

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: Exploring the Impact of Institutional Placement on the Recidivism of Delinquent Youth

Author(s): Jeffrey Lin

Document No.: 217590

Date Received: March 2007

Award Number: 2005-IJ-CX-0014

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Exploring the Impact of Institutional Placement on the Recidivism of Delinquent
Youth

by

Jeffrey Lin

New York University

TECHNICAL REPORT

SUBMITTED TO THE NATIONAL INSTITUTE OF JUSTICE

ABSTRACT

This dissertation explores the reasons that court-involved youth in New York City are sent to institutional placement (incarcerated), and assesses the impact of placement on future recidivism. Unlike adult dispositions, family court dispositions for juveniles are driven by two distinct goals: protecting public safety and acting in the best interests of the youth. These interests may act in concert, or they may be at odds with one another. That is, the disposition that is best suited to protecting public safety may not be the one that is best for the youth. Given this dilemma, what are the real reasons behind decisions to incarcerate New York City juvenile delinquents?

I find that the main forces behind the placement decisions have less to do with criminogenic risk factors and assessed needs, and more to do with factors that characterize youths' relationships with the court itself. These factors often represent the degree to which youth have "learned their lesson" and demonstrate that they can comply with court orders. However, despite the profound impact that they have on the risk of incarceration, these characteristics and dynamics are not very predictive of the risk of recidivism.

Placement itself, at least in the short term, does not appear to affect the risk of recidivism. It neither decreases recidivism, as deterrence theory would predict,

nor does it increase recidivism, as labeling theory would predict. However, I do find some evidence that school engagement may condition this relationship.

TABLE OF CONTENTS

ABSTRACT	ii
LIST OF FIGURES	vii
LIST OF TABLES	viii
CHAPTER 1	1
1.1 Primary Research Goal	1
1.2 Secondary Research Goal	3
1.3 Structural Logic of the Dissertation	4
1.4 Chapter Structure	8
CHAPTER 2	11
2.1 Juvenile Justice Processing in New York City	12
2.2 Predictors of Juvenile Dispositions	19
2.3 The Juvenile Probation Officer	23
2.4 The Effect of Incarceration on Offending	29
2.5 Theoretical Framework	42
2.6 Conclusion	55
CHAPTER 3	56
3.1 Data Collection	56
3.2 Description of the Sample	63
3.3 Methodology	74
3.4 Limitations of the Data	83

3.5 Methodological Limitations	84
CHAPTER 4	88
4.1 JPO Dispositional Recommendations: Descriptive Statistics	89
4.2 JPO Dispositional Recommendations: Multivariate Analysis	96
4.3 Family Court Dispositions: Descriptive Statistics	109
4.4 Family Court Dispositions: Multivariate Analysis	114
4.5 Conclusion	124
CHAPTER 5	129
5.1 Introduction	129
5.2 Patterns of Recidivism and Time to Recidivism	130
5.3 Predictors of Recidivism and Time to Recidivism	138
5.4 The Effect of Placement; the Problem of Heterogeneity	151
5.5 Assessing the Impact of Punishment Severity: Length of Stay	159
5.6 Differential Impacts: Testing the Control Hypotheses	161
5.7 Differential Impacts: Testing the Geographic Hypotheses	167
5.8 Conclusion	172
CHAPTER 6	175
6.1 Implications for Research	180
6.2 Implications for Policy	185
6.3 Final Note	188
APPENDIX A	189

REFERENCES	197
ENDNOTES	217

LIST OF FIGURES

Fig. 2.1	Juvenile Justice Processing in New York City	12
Fig. 5.1	Proportion of Subjects Remaining Arrest-Free Over Time	134
Fig. 5.2	Proportion of Subjects Remaining Felony Arrest-Free Over Time	135
Fig 5.3	Proportion of Subjects Remaining Violent Arrest-Free Over Time	136
Fig. 5.4	Proportion of Subjects Remaining Violent Felony Arrest-Free Over Time	137
Fig. 5.5	Proportion of Subjects Remaining Arrest-Free, by Disposition Type	154

LIST OF TABLES

Table 3.1	Percent of Sample Located, by Borough	57
Table 3.2	Demographic Characteristics of Youth	64
Table 3.3	Legal Characteristics of Youth	67
Table 3.4	Family Characteristics of Youth	70
Table 3.5	School-Related Characteristics of Youth	71
Table 3.6	Other Social Characteristics of Youth	73
Table 4.1	JPO Dispositional Recommendations in NYC	89
Table 4.2	Characteristics of Youth Recommended for Placement and Probation in NYC	90
Table 4.3	Independent Variables in Logistic Regression Model Predicting JPO Recommendations	98
Table 4.4	Logistic Regression Predicting JPO Dispositional Recommendations	101
Table 4.5	NYC Family Court Dispositions	110
Table 4.6	Agreement of NYC JPOs and Judges, by Disposition	110
Table 4.7	Characteristics of NYC Youth Given Different Dispositions	112
Table 4.8	Logistic Regression Predicting Dispositions in NYC	116
Table 4.9	Logistic Regression Predicting Judge Overrides for	

	Placement	121
Table 5.1	Proportion of Sample Recidivating within 18 months	131
Table 5.2	Average Time to Re-arrest, among Youth who are Re-arrested	132
Table 5.3	Recidivism Rates by Characteristics of NYC Youth Receiving Dispositions	138
Table 5.4	Logistic Regression Models Predicting Recidivism	145
Table 5.5	Cox (Survival) Models Predicting Recidivism	150
Table 5.6	Recidivism by Disposition among NYC Youth Disposed in Spring 2000	153
Table 5.7	Logistic Regression Models Predicting Recidivism, with PLACEMENT Included	156
Table 5.8	Cox (Survival) Models Predicting Recidivism, with PLACEMENT Included	158
Table 5.9	Length of Stay Coefficients in Four Recidivism Regression Models	160
Table 5.10	Length of Stay Coefficients in Four Recidivism Survival Models	160
Table 5.11	Placement*School Attendance Interaction Coefficients in the “Any Re-Arrest” Logistic Regression Model	162
Table 5.12	Placement*Grades Interaction Coefficients in Three	

	Recidivism Regression Models	164
Table 5.13	Social Disorganization Variable Coefficients in Logistic Regression Models Predicting Recidivism	168
Table 5.14	Criminal Opportunity Variable Coefficients in Logistic Regression Models Predicting Recidivism	170

Chapter 1

Introduction and Research Agenda

1.1 Primary Research Goal: The Impact of Juvenile Incarceration on Recidivism

There has been longstanding interest about the effect of incarceration on the risk of future recidivism. Common wisdom proposes that imprisonment deters offenders from committing subsequent crime through incapacitation, and by making the consequences of illegal activities tangible. However, others argue that offending is more a product of social background and life circumstances than rational calculation and therefore, that incarceration holds little promise to prevent future crime. In some cases, imprisoning offenders may actually increase their likelihood of re-offending, as criminal records reduce access to legitimate life pathways and attach harmful stigmas to the incarcerated. Furthermore, prison has been characterized as a sort of “school for criminals,” where inmates become more deeply entrenched in criminal lifestyles, develop delinquent identities, acquire negative peers, and learn more sophisticated criminal techniques (see Branham 1992).

While discussions abound about the utility of incarceration for adult offenders, the effect of *juvenile* incarceration on subsequent criminal trajectories is less well-explored. Few studies address the relationship between sentencing and

recidivism in young populations. Furthermore, these studies generally fail to distinguish the impact of incarceration on youth with diverse social and legal backgrounds. In this dissertation, I explore the effects of juvenile incarceration on future recidivism using social and legal history data about adjudicated juvenile delinquents in New York City. Principally, I compare the recidivism patterns of youths who receive different types of dispositions (i.e., institutional placement versus probation and other community-based sentences) while controlling for social background and legal history variables – thus answering the most fundamental question about how juvenile incarceration affects subsequent re-offending.

More relevantly, I assess the utility of incarceration for youth with different personal, social and legal profiles. The effects of incarceration are likely to vary by offender characteristics (DeJong 1997; Orsagh and Chen 1988; Sherman 1993). Because my dissertation data contain information about a variety of background factors (e.g. demographics, family history, substance abuse patterns, educational history, peer groups), I can evaluate the deterrent effect of incarceration (or lack thereof) on youth with diverse social and legal histories. I explore the impact of a range of disposition-types on recidivism for youth with different backgrounds and profiles. Which types of youth, for example, benefitⁱ most from community-based sentences like probation? Which benefit most from institutional placement?ⁱⁱ

These issues are important, as juvenile incarceration is expensive and potentially harmful. In New York, incarcerating a young person for a year costs about \$70,000.ⁱⁱⁱ New York City pays about half of that amount for each local youth sent to state placement. Concern about the effectiveness of incarceration is therefore both financial and ethical, and these dimensions are intertwined. Policymakers must ask themselves: What return are we getting on this expense? And more broadly: What is the primary purpose of incarceration, and are we achieving this goal? Incarceration certainly incapacitates for a discrete period of time, but if its intent is to deter or rehabilitate, then we must assess its ability to do so. If juvenile incarceration has a criminogenic effect, then government needs to think very hard about the youth that are sent away, and their condition upon return.

1.2 Secondary Research Goal: Exploring Family Court Decision-Making

While my primary research interest in this dissertation has to do with the impact of incarceration on juvenile recidivism, my data also allow me to closely investigate the nature of family court processing. In doing so, I can paint a detailed portrait of pathways through the juvenile justice system. I attempt to identify factors associated with discretionary court actions such as dispositional recommendations made by juvenile probation officers, and judges' ultimate dispositional decisions. Thus, I aim to determine not only the ways in which delinquent youth respond to placement, but also the reasons that youth end up in

placement. This approach enables me to draw conclusions that have targeted and useful policy implications. In mapping youths' pathways through the system, and describing the impacts of official decisions on subsequent patterns of offending, I hope to identify discretionary decisions that may negatively affect the lives of youth, and to propose ways that these decisions might be improved. If, hypothetically, placement has a negative impact on a group of "marginal" youth – kids whose criminal and personal profiles place them on the border of a placement and a probation disposition – then maybe these youth should be proactively funneled into community-based alternatives to placement. If placement has the most adverse affect on a "high-risk" group of youth who are extremely likely to be placed by the court, perhaps the state needs to focus attention on the services that these youth receive while incarcerated, and the nature of post-release supervision and services. More specifically, I attempt to discern differential effects by degree of social bonding and neighborhood characteristics.

1.3 Structural Logic of the Dissertation

This dissertation's structural logic follows a series of research questions – each reflecting a critical juncture in the arrangement of contacts between youth and the justice system. I explore these questions separately, but also consider their implications on one another. The questions are:

1. What characteristics of youth are predictive of placement recommendations?

If a youth has been found “involved”^{iv} in an offense, the disposition process is set in motion. This process will culminate in a sentence handed down by a family court judge. However, much of the substantive investigative work that feeds into this sentence is done by juvenile probation officers (JPOs), who write pre-sentence reports called “investigation and recommendation” (“I&R”) reports for family court judges. These reports describe youths’ offenses, legal histories, school information, family backgrounds, community involvement, peer influences, mental health, and substance use patterns. I&Rs culminate in a recommendation to the juvenile bench – typically either for probation or placement. In most cases, JPO recommendations and judges’ dispositions agree. In my data, when JPOs recommended probation, judges gave probation sentences 94% of the time; when JPOs recommended placement, judges gave placement sentences 74% of the time. I will discuss this in more detail in chapter four. There is some scholarly debate about whether JPO recommendations drive judicial decisions or vice versa, but the important point here is that JPOs play an integral role in filtering information about court-involved youth to judges, and are one of the principal driving forces behind the disposition. In New York City in 2000, there was no standardized risk-assessment instrument in place in the probation department, so JPOs were given wide discretion in rationalizing their recommendations.^v As such, their personal

assessments of youth were critically important in terms of where youth found themselves at the end of their family court experience.

2. What characteristics of youth are predictive of placement dispositions?

While JPO recommendations are important, judges' disposition decisions serve as the final word regarding whether youth are placed or allowed to remain at home under some form of supervision. Therefore, I will predict placement dispositions for my study sample, identifying the factors that judges consider most important in making the decision to incarcerate youth. This analysis will likely yield a laundry list of factors, such as offense severity, legal history, school engagement and family functioning, which are significantly predictive of placement. I will also estimate a multivariate regression model that predicts instances when judges override the dispositional recommendations of JPOs, in order to explore this critical area of agreement and disagreement.

Overall, it will be interesting to identify the characteristics of youth that are most likely to lead them to placement. In subsequent analyses, I will compare these characteristics to those that predict recidivism, in order to determine how closely court rationales align with real risk of offending.

3. What characteristics of youth are predictive of recidivism?

As a first step in the recidivism analysis, I will estimate multivariate models, without including the *placement* variable, so as to initially identify those characteristics most closely associated with re-offending. This analysis will also allow me to compare factors that predict re-offending with factors that predict placement. The prediction of recidivism will serve as a starting point for answering my central research question:

a. Does placement have an impact on recidivism?

Subsequent models will include the *placement* variable, allowing an analysis of the effect of placement on recidivism. Thus, I will determine whether placement has, in the aggregate, a deterrent effect, a criminogenic effect, or no discernable effect.

b. Does this placement impact vary by youth characteristics?

Using criminological theories as guiding frameworks, I will study the interaction between placement and youth characteristics in predicting recidivism. I will attempt to identify sub-groups of youth for whom placement has a deterrent or rehabilitative effect (i.e., placement reduces subsequent recidivism), and sub-groups for whom placement has a criminogenic impact (i.e., it increases recidivism). Specifically, I will attempt to determine whether the impact of placement on recidivism varies by degree of conventional social bonding, or by neighborhood

characteristics. These efforts will allow me to draw nuanced conclusions about the intricate relationship between youth characteristics, the court process, and patterns of criminality.

1.4 Chapter Structure

Chapter Two will begin with a review of relevant literature. This review will cover scholarship about juvenile court processing and decision-making, as well as research on the incarceration of youth and its consequences. I will also outline research on the effects of incarceration on adult offender populations. Chapter Two will also present the theoretical foundations of the analysis. Organizational perspectives will frame the analysis of court decision-making. Criminological theories drive the analysis of incarceration effects. The central research question – regarding the impact of placement on recidivism – emerges from deterrence, labeling, and differential association theories. To explore the interaction between placement effects and youth characteristics, I derive hypotheses from control theory and social disorganization theory. Again, I think that placement effects may vary by degree of conventional social bonding, and by neighborhood conditions.

Chapter Three describes my data and methodological approach. Issues of data collection, quality checking, reliability, and validity are covered, and I present descriptive statistics about study subjects. I also discuss limitations of the data set

and of the research design. Finally, I outline the statistical methods that I adopt to answer research questions, and describe their strengths and weaknesses.

Chapter Four presents the results of my family court processing analysis. I statistically model both JPO dispositional recommendations and judges' dispositional decisions, and explore their relationship to one another. Principally, I try to determine why youth end up in placement, and highlight individual- and case-level characteristics that are significantly associated with family court decisions. I also try to figure out why judges override JPO recommendations.

Chapter Five presents analyses that answer my central research questions. I use logistic regression and survival analysis to assess the overall impact of placement on recidivism. I construct a series of models with theoretically derived interaction terms to illustrate the ways that placement effects are conditioned by youths' characteristics. To gain a holistic understanding of patterns of recidivism, I estimate a series of models with different dependent measures, including time to re-arrest, time to re-arrest for a felony offense, time to re-arrest for a violent crime, and time to re-arrest for a violent felony.

The final chapter provides a review of findings and a discussion of scholarly and policy implications. This dissertation will contribute to literature on delinquency risk, deterrence, labeling, social bonding, and other theoretical correlates of recidivism. I use the main research questions to test the applicability of several theories of delinquency and crime. This research also engages

criminological literature about the utility of incarceration for a population that has been underexamined in this regard. Practically, this can inform juvenile justice decision-making by effectively specifying profiles of youth for whom incarceration holds the most rehabilitative promise, and those who are best served by community-based sentencing.

Chapter 2

Overview of Family Court Processing and Review of Relevant Literature

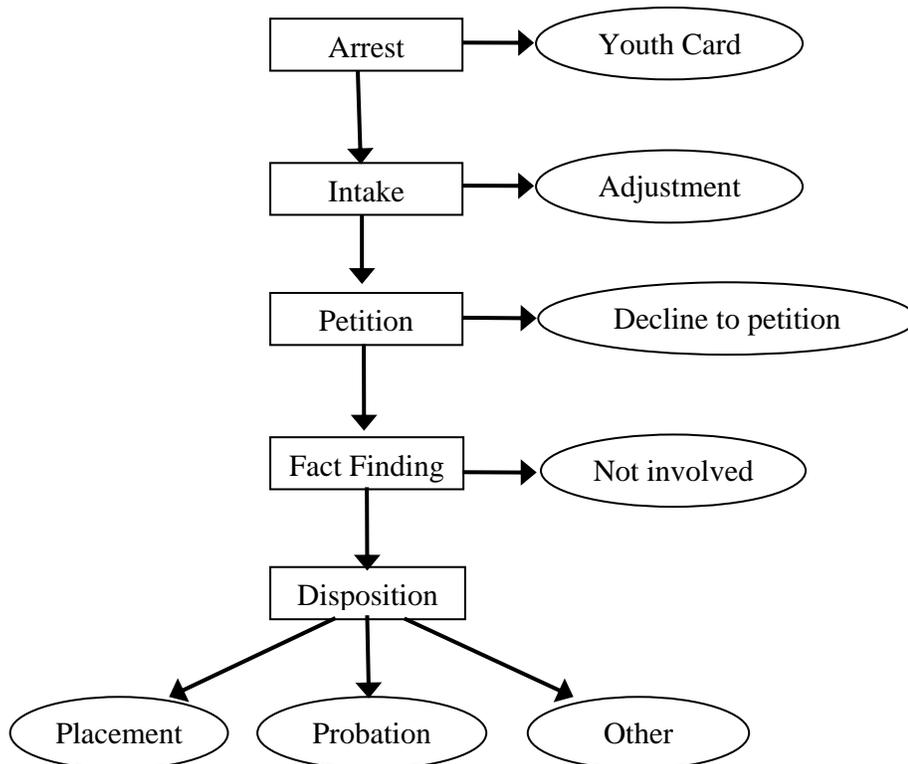
This chapter begins with a detailed overview of juvenile justice processing in New York City. Specifically, I identify critical decision points and key actors in this process, and highlight the points where young offenders can be diverted from further involvement, or be pushed deeper into the system (i.e., towards placement). This overview should clarify the pathways to placement, as well as the means by which youth may avoid being placed.

New York City is, of course, a unique place with distinctive demographics and social conditions. In this dissertation, it is therefore important to frame the analysis in the context of similar research done in other jurisdictions, in order to be able to situate my findings in a broader body of work. In this chapter then, I also review relevant literature on family court decision-making, juvenile incarceration, and the relationship between incarceration and recidivism. Finally, I outline the criminological theory scholarship from which I draw hypotheses about incarceration effects and the interactions between incarceration and individual characteristics.

2.1 Juvenile Justice Processing in New York City

Figure 2.1, below, provides a visual outline of family court processing in New York City. This is a relatively simplified representation, but all of the critical decision points in the process are depicted. There are a number of decisions that can divert youth from further involvement with the system, or postpone further involvement by giving youth the chance to stay out of trouble for a set period of time.

Figure 2.1: Juvenile Justice Processing in New York City



The process starts with an arrest. While most youth who are arrested will go through the intake, adjudication and disposition process in family court, some receive a “Youth Card” at arrest. The Youth Card is an extremely mild sanction, and is generally given to youth who have committed non-serious, non-violent offenses such as turnstile-jumping, possession of graffiti instruments, or very minor theft. Those who receive these Youth Cards do not have to come to family court, and their cases essentially end at arrest. If they are re-arrested later however, police and the courts may take prior Youth Cards into account in making subsequent decisions.

Most youth between the ages of seven and fifteen (at the time of offense) who are charged with committing an act that would constitute a crime if committed by an adult are labeled “juvenile delinquents;” their cases are processed in family court. After a youth is arrested, he or she is brought to the family court for intake.^{vi,vii} At intake, the youth is interviewed by a juvenile probation officer, who asks questions about the current offense, family situation, peer group, school performance, drug use, and other pertinent social and behavioral characteristics. The JPO also fills in information about legal history, including status offenses. At this point, the JPO can “adjust” the case. Adjustment^{viii} means that the case will not go forward at that point, and the youth is released. If the youth stays out of trouble for a set period of time – typically six months – the case is stricken from

the record; if the youth is re-arrested, or is truant from school, or violates some other condition of the adjustment, the original case can be reopened for adjudication and disposition. About fifteen percent of cases that reach intake each year are adjusted.^{ix}

If the case is not adjusted, results of the JPO's preliminary investigation are shared with the presiding judge, and the JPO makes a recommendation to the bench regarding the youth's detention status until the next court date. The judge ultimately decides whether the youth will be detained or not, and if so, what the level of restriction for detention will be.^x

Next, the case is brought to the city's Corporation Counsel – the family court prosecutor. Corporation Counsel examines the details of the case, and decides whether to continue with the *petition*. If there is weak evidence, Corporation Counsel can decline to prosecute, effectively ending the case. If, on the other hand, the prosecutor decides to go forward, final charges are determined and a next court date is arranged. The final petition is given to the judge. This document lists the exact charges, describes the alleged offense, and includes victims' statements and police reports.

If Corporation Counsel chooses to petition, a series of hearings are held in family court regarding the case. These hearings are called *fact-finding*, and are meant to determine the youth's guilt or innocence. During these hearings, the judge will hear from the youth, the youth's family, victims, police officers, and

other relevant parties in order to establish the youth's role in the offense. The words "guilty" and "innocent" are not used. Instead the youth is found to be "involved" or "not involved." Being found "not involved" is equivalent to acquittal, and ends the case. Conversely, a youth who is found to be involved in the alleged offense is scheduled for a dispositional hearing, which will decide the sentence.

If fact-finding establishes involvement in the crime, a juvenile probation officer is assigned to the case, and writes an investigation and recommendation report (I&R).^{xi} The I&R is analogous to the pre-sentencing investigation in adult criminal processing, although with much greater emphasis on so-called "extralegal" factors such as family functioning and school involvement. To complete the I&R, the JPO will interview the youth and the youth's family, check to see if the family has any official complaints of neglect or abuse,^{xii} look up the youth's legal history, and obtain attendance and grade reports from school. The I&R narrative broadly covers the following topics:

- Current offense;
- Legal history;
- History of status offenses (PINS complaints);
- Family structure;
- Family conflict;

- Details of family members' lives such as employment, public assistance enrollment, mental health issues, substance use, and criminal records;
- Grades, attendance, school conduct, special education status;
- Peer influences, including reported gang membership or affiliation;
- Community or organizational involvement, such as church attendance, membership in clubs, and participation in sports;
- Use of free time;
- Drug and alcohol use;
- Mental health.

At the end of the I&R report, the JPO makes a dispositional recommendation to the judge. Typically, this recommendation is for placement or for probation. The judge then makes a dispositional (sentencing) decision based on information in the I&R, and his or her understanding of the case. In the vast majority of cases, judges' dispositional decisions agree with JPO recommendations. Below, I outline the sanctions that judges may issue.^{xiii}

The most severe sanction that youth can receive from the family court is institutional placement, which removes the youth from the community for a period of six to twenty-four months. The restrictiveness of placement can vary between non-secure, limited secure, and secure, with different state facilities offering different levels of restriction. Schooling is provided in placement, though it is generally understood that the quality of education is poor. There are several

reasons for this. First, youth are staying in placement for different lengths of time and at different times of the year, so designing curriculum that meets the needs of all placed youth is quite difficult. Second, educational staff and materials are not likely to be very good in placement facilities. And finally, for a variety of reasons, placed youth are probably not very well-engaged in school.

Some youth, usually those with specific needs and who are less “risky,” are sent to state-contracted *voluntary agencies*, which run facilities providing specialized treatment approaches for issues like drug dependence and sexual abuse. Placement-bound youth are screened by these agencies prior to disposition; the agencies make admission decisions based on program suitability and available bed space.

Youth who are sent to placement (including voluntary agencies) do not spend their entire sentence incarcerated. Typically, they stay in placement for 60-80% of their sentenced time, and then are released to *aftercare*, a form of juvenile parole. While on aftercare, they check in regularly with aftercare workers (akin to adult parole officers), who monitor their behavior, and can *violate* youth for truancy or delinquency, sending them back to placement.

Other placement-bound youth are sent to community-based alternative-to-placement programs. These youth, in general, are slightly less “risky” than those who do go to placement. In 2000, there were essentially two such programs – both of which still exist.^{xiv} One is Juvenile Intensive Supervised Probation (JISP),

which is run through the Department of Probation. JISP is like normal probation with higher frequency of contact, longer sentence length (usually eighteen to twenty-four months), and stricter compliance requirements. The other program is called the Center for Alternative Sentencing and Employment Services (CASES) – a non-profit agency which specializes in providing educational and employment programming. Like JISP, CASES requirements are generally quite strict, and typically include remaining arrest-free, obeying a curfew, going to school, attending mandated services, and refraining from drug use. Youth who fail to meet the conditions of their JISP or CASES supervision are terminated from the program and re-adjudicated in family court.

Less risky youth are given normal probation (six to twenty-four months; typically twelve or eighteen), which involves regular meetings with a probation officer, as well as some combination of other requirements such as staying in school and not getting arrested. When appropriate, youth will be mandated to attend drug treatment, counseling, psychiatric services, or an educational program alongside the other requirements of their probation supervision. The Department of Probation has a number of formal and informal arrangements with local service agencies, and attempts to refer young probationers to appropriate services in their neighborhoods. Youth who do not meet their probation conditions are issued violations by their probation officer (in professional parlance, they are *violated*), re-adjudicated in family court, and given a new disposition. The new disposition is

typically harsher than the previous disposition. Youth who have been violated may get longer probation, more intensive probation, or be sent to state placement. This is sometimes called “stepping up” sanctions.

The least risky youth are given a conditional discharge (CD), which is a short (six to twelve month) community-based sentence with few, if any, requirements. No regular meetings with probation officers or other court officials are required. This disposition is common for first-time offenders who commit minor, non-violent crimes (e.g., turnstile jumping, graffiti, low-level theft). Generally, a youth will only have to remain arrest-free to successfully complete this sentence. Upon completion of CD, the case is retroactively dismissed and the youth’s record is sealed.

2.2 Predictors of Juvenile Dispositions: Why Do Youth Get Placed?

As an initial analytical step in this dissertation, I aim to identify the types of youth who are likely to end up in placement. In this section, I cover prior research on the prediction of juvenile dispositions. Since its inception at the turn of the century, the American juvenile justice system has been governed by a dualistic philosophy that distinguishes it from the adult justice system. Adult sentencing is a fairly routine process that relies heavily on legal factors such as the current offense and the offender’s history of legal involvement, while decisions in the juvenile justice system are rooted in a much more expansive doctrine that entails more

individualized treatment of cases (see Curtis and Reese 1994; Zimmerman and Chein 1981). The rationale behind adult sentences is driven by concerns about public safety, and while this issue is certainly considered in juvenile dispositions, concerns about the welfare of the offender him- or herself play a much more important role in dispositional decisions about young offenders. Consider the New York State Family Court Act, which states:

“In determining an appropriate order the court shall consider the needs and best interests of the respondent as well as the need for protection of the community. [The court] shall order the least restrictive available alternative...” (§352.2)

The goal of “child saving,” more formally known as *parens patriae*,^{xv} allows an array of extra-legal factors to be considered by the court in making dispositional decisions. The state is to act as surrogate parent, and not in an adversarial manner towards the child (*Kent v. United States*, 383 U.S. 542 (1966)). This is not to say that extra-legal factors do not play a role in adult court decisions – only that these factors have a more explicit place in family court. The dualistic philosophy of juvenile justice often results in confusion over the purposes of sanctioning, and creates tension between the competing goals of preserving public safety and serving the best interests of the child.

