and dangerous offender (Kraska & Neuman, 2008; Welch, 2005). The economic needs of the corrections industry, writes Welch (2005), demands an ever-increasing supply of offender bodies to remain profitable and the true culpability of those caught up in the net is irrelevant as profits are made regardless of whether an individual is a real threat to the community or not.

With the proliferation of private interests in the corrections industry, humans have become a commodity. The offenders are products; their incarcerated bodies valued for their per diem payments (Donohue & Moore, 2009; Hallett, 2002). McLennan (2008) writes about the U.S. history of imprisonment and the earlier use of prison labor as a state sanctioned form of slavery. Interestingly, the reason this practice was halted had nothing to do with the cruel and sub-human conditions these individuals were exposed to but rather the conflict that free labor (and the training required to exact it) was to the tradesmen competing for jobs (McLennan, 2008).

There has been a long standing tradition in the U.S. of criminal punishment policies being a product of an agenda other than crime control (Hallett, 2002). Prisoners in private prisons come from many states. In a rent-a-cell business model, a broker is contacted by a state corrections official to locate a prison with 'space' and arranges the transport of the commodity; there is greater regulation of interstate transport of cattle than

these humans (Schlosser, 1998). The increased investment in the corrections system is consistent with a capitalist approach to acquisition of wealth for the affluent through oppressive measures of control upon the poor and marginalized (Blomberg & Cohen, 2003).

Hallett (2002, p. 372) found in a 1997 analysis of the private (non-governmental) prison industry, four threats to profitability were identified: (1) falling crime; (2) shorter prison terms; (3) alternatives to incarceration; and (4) reduction in the use of mandatory prison sentence for non-violent crimes. With staffing accounting for 75-80% of correctional budgets (Scott-Hayward, 2009), the focus of many employed in the industry on profitability is predictable.

Current punitive policies have significant support from those with a financial stake in the criminal justice system: state, federal and privately run prisons, probation systems, court-ordered treatment program providers, drug testing centers, and the like (Beale, 2003). Sources of funding for tough on crime initiatives can be found among those groups with a substantial vested interest in maintaining or increasing the flow of human bodies through criminal justice system. For example, the driving force behind California's three strikes legislation received 78% of initiative total funding from the state prison guard union (Beale, 2003).

The increase in imprisonment is associated with the increase in the role of capitalism in the corrections system (Welch, 2005). Growth in the prison population in recent years comes from the supervision violation (Mauer, 2002). The tough on crime legislation that has been the driving force behind the new punitive system took away much of the discretion regarding those charged with crimes from judges and gave it to

community corrections supervisors (Welch, 2009). These new brands of adjudicators have neither the legal background nor the professional experience of appointed judges.

As Garland (1991, p. 149) describes, incarceration is legally disguised as a simple loss of liberty, the true toll it takes on both the incarcerated individual and their family is concealed from the public. The government has the power to suffocate people and causes (Ivins & Dubose, 2007). As Welch (2005, p. 149) aptly noted, “Profiting from corrections is different from other forms of privatization because it reduces the administration of justice to the accumulation of capital at the expense of programmatic and humanitarian ideals.”

### **Statistical Methods in Criminal Justice Research**

Researchers in the field of criminal justice have been utilizing increasingly sophisticated statistical techniques to address hypotheses. The ordinary least squares method has been fairly commonly used in research on crime data. In 1985, a study was conducted to determine which explanatory variables (racial composition, welfare rates, economic inequality) were significant in a model to predict incarceration rates per state (Carroll & Cornell, 1985). Modeling parole violations by state, Rhodes (1990) considered the political composition of the state and percent of state residents in favor of the death penalty. Looking at state level data, Patterson (1991) predicted criminal activity with various state economic variables. State incarceration rate was used as the dependent variable by Selke and Andersson (1992).

In a 1995 study predicting state level incarceration rates, the researchers considered geographic location, percent blacks in the state and income inequality for inclusion in the model (Arvanites & Asher, 1995). A generalized least squares method

was employed to predict state incarceration rates based on state level racial composition, income inequality, and welfare rates (Greenberg & West, 2001). Using state level data on the number of prisoners serving at least a year in prison per 100,000 state residents, a researcher tested for inclusion in the linear regression model, race, poverty, unemployment, and unequal income distribution in each state (Smith, 2004). In all of these studies that predicted some variation on incarceration (at least one year, overall rates, and criminal activity) only race was consistently found to be a significant predictor.

A time series analysis was utilized to predict state level incarceration rates from 1950 -1990 (Jacobs & Helms, 1996). Logistic regression was used in one study to predict the odds of probation revocation in a study of North Carolina cases (Sims & Jones, 1997) and in another to predict the odds of recidivism (Hancock & Raeside, 2009). Path analysis was employed in a study of factors related to crime rate reduction (Logan, 1993) and in an examination of factors related to prison crowding (Steiner & Wooldredge, 2008; Wooldredge, 1996). In 2002, using exploratory factor analysis, researchers examined the dimensions of criminal attitude and criminal conduct (Simourd, & Olver, 2002). Self control theory associated with crime was analyzed using a Rasch Model (Higgins, 2007).

Multilevel modeling, or hierarchical linear modeling (HLM), has recently surfaced in criminal justice research, with HLM applications in this field steadily increasing since 2005. A multilevel model was employed to predict the odds of committing a violent offense, with survey item responses within each respondent as level one variables and the attributes of the neighborhoods these respondents resided in as level two variables (Sampson, Morenoff, & Raudenbush, 2005). Analyzing homicide trends in

44 countries, HLM was used to determine the impact of democratization of a country (level two) on the homicide rates across regions of each country (level one) (Lafree & Tseloni, 2006). In a 2008 study predicting crowding in prisons, inmate attributes were used as level one variables and characteristics associated with the various prisons as level two variables (Steiner & Wooldredge, 2008). Also in 2008, a multilevel study was conducted predicting the probability of sentencing as a habitual offender, with individual characteristics as the level one variables and county attributes as the level two variables (Crow & Johnson, 2008).

Most recently, two studies from 2009 report HLM results. In one, odds of completion of day reporting programs for non-incarcerated offenders were analyzed using the individual attributes as level one variables and the program characteristics as level two variables (Craddock, 2009). In another, an offense seriousness score was predicted using multilevel modeling with the offender attributes as level one variables and the probation office policies as level two variables (Kautt, 2009).

This present research study will rely on a large inmate survey that has been conducted at time intervals beginning in 1974. Some work has been done to analyze the reliability and validity of this data source. In 1999, the responses to this survey were found to vary in a systematic fashion, lending support to validity of the data (Camp, 1999). In 2002, with an eye towards the possibility respondents may exaggerate, researchers suggested this was not likely (Camp, Gaes, Klein-Saffran, Daggett, & Saylor, 2002). In addition, these researchers found no systematic bias in type of respondent completing the survey (Camp et al.). Using a correlation analysis to validate inmate survey responses, measures of perceived safety on the part of the inmates were found to

be strongly associated with official misconduct reported (Daggett & Camp, 2009). These authors write that such surveys are an alternative data source providing accurate and important information. Finally, using HLM analysis on the inmate survey data, a study was conducted to determine which level one variables (inmates) and level two variables (prison) were useful in predicting inmate violence (Huebner, 2003).

### **Importance of State Level Data**

“States exercise extraordinary discretion in the substance and implementation of their criminal laws” (Yates & Whitford, 2009, p. 877). Yet differences among states’ corrections policies have been largely ignored (Greenberg & West, 2001). There is greater variation in incarceration rates across U.S. states than across all nations of Western Europe, despite the diversity among these European nations (Zimring & Hawkins, 1991). The U.S. is not a coherent or singular state but is instead a mixture of democratic practices, creating and resulting in differences in enactment and implementation of correctional policies (Barker, 2006). Criminal justice and state activities are inextricably linked (Coleman et al., 2009) but there is a dearth of sophisticated studies of correctional policies using national samples; such studies are desperately needed (Cullen et al., 2000).

States vary greatly on important correctional relevant variables. For example, differences in the way states exercise their power (in an effort to maintain legitimacy) will produce varying degrees of reliance on incarceration (Barker, 2006). A substantial variation in racial disparities in imprisonment exists across states (Bridges & Crutchfield, 1988). Variation in state probation rates have been used to rank states (Hanser, 2010). While incarceration has generally been increasing, some states have diverged from the

national trend (Barker, 2006); scant attention has been given to explaining why some states ‘aggressively’ incarcerate their residents while others do not (Mears, 2006). One study found increases in murder rates in only those states that had enacted three strikes policies; the hypothesis was that fear of super incarceration provoked offenders to kill potential witnesses (Chen, 2008). Even such unrelated indices as perceived health were a source of variation across states (Subramanian, Kawachi, & Kennedy, 2001).

At the state level, corrections constitute a substantial percent of all state expenditures and this percent varies by state (Mauer, 2002). Researchers have recognized keeping crime in abeyance involves the willingness of correctional agencies to confront social structures that represent obstacles to crime reduction; this willingness on the part of political and correctional individuals varies by state (Bracken, Deane, & Morrissette, 2009). On the other hand, there are some drawbacks to using state level data. You lose, as one author put it, the charming regional differences (Sedaris, 2004, p. 183). Aggregation at the state level misses such things as relative and absolute poverty indices (Patterson, 1991). While the states write and pass laws, counties interpret them, which leads to variations within states (Baumgartner et al., 2008).

A measure of the state’s punitiveness—how punishing the response is to low-level crime, for example—is useful and important as an index of state level corrections activity. Several studies have attempted to capture this measure. Greenberg and West (2001) used the incarceration rate per 100,000 as an index to rank state punitiveness. This measure, however, does not include variables that should be factored in. For example, if a state has built many prisons they may have ‘borrowed’ inmates from other states. Austin and Tillman (1988) proposed a punitiveness ranking of states based on the number of

inmates per 100,000 and total control rates (to include, in addition to those incarcerated, those on community supervision) per 100,000. This additive measure does little to account for the size of the differences in incarceration and probation rates among states—some states have correction rates substantially larger than others (Cullen et al., 2000). A more sophisticated (and complex) index of state punitiveness that takes into account crime rates, arrest rates and imprisonment rates was proposed by Selke and Andersson (1992). This last metric represents a movement in the right direction by recognizing the interaction of these other variables on states' punitiveness but it does not factor in the change over time with this snapshot approach.

None of the existing measures consider the change of the state's correctional policies over time. Additionally, in support of theories that suggest some states have been actively defining crime down (expanding the definition of crime to ensnare more and more residents), none of the indices have accounted for the ratio of serious crime to lower-level 'crime' such as that with which Professor Gates was charged.

### **Importance of this Research Study**

Several studies have examined the association between crime rates and incarceration levels but none have found any significant relationship (Chamlin & Myer, 2009; Greenberg, Kessler, & Logan, 1979; Logan, 1975). States are unable to support policies for locking up their citizens as needed for safety. Although a study looking at policies targeting minor offenses found an association with some reduction in certain types of crimes, the author admits that using the number of misdemeanors per state was a crude measure (Worrall, 2006). The states' use of symbolic (compared to real) threats to safety (e.g., airports' public announcements of the current terrorist threat level/color;

racial profiling stops and searches) has been found to be a significant predictor of incarceration rates (Mears, 2006).

The total cost of punitive strategies is tremendous. States' tough on crime policies are associated with massive budgetary costs and societal damage (Chen, 2008).

Correctional spending has been the fastest growing component of state general fund budgets beginning in the 1980s (Rubin & Wood, 1990). Compelling evidence suggests imprisonment has a brutalizing effect on prisoners (Hallett, 2002). The collateral damage done to communities, children, health and families is enormous (Hagan & Dinovitzer, 1999; Shinkfield & Graffam, 2009).

If all the above isn't sufficient to cause states to reconsider their punitive policies, consider the racial component of these correctional practices. Racism is apparent in education, politics, and economic structures so it is not completely surprising it is found in the criminal justice system—it is hard to get ahead behind bars (Hagan, 2011; Pager, 2007). Georges-Abeyie (1989) writes of the experiences of young black men with police practices of stop-and-question, stop-and-frisk imposed on such a greater percent of the poor as a form of government sanctioned non-white segregation. The current correctional policies have a profound effect on young black men, producing an enduring low social stratum (Thompson, 2008).

The principle of proportionality requires a government take no action that exceeds that which is necessary; this has consistently been violated within the states' criminal justice system (Reiman & Leighton, 2009). Revocation is punishment on the installment plan (Steen & Bandy, 2007). States need to remove individuals from supervision or never put them there in the first place (Scott-Hayward, 2009). Often, corrections policies are

vague and confusing, ensnaring the unsuspecting offender (Ruback, Ruth, & Shaffer, 2005).

There is a need to improve the public understanding of the criminal justice system and political decisions made concerning this system (Newburn, 2009). The existing body of knowledge on incarceration has a nearly exclusive focus on large prisons in urban areas (Applegate & Sitren, 2008). States should be exploring (and the federal government should be encouraging) methods to decrease rates of incarceration, probation, and parole (Austin et al., 2001). Additional research on imprisonment rates of the states can only improve our understanding of the processes that compel states to solve social disorder problems by locking up citizens (Barker, 2006). With a great understanding of the challenges facing those pushing back against the punitive state policies, Coleman et al. (2009) write:

Social scientists would do well to maintain vigilance on and over the enemy of social justice, social equity and democratic accountability. These enemies are far more likely to emerge within, and out of, the moving target that is state power...to challenge state power is to enter the eye of the storm. (p. 212)

Criminal sentencing is specific to an individual but the sentencing schemes are unique to each state. Several studies have sought to examine the effects of both legal (e.g., prior criminal record, current offense) and extra legal (not governed by law such as race, income, education level) on sentencing decisions. A thorough review of literature reveals nine research studies to date relating to the present study and utilizing multilevel modeling analyses. Three studies (Kautt, 2009; Kautt, 2002; Spohn, 2000) examined influences, both legal and extra-legal, on federal sentencing practices. Focusing on one state in a multilevel analysis, Crow and Johnson (2008) evaluated the effect of both legal

and extra-legal variables on the designation of habitual offender status in Florida. Two studies used sentencing data from Pennsylvania for multilevel modeling—Britt (2000) examined the impact of social context and race on punishment decisions, and Ulmer and Johnson (2004) studied the effect of contextual variables and the interaction effect on regional court decisions.