Over the past four decades, studies of the juvenile justice system have suggested that the lack of specified guidelines in decision-making processes results in sentencing outcomes which are profoundly affected by the individual judgments of court actors (see Curtis and Reese 1994). One source of sentencing inconsistency in juvenile justice can be found in the aforementioned philosophy of *individualized justice*, which seeks to examine each individual on a case-by-case basis and provide the best treatment available (Bernard 1992; Bortner 1986; Cavender and Knepper 1992; Cullen et al. 1983; Sanborn 1994). However, juvenile justice decision-makers are also forced to consider the safety of the community in deciding how to sentence delinquent youth. This presents a dilemma for decision-makers. The disposition that may be best suited to serving the needs of the child may be, either partially or fully, at odds with the disposition that is perceived to minimize community risk. The means by which court actors reconcile these oft-competing objectives demands attention.

There is a core set of factors that research has shown to predict juvenile dispositions. Previous research has found legal factors such as the nature of the referral offense and legal history to be strongly related to juvenile dispositional decisions (Arnold 1971; Cohen and Kluegel 1978, 1979; Kowalski and Rickicki 1982; Minor et al. 1997; Sanborn 1996; Tittle and Curran 1988). More serious offenses certainly lead to more restrictive sanctions (e.g., Fader et al. 2001; Minor, Hartmann & Terry 1997; Sanborn 1996), though the degree of this influence has

not been definitively established (Fader et al. 2001). Higher frequency and seriousness of prior system contact is also associated with more severe sanctions (Cohen & Kluegel 1979; Kowalski & Rickicki 1982; Minor, Hartmann & Terry 1997; Phillips & Dinitz 1982; Reese, Curtis & Richard 1989; Thornberry 1973; Tittle & Curran 1988). Youth who have been “given a chance” by the court and then get into more trouble, such as probation violators, are likely to be stepped up to harsher sanctions as a result of subsequent court contact (Asquith 1983; Cicourel 1968; Gross 1967; Reese, Curtis & Richard 1989; Sanborn 1996).

A host of extralegal factors have also been examined in terms of their influence on juvenile dispositions. Under the principle of *parens patriae*, court actors may include anything relevant to public safety or the welfare of the youth in making decisions. Age, for example, is often considered with regard to system penetration or potential removal from the home (Kowalski & Rickicki 1982; Minor et al. 1997; Sanborn 1996). Another relevant factor may be family functioning. Fader et al. (2001) find that maternal substance abuse or family history of neglect predict out-of-home placement for youths in the Philadelphia juvenile justice system, providing some support for the notion of “state as caretaker” (see also, Sanborn 1996).^{xvi} Other extralegal variables that may be considered include school engagement, mental health, and attitude towards the offense (Fader et al. 2001; Rogers & Williams 1994; Sanborn 1996).

Extralegal considerations such as school performance and family functioning fall well within the mandate of the juvenile justice system, but other research has suggested that decisions driven by the dual consideration of risk and need also open the door to potential racial or gender discrimination. Findings are mixed, with some studies concluding that race and gender have profound influence on decisions to place youth (Frazier, Bishop & Henretta 1992; Horowitz & Pottieger 1991; McCarthy & Smith 1986; Thomas & Cage 1977; Thornberry 1973; Tittle & Curran 1988), and others finding no evidence of such bias (Carter 1979; Dannefer & Schutt 1982; Horwitz & Wasserman 1980; Kowalski & Rickicki 1982; Phillips & Dinitz 1982; Teilman & Landry 1981). I attempt to identify such bias in my own analyses.

2.3 The Juvenile Probation Officer (JPO) as a Case Study of Individualized Justice

In the New York City juvenile justice system, as in others, JPOs play a key role in determining the dispositional outcomes of adjudicated youth. They serve as the main informational resource for family court judges who must make a decision about whether to let a youth remain in the community under some form of supervision, or to place that youth in a state-run facility. As such, I wish to devote some space to fully explicating their function.

Again, in New York City, JPOs write pre-sentencing (I&R) reports for judges, which provide details of a youths' cases, including: legal history, family background, school performance, peer group, use of drugs and alcohol, and mental health, as well as a description of the current offense. At the conclusion of an I&R report, the JPO makes a recommendation to the family court about what the disposition should be; typically, this is either a recommendation for state placement or for probation. This narrative summary is a key source of information for judges, and in the vast majority of cases, both in New York City and elsewhere, judges' decisions align with JPO recommendations (Carter and Wilkins 1967; Rush 1992; Susman 1973). Since JPOs appear to have a significant influence on the destinations of adjudicated youth, it is important to ask:

- To what factors do JPOs in New York City give the most weight in making dispositional recommendations to family court judges?

It has been argued that probation departments and probation officers “are the most conspicuous manifestation of the philosophy of individualized justice” (Walsh 1985, 290). JPOs, in making dispositional recommendations, must balance the potentially conflicting goals of public protection and child welfare. Prior research has suggested that juvenile justice actors generally, and juvenile probation officers specifically, attempt to resolve this conflict through narrative justifications

of their dispositional recommendations (Curtis & Reese 1994; Reese, Curtis & Richard 1989). However, the rationale which underlies a particular dispositional recommendation may be similar, even identical, to the rationale that supports a very different disposition. To wit, juvenile probation officers can cite the need for “treatment” or “therapy” to defend recommendations of institutional placement, as well as community-based supervision (Crittendon 1983; Curtis & Reese 1994; Reese, Curtis & Richard 1989). Thus, these justifications may serve to obscure the real forces behind JPO dispositional recommendations.

In addition to public safety and child welfare, some research has cited a third potential basis for JPO dispositional recommendations: entrenched organizational practices. That is, JPOs make their recommendations based on an institutionally evolved logical sequence (Asquith 1983; Cicourel 1968; Reese, Curtis & Richard 1989). Thus, youth who exhibit behaviors that indicate non-compliance with institutional expectations, such as probation violators and youth who show little remorse for their actions, are expected to be stepped up to harsher sanctions, regardless of the actual risk they present to community safety, or the appropriateness of the delivered sanction to meet their needs. Established institutional decision processes take precedence over other case-specific factors that may speak more directly (and more empirically) to needs and risks. Narrative accounts of needs and risks, therefore, can merely serve to justify the inevitability

that youth with certain individual- and case-level characteristics are destined for particular sanctions.

Previous research has found a high rate of agreement between the dispositional recommendations of POs and subsequent court sentencing decisions. In the adult criminal justice system, one study found that courts followed the recommendation of POs 95% of the time (Neubauer 1974). In a more recent study of adult criminal processing, Latessa (1993) found that judges followed PO recommendations for probation 85% of the time and recommendations for prison 66% of the time. Decisions in the juvenile justice system also appear to follow this pattern; Susman's (1973) analysis on the Washington DC juvenile court system revealed that judges followed the JPO's dispositional recommendation in 76% of all cases.

There has been considerable confusion and little consensus on the causal direction between recommendations and sentencing decisions. In studies of the adult justice system, some point to this high rate of agreement as evidence that POs merely shape their recommendations to reflect judges' sentencing tendencies (Carter & Willkins 1967; Hood 1966; Neubauer 1974, Rosecrance 1985). On the other hand, judges may rely quite heavily on POs' recommendations to ensure efficient court processing and quick delivery of appropriate services. Walsh (1985) claims: "probation officers are the source of disparate sentences rather than the judicial disparity being the source of disparate recommendations" (291, see also

Hagan 1975; Hagan, Hewitt & Alwin 1979). It is evident that more research is necessary to determine the causal relationship between judicial decisions and PO recommendations. However, regardless of the direction of the relationship, given the high rate of agreement and the pivotal role POs play in filtering information to judges, it is very important to understand the factors POs consider when making recommendations.^{xvii}

There is limited knowledge about the particular relationship between juvenile characteristics and their influence on JPO recommendations. Studies that have examined the role of the JPO have found that the demeanor of the court-involved youth plays a critical role in the types of treatment POs will recommend (Albonetti 1991; Barton 1976; Cohn 1963; Emerson 1969; Grisso, Tomkins & Casey 1988; Smith, Black & Weir 1980; Tomkins 1990).^{xviii} In a questionnaire administered on JPOs in Minnesota, Gross (1967) analyzed perceptions of the most important factors considered in the juvenile predisposition report. He found that JPOs ranked attitude towards the offense, family situation, and previous delinquency problems as the three most important factors for disposition recommendations. Sanborn (1996) broadened this study, surveying criteria that POs, as well as other court personnel, considered in the decision-making process. He found that court officials cited the following factors and characteristics as predictors of a harsh delinquency disposition: delinquent record, offense type and severity, school record, history of failed treatment, youths' character, and family

circumstances. Sanborn's study was influential in that it departed from the traditional dependence on administrative data, and provided a nuanced examination of how court officials actually viewed potentially relevant characteristics of youth. For instance, Sanborn's conceptualization of family characteristics did not simply examine single parent status, but also looked for indicators of family dysfunctionality (i.e. the family's willingness to assist in the rehabilitative effort, the family's ability to control and supervise the child).

While this litany of factors that JPOs seem to consider in their recommendations may simply be evidence of rampant individual-level discretion in the juvenile justice system, they may also be a manifestation of efforts to frame and justify recommendations that are in actuality, institutional imperatives. Again, this may stem from the dual function of the juvenile justice system: protecting the public and saving the child. The use of similar reasoning to justify dissimilar recommendations (treatment or therapy) is cited as evidence of this framing process (Crittendon 1983; Curtis and Reese 1994; Reese, Curtis and Richard 1989). The reality may be that that structural constraints and institutional expectations drive recommendation patterns, not individual judgments of risk or need. Asquith (1983) suggests one way that JPOs may reconcile the conflict between risk and need. He argues that actors in the juvenile justice system, in making decisions, adopt a "frame of relevance" created by an accepted stock of professional knowledge and shaped by "available ideologies" that court actors

draw upon. This frame of relevance provides a way of explaining and interpreting behavior, and acts to subsume concepts of risk and need into a consistent set of practices. Symptoms of risk and symptoms of need coagulate into a single frame of relevance with standard risk/need markers, and these markers often represent the degree to which youth have “learned their lesson” and can demonstrate the ability to comply with system rules and mandates. However, the accuracy with which these symptoms track real risk or real need remains up for debate. The implication here is that it is difficult, if not impossible, to simultaneously serve the needs of youth and the community, and that the court instinctively finds a way to settle this dilemma.

2.4 The Effect of Incarceration on Offending

In this chapter, I have detailed juvenile justice processing in New York City, and outlined relevant literature regarding decision-making, with special emphasis on predictors of placement. Now, I turn to the central research aim in this dissertation: exploring the impact of placement on the recidivism of youth. In the sections that follow, I review extant research on incarceration effects for both adult and juvenile offender populations.

The relationship between incarceration and recidivism in adult populations

Broadly, studies which examine the relationship between incarceration and subsequent recidivism in adult criminal justice populations find little support for a deterrent effect. Some find that incarceration, in fact, increases the risk of recidivism. However, existing literature also suggests that the relationship between incarceration and recidivism is complex, and that examinations of this relationship must take into account a variety of factors – such as background characteristics, criminal history, and offense type – that may affect the impact of incarceration on recidivistic outcomes (Song & Lieb 1993; Walker 1987). Clearly, incarceration can have a more powerful deterrent effect for some offenders than for others (e.g., younger versus older; property versus drug offenders). Further, any conclusions drawn from this body of literature must be tempered by the fact that studies vary widely in terms of their sampled populations, measures of recidivism, controlled factors, and research designs (Smith, Goggin & Gendreau 2002).

If imprisonment fails to deter future crime on the part of those imprisoned, then one of its most commonly cited functions lacks an empirical foundation. Studies which find incarceration to have little deterrent impact thus call underlying principles of American criminal justice into question. Smith and Akers (1993) compared the recidivism rates of Florida prisoners against rates for a matched sample of offenders in a prison diversion program for a five year follow-up period. They found that recidivism rates between the two groups were essentially the same, regardless of what type of recidivism measure was used (re-arrest, re-

conviction, re-incarceration, length of time to re-arrest). Marion's (2002) study of the relative cost-effectiveness of community and prison sentences also touches on this dissertation's central research questions. Comparing the recidivism rates of offenders who successfully completed community-based corrections programs to those released from prison, Marion found no difference in re-imprisonment rates for a two year follow-up period. She concluded that compared to incarceration, community-based sentences can provide equal public protection at reduced cost. In a foreign example, Cohen, Eden, and Lazar (1991) followed 202 Israeli felony offenders for five years after sentence completion. Roughly half of the subjects were given probation, and half were given prison sentences. Controlling for the effects of age, education, and legal history, these researchers found that initial sentence-type was *not related* to recidivism. That is, those who received probation and those who received prison recidivated at statistically identical rates. However, because of the high recidivism rates in both groups, the authors concluded that neither probation nor prison were particularly effective sentences.

While the studies described above found incarceration to have no deterrent effect on subsequent offending, some have reached the far more troubling conclusion that incarcerating offenders may actually increase the likelihood of later criminal behavior. For example, Bartell and Winfree, Jr. (1977) examined the reconviction of one hundred offenders sentenced for burglary in 1971 in New Mexico. Controlling for age, criminal history, and offense severity, these authors

found that incarcerated subjects were *more likely* to be re-convicted than those who had received probation. Petersilia, Turner and Peterson (1986) matched a group of offenders released from California prisons to a group of probationers on background characteristics and criminal history. These researchers found that more prisoners (72%) than probationers (63%) were re-arrested within two years, and that more prisoners (47%) than probationers (31%) were re-incarcerated over the same period.^{xix} Wheeler and Hissong (1987) performed a three-year recidivism analysis on misdemeanor offenders in Houston who received fines, probation, and jail sentences. Controlling for criminal history and demographic characteristics, these authors found that probation reduced recidivism more effectively than fines or jail. Spohn and Holleran's (2002) recidivism analysis focused on 1,077 felony offenders in Kansas City, comparing the recidivism outcomes of those who received jail time to those who received probation. These researchers also refute the idea that incarceration has a specific deterrent effect: incarcerated offenders re-offended at higher rates and more quickly than those with community sentences. These relationships were particularly pronounced for felony drug offenders. Perhaps most comprehensively, Smith, Goggin and Gendreau's (2002) meta-analysis of literature on the effects of criminal justice sanctioning on recidivism outcomes examined this relationship in 111 research studies. While limited by methodological and design differences across included studies, these researchers found harsher sanctions to have *no deterrent effect* on recidivism. In fact, harsher

punishments appeared to slightly increase recidivism. Findings were consistent across all subgroups of offenders – adults and youths, men and women, whites and minorities.

The relationship between time served and recidivism in adult populations

Studies which compare the recidivistic outcomes of incarcerated and non-incarcerated subjects, while informative, are limited by an inability to distinguish the effects of sentence length on re-offending. Clearly, longer periods of incarceration incapacitate offenders for longer periods of time. But what effect do longer prison sentences have on recidivism after release? Those who advocate longer sentences argue that in addition to incapacitation, longer sentences will discourage released offenders from committing crime through specific deterrence, and moreover, will discourage *potential* offenders from crime through general deterrence (Blumstein, Cohen & Nagin 1978; Song & Lieb 1993; US Department of Justice 1992). Those who argue for shorter sentences believe that the certainty of punishment is more critical than the severity of punishment (i.e., sentence length) in deterring re-offending (Smith, Goggin, & Gendreau 2002). Furthermore, crimes that stem from limited life chances, broader social problems and physical addictions are unlikely to be deterred – in fact they may be exacerbated – by long periods of imprisonment (Orsagh & Chen 1988). Finally, long prison stays may increase re-offending by indoctrinating prisoners into criminal lifestyles and

teaching them more sophisticated criminal techniques (Branham 1992; Smith, Goggin & Gendreau 2002).

Studies which find little or no connection between sentence length and subsequent offending challenge the utility of harsh punishments in the form of long sentences. If longer sentences have no deterrent effect, then public resources are wasted on housing prisoners who may be better served by community-based supervision and treatment. Beck and Hoffman (1976) examined the recidivism of 1,546 federal prisoners for two years after release. Controlling for criminal history, age, education, employment history and marital status, these authors found *no relationship* between time served and recidivism rates. The Hawaii Department of the Attorney General's (1984) report on the recidivism of 115 parolees in Hawaii examined factors related to the re-arrest of this population. This study also found total time served to be *unrelated* to the probability of re-arrest during a six-year follow-up period. In the longest study of this kind, Denise Gottfredson (1999) compared the recidivism rates of those who were incarcerated against those who received suspended sentences or probation for a 20-year follow-up period in New Jersey. She found that neither sentence type nor length of confinement affected the likelihood of recidivism.

Two earlier studies actually find length of sentence to be positively related to recidivism risk for certain offender groups. Gottfredson, Gottfredson, and Garafalo (1977) followed 5,349 male prisoners paroled in Ohio between 1965 and

1972 for one year post-release. Controlling for risk categories such as age, offense type, criminal history, alcohol and drug use, and parole performance, these researchers found that in general, increased length of time served *did not* reduce recidivism. Recidivism, across risk categories, either increased or remained constant with increased time served. Gottfredson, Neithercutt, Nuffield and O'Leary (1973) conducted a recidivism study of 104,182 American male prisoners paroled between 1965 and 1970. Recidivism was operationalized as re-incarceration. Controlling for age, offense type, and prior offenses, these authors found that while on parole, offenders who had served longer sentences had *higher* re-incarceration rates than offenders with shorter sentences. However, this relationship varied by offense type. Property offenders were less likely to be deterred by longer sentences, while for armed robbers and drug offenders, longer sentences produced a slight deterrent effect.

Unpacking the relationship between incarceration and recidivism

Gottfredson et al.'s findings indicate an important limitation in the way that the relationship between incarceration and recidivism is framed. Rather than simply assessing the deterrent impact of prison as a dichotomous conclusion (deterrent/not deterrent), researchers should move toward studies which attempt to identify groups of offenders who are most effectively deterred by the prospect of

incarceration, and those for whom incarceration will have little impact (Sherman 1993).

Walker, Farrington and Tucker (1981) explored this relationship for 2,069 male offenders in England. These researchers found that the impact of sentence-type was mitigated by number of previous convictions. Imprisonment was more effective than probation in reducing re-conviction for first-time offenders. However, for offenders with one to four previous convictions, probation was more effective. For those with five or more previous convictions, there was no significant difference; re-conviction rates were high for all sentence types. Similarly, DeJong (1997) found that first-time offenders in New York City were more likely to recidivate than “experienced” offenders following incarceration.

Orsagh and Chen (1988) examined the relationship between time served and recidivism for different types of offenders, and also tested the presumption that the effect of sentence length was not monotonic; these authors proposed that this relationship follows a U-shaped curve. That is, there may be an optimum sentence length that maximizes the suppression of potential recidivism. Following 1,425 North Carolina prison releasees for two years, Orsagh and Chen found significant differences across offense types, as well as variability by sentence duration. For robbery offenders, time served was positively related to the probability of re-offense. For burglars, time served had a deterrent effect up to an optimum sentence length of 1.3 years for younger offenders and 1.8 years for older

offenders, after which recidivism was positively related to sentence length. As a whole, the sample's optimum time served was 1.2 years. Prior to 1.2 years served, length of time served effected a reduction in recidivism; after 1.2 years, time served increased the risk of recidivism. Orsagh and Chen conclude that the relationship between sentence length and recidivism risk is complex and specific to offender characteristics.

DeJong (1997) approached this issue in a slightly different way; she proposed that offenders' ties to conventional society would mitigate the deterrent effect of incarceration. Comparing this effect for roughly 5,000 New York City arrestees, DeJong found those with fewer ties to conventional society (e.g., marriage, employment, high school education) were more difficult to deter through incarceration; these offenders were more likely than their socially-bonded counterparts to re-offend after being incarcerated. However, as testament to the complexity of this relationship, she also found that for offenders with few social ties, longer prison stays predicted longer periods to re-arrest. She speculates that "short confinements may not provide a strong enough dosage to get unbonded people to reevaluate their perceptions of the certainty and severity of punishment" (572). While DeJong's analyses are limited by her unfortunate exclusion of supreme court cases (thereby "softening" the sample) and the lack of precision with which she was able to calculate time incarcerated, her findings nevertheless indicate that the ways in which offenders experience and perceive punishment may

be fundamentally linked to their relative stake in conventional and criminal lifestyles.

The relationship between incarceration and recidivism in juvenile populations

Research on the relationship between incarceration and recidivism in adult criminal populations reveals empirical problems in “get tough” crime control approaches, and underscores the need to better understand the consequences of particular criminal sanctions for different subparts of heterogeneous offender populations. Like research on adult criminal populations, research exploring the incarceration-recidivism link for young offenders has produced mixed support for a deterrent effect. Moreover, research on this issue for juvenile populations has not yet distinguished incarceration effects by offender characteristics. This is unfortunate for a number of reasons. First, recent trends in the criminal justice treatment of juveniles have exhibited a general shift away from rehabilitative ideals and toward harsher punishments (Bazemore & Umbreit 1995; Champion 1989; Feld 1987, 1990, 1993, 1998, 1999; Forst et al. 1989; Krisberg et al. 1986; Rudman et al. 1986), and the effects of this trend are in need of more thorough empirical examination.^{xx} Second, the juvenile justice population reflects a group of offenders who are in (or nearing) their peak years of criminal activity, and devising effective strategies for controlling present and future offending can have important consequences for individual and social welfare. Lastly, research in this

area can speak to the unique reasons behind juvenile offending behavior, and may inform approaches to deal with social and personal circumstances which underlie youth criminality.

Some studies have shown incarceration to have a deterrent effect for youth. Murray and Cox (1979) examined re-offending among chronic delinquents in Chicago who were either incarcerated in reformatories or diverted to community programs. They compared pre- and post-program arrest rates, and found that incarcerated youth exhibited larger reductions in post-program offending. Furthermore, among those sentenced to community programs, youths who were in more restrictive programs showed the greatest reduction in arrests. Gottfredson and Barton (1993) compared the recidivistic outcomes of 673 youths who had been incarcerated in Maryland's Montrose Training School to 254 matched individuals in community-based programs. Over a 2½-year follow-up period, incarcerated subjects were re-arrested significantly fewer times than those in the community group. This difference, however, was diminished when only serious offenses were compared. Moreover, when self-reported delinquency rates were compared, differences between the two groups were smaller than when comparing official re-arrest rates. Nevertheless, Gottfredson and Barton's findings provide some support for the deterrence hypothesis.

Other research has found incarceration to have no deterrent effect, or a positive relationship with recidivism. Lipsey's (1999) meta-analysis of the impact

of rehabilitative programs compared the relative reduction on recidivism of a variety of programs for juvenile offenders in 196 research studies. Controlling for methodological variations, Lipsey found that incarcerating youth, even with service enhancements, was not significantly related to recidivism reduction. Wooldredge (1988) compared twelve different dispositions on their ability to reduce recidivism for 2,038 young offenders in Illinois. Recidivism was measured by juvenile and adult arrests for a three to seven year follow-up period. Controlling for a variety of individual and environmental factors, Wooldredge found that the best disposition in terms of reducing recidivism was a combination of probation and community treatment. More importantly for this dissertation, he also found that longer terms of incarceration were associated with increased recidivism. Schneider and Ervin (1990) used both quantitative and qualitative approaches to examine the effects of different dispositional options on 876 delinquents in six cities for a two to three year follow-up period. These researchers found that incarceration and probation were both less effective than restitution in reducing subsequent delinquency. Further, time incarcerated was positively related to committing more subsequent crimes. Jacobs (1990) conducted a survival analysis of 629 delinquents who were either formally processed in court, or diverted from formal court referral. Those who were formally processed displayed less recidivism than those who were diverted. However, among those who were

formally processed, youths who received out-of-home placements exhibited more recidivism than those who remained at home.

While this research is informative, and speaks to debates about the need and function of juvenile criminal confinement, it generally treats samples as homogenous groups. However, juvenile offender populations are not homogenous. Youths can differ on any number of characteristics: demographics, attachment to parents, peer relations, school performance, mental and psychological functioning, substance abuse, and neighborhood of residence. These factors may have profound interactive effects with the way that youth experience criminal sentences. Clearly, youth with more social bonds may feel the deterrent effects of harsh sanctions more keenly than youth with fewer (or weaker) bonds. Furthermore, young offenders who come from (and are released to) neighborhoods with higher crime rates may internalize criminal norms and prove less susceptible to deterrent effects. Or, as Orsagh and Chen (1998) propose, the effects of deterrence may not be monotonic. Institutional confinement may initially dissuade youth from criminal activity, but prolonged institutional confinement may indoctrinate youth into criminal lifestyles and identities that promote subsequent delinquency. These examples underscore the need for more nuanced analysis of the incarceration-recidivism relationship in young populations.

2.5 Theoretical Framework

Primary theories: Deterrence, labeling, and differential association

In addition to exploring practical issues related to juvenile punishment, this research provides a good opportunity to test criminological theories against, and in conjunction with, one another. Moreover, situating these analyses within existing theoretical frameworks generates a number of testable hypotheses. Most fundamentally, I will engage criminological literature on deterrence, with specific reference to juvenile offender populations. Testing the validity of deterrence theory is important because the notion of deterrence supports much of modern American criminal justice policy and practice. Deterrence theory is rooted in the classical work of Beccaria (1764) and Bentham (1823), who presumed criminal behavior to be the product of rational calculations of interests (i.e., costs and benefits). Accordingly, the social response to crime must make clear the consequences of criminal action in order to prevent future offending. Punishments, in order to deter crime effectively, must be swift (the principle of celerity), certain (certainty), and appropriate to the offense (severity). A system of effective criminal sanctions will deter crime in two ways. At the social level, these sanctions will have a *general deterrent* effect. That is, potential offenders will refrain from crime because the consequences of criminal actions are widely known. Unfortunately, this dissertation is not suited to testing the idea of general deterrence.^{xxi} At the individual level, criminal sanctions produce a *specific*

deterrent effect, meaning that individuals calculating the costs and benefits of crimes are dissuaded from crime by the experience of these sanctions. Criminals who have been caught and punished should be more specifically deterred from future crime. Further, the severity of experienced sanctions should be positively related to their deterrent effect.

If juvenile criminal sanctions do have a deterrent effect, incarcerating juveniles for their criminal behavior should cause these young offenders to associate crime with their experienced punishment, and therefore reduce their future offending. The perceived threat of punishment is theoretically increased following incarceration, and thus, those who have been incarcerated will commit less future crime than those who have not experienced this harsh sanction.

Hypothesis 1a: Controlling for other relevant factors, juvenile delinquents who are incarcerated will recidivate later, and less frequently, than those who are not incarcerated.

Hypothesis 1a proposes that swift and certain punishment will deter subsequent criminal behavior. However, in accordance with the doctrines of deterrence, the *severity* of punishment may also impact future offending. Longer carceral stays will serve to reinforce the psychological association between criminal behavior and its legal consequences.

Hypothesis 1b: Controlling for other relevant factors, the length of time that juvenile delinquents are incarcerated for will be negatively associated with subsequent recidivism.

The deterrent effects of criminal sanctions may be counterbalanced, or negated, by other individual factors and circumstances. Or, more simply, the principles of deterrence theory could just be wrong. Skolnick (1997) characterizes the idea of deterrence as “superficially persuasive” (411), and others have contended that the deterrence doctrine rests on the fiction that changing criminal penalties will alter criminal behavior (Irwin & Austin 1997; Paternoster 1987, 1991; Tonry 1995). Existing scholarly research, while far from conclusive, generally shows that increasing criminal penalties has little or no effect on aggregate crime rates (see Blumstein, Cohen & Nagin 1978; Paternoster 1987, 1991; Tonry 1995; Reiss & Roth 1993).

Labeling theory counters deterrence theory in contending that criminal punishments can actually increase future offending among the punished (Becker 1963; Chambliss 1973; Lemert 1951, 1972). According to labeling theorists, criminal behavior may increase after sanctioning because formal sanctions attenuate legitimate life pathways, or because sanctioned criminals engage in a process of value identification with their label, and thus adopt norms and behavior

patterns typical to that label (Becker 1963; Chambliss 1973; De Li 1999; Paternoster & Iovanni 1989; Thomas & Bishop 1984; more generally, Goffman 1963). Imprisonment may serve as a powerful conduit to the adoption of criminal identity, as it is the most severe sanction that one can receive from the state (except for death) and in fact, bestows a more stigmatized label than lesser sanctions (e.g. probation). In this way then, being imprisoned may serve to increase future offending.^{xxii}

In New York, as in other states, juvenile arrest and court records are sealed (hidden from public view) in order to limit stigmatizing effects. However, youth who have been arrested and incarcerated, even if their records are sealed, can never be fully shielded from stigma, as family members and peers are likely to become aware of this legal history. In school, youth who have been incarcerated will need to explain their long absence to classmates and teachers. Furthermore, incarcerated youth are likely to have fallen behind in their studies while in placement, potentially augmenting the stigma they feel (life cycle damage). Relatedly, other facets of incarcerated youths' lives may be interrupted by placement. Membership on sports teams or in other organized activities may be lost, or youth may be reluctant to return to these activities after placement. Part-time employment may also be lost. Along with the psychological effects of stigmatization then, placement may directly or indirectly contribute to tangible changes that can have negative impacts. Diminished academic engagement may

result in dropping out; withdrawal from teams and clubs may leave more hours in the day for delinquent activity; the loss of a job may push youth towards illegal money-making activities like selling drugs. The relationships between placement, stigma, life cycle damage and the erosion of human capital are likely to be complex, but whatever these interrelationships are, they lead to the prediction that placement will have negative effects on the lives of previously incarcerated youth, and criminal activity is likely to increase because of these effects.

Beyond the adoption of criminal identities and “life cycle damage,” incarceration may have other deleterious effects that can increase future re-offending. Theories that focus on the process of learning may help to understand these effects. Sutherland’s (1937, 1947) differential association theory posits that criminal behavior is learned through interaction with others, and that this process includes acquisition of both criminal techniques and criminal motivations (see also, Matsueda 1988; Sutherland & Cressey 1960). According to differential association theorists, the motives and impulses of a potential delinquent are conditioned through this learning process, in which the delinquent internalizes definitions of legal codes as either “favorable” or “unfavorable.” A person will become delinquent because of an excess of definitions that encourage violation of the law, over definitions that do not encourage such transgressions.^{xxiii} It follows that juveniles who are incarcerated, and thus surrounded by other juveniles who have committed crimes (including the most serious offenders), will be more likely

to internalize these criminal definitions and that therefore, their propensity to commit crime after release will increase. Moreover, stigmatization, in combination with the acquisition of new peer groups in placement, may propel incarcerated juveniles towards negative peers (other stigmatized youth) after release, further amplifying bad effects.

Hypotheses 2a and 2b emerge from the postulates of labeling and differential association theory, and contradict the predictions made by deterrence theory. Some criminological theorists have in fact argued that labeling theory, rooted in the sociological tradition of symbolic interactionism, fits well with ideas of differential association, as learned definitions of criminality are inherently linked to adopted social roles (Matsueda 1988; Orcutt 1987).

Hypothesis 2a: Controlling for other relevant factors, juvenile delinquents who are incarcerated will recidivate sooner, and more frequently, than those who are not incarcerated.

It follows that those who are incarcerated for longer periods would identify more readily with their criminal label than those who are incarcerated for less time. Moreover, longer periods of incarceration will increase the duration and frequency of delinquent associations. Therefore, recidivism should increase in association with time served.

Hypothesis 2b: Controlling for other relevant factors, the length of time that juvenile delinquents are incarcerated for will be positively associated with subsequent recidivism.

Mediating theories: Control, social disorganization, and criminal opportunity

The criminological theories discussed in the previous section provide useful frameworks to study the aggregate impact of incarceration on re-offending among juveniles. As stated earlier however, I am also interested in a more nuanced examination of the deterrent impact of incarceration at the individual level. Harsh sanctions are not likely to deter all youth from future crime, as distinct sub-segments of the juvenile offender population may experience incarceration in different ways. I aim to examine the particular characteristics of youth who are deterred by such sanctions, youth who are not deterred, and youth for whom such sanctions are counterproductive (i.e., they are associated with increased recidivism). Criminological theories that explore the impact of social bonding and community characteristics on delinquency will guide this effort.

Social control theory proposes that criminal and delinquent behavior can be explained through an examination of the bonds between potential delinquents and conventional activities, beliefs, and institutions. Put simply, at the individual level, degree of attachment to conventional society should be inversely related to

criminal propensity (Gottfredson & Hirschi 1990; Hirschi 1969; Sampson & Laub 1990). Hirschi's (1969) original formulation of control theory described four elements of the social bond: attachment (identification with convention), involvement (participation in pro-social activities), commitment (aspirations and expectations), and belief (respect for and acceptance of convention). Social bonds have traditionally been operationalized in the areas of education, employment, family and peers, and conventional activities (see, for example, Agnew 1985; Akers & Cochran 1985; Wiatrowski, Griswold & Roberts 1981). And indeed, in literature pertaining to delinquency risk, factors in these areas have been shown to predict delinquency among young people. For example, high levels of conflict with parents, poor parental supervision, and low levels of positive parental involvement have been identified as risk factors for delinquency and antisocial behavior (Hawkins et al. 1998; Wasserman et al. 1996, 2003). Likewise, peer rejection has recently been shown to relate to delinquency (Bagwell et al. 2000; Coie et al. 1995). Failure to engage school during childhood and adolescence has also been associated with delinquency risk (Hawkins et al. 1998; Le Blanc, Cote, & Loeber 1991; Maguin & Loeber 1996).

If level of social bonding is indeed negatively related to delinquency, and incarceration, in general, has a deterrent effect, placement will be more likely to deter youth with higher levels of bonding from future criminal behavior. After release, poorly-bonded youth will remain at high risk for criminal activity, and

likely recidivate faster and more severely than their well-bonded counterparts. Conversely, well-bonded youth may feel that they have more at stake and more to lose through continued criminality, and thus feel the deterrent effects of incarceration more acutely. DeJong's (1997) study of adult arrestees in New York City proposed this exact hypothesis, and found some evidence to support it.

Hypothesis 3a: Among delinquent youth, the deterrent effect of incarceration will vary by level of social bonding. Those with higher levels of social bonding will recidivate later, and less frequently, than those with lower bonding levels.

Critically, the interaction between placement and social control may depend on the broader effect of incarceration. That is, a contradictory hypothesis could also emerge from control theory. While social bonds may strengthen the deterrent impact of incarceration, the opposite could be true: incarceration, or its attached stigma, may actually serve to weaken or sever existing social bonds (Brodsky 1975; Edin, Nelson & Paranal 2004; Moore 1996). This incarceration-initiated loss of social bonds might lead to continued, or increased, criminal behavior after release because of diminished social controls. Edin, Nelson and Paranal (2004) identify this effect among adult fathers who are incarcerated, and posit that it is the very loss of attachment caused by incarceration that increases further criminality. Because well-bonded youth will experience this loss and

poorly-bonded youth will not (i.e., their bonds are already broken), I might expect well-bonded youth to experience relatively higher rates, and greater severity, of recidivism than poorly-bonded youth after incarceration. The absence of social controls may leave previously-bonded youth free to engage in elevated levels of post-incarceration delinquency. Furthermore, the stigma attached to placement may be felt most acutely by those youth that initially have the most to lose. I would expect that if in general, placement deters youth from further offending, Hypothesis 3a would be supported. However, if placement has a criminogenic effect, Hypothesis 3b would be supported.

Hypothesis 3b: Among delinquent youth, the criminogenic effect of placement will associate positively with level of social bonding. Those with higher levels of social bonding will recidivate sooner, more frequently, and more severely, than those with lower bonding levels.

Neighborhood-level factors may also potentially explain some variation in the deterrent effect of incarceration on recidivism. Social disorganization theory, first imagined by Shaw and McKay (1942), posits that there are direct and indirect relationships between community characteristics and crime rates. Socially disorganized urban areas – marked by conflicting cultural values, low social cohesion, and poor physical conditions – lack social controls which guard against

crime and delinquency (see also Faris 1948). More recent forms of social disorganization theory argue that macro-conditions such as poverty, urbanization, industrialization, population turnover, and racial heterogeneity affect crime through their impacts on informal social controls, neighborhood cohesion, and the ability of residents to maintain public order (Bursik & Grasmick 1993; Kornhauser 1978; Sampson et al. 1997; Skogan 1990; Warner & Rountree 1997). Specifically, as Sampson and Groves (1989) argue, social disorganization affects crime through the inability of communities to supervise and control teenage peer groups, weak informal local friendship networks, and low rates of participation in formal and voluntary neighborhood organizations. I would expect the direction of a neighborhood effect to be consistent regardless of whether placement had a positive or negative association with recidivism. That is, if placement reduced subsequent offending, this reduction will be smaller for youth who live in disorganized neighborhoods. Conversely, if placement increases recidivism, the increase will be greater for those in disorganized neighborhoods.

Hypothesis 4: Youth released into more socially disorganized neighborhoods will recidivate faster, and more frequently, than youth released into less socially disorganized neighborhoods.

Social disorganization theory explains criminality by identifying community-level predictors of aggregate crime rates, which stands in contrast to theories such as control, which focus on variations in individual characteristics in explaining criminal propensities. Some recent efforts in criminological scholarship, however, have sought to integrate individual- and community-level explanations. One example of theoretical synthesis is Wilcox, Land and Hunt's (2003) "dynamic, multicontextual criminal opportunity theory" (I will refer to it as "criminal opportunity theory"). Borrowing largely from routine activities theory (Cohen & Felson 1979; Felson & Cohen 1980), Wilcox et al. focus their efforts on the circumstances surrounding criminal acts. Criminal opportunity, according to these theorists, results from the intersection of three factors: motivated offenders, suitable targets, and capable guardianship. As these three factors vary across time and space, criminal opportunity (and criminal activity) will likewise vary. Motivated offenders and suitable targets are presumed to have a positive relationship with criminal opportunity, while capable guardianship should be negatively related.

Criminal opportunity theory reconciles the apparent conflict between *classical* theoretical traditions (such as deterrence and social disorganization), which assume criminal motivation as a given and attempt to specify the circumstances under which people act upon that motivation, and *positivist* theories which purport criminal acts to be products of variations in individual motivation.

Like classical theories, criminal opportunity theory conceptualizes criminal motivation as fixed in the general population; the number of motivated offenders per unit of space should vary according to population density. However, the criminal activity of these potential offenders will be determined by the spatial and temporal characteristics of their environments. Put simply, aggregate-level exposure of unguarded targets to motivated offenders will explain crime rates. Applying this theory to the present study, I would expect incarcerated youth (ostensibly a population of motivated offenders) who are released to neighborhoods with more suitable targets and less capable guardianship to be more likely to recidivate than youth who are released to neighborhoods with fewer suitable targets and more capable guardianship.

Hypothesis 5a: Youth released into neighborhoods with more suitable targets will recidivate faster, and more frequently, than youth released into neighborhoods with fewer suitable targets.

Hypothesis 5b: Youth released into neighborhoods with less capable guardianship will recidivate faster, and more frequently, than youth released into neighborhoods with more capable guardianship.

2.6 Conclusion

Broadly, my dissertation addresses two research concerns:

1. The reasons behind decisions to place youth.
2. The effect of placement on youths' offending patterns.

These concerns are obviously intertwined, and analyses of these phenomena should have important policy implications. Questions of the function and utility of placement are important to policymakers. What types of youth are being sent to placement, and why? What effect does placement have on the criminality of the placed? What implications do New York City's juvenile incarceration practices have for public safety? More broadly, what is the function of placement? Is it to deter? To incapacitate? To punish? To rehabilitate? Are these goals being achieved? If not, is there a better way to achieve them?

Placement is expensive and harsh. In times of fiscal crisis, policymakers may be searching for ways to reduce the expense of criminal sanctioning without risking increases in local crime and potential public furor over perceived leniency. With these constraints in mind, how can placement decisions be intelligently informed by research? In the next chapter, I will detail the data to be used in my analyses, as well as the analytical approach I will take to answering my research questions.

Chapter 3

Data and Methodology

This chapter will describe the data to be used in my analyses, as well as the methodological approach I have chosen to use. Specifically, I cover issues of data collection, sample description, and statistical methods. I also outline some limitations in the data and methodology.

3.1 Data Collection

To answer my research questions, I conduct analyses on a sample of 736 juvenile delinquents who received dispositions in the New York City Family Court system during the spring of 2000. I collected these data between April and June of 2003 as part of a team of researchers at the Vera Institute of Justice, and I have been granted permission to use the data for my dissertation.

In New York, a juvenile delinquent is a person between the ages of seven and fifteen (at the time of the offense) who is charged with committing an act that would constitute a crime if committed by an adult.^{xxiv} All juvenile delinquents in New York City are adjudicated and sentenced in Family Court. Study subjects were chosen by examining Family Court calendars in all five New York City boroughs for each day in April, May, and June of 2000 – which identified every youth who received a disposition during this period. Thus, this dataset should be

representative of the universe of juvenile delinquency cases processed in the New York City Family Court. Other Vera Institute researchers and I located case files for each subject in probation department file rooms in the five family courts using personal and numeric identifiers taken from court calendars. Case files contain a variety of documents pertaining to each youth, and his or her journey through the New York juvenile justice system. Not surprisingly, we were unable to locate files for every identified study subject. Some files were probably misplaced or filed incorrectly; others may have been in use by court personnel. Table 3.1 summarizes the percentages of files located in each borough.

Table 3.1: Percent of Sample Located, by Borough

Borough	Files Located	Number of Possible Files	% of Sample Located
Brooklyn	211	226	93.4
Manhattan	199	215	92.6
Queens	116	137	84.7
Staten Island	43	49	87.8
Bronx	167	210	79.5
TOTAL	736	837	87.9

We were able to locate the majority of files, with an overall location rate of 88%.

File location rates were highest in Manhattan and Brooklyn, and lowest in the Bronx.

In this dataset, each record is essentially a snapshot of a particular youth at the time of his or her disposition. Variables reflect the following characteristics of sampled youth:

- Demographic profile (date of birth, sex, race, zip code);
- Case processing variables (e.g. name of judge, court dates, detention/parole status during trial, arrest and petition charges, type of disposition, length of disposition);
- Legal history (e.g. prior arrests and institutional placements);
- Characteristics of present and past family environments (e.g. guardians, abuse/neglect history, nature of relationships between family members);
- School performance indicators (e.g. attendance, grades, conduct at school);
- Community and peer relationships (e.g. negative peers, gang involvement, use of free time, participation in organized activities);
- History of alcohol and drug use;
- Mental health history;
- History of victimization (e.g. bullying, sexual abuse, property offenses against respondent).

Coded information was derived by examining documents in each subject's probation case file. We developed a standardized data collection instrument, which included a series of items covering the areas of information described above, and

hired temporary staff to assist with the data collection. Data collectors were well educated; all had at least a bachelor's degree and most had obtained or were in the process of obtaining graduate degrees in public policy or the social sciences. Most had some experience working with the criminal justice system, and/or had studied criminal justice in college or graduate school. Data coders were given extensive training by senior research staff at the Vera Institute in order to promote coding consistency. Principally, this training consisted of a series of meetings in which senior research staff tutored data coders on the intricacies of family court processing, and helped to resolve potentially confusing issues related to interpreting court documents. These meetings also served to familiarize data collectors with the form and function of the data collection instrument.

During the course of data collection, we implemented a number of additional measures to ensure coding accuracy and consistency. At least one senior staff member was present at all times.^{xxv} Coded data for each and every study subject was double-checked by senior staff. Immediately after a file was coded, the senior staff member would review responses with the data coder to identify potentially conflicting or ambiguous information, and appropriately adjust responses. Moreover, we held regular meetings with data coders during the data collection process to establish consistent coding guidelines and resolve issues related to data collection. Data coders were also rotated periodically throughout the five New York City borough family courts as a further guard against coding

bias. Lastly, collected demographic and legal information was crosschecked in other state and local administrative databases (i.e., detention and placement data).

The main sources of information in the paper case files were:

- *Probation Investigation and Recommendation (I & R) Reports*: Pre-sentencing reports written by probation officers and submitted to family court judges that recommend the most appropriate disposition in each case. They contain fairly comprehensive legal, social, and psychological information for delinquent youth.
- *Probation Intake Reports*: Brief reports, written by probation officers at the time of a youth's first court appearance, which summarize the offense and provide overviews of family life, peers, school performance, and other potentially relevant characteristics of youth. Intake reports are often used by judges to make detention recommendations during the trial process.
- *Mental Health Reports (MHRs)*: Psychological evaluations of delinquent youth, written by licensed clinicians prior to disposition. MHRs contain legal and social information, but primarily focus on mental health issues.
- *"JISP" assessments*: Reports, written prior to disposition, which evaluate the suitability of placement-bound youth for the Juvenile Intensive Supervision Program, which is a more restrictive form of probation. These reports describe various legal and behavioral issues related to subjects.

- *School records*: Official reports on grades, attendance, infractions, and school interventions.
- *Court petitions*: These are filed by Corporation Counsel (the juvenile prosecutor), and describe the final charges made against a particular youth. They also include a description of the offense written by the arresting officer, as well as any relevant victims' statements.
- *NYPD arrest reports*: These describe the offense for which a youth is arrested, the offense and arrest dates, and the initial charges filed by the police. They also contain some demographic information.

Coded data from probation case files offer a rich baseline portrait of this sample of delinquent youth, and are highly suitable for conducting recidivism analyses. Variables capture a number of characteristics that potentially amplify or protect against the risk of future offending. In this dissertation, these baseline measures are used to predict recidivism patterns over a three-year post-disposition follow-up period. In order to measure recidivism, I have linked baseline records, using personal and numeric identifiers, to arrest and incarceration information provided by other city and state agencies. I have signed agreements with all relevant agencies, which grant me permission to use their data for the purposes of this dissertation. Below, I describe the origin and purpose of the various data sources:

- *Arrest records:* The New York City Criminal Justice Agency (CJA) provided data on subsequent arrests (juvenile and adult) in New York State. Records included arrest dates and charges. Some demographic information was also included. These arrest records have been used to derive all recidivism outcome measures.
- *Juvenile placement:* The New York State Office of Children and Family Services (OCFS), which oversees all state juvenile placement facilities, provided data on juvenile re-incarceration. These data included information on length of stay in these facilities, types of facilities, and transfers between facilities. OCFS data allowed me to calculate the exact time that each study subject spent in state incarceration. For those study subjects who were sent to state placement, I was able to use OCFS data to determine their exact date of release. This release date marked the temporal point when the recidivism “clock” started for each placed subject in my analyses.
- *Juvenile detention:* The New York City Department of Juvenile Justice provided data on pre-trial detention in juvenile incarceral facilities. The data included admission and release dates, admission and release reasons, and some legal and demographic information. Mainly, I used these data to calculate time in the community for the recidivism analyses.

- *Adult incarceration:* The New York City Department of Correction (DOC) provided data on adult incarcerations, for those study subjects who “aged out” of the juvenile justice system during the follow-up period. Linking OCFS, DJJ and DOC data allowed me to calculate, for every day after disposition, whether a particular subject was incarcerated or in the community. Consequently, my recidivism outcome measures are extremely accurate.

Thirty-eight cases in my dataset did not have a matching OCFS incarceration record. As a result, I am unable to determine accurately time spent incarcerated and in the community for these subjects, and choose to exclude them from multivariate analyses. The final dataset thus contains 698 total cases.

3.2 Description of the Sample

Demographically, this sample of delinquent youth is typical of the criminal justice-involved population in New York City. Four out of five subjects are male, and over 90% are persons of color – mostly black and Hispanic. The mean age at disposition was 14.5. Table 3.2 summarizes the main demographic characteristics of the study’s subjects.

Table 3.2: Demographic Characteristics of Youth Receiving Dispositions in NYC, Spring 2000 (N=698)

Sex	<i>Number</i>	<i>Percent</i>
Male	553	79.2
Female	145	20.8
Race		
White	43	6.2
Black	428	61.3
Hispanic	196	28.1
Asian	9	1.3
Other	12	1.7
Don't know	10	1.4
Age at disposition		
9	2	0.3
10	5	0.7
11	8	1.1
12	30	4.3
13	84	12.0
14	173	24.8
15	277	39.7
16	112	16.0
17	7	1.0

Table 3.3 below outlines the legal characteristics of the sample. The plurality of youth adjudicated in the New York City family courts are there as a result of a violent offense. About half of the study's subjects are adjudicated on violent, against person, or weapons charges, while roughly one-third are convicted of property crimes. Only 13% are adjudicated on drug-related charges. However, while the *types* of offenses youth are convicted of seem serious, in that they tend to be violent, the *severities* of those offenses are not so serious. More than half (56.4%) are convicted of misdemeanors. Only 3.2% are convicted on felony A or

felony B charges – the most serious. Thirty-six percent are convicted of lesser felonies (felony C, D or E).

Almost 60% of subjects had been detained at some point during the court process. However, it is important to remember that youth can be detained for many reasons, and not all of these reasons are necessarily related to the youth's threat to public safety, or the likelihood that the youth will eventually be placed. I will discuss this further in the multivariate results sections chapter four. Most youth do not readily admit their guilt regarding the current offense. Only 31.9% take some responsibility for what happened. This is not surprising, as the issues of remorse and admitted involvement are drawn from the I&R report. Under the duress of interrogation by a JPO, with the issue of disposition hanging in the balance, youth may be inclined to minimize or justify their actions as a means to a more lenient sentence. Anecdotally, from reading the I&R reports in the case files, I find that subjects, under questioning from the investigating JPO, commonly attempt to downplay their involvement, redirect responsibility for the incident to the victim or to other perpetrators, or simply deny involvement altogether.^{xxvi} Such efforts may be counterproductive, however, as prior research has shown that taking responsibility can lead to a lesser sanction (e.g., Emerson 1969; Gross 1967; Sanborn 1996).

A substantial proportion of subjects have prior justice system-involvement. Over 40% had previously been arrested, and over one in five had been arrested for

a violent crime. Fifteen percent are being adjudicated for a violation of probation or conditional discharge, meaning that they had been “given a chance” by the court and failed to comply with mandated requirements. Very few subjects (4%) had experienced state placement. This is not surprising, as older youth tend to be placed; by the time they are released, they have often aged out of the juvenile system and are subsequently processed as adults. Finally, almost a quarter of the sample (23.6%) had prior status offenses (PINS complaints) on record, suggesting that these youth are perceived as troublesome and in need of formal supervision. PINS (“persons in need of supervision”) complaints are non-criminal family court cases that are typically filed by a child’s family as a request for formal assistance in controlling the youth’s behavior. JPOs and judges handle PINS cases by referring youth to appropriate services, and imposing sanctions when absolutely necessary. In extreme cases, PINS complaints can lead to placement in foster care or other restrictive settings.

Table 3.3: Legal Characteristics of Youth Receiving Dispositions in NYC, Spring 2000 (N=698)

Top adjudicated charge type	<i>Number</i>	<i>Percent</i>
Violence/against person/weapons	344	49.3
Property	218	31.2
Drugs	91	13.0
Other/don't know	45	6.4
Top adjudicated charge severity		
Felony A or B	22	3.2
Felony C, D or E	251	36.0
Misdemeanor	394	56.4
Other/don't know	31	4.4
Detained before disposition	415	59.5
Takes some responsibility for the offense	223	31.9
Probation/CD violator	106	15.2
Prior arrests on record	284	40.7
Prior arrests for violent offense on record	145	20.8
Previously placed in OCFS	28	4.0
Prior PINS complaints on record	165	23.6

Table 3.4 below describes the home and family-related details of subjects' lives. The study sample appears to be a fairly troubled one, with a high incidence of family and home problems. About 7% live in institutions or are homeless. Almost two-thirds have only one parental figure at home.^{xxvii} Four out of ten had

moved between family units – meaning that they had had different caretakers over the course of their lives.^{xxviii}

A fair number of subjects have problems in the home, though these assessments are colored by the occupational and ideological perspectives of court actors, and thus must be treated with caution. Regardless, according to JPOs, parental figures provide clear supervision in only one quarter of all cases. Only about half of the subjects are usually obedient to their parents. And, about a quarter of the subjects have significant conflict with their parents. In fifteen percent of cases, youths' parents actually requested that they be placed at disposition. Anecdotally, from reading the case files, I found that in the vast majority of these cases, the parent(s) described the youth in question as “out of control/uncontrollable,” or “a threat to the safety of other family members.” Sometimes, parents request placement because youth are engaging in criminal activity (e.g., selling drugs) in the home.

Aside from problems between the youth and family members, the families involved in this study displayed an array of other problems. In 10.9% of the families under study, there had been some official finding of abuse and neglect, though these findings did not necessarily involve the study subject specifically. Ten percent of families have a member in residence with a criminal record; six percent have a member with an alcohol or drug problem; and six percent have a member with a mental health problem. Note that these numbers are probably much

lower than the actual incidence of these problems, as family members, under questioning by court officials, are likely to be reluctant to admit such problems. Only findings of abuse and neglect are checked against official records, and can thus be considered totally accurate. Family criminal history, alcohol and drug use, and mental health issues are gleaned only from interviews between JPOs and family members.

Legal employment is not that common among subjects' family members. Only 53.3% of subjects have *any* family member that is employed, and 44% have at least one family member receiving public assistance.

Table 3.4: Family Characteristics of Youth Receiving Dispositions in NYC, Spring 2000 (N=698)

Parental figures in household	<i>Number</i>	<i>Percent</i>
2 parents/guardians	191	27.4
1 parent/guardian	455	65.2
Institution/homeless/don't know	52	7.4
Youth has history of moving b/w family units	279	40.0
Parent(s) set clear supervision boundaries	178	25.5
Youth is usually obedient to parent(s)	345	49.4
Significant conflict with parent(s)	175	25.1
Parent has asked for placement	105	15.0
Court finding of abuse/neglect in family	76	10.9
Family member has criminal record	65	9.3
Family member has drug/alcohol problem	44	6.3
Family member has mental health problem	43	6.2
Family member is employed	372	53.3
Family member receives public assistance	307	44.0

Table 3.5 below outlines the school-related characteristics of the study subjects.^{xxix} Overall, they do not do very well in school. Fully 15% do not attend at all, or attend less than 10% of the time. Only 12.6% attend more than 90% of the time. School performance is similarly lackluster; only 17.9% are passing more than half of their classes. Almost 30% are enrolled in special education. About

one-third have experienced an official school intervention (detention/suspension/expulsion) for behavioral problems.