The first to consider multi-state data, Gillespie (2005) examined the impact of correctional practices on drug abuse using data from Kentucky, Tennessee, and Ohio in a multilevel analysis. Another multi-state, multilevel study considered imprisonment decisions on felony cases in 39 of the 75 most populous counties in the U.S. (Weidner et al., 2005). Finally, Huebner (2003), using the same inmate survey (but a different year) as the present research study employs, analyzed through multilevel modeling the effect of various prison practices on inmate violence. None of the multilevel studies to date have considered the impact state level (all states) contextual variables have on sentencing practices—that is the purpose of the present research study. These past studies have demonstrated the utility of multilevel modeling in this research area.

## **Summary**

Incarceration rates have been rising across the U.S. while crime rates have been dropping. The U.S. national rate of corrections involvement of 1 in 31 means in a room of 31 randomly selected U.S. residents, one will be ‘involved’ with the criminal justice system under either imprisonment or probation (or both). This rate varies by state. Many researchers believe the current penal policies (especially the ever expanding definition of crime) are at their heart about political grandstanding and not associated with crime concerns.

Because crime has been defined downward, what were once thought of as incivilities are now criminal acts. The assertion by Professor Gates which he shared with the police officer, that he (the officer) was a racist, is an excellent example of an incivility that is defined as a crime. Once arrested, most folks (greater than 90%) will never exercise their right to a trial and will instead take a plea in which they admit guilt to something. This admission is most likely to occur on the part of innocent people as they are the most risk averse. The prosecutor's office will use all tools available (puffing, padding charges, etc.) to compel the taking of a plea. Since the majority of crimes charged come from these acts formally known as uncivil and now known as criminal, probation is a likely outcome for many that take a plea. Probation levels have been rising dramatically in the past 30 years to reflect this.

With little understanding of the terms and conditions of probation until after accepting pleas, an 'offender' will be required to meet more and more punitive and needlessly humiliating requirements for a longer and longer period of time. Those in the corrections industry know one in three probationers will be unable to fulfill the conditions imposed, and for these unfortunate individuals the move to imprisonment is swift. Professor Gates would likely have received probation and he would likely have successfully completed the term of his sentence as socio-economic status is the single best predictor of completion. The wedding of private financial interests to state criminal justice systems has helped keep pressure on politicians to continue the tough on crime policies known to be harmful to the disadvantaged and socially marginalized, and extremely costly to the states.

## **Chapter Three: Method**

### **Overview**

This research study addressed several theoretical hypotheses using individual level inmate data and state level variables. Inmate level data were obtained from the 2004 Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice, 2007). State level data are derived from U.S. Department of Justice, Bureau of Justice Statistics, and the U.S. Census Bureau. The inmate survey data contain detailed information on over 3,000 variables. Of particular interest was length of sentence, whether or not the sentence is associated with a probation violation and if so for what probation condition, race of the individual, and education level of the individual. The inmate survey responses provide a rich source of data that have been validated for use by multiple researchers (Camp et al., 2002; Daggett & Camp, 2009).

The present study had two sequential foci: (1) to develop meaningful measures/indices of a state's level of punitiveness and movement towards or away from a more punitive, increasingly broader definition/approach to crime control, and (2) to use these newly developed indices, along with other state level variables and inmate level variables, in a multilevel modeling analysis to determine the influence of state contextual factors and individual extra legal factors on sentence length imposed.

To develop new, more useful indices of level of punitiveness for the present research study, multiple rates from states were considered. With data obtained from the

Bureau of Justice Statistics, each state's lower-level crime count (crime other than violent, property, drug-related, or traffic tickets) is compared to the violent crime count (murder, attempted murder, rape, and assault) using the *punitive severity index* (PSI), defined as the ratio of lower-level crime count to violent crime count. In the multilevel model to follow, for each state the average PSI over the ten year period 1995–2004 is used as a measure reflecting the overall scope and scale of a state's interest in lower-level crime. The average yearly percent change in this ratio (i.e., the average of all percentage differences between adjacent years)—the *punitive progression index* (PPI)—is used as a measure of the change in a state's handling of not-so-criminal acts versus serious criminal acts. A negative value of the PPI implies a decrease in the ratio of lower-level crime to violent crime over time and a positive value implies an increase in this ratio over the ten year period. Values close to zero reflect little change in this ratio.

### **Sampling**

This research study uses data from the 2004 Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice, 2007). The sample data were derived from surveys and personal interviews of inmates from 287 correctional facilities during mid-2004. Using a two stage sampling design, the sample was selected from 1,801 institutions with 1,115,853 male and 77,404 female individuals incarcerated. At stage one of the sampling design, selection was based on population, region, and security level of institutions from the 2000 Census of State and Federal Correctional Facilities (Karberg & Stephan, 2003). Stage two involved systematic sampling of inmates from the prisons selected in stage one, based on probabilities proportional to the size of the prisons using

the list of all individuals that occupied a bed the previous night. The non-response rate at stage two was 10.23%.

The database consists of 6,034 observations (respondents) for which length of sentence expressed in years was recorded. These 6,034 observations consisted of 4,798 males and 1,236 females, nested within all fifty states. Since female respondents were eliminated due to their small representation in overall percent of inmates (less than 10%) and the significant differences ( $p = .0109$ ) in average length of sentences between males (15.89 years) and females (12.74 years), the sample size for this study is 4,798. State level data were constructed by aggregating individual respondent surveys by state. Table 1 provides a summary of the variables from the sample data used in this study.

**Table 1: Sample Data**

<i>Variable</i>	<i>Description</i>
Black	Offender race: Black = 1, Non-Black = 0
Black Percent	Percent of Blacks living in U.S. states in 2004
Education	0 = never attended school, 1 = 1st grade, 2 = 2nd grade, ..., 12 = high school graduate, 13 = freshman in college, ..., 16 = undergraduate degree
Average Punitive Severity Index (Average PSI)	Average of {(Lower-Level Crime)/(Violent Crime)} over 10 year period
Punitive Progression Index (PPI)	Average rate of growth of {(Lower-Level Crime)/(Violent Crime)} over 10 year period
Probation Rate	2004 probation per 100,000 state residents
Sentence Length	Length of sentence in years
Type of Probation	Type of probation oversight: Executive = 1, Judicial = 0

## **Instrument**

### **Survey**

The Survey of Inmates in State Correctional Facilities is conducted periodically on behalf of the United States Department of Justice to provide national information about characteristic of inmates held in states prisons. The Department of Justice solicits bids for collections agents that develop and administer the surveys. The surveys are intended to be nationally representative and are collected through face-to-face personal interviews. Designed to be broad in scope, the survey addresses current and past issues of the inmates.

The Survey of Inmates was collected in 1974, 1979, 1986, 1991, 1997 and 2004. This periodic survey provides information on individual characteristics of inmates; criminal histories, health, family background, education, income, current offense and sentences, parole and probation. An extensive set of items on the survey targets use of drugs and alcohol. For the 2004 survey there were 2,984 variables. Approximately 350 of these variables are for sampling weights, 300 for drug and alcohol use history, 650 for prior criminal record and another 150 for drug and alcohol use during the commission of the crime. There are no places to fill in a response so an extensive list of possible responses are included as items. For example, with regard to alcohol use, the questions address the use of a particular type (most standard types are listed, e.g. wine, beer, hard liquor) and then a large series of questions follows dealing with amount of use and frequency. Again many possible responses are included as questions: e.g., Did you drink beer every day? Did you drink beer every other day? Did you drink beer three times a

week? Did you drink beer multiple times a day? And so on. Ultimately there are surprisingly few variables available for inclusion in this study due to low responses rates. Whether from the numbing effect of being asked to answer so many survey questions, a genuine lack of knowledge or little interest in cooperating with this process, many inmates do not respond to many items on the survey. The largest response rates are associated with less personal types of inquiries and items of a more immediate concern such as sentence length, race, and education. Self reported assessments of guilt and treatment by prison staff may be susceptible to misrepresentations, however self identified sentence length, race, and education are more likely to reflect an accurate measure.

### **Dependent Variable**

Respondents were asked: *How long is the sentence to prison for (controlling offenses – the offense that brought you to prison at the current time )? Including any suspended time* (see U.S. Department of Justice, 2007). Their response, length of sentence in years, represents the dependent variable.

To ensure state prisoners sampled did not come from all low-level security or all high-level security facilities (thereby making the average sentence possibly higher or lower for certain states), minimums and maximums were examined within each state. Most states had a lower limit of 1, 2 or 3 years and all states had upper limits in excess of 10 years. Of the four states with lower limits in excess of 3 years, two (Montana and Kentucky) had a minimum of 4 years; the other two (Oregon and Iowa) had minimums of 5 years. Since the lower bound on the range of sentence lengths for most states is 3 or less and the maximums exceed 10, the sampling scheme most likely took into

consideration varying levels of facility security. (Note: Of interest in Oregon and Iowa is their apparent preference for sentencing in multiples of 5—in Oregon the sentences are 5, 20 or 30; in Iowa the sentences are 5, 8, 10, 15 and 25.)

### **Independent Variables**

*Individual-level variables.* Individual level variables were selected based on their inclusion in previous modeling studies evaluating sentencing practices and conflicting findings from these studies. Some research has found black offenders receive longer sentences (Albonetti, 1997; Chiricos & Crawford, 1995; Spohn, 2000; Steffensmeier & Demuth, 2000). Other research has found race to have no effect on sentencing (Kautt, 2002; Ulmer, 1997). Still other research suggests those of minority status receive shorter sentences (see e.g., Peterson & Hagan, 1984). Clearly this issue has not been resolved and inclusion of a race variable study may shed light on the true nature of the race effect.

Many studies have investigated the impact of economic factors on severity of punishment (see e.g., Mears & Field, 2000). These findings have also been inconsistent. In several studies poverty was not found to have a significant effect on sentence length (Kautt, 2002; McCarthy, 1990; Ulmer and Johnson, 2004; Weidner & Frase, 2001), while other studies found poverty to have a positive effect on rates of incarceration (Arvanites, 1992; Taggart & Winn, 1993). Respondents to the inmate survey reported monthly income prior to incarceration, but the survey did not require them to differentiate between that legally earned and that acquired from other enterprises. In some cases the income reported greatly exceeded what one might expect of individuals without even a high school diploma. To address these apparent inconsistencies in reported income, years of

education is used a surrogate for income. Highest level of education achieved prior to incarceration is also included in this multilevel model.

*State-level measurements.* State is the identification variable for this HLM model. In the survey data there were no inmate responses from Wyoming or West Virginia therefore neither of these states will be used in the model. The District of Columbia was included, bringing the total sample size for state (identification variable) to forty-nine. There are four variables included in the model to assess contextual effects on sentencing practices within each state.

The punitive severity index (average PSI) is the ratio of lower-level crime to violent crime reported in each state. The average PSI for the ten year period 1995-2004 is used in this model. The PSI is a measure of the overall scope and scale of a state's interest in lower-level crime. For example, a PSI of 2.5 (a relatively low value) implies a state makes ten lower-level crime arrests for every four violent crime arrests. A PSI of 36.3 (a relatively high PSI) implies a state makes 36 arrests of lower-level crime for every one arrest for violent crime. The PSI provides a snapshot (across the ten year time period) of the relative magnitude of minor crime in a state relative to major crime. This index reveals an interesting aspect of state criminal justice practices and may be significant in a model to predict sentence length.

The punitive progression index (PPI) is the average percent change in the PSI over the ten year period 1994–2004. The PPI reflects the percent change in a state's handling of not so criminal acts compared to serious criminal acts from year to year across this period of time. A large PPI indicates a state has experienced on average a substantial increase in lower-level crimes arrests relative to violent crime arrests (violent

crimes rates have tended to either remain the same or decrease in virtually every state) over this ten year period. A number of states have a negative PPI; for these states this value reflects an average decrease over the years in the rate of arrests for lower-level crimes relative to violent crime arrests. The PPI varies across states and is included in the multilevel model as a contextual variable. While the PSI (the ratio of lower-level crime arrests to violent crime arrests) is a measure of the overall scope and scale of a state's interest in lower-level crime, the PPI captures the average *change* in states' reliance on arrests of lower-level crimes relative to violent crime arrests.

As stated earlier, the impact of race, in particular black, on correctional practices has been inconclusive. By including the percent black of the total state population as a contextual variable (one which the accused has no control over, an aspect of the state in which the individual is sentenced), the interaction of state percent black (level 2) and the individual minority status (level 1) can be examined.

The final state level contextual variable included in this multilevel model is a binary variable to denote whether a particular state has its probation system under the control of the state's judiciary or the state's executive branch. Incarceration rates are high and rising (due to a certain extent from the number of failed probationers). Roughly one-third of all probationers are incarcerated for probation conditions violations, and there is an ever increasing roster of individuals placed on probation with harsher conditions and increasing lengths. Given all these factors, the axis of probation control may have an effect on the length of sentences. The judiciary has the day to day operations to better assess needs of the court system, while states that place the oversight of their probation system within the executive branch may put the direct budget for probation in the hands

of the governor and legislators. Under the executive branch control model, the judiciary is given a budget and allowed to decide how funds are spent, thereby giving the executive branch some, though indirect, control over probation systems. Under a judiciary branch control model, the budget amount and decisions about how the funds are spent likely rests within the judiciary. To date this probation system control variable has not been studied for its effect on states' correctional practices.

### Descriptive Statistics

Table 2 shows variables, metrics, and descriptive statistics for variables in the conceptual model.