Table 3.5: School-Related Characteristics of Youth Receiving Dispositions in NYC, Spring 2000 (N=698)

School attendance	<i>Number</i>	<i>Percent</i>
Good attendance (90% or more)	88	12.6
Average attendance (10-90%)	505	72.3
Poor attendance/not attending (0-10%)	105	15.0
Passing more than half of his/her classes	125	17.9
Youth is in special education	209	29.9
School intervention for behavioral problems	226	32.4

Table 3.6 details some other social and personal details about subjects' social lives that may be pertinent to their risk of being placed, or the risk of future criminal activity. Many youth are believed to have negatively-influencing peer groups. This information is typically obtained through interviews between the investigating JPO and parents. Almost 80% of youth are believed to have some negative peers. Almost 25% are believed to belong to a gang, associate with gang members, or have family members who belong to a gang. A substantial percentage (72.9%) are known to have acted violently against another person, though this figure includes the current offense, so it does not accurately capture violent behavior that is exclusively unrelated to the current adjudication.

Almost half of study subjects admit some past or present drug use – almost always marijuana. The actual number is likely to be higher, as many youth will deny such behavior in the presence of court officials. A common response to the question of drug use is something like, “I tried it once, but did not like it.” During data collection, we found that a youth will often give this response to the probation officer, but then admit to current, often frequent, usage to a mental health clinician. As a result, I have chosen to combine acknowledgement of past and present drug use into a single measure. Still, it is important to note the potential inaccuracy of this measure, and others that are derived from JPO-respondent pre-dispositional interviews.

Behavioral and mental health problems are common. Almost two-thirds have been previously diagnosed, or diagnosed by a court clinician to have such problems. Although very few subjects are known to have serious problems such as bipolar disorder or schizophrenia, a very large number are assessed as having lesser problems such as conduct disorder and antisocial personality disorder. This may be evidence of psychiatric net-widening, but the percentage of subjects who have attended counseling (44.1%) either by will or by mandate suggests that these are people with real problems that require some form of treatment.

Finally, a fair number of subjects (44.3%) participate in some form of organized social activity such as church, organized sports, or after-school clubs.

Table 3.6: Other Social Characteristics of Youth Receiving Dispositions in NYC, Spring 2000 (N=698)

	<i>Number</i>	<i>Percent</i>
Youth has negatively-influencing peers	557	79.8
Youth associates with gang members	164	23.5
Youth has history of violence/assault	509	72.9
Past or present drug use acknowledged	328	47.0
Evidence of behavioral/mental health problems	454	65.0
Youth has attended counseling	308	44.1
Youth participates regularly in organized activities	309	44.3

Overall then, my study population appears fairly troubled, with high incidences of a range of problem issues. Legal contact is common. Problems in the home are varied and serious. School performance is generally quite poor. Peer groups, patterns of substance use, and behavioral issues likewise indicate a group of youth who do not show great promise to achieve success through legitimate means.

3.3 Methodology

Court processing analyses

The first part of my analysis focuses on identifying predictors of court actions – specifically, the JPO dispositional recommendation and the ultimate disposition. I model each of these outcomes separately using logistic regression techniques. Independent predictors have been selected based on prior research and theory. They fall into three broad categories: demographics, legal variables, and social variables. Demographic variables include gender, age and race. Legal variables include current offense and prior legal involvement. Social variables cover a broad range of areas, reflecting the dualistic nature of family court decision-making. These areas include drug use, peers, school performance, family functioning and mental health.

Dependent variables are coded dichotomously. The dependent variable in the JPO dispositional recommendation model is coded one for a placement recommendation and zero for a probation recommendation. The dependent variable in the final disposition model is coded one for a placement disposition and zero for a non-placement disposition. In both models, I conduct diagnostics to test for multicollinearity, and adjust the models accordingly.

Recidivism analyses

The principal goal of the data analysis is to investigate the specific deterrent effect of incarceration on this population of adjudicated youth. To do this, I conduct a number of statistical analyses on these data. The selection of relevant predictors of recidivism for multivariate models is driven primarily by theoretical concerns, as well as findings from prior research. Multivariate analyses, in the form of logistic regression and survival (or “event history”) analysis, test the independent effect of incarceration on the recidivism of delinquent youth, controlling for other potential recidivism predictors. Multivariate models are constructed which include incarceration as a dichotomous independent variable (“ever incarcerated”), and as a continuous variable (“length of incarceration”).

Logistic regression is used to identify predictors of recidivism, and to test the independent effect of placement on recidivism during the follow-up period. Survival analysis predicts time to failure (re-arrest) for study subjects. Modeling the amount of time to recidivistic outcomes allows examinations of both desistance/reintroduction of criminality, and differences between delayed and immediate return to criminal behavior. Survival results will enhance regression results by illustrating the impact of incarceration on the length of time to recidivism for young offenders. Though it may be unnecessary to conduct both regression and survival analysis, I do so as a form of validity checking – to see

whether similar variables emerge as predictors of recidivism for different follow-up periods.

Survival analysis explores the effect of independent covariates on the distribution of “failure” times in a group. This technique is commonly used in biomedical research, where failure refers to death or illness, and researchers wish to test the impact of a treatment on these outcomes while controlling for other relevant factors. It is, however, gaining more widespread usage in the social sciences, and recidivism analyses are a common application, as re-arrest or re-conviction can be easily understood within this notion of “failure.” Multivariate survival analysis allows an estimation of the relative impacts of covariates on the time it takes to fail (get re-arrested) by assessing the effect of each covariate on the shape of the survival curve (i.e., distribution of failure times), as well as determining the levels of statistical significance of associated coefficients.

In the survival analyses, I first attempt to estimate Cox Proportional Hazards models, as the Cox model (also, “Cox regression”) is a versatile survival model that assumes no shape in the underlying distribution of the data. The model’s hazard function is given as:

$$h\{t|x(t)\} = h_0(t) \exp\{x(t)'\beta\},$$

where $x(t)$ is a vector of covariates, and $h_0(t)$ is the hazard function at $x(t)=0$.

The Cox model is *semi-parametric*; it has non-parametric and parametric elements. While the model is non-parametric in that no shape is assumed for the

baseline hazard, a critical assumption in the Cox proportional hazards model is that the effect of a given covariate does not change over time, or more specifically, that the hazards of different values of covariates remain proportional to one another (this is the parametric part). Thus, if Person One's risk of recidivism is twice as great as Person Two's at a certain point in time, Person One's risk is twice as great at all times. This is known as the *proportional hazards assumption*. This proportionality means that regression coefficients are understood as time-invariant, and interpreted as the effect of given covariates on the risk of failure, relative to the baseline risk. There are a number of ways to test the proportional hazards assumption. I apply STATA's^{xxx} survival diagnostic function (STPHTEST command) to test the applicability of the Cox model for each dependent variable.

Dependent variables in the Cox models are:

- Number of days to first arrest;
- Number of days to first arrest for a felony;
- Number of days to first arrest for a violent offense;
- Number of days to first arrest for a violent felony;

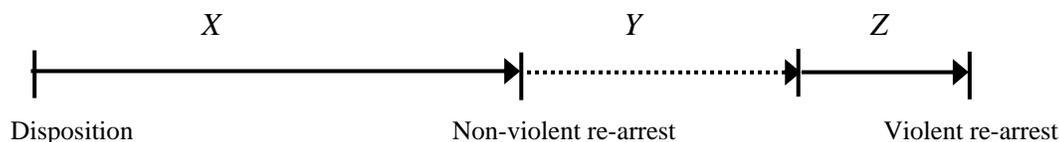
Total follow-up time^{xxxi} (time in the community) in this study is three years – the length of time from the latest possible disposition received (June 30, 2000) and the temporal endpoint of data indicating re-arrest (June 30, 2003). It is

important to note that many study subjects were not in the community for the full three years, as those who were incarcerated were not considered to be at-risk for re-arrest until their release from state facilities. The maximum typical sentence length for juveniles in state-run facilities is eighteen months, but I am able to calculate exact entry and release dates based on state placement data (source: OCFS). It is useful to envision each subject's follow-up period as a "clock" that "ticks" when the youth is in the community and stops when the youth is incarcerated. Upon release from OCFS placement facilities, a subject's recidivism clock begins ticking, and I count the number of days to re-arrest from this temporal starting point.

This process is straightforward when counting the number of days to *any* re-arrest, but is complicated by the estimation of more specific recidivism measures such as time to re-arrest for a violent offense. After disposition or release from placement, a particular youth may be re-arrested for a non-violent offense and incarcerated for this offense for a time, but in terms of the analysis of violent recidivism, this subject has yet to recidivate. Therefore, I am forced to subtract the number of days the youth spent incarcerated on the non-violent offense from the follow-up period. And again, because I have data on all forms of juvenile and adult incarceration, I am able to calculate these incarcerated spells with precision. Below, for further clarity, I present a few visual examples of typical post-disposition trajectories.

In Scenario 2, the youth is placed at disposition, spends X days incarcerated, and is then released. This subject's recidivism clock does not begin ticking until release from placement. The clock stops when the subject is re-arrested after Y days, or when eighteen months elapse after release from placement. In this example, the subject's time to re-arrest is calculated as Y , even though the *real* number of days that have passed between disposition and re-arrest is $X+Y$. If Y is greater than eighteen months, then the subject has not recidivated in my analyses.

Scenario 3: Time to *violent* re-arrest for subject sentenced to probation



Scenario 3 is different because here, I am interested in predicting a specific type of re-arrest: re-arrest for a violent offense. Thus, if the subject is given probation at disposition, then re-arrested and incarcerated for a *non-violent* offense after X days, the recidivism clock stops ticking after X days. After release from incarceration, the recidivism clock begins to tick again, and Z days pass until the subject is re-arrested for a *violent* offense. Here, time to violent recidivism is calculated as $X+Z$, even though $X+Y+Z$ real days have passed since disposition. If $X+Z$ exceeds eighteen months, the subject has not recidivated in my analyses.

The scenarios described above are typical, but not comprehensive. The complexity of the family court process lends itself to myriad trajectories of system contact. For example, a subject sentenced to probation may be technically violated by his JPO because he or she did not go to school, and may be detained pending the outcome of this violation filing. This subject has not been re-arrested, but has been re-incarcerated. In this scenario, I subtract out the incarcerated time from the follow-up period. The point here is that the level of detail in my data allows me to conduct recidivism analyses with an exact knowledge of time spent incarcerated, and I can calculate time incarcerated and time not incarcerated precisely, regardless of how unusual a youth's path through the system may be.

All multivariate models include a series of independent variables derived from prior research and relevant theory. To test the differential impacts of incarceration on theoretically specified subparts of this sample, I add or derive a number of variables to be included in multivariate analyses that reflect theoretically meaningful predictive factors. I create interaction terms between these variables and the *placement* variable to investigate the differential effect of placement on relevant sub-samples. The variables associated with specific hypotheses are listed below.

Hypotheses 3a and 3b ("Control" hypotheses): To test these hypotheses, measures of social control are included in regression and survival analyses. These measures

incorporate variables on family relationships, school engagement, organizational involvement, and peer relationships. Specifically, I draw on variables that reflect:

- Degree of conflict between subject and parents/guardians;
- School attendance;
- Grades in school;
- Nature of peer influences.

Hypothesis 4 (“Social Disorganization” hypothesis): I derive measures of ethnic/racial heterogeneity, poverty and residential mobility for each subject’s neighborhood by linking the “zip code” field to neighborhood characteristics using online data provided by the U.S. Census Bureau.^{xxxii} These measures include:

- Ethnic and racial composition;^{xxxiii}
- Percent of households with public assistance income in 1999;
- Percent of residents below poverty level in 1999;
- Household tenure (owner or renter occupied);
- Residence in 1995 (same/different house, same/different town or city).

Hypotheses 5a and 5b (“Criminal Opportunity” hypotheses): I derive measures of target suitability and capable guardianship in neighborhoods using online U.S. Census data. These include:

- Housing units per square mile;
- Occupancy status (i.e. percent of vacant housing units);
- Population density;
- Percent of population that works outside county of residence;
- Average travel time to work;
- Vehicles per square mile;
- Median rent asked.

3.4 Limitations of the Data

There are a number of limitations to these data. First, because the sample is taken entirely from the New York juvenile justice system, the relevance of findings to other jurisdictions and institutions must be stated with care. New York is a unique place with a distinctively complex system of juvenile justice. Second, since these data are primarily coded from probation department case files, they are constrained by the information contained in these files. Probation I&Rs, for example, are written by probation officers, and largely based on their interviews with delinquent youth. As I have already mentioned, it is likely that recently

arrested youth would not be completely forthcoming about issues such as their drug use and criminal activity in these settings. Where possible, data coders have corroborated coded data across multiple sources, and made educated judgments about the most reliable information available. Relatedly, accounts of delinquent youth written by police officers, probation officers, clinicians, and other criminal justice officials will be inherently affected by the authors' occupational, social, and ideological dispositions. A final limitation is that recidivism measures record arrests in New York State only. Thus, if a subject is arrested in another state during the follow-up period, it cannot be taken into account in these analyses. The offending patterns of youth who move out of the area are unobserved and thus, these cases are a source of bias in the analysis.

3.5 Methodological Limitations

Studies of recidivism must find a balance between allowing sufficient follow-up time and selecting a representative sample. Coding baseline measures at a point in the distant past allows for long follow-up periods, but at the expense of sample representativeness; the further back in time one goes for baseline evaluation, the less that the study's subjects look like their modern-day counterparts. Conversely, a shorter follow-up period promotes greater similarity between sampled subjects and their contemporaries, but these short follow-up periods prevent analyses that explain any long-term impacts on recidivism. The

data set that I use sampled juvenile delinquents in the spring of 2000. This allows for a fairly short follow-up period (3 years total), but there should be a great deal of similarity between study subjects and youth that are currently adjudicated in New York Family Court.

In essence, this research project is “experimental,” in that I seek to test the effects of a type of “treatment” (i.e., placement) on a particular population by comparing treatment group outcomes against the outcomes of a control group (i.e., those who receive community-based sentences). This design raises some methodological issues that can be understood through an examination of the *counterfactual account of causality* (see Winship & Morgan 1999 for a review). The counterfactual framework indicates two potential sources of bias when using observational data to estimate causal effects. First, outcomes for treatment and control groups may differ, even in the absence of treatment, because the two groups are not alike. Second, the potential effects of treatment may differ for treatment and control groups.^{xxxiv} These biases will be unobservable, as treatment group subjects cannot possibly have observable outcomes as control subjects, and control group subjects cannot have observable outcomes as treatment subjects.

Applying the counterfactual framework to the current project, one can imagine two potential areas where bias may manifest itself. First, recidivism will likely be correlated with selection into treatment and control groups. That is, youth who are sentenced to placement will have distinct profiles from those who receive

community sentences (i.e., placed youth may be harder to deter in general). Thus, placed youth may recidivate at higher rates, regardless of their sentence. Similarly, youth on probation may have been more effectively deterred through placement than youth who were actually placed. Second, time actually served in placement is not equal to sentence received, and time served may vary by a number of factors. When a youth receives a sentence of eighteen months in OCFS placement, it simply means that the youth will be under OCFS supervision for eighteen months, not necessarily that the youth will be incarcerated for eighteen months. Depending on his/her behavior in placement and other life circumstances (e.g., family situation), a youth can be released early to OCFS *aftercare* – again, this is essentially a form of parole. Conversely, a placed youth may be incarcerated for a period *longer* than his/her sentence, should OCFS apply for a placement extension due to behavioral issues or their assessment of a youth’s suitability for return to the community. In short, actual time served may also be correlated with pertinent non-legal factors.

The key to addressing these methodological limitations is identifying factors which contribute to selection bias – either by disposition or by time served – and determining whether these factors are measurable or not. For example, if selection into treatment and control groups can be accurately predicted through an analysis of observable factors (legal history, charge severity, family circumstances), I am able to model the selection into treatment and control groups

as a discrete outcome. By controlling for variables that affect group assignment, I eliminate the correlation between assignment and outcome (recidivism). Likewise, if I can model determinants of actual time served, I can control for variations in “assignment” to longer/shorter sentences, and eliminate correlation between *this* type of assignment and outcome.

These limitations are more difficult to address if I find that observable/measurable factors *cannot* explain selection into treatment/control groups, or variations in time served. Should this be the case, I must devise alternative strategies to compensate. A solution that I have adopted is to use *propensity scoring* methods to control for inter-group differences. That is, I model the propensity of each subject to be assigned (sentenced) to the placement or probation group, and include this propensity in multivariate models. I would hope that this calculated propensity can “soak up” unobserved differences between the samples.

Chapter 4

Family Court Processing Analysis

This chapter covers findings related to family court processing in New York City. I focus on two critical and related decision points in the court process: the JPO dispositional recommendation and the judge's ultimate dispositional decision. These decisions are the most important in terms of youths' likelihood of placement. Broadly, I aim to determine why court-involved youth in New York City end up in placement. That is, what legal and social characteristics of youth are associated with an increased chance of incarceration at disposition? Specifically, under what circumstances do JPOs typically recommend placement? Under what circumstances do judges sentence youth to placement? Finally, what is the nature of the relationship between the recommendation and the disposition?

Recall that in the juvenile justice system, sentencing is based on two potentially countervailing forces: community safety and child welfare. In this chapter, I hope to explain how judges and probation officers consider and reconcile these forces in their decisions. In later chapters, I will compare the results of my recidivism analyses with the results of these court processing analyses, in order to assess how well the decisions of court actors actually coincide

with the risk of re-offending. This will allow me to draw comparisons between the purported function of juvenile justice in New York and its actual function.

4.1 JPO Dispositional Recommendations: Descriptive Statistics

Table 4.1 below displays the proportion of subjects who received recommendations for placement and for probation. Eighty-seven cases had no recommendation on file, either because the I&R report was missing, the recommendation had been deferred, or no recommendation had been made.

Table 4.1: JPO Dispositional Recommendations in NYC, Spring 2000 (N=698)

	<i>Number</i>	<i>Percent</i>
Placement	394	56.4
Probation	217	31.1
Don't know	11	1.6
Recommendation deferred	14	2.0
No I&R on file	62	8.9

Most subjects were recommended for placement (56.4%). About one-third received a probation recommendation. Eighty-seven subjects had no recommendation available, for the reasons cited above. These eighty-seven are excluded from the multivariate analysis predicting I&R recommendation.

Table 4.2 below breaks down the demographic, legal and social characteristics of youth receiving placement and probation recommendations. The table serves two purposes. First, it allows me to identify the critical observed

differences between the two sub-samples. Second, these differences begin to suggest the factors that may be most significantly associated with the recommendation. Multivariate analyses will further explore the role of these factors.

Table 4.2: Characteristics of Youth Recommended for Placement and Probation in NYC, Spring 2000 (N=611)

	I&R Recommendation	
	<i>Placement</i>	<i>Probation</i>
Female (%)	18.5*	26.7
Age (mean)	14.53	14.35
Black (%)	63.7*	59.4
Hispanic (%)	29.9*	24.0
Bronx (%)	27.4*	14.3
Brooklyn (%)	27.4*	30.4
Manhattan (%)	26.6*	32.3
Queens (%)	14.0*	17.1
Staten Island (%)	4.6*	6.0
Adjudicated on violent charge (%)	44.2*	58.5
Adjudicated on property charge (%)	31.5*	32.3
Adjudicated on drug charge (%)	16.8*	5.1
Adjudicated on felony charge (%)	42.9*	34.1
Probation violators (%)	19.8*	2.8
Has previous arrests (%)	51.3*	18.4
Has previous violent arrests (%)	25.9*	8.8
Has previous OCFS placements (%)	4.3*	0.5
Has previous PINS complaints (%)	32.0*	6.5
Detained before disposition (%)	84.8*	18.9
Takes some responsibility for offense (%)	27.4*	46.5
In 2 parent household (%)	27.2	28.6
History of moving between family units (%)	45.2*	30.0
Parents set clear boundaries (%)	19.3*	38.2
Usually obedient to parents (%)	33.2*	71.9

Significant conflict with parents (%)	36.3*	8.8
Parent wants youth placed (%)	25.1*	1.8
Court finding of abuse/neglect in house (%)	13.7*	7.4
Family member with criminal record (%)	9.9	8.8
Family member with drug/alcohol problem (%)	10.2*	0.9
Family member with mental health problem (%)	8.1	4.1
Family member is employed (%)	52.3	58.5
Family member receives public assistance (%)	43.4	45.2
Attends school more than 90% of the time (%)	6.1*	24.4
Passing more than ½ of classes (%)	11.7*	32.3
In special education (%)	34.0*	24.9
School intervention for behavioral problem (%)	44.9*	27.6
Has negative peers (%)	84.5*	66.4
Associates with gang members (%)	31.2*	12.0
History of assaultive behavior (%)	78.2*	65.9
Current or past drug use (%)	63.5*	20.3
Has attended counseling (%)	52.3*	32.7
Participates in regular organized activities (%)	39.1	45.6

*Differences significant at $p \leq 0.05$

While the age of the two sub-samples is virtually identical, there are other important demographic differences. Youth who are recommended for probation are more likely to be female (26.7% vs. 18.5%) and less likely to be black or Hispanic (83.4% vs. 92.6%).

There are differences across boroughs as well. The Bronx, in particular, appears to recommend a disproportionate number of youth for placement. It is the only borough in which fewer youth are recommended for probation than placement, and this difference is large. Over a quarter of the youth recommended

for placement (27.4%) come from the Bronx, while only 14.3% of youth recommended for probation come from this borough.

Interestingly, being adjudicated on a drug charges appears to be associated with placement recommendations, while those adjudicated for violent offenses are more likely to be recommended for probation. The two sub-samples have roughly equal proportions of property offenders. Anecdotally, from reading the I&R narratives, it seems that JPOs may view many violent acts as singular emotional outbursts of the “schoolyard fight” variety, while drug offenses, particularly drug selling, are seen as evidence of formal entry into illegal activities and networks. Offense severity, however, appears to be connected to the recommendation in the expected manner. Youth recommended for placement are more likely to be adjudicated on felonies than those receiving probation recommendations (42.9% vs. 34.1%).

Youth recommended for placement have more extensive legal histories than those recommended for probation. They are significantly more likely to be in court for the violation of probation or some other community-based sentence (19.8% vs. 2.8%). They are more likely to have been previously arrested (51.3% vs. 18.4%), to have been previously arrested for a violent crime (25.9% vs. 8.8%), and to have previously experienced state placement (4.3% vs. 0.5%). A much larger proportion of youth receiving placement recommendations are detained during trial (84.8% vs. 18.9%), suggesting that judges may already, during the trial

process, be identifying youth that will eventually be placed. Probation officials, in informal conversations,^{xxxv} have suggested that it is common for judges to give “softer” youth a chance during trial by allowing them to be paroled to their homes. Those youth who make it through trial without further incident have, in a sense, proven themselves to the court and are more likely to be sentenced to probation or some other community-based disposition. Those who “fail” this trial period, by getting re-arrested, absconding or not attending school, are more likely to get placed. Conversely, judges do not feel that it is necessary to give this chance to youth who, because of the characteristics of their cases, will inevitably be placed. Thus, youth who are already destined for incarceration are substantially more likely to be detained during trial, in order to guard against the possibility of absconding or further offending.

A youth’s attitude towards the offense may also contribute to the recommendation outcome. Recall that in Chapter 2, I proposed that youth who are not compliant with institutional expectations, such as probation violators and those who show little remorse, are likely to be “stepped up” to harsher sanctions (see Asquith 1983; Reese, Curtis & Richard 1989). The descriptive statistics presented in Table 4.2 bear this out. Almost half of those recommended for probation (46.5%) take some responsibility for the offense, while only 27.4% of those recommended for placement take such responsibility.

Youth recommended for placement, overall, have much worse home lives than those recommended for probation, though some of these differences are not statistically significant. Those receiving placement recommendations are significantly more likely to have moved between family units (45.2% vs. 30.0%). They are significantly less likely to have clear boundaries set in the home (19.3% vs. 38.2%). They are significantly less likely to be obedient to their parents (33.2% vs. 71.9%) and significantly more likely to have conflict with parents (36.3% vs. 8.8%). Their parents are significantly more likely to ask for placement as a disposition (25.1% vs. 1.8%). They live in households that are significantly more likely to have had an official finding of abuse or neglect (13.7% vs. 7.4%). They are more likely to live with family members with criminal records (9.9% vs. 8.8%, non-significant), drug or alcohol problems (10.2% vs. 0.9%), and mental health problems (8.1% vs. 4.1%, non-significant). Youth recommended for placement are also slightly less likely to have a legitimately-employed family member (52.3% vs. 58.5%, non-significant).

Youth recommended for placement do much worse in school than their probation-recommended counterparts. Their attendance is worse: 6.1% of those recommended for placement attend more than 90% of the time, while 24.4% of those recommended for probation have good attendance. Only 11.7% of youth recommended for placement are passing more than half of their classes. Conversely, almost one-third (32.3%) of youth recommended for probation are

passing more than half. More placement-recommended youth are enrolled in special education (34.0% vs. 24.9%), and more have received some sort of intervention, such as detention or suspension, for behavioral problems in school (44.9% vs. 27.6%).

Placement-recommended youth also exhibit other social and behavioral problems at higher rates. They are significantly more likely to have negative peers (84.5% vs. 66.4%), to associate with gang members (31.2% vs. 12.0%), and to have a history of assaultive behavior (78.2% vs. 65.9%). They more frequently admit to current or past drug use (63.5% vs. 20.3%). A higher proportion has a history of receiving counseling (52.3% vs. 32.7%). Fewer placement-recommended youth regularly participate in organized activities such as church, sports teams or school clubs (39.1% vs. 45.6%, non-significant).

Overall, there appear to be substantial differences between youth recommended for placement and youth recommended for probation, with placement-recommended youth having more extensive legal histories, more family and home problems, lower school engagement, and a higher incidence of behavioral issues. But which of these factors are most important in the minds of JPOs? And which of the two mandates of the juvenile justice system (public safety or child welfare) weighs more heavily on the recommendation? Or, as Asquith (1983) and others have suggested, is there an institutional logic to system decisions that transcends these mandates?

4.2 JPO Dispositional Recommendations: Multivariate Analysis

To predict JPO dispositional recommendations, I estimated a logistic regression model. The dependent variable in this model was coded dichotomously, with a zero value indicating a probation recommendation and a value of one indicating a placement recommendation. Independent variables, drawn from prior research and theory, represented factors that JPOs were likely to consider in making their recommendation, and were split into four categories:

- Demographic: Age, sex, race, borough;
- Risk: Variables signifying higher risk of future offending;
- Needs: Variables describing problems or issues that need attention;
- “Institutional non-compliance”: Variables indicating the degree to which youth meet the expectations of the justice system.