**Table 2: Descriptive Statistics**

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>	<i>Description</i>
Dependent Variable					
Sentence Length	12.23	13.72	1	99	Length of sentence in years
Individual-level Variables					
Black	0.42	0.49	0	1	Offender race: Black = 1, Non-Black = 0
Education	10.76	2.42	0	16	0 = never attended school, 1 = 1st grade, 2 = 2nd grade, ..., 12 = high school graduate, 13 = freshman in college, ..., 16 = undergraduate degree
State-level Variables					
Punitive Progression Index (PPI)	7.2%	9.1%	-6.7%	36.0%	Average rate of growth of {(Lower-Level Crime)/(Violent Crime)} over 10 year period
Black Percent	11.26%	11.67%	0.5%	57.8%	Percent of Blacks living in U.S. states in 2004
Probation Rate	1,817	1,129	637	6,565	2004 probation per 100,000 state residents
Type of Probation	0.69	0.47	0	1	Type of probation oversight: Executive = 1, Judicial = 0
Average Punitive Severity Index (Average PSI)	11.67	6.96	2.5	36.3	Average of {(Lower-Level Crime)/(Violent Crime)} over 10 year period

Note that for the two binary variables, Black and Type of Probation, the mean values are just the proportion of Black offenders and proportion of the states with executive oversight of probation, respectively. The standard deviations for these two binary variables represent the average of the squared differences between each of the 0 or 1 data values and the respective sample proportions (means).

### **Procedure**

All data used in the study are available on the internet. Two main sources exist for obtaining corrections data: The Bureau of Justice Statistics (BJS) (available at <http://bjs.ojp.usdoj.gov/>) and the Inter-University Consortium for Political and Social Research (ICPSR) (available at <http://www.icpsr.umich.edu/icpsrweb/ICPSR/>). The BJS website was utilized for data extraction and development of the punitive indices; the ICPSR website supplied the data for the multilevel model.

Under the Freedom of Information Act which allows for the disclosure of information and documents controlled by the United States government, the BJS website, a product of the United States Department of Justice, makes available data on crimes, victims, correctional facilities, correctional employees, probation, parole, and courts and sentencing. Most of the available data result from annual surveys and for many areas the data availability begins in 1995, not all surveys are conducted every year, some may be every three to five years while other types of data do not show any particular pattern with regard to collection intervals. The website does not contain any requirements concerning permission or terms of usage. Their homepage specifically states that data and other information contained in the website are in the public domain and may be reproduced,

published or otherwise used without the Department's permission. There is a request that the user of information or data from this source provide a citation where appropriate and that doing so would be appreciated.

ICPSR is a data depository housed at the University of Michigan. Data available from this source run the gamut from mental health to criminal justice. Their home page states that they provide leadership and training in data access, curation, and methods of analysis for the social science research community. The University of Michigan is well known for summer programs in quantitative methods in social research offered. The Survey of Inmates in State Correctional Facilities responses were obtained from this site and used for the modeling in this study. While one can acquire parts of the total survey using the BJS website, ICPSR pulls together all variables and all responses in a very user friendly manner. One can specify the format for data downloading (SPSS or SAS) with syntax and code provided to allow for importing of these very large data sets. In addition to the data, an extensive guide to variables and data collection methods are provided in what is labeled as a codebook.

Access to this website is restricted to participating universities and colleges. The user is required to enter an email address that corresponds to a participating academic institution and set a password. Prior to downloading data the user must agree, by virtue of clicking on the appropriate icon, to a list of terms. The user must agree to maintain the privacy of the research subject, to use the data solely for statistical analysis and report only aggregated information. In addition, the user agrees not to redistribute the data without permission and to reference the recommended bibliographic citations. These

references appear in the reference list for this research study, many are Bureau of Justice Statistics references.

### **Analytic Strategy**

Because of the research questions and nested nature of the data, hierarchical linear modeling was used for analyzing these data. HLM has disadvantages over ordinary least squares modeling. HLM models are fragile and complicated and necessitate *a priori* understanding of research hypotheses (Kautt, 2002). The intercepts and slopes in the level one model become the outcome variable in the level two model and careful consideration must be given to which variables to include in each level (Heck & Thomas, 2009). With 49 states to analyze, every level one variable could produce a different intercept and slope. The complex effect of a large number of independent variables is obvious, therefore this research study was limited to two level one variables (both extra-legal) and four level two variables (all contextual).

Individual inmates are nested within the states that determined sentences, which is likely to result in inmates sentenced within the same state to have a certain degree of similarity. Using a single level of ordinary least squares (OLS) analysis, the residual errors are likely to be correlated within states, thus violating an OLS assumption (Raudenbush & Bryk, 2002). Variation in sentencing across states is of particular interest and as such requires a different approach. Hierarchical linear modeling (HLM) introduces a unique random effect for each state level equation to take into account the problem of correlated residual errors (Gelman & Hill, 2007). Additionally, if the effect of level one characteristics varies across states (e.g., race, education level), regression coefficients in

an OLS model will be heterogeneous; HLM can also address this problem (Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2004).

A single level analysis would ignore contextual information about the jurisdiction that may be important to sentencing decisions. Multilevel models contain variables measured at a minimum of two levels, with lower-level observations nested within higher levels (Kreft & De Leeuw, 1998). HLM involves the formulation and testing of hypotheses about how variables at one level affect relationships at another, allowing for testing of individual and group effects on the dependent variable (Banerjee, Carlin, & Gelfand, 2004; see also Heck & Thomas, 2009). Since the data were multilevel and the research questions support construction and analysis of a multilevel model, HLM was well suited for this research study. Full Maximum Likelihood Estimation (MLF) was utilized due to the asymptotically efficiencies of the estimates when the sample sizes are large (Raudenbush & Bryk, 2002, p. 52).

Before conducting the main multilevel model analysis, correlations among the various state crime statistics (incarceration rate, probation rate, and various crime rates) were examined. This was followed by the calculations for each state of the two punitive indices, PSI and PPI, reflecting the overall magnitude of punitiveness and the change in punitiveness over time, respectively.

The next step was constructing the hierarchical linear model. Error variance plays a significant role in HLM and misestimates can occur when dependency among outcomes within the same state are ignored. A unique random effect for each state was incorporated in the model but the researcher must determine if each attribute has a nonrandom,

random, or fixed effect across each organization, in this case each state (Raudenbush & Bryk, 2002). This can only be accomplished after running multiple potential models.

The general form of this research study HLM model is as follows:

$$(Y_{ij}) = \beta_{0j} + \beta_{1j}(X_{1ij} - \bar{X}_1) + \beta_{2j}X_{2ij} + r_{ij} \quad (1)$$

where

$$\beta_{0j} = \gamma_{00} + \gamma_{01}W_1 + \dots + \gamma_{0m}W_m + u_{0j} \quad (2)$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}W_1 + \dots + \gamma_{1m}W_m + u_{1j} \quad (3)$$

⋮

$$\beta_{kj} = \gamma_{k0} + \gamma_{k1}W_1 + \dots + \gamma_{km}W_m + u_{kj} \quad (4)$$

Equation (1) addressed the question: How do inmate characteristics (race and level of education) affect the length of incarceration? In this equation the term  $(X_{1ij} - \bar{X}_1)$  represents the level of education for inmate  $i$ , centered on the average of all states' education levels, that is, grand mean centered. In this same equation,  $X_{2ij}$  represents the race of inmate  $i$  from state  $j$ . Although grand mean centered introduces estimation bias in the individual level effect because the coefficient is a weighted combination of the between and within state effects, it allows easier assessment of state level differences in sentencing by education (Raudenbush & Bryk, 2002). With a greater emphasis on state differences with regard to the influence of education, grand mean centering is chosen for this variable.

The strategy with regard to HLM was to examine the various influences of individual and contextual (state level) factors on sentence lengths. As Ulmer and Johnson (2004) succinctly describe, the first analysis was the unconditional model (one-way random effects ANOVA), which provided a measure of the amount of variation occurring at both levels of analysis. Information about the proportion of variation between versus

within states provided by this model provided the baseline for evaluating subsequent, more sophisticated models. The next model included the level one predictor variables (random coefficients ANCOVA with individual level predictors). This second model revealed the proportion of reduction in variance at each level (level one and level two) that is due to both the race and level of education of the inmate.

The third model built on the second model and introduced the level two explanatory variables (random coefficients ANCOVA models with level one and level two covariates) and provided information about average differences in sentencing practices across states. The final model estimated the cross level interactions within the third model, that is, the interactions between level one and level two variables (random coefficients ANCOVA models with cross level interactions). For example, the effect that percent of blacks in the state population has on sentence length for a black inmate can be examined.

## **Chapter Four: Results**

### **Preliminary Analyses**

Of the 14,499 inmates surveyed, 3,121 indicated they were incarcerated for probation violations. Of those approximately one-third provided information about what type of violation occurred. Roughly one-half of the violations were of the new crime variety (running the gamut from traffic tickets to violent crimes) and the rest were for technical violations (failure to pay a court imposed costs, missed meeting with probation officer, etc.). The average sentence length for those violating probation with a new crime was 8.55 years ( $sd = 9.93$ ). The average sentence length for those violating probation with a technical rule infraction was 6.12 years ( $sd = 5.54$ ); the most common reason stated for these technical rule infraction was failure to pay fees.

The HLM analysis used data from a 2004 inmate survey, the most recent available. For this reason, the ten-year time series data collected for indices development begins in 1995. Table 3 shows the aggregated U.S. data for the number of individuals on probation, number of individuals in prison, number of violent crimes, number of low-level crimes, and the ratio of lower-level crimes to violent crimes (PSI) from 1995 to 2004.

**Table 3: U.S. Crime, Prison, and Probation, 1995-2004**

Year	Violent Crime	Lower-Level Crime	Probation	Prison	PSI*
1995	682,159	3,460,731	3,077,861	1,078,542	5.0732
1996	548,146	3,367,647	3,164,996	1,127,528	6.1437
1997	501,353	3,269,761	3,296,513	1,176,564	6.5219
1998	539,523	3,500,399	3,670,441	1,224,469	6.4880
1999	475,823	3,167,875	3,779,922	1,287,172	6.6577
2000	475,521	3,203,645	3,826,209	1,316,333	6.7371
2001	492,073	3,234,112	3,931,731	1,330,007	6.5724
2002	500,678	3,456,026	4,024,067	1,367,547	6.9027
2003	472,599	3,447,311	4,120,012	1,390,279	7.2944
2004	471,007	3,659,243	4,143,792	1,421,345	7.7690

\* Punitive Severity Index = (Lower-Level Crime)/(Violent Crime)

Since the values in Table 3 are absolute frequencies rather than per capita figures, one might expect some (if not all) of these variables to be increasing over time due to the population increase over the ten year period. Pairwise correlations and associated *p*-values for these five variables are shown in Table 4.

**Table 4: Pairwise Pearson Correlation Coefficients (*p*-values) for U.S. Crime, Prison, and Probation, 1995-2004**

	Violent Crime	Lower-Level Crime	Probation	Prison	Average PSI*
Violent Crime	1.00				
Lower-Level Crime	.22 (.5401)	1.00			
Probation	-.76 (.0114)	.18 (.6119)	1.00		
Prison	-.80 (.0056)	.17 (.6292)	.99 (<.0001)	1.00	
Average PSI*	-.89 (.0006)	.24 (.4984)	.86 (.0015)	.90 (.0004)	1.00

\* PSI = Punitive Severity Index = (Lower-Level Crime)/(Violent Crime)

Lower-level crime was not significantly related to any of the other variables. Violent crime was significantly associated with probation, prison, and average PSI; in all three cases these correlations were negative ( $r = -.76$ ,  $r = -.80$ , and  $r = -.89$ , respectively). The relationship between probation and PSI was significant and positive ( $r = .86$ ,  $p = .0015$ ). The strongest correlation was found between incarceration (prison) and probation ( $r = .99$ ,  $p < .0001$ ). In addition, incarceration was significantly positively related to PSI ( $r = .90$ ,  $p = .0004$ ). The ratio of lower-level crimes to violent crimes was associated with the increase in incarceration experienced by the U.S. over this ten year period. The variation in PSI explained 81.1% of the variation in incarceration; the variation in probation explained 97.6% of the variation in incarceration. Taken together in a regression model to predict incarceration rates, probation and PSI accounted for 98.6% of the variation in incarceration.

## **Indices**

To best capture the states' downward defining of crime, the number of lower-level crimes (disturbing the peace, jaywalking, public drunkenness, etc.) was compared to the number of violent crimes (rape, attempted murder, murder, assault, etc.) via a ratio. The *punitive severity index* (PSI) was defined to be the ratio of lower-level crimes to violent crimes. Since per capita data were used, no adjustments need to be considered for any increases (or decreases) in the states' populations. In any given year, a state might expect this ratio to vary some from the prior year. By considering a ten year period, an index can be developed which reflects a trend towards or away from the downward defining of crime. The *punitive progression index* (PPI) is defined to be the average

yearly percent change in the PSI (ratio of lower-level crime to violent crime) over ten years. The PPI for a ten-year period is given by:

$$PPI = \frac{1}{9} \times \left[ \sum_{t=2}^{10} \frac{(PSI_t - PSI_{t-1})}{PSI_{t-1}} \right]$$

where  $PSI_t$  is the PSI value in year  $t$ , for  $t = 1, 2, \dots, 10$ .

Lower-level and violent crime trends for each state were plotted to determine if any relationships were apparent. For most states the violent crimes per capita decreased over time and the lower-level crimes steadily increased. There were however exceptions. Figures 1 through 8 show trends of lower-level and violent crimes, as well as the punitive severity index (PSI), for selected states. New Jersey and Arizona were chosen due to the typical trends exhibited for lower-level and violent crimes, Delaware was selected to illustrate parallel growth in these two types of crimes, and Illinois serves as an example in which the national trend (of expanding the definition of crime) is reversed.