It would be fiction to presume that the categories of “risk,” “need” and “non-compliance” are mutually exclusive and clearly bounded. While some measures fall clearly into a single category (e.g., history of assaultive behavior), others straddle multiple categories. Pre-trial detention, for example, suggests an increased risk of offending, but might also be interpreted by a JPO as a measure of non-compliance with system mandates, as youth who refuse to go to school or show up in court are often remanded to detention by judges. My categorizations,

then, should be viewed as guidelines, rather than definitive theoretical compartments.

Some independent measures were recoded in order to reduce degrees of freedom, and improve the distributions of the variables. Table 4.3 describes the included independent variables, and categorizes them.

Table 4.3: Independent Variables in Logistic Regression Model Predicting JPO Recommendations, Spring 2000

Variable name	Description	Variable type	Variable category
AGE	Age at disposition	Continuous	Demographic
SEX	Sex (male=1)	Dichotomous	Demographic
RACE	Race: white, black, Hispanic, other/don't know	Categorical	Demographic
BOROUGH	Borough of disposition	Categorical	Demographic
TOPVIOL	Top adjudicated charge type is for a violent, against person, or weapons offense	Dichotomous	Risk
TOPSEV	Top adjudicated charge severity: misdemeanor, felony C/D/E, felony A/B, other/don't know	Categorical	Risk
VIOLHIST	Respondent has a history of assaultive behavior	Dichotomous	Risk
PREVAR	Previous or other arrests on record	Dichotomous	Risk
NEGPEERS	Respondent only associates with negative peers	Dichotomous	Risk
FAMDRUG	Family member has a drug or alcohol problem	Dichotomous	Need
CONFLICT	Significant conflict between respondent and parent	Dichotomous	Need
ATTEND	Respondent is not enrolled in school, or attending less than 10% of the time	Dichotomous	Need
PASSING	Respondent is passing more than ½ of his/her classes in school	Dichotomous	Need
CURRDRUG	Current drug or alcohol use by respondent	Dichotomous	Need
COUNSEL	Respondent has previously attended counseling	Dichotomous	Need
DETAINED	Respondent detained before disposition	Dichotomous	Non-compliance
VIOLATED	Current disposition is for violation of probation or other community sentence	Dichotomous	Non-compliance
PINS	Previous PINS complaints on record	Dichotomous	Non-compliance
ATTITUDE	Youth takes some responsibility for the current offense	Dichotomous	Non-compliance

Results of the logistic regression predicting JPO recommendation are presented in Table 4.4 below. For categorical independent variables, the first listed category is the reference category. The logistic regression model correctly predicted 86.9% of dispositional recommendations. The logistic equation produced a significant model with a pseudo R^2 of .413;^{xxxvi} the pseudo R^2 was calculated as $c/(c+N)$, where c was the model chi-square and N was the number of cases. The included independent variables thus improved the goodness of fit 41% over chance.

Multicollinearity did not appear to be a problem among the selected independent variables. I estimated a linear regression, with all independent measures included, and examined the variance inflation factor (VIF) associated with each variable. No VIF had a value exceeding six. Black race had a VIF of 5.9; the Hispanic race VIF was 5.6; and the “other race” VIF was 2.1. VIFs for all other variables were below two, with most being closer to one.

To test for model misspecification, I performed a *linktest* in STATA after running the logistic regression. The *linktest* was non-significant, suggesting an acceptable model specification. Additionally, I examined two two-by-two tables detailing the predictive accuracy of the model. The first table reported the percentage of cases correctly classified on the basis of the base rate – that is, the regression model with no independent predictors included. This classification rate

was 56.5%. I then examined the same table for the full model (with all independent variables); the classification rate improved to 81.8%.

Table 4.4: Logistic Regression Predicting JPO Dispositional Recommendations

Variable name	Variable description	B	Exp(B) [Odds]
AGE	Age at disposition	-0.12	0.89
SEX	Sex (male=1)	0.68	1.97
RACE (1)	Race – white		
RACE (2)	Race – black	1.24	3.45
RACE (3)	Race – Hispanic	0.74	2.09
RACE (4)	Race – other/DK	0.60	1.82
BOROUGH (1)	Borough – Bronx		
BOROUGH (2)	Borough – Brooklyn	-1.83**	0.16
BOROUGH (3)	Borough – Manhattan	-1.30**	0.27
BOROUGH (4)	Borough – Queens	-1.10*	0.33
BOROUGH (5)	Borough – Staten Island	-1.34	0.26
TOPVIOL	Top charge – violent	-1.05**	0.35
TOPSEV (1)	Top charge – misdemeanor		
TOPSEV (2)	Top charge – felony C/D/E	-0.27	0.76
TOPSEV (3)	Top charge – felony A/B	2.09	8.06
TOPSEV (4)	Top charge – other severity/DK	-0.46	0.63
VIOLHIST	History of assaultive behavior	0.72*	2.06
PREVAR	Previous or other arrests on record	0.77*	2.15
NEGPEERS	Only associates with neg. peers	0.66*	1.93
FAMDRUG	Family with drug/alc. Problem	2.57**	13.10
CONFLICT	Significant conflict with parent	0.66	1.94
ATTEND	Not enrolled/attends less than 10%	0.24	1.27
PASSING	Passing more than ½ of classes	-0.07	0.93
CURRDRUG	Current drug or alcohol use	0.82*	2.27
COUNSEL	Previously attended counseling	0.92**	2.50
DETAINED	Detained before disposition	2.56**	12.92
VIOLATED	Violation of probation	2.57**	13.08
PINS	Previous PINS complaints	1.18**	3.27
ATTITUDE	Takes some responsibility for offense	-0.72*	0.49
Constant	Constant	-0.85	0.43
Model Chi ²	430.38**		
Pseudo-R ²	0.413		

* p≤.05; ** p≤.01 (one-tailed).

The most powerful predictors of a placement recommendation were having a family member with a drug problem (odds ratio=13.10), being a probation violator (OR=13.08), and being detained prior to disposition (OR=12.92). Being adjudicated on a violent charge was also significantly related to JPO recommendation, but the direction of this relationship was counterintuitive. Youth adjudicated on violent charges were *less* likely to be recommended for placement than youth adjudicated on property, drug, or other types of charges (OR=0.44).

The model also discerned a strong borough effect, with Bronx JPOs being significantly more likely than JPOs from other boroughs to recommend placement. This dissertation's data are not well suited to systematically identifying the reasons behind this tendency, but it is believed anecdotally that Department of Probation staff members in the Bronx do take a more punitive view of young offenders than staff in other boroughs (differential borough placement rates are the main evidence). Senior staffers, in particular, seem to favor placement dispositions over community alternatives, and there is speculation that this organizational propensity "trickles down" to JPOs making dispositional recommendations. However, other dynamics could be at work. Distinctive social and economic conditions in the Bronx might indeed increase opportunities for juvenile recidivism, and probation staff may simply be recognizing this reality. Specifically, they might believe that recommending probation allows youth to remain in bad neighborhoods (with bad influences) and that therefore, placement is a good way to separate youth from

these influences. As an imperfect test of this proposition, I re-estimated the regression with neighborhood characteristics included as independent variables, in order to see whether these characteristics affected inter-borough recommendation differences (see chapter 3 for variable descriptions and derivations). They did not. Borough differences remained significant, and geographic variables did not significantly affect recommendation patterns. This test was imperfect in that most youth come from the same disadvantaged neighborhoods, and so the assessment of neighborhood effects may have been hindered by the skewed distributions of independent neighborhood variables.^{xxxvii} Nevertheless, the results of this test suggest that there are other, unmeasured, reasons behind the Bronx's more punitive treatment of young offenders. At this point, my best guess is that this is principally an issue of organizational culture.

Other factors that were positively and significantly related to the recommendation were: prior PINS complaints, having a history of counseling, current drug use, prior arrests, a history of assaultive behavior, and having negatively-influencing peers. Taking some responsibility for the offense was, as expected, negatively and significantly related to receiving a placement recommendation.

Race did not appear related to recommendation as no coefficients were significant. However being black, Hispanic, or another nonwhite race did raise odds ratios appreciably. This may have been due to the small number of white

respondents in the sample (n=30 in the recommendation model), so it was suggested that I create a dichotomous white/nonwhite race variable and test its power and significance. The new NONWHITE variable did exhibit a large coefficient (B=1.05; OR=2.85), but it was not statistically significant. So, while there is some evidence that JPOs give either conscious or subconscious consideration to race in their recommendation decisions, this evidence is far from definitive.

Overall, JPOs seem to consider a number of factors related to recidivism risk and youths' needs in making dispositional recommendations, but they appear *most* concerned with youths' respect for and compliance with legal institutions. In other words, JPOs appear to be swayed heavily by indications that youth "have not learned their lesson." In the logistic regression model, *every* variable in the institutional non-compliance category was significantly related to the dispositional recommendation. Two that had a particularly strong relationship with the PO dispositional recommendation were: whether youth were detained before disposition, and whether the current disposition is for a probation violation or violation of some other community disposition (e.g., conditional discharge). Pre-trial detention was the most powerful predictor of a placement recommendation, with youth who were detained before disposition much more likely than non-detained youth to be recommended for placement. Probation violators were substantially more likely to be recommended for placement than non-violators.

Regression coefficients were also significant, and in the expected directions, for variables indicating prior PINS complaints and attitude towards the offense. Youth who took some responsibility for the act that led to the current disposition were significantly less likely to be recommended for placement as those who minimized, justified or simply denied their actions.

These findings suggest that JPOs in New York City may be adopting measures of institutional non-compliance as critical markers in their “frames of relevance” (Asquith 1983). These markers trigger placement recommendations under the auspices of community safety and youth needs, with the twin forces of risk and need reconciled in an accepted logical sequence of sanctions. When a JPO is aware that a youth has been remanded to a city detention facility, the JPO may infer that that youth needs to be kept out of the community as a safety precaution. However, the decision to detain a youth is not based completely on the risk of offending; youth can be detained because of family instability, for fear that the he or she may not appear at the next court date, or a number of other administrative or legal reasons. For example, youth who are arrested after family court working hours are automatically delivered to a city detention facility; if the youth’s parents cannot be reached, or if they cannot come to the facility, the youth is remanded until the first court date. Probation violations can also occur for a number of reasons: truancy, failure to report to or cooperate with the JPO, failure to report to counseling or other mandated services, in addition to re-arrest. Note here that these

failures may have little to do with the likelihood of criminal activities. A youth may not like going to school because he fears being bullied. She may not report to her JPO because she does not like the JPO, or because she cannot find transportation. A youth may not go to counseling because it conflicts with another obligation, such as a part-time job. Likewise, having a PINS complaint on file may not be a good marker of criminal propensity. Youth may be PINS because of drug problems, because they do not like to go to school, or because parents feel the youth is associating with negative peers. Moreover, the presence of a prior PINS complaint can actually represent two countervailing forces – one potentially criminogenic, one potentially protective. PINS complaints indicate that a youth has problems, but also that the youth’s family cares enough to seek formal help from the court. Presumably, there are many youth in the community with problems, but whose families are not engaged or motivated enough to seek help for those problems. Again, I will compare factors associated with court decisions with factors related to recidivism in the next two chapters.

It is important to note here that the factors that best predict JPO recommendations may not necessarily be the ones given most *narrative* weight in the actual I&R reports. While JPOs may, either consciously or unconsciously, be giving these factors priority in their decisions, the language of the actual reports may not reflect this. As Curtis and Reese (1994) claim, JPO reports are accounts using “vocabularies of motive” or “organizationally acceptable languages” to

justify and defend recommendations. What I suggest in this chapter is that the wording of these accounts may be disconnected from the real factors behind recommendation decisions.

The above discussion should not imply that JPOs do not factor needs and risk at all in their dispositional recommendations. While markers of institutional non-compliance are highly predictive of the recommendation, other factors also play a role. Having a family member with a drug problem, one marker of need, is highly associated with receiving a placement recommendation. When JPOs become aware of drug problems in a youth's family, they may assume that these problems detrimentally impact the youth's welfare and behavior. However, JPOs may only become aware of these problems because the affected family member has enrolled in some sort of treatment program, or is openly attempting to address the problem. JPOs probably do not detect many cases in which family members have drug and alcohol problems, as youth and their families, when being interviewed by court officials, are not likely to volunteer such information. Thus, when JPOs do become aware of such problems, it is likely to be in cases where the family, either by will or by coercion, is taking steps to remedy the problem. Two other "needs" variables - having a history of counseling and current drug use - are also predictive of receiving a placement recommendation, though their coefficients are not large (OR=2.50 and 2.27, respectively).

Certain community risk-indicating variables are also significantly associated with the dispositional recommendation, though none exhibit very large coefficients. Youth with previous arrests on record are more likely to receive a recommendation of placement. This is no surprise, and as mentioned above, the previous arrest variable might actually straddle the line between the categories of risk and non-compliance. While a longer criminal record is commonly viewed as a marker of increased offending risk, it also shows that previous sanctioning had not effectively deterred the youth in question. Being adjudicated on felony A or felony B offenses is not significantly associated with the JPO recommendation, though this may be a result of the relatively small number of youth who fall into this category. Only 2.8% of the sample was adjudicated on these most serious charges. However, it seems as if charge severity is, in reality, something that JPOs do consider in their recommendations, as this variable exhibits a fairly large regression coefficient (OR=8.06). Another variable that is significant in the recommendation model was having negatively-influencing peers. Youth who only associate with negative peers are more likely to receive a placement recommendation.

One puzzling finding in my analysis is that when a youth's top adjudicated charge is for a violent offense, he or she is *less* likely to receive a placement recommendation. Though this may seem surprising on the surface, it may be the case that JPOs view many violent offenses as singular, emotional outbursts,

particularly if they are of the “schoolyard fight” variety. Conversely, JPOs may consider property and drug offenses to be calculated crimes-for-profit, which are likely to be repeated in the absence of a restrictive intervention.

My findings in this section seem to support the notion that non-compliance with legal norms and institutional orders is the driving force behind placement recommendations. For JPOs, markers of non-compliance, such as detention status, probation violation, and a youth’s attitude, might serve as a partial solution to the conundrum of juvenile justice. The range of dispositional options available to JPOs is limited, and it is unlikely for any disposition to simultaneously address the issues of public safety and child welfare with any adequacy. Individual-level factors that suggest increased offending risk or the needs of youth thus play second fiddle to proximate institutional factors that are easily knowable and directly indicative of youths’ respect for, and adherence to, the mandates of the system.

4.3 Family Court Dispositions: Descriptive Statistics

I have shown that JPOs, in their assessments of youth, give a great deal of weight to factors that signify compliance with institutional expectations. Next, I wish to investigate the dispositional decision itself. In this sub-section, I explore the types of dispositions that are given to delinquent youth, the degree to which dispositions agree with what JPOs have recommended, and the factors that are most significantly associated with placement. Table 4.5 below lists the frequencies

of dispositions received. About one-half (48.9%) of subjects go to placement. One-third receives straight probation. Nine percent end up in community-based alternative-to-placement programs, and another nine percent receive conditional discharges.

Table 4.5: NYC Family Court Dispositions, Spring 2000 (N=698)

	<i>Number</i>	<i>Percent</i>
Placement	341	48.9
Probation	230	33.0
Alternative-to-placement program (JISP, CASES)	62	8.9
Conditional discharge	65	9.3

Next, I explore the degree to which recommendations and dispositions agree. In line with prior research, I find a high rate of agreement between recommendations offered by JPOs and ensuing dispositions (see Table 4.6 below).

Table 4.6: Agreement of NYC JPOs and Judges by Disposition, Spring 2000 (N=698)

Disposition	JPO Recommendation		
	Probation	Placement	Missing/Don't know
Probation	94.0%	26.4%	56.3%
Placement	6.0%	73.6%	43.7%

When a JPO recommends probation, the youth is given probation 94% of the time. Similarly, when the JPO recommends placement, the juvenile is

sentenced to placement about 74% of the time. These results underscore the important role of JPOs in determining juvenile dispositions. The reason that placement recommendations lead to placement dispositions less often than probation recommendations lead to probation dispositions has to do with the availability of alternative-to-placement programs in New York City. A certain proportion of court-involved youth who are recommended for placement are screened for eligibility for these community-based alternatives, and some of these youth are accepted and “stepped down” to community supervision. However, youth who are recommended for probation are rarely “stepped up” to placement dispositions.

In cases where no recommendation could be found, subjects were fairly evenly split between probation and placement dispositions (56.3% versus 43.7%), suggesting an absence of bias in the reasons behind missing/deferred/unknown recommendations.

Next, I explore the characteristics of youth receiving different dispositions: placement, community-based alternative-to-placement, probation, and conditional discharge (see Table 4.7 below). As expected, youth sentenced to placement have the most extensive legal histories, the highest incidence of home/family problems, and the worst school performance. There is also evidence of other problems among this group, such as drug use, behavioral issues, and peer influences.

Table 4.7: Characteristics of NYC Youth Given Different Dispositions, Spring 2000 (N=698)

	<i>Placement</i>	<i>Alt-to- placement</i>	<i>Probation</i>	<i>CD</i>
Female (%)	16.7*	24.2	22.2	33.8
Age (mean)	14.45	14.74	14.50	14.46
Black (%)	64.8*	58.1	58.7	55.4
Hispanic (%)	29.0*	32.3	23.9	27.7
Bronx (%)	28.4*	19.4	12.6	29.2
Brooklyn (%)	26.7*	32.3	31.7	29.2
Manhattan (%)	26.7*	27.4	28.7	30.8
Queens (%)	14.1*	17.7	18.3	3.1
Staten Island (%)	4.1*	3.2	8.7	7.7
Adjudicated on violent charge (%)	45.2	48.4	53.0	58.5
Adjudicated on property charge (%)	30.8	33.9	32.2	27.7
Adjudicated on drug charge (%)	17.6	8.1	9.6	6.2
Adjudicated on felony charge (%)	46.9*	40.3	33.1	18.5
Detained before disposition (%)	92.1*	50.0	26.1	15.4
Takes some responsibility for offense (%)	24.0*	37.1	41.3	35.4
Probation violators (%)	22.0*	12.9	9.1	3.1
Has previous arrests (%)	56.6*	35.5	22.6	26.2
Has previous violent arrests (%)	29.9*	11.3	10.9	16.9
Has previous OCFS placements (%)	6.7*	0.0	0.4	6.2
Has previous PINS complaints (%)	33.4*	16.1	13.0	16.9
In 2 parent household (%)	24.3*	33.9	27.4	36.9
History of moving b/w family units (%)	46.0*	46.8	33.5	24.6
Parents set clear boundaries (%)	15.2*	25.8	36.1	41.5
Usually obedient to parents (%)	30.2*	54.8	66.5	84.6
Significant conflict with parent (%)	37.8*	22.6	10.4	12.3
Parent wants youth placed (%)	27.0*	6.5	3.5	1.5
Court finding of abuse/neglect (%)	13.8	14.5	7.0	6.2
Family with criminal record (%)	11.7	8.1	7.0	6.2
Family with drug/alcohol problem (%)	9.4*	4.8	3.9	0.0
Family with mental health problem (%)	7.6*	12.9	3.5	1.5
Family member is employed (%)	51.6	50.0	55.7	56.9
Family member with pub. assistance (%)	44.0	46.8	44.8	38.5
Attends school more than 90% (%)	5.3*	11.3	19.1	29.2
Passing more than ½ classes (%)	10.3*	14.5	24.8	36.9
In special education (%)	34.3*	25.8	29.1	13.8
School intervention (%)	42.8*	41.9	30.9	20.0
Has negative peers (%)	85.9*	83.9	71.7	72.3
Associates with gang members (%)	31.7*	29.0	13.0	12.3

History of assaultive behavior (%)	78.6*	87.1	63.0	64.6
Current or past drug use (%)	62.5*	50.0	30.9	20.0
Has attended counseling (%)	49.0*	53.2	36.1	38.5
Participates in organized activities (%)	38.1*	37.1	49.6	64.6

*Differences significant at $p \leq 0.05$.

The descriptive statistics shown in Table 4.7 above mirror those shown in Table 4.2 (youth characteristics by JPO recommendation outcome), and not surprisingly, more severe dispositions appear to be associated with higher incidences of problems. Youth sentenced to placement have the most problems; youth sentenced to conditional discharge have the least, and youth given alternative-to-placement and probation fall in the middle.

I am not going to go into detail about each item listed in Table 4.7, but I will point out some interesting findings. Girls are under-represented and ethnic minorities over-represented at the more severe end of the juvenile sanction spectrum. Age appears to play no role. As with JPO recommendations, the Bronx appears more punitive than other boroughs. Bronx youth comprise the highest proportion of cases going to placement, and a disproportionately low proportion of youth going to probation and alternative-to-placement programs.

Violent charges tend to result in lesser sanctions, while drug charges are associated with more serious sanctions. Placement-bound youth are more likely to be felons than youth receiving community dispositions. Placement-bound youth have the longest legal histories.

Placement-bound youth are the least likely to live in two-parent households, to have clear boundaries set at home, and to be obedient to their parents. They are the most likely to have significant conflict with a parent, and for their parents to want them placed. They are also most likely to have a family member with a criminal record (not statistically significant) or a drug/alcohol problem.

Youth getting placement dispositions also do the worst in school, and on other social and behavioral issues. They have the worst attendance, the worst grades, are most likely to be in special education, and the most likely to have been subject to school intervention for a behavioral problem. They are the most likely to have negative peers and associate with gang members. They are most likely to have admitted past or present drug use.

4.4 Family Court Dispositions: Multivariate Analysis

I use logistic regression to model the judges' dispositional decisions. Two models are estimated. The first predicts judges' disposition decisions. The second predicts cases in which judges override JPO recommendations for probation and decide to place youth. I have estimated this second model in order to get a sense of an important sub-part of the juvenile delinquent population: youth who, by recommendation, appear destined for probation but are placed instead. And in

addition to examining this interesting sub-population, the analysis can help better understand a critical point of disagreement between JPOs and judges. Included independent variables are the same as those included in the JPO recommendation model. The dependent variable the first model is dichotomous, with a value of one indicating a placement disposition. The dependent variable in the second model is also dichotomous, with a value of one indicating a placement disposition in cases where the JPO recommendation was for probation. Table 4.8 below displays the results of the first model.

The logistic regression model correctly predicted 83.1% of dispositional recommendations (compared to a base rate of 51.2%), and produced a significant model with a pseudo R^2 of .392.^{xxxviii} The included independent variables thus improved the goodness of fit 39% over chance. I performed a *linktest* in STATA to assess misspecification; the test was non-significant, suggesting no specification problems. And as with the recommendation model, examination of variance inflation factors did not reveal multicollinearity to be a serious problem.

Table 4.8: Logistic Regression Predicting Dispositions in NYC, Spring 2000 (N=698)

Variable name	Variable description	B	Exp(B) [Odds]
AGE	Age at disposition	-0.38**	0.69
SEX	Sex (male=1)	0.34	1.41
RACE (1)	Race – white		
RACE (2)	Race – black	1.38*	3.97
RACE (3)	Race – Hispanic	1.04	2.82
RACE (4)	Race – other/DK	0.57	1.77
BOROUGH (1)	Borough – Bronx		
BOROUGH (2)	Borough – Brooklyn	-1.58**	0.21
BOROUGH (3)	Borough – Manhattan	-1.02**	0.36
BOROUGH (4)	Borough – Queens	-0.50	0.61
BOROUGH (5)	Borough – Staten Island	-1.30*	0.27
TOPVIOL	Top charge – violent	-0.59*	0.55
TOPSEV (1)	Top charge – misdemeanor		
TOPSEV (2)	Top charge – felony C/D/E	0.36	1.44
TOPSEV (3)	Top charge – felony A/B	0.16	1.18
TOPSEV (4)	Top charge – other/DK	-0.26	0.77
VIOLHIST	History of assaultive behavior	0.42	1.52
PREVAR	Previous or other arrests on record	0.86**	2.36
NEGPEERS	Only associates with negative peers	0.64**	1.90
FAMDRUG	Family member has a drug or alcohol problem	0.67	1.95
CONFLICT	Significant conflict with parent	0.85**	2.34
ATTEND	Not enrolled/attends less than 10%	0.52	1.68
PASSING	Passing more than ½ of classes	-0.40	0.67
CURRDRUG	Current drug or alcohol use	0.14	1.15
COUNSEL	Previously attended counseling	0.07	1.07
DETAINED	Detained before disposition	2.97**	19.43
VIOLATED	Violation of probation	1.05**	2.87
PINS	Previous PINS complaints on record	0.60*	1.82
ATTITUDE	Takes some responsibility for offense	-0.65*	0.52
Constant	Constant	1.59	4.90
Model Chi ²	450.64**		
Pseudo-R ²	0.392		

* p≤.05; ** p≤.01 (one-tailed)

The results of this model are similar to the JPO recommendation model. Most of the factors that predict placement recommendations also predict placement dispositions. Variables indicating institutional non-compliance dominate the disposition model. By far, the strongest predictor of placement is whether a youth was detained prior to disposition (OR=19.43). Probation violation (OR=2.87), attitude towards the offense (OR=-0.52), and prior PINS complaints (OR=1.82) are all significant predictors of placement. The previous arrests variable, which can be considered both a risk measure and a non-compliance measure, is again significant (OR=2.36).

Violent charges are again negatively associated with placement (OR=0.55). Association with negative peers is again positively associated with placement (OR=1.90).

Needs-related factors appear to hold less sway in the dispositional decision, compared to the JPO recommendation. JPOs, in making recommendations, give significant consideration to whether family members have drug or alcohol problems, current drug or alcohol use by the youth, and the youth's history of counseling. However, these factors do not weigh very heavily on the disposition. The only needs variable that significantly predicts placement is conflict between the youth and parent (OR=2.34).

Demographics impact the disposition more than they impact the recommendation. While age is not significantly related to the recommendation, judges appear more reluctant to place older offenders. Age is negatively and significantly related to the likelihood of placement (OR=0.69). That is, the older the youth, the less likely he/she is to be placed. This is surprising, but perhaps judges believe that younger offenders need to be removed from unhealthy environments while there is still a chance for rehabilitation. This finding might also be due to the fact that alternative-to-placement programs are reluctant to accept very young clients. (They may also be legally prohibited from taking on the youngest offenders.)

There appear to be differential placement patterns by borough. Controlling for other factors in the model, I find that judges in the Bronx are substantially more likely to place youth than judges in other boroughs. This pattern is nearly identical to the pattern seen in the JPO recommendation model. It is not clear whether Bronx judges place a higher proportion of young offenders because there are a higher proportion of JPO placement recommendations, or whether there are more placement recommendations because JPOs are in tune with judges' proclivities. Either way, it is unsettling that Bronx youth are more likely to be incarcerated at disposition, even controlling for other case-level factors.

Race also exhibits a more powerful effect on the disposition as compared to the recommendation. While I did find that black youth are more likely than

white youth to be recommended for placement by JPOs (this coefficient was non-significant, but just barely), I find this effect to be even more pronounced for the disposition. Black youth are significantly more likely to be placed by judges than white youth (OR=3.97). But what does this mean?

We must be careful not to jump to the conclusion that judges are more racially biased than JPOs. While this is indeed a possibility, other forces could be at work. Race, for example, could be a proxy for class. Hypothetically, white youth may be more likely than black youth to retain private counsel (as opposed to a public defender). Presumably, the commitment and legal dexterity of a hired defense lawyer would be expected to outstrip the dedication and skill of an overburdened public defender, and thus, those youth with private counsel would be more likely to avoid placement. An alternative explanation might be that there is bias in the system, but the locus of that bias may not be the judge. If alternative-to-placement programs are more likely to admit white youth than black youth, then non-incarceral opportunities will be more limited for black youth, and they will be more likely to be placed. Judges may simply be unable to avoid placing disproportionate numbers of black youth, as their hands would be tied by discriminatory program admission practices. Bridges and Steen (1998) propose a related explanation; they find that JPOs tend to explain the criminal behaviors of black youth through *internal* attributions (i.e., “bad character”), while the behaviors of white youth are explained by *external* attributions (i.e., “family

conflict,” “bad peers”). If this were true in New York City, then judges might be making racially biased decisions because of a systematic skew in the content of JPOs’ I&R narratives. Unfortunately, this is all speculation. My data are not well suited to test the accuracy of these propositions, but it is important to mention them in order to avoid the crude conclusion that judges are simply racist.

So when do judges override JPO recommendations? Table 4.9 below shows the results of the logistic regression model predicting judges’ placement overrides. I exclude the eighty-seven cases in which there was no recommendation on file, resulting in a model N of 611. Overall, this is a poor model; it is not significant. Principally, this is due to the fact that there were only thirteen cases (out of 611) in which such an override occurred. The pseudo- R^2 is quite small: 0.048. Therefore, conclusions drawn from this portion of the analysis must be considered with great caution.

Table 4.9: Logistic Regression Predicting Judge Overrides for Placement, Spring 2000 (N=611)

Variable name	Variable description	B	Exp(B) [Odds]
AGE	Age at disposition	0.24	1.27
SEX	Sex (male=1)	0.11	1.12
RACE (1)	Race – white		
RACE (2)	Race – black	-0.93	0.39
RACE (3)	Race – Hispanic	-0.66	0.52
RACE (4)	Race – other/DK	-0.01	0.99
BOROUGH (1)	Borough – Bronx		
BOROUGH (2)	Borough – Brooklyn	0.28	1.32
BOROUGH (3)	Borough – Manhattan	0.76	2.13
BOROUGH (4)	Borough – Queens	1.78	5.92
BOROUGH (5)	Borough – Staten Island	-5.09	0.01
TOPVIOL	Top charge – violent	0.87	2.40
TOPSEV (1)	Top charge severity – misdemeanor		
TOPSEV (2)	Top charge severity – felony C/D/E	2.02*	7.52
TOPSEV (3)	Top charge severity – felony A/B	-5.00	0.01
TOPSEV (4)	Top charge severity – other/DK	1.66	5.26
VIOLHIST	History of assaultive behavior	-0.28	0.75
PREVAR	Previous or other arrests on record	-0.19	0.82
NEGPEERS	Only associates with negative peers	-0.38	0.68
FAMDRUG	Family member has a drug/alcohol problem	0.16	1.18
CONFLICT	Significant conflict with parent	1.84*	6.28
ATTEND	Not enrolled/attends less than 10%	0.28	1.32
PASSING	Passing more than ½ of classes	0.22	1.25
CURRDRUG	Current drug or alcohol use	-0.86	0.42
COUNSEL	Previously attended counseling	-0.75	0.47
DETAINED	Detained before disposition	1.33	3.77
VIOLATED	Violation of probation	0.48	1.61
PINS	Previous PINS complaints	-1.27	0.28
ATTITUDE	Takes some responsibility for offense	0.50	1.65
Constant	Constant	-9.86	0.00
Model Chi ²	31.38		
Pseudo-R ²	0.048		

* p≤.05.

Only two variables are significantly associated with judges' decisions to override. The first is a top adjudicated charge with a severity of felony C, D or E (OR=7.52). Since youth adjudicated on felony A or B charges are never recommended for probation, this effectively means that when JPOs recommend probation for youth convicted of felonies, judges are likely to give strong consideration to placement. The other variable that is significant in the model is conflict between youth and parent (OR=6.28). It is difficult to say why this is a factor. Perhaps the nature of such conflict is more evident in the courtroom than in interviews with JPOs. Over the course of a number of court dates, judges might get a clearer sense of this conflict, and in certain cases, decide that it would be better to place youth rather than let them remain in a tumultuous family environment.

Since this is such a poor model, I must note here that interpretations of coefficients must be treated with caution. At the $p \leq .05$ level, I might expect to find one coefficient in twenty to be significant by chance (if no variable was significant in the "true" model). Two variables are significant in this model, and so must be interpreted with care.

Another variable deserves mention. Though the *detained before disposition* variable is not significant in the override model, it exhibits a relatively large coefficient (OR=3.77) and approaches statistical significance ($p=0.160$). I wish to discuss the issue of detention because it plays such a large role in the recommendation and the disposition, and because it is indicative of judges'

perceptions of youth. Youth may be detained for many reasons, ranging from risk of absconding, to risk of re-offending, to an unstable home environment. But there are few statutory guidelines to dictate the rationale behind detention. The analyses in this chapter suggest that judges detain youth whom they feel are likely to be placed at disposition. Anecdotal evidence also supports this point. Thus, when a detained youth receives a probation recommendation, judges may choose to look quite closely at the case, and formulate their own reasons for placement. That is, they may see something inherently and unmeasurably dangerous about the youth, and thus override the JPO's recommendation. This decision to place may be foreshadowed by the initial decision to detain.

Though not statistically significant, the coefficients and odds ratios for the race variables in this model were fairly large, and suggested that youth of color are less likely than white youth to have recommendations overridden for placement. (As in the JPO recommendation model, the non-significance may have been due to the small number of white respondents in the sample.) It was suggested that I group nonwhites together and rerun the model to see if the coefficient for a dichotomous race variable (white/non-white) might reach statistical significance. The dichotomous NONWHITE variable did not reach significance, though the coefficient remained large and negative ($B=-0.773$). So, while it seems that whites are more likely to have their recommendations overridden and to be sent to placement against the suggestions of JPOs, I cannot state this with any certainty.

4.5 Conclusion

The purpose and function of juvenile justice in America is distinct from the purpose and function of adult justice. The dual, often conflicting, mandates of public safety and child welfare produce decisions that may meet the requirements of one while ignoring the other. Placement, for example, in removing a youth from the community, is an effective means of (temporary) public protection, but might not be very good for the youth. Probation, on the other hand, can facilitate the provision of needed services, but in allowing the youth to remain at home, may not adequately protect the public from the youth's offending. Given that juvenile justice decision-makers can consider a range of factors in their orders, and that available dispositional options cannot possibly meet the twin mandates of juvenile justice in any satisfactory way, these decisions have the potential to become very muddled. As prior research has shown, decision-makers often cite the same reasons for different dispositions; the need for "treatment" can be used to justify probation, placement, or an alternative-to-placement (Crittendon 1983; Curtis & Reese 1994; Reese, Curtis & Richard 1989). More critical research has suggested that the justificational language behind dispositions, in reality, masks an institutional logic that transcends and reconciles the ideas of risk and need (Asquith 1983; Cicourel 1968; Reese, Curtis and Richard 1989). As there is no easy solution to the dilemma of juvenile justice, the court has created its own ad

hoc solution. That is, the institution establishes its own readily observable markers for ascension up the sanction scale.

In this chapter, I have attempted to uncover the real forces behind dispositions in New York City. The richness of the data I have collected allows a fairly nuanced investigation of the reasons youth get placed or do not get placed. I am thus able to test the relative impacts of individual-level factors on the likelihood of placement, and have split these factors into broad categories representing risk, need, and what I term *institutional non-compliance*. As I have stated previously, these categories are not mutually exclusive, as measures may fall into more than one. But splitting them up as an intellectual exercise is revealing.

I find evidence that JPOs and judges do appear to rely on standard markers of non-compliance in making placement decisions. Detention, probation violation, prior arrests, prior PINS complaints, and attitude toward the offense are all powerful and significant predictors of placement recommendations and dispositions. Detention status is the strongest predictor of a placement recommendation, as well as a placement disposition. It is also one of the most difficult factors to interpret, as there are a number of sub-factors that contribute to the decision to detain. Youth may be detained because of the severity of their offense, or because of extensive prior legal contact. They may also be detained because they are arrested at night or on the weekends and cannot be brought to

court. Judges may detain a youth because of flight risk, or risk of non-appearance in court. They may also detain youth because of an unspecified “badness” that they perceive. In a way, detention status may, empirically, be soaking up a range of characteristics. I have labeled it “non-compliance” because it captures a number of factors that may indicate an inability to adhere to system mandates; judges typically detain youth who they feel will re-offend, flee, or fail to meet some other order (e.g., attend school). Similarly, probation violators, youth with arrest records, and youth with PINS complaints on file are seen to have been given a chance by the system, and to have failed. These measures can be interpreted as indicators of risk, but in reality, they indicate an inability to adhere to system guidelines. A youth’s attitude towards the offense reveals, to JPOs and judges, the degree to which the family court experience has deterred the youth from future actions that may result in repeat court contact.

In the next chapter, I will present the results of my recidivism analyses, which identify factors that are most powerfully associated with the risk of various types of re-offending. I can thus compare the factors that predict placement against the factors that predict recidivism, and determine whether those that get youth placed are congruent with those that empirically indicate recidivism risk. These comparisons will allow me to draw broader conclusions about the purpose and function of juvenile justice. Is the system placing youth who are most likely to re-

offend? Is the system placing youth who are most likely to re-offend in serious, violent ways?

This chapter has also allowed me to examine the relationship between JPO recommendations and judges' dispositions. One question of interest in the field is whether judges follow JPO recommendations or whether JPOs write with the expectations of judges in mind. Unfortunately, my analysis has not produced a clear answer. It does seem that JPOs and judges give weight to the same factors in their decisions, but I cannot discern the direction of the relationship. My attempt to address this question, in modeling judge decisions to override the recommendation, did not produce very reliable results. In truth, the answer to this question may be complicated. Prior research has found differences in recommendation/disposition patterns by decision-maker characteristics (Anderson and Spanier 1980; Brennan and Khinduka 1970; Reese, Curtis and Whitworth 1988; Rush 1992; Walsh 1985). And given the wide discretionary powers of juvenile justice officials, there may be profound differences across boroughs, across judges, and across JPOs.

An alternative possibility is that there is no direction of influence at all. Some research has analyzed the courtroom as a sort of organizational "workgroup" structured around the negotiations of various court actors (Clynch & Neubauer 1981; Eisenstein & Jacob 1977; Ulmer 1997). This characterization, in contrast to the common "adversarial" perspective, depicts many court actors as sharing

common goals (i.e., hassle-free processing) and seeking to maintain group cohesion in the interest of bureaucratic efficiency. I certainly see evidence of this in the operation of the New York City Family Court, as judges and JPOs appear to adopt very similar rationales about the causes of and remedies for delinquent behavior. Perhaps the family court, over time, develops accepted standards of guilt and punishment, and it is this standard that pervades the work of every court actor. Thus, the direction of influence (judge to JPO, versus JPO to judge) may be less germane than the original sources of court punishment ideologies, and how these ideologies vary from court to court. The cross-borough differences I find in placement rates provide some tentative support for this idea.

Chapter 5

Recidivism Analysis and the Effect of Placement

5.1 Introduction

This chapter presents the results of my recidivism analyses. I use logistic regression to identify the best predictors of recidivism, and survival analysis to identify predictors of *time to recidivism*. For all models, the follow-up period is eighteen months of time in the community. In order to better understand the dynamics of different types of re-offending, each series of models predicts four types of recidivism: any re-arrest, any re-arrest for a felony offense, any re-arrest for a violent offense, and any re-arrest for a violent felony offense.

The first question that these analyses address is: What are the best predictors of recidivism? That is, what individual-level characteristics are associated with various types of re-offending? Answering this most basic question allows me to compare factors that predict recidivism against factors that predict placement, thus illustrating the degree to which the rationale behind placement decisions coincides empirically with threat to public safety. It is important to note here that placement decisions are ostensibly based on the dual goals of community safety and child welfare, and my analyses in this chapter do not address the latter

issue. Nevertheless, examining the degree to which family court decision-making identifies the most dangerous young offenders is of critical importance.

Next, the analyses in this chapter address my dissertation's central research questions: Does placement, controlling for other relevant factors, have an impact on recidivism? Can I identify a deterrent or criminogenic effect? And more specifically, does this effect vary by the characteristics of youth – particularly their levels of social bonding and the characteristics of their neighborhoods? The answers to these questions are of academic interest, but they can also have implications for policy.

5.2 Patterns of Recidivism and Time to Recidivism

My initial step in the recidivism analyses is to gauge the extent of recidivism. What proportion, overall, of subjects experience different types of recidivism events? Table 5.1 below breaks these numbers down. Both juvenile and adult re-arrests are counted.

Table 5.1: Proportion of Sample Recidivating within 18 Months (N=698)

Type of recidivism	Percent recidivating within 18 months
Any re-arrest	47.9
Felony re-arrest	32.9
Violent re-arrest	26.0
Violent felony re-arrest	21.1

Recidivism rates are relatively high. Almost half (47.9%) of study subjects, regardless of disposition received, are re-arrested within eighteen months in the community. About one third (32.9%) are re-arrested for felony-level offenses, and roughly one quarter (26.0%) are re-arrested for violent offenses. Slightly more than one fifth (21.1%) experience the most serious type of recidivism – violent felony re-arrest.

Next, I am interested in examining the *timing* of recidivism. That is, how long does it take these youth to be re-arrested? Table 5.2 below displays the average number of days that it takes youth to get re-arrested, to get re-arrested for a felony, to get re-arrested for a violent offense, and to get re-arrested for a violent felony. Note that these are averages among those who are re-arrested only. Those who do not recidivate within eighteen months are excluded from the calculation.

Table 5.2: Average Time to Re-arrest (in Days), among Youth who are Re-arrested

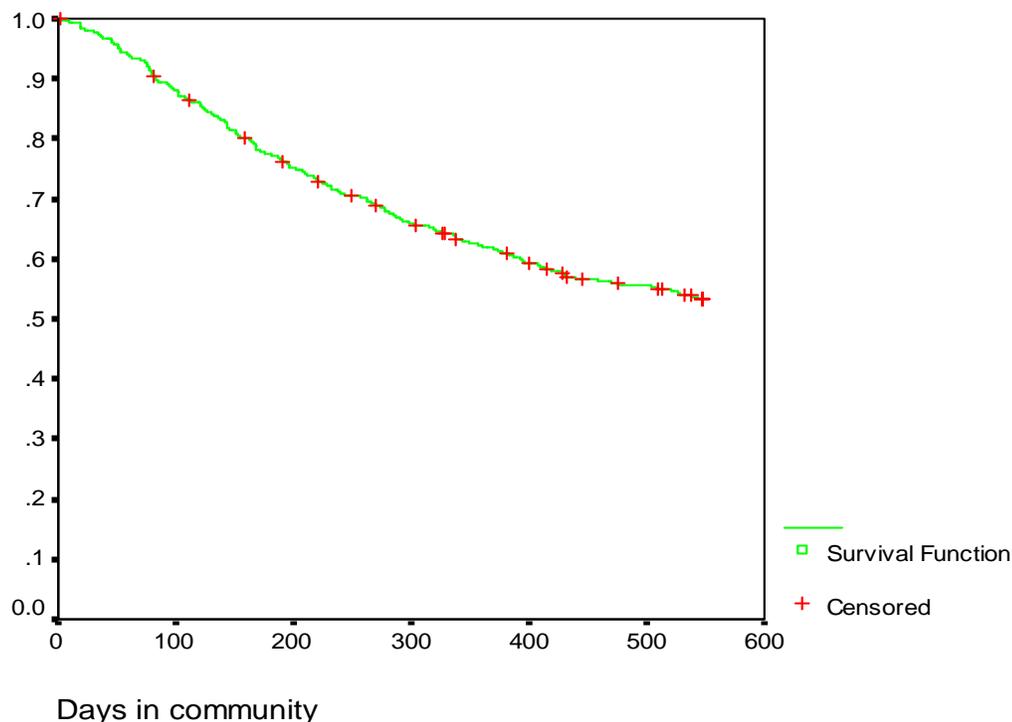
Type of re-arrest	Mean days to re-arrest
Any re-arrest	215
Felony re-arrest	232
Violent re-arrest	246
Violent felony re-arrest	250

Those who are re-arrested are re-arrested, on average, within a year of disposition or release from placement. More serious types of recidivism happen later. While re-arrests, among those who recidivate, occur on average in 215 days, felony re-arrests take about 232 days, violent re-arrests take 246 days, and violent felony re-arrests take 250 days. So more serious types of re-arrests are not only less common, but they also appear to take longer to occur. Table 5.2 is informative, but there is still more to be known about the timing of juvenile recidivism.

To further address this issue, I have created cumulative survival curves that illustrate the proportion of subjects remaining arrest-free during their first eighteen months in the community. These curves paint a detailed picture of the patterns of recidivism over time. See figures 5.1-5.4 below. Note that across all curves, some cases are *censored* before the full eighteen-month risk period elapses. Censoring occurs when a subject runs out of time in the community, and it is therefore not known whether the subject is re-arrested within the allotted follow-up frame.

There are a couple of explanations for these cases. One: subjects may be incarcerated or re-incarcerated as a result of a probation violation or a violation of OCFS aftercare.^{xxxix} These violations may not be due to a re-arrest; rather, subjects may have failed to attend school, or failed to engage some other mandated service. Regardless, these subjects do not accumulate sufficient community time because of their incarceration for these infractions. Two: subjects may have been re-arrested and re-incarcerated, but the re-arrests may not have met the recidivism criteria displayed in the survival curve. For example, if a subject was re-arrested on a misdemeanor and re-incarcerated for the balance of the follow-up period, that subject would be censored in figure 5.2 below (felony re-arrests) because of his or her removal from the community, yet would not have “failed” according to the criteria of figure 5.2 because he or she had not been re-arrested for a felony. Instead, that case would be censored.

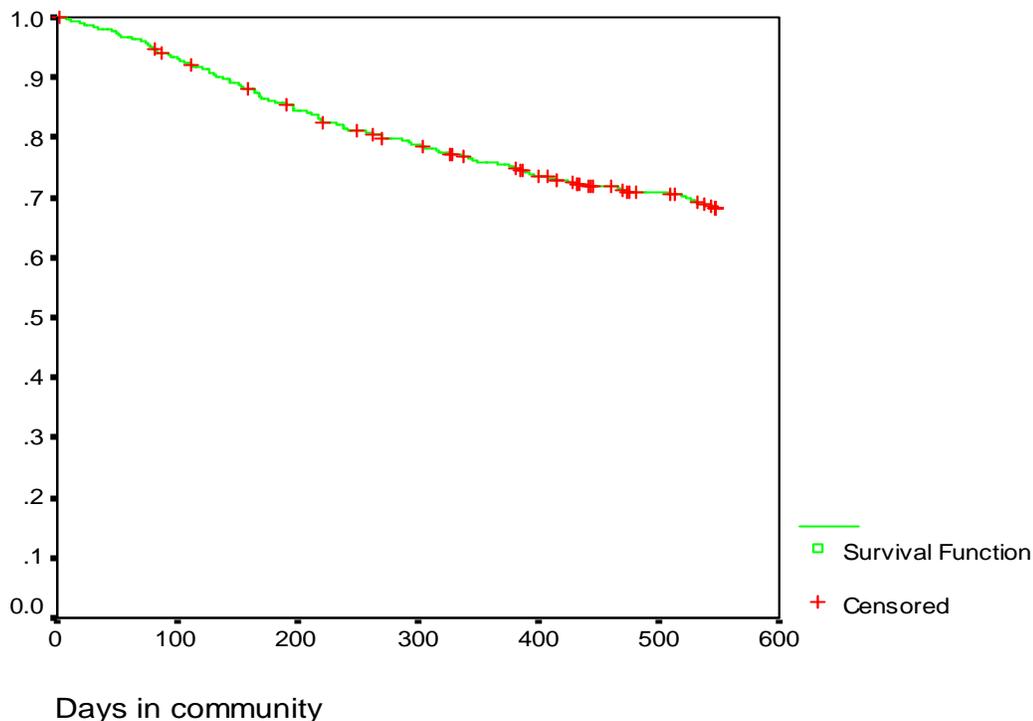
Figure 5.1: Proportion of Subjects Remaining Arrest-Free Over Time



As Table 5.1 and Figure 5.1 show, about half of study subjects are arrested within eighteen months of release to the community. Figure 5.1 illustrates the temporal pattern of this form of recidivism. The initial leg of the curve (until about 50 days in the community) is relatively “flat,” indicating a fairly slow re-arrest rate during this period. The curve then becomes steeper, signifying an increased rate of arrest for the next year or so. At about day four hundred, the curve flattens out again. Overall, this pattern suggests that family court contact may deter youth from offending (or at least getting caught) for a very brief period, after which subjects

re-offend more frequently. The flattening of the curve after about a year implies that among those who will be re-arrested within eighteen months, the period of highest risk is between thirty days and one year in the community.

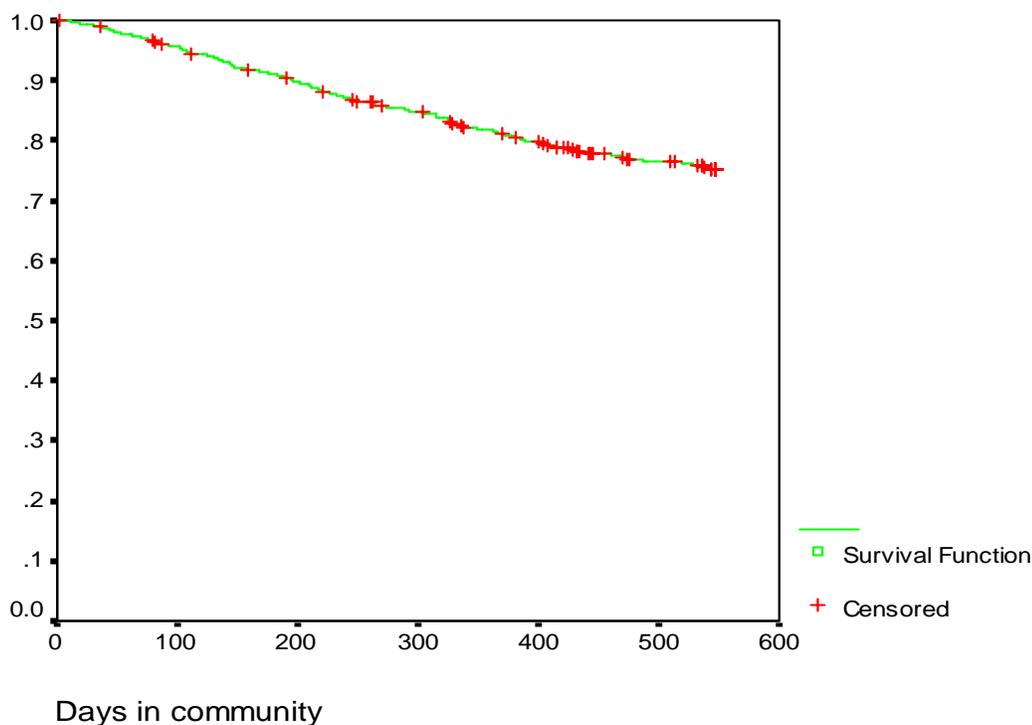
Figure 5.2: Proportion of Subjects Remaining *Felony* Arrest-Free Over Time



The line of the felony re-arrest survival curve is fairly straight, meaning that the rate of re-arrest is steady over time. However, the timing of felony re-arrests follows a similar pattern to the pattern of all arrests, although it is not as pronounced. There is a brief period of fifty to seventy days when the felony re-arrest rate is fairly low, after which the curve gets steeper – though only slightly. After about a year, the rate of felony arrests flattens out a bit. So overall, the rate

of felony re-arrests is stable; though there are subtle shifts in that rate that are worth noting. The stability of this rate indicates that changes in the rate of *all* re-arrests (figure 5.1) are likely due to changes in the pattern of re-arrests for less serious (non-felony) crimes. The pattern of felony-level offending is more consistent over time.

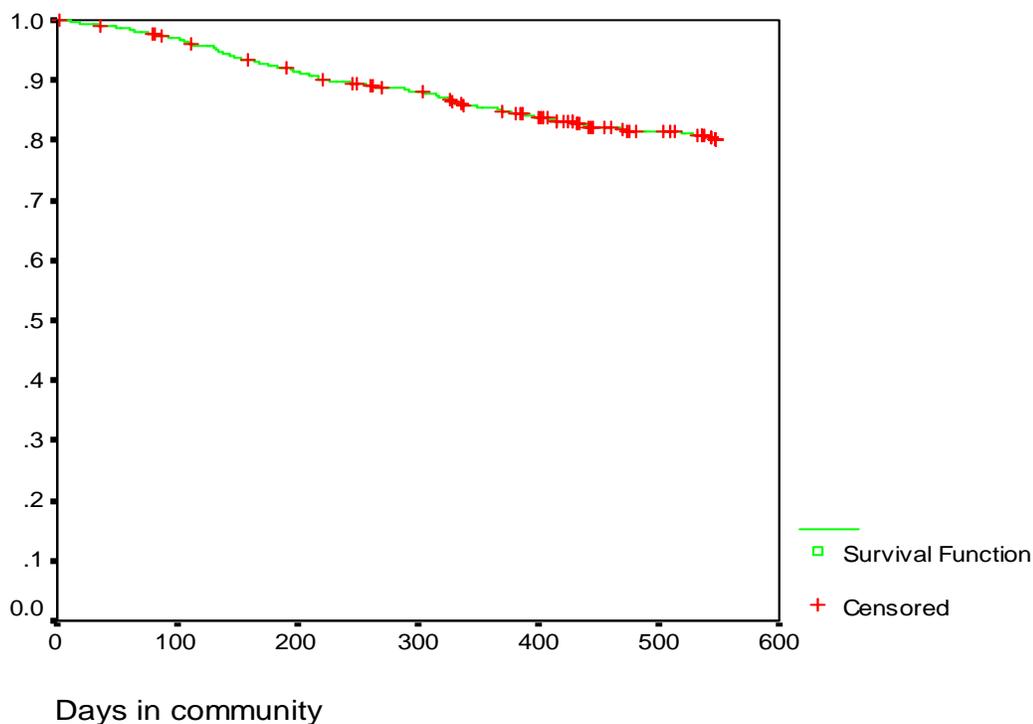
Figure 5.3: Proportion of Subjects Remaining *Violent* Arrest-Free Over Time



The curve shown in figure 5.3 above, indicating re-arrests for violent offenses, is straighter than the previous two curves. The brief period of suppressed offending is still present, as is the slight flattening of the curve after the first year.

But these shifts are even subtler in figure 5.3. Violent re-offending, it seems, is not significantly affected by court contact, as these offenses occur at a very steady rate after disposition or release from placement. There is an intuitive logic to this finding, as violent offenses are more likely than property and drug crimes to be a product of charged emotional circumstances, and less a product of any sort of rational calculation. As such, these violent acts are less likely to be premeditated, and therefore, less likely to be influenced by prior legal contact.