Figure 1. New Jersey Crime, 1995-2004

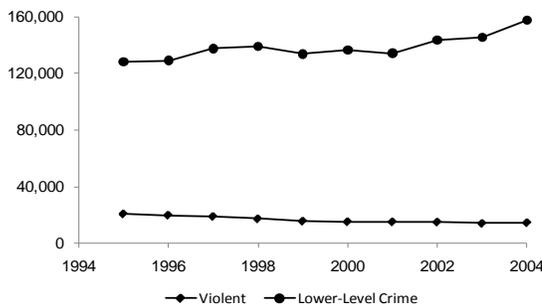
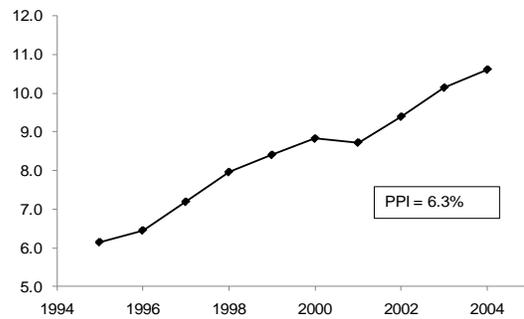
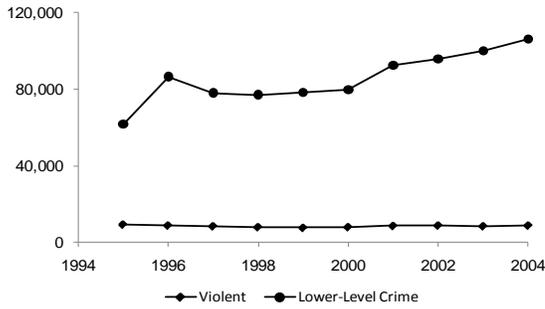


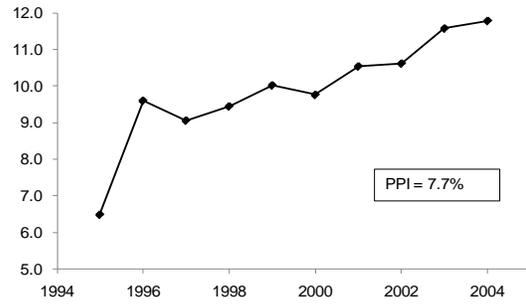
Figure 2. New Jersey PSI, 1995-2004



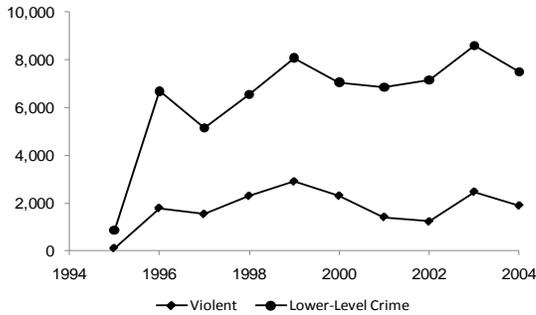
**Figure 3. Arizona Crime, 1995-2004**



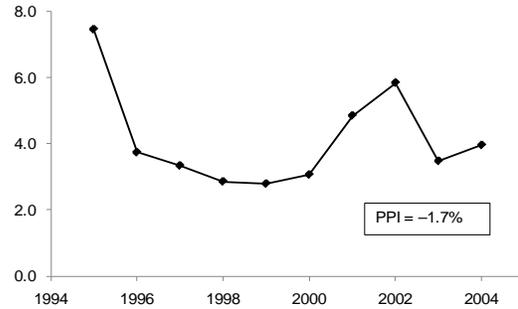
**Figure 4. Arizona PSI, 1995-2004**



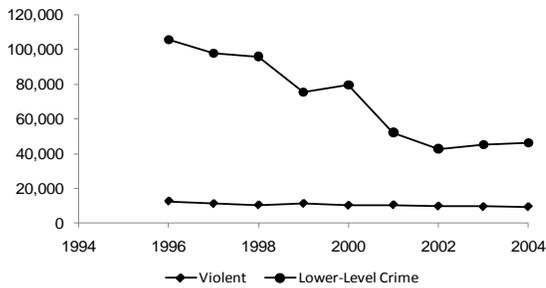
**Figure 5. Delaware Crime, 1995-2004**



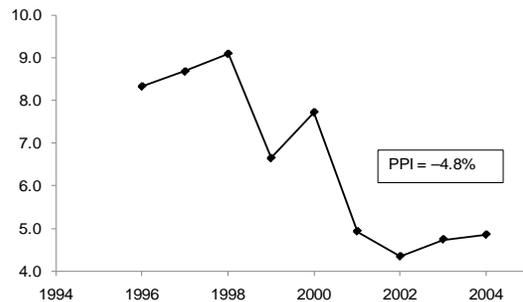
**Figure 6. Delaware PSI, 1995-2004**



**Figure 7. Illinois Crime, 1996-2004**



**Figure 8. Illinois PSI, 1996-2004**



The ratio of lower-level crimes to violent crimes (PSI) for each state were calculated for the period 1995-2004. With these ten observations per state, the percentage change in PSI from each prior year was calculated, resulting in nine values per state. The average of these nine percentage changes for each state was obtained to produce the

punitive progression index, PPI, for each state. Table 5 shows these values for the fifty states plus the District of Columbia.

**Table 5. Punitive Progression Index for the 50 States and District of Columbia**

<b>State</b>	<b>PPI</b>	<b>State</b>	<b>PPI</b>	<b>State</b>	<b>PPI</b>
Alabama	11.6%	Kentucky	24.1%	North Dakota	5.6%
Alaska	4.2%	Louisiana	6.9%	Ohio	5.8%
Arizona	7.7%	Maine <sup>1</sup>	-0.6%	Oklahoma <sup>1</sup>	-3.1%
Arkansas	2.6%	Maryland	36.0%	Oregon	0.0%
California	2.6%	Massachusetts	13.0%	Pennsylvania	27.1%
Colorado	9.8%	Michigan	20.3%	Rhode Island	14.4%
Connecticut	0.1%	Minnesota	4.2%	South Carolina	25.3%
Delaware	-1.7%	Mississippi	10.4%	South Dakota	11.1%
D.C. <sup>1</sup>	-0.5%	Missouri	-1.9%	Tennessee	3.6%
Florida <sup>1</sup>	9.1%	Montana <sup>1</sup>	7.4%	Texas	3.4%
Georgia	14.7%	Nebraska	3.1%	Utah	5.9%
Hawaii	0.8%	Nevada <sup>1</sup>	15.5%	Vermont <sup>1</sup>	-6.7%
Idaho	4.7%	New Hampshire <sup>1</sup>	3.6%	Virginia	5.5%
Illinois <sup>1</sup>	-4.8%	New Jersey	6.3%	Washington	1.3%
Indiana	2.2%	New Mexico	1.1%	West Virginia	22.0%
Iowa	5.9%	New York	0.8%	Wisconsin <sup>1</sup>	24.8%
Kansas <sup>1</sup>	-4.2%	North Carolina	3.6%	Wyoming	2.2%

1. At least one year of missing data.

From these same ratios an average ratio of lower-level crimes to violent crimes was calculated to reflect, in absolute terms, the average approach a given state has had with regard to lower-level crimes versus violent crimes during this ten year period. The resulting average punitive severity index measures in a more general sense how punitive a state is with regard to its citizens. Table 6 provides the average PSI for the fifty states and the District of Columbia and type of probation oversight.

**Table 6. Average PSI and Probation Oversight Type for the 50 States and District of Columbia**

State	PSI	State	PSI	State	PSI
Alabama <sup>1</sup>	9.5	Kentucky <sup>1</sup>	5.9	North Dakota <sup>1</sup>	36.3
Alaska <sup>1</sup>	10.3	Louisiana <sup>1</sup>	7.7	Ohio	9.8
Arizona	16.2	Maine <sup>1,2</sup>	22.0	Oklahoma <sup>1,2</sup>	5.9
Arkansas <sup>1</sup>	9.9	Maryland <sup>1</sup>	9.4	Oregon <sup>1</sup>	7.5
California	2.5	Massachusetts	2.9	Pennsylvania	4.3
Colorado	14.7	Michigan <sup>1</sup>	7.8	Rhode Island <sup>1</sup>	10.9
Connecticut	10.3	Minnesota	10.1	South Carolina <sup>1</sup>	5.1
Delaware <sup>1</sup>	4.1	Mississippi <sup>1</sup>	15.1	South Dakota <sup>1</sup>	15.9
D.C. <sup>1,2</sup>	30.0	Missouri <sup>1</sup>	9.7	Tennessee	6.1
Florida <sup>1,2</sup>	6.5	Montana <sup>1,2</sup>	8.3	Texas <sup>1</sup>	9.9
Georgia <sup>1</sup>	7.2	Nebraska	17.6	Utah <sup>1</sup>	19.7
Hawaii	20.4	Nevada <sup>1,2</sup>	13.1	Vermont <sup>1,2</sup>	10.9
Idaho <sup>1</sup>	20.6	New Hampshire <sup>1,2</sup>	23.5	Virginia <sup>1</sup>	12.7
Illinois <sup>2</sup>	6.6	New Jersey	8.4	Washington <sup>1</sup>	8.4
Indiana	6.1	New Mexico <sup>1</sup>	12.7	West Virginia	7.1
Iowa <sup>1</sup>	7.0	New York <sup>1</sup>	7.0	Wisconsin <sup>1,2</sup>	21.5
Kansas <sup>2</sup>	12.3	North Carolina <sup>1</sup>	6.1	Wyoming <sup>1</sup>	21.4

1. Executive branch probation system oversight. If not 1, some or all judicial branch oversight.

2. At least one year of missing data.

Both the PPI and the Average PSI were included in the HLM model. These indices were not significantly correlated ( $r = -.15, p = .304$ ). Both of these indices reflect the degree to which a state exercises its power of lower-level crime prosecution relative to violent crime prosecution, providing a degree of face validity evidence. Once incorporated in the multilevel model, convergent validity can be addressed. If states are directing punitive attention towards increasing prosecution of lower-level crimes, an inverse relationship should be revealed between length of sentence and the punitiveness indices.

## A Hierarchical Linear Model

### Null Model

Before developing the full multilevel model, the variation in sentence length that lies within and between each level of the two level model was calculated. This was achieved through specifying a one-way ANOVA with a random-effect model (Gelman & Hill 2009; Heck & Thomas 2009; Raudenbush et al., 2004), commonly referred to as the null model. This null model provides important information that guides later decisions concerning multilevel modeling, specifically, whether a multilevel approach to the data is appropriate or not. Table 7 shows the null model results.

**Table 7: Null Model (Case-level  $n = 4,798$ ; State-level  $n = 49$ )**

<i>Random Effect</i>	<i>Variance Component</i>	<i>df</i>	<i>Chi-Square</i>	<i>p-value</i>
Intercept	15.436	48	507.119	<.001
Level 1	170.146			

Intraclass correlation (15.436/185.582) = .0832.  
Deviance = 38,261.54 (Number of estimated parameter = 2)

Using the variance components, a measure of the dependence of inmate sentence length on state was calculated. From the *Final estimation of variance components* section produced from the HLM software package *Scientific Software International HLM 6*, an intraclass correlation (ICC) was calculated. This ICC, a measure of the within-state dependency of sentence length, was .0832. Approximately 8% of the variation in sentence length was associated with the state. This is not a particularly large value; it is however sufficient to suggest multilevel modeling is an appropriate alternative to single level modeling (OLS). The ICC ranges from zero to one, measuring how strong units in the same group resemble each other and values below .05 are considered insufficient to

support multilevel modeling (Gelman & Hill 2009; Heck & Thomas 2009). The significance of the ICC is determined using a chi-square test with  $j-1$  degrees of freedom. The observed chi-square of 507.12 ( $p < .001$ ) refutes the hypothesis that mean sentence length for males in the sample is equal across all states. The average length of sentence for all males in the sample across all states was 11.97 years.

A measure of the reliability of the sample mean for any state as an estimate of the population mean is evaluated from the variance component section of the HLM output which incorporated the sample sizes for each state. The summary measure (with a range between zero and one) of these within-state reliabilities was  $\lambda = .709$  for this model. With a significant ICC suggesting a difference in sentence length by state, and a relatively high reliability ( $\lambda = .709$ ), suggesting that the sample data provides a real difference in sentence length by state, multilevel modeling was appropriate for these data.

### **Level 1 Model**

The next step in the analysis is to develop the level 1 model. Guided by prior research results, two level 1 variables were considered for inclusion in the level 1 model: the race of the inmate (Black or Non-Black) and the level of education. The goal in this study was to use multilevel modeling to determine the correct specification of the theoretical model—both of these level 1 variables were to be retained in the model even if efficiency of the prediction suggested removal.

Testing the relationships between sentence length and race and level of education for significance, the unconditional model was specified with the education grand mean centered to allow for a useful interpretation of the intercept, which became the outcome variable in level 2 of this model. This intercept is interpreted as the adjusted mean for

group  $j$ , specifically the outcome for an inmate whose education level is equal to the average education of all inmates across all states. Table 8 shows the unconditional model results.

**Table 8: Level 1 Model (Case-level  $n = 4,798$ ; State-level  $n = 49$ )**

<i>Fixed Effect</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>t Ratio</i>	<i>df</i>	<i>p-value</i>
Constant	11.335	0.676	16.759	48	<.001
Race	1.597	1.042	1.533	4,785	.125
Education	0.003	0.028	0.103	4,785	.918

<i>Random Effect</i>	<i>Variance Component</i>	<i>df</i>	<i>Chi-Square</i>	<i>p-value</i>
Intercept	15.284	48	504.500	<.001
Level 1	169.678			

Intraclass correlation (15.284/184.962) = .0826  
Deviance = 38,251.00 (Number of estimated parameters = 2)

The average sentence length, adjusted for Race and Education is 11.36 years (approximately .61 years lower than the average of the grand mean of 11.97 years). This is the average sentence length of each state after adjusting for the level 1 variables in the model.

After this adjustment for level 1 variables, significant variance in mean sentence length by state continued to be present ( $\chi^2 = 504.5, p < .001$ ). Comparing the unconditional model intraclass correlation of .0826 with that of the null-model ( $r = .0832$ ) suggests very little of the variance in state average sentences is accounted for by race and education level of the inmate. Testing the statistical significance of level 1 parameters reveals mean sentence length does not vary by education level but may vary by race. For black inmates the predicted sentence length was 1.59 years longer ( $p = .125$ ).

Of interest in this research paper is the relationship between race and sentence length and if this relationship varies from state to state. The model to test this includes level 1 random intercepts and slopes. Table 9 shows the results for this model.

**Table 9: Random Intercept and Slope Model  
(Case-level  $n = 4,798$ ; State-level  $n = 49$ )**

<i>Fixed Effect</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>t Ratio</i>	<i>df</i>	<i>p-value</i>
Constant	11.597	0.639	18.157	48	<.001
Race	0.894	0.588	1.520	4,785	.135
Education	-0.002	0.029	-0.067	4,785	.947

<i>Random Effect</i>	<i>Variance Component</i>	<i>df</i>	<i>Chi-Square</i>	<i>p-value</i>
Intercept	12.982	38	243.122	<.001
Race	4.044	38	72.730	.001
Level 1	168.415			

The results suggests a significant variation in the intercept from state to state for average sentence length ( $\chi^2 = 243.12, p < .001$ ). In addition, the slope for race varied significantly from state to state ( $\chi^2 = 72.73, p < .001$ ). Thus, the relationship between sentence length and race is not the same across states.

The purpose of the next and final model was to identify state variables that might explain the significant variation in sentence length by state established in the prior models. For this model, level 1 variables must be specified as either fixed or random across each level 2 equation (Kautt, 2002). As a general rule, level 1 variables not found significant in preliminary analyses (unconditional model) should be modeled as having a fixed effect (Raudenbush & Bryk, 2002). Education was modeled as fixed while race, with a stronger indication of usefulness ( $p = .125$ ) was modeled as random though

nonsignificant, allowing the impact of an individual's race on sentence length to vary across states. Table 10 shows the results for this final model.

**Table 10: Level 2 Intercept and Slope as Outcomes Model  
(Case-level  $n = 4,798$ , State-level  $n = 49$ )**

<i>Fixed Effect</i>	<i>Coefficient</i>	<i>Std Error</i>	<i>t Ratio</i>	<i>df</i>	<i>p-value</i>
Constant	8.967	1.814	4.942	44	.000
Probation Type	3.808	1.319	2.887	44	.006
Percent Black	0.058	0.062	0.928	44	.359
PPI	-0.007	0.003	-2.661	44	.011
PSI	0.042	0.110	0.387	44	.700
Race	0.784	0.583	1.344	48	.186
Education	-0.003	0.029	-0.120	4,781	.905

<i>Random Effect</i>	<i>Variance Component</i>	<i>df</i>	<i>Chi-Square</i>	<i>p-value</i>
Intercept	12.335	34	180.031	.000
Race	4.377	38	73.803	.001
Level 1	168.283			

Deviance = 38,229.26 (Number of estimated parameters = 4)  
Deviance = 38,229.26 (Number of estimated parameters = 4)

Probation type ( $p = .006$ ) and PPI ( $p = .011$ ) appear to be useful in the multilevel model while percent black and PSI do not ( $p = .359$  and  $p = .700$ , respectively). In the presence of the level 2 variables, race is not particularly useful ( $p = .186$ ) and education ( $p = .905$ ) continues to add little value in explaining variation in inmate sentence length.

While substantial variation in parameter estimates exists across states in the final model, the chi-square values associated with the variance component for the random intercept have been reduced from  $\chi^2 = 243.122$  in the random intercept and slope model to  $\chi^2 = 180.031$  in the intercepts and slopes and outcomes model. No such reduction in

the chi-square statistic is found with regard to the random race slope; indeed the value increased slightly in the final model ( $\chi^2 = 72.73$  versus  $\chi^2 = 73.801$ ).

The proportional reduction of error measure, similar to the coefficient of determination in OLS, is calculated by subtracting the sum of the variance components in the final model from the sum of the variance components in the null model and dividing this value by the sum of the variance components in the null model. From the first model to the last model, the decrease in variance component of sentence length is approximately 3% of the original unexplained variance in sentence length—not particularly noteworthy. On the other hand, the hypothesis test for the deviance differences in these two models (i.e., the multivariate test of variance-covariance components specification) supports a finding that the final model represents a significant improvement over the first model ( $\chi^2 = 1368.79, p < .001$ ). All assumptions were checked and no significant departures noted.

### **Research Hypotheses**

*Hypothesis 1:* U.S. probation rates will explain a significant proportion of the variation in incarceration rates and will be a better predictor of incarceration rates than other corrections-related variables including various crime rates.

Probation provides a fast track to incarceration for approximately one in three probationers. Those violating probation are just as likely to have done so due to a technical violation as a new crime. Such technical violations can run the gamut from insufficient funds to pay court-imposed fees to absences from court ordered treatment classes to failure to check in with the probation officers at the appointed times. Most technical violations are for financial reasons. Additionally, probationers tend to be those originally charged with lower-level crimes, which is why probation rate and the ratio of

lower-level crimes to violent crimes are so highly and positively correlated. An expansion of lower-level crimes will provide new “criminals” to feed the criminal justice industrial complex in both the supervision business and the incarceration business. Researchers have established that longer probation sentences are associated with greater likelihood of unsuccessful completion (with the concomitant increase in incarceration) and that probation sentence lengths, as well as the number and punitiveness of conditions of probation, have been increasing. This combination virtually ensures the continued expansion of the states’ corrections reach and power over its citizens. The data strongly support *Hypothesis 1*.

*Hypothesis 2:* Both the education level (as a surrogate measure for socioeconomic level) and race of the incarcerated will be significant level 1 predictors of sentence length.

Education was utilized as a surrogate measure for socio-economic level. The only other measure available that may have provided insight into the inmates’ socio-economic level was income. However, many questionably high incomes were reported for individuals with exceedingly low levels of education, thus rendering income reported potentially inaccurate. Another concern with the use of education as a predictor variable is the nature of the data itself. While used in this model as a continuous variable, the difference between a second and third grader may not be the same as the difference between a ninth and tenth grader. Nonetheless, education was not significant to the model for predicting sentence length.

Race, specifically in this study black or not black, appears to be somewhat useful though nonsignificant ( $p = .125$ ) in explaining the variation in sentence length. This

partially supportive finding tends to confirm the mixed results of research to date—some researchers have found black offenders are treated differently from all other races when sentenced to prison while others have not found differential treatment. Forty-three percent of all respondents in the 2004 inmate survey are black, much greater than the U.S. population percent black for the same year, 12.4%. Clearly race makes a difference, but length of sentence does not address it. *Hypothesis 2* is not supported by the data.

*Hypothesis 3*: The ten-year growth in the ratio of lower-level to violent crimes (the punitive progression index), the ten-year average ratio of lower-level crime to violent crime (ten-year average punitive severity index), the type of probation (executive or judicial oversight), and percent of blacks in the state will be significant level 2 predictors of states' incarceration sentencing lengths.

The PPI (punitive progression index) represents a trend either towards or away from punitiveness as measured by the level of enforcement of lower-level criminal violations to violent criminal violations for each state. This index is useful in explaining the variation in average length of sentence by state ( $p = .011$ ). The PPI coefficient of  $-0.007$  implies that as this index increases sentence length decreases. It could be said that those states with lower PPIs value the 'quality' of the arrest while states with higher PPIs emphasize quantity over quality.

The ten-year average PSI (punitive severity index) is not useful as a level 2 predictor ( $p = .700$ ). This result is surprising in light of the high positive correlation between the PSI and incarceration rates for the aggregated U.S. data ( $r = .90, p = .0004$ ). Since the ratio of these two types of law enforcement activities (arrests for lower-level crime and arrests for violent crime) suggests a certain corrections philosophy on the part

of elected officials, it should logically be associated with average sentence length by state. One possible explanation may be that in terms of sentence length, trends matter more than ratios and there may be a lag factor that is accounted for by trending the indices. Additionally, PSI is not compared to the national average and perhaps a norming of each state's value relative to the national PSI would have been useful in the model.

Percent black is not a good level 2 predictor ( $p = .359$ ). With a disproportionate percent of blacks incarcerated relative to the population percent of blacks, one theory suggests elected officials would be less inclined to sentence any individual (black or not) to long periods of incarceration in states with a large black population; this theory is not supported by the data. Additionally, there is no significant relationship between either PPI or PSI and percent black, further refuting the theory that large black population states apply justice in a different manner than other states.

Finally, type of probation oversight, executive versus judicial, appears to be a useful level 2 predictor in explaining variation in average sentence length by state ( $p = .006$ ). Those states with at least some judicial oversight of the probation process have significantly lower average sentence length than states that have only executive oversight. With probation rates highly correlated with incarceration rates we know the number of individuals on probation is a good predictor of the number of individuals incarcerated. A difference in probation administration appears to be associated with a difference in length of incarceration. One possible explanation is that when the judicial branch oversees the probation process, politics are less involved. Another reason may be associated with judges' involvement in the day-to-day process of administering justice since they can see first-hand what does and does not work. Perhaps this makes them less inclined to

sentence residents to extended time in prison than elected policy-makers might prefer. Additionally, if oversight includes control of a budget, judges may be disinclined to spend limited funds on incarceration as a justice device, but if funds are controlled by the executive branch, concerns about the cost of incarceration may not factor into decisions about sentence lengths. The data support two of the four variable association theories in *Hypothesis 3*.

*Hypothesis 4*: The ratio of the number of lesser crimes to the number of more serious crimes will be significantly correlated with both probation and incarceration rates, and significant in a model to predict incarceration in the presence of probation.

When considering which variables might be associated with incarceration rates many come to mind. Perhaps the most obvious and likely is crime rate. Rates of crime, however, do not adequately predict incarceration rates. This is true whether one considers violent crime or lower-level crime. If states' are locking up their citizens to make their states safer places to live, logic dictates crime would be positively associated with levels of incarceration; it is not. Even with one, two and three year lag times for incarceration to catch up to crimes, no improvement in strength of the correlations is found.

If U.S. citizens are becoming more inclined towards criminal activities, one would expect levels of all crimes to increase and this increase should be associated with an increase in incarceration rates. There are four large categories of reported crimes accounting for over 90% of all crimes—violent crime, property crime, drug crime, and lower-level crimes. Both violent crime and property crime have been declining while drug crime and lower-level crime have been increasing. Drug crimes are unlikely to be a significant factor in probation level increases since the minimum sentencing guidelines,

in effect during the period 1995-2004, required jail time for most offenses. If the incarceration rates do not reflect either more dangerous citizens or safer states, what is the source of the substantial increases in incarceration rates across the U.S.? Probation appears to be a very good predictor of incarceration as does the ratio of lower-level crime to violent crime (PSI). When both of these variables are in a regression model to predict incarceration rates, 98.6% of the variation in U.S. incarceration rates from 1995 to 2004 can be accounted for by the variation in probation rates and PSI. The data strongly support *Hypothesis 4*.

## **Chapter Five: Discussion and Conclusions**

### **Summary**

#### **Indices**

Why is the U.S. locking up so many of its citizens? If the population as a whole is becoming more criminal one would expect substantive crime to be increasing, but it is not. Indeed the most violent types of crime have been on a downward trend for more than twenty years. In the hierarchy of criminal acts, the most harmful types have shown a steady decline while the least harmful (some argue harmless) types have been increasing.

Looking at aggregated U.S. data, probation rates are an excellent predictor of incarceration rates. The index developed herein to capture the trend towards more inclusive defining of crime, PPI, is also an important predictor of incarceration rates. The most common outcome for those charged with lower-level crimes is probation, a punishment that represents a delayed entry into the prison system for approximately one-third of all participants. With the surge in probation, a surge in incarceration is bound to occur.

#### **HLM**

Since states differ on the average amount of time they sentence their citizens for crimes, multilevel modeling has the potential to explain some of the variation in sentence length. Neither an individual's level of education ( $p = .918$ ) nor race ( $p = .125$ ) appear to be a good predictors of sentence. Of the contextual variables considered, PPI and type of

probation system were significant ( $p = .001$  and  $p = .006$ , respectively). Those states with executive branch oversight of the probation system had significantly higher average sentence lengths (13.29 years,  $sd = 4.81$ ) for inmates than the states with judicial branch oversight (8.89 years,  $sd = 4.14$ ). The estimated coefficient for PPI was negative—which is what is expected if PPI is a valid measure of movement towards or away from punitiveness. States with higher PPI's are incarcerating lower-level criminals at a greater rate relative to violent criminals; the sentence length for lower-level crimes are shorter than those for not so lower-level crimes.

### **Implications for Research and Policy**

A better understanding of the operations of judicial oversight probation systems compared to executive oversight is needed as this variable is significant in explaining some of the variation in average sentence length by state. Which aspects are similar and which are different? How do the outcomes differ for the two types and what does that mean for the state budgets? Additionally, it would be interesting to find out if the decision whether or not to incarcerate differs by probation oversight, at least with respect to probation violations.

PPI was trended over a ten-year period and found to be useful in explaining some of the variation in average sentence length by state. More work needs to be done regarding issues of validity and reliability. In addition, this measure could be calculated for a longer or shorter period. Future research may reveal the versatility of the index. State policy makers may utilize this index for inclusion in a developed model to determine ways to meet budget constraints. With many years of data, a PPI which optimizes states' interests could be developed to inform corrections practices. A more precise analysis might be

obtained by using county level data for purposes of PPI and PSI and modeling these to predict sentence length by county. This would require a tremendous though useful data collection effort as each state has unique reporting systems.