Figure 5.4: Proportion of Subjects Remaining *Violent Felony* Arrest-Free Over Time



Finally, figure 5.4 above shows the temporal pattern of violent felony re-arrests. This is the least common form of recidivism, with only about one fifth of study subjects getting re-arrested for violent felonies. The initial “grace period” is still present, with the rate of violent felony recidivism fairly low for the first one hundred days or so. After this period, the curve gets slightly steeper, indicating a higher risk of re-arrest, and again, the curve flattens out a little after the first year in the community. However, like figure 5.3 (survival for violent re-arrest), the line of this curve is flat and steady. Once again, I am inclined to conclude that the timing of violent recidivism, even serious violent recidivism, is not substantially affected by family court contact. The deterrent (or rehabilitative) impact of the court on violent felony offending, at least in the short term, does not seem to be felt very acutely.

5.3 Predictors of Recidivism and Time to Recidivism

Thus far, I have established overall rates and temporal patterns of recidivism, painting a general picture of youthful offending patterns in New York City. Now, I turn to the characteristics of youth that are most profoundly associated with the likelihood of re-offending. To begin, Table 5.3 below presents recidivism rates broken down by youths’ demographic, legal and social characteristics.

Table 5.3: Recidivism Rates by Characteristics of NYC Youth Receiving Dispositions in Spring 2000 (N=698)

	TYPE OF RECIDIVISM			
	Any re-arrest (%)	Felony re-arrest (%)	Violent re-arrest (%)	Violent felony re-arrest (%)
Male	55.1**	39.4**	31.0**	25.4**
Female	19.6	8.0	7.3	5.1
Age 14 or younger	40.4**	26.5**	24.5	19.2
Age 15 or older	53.3	37.5	27.1	22.5
White	33.3**	17.1*	4.9*	2.4*
Black	52.0	36.3	28.1	22.7
Hispanic	46.0	30.6	26.8	22.0
Other	26.5	23.5	23.5	20.6
Bronx (%)	49.0	35.2	25.0	20.3
Brooklyn (%)	54.1	36.8	29.2	25.0
Manhattan (%)	43.7	31.4	25.8	19.7
Queens (%)	44.4	26.0	22.3	19.4
Staten Island (%)	41.5	29.3	24.4	17.1
Violent adjudicated charge	42.0**	27.5**	22.9	19.0
Non-violent adjudicated charge	53.5	38.1	29.0	23.1
Felony adjudicated charge	55.3**	38.8**	28.3	23.0
Non-felony adjudicated charge	43.1	29.1	24.6	20.0
Subject has history of assaultive behavior	50.1	35.1	28.4*	23.6*
NO history of assaultive behavior	41.8	27.1	19.7	14.6
Subject has previous arrests on record	61.5**	44.0**	34.1**	28.0**
Subject has NO previous arrests on record	38.5	25.3	20.7	16.5
Only associates with negative peers	55.5**	26.3**	31.3**	25.6**
Does NOT only associate with neg. peers	40.6	39.9	21.1	17.0
Family member has drug/alcohol problem	54.8	38.1	30.0	27.5
NO family with drug/alcohol problems	47.4	32.5	25.7	20.7
Significant conflict with parent	54.5*	41.5**	31.1	25.2
NO significant conflict with parent	45.7	30.0	24.3	19.8
Attends school less than 10%	44.0**	49.5**	36.2*	24.7
Attends more than 10% of the time	70.0	30.0	24.3	20.5

Passing less than ½ classes	52.1**	36.2**	28.1*	23.0*
Passing more than ½ classes	29.0	18.2	16.8	12.7
Current drug/alcohol use	62.0**	45.9**	33.9**	29.0**
NO current drug/alcohol use	40.4	26.0	21.9	17.0
Previously attended counseling	50.2	34.7	27.9	23.9
NO previous counseling	46.0	31.5	24.6	19.0
Detained prior to disposition	56.1**	39.0**	31.2**	25.4**
NOT detained prior to disposition	36.2	24.5	18.9	15.3
Disposition is violation of probation	56.9*	39.2	28.7	23.8
Disposition is NOT violation of probation	46.2	31.7	25.5	20.6
Previous PINS complaints	52.2	37.9	26.8	25.0
NO previous PINS complaints	46.5	31.4	25.7	20.0
Takes some responsibility for the offense	38.1**	25.5**	20.0*	14.4**
Minimizes, justifies or denies the offense	52.4	36.4	28.9	24.3

*Differences significant at $p \leq 0.05$; **Differences significant at $p \leq 0.01$.

Demographics matter. Boys are much more likely than girls to recidivate. They are arrested at significantly higher rates for any offense, for felonies, for violent offenses and for violent felonies. Older subjects (15 and above at disposition)^{x1} are significantly more likely than younger subjects to be re-arrested, and to be re-arrested for a felony. They are also more likely to be arrested for violent offenses and violent felonies, though these differences are not statistically significant. Youth of color recidivate at considerably higher rates than white youth. Across all recidivism measures, white youth exhibit extremely low re-arrest rates, while black youth exhibit the highest rates. Hispanic youth also recidivate at much higher rates than white youth, but at slightly lower rates than black youth. Here, it is important not to jump to the conclusion that black and Hispanic youth simply

have greater criminal tendencies than their white counterparts. Race, for example, may be masking other characteristics that are linked to the propensity to offend, or the likelihood of detection. Race might be a proxy for class. Or, the neighborhoods where black and Hispanic youth tend to live might be more heavily policed. Relatedly, police may be more willing to charge youth of color at the moment of arrest, instead of letting them go with a warning.

There are not significant differences in re-arrest rates by borough. This is noteworthy, as I did find borough differences in JPOs' placement recommendations and judges' dispositions in chapter 4. JPOs and judges in the Bronx were significantly more likely than officials in other boroughs to recommend youth for placement, and to order placement at disposition. But despite the fact that youth in the Bronx are more likely to end up in placement, they show no greater propensity to recidivate than youth in any other borough. In fact, though the differences are not statistically significant, youth in Brooklyn exhibit the highest rates of re-arrest, re-arrest for felonies, re-arrest for violent offenses, and re-arrest for violent felonies.

The risk of re-offense also varies by legal characteristics. Subjects adjudicated on violent charges are significantly less likely to be re-arrested, or to be re-arrested for a felony. They are also less likely to be re-arrested for violent offenses and violent felonies, though these differences are not statistically significant. Recall that in chapter 4, I showed that youth adjudicated on violent

offenses are also less likely to be placed at disposition, suggesting that JPOs and judges are correctly identifying these youth as less likely to threaten public safety. Unsurprisingly, youth sentenced for felonies are more likely to experience all four types of recidivism (differences in violent re-arrests and violent felonies not significant). Subjects with a record of assaultive behavior are more likely to be arrested for violent offenses and violent felonies. Youth with prior arrests on record are significantly more likely than youth with no prior arrests to experience all types of recidivism.

Social factors, including school performance, also appear to have some value in distinguishing youth who are likely to re-offend from youth who are not. Subjects who only associate with negative peers are significantly more likely to be re-arrested, to be re-arrested for a felony, to be re-arrested for a violent offense, and to be re-arrested for a violent felony. Youth who have conflict with their parents are significantly more likely to be re-arrested, or to be re-arrested for a felony. Youth who rarely or never attend school are more likely to be re-arrested, re-arrested for a felony, or re-arrested for a violent offense. Similarly, those who do better academically (are passing more than half of their classes) are less likely to experience any type of recidivism, compared to those who do worse in school. Finally, youth who are known to use drugs or alcohol recidivate (all four types) at significantly higher rates.

Chapter 4 revealed that a critical area of interest in the recidivism analyses should be around those factors that indicate institutional non-compliance, such as probation violation, detention status, prior PINS complaints, and attitude toward the offense. Since these factors contribute so heavily to the prediction of placement, I am extremely interested in assessing their relationship to recidivism. The evidence from my bivariate analysis is mixed. Those who are detained before disposition recidivate at much higher rates than those who are not. Similarly, youth who take some responsibility for the offense are much less likely to recidivate than those who do not take any responsibility. However, while probation violators are significantly more likely to be re-arrested than non-violators, differences in rates of felony, violent, and violent felony re-arrests are not statistically significant. The differences in recidivism rates between those with prior PINS complaints and those without are not significant at all.

For the most part, the recidivism rates of my study subjects fall in line with what common sense and prior research would posit. Boys, older subjects, and youth of color recidivate at higher rates. Youth with more extensive legal histories appear more likely to recidivate. And social problems also seem associated with recidivism propensity in the expected directions. However, it is clear that a multivariate analysis is needed to disentangle the potential interactive effects of these factors, and to isolate factors that are empirically linked to the risk of recidivism, controlling for all other factors.

Table 5.4 below summarizes the results of my multivariate logistic regression analyses predicting re-arrest, felony re-arrest, violent re-arrest, and violent felony re-arrest. Cases that are censored (i.e., subject is not re-arrested and does not complete eighteen months in the community) are excluded from the models. The number of censored cases in each model is:

- Any re-arrest: 23
- Felony re-arrest: 38
- Violent re-arrest: 48
- Violent felony re-arrest: 54

Multicollinearity diagnostics revealed no serious problems. None of the recidivism models appeared to be misspecified, and all were significant.

Table 5.4: Logistic Regression Models Predicting Recidivism (N=698)

Variable name	Any arrest		Felony arrest		Violent arrest		Violent felony	
	B	Exp(B) [Odds]	B	Exp(B) [Odds]	B	Exp(B) [Odds]	B	Exp(B) [Odds]
Age	0.17*	1.18	0.11	1.12	0.01	1.01	0.02	1.02
Male	1.68**	5.35	2.08**	8.02	1.81**	6.12	1.89**	6.63
White								
Black	0.93*	2.54	1.29**	3.63	2.35**	10.51	2.63*	13.84
Hispanic	0.60	1.83	0.91	2.48	2.30**	9.92	2.64*	14.01
Other race	-0.42	0.66	0.64	1.91	2.10*	8.16	2.54*	12.73
Bronx								
Brooklyn	0.17	1.18	-0.05	0.95	0.24	1.27	0.37	1.45
Manhattan	-0.15	0.86	-0.18	0.83	0.05	1.05	0.02	1.02
Queens	0.06	1.06	-0.34	0.71	-0.07	0.93	0.07	1.07
Staten Island	0.32	1.37	0.31	1.37	0.83	2.30	0.65	1.91
Violent charge	-0.43*	0.65	-0.46*	0.63	-0.29	0.75	-0.23	0.80
Misdemeanor								
Felony C/D/E	0.17	1.19	0.20	1.22	-0.12	0.89	-0.02	0.98
Felony A/B	2.05**	7.77	1.47**	4.34	0.99	2.68	0.61	1.85
Other severity	0.31	1.37	0.61	1.84	0.00	1.00	-0.01	0.99
Hist. of assault	0.51*	1.67	0.59*	1.81	0.52*	1.68	0.53	1.70
Prior arrests	0.32	1.38	0.26	1.30	0.20	1.23	0.17	1.19
Neg. peers	0.30	1.34	0.25	1.28	0.28	1.32	0.29	1.34
Family drug	-0.44	0.65	-0.38	0.69	-0.30	0.74	-0.07	0.93
Parent conflict	0.04	1.04	0.34	1.40	0.20	1.22	0.11	1.11
School attend.	0.95**	2.59	0.63*	1.88	0.47	1.60	-0.02	0.98
Grades	-0.56*	0.57	-0.54	0.58	-0.38	0.68	-0.48	0.62
Curr. drug use	0.34	1.41	0.36	1.44	0.17	1.18	0.32	1.38
Counseling	0.27	1.31	0.23	1.26	0.21	1.23	0.33	1.38
Detained	0.17	1.19	-0.01	0.99	0.18	1.20	0.06	1.06
Prob. violator	0.00	1.00	-0.07	0.94	-0.17	0.84	-0.17	0.84
Prior PINS	-0.13	0.88	-0.05	0.95	-0.29	0.75	0.01	1.01
Attitude	-0.43*	0.65	-0.34	0.71	-0.33	0.72	-0.50*	0.61
Constant	-5.40**	0.00	-5.97**	0.00	-5.65**	0.00	-6.55	0.00
Model Chi ²	178.1**		146.0**		96.4**		84.2**	
Pseudo-R ²	0.209		0.181		0.129		0.116	

* p≤.05; ** p≤.01 (one-tailed)

Many of the bivariate results (table 5.3) re-emerge in the multivariate analysis. In predicting recidivism, demographics matter quite a bit. The most consistent predictor of recidivism is gender. Boys are much more likely than girls to be re-arrested (OR=5.35), re-arrested for a felony (OR=8.02), re-arrested for a violent offense (OR=6.12), or re-arrested for a violent felony (OR=6.63). Older age is associated with the risk of (any) re-arrest (OR=1.18). And race exerts a profound effect, particularly with regard to violent offending. Black youth are significantly more likely than white youth to experience any of the four forms of re-arrest. Hispanic youth are more likely than white youth to be arrested for a violent offense or a violent felony. There are no significant differences by borough.

Legal variables also contribute to the prediction of recidivism. Violent top charge is negatively and significantly associated with the likelihood of any re-arrest (OR=0.65) and felony re-arrest (OR=0.63). It is also negatively associated with violent re-arrests (OR=0.75) and violent felony re-arrests (OR=0.80), though the coefficients are not statistically significant. In this regard, JPOs and judges appear to be rightly flagging youth as lower risk, as youth adjudicated on violent charges are less likely to be recommended for placement or to be placed at disposition. Youth adjudicated on the most severe charges – felony A's and B's – are also much more likely to be re-arrested (OR=7.77) and to be re-arrested for a

felony (OR=4.34). Finally, histories of assaultive behavior are predictive of any re-arrest (OR=1.67), felony re-arrest (OR=1.81) and violent re-arrest (OR=1.68).

With the exception of measures related to school, social variables are not highly predictive of recidivism. Negative peers, family member drug use, conflict with parents, current drug use, and counseling history are not significant in the models. However, those who attend school less than ten percent of the time are more likely to be re-arrested (OR=2.59) and to be re-arrested for a felony (OR=1.88). Youth who are passing more than half their classes are less likely to be re-arrested (OR=0.57). There are a couple of potential reasons why social variables are not highly predictive of recidivism. Most obviously, they may simply not be related to the risk of re-offending. Alternatively, JPOs and other court officials may not be getting very accurate information about these factors, thus diluting the accuracy and predictive power of the variables in my models. This hypothesis is given further support by the statistical significance of school attendance and grades, which are typically obtained directly from schools and are therefore fairly accurately recorded in court files.

Critically, variables indicating institutional non-compliance do not contribute much to the recidivism models. Only attitude towards the offense matters at all. Youth who take some responsibility for the offense are less likely to be re-arrested (OR=0.65) or to be re-arrested for a violent felony (OR=0.61). Neither pre-trial detention, nor probation violation, nor prior PINS complaints are

significant in any model. The issue of detention, however, is complicated. We must take care here not to conclude that judges are detaining non-risky youth. The decision to detain can be driven by a number of factors that are also included in the regression models (e.g., charge severity, legal history, attitude). These factors are likely related to the risk of recidivism and the risk of placement, as well as the likelihood of pre-trial detention. As the multivariate models include these factors as well, they could be “soaking up” the predictive power of the detention variable. So, even though detention factors heavily into JPOs’ and judges’ placement decisions, the reality may be that detention actually acts as a proxy for a number of other relevant characteristics, and even though the detention variable itself does not contribute much to the prediction of recidivism, the characteristics that get youth detained make this contribution in its place.

Next, I mimic these four logistic regression models using multivariate survival analysis. Results of the survival analysis highlight factors that are statistically associated with time to recidivism. I estimated four Cox Proportional Hazards models. To check for violation of the proportional hazards assumption, I used the STPHTEST command in Stata, version 8. None of the models violate this assumption, and so I report results directly in Table 5.5 below.

To assess overall model fit, I examine pertinent residuals – specifically Cox-Snell residuals. If the Cox model adequately fits the data, these Cox-Snell residuals should have a standard censored exponential distribution with a hazard

ratio of one. To verify, I plot Kaplan-Meier survival curves substituting the Cox-Snell residuals for the time variable, with each relevant recidivism variable still indicating failure. A good model fit is supported when this plot is a straight line with a slope of one (some deviation is acceptable). The four recidivism survival models appear to be reasonably fitted. The Cox-Snell plots are shown in Appendix A.

Table 5.5: Cox (Survival) Models Predicting Recidivism (N=698)

Variable name	Any arrest		Felony arrest		Violent arrest		Violent felony	
	B	Exp(B) [Odds]	B	Odds	B	Odds	B	Odds
Age	0.16**	1.18	0.13*	1.14	0.03	1.03	0.03	1.03
Male	1.26**	3.51	1.72**	5.57	1.62**	5.05	1.70**	5.49
White								
Black	0.61*	1.84	0.93*	2.54	2.03**	7.59	2.32*	10.15
Hispanic	0.50	1.65	0.80	2.23	2.12**	8.30	2.44*	11.52
Other race	-0.26	0.77	0.52	1.68	2.00*	7.36	2.39*	10.95
Bronx								
Brooklyn	0.16	1.17	0.06	1.07	0.26	1.30	0.33	1.40
Manhattan	0.07	1.07	0.05	1.05	0.15	1.16	0.10	1.11
Queens	0.12	1.12	-0.17	0.84	-0.03	0.97	0.01	1.01
Staten Island	0.34	1.41	0.35	1.41	0.83*	2.29	0.60	1.82
Violent charge	-0.23	0.79	-0.25	0.78	-0.19	0.83	-0.16	0.85
Misdemean.								
Felony C/D/E	0.07	1.07	0.11	1.11	-0.15	0.86	-0.10	0.90
Felony A/B	0.89**	2.43	1.08**	2.93	0.57	1.76	0.42	1.52
Other severity	-0.03	0.97	0.21	1.24	-0.09	0.91	-0.02	0.98
Hist. of assault	0.32*	1.38	0.38*	1.46	0.35	1.42	0.41	1.50
Prior arrests	0.26*	1.29	0.30*	1.36	0.17	1.19	0.20	1.22
Neg. peers	0.18	1.20	0.22	1.25	0.24	1.27	0.23	1.26
Family drug	-0.35	0.70	-0.29	0.75	-0.12	0.89	0.06	1.06
Parent conflict	0.09	1.10	0.27	1.31	0.23	1.26	0.14	1.16
School attend.	0.42**	1.52	0.32	1.38	0.22	1.25	-0.10	0.90
Grades	-0.39*	0.68	-0.42	0.66	-0.39	0.68	-0.48	0.62
Curr. drug use	0.17	1.18	0.25	1.28	0.07	1.07	0.23	1.26
Counseling	0.12	1.13	0.13	1.14	0.15	1.16	0.20	1.23
Detained	0.08	1.08	-0.11	0.89	0.14	1.15	0.02	1.02
Prob. Violator	0.01	1.01	0.04	1.04	-0.18	0.84	-0.14	0.87
Prior PINS	-0.15	0.86	-0.10	0.90	-0.34	0.71	-0.09	0.91
Attitude	-0.30*	0.74	-0.26	0.77	-0.28	0.76	-0.41	0.67

* $p \leq .05$; ** $p \leq .01$ (one-tailed)

Overall, the results of the Cox regressions are quite similar to the logistic regression results reported in table 5.4, suggesting that factors which predict the likelihood of re-arrest also predict the speed at which youth are re-arrested. Older age speeds time to re-arrest and time to felony re-arrest. Sex is again the most consistent and powerful predictor, with boys getting arrested faster than girls for all recidivism measures. Black and Hispanic youth generally get re-arrested faster than their white counterparts, particularly for violent offenses and violent felonies.

Youth adjudicated on felony A and B charges are arrested faster and arrested faster for felonies, as are youth with histories of assault, and youth with prior arrests on record.

School attendance and grades are also associated with time to recidivism, in the expected directions. Institutional non-compliance variables such as detention status, probation violation, and prior PINS complaints are not related to the timing of recidivism. However, youth who take some responsibility for the offense do get re-arrested a bit slower than youth who take no such responsibility.

5.4 The Effect of Placement; the Problem of Heterogeneity

I have so far established that the most reliable predictors of recidivism (and the speed of recidivism) are demographics and legal background. But what about placement? Does placement exert any effect on the likelihood or timing of

recidivism? In this section, I re-run the same regression and survival models with a binary placement variable included, in an attempt to identify this effect.

Recall that in chapter 4, I showed that youth who get placed look substantially different from youth who receive probation. In addition to certain demographic differences, youth who get placed have more serious legal records and more social problems. Therefore, it would not be fair to simply compare the recidivism of youth in placement with the recidivism of youth who are not, as youth in placement may have other characteristics that affect their propensity to recidivate. This is the problem of heterogeneity (Winship and Morgan 1999; see also chapter 3). Let me first show the differential recidivism patterns of placed and non-placed youth, to illustrate the raw differences in re-offending between these two sub-samples. Then I will discuss my remedy for this problem.

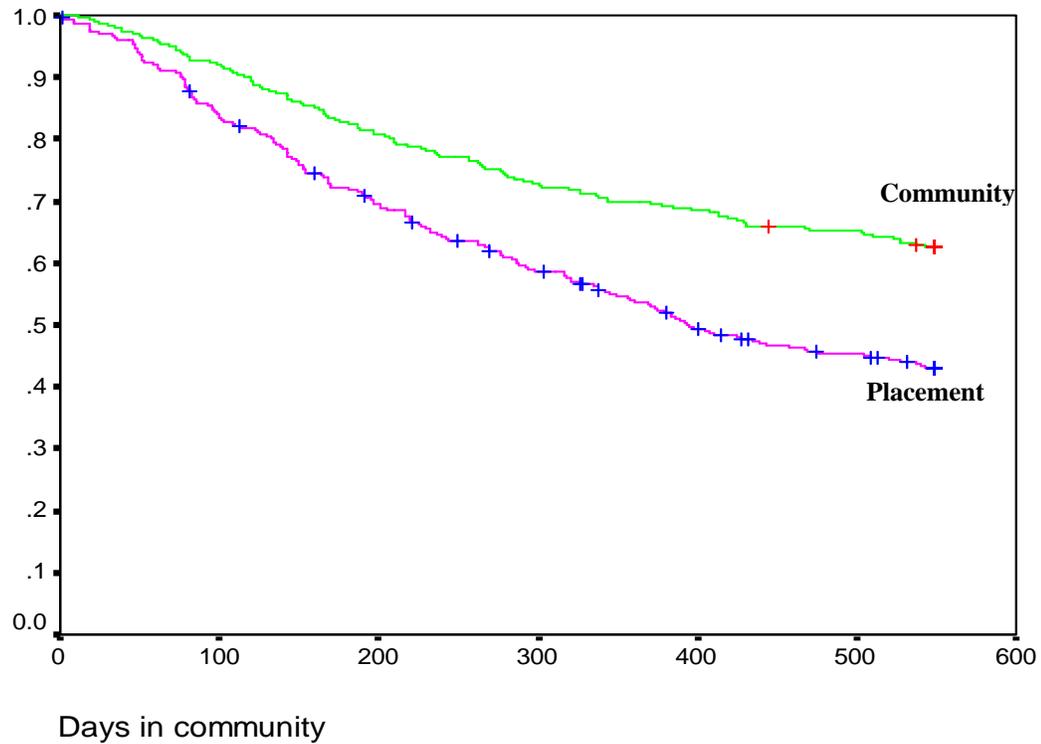
Youth who go to placement are re-arrested more frequently, and more frequently re-arrested for serious and violent offenses, than youth who remain in the community at disposition. Table 5.6 below displays recidivism rates by disposition type.

Table 5.6: Recidivism by Disposition among NYC Youth Disposed in Spring 2000 (N=698)

Type of recidivism	Disposition	
	Placement	Community
% re-arrested	59.1	37.7
% re-arrested for felony	43.3	23.8
% re-arrested for violent	32.7	20.4
% re-arrested for violent felony	28.0	15.4

Figure 5.5 below is a survival curve that illustrates the timing of recidivism by disposition type. There appears to be a brief “grace period” of about fifty days when subjects sentenced to placement recidivate at a similar rate to those given probation and other community sentences. After this period, however, the placement sub-sample recidivates at a considerably faster rate, and by the time eighteen months elapse, roughly twenty percent more placement subjects are arrested than community subjects. Survival curves (by disposition) indicating the proportions of subjects remaining felony arrest-free, violent arrest-free and violent felony arrest-free show similar patterns. I choose not to display these curves here.

Figure 5.5: Proportion of Subjects Remaining Arrest-Free Over Time, by Disposition Type



I have shown that subjects sentenced to placement are arrested faster and more frequently than those given community-based sentences. But is this difference the product of incarceration itself, or the characteristics of youth? Next, I estimate multivariate regression and survival models with a binary variable indicating a placement or community disposition included (PLACEMENT). The inclusion of demographic, legal, and social characteristics in the multivariate models controls for *observed* differences between the two subsamples, but recall from chapter three that *unobserved* differences may also befuddle quasi-

experimental designs. There is no easy fix for this problem. However, I have chosen to use a propensity scoring method to alleviate the relationship between unobserved group differences and recidivism outcomes, which will help isolate the “pure” effect of incarceration. Using the results of my placement prediction model, I calculate each subject’s predicted probability of placement as an independent variable (PREDPROB). PREDPROB is a continuous variable with values ranging from zero to one; a zero value means no chance of placement and a one value means that placement is inevitable. In doing so, I hope that differences in observed independent predictors, in combination, will also soak up unobserved cross-sample differences. Spohn and Holleran (2002) utilize this method in a similar analysis of adult offenders. Table 5.7 below displays the results of the logistic regression models with PLACEMENT and PREDPROB included as independent measures. Table 5.8 displays the results of the Cox survival models with PLACEMENT and PREDPROB included. No Cox model violates the proportional hazards assumption, and all appear to have a reasonable goodness of fit (Cox-Snell residual plots are displayed in Appendix A).

Table 5.7: Logistic Regression Models Predicting Recidivism, with PLACEMENT Included (N=698)

Variable name	Any arrest		Felony arrest		Violent arrest		Violent felony	
	B	Exp(B) [Odds]	B	Odds	B	Odds	B	Odds
Age	0.17*	1.19	0.13	1.13	0.02	1.02	0.05	1.05
Male	1.67**	5.29	2.06**	7.85	1.82**	6.15	1.89**	6.60
White								
Black	0.90*	2.47	1.21*	3.37	2.37**	10.69	2.60*	13.52
Hispanic	0.58	1.78	0.84	2.33	2.31**	10.07	2.62*	13.79
Other race	-0.44	0.65	0.60	1.82	2.12*	8.35	2.57*	13.05
Bronx								
Brooklyn	0.21	1.24	0.06	1.06	0.17	1.19	0.35	1.42
Manhattan	-0.12	0.89	-0.11	0.89	0.01	1.01	0.00	1.00
Queens	0.08	1.08	-0.30	0.74	-0.09	0.91	0.05	1.05
Staten Island	0.35	1.42	0.40	1.50	0.77	2.16	0.62	1.85
Violent charge	-0.42*	0.65	-0.44*	0.64	-0.29	0.75	-0.21	0.81
Misdemean.								
Felony C/D/E	0.16	1.18	0.18	1.20	-0.12	0.89	-0.03	0.97
Felony A/B	2.05**	7.79	1.46**	4.32	1.00	2.73	0.64	1.89
Other severity	0.33	1.39	0.64	1.89	0.00	1.00	0.00	1.00
Hist. Of assault	0.49*	1.64	0.56*	1.75	0.53*	1.71	0.53	1.70
Prior arrests	0.29	1.34	0.20	1.22	0.25	1.28	0.20	1.22
Neg. peers	0.28	1.32	0.21	1.23	0.29	1.34	0.29	1.33
Family drug	-0.44	0.64	-0.40	0.67	-0.30	0.74	-0.07	0.93
Parent conflict	0.01	1.01	0.29	1.34	0.23	1.26	0.12	1.12
School attend.	0.94**	2.56	0.60*	1.82	0.48	1.62	-0.04	0.96
Grades	-0.55*	0.57	-0.52	0.60	-0.38	0.68	-0.48	0.62
Curr. drug use	0.34	1.41	0.36	1.43	0.18	1.20	0.34	1.40
Counseling	0.27	1.31	0.23	1.26	0.22	1.25	0.35	1.42
Detained	0.06	1.06	-0.27	0.76	0.35	1.42	0.18	1.20
Prob. violator	-0.03	0.97	-0.13	0.88	-0.14	0.87	-0.17	0.85
Prior PINS	-0.15	0.86	-0.09	0.91	-0.28	0.76	0.00	1.00
Attitude	-0.41*	0.67	-0.30	0.74	-0.35	0.70	-0.52*	0.60
<i>PREDPROB</i>	0.03	1.03	0.21	1.23	-0.43	0.65	-0.64	0.53
<i>PLACEMENT</i>	0.19	1.21	0.32	1.38	0.10	1.11	0.44	1.55
Constant	-5.50**	0.00	-6.11**	0.00	-5.79**	0.00	-6.96**	0.00
Model Chi ²	178.8**		148.2**		96.9**		86.2**	
Pseudo-R ²	0.209		0.183		0.130		0.118	

* p≤.05; ** p≤.01 (one-tailed)

The inclusion of PLACEMENT (and the predicted probability of placement) does not substantially change the regression results. Demographics continue to contribute the bulk of explanatory power. Legal and social variables make modest contributions.