For those concerned with the ever-increasing rate of incarceration in the U.S., identifying variables that may be associated with length of sentence represents an important step towards reversing the trends. For state-level decision makers, a better understanding of how states' got to their high levels of incarceration may provide the means to begin a reduction. With the politicians' push to surpass opponents in the get tough on crime positioning, a very expensive corrections system has evolved. When the economy was robust and employment levels were high, states could support the fiscal cost of the always increasing incarceration rates of its citizens while they might have chosen to ignore the societal costs. Now states must choose among such expenditures as education, medical care for the poor, and emergency services to decide where to make the cuts if they wish to continue the race to incarcerate.

Increased levels of incarceration are not associated with crime rates as the public has been led to believe. Swept up in the tough on crime frenzy are law-abiding citizens that find themselves astonished to be 'new criminals'—such was the case for Professor Gates. To ratchet down the corrections system will certainly require a careful look at probation, and that will lead policy makers to examine the surge in the number of citizens charged with lower-level crimes. If the U.S. continues to drive into the corrections system 1 in every 31 citizens, a tipping point will be reached where the population of those with experience on the wrong side of the corrections system (and their friends and family) will outnumber those without such experience—it is anyone's guess what might happen then.

## **Limitations**

The corrections data for each state (probation, incarceration, parole, number of crimes by type, etc.) are provided by the various state reporting agencies to the Federal Bureau of Justice Statistics. These data are assumed to be measured without error. This assumption is reasonable in light of the public scrutiny such reports bring. If there is error in measuring, this error is unlikely to be biased towards under- or over-reporting.

This research study relies on data collected by others, a reasonable reliance with regard to the state agencies but perhaps problematic for the inmate survey data. Whenever a researcher does not control all phases of survey design and collection, assumptions made about the appropriateness of the sampling method and data collection may be dubious. For example, the kind of environment in which the face-to-face interviews were conducted could have played a significant role in the response rates and possibly the actual responses to some of the survey items. No information is available about the particular environment and whether or not the setting was the same for each correctional institution. The assumption that all variables are measured without error may be violated with regard to the inmate survey.

Regarding the developed indices (PSI and PPI), there is preliminary evidence to suggest validity as other variables behave in expected ways with respect to the indices. However, in the absence of further work in the area of validation, these indices should be viewed as reasonable for inclusion in the model but caution should be used with interpretations. Additionally, PPI was calculated over a ten year period and calculation over adjacent years may be of greater interest. Looking at state activity on a more micro level may be useful for validation purposes. Counties vary in the severity with which they

respond to infractions, harsher responses are *de facto* increased punitiveness. County level PSIs and PPIs should be correlated with differing levels of county correction responses to similar crimes.

With respect to the variables chosen for inclusion in the multilevel model, it cannot be said that all known relevant variables are included. The reality is inmates are not very forthcoming when answering many of the questions posed to them, resulting in very low response rates. Some variables that might have been relevant in explaining the variation in sentence length are simply unavailable. Nonetheless, the self-reported variables chosen for inclusion in the model (sentence length, race and education) have very few missing responses (< 2%), perhaps indicating a certain degree of honesty on the part of the inmates for these variables and a willingness or even desire to have these facts about them known.

## References

- Albonetti, C. A. (1997). Sentencing under the federal sentencing guidelines: Effects of defendant characteristics, guilty pleas, and departure on sentence outcomes for drug offenses. *Law & Society Review, 31*, 789-822.
- Altheide, D. L., & Coyle, M. J. (2006). Smart on crime: The new language for prisoner release. *Crime Media Culture, 2*, 286-303.
- Applegate, B. K., & Sitren, A. H. (2008). The jail and the community: Comparing jails in rural and urban contexts. *The Prison Journal, 88*, 252-269.
- Arvanites, T. M. (1992). Increasing imprisonment: A function of crime or socio-economic factors? *American Journal of Criminal Justice, 37*, 19-38.
- Arvanites, T. M., & Asher, M. A. (1995). The direct and indirect effects of socio-economic variables on state imprisonment rates. *Criminal Justice Policy Review, 7*, 27-53.
- Austin, J., Bruce, M. A., Carroll, L., McCall, P. L., & Richards, S. C. (2001). The use of incarceration in the United States. *Critical Criminology, 10*, 17-41.
- Austin, J., & Tillman, R. (1988). *Ranking the nation's most punitive states* (National Criminal Justice Reference Service publication NCJ 110379). Washington, DC: Office of Justice Programs.
- Bach, A. (2009). *Ordinary injustice: How America holds court*. New York: Metropolitan Books.
- Bachman, R., & Schutt, R. K. (2007). *The practice of research in criminology and criminal justice* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Ballenger, B. (2007). *The curious researcher: A guide to writing research papers* (5th ed.). New York: Pearson Education.
- Banerjee, S., Carlin, B. P., & Gelfand, A. E. (2004). *Hierarchical modeling and analysis for spatial data*. Boca Raton, FL: Chapman & Hall/CRC.
- Barker, V. (2006). The politics of punishing: Building a state governance theory of American imprisonment variation. *Punishment and Society, 8*, 5-32.
- Baumgartner, F. R., De Boef, S. L., & Boydston, A. E. (2008). *The decline of the death penalty and the discovery of innocence*. New York: Cambridge University Press.

- Beale, S. S. (2003). Interdisciplinary perspectives on restorative justice: Still tough on crime? Prospects for restorative justice in the United States. *Utah Law Review*, 2003, 413-437.
- Bergman, P., & Berman, S. J. (2008). *The criminal law handbook* (10th ed.). Berkeley, CA: Nolo.
- Best, J., & Birzon, P. I. (1963). Conditions of probation: An analysis. *The Georgetown Law Journal*, 51, 809-836.
- Bibas, S. (2004). Plea bargaining outside the shadow of trial. *Harvard Law Review*, 117, 2463-2547.
- Blomberg, T. G., & Cohen, S. (2003). *Punishment and social control: Essays in honor of Sheldon L. Messinger* (2nd ed.). New York: Aldine de Gruyter.
- Blumstein, A. (1998). U.S. criminal justice conundrum: Rising prison populations and stable crime rates. *Crime & Delinquency*, 44, 127-135.
- Bogira, S. (2005). *Courtroom 302*. New York: Vintage Books/Random House.
- Bonczar, T. P. (2003). Prevalence of imprisonment in the U.S. population, 1974-2001 (Bureau of Justice Statistics Special Report NCJ 197976). Washington, DC: Bureau of Justice Statistics.
- Bracken, D. C., Deane L., & Morrissette, L. (2009). Desistance and social marginalization. *Theoretical Criminology*, 13, 61-78.
- Brereton, D., & Casper, J. D. (1981). Does it pay to plead guilty? Differential sentencing and the functioning of criminal courts. *Law & Society Review*, 16, 45-70.
- Bridges, G. S., & Crutchfield, R. D. (1988). Law, social standing and racial disparities in imprisonment. *Social Forces*, 66, 699-724.
- Britt, C. L. (2000). Social context and racial disparities in punishment decisions. *Justice Quarterly*, 17, 707-732.
- Bureau of Justice Statistics (2010). *Total correctional population*. Retrieved March 20, 2010, from <http://bjs.ojp.usdoj.gov/index.cfm?ty=tp&tid=11>.
- Cambridge Police Department (2009, July 16). Incident Report #9005127. Retrieved April 16, 2010, from <http://www.amnation.com/vfr/Police%20report%20on%20Gates%20arrest.PDF>.

- Camp, S. D. (1999). Do inmate survey data reflect prison conditions? Using surveys to assess prison conditions of confinement. *The Prison Journal*, 79, 250-268.
- Camp, S. D., Gaes, G. G., Klein-Saffran, J., Daggett, D. M., & Saylor, W. G. (2002). Using inmate survey data in assessing prison performance: A case study comparing private and public prisons. *Criminal Justice Review*, 27, 26-51.
- Carothers, T. (1998). The rule of law revival. *Foreign Affairs*, 77(2), 95-106.
- Carroll, L., & Cornell, C. P. (1985). Racial composition, sentencing reforms, and rates of incarceration, 1970-1980. *Justice Quarterly*, 2, 473-490.
- Cavender, G. (2004). Media and crime policy: A reconsideration of David Garland's *The culture of control*. *Punishment and Society*, 6, 335-348.
- Chamlin, M. B., & Myer, A. J. (2009). Disentangling the crime-arrest relationship: The influence of social context. *Journal of Quantitative Criminology*, 25, 371-389.
- Chemerinsky, E., & Levenson, L. L. (2008). *Criminal procedure: Investigation*. New York: Aspen Publishers.
- Chen, E. Y. (2008). Impacts of "Three Strikes and You're Out" on crime trends in California and throughout the United States. *Journal of Contemporary Criminal Justice*, 24, 345-370.
- Chevigny, P. (2003). The populism of fear: Politics of crime in the Americas. *Punishment and Society*, 5, 77-96.
- Chiricos, T. G., & Crawford, C. (1995). Race and imprisonment: A contextual assessment of the evidence. In D. F. Hawkins (Ed.), *Ethnicity, race, and crime: Perspectives across time and space* (pp. 281-309). Albany: State University of New York Press.
- Clarke, S. H. (1979). What is the purpose of probation and why do we revoke it? *Crime & Delinquency*, 25, 409-424.
- Clear, T. R. (1994). *Harm in American penology: Offenders, victims, and their communities* (National Criminal Justice Reference Service publication NCJ 158791). Washington, DC: Office of Justice Programs.
- Coffee, J. C. (1991). Does "unlawful" mean "criminal"? Reflections on the disappearing tort/crime distinction in American law. *Boston University Law Review*, 71, 193-246.

- Cohen, P., Cohen, J., Teresi, J., Marchi, M., & Velez, C. N. (1990). Problems in the measurement of latent variables in structural equations causal models. *Applied Psychological Measurement, 14*, 183-196.
- Coleman, R., Sim, J., Tombs, S., & Whyte, D. (Eds.). (2009). *State, power, crime*. London: Sage Publications.
- Costelloe, M. T., Chiricos, T., & Gertz, M. (2009). Punitive attitudes towards criminals: Exploring the relevance of crime salience and economic insecurity. *Punishment and Society, 11*, 25-49.
- Craddock, A. (2009). Day reporting center completion: Comparison of individual and multilevel models. *Crime & Delinquency, 55*, 105-133.
- Craun, S. W., & Theriot, M. T. (2009). Misperceptions of sex offender perpetration: Considering the impact of sex offender registration. *Journal of Interpersonal Violence, 24*, 2057-2072.
- Crow, M. S., & Johnson, K. A. (2008). Race, ethnicity, and habitual-offender sentencing: A multilevel analysis of individual and contextual threat. *Criminal Justice Policy Review, 19*, 63-83.
- Cullen, F. T., Fisher, B. S., & Applegate, B. K. (2000). Public opinion about punishment and corrections. In M. Tonry (Ed.), *Crime and justice: Vol. 27. A review of research* (pp. 1-79). University of Chicago Press.
- Cullen, F. T., Gilbert, K. E., & Cullen, J. B. (1983). Implementing determinate sentencing in Illinois: Conscience and convenience. *Criminal Justice Review, 8*(1), 1-16.
- Daggett, D., M., & Camp, S. D. (2009). Do official misconduct data tell the same story as the individuals who live in prison? *Criminal Justice Review, 34*, 428-449.
- Davis, G. F. (1964). A study of adult probation violation rates by means of the cohort approach. *Journal Criminal Law, Criminology and Police Science, 55*, 70-85.
- Donohue, E., & Moore, D. (2009). When is an offender not an offender?: Power, the client and shifting penal objectives. *Punishment and Society, 11*, 319-336.
- Federal Bureau of Investigation (2007). Crime in the United States, 2006. Washington, DC: Government Printing Office. Available at and retrieved May 1, 2010, from [http://www.fbi.gov/ucr/cius2006/data/table\\_29.html](http://www.fbi.gov/ucr/cius2006/data/table_29.html).
- Filcik, J. C. (1990). Signs of the times: Scarlet letter probation conditions. *Journal of Urban and Contemporary Law, 37*, 291-323.

- Fleury-Steiner, B. D., Dunn, K., & Fleury-Steiner, R. (2009). Governing through crime as commonsense racism: Race, space, and death penalty 'reform' in Delaware. *Punishment and Society, 11*, 5-24.
- Foster, L., Siegel, A., Butler, G., Gill, M., & Wimmer, K. (Producers), & Gray, F. G. (Director). (2009). *Law abiding citizen* [Motion picture]. United States: Overture Films.
- Garland, D. (1996). The limits of the sovereign state. *The British Journal of Criminology, 36*, 445-471.
- Garland, D. (1991). Sociological perspectives on punishment. In M. Tonry (Ed.), *Crime and justice: Vol. 14. A review of research* (pp. 115-165). University of Chicago Press.
- Gelman, A., & Hill, J. (2007). *Data analysis using regression and multilevel/hierarchical models*. New York: Cambridge University Press.
- Georges-Abeyie, D. (1989). Review of William Wilbanks: The myth of a racist criminal justice system. *The Critical Criminologist, 1*, 5-6.
- Gibbs, J. J., Giever, D., & Higgins, G. E. (2003). A test of Gottfredson and Hirschi's general theory using structural equation modeling. *Criminal Justice and Behavior, 30*, 441-458.
- Gideon, L. (2009). What shall I do now? Released offenders' expectations for supervision upon release. *International Journal of Offender Therapy and Comparative Criminology, 53*, 43-56.
- Gifis, S. H. (2003). *Law dictionary* (5th ed.). Hauppauge, NY: Barron's.
- Gillespie, W. (2005). A multilevel model of drug abuse inside prison. *The Prison Journal, 85*, 223-246.
- Glaze, L. E., & Bonczar, T. P. (2009). *Probation and parole in the United States, 2008* (BJS Bulletin NCJ 228230). Washington, DC: Bureau of Justice Statistics.
- Glaze, L. E., & Bonczar, T. P. (2006). *Probation and parole in the United States, 2005* (BJS Bulletin NCJ 215091). Washington, DC: Bureau of Justice Statistics.
- Glaze, L. E., & Palla, S. (2005). *Probation and parole in the United States, 2004* (BJS Bulletin NCJ 210676). Washington, DC: Bureau of Justice Statistics.

- Graffam, J., Shinkfield, A. J., & Hardcastle, L. (2008). The perceived employability of ex-prisoners and offenders. *International Journal of Offender Therapy and Comparative Criminology*, 52, 673-685.
- Gray, M. K., Fields, M., & Maxwell, S.R. (2001). Examining probation violations: Who, What, and When. *Crime & Delinquency*, 47, 537-557.
- Greenberg, B. D. (1981). Probation conditions and the first amendment: When reasonableness is not enough. *Columbia Journal of Law and Social Problems*, 17, 45-97.
- Greenberg, D. F., Kessler, R. C., & Logan, C. H. (1979). A panel model of crime rates and arrest rates. *American Sociological Review*, 44, 843-850.
- Greenberg, D. F., & West, V. (2001). State prison populations and their growth, 1971-1991. *Criminology*, 39, 615-653.
- Gross, S. R., & O'Brien, B. (2008). Frequency and predictors of false conviction: Why we know so little, and new data on capital cases. *Journal of Empirical Legal Studies*, 5, 927-962.
- Hagan, F. E. (2011). *Introduction to criminology: Theories, methods, and criminal behavior* (7th ed.). Thousand Oaks, CA: Sage Publications.
- Hagan, J., & Dinovitzer, R. (1999). Collateral consequences of imprisonment for children, communities, and prisoners. In M. Tonry & J. Petersilia (Eds.), *Crime and justice: Vol. 26. Prisons* (pp. 121-162). University of Chicago Press.
- Hallett, M. A. (2002). Race, crime, and for-profit imprisonment: Social disorganization as market opportunity. *Punishment and Society*, 4, 369-393.
- Hancock, P. G., & Raeside, R. (2009). Modeling factors central to recidivism: An investigation of sentence management in the Scottish prison service. *The Prison Journal*, 89, 99-118.
- Hanser, R. D. (2010). *Community corrections*. Thousand Oaks, CA: Sage Publications.
- Harrison, P. M., & Beck, A. J. (2005). *Prisoners in 2004* (BJS Bulletin NCJ 210677). Washington, DC: Bureau of Justice Statistics.
- Hearnden, I., & Millie, A. (2003). Investigating links between probation enforcement and reconviction. Home Office Online Report 41/03. London: Home Office Research Development and Statistics Directorate. Available at <http://www.homeoffice.gov.uk/rds/pdfs2/rdsolr4103.pdf>.

- Heck, R. H., & Thomas, S. L. (2009). *An introduction to multilevel modeling techniques* (2nd ed.). New York: Routledge.
- Higgins, G. E. (2007). Examining the original Grasmick scale: A Rasch model approach. *Criminal Justice and Behavior, 34*, 157-178.
- Higgins, M. (1999, March). Tough luck for the innocent man. *American Bar Association Journal, 46-52*.
- Hogeveen, B. R. (2005). 'If we are tough on crime, if we punish crime, then people get the message': Constructing and governing the punishable young offender in Canada during the late 1990s. *Punishment and Society, 7*, 73-89.
- Horney, J., Osgood, W. D., & Marshall, I. H. (1995). Criminal careers in the short-term intra-individual variability in crime and its relation to local life circumstances. *American Sociological Review, 60*, 655-673.
- Horwitz, A. (2000). Coercion, pop-psychology, and judicial moralizing: Some proposals for curbing judicial abuse of probation conditions. *Washington and Lee Law Review, 57*, 75-162.
- Hubbard, D. J., & Pealer, J. (2009). The importance of responsivity factors in predicting reductions in antisocial attitudes and cognitive distortions among adult male offenders. *The Prison Journal, 89*, 79-98.
- Huebner, B. M. (2003). Administrative determinants of inmate violence: A multilevel analysis. *Journal of Criminal Justice, 31*, 107-117.
- Ivins, M., & Dubose, L. (2007). *Bill of wrongs*. New York: Random House.
- Jacobs, D., & Helms, R. E. (1996). Toward a political model of incarceration: A time-series examination of multiple explanations for prison admission rates. *The American Journal of Sociology, 102*, 323-357.
- Jan, T. (2009, July 20). Harvard professor Gates arrested at Cambridge home. *The Boston Globe*. Retrieved March 20, 2010, from [http://www.boston.com/news/local/breaking\\_news/2009/07/harvard.html](http://www.boston.com/news/local/breaking_news/2009/07/harvard.html).
- Jargowsky, P. A., & Park, Y. (2009). Cause or consequence?: Suburbanization and crime in U.S. Metropolitan areas. *Crime & Delinquency, 55*, 28-50.
- Johnson, D. (2009). Anger about crime and support for punitive criminal justice policies. *Punishment and Society, 11*, 51-66.

- Jones, T., & Newburn, T. (2002). Policy convergence and crime control in the USA and the UK: Streams of influence and levels of impact. *Criminology and Criminal Justice*, 2, 173-203.
- Kadish, S. H., Schulhofer, S. J., & Steiker, C. S. (2007). *Criminal law and its processes: Cases and materials* (8th ed.). New York: Aspen Publishers.
- Kafka, F. (1998). *The trial*. New York: Schocken Books.
- Karberg, J. C., & Stephan, J. J. (2003). *Census of state and federal correctional facilities, 2000* (BJS Bulletin NCJ 198272). Washington, DC: Bureau of Justice Statistics.
- Karmen, A. (1994). Defining deviancy down": How Senator Moynihan's misleading phrase about criminal justice is rapidly being incorporated into popular culture. *Journal of Criminal Justice and Popular Culture*, 2, 99-112.
- Kautt, P. (2009). Heuristic influences over offense seriousness calculations: A multilevel investigation of racial disparity under sentencing guidelines. *Punishment and Society*, 11, 191-218.
- Kautt, P. (2002). Location, location, location: Interdistrict and intercircuit variation in sentencing outcomes for federal drug-trafficking offenses. *Justice Quarterly*, 19, 633-671.
- Kautt, P., & Spohn, C. (2002). Crack-ing down on black drug offenders?: Testing for interactions between offender race, drug type, and sentencing strategy in federal drug sentences. *Justice Quarterly*, 19, 1-35.
- Kerbs, J. J., Jones, M., & Jolley, J. M. (2009). Discretionary decision making by probation and parole officers: The role of extralegal variables as predictors of responses to technical violations. *Journal of Contemporary Criminal Justice*, 25, 424-441.
- Kennedy, D. M. (2001). *Freedom from fear: The American people in depression and war, 1929-1945*. New York: Oxford University Press.
- Knowlton, L. W., & Phillips, C. C. (2009). *The logic model guidebook: Better strategies for great results*. Thousand Oaks, CA: Sage Publications.
- Kraska, P., & Neuman, W. L. (2008). *Criminal justice and criminology research methods*. Boston: Pearson/Allyn and Bacon.
- Kreft, I. G. G., & De Leeuw, J. (1998). *Introducing multilevel modeling*. Thousand Oaks, CA: Sage Publications.

- Krisberg, B., Litsky, P., & Schwartz, I. (1984) Youth in confinement: Justice by geography. *Journal of Research in Crime and Delinquency*, 21, 153-181.
- Lafree, G., & Tseloni, A. (2006). Democracy and crime: A multilevel analysis of homicide trends in forty-four countries, 1950-2000. *The Annals of the American Academy of Political and Social Science*, 605, 25-49.
- Lapido, D. (2001). The rise of America's prison-industrial complex. *New Left Review*, 7, 109-123.
- Lawson, R. G. (2004). Difficult times in Kentucky corrections—Aftershocks of a “Tough on Crime” philosophy. *Kentucky Law Journal*, 93, 305-376.
- Levitt, S. (1996). The effect of prison population size on crime rates: Evidence from prison overcrowding litigation. *Quarterly Journal of Economics*, 111, 319-352.
- Logan, C. H. (1975). Arrest rates and deterrence. *Social Science Quarterly*, 56, 376-389.
- Logan, C. H., & Gaes, G. G. (1993). Meta-analysis and the rehabilitation of punishment. *Justice Quarterly*, 10, 245-263.
- Lynch, T. (2003). The case against plea bargaining. *Regulation*, pp. 24-27. MAGAZINE
- Lynch, J. P., & Sabol, W. J. (1997). Did getting tough on crime pay? Crime Policy Report No. 1 (Justice Policy Center Research Report). Washington DC: Urban Institute.
- MacKenzie, D. L., & Li, S. D. (2002). The impact of formal and informal social controls on the criminal activities of probationers. *Journal of Research in Crime and Delinquency*, 39, 243-276.
- Martinez, P. E. (2008). Projecting prison populations starting with projected admissions. *The Prison Journal*, 88, 493-516.
- Maruna, S. (2007). The probation story: One hundred years of probation in the media. *Vista: Perspectives on Probation Criminal Justice & Civil Renewal*, 11, 113-119.
- Mauer, M. (2002). State sentencing reforms: Is the “Get Tough” era coming to a close? *Federal Sentencing Reporter*, 15, 50-52.
- Mauer, M. (1999). Why are tough on crime policies so popular? *Stanford Law & Policy Review*, 11, 9-21.
- Mauer, M., & King, R. S. (2007). *Uneven justice: State rates of incarceration by race and ethnicity*. Washington, DC: The Sentencing Project.

- Marvell, T. B., & Moody, C. E. (1994). Prison population growth and crime reduction. *Journal of Quantitative Criminology*, 10, 109-140.
- Marvin, N. (Producer), & Darabont, F. (Director). (1994). *The Shawshank redemption* [Motion picture]. United States: Columbia Pictures.
- McCarthy, S. R. (1990). A micro-level analysis of social structure and social control: Intrastate use of jail and prison confinement. *Justice Quarterly*, 7, 326-340.
- McLennan, R. M. (2008). *The crisis of imprisonment: Protest, politics, and the making of the American penal state, 1776-1941*. New York: Cambridge University Press.
- McNichol, E., & Johnson, N. (2010, February 25). Recession continues to batter state budgets; state responses could slow recovery. *Center on Budget and Policy Priorities*. Retrieved March 20, 2010, from <http://www.cbpp.org/cms/index.cfm?fa=view&id=711>.
- Mears, D. P. (2006). Exploring state-level variation in juvenile incarceration rates: Symbolic threats and competing explanations. *The Prison Journal*, 86, 470-490.
- Mears, D. P., & Field, S. H. (2000). Theorizing sanctioning in a criminalized juvenile court. *Criminology*, 38, 983-1020.
- Medhurst, M. J. (1994). Reconceptualizing rhetorical history: Eisenhower's farewell address. *Quarterly Journal of Speech*, 80, 195-218.
- Mengler, T. M. (1995). The sad refrain of tough on crime: Some thoughts on saving the federal judiciary from the federalization of state crime. *Kansas Law Review*, 43, 503-540.
- Miller, M., & Morris, N. (1986). Predictions of dangerousness: Ethical concerns and proposed limits. *Journal of Law, Ethics & Public Policy*, 2, 393-444.
- Miller, D. C., Sluder, R.D., & Laster, J. D. (1999). Can probation be revoked when probationers do not willfully violate the terms or conditions of probation? *Federal Probation*, 63(1), 23-29.
- Mitchell, O. (2005). A meta-analysis of race and sentencing research: Explaining the inconsistencies. *Journal of Quantitative Criminology*, 21, 439-466.
- Moore, S. (2009, March 2). Prison spending outpaces all but Medicaid. *The New York Times*. Retrieved March 20, 2010, from <http://www.nytimes.com/2009/03/03/us/03prison.html>.

- Morgan, K. D. (1993). Factors influencing probation outcome: A review of the literature. *Federal Probation, 57*(2), 23-29.
- Nash, M. (1996). Consumers without teeth: Can probation service “clients” have a say in the service they receive? *The International Journal of Public Sector Management, 9*(4), 12-19.
- Neithercutt, M. G. (1987). Time to recidivism in probation/parole cohorts. *Journal of Contemporary Criminal Justice, 3*(2), 7-24.
- Nellis, M. (2009). The aesthetics of redemption: Released prisoners in American film and literature. *Theoretical Criminology, 13*, 129-146.
- Newburn, T. (2009). *Key readings in criminology*. London: Willan Publishing.
- Newburn, T. (2002). Atlantic crossings: ‘Policy transfer’ and crime control in the USA and Britain. *Punishment and Society, 4*, 165-194.
- Newburn, T., & Jones, T. (2007). Symbolizing crime control: Reflections on zero tolerance. *Theoretical Criminology, 11*, 221-243.
- Oser, C. B., Mooney, J. L., Staton-Tindall, M., & Leukefeld, C. G. (2009). The drugs-violence nexus among rural felony probationers. *Journal of Interpersonal Violence, 24*, 1285-1303.
- Padfield, N., & Maruna, S. (2006). The revolving door at the prison gate: Exploring the dramatic increase in recalls to prison. *Criminology and Criminal Justice, 6*, 329-352.
- Pager, D. (2007). *Marked: Race, crime, and finding work in an era of mass incarceration*. Chicago: University of Chicago Press.
- Palermo, G. B. (2009). Reintegration and recidivism. *International Journal of Offender Therapy and Comparative Criminology, 53*, 3-4.
- Patterson, E. B. (1991). Poverty, income inequality, and community crime rates. *Criminology, 29*, 755-776.
- Petersilia, J. (1997). Probation in the United States. In M. Tonry (Ed.), *Crime and justice: Vol. 22. A review of research* (pp. 149-200). University of Chicago Press.
- Petersilia, J. (1992). Probation and felony offenders. In L. F. Travis, III, M. D. Schwartz, and T. R. Clear (Eds.), *Corrections: An issues approach* (3rd ed.). Cincinnati, OH: Anderson Publishing Company.