Placement itself does not appear to increase or decrease the risk of re-arrest (of any type). Across all four models, the PLACEMENT coefficient is small and non-significant. However, the coefficient is consistently positive, hinting at a slight criminogenic placement impact, or perhaps some degree of selection on unobserved variables.

Table 5.8: Cox (Survival) Models Predicting Recidivism, with PLACEMENT Included (N=698)

Variable name	Any arrest		Felony arrest		Violent arrest		Violent felony	
	B	Exp(B) [Odds]	B	Odds	B	Odds	B	Odds
Age	0.17**	1.19	0.14*	1.15	0.04	1.04	0.05	1.05
Male	1.25**	3.50	1.70**	5.48	1.63**	5.10	1.70**	5.48
White								
Black	0.59*	1.81	0.89*	2.44	2.06**	7.85	2.33*	10.23
Hispanic	0.49	1.63	0.77	2.15	2.14**	8.49	2.45*	11.62
Other race	-0.27	0.76	0.49	1.64	2.02*	7.57	2.42*	11.28
Bronx								
Brooklyn	0.16	1.18	0.13	1.14	0.18	1.20	0.28	1.33
Manhattan	0.07	1.08	0.10	1.10	0.10	1.10	0.07	1.07
Queens	0.12	1.13	-0.14	0.87	-0.06	0.94	0.00	1.00
Staten Island	0.35	1.41	0.44	1.55	0.73	2.07	0.55	1.74
Violent charge	-0.23	0.79	-0.23	0.79	-0.20	0.82	-0.15	0.86
Misdemeanor								
Felony C/D/E	0.07	1.07	0.10	1.11	-0.14	0.87	-0.10	0.91
Felony A/B	0.89**	2.45	1.08**	2.93	0.60	1.82	0.44	1.55
Other severity	-0.03	0.97	0.21	1.24	-0.09	0.91	-0.03	0.97
Hist. Of assault	0.32*	1.38	0.36*	1.44	0.38	1.46	0.41	1.51
Prior arrests	0.26*	1.29	0.27	1.31	0.22	1.25	0.24	1.28
Neg. peers	0.18	1.20	0.19	1.21	0.27	1.31	0.24	1.27
Family drug	-0.35	0.70	-0.30	0.74	-0.11	0.89	0.07	1.07
Parent conflict	0.09	1.10	0.24	1.27	0.27	1.31	0.17	1.18
School attend.	0.41**	1.51	0.30	1.35	0.25	1.28	-0.09	0.92
Grades	-0.38*	0.68	-0.40	0.67	-0.40	0.67	-0.48	0.62
Curr. drug use	0.17	1.19	0.25	1.28	0.08	1.08	0.23	1.26
Counseling	0.12	1.13	0.12	1.13	0.16	1.18	0.22	1.24
Detained	0.09	1.09	-0.27	0.76	0.37	1.44	0.20	1.22
Prob. violator	0.02	1.02	0.01	1.01	-0.14	0.87	-0.12	0.89
Prior PINS	-0.15	0.86	-0.12	0.89	-0.31	0.73	-0.08	0.92
Attitude	-0.30*	0.74	-0.24	0.79	-0.30	0.74	-0.42	0.65
PREDPROB	-0.11	0.89	0.11	1.11	-0.43	0.65	-0.57	0.57
PLACEMENT	0.10	1.11	0.20	1.22	0.00	1.00	0.25	1.29

* $p \leq .05$; ** $p \leq .01$ (one-tailed)

Placement does not appear to have a profound effect on time to recidivism either. The inclusion of the PLACEMENT and PREDPROB variables does not change the results of the survival models very much, and the coefficient associated

with PLACEMENT is small and non-significant across models. It is, however, consistently positive, suggesting a minor acceleration in time to recidivism.

5.5 Assessing the Impact of Punishment Severity: Length of Stay

In order to assess whether the severity of punishment is related to the risk of recidivism, I estimate multivariate models with a variable indicating subjects' length of stay in state placement facilities. For these models, I conduct analyses on a sub-sample of youth who were sentenced to placement, excluding those given probation, alternative-to-incarceration, and conditional discharge (n=394). Length of stay is operationalized as a continuous measure representing the number of days that youth spent incarcerated. Table 5.9 reports the logistic regression coefficients of the length of stay variable in the four recidivism models. All other independent predictors are included in these models, but for the sake of clarity, I do not report the associated coefficients.

Table 5.9: Length of Stay Coefficients in Four Recidivism Regression Models (N=698)

	B	Exp(B) [Odds]
Any re-arrest	0.002*	1.002
Felony re-arrest	0.001	1.001
Violent re-arrest	0.001	1.001
Violent felony re-arrest	0.001	1.001

* $p \leq .05$; ** $p \leq .01$ (one-tailed)

The impact of length of stay is minimal. Among youth sentenced to placement, length of stay has a very small, but statistically significant, positive effect on the risk of any re-arrest. For every additional day that youth spend in placement, the risk of re-arrest is increased by about one-fifth of one percent (0.2%). There are no significant relationships between length of stay and felony, violent, or violent felony re-arrests.

Table 5.10 displays length of stay coefficients from four Cox survival models predicting recidivism.

Table 5.10: Length of Stay Coefficients in Four Recidivism Survival Models (N=698)

	B	Exp(B) [Odds]
Any re-arrest	0.001	1.001
Felony re-arrest	0.000	1.000
Violent re-arrest	0.000	1.000
Violent felony re-arrest	0.000	1.000

* $p \leq .05$; ** $p \leq .01$ (one-tailed)

Length of stay in placement has no impact whatsoever on the timing of recidivism. No coefficient in any of the Cox models is significant, and the coefficient values suggest no change in timing related to the length of placement.

5.6 Differential Impacts: Testing the Control Hypotheses

I have shown that placement, above and beyond other relevant predictors of recidivism, does not exert much effect on the timing or likelihood of juvenile re-arrest patterns. But as I proposed in chapter two, there may be differential effects by youth characteristics. Specifically, I wish to determine whether there are differences by degree of conventional social bonding. I have identified four variables in my multivariate models that represent such bonding. They are: having negative peers (only), having significant conflict with a parent, school attendance, and grades.

To operationalize this research agenda, I have created interaction terms that are included in multivariate models. When an interaction term coefficient is statistically significant, this indicates that the effect of one independent variable (i.e., placement) on the dependent variable (recidivism) differs by the value of the other independent variable (peers, parental conflict, attendance, grades).

I re-estimate the four logistic regression models predicting various types of re-arrest with interaction terms included. Coefficients for *placement*negative*

peers and *placement*parental conflict* were not significant in any model. The *placement*attendance* coefficient was significant in the “any re-arrest” model, and the *placement*grades* coefficient was significant in both the any re-arrest model and the felony re-arrest model. The *placement*grades* coefficient was also nearly significant in the violent felony re-arrest model (p=0.06).

I will first explore the interaction between placement and school attendance. Table 5.11 below reports the coefficients, in the “any re-arrest” model, for the placement variable, the attendance variable, and the *placement*attendance* interaction variable. For clarity, I will not report coefficients of other independent predictors in this section.

Table 5.11: Placement*School Attendance Interaction Coefficients in the “Any Re-arrest” Logistic Regression Model (N=698)

Variable	Coefficient (B)
Placement	0.386
Attendance	1.896**
Placement*Attendance	-1.581**

* p≤.05; ** p≤.01 (one-tailed)

How are these coefficients to be interpreted? Assume the following regression equation where **a** is the intercept, **B₁** is the PLACEMENT coefficient, **B₂** is the ATTENDANCE coefficient, and **B₃** is the PLACEMENT*ATTENDANCE interaction coefficient:

$$Y = a + B_1(\text{PLACEMENT}) + B_2(\text{ATTENDANCE}) + B_3(\text{PLACEMENT} * \text{ATTENDANCE})$$

Recall that the ATTENDANCE variable equals one when a subject is not enrolled in school, or attends less than ten percent of the time (“bad attender”);

ATTENDANCE equals zero when a subject attends more than ten percent of the time (“good attender”).

For good attenders (ATTENDANCE=0), the effect of placement (PLACEMENT=1) can be calculated as:

$$Y = a + 0.386(1) + 1.896(0) - 1.581(1*0)$$

OR

$$Y = a + 0.386$$

Placement thus has a modest criminogenic effect on good attenders.

For bad attenders (ATTENDANCE=1), the effect of placement is calculated as:

$$Y = a + 0.386(1) + 1.896(1) - 1.581(1*1)$$

OR

$$Y = a + 0.701$$

Placement therefore also has a criminogenic effect on bad attenders, and this effect is larger than it is for good attenders.

Next, I explore the differential impact of grades. Table 5.12 below displays coefficients for placement, grades and the placement*grades interaction in the any re-arrest, felony re-arrest and violent felony re-arrest regression models.

Table 5.12: Placement*Grades Interaction Coefficients in Three Recidivism Regression Models (N=698)

Variable	Coefficient (B)		
	Any re-arrest	Felony re-arrest	Violent fel. re-arrest
Placement	0.003	0.147	0.292
Grades	-1.102**	-1.134**	-1.038*
Placement*Grades	1.375**	1.400*	1.207

* p≤.05; ** p≤.01 (one-tailed)

Using the same calculations as I made for good and bad attenders, I estimate that for subjects passing less than half their classes (GRADES=0), the effect of placement on the risk of (any) re-arrest is:

$$Y = a + 0.003(1) - 1.102(0) + 1.375(1*0)$$

OR

$$Y = a + 0.003$$

Placement has no apparent impact on youth with “bad” grades. For subjects passing more than half their classes (GRADES=1), I calculate the effect of placement as:

$$Y = a + 0.003(1) - 1.102(1) + 1.375(1*1)$$

OR

$$Y = a + 0.276$$

Placement and grades interact in the opposite manner from placement and attendance. While placement has a larger criminogenic effect on youth with *bad* attendance, youth with *good* grades recidivate more when placed.

Placement has a stronger criminogenic impact in terms of the risk of re-arrest for youth with good grades than for youth with bad grades. This effect is similar when considering felony re-arrests and violent felony re-arrests. Among youth with bad grades, placement modestly increases the risk of re-arrest for a felony ($Y=a+0.147$) and the risk of re-arrest for a violent felony ($Y=a+0.292$; not statistically significant). Among youth with good grades though, placement increases the risk of re-arrest for a felony ($Y=a+0.413$) and the risk of re-arrest for

a violent felony ($Y=a+0.461$; not statistically significant) to a greater extent than it does for youth with bad grades.

I re-ran the four multivariate Cox survival models with the control interactions included, and results were nearly identical to the logistic regression results. Among good attenders, placement slightly accelerated time to (any) arrest. Among bad attenders, placement *substantially* accelerated time to arrest. Among youth with bad grades, placement slightly accelerated time to re-arrest for felonies and violent felonies. Among youth with good grades, placement considerably shortened time to re-arrest, time to re-arrest for a felony, and time to re-arrest for a violent felony. In the interest of avoiding redundancy, I will spare further details of the survival models.

School engagement then, has a profound interactive relationship with placement. While placement overall does not seem to have much of an impact on short-term recidivism, I am able to identify important differential effects by school attendance and academic performance. Let me reiterate the control theory hypotheses I proposed in chapter two:

Hypothesis 3a: Among delinquent youth, the deterrent effect of incarceration will vary by level of social bonding. Those with higher levels of social bonding will recidivate later, and less frequently, than those with lower bonding levels.

Hypothesis 3b: Among delinquent youth, the criminogenic effect of placement will associate positively with level of social bonding. Those with higher levels of social bonding will recidivate sooner, more frequently, and more severely, than those with lower bonding levels.

Overall, I find placement to have a very small, non-significant, criminogenic effect. The school-related differential effects of placement, while significant, are confusing. Youth with bad attendance experience increased recidivism as a result of placement, but so do youth with good grades. Depending on the chosen measure of school engagement then, placement is either worse, or better, for academically-engaged youth.

5.7 Differential Impacts: Testing the Geographic Hypotheses

Next, I attempt to determine whether geographic or neighborhood factors have any effect on recidivism risk, and subsequently, whether there are interactive relationships between placement and neighborhood characteristics. I re-estimate multivariate regression and survival models with geographic variables included. The first set of geographic variables I test in these models are derived from social disorganization theory, which posits that socially disorganized environments increase the probability of criminal activity. Using subjects' zip codes, I have attached year 2000 U.S. Census data to my dataset that indicate:

- Ethnic heterogeneity: calculated as the sum of the squared proportions of persons (p) within each ethnic group from one ($1-\sum p_i^2$);
- Percent of households with public assistance income;
- Percent of residents living below poverty level;
- Median family income;
- Percent of owner occupied housing units;
- Percent of residents living in same house in 1995;

Table 5.13 displays the logistic regression coefficients of the social disorganization variables. I do not report the coefficients for other included independent variables.

Table 5.13: Social Disorganization Variable Coefficients in Logistic Regression Models Predicting Recidivism (N=698)

	Any re-arrest		Felony		Violent		Violent felony	
	B	Exp(B) [Odds]	B	Exp(B) [Odds]	B	Exp(B) [Odds]	B	Exp(B) [Odds]
Ethnic heterogeneity	0.81	2.24	0.86	2.36	0.10	1.11	0.26	1.29
% public assistance	0.00	1.00	0.01	1.01	0.01	1.01	0.01	1.01
% below poverty	0.01	1.01	0.01	1.01	- 0.02	0.98	- 0.02	0.98
Median family inc.	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
% owner occupied	0.00	1.00	0.01	1.01	- 0.01	0.99	- 0.01	0.99
% in same house	0.02	1.02	0.00	1.00	0.03	1.03	0.04	1.04

* $p \leq .05$; ** $p \leq .01$ (one-tailed)

No social disorganization variable is significant in any model, and the effect sizes are not large. I also re-estimated the survival models with these geographic measures included, and results were similar. No variable was statistically significant. I tried using exploratory factor analysis to condense measures, and was able to create a “poverty” factor that combined median family income, percent of households with public assistance, and percent of residents living below the poverty line ($\alpha=0.909$). However, this factor had no relationship to recidivism. I also created interaction terms between each variable and placement, and included these interaction variables in regression and survival models. None of the interaction terms was significant.

Criminal opportunity theory contends that crime rates will be higher in geographic areas with more suitable targets and less capable guardianship. I have derived representative measures from the 2000 U.S. Census. They include:

- Housing units per square mile (target);
- Median rent asked (target);
- Vehicles per square mile (target);
- Percent of vacant housing units (guardianship);
- Population density (guardianship);
- Percent of population that works outside county of residence (guardianship);
- Average travel time to work (guardianship);

Table 5.14 reports the logistic regression coefficients of these criminal opportunity variables across the four recidivism models.

Table 5.14: Criminal Opportunity Variable Coefficients in Logistic Regression Models Predicting Recidivism (N=698)

	Any re-arrest		Felony		Violent		Violent felony	
	B	Exp(B) [Odds]	B	Exp(B) [Odds]	B	Exp(B) [Odds]	B	Exp(B) [Odds]
Housing units per sq mile	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Median rent asked	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Vehicles per sq mile	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
% vacant housing units	0.03	1.03	0.04	1.04	0.02	1.02	0.02	1.02
Population density	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
% working outside county	0.00	1.00	- 0.01	0.99	0.01	1.01	0.00	1.00
Average travel time to work	- 0.01	0.99	0.02	1.02	0.01	1.01	0.00	1.00

* p≤.05; ** p≤.01 (one-tailed)

Like the social disorganization measures, none of the criminal opportunity measures was significant in any model. Results were similar in the multivariate survival models, and I found no interactive effects between any of these variables and placement.

There are a number of reasons why geographic factors do not impact recidivism in my analysis. The most straightforward explanation would be that

neighborhood factors simply have no effect. However, I do not believe that I can draw this conclusion, as my analysis is riddled with methodological problems. First, my measures of social disorganization and criminal opportunity appear too crude to be meaningful. Second, using zip code as a neighborhood proxy may produce analytical “neighborhoods” that are too large to be able to isolate geographic effects. Similarly, zip codes may cross the boundaries of neighborhoods, further muddling the findings. These are limitations of the U.S. Census. Third, most of this study’s subjects are clustered in New York City’s most disadvantaged areas. This was obvious during the data collection process; court-involved youth live almost exclusively in the same neighborhoods, such as Harlem, East New York, and the south Bronx. Because of this limited variation in neighborhoods’ character, my statistical analyses are unlikely to detect neighborhood effects.

Thus, I do not believe that I can affirm or refute the predictions of social disorganization theory or criminal opportunity theory, as my tests are simply inadequate. My data are well suited to testing individual-level theories, but poorly suited to testing community-level theories.

5.8 Conclusion

In this chapter, I have explored patterns of recidivism among delinquent youth in New York City, identified individual-level characteristics associated with an increased risk of recidivism, estimated the impact of placement on recidivism likelihood, and discerned interactive effects between placement and other factors.

Overall, I find recidivism rates to be high, with almost half of my study subjects getting re-arrested within eighteen months of disposition or release from placement. The average time to re-arrest is 215 days, though slightly longer for more serious types of recidivism. If family court contact has any deterrent effect, it is short-lived. There is a brief period (about fifty days post-disposition) of suppressed offending, followed by a more rapid increase in the risk of re-arrest that lasts for about a year, after which the re-arrest rate slows again. While this pattern holds across all four recidivism measures, it is less pronounced for violent recidivism and violent felony recidivism.

The best predictors of recidivism are demographics. Boys are much more likely than girls to recidivate, and there are substantial differences by race, particularly with regard to violent recidivism and violent felony recidivism. Once again, however, one must be careful not to jump to the conclusion that youth of color are simply more violent than white youth. Communities of color are likely to be more heavily policed, and youth of color may penetrate more deeply into the system because of systemic biases. Race, also, could be a proxy for class or other

differential characteristics that are related to the risk of re-offense. Along with demographic factors, some legal and social characteristics contribute to the prediction of recidivism. School engagement, for one, appears to relate significantly to risk. Youth who are out of school a lot may simply have more ample time to offend, or the reasons that they choose not to engage school may also be related to their criminal propensities.

Placement itself has no apparent relationship to recidivism, neither increasing nor decreasing risk. While regression and survival models show consistent positive (criminogenic) effects, none of these effects was statistically significant. Length of stay in incarceration also appears to have minimal impact.

The most interesting finding from this chapter's analysis has to do with interactive effects between placement and school engagement. While placement, on its own, does not affect recidivism, I find significant differential effects by school attendance and grades. The findings related to differential placement effects by school engagement are, however, contradictory. Placement increases the likelihood of recidivism (and decreases time to recidivism) for:

1. Youth who do not attend school very often (poorly engaged youth).
2. Youth who pass more than half of their classes (better engaged youth).

While these findings are hard to explain and reconcile, when they are taken in conjunction with other findings in this chapter, they highlight the profound dilemma of the juvenile justice system. Initial regression results show that poor

school engagement (attendance and grades) predicts recidivism. From these findings alone, we might suggest to policymakers that youth who are poorly-engaged in school should be flagged for placement, as they are most likely to recidivate. When asked to consider the best interests of youth though, such a policy does not seem as sensible, as placement will have a larger negative effect for some poorly-engaged youth than for others. Specifically, placement increases the recidivism of youth who do not attend school very often. In light of this, how should juvenile justice decisionmakers view the function of incarceration? The inability of juvenile sanctions to simultaneously address the issues of public safety and youths' best interests is brought into profound relief, as placement, in many cases, cannot address one without compromising the other.

Chapter 6

Discussion and Conclusion

This dissertation has explored the function and effect of juvenile incarceration in New York City. I have attempted to address two distinct, but analytically and politically intertwined questions:

- Why are youth incarcerated?
- What effect does incarceration have on juvenile re-offending patterns?

Using data collected from Department of Probation case files found in the New York City Family Court, I have developed measures that capture a wide range of characteristics of delinquent youth, and used these data to predict the likelihood of incarceration, as well as the likelihood of recidivism for a sample of youth given dispositions between April and June of 2000. Multivariate statistical techniques have identified the institutional reasons behind juvenile incarceration, as well as the effects of incarceration on four types of recidivism in a controlled eighteen month follow-up period: any re-arrest, re-arrest for a felony, re-arrest for a violent offense, and re-arrest for a violent felony.

In the adult justice system, incarceration is meant to achieve a range of goals, though debates rage about their underlying rationales and utilities. These goals include: incapacitation, retribution, deterrence, and rehabilitation.

Incarceration certainly incapacitates offenders for some period of time; there is no doubt that this goal is effectively accomplished (not considering escapes from incarceration). And retribution, debatably, is also accomplished. The evidence on deterrence is mixed at best, as is evidence about rehabilitative effects. Regardless of which goal is considered the most important, the principal rationale behind incarcerating adults is to reduce the threat to public safety through the reduction of present and future criminal activity.

In the juvenile justice system, however, the purpose of incarceration is more confused, as young people in America are perceived differently from adults. Regardless of the nature of their crimes, young offenders are not viewed as fully culpable, and are always legally considered as candidates for effective rehabilitation. Judges and JPOs, who are the most important decision-makers in the family court, are thus subject to a confusing mandate in making dispositional decisions about youth. The historical development of juvenile justice, as well as the conceived role of the young offender within the system, has resulted in a mandate that orders the simultaneous consideration of both public safety and child welfare in making dispositional decisions. But these purposes are often at odds, and court actors must find a way to resolve them. This is not always easy,

considering that state placement may not necessarily be the best place for youth needing services or treatment, or that youth who may be best served in the community may also present a substantial risk to public safety. But given that the youth who are most likely to offend are generally the youth with most problems, what are the real reasons behind the decision to incarcerate? That is, how do court actors resolve this dilemma of juvenile justice? Adult dispositions are driven by a discrete number of legal factors – most notably the character of the offense and the defendant’s legal history. However, since family court dispositions may be based on a whole host of factors pertaining to youths’ perceived risk and their putative needs, the task of identifying reasons behind juvenile placement is more challenging, and requires more information than administrative data alone can provide.

I find that JPOs and judges in New York City, in making their dispositional decisions, are very concerned with factors that are organizationally and personally proximate. It is nearly impossible, given the limited resources and abilities of the state placement system, to consistently order dispositions that optimally preserve public safety and serve the needs of court-involved youth. Instead, actors appear to solve this problem by adopting markers of institutional compliance and non-compliance as the driving forces behind dispositional recommendations and orders. Youth who demonstrate to the court that they cannot or will not obey its orders are identified as prime candidates for incarceration. In multivariate models

predicting dispositional recommendations and dispositions themselves, I find that such markers, including probation violation, pre-trial detention, prior arrests, and prior status offenses are among the most powerful predictors of placement. When court officials see that youth have not learned their lesson as a result of prior court contact, youth are “stepped up” to more severe sanctions. Similarly, when youth are not viewed as adequately contrite or remorseful, officials are inclined to punish them more severely. I find that youth who minimize, justify or deny their crimes are significantly more likely to be recommended and ordered for state placement than youth who are willing to take some responsibility for their offenses.

JPOs and judges may perceive markers of institutional non-compliance as indicators of increased offense risk, but empirically, they contribute little to the prediction of recidivism. The best predictors of recidivism are factors that court actors cannot control, and furthermore, are unable to cite as reasons for incarceration. Gender and race are the most consistent predictors of re-offending. School engagement is another promising area for investigation. My recidivism analyses show that attendance and grades both contribute to the prediction of re-offending, and that engagement in school may be a good proxy indicator for youths’ propensity to offend.

I have shown that placement decisions are based on the degree to which youth demonstrate that they have “learned their lesson” from prior sanctioning. The question that logically follows is: Does placement teach this lesson? That is,

can placement serve the purpose that other sanctions cannot – namely, to reduce subsequent offending? I find that, at least in the short term, it does not. Placement does not suppress the frequency or speed of recidivism. If anything, it may have a very small criminogenic effect. Across multivariate regression and survival models predicting four types of re-arrest, the placement coefficient is small, positive and non-significant.

Some interesting findings of this dissertation emerge from the analysis of differential placement effects. I find that school engagement is a critical area of distinction. Placement has different impacts depending on whether youth are well-engaged or poorly-engaged in school, though these findings are confusing and difficult to interpret. Among youth who attend school infrequently (or never), placement has a positive and statistically significant association with the risk of recidivism. This effect is substantially greater than the comparable effect placement on “good attenders,” and suggests that these “bad attenders” may have their remaining, tenuous, social bonds destroyed by the experience of incarceration. Strangely, youth who have better achievement in school (passing more than half their classes) experience greater recidivism as a result of placement than youth who pass less than half their classes. So I find some evidence that placement is more suitable for better-bonded youth, and other evidence that placement is more suitable for poorly-bonded youth. These findings are confusing, but perhaps it is more useful to step away from examining specific incarceration

effects, and consider larger issues. By this I mean that if juvenile dispositions are meant to simultaneously address the best interests of public safety and child welfare, these findings indicate that this goal is elusive. Bad attenders and bad achievers, overall, are more likely to recidivate. Thus, if public safety were the principal concern of juvenile dispositional decisions, such youth should be flagged for placement. However, I also find evidence that bad attenders will experience relatively higher recidivism rates as a result of placement. This suggests that placement, in terms of youths' welfare, is not the correct disposition for bad attenders. So which goal – public safety or youth interests – is to take precedence here? This dissertation shows that one cannot be prioritized without, at least in some cases, compromising the other.

6.1 Implications for Research

In terms of family court processing, this research supports other work that highlights organizational mechanisms by which court actors resolve the “risk and need” dilemma of juvenile justice. In the case of New York City juvenile justice, actors tend to conform to established institutional decision processes that step youth up to harsher penalties when they prove themselves to be non-compliant with prior sanctions (Asquith 1983; Cicourel 1968; Reese, Curtis and Richard 1989). This is likely