- Petersilia, J. (1990). When probation becomes more dreaded than prison. *Federal Probation*, 54(1), 23-27.
- Petersilia, J., & Turner, S. (1993). Intensive probation and parole. In M. Tonry (Ed.), *Crime and justice: Vol. 17. A review of research* (pp. 281-335). University of Chicago Press.
- Peterson, R. D., & Hagan, J. (1984). Changing conceptions of race and sentencing outcomes. *American Sociological Review*, 49, 56-70.
- Piquero, N. L. (2003). A recidivism analysis of Maryland's community probation program. *Journal of Criminal Justice*, 31, 295-307.
- Quinney, R. (1970). *The social reality of crime*. Boston: Little, Brown.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Raudenbush, S. W., Bryk, A., Cheong, Y. F., Congdon, R., & du Toit, M. (2004). *HLM6: Linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International.
- Raudenbush, S. W., & Sampson, R. (1999). Assessing direct and indirect effects in multilevel designs with latent variables. *Sociological Methods & Research*, 28, 123-153.
- Reaves, B. A. (2005). *Census of state and local law enforcement agencies, 2004* (BJS Bulletin NCJ 212749). Washington, DC: Bureau of Justice Statistics.
- Reiman, J., & Leighton, P. (2009). *The rich get richer and the poor get prison: Ideology, class, and criminal justice* (9th ed.). Upper Saddle River, NJ: Prentice Hall.
- Rhodes, S. L. (1990). Democratic justice: The responsiveness of prison population size to public policy preferences. *American Politics Research*, 18, 337-375.
- Richards, S. C., & Avey, M. J. (2000). Controlling state crime in the United States of America: What can we do about the thug state? In J. I. Ross (Ed.), *Varieties of state crime and its control* (pp. 31-57). Monsey, NY: Criminal Justice Press.
- Richards, S. C., & Ross, J. I. (2001). Introducing the new school of convict criminology. *Social Justice*, 28, 177-190.
- Robbers, M. L. (2009). Lifers on the outside: Sex offenders and disintegrative shaming. *International Journal of Offender Therapy and Comparative Criminology*, 53, 5-28.

- Roberts, J. V. (1992). Public opinion, crime, and criminal justice. In M. Tonry (Ed.), *Crime and justice: Vol. 16. A review of research* (pp. 99-180). University of Chicago Press.
- Rothman, D. J. (1995). More of the same: American criminal justice policies in the 1990's. In T. G. Blomberg & S. Cohen (Eds.), *Punishment and social control: Essays in honor of Sheldon L. Messinger* (pp. 29-44). New York: Aldine de Gruyter.
- Ruback, R. B., Ruth, G. R., & Shaffer, J. N. (2005). Assessing the impact of statutory change: A statewide multilevel analysis of restitution orders in Pennsylvania. *Crime & Delinquency, 51*, 318-342.
- Rubin, L. S., & Wood, C. B. (1990). The current fiscal situation in state and local governments. *Federal Reserve Bulletin, 76*, 1009-1018.
- Sampson, R. J., Morenoff, J. D., & Raudenbush, S. (2005). Social anatomy of racial and ethnic disparities in violence. *American Journal of Public Health, 95*, 224-232.
- Schlosser, E. (1998, December). The prison-industrial complex. *The Atlantic Monthly*. Retrieved April 10, 2010, from <http://www.theatlantic.com/magazine/archive/1998/12/the-prison-industrial-complex/4669/>.
- Scott-Hayward, C. S. (2009). *The fiscal crisis in corrections: Rethinking policies and practices* (Center on Sentencing and Corrections Report). New York: Vera Institute of Justice.
- Sedaris, D. (2004). *Dress your family in corduroy and denim*. Boston: Little, Brown.
- Selke, W. L., & Andersson, S. A. (2003). A test of social stress theory as applied to the study of imprisonment rates. *The Prison Journal, 83*, 426-441.
- Selke, W. L., & Andersson, S. A. (1992). A model for ranking punitiveness of the states. *Journal of Quantitative Criminology, 8*, 217-232.
- Shinkfield, A. J., & Graffam, J. (2009). Community reintegration of ex-prisoners: Type and degree of change in variables influencing successful reintegration. *International Journal of Offender Therapy and Comparative Criminology, 53*, 29-42.
- Simourd, D. J., & Olver, M. E. (2002). The future of criminal attitudes research and practice. *Criminal Justice and Behavior, 29*, 427-446.

- Sims, B., & Jones, M. (1997). Predicting success or failure on probation: Factors associated with felony probation outcomes. *Crime and Delinquency*, 43, 314-327.
- Smith, K. B. (2004). The politics of punishment: Evaluating political explanations of incarceration rates. *The Journal of Politics*, 66, 925-938.
- Solomon, D. (2010, February 11). After the beer summit. *The New York Times*. Retrieved April 16, 2010, from <http://www.nytimes.com/2010/02/14/magazine/14fob-q4-t.html?scp=1&sq=Black%20Harvard%20Professor%20Donated%20Handcuffs&st=cse>.
- Sorensen, J., & Stemen, D. (2002). The effect of state sentencing policies on incarceration rates. *Crime & Delinquency*, 48, 456-475.
- Spohn, C. (2000). Thirty years of sentencing reform: The quest for a racially neutral sentencing process. In J. Horney (Ed.), *Policies, processes, and decisions of the criminal justice system* (Vol. 3, pp. 427-501). Washington, DC: National Institute of Justice.
- Steen, S., & Bandy, R. (2007). When the policy becomes the problem: Criminal justice in the new millennium. *Punishment and Society*, 9, 5-26.
- Steffensmeier, D., & Demuth, S. (2000). Ethnicity and sentencing outcomes in US federal courts: Who is punished more harshly? *American Sociological Review*, 65, 705-729.
- Steiner, B., & Wooldredge, J. (2008). Comparing state- versus facility-level effects on crowding in U.S. correctional facilities. *Crime & Delinquency*, 54, 259-290.
- Stickels, J. W. (2007). A study of probation revocations for technical violations in Hays County, Texas, USA. *Probation Journal*, 54, 52-61.
- Subramanian, S. V., Kawachi, I., & Kennedy, B. P. (2001). Does the state you live in make a difference? Multilevel analysis of self-rated health in the US. *Social Science & Medicine*, 53, 9-19.
- Taggart, W. A., & Winn, R. G. (1993). Imprisonment in the American states. *Social Science Quarterly*, 74, 736-749.
- Taxman, F. S. (1995, February). Intermediate sanctions: Dealing with technical violators. *Corrections Today*.
- Thompson, A. C. (2008). *Releasing, prisoners, redeeming communities: Reentry, race, and politics*. New York: New York University Press.

- Tonry, M. (2009). Explanations of American punishment policies: A national history. *Punishment and Society*, 11, 377-394.
- Tonry, M., & Farrington, D. P. (1995). Strategic approaches to crime prevention. In M. Tonry & D. Farrington (Eds.), *Crime and justice: Vol. 19. Strategic approaches to crime prevention* (pp. 1-20). University of Chicago Press.
- Travis, J., & Lawrence, S. (2002). *Beyond the prison gates: The state of parole in America*. Washington, DC: The Urban Institute.
- Ulmer, J. T. (1997). *Social worlds of sentencing: Court communities under sentencing guidelines*. Albany, NY: State University of New York Press.
- Ulmer, J. T., & Johnson, B. (2004). Sentencing in context: A multilevel analysis. *Criminology*, 42, 137-177.
- U.S. Department of Justice, Bureau of Justice Statistics (2008). *National crime victimization survey, 1992-2005: Concatenated incident-level files*. (ICPSR Study Number 4699). Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- U.S. Department of Justice, Bureau of Justice Statistics (2007). *Survey of inmates in state and federal correctional facilities, 2004*. (ICPSR Study Number 4572). Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- U.S. Department of Justice, Bureau of Justice Statistics (2007). *National corrections reporting program, 2003*. (ICPSR Study Number 20741). Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- U.S. Department of Justice, Bureau of Justice Statistics (2006). *Law enforcement management and administrative statistics (LEMAS): 2003 sample survey of law enforcement agencies*. (ICPSR Study Number 4411). Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- U.S. Department of Justice, Bureau of Justice Statistics (2006). *National incident-based reporting system, 2003*. (ICPSR Study Number 4292). Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- van de Vijver, F. J. R., & Poortinga, Y. H. (2002). Structural equivalence in multilevel research. *Journal of Cross-Cultural Psychology*, 33, 141-156.
- Vazsonyi, A. T., & Belliston, L. M. (2007). The family → low self-control → deviance: A cross-cultural and cross-national test of self-control theory. *Criminal Justice and Behavior*, 34, 505-530.

- Visher, C. A. (1991). *A comparison of urinalysis technologies for drug testing in criminal justice*. Ann Arbor, MI: University of Michigan Library.
- Wakefield, A., & Fleming, J. (Eds.). (2009). *The Sage dictionary of policing*. Thousand Oaks, CA: Sage Publications.
- Wallsten, P., & Dorning, M. (2009, July 31). Beer summit: Professor, officer have cordial chat with President Barack Obama. *Chicago Tribune*. Retrieved March 20, 2010, from <http://www.chicagotribune.com/news/chi-tc-nw-beer-summit-0730-0731jul31,0,143720.story>.
- Wang, X., & Mears, D. P. (2009). A multilevel test of minority threat effects on sentencing. *Journal of Quantitative Criminology*, available at <http://www.springerlink.com/content/102586/?Content+Status=Accepted>.
- Weidner, R. R., & Frase, R. (2001). A county-level comparison of the propensity to sentence felons to prison. *International Journal of Comparative Criminology, 1*, 1-22.
- Weidner, R. R., Frase, R. S., & Schultz, J. S. (2005). The impact of contextual factors on the decision to imprison in large urban jurisdictions: A multilevel analysis. *Crime & Delinquency, 51*, 400-424.
- Weisberg, H. F. (2005). *The total survey error approach: A guide to the new science of survey research*. Chicago: The University of Chicago Press.
- Weissman, J. C. (1982). Constitutional primer on modern probation conditions. *New England Journal on Prison Law, 8*, 367-392.
- Welch, M. (2009). Guantanamo Bay as a Foucauldian phenomenon: An analysis of penal discourse, technologies, and resistance. *The Prison Journal, 89*, 3-20.
- Welch, M. (2005). *Ironies of imprisonment*. Thousand Oaks, CA: Sage Publications.
- Wooldredge, J. (1996). Research note: A state-level analysis of sentencing policies and inmate crowding in state prisons. *Crime & Delinquency, 42*, 456-466.
- Worrall, J. L. (2006). Does targeting minor offenses reduce serious crime? A provisional, affirmative answer based on an analysis of county-level data. *Police Quarterly, 9*, 47-72.
- Yates, J., & Whitford, A. B. (2009). Race in the war on drugs: The social consequences of presidential rhetoric. *Journal of Empirical Legal Studies, 6*, 874-898.

Zeizima, K., & Goodnough, A. (2009, July 21). Harvard scholar won't be charged. *The New York Times*. Retrieved March 20, 2010, from <http://www.nytimes.com/2009/07/22/us/22gates.html>.

Zimring, F. E. (2007). *The great American crime decline*. New York: Oxford University Press.

Zimring, F. E., & Hawkins, G. (1991). *The scale of imprisonment*. Chicago: University of Chicago Press.

# Appendix



CAMBRIDGE POLICE DEPARTMENT  
CAMBRIDGE, MA

**Incident Report #9005127**  
Report Entered: 07/16/2009 13:21:34

Case Title	Location	Apt/Unit #
Date/Time Reported 07/16/2009 12:44:00	WARE ST	
Incident Type/Offense 1.) DISORDERLY CONDUCT c272 S53 —	Date/Time Occurred to	
Reporting Officer CROWLEY, JAMES (467)	Approving Officer WILSON III, JOSEPH (213)	

### Persons

Role	Name	Sex	Race	Age	DOB	Phone	Address
WITNESS	WHALEN, LUCIA			40		H C	MA

### Offenders

Status	Name	Sex	Race	Age	DOB	Phone	Address
DEFENDANT	GATES, HENRY	MALE	BLACK	58		H C	WARE ST CAMBRIDGE, MA

### Vehicles

### Property

Class	Description	Make	Model	Serial #	Value
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### Narrative

On Thursday July 16, 2009, Henry Gates, Jr. (redacted) of (redacted) Ware Street, Cambridge, MA) was placed under arrest at (redacted) Ware Street, after being observed exhibiting loud and tumultuous behavior, in a public place, directed at a uniformed police officer who was present investigating a report of a crime in progress. These actions on the behalf of Gates served no legitimate purpose and caused citizens passing by this location to stop and take notice while appearing surprised and alarmed.

On the above time and date, I was on uniformed duty in an unmarked police cruiser assigned to the Administration Section, working from 7:00 AM-3:30 PM. At approximately 12:44 PM, I was operating my cruiser on Harvard Street near Ware Street. At that time, I overheard an ECC broadcast for a possible break in progress at (redacted) Ware Street. Due to my proximity, I responded.

When I arrived at (redacted) Ware Street I radioed ECC and asked that they have the caller meet me at the front door to this residence. I was told that the caller was already outside. As I was getting this information, I climbed the porch stairs toward the front door. As I reached the door, a female voice called out to me. I turned and looked in the direction of the voice and observed a white female, later identified as Lucia Whalen. Whalen, who was standing on the sidewalk in front of the residence, held a wireless telephone in her hand and told me that it was she who called. She went on to tell me that she observed what appeared to be two black males with backpacks on the porch of (redacted) Ware Street. She told me that her suspicions were aroused when she observed one of the men wedging his shoulder into the door as if he was trying to force entry. Since I was the only police officer on location and had my back to the front door as I spoke with her, I asked that she wait for other responding officers while I investigated further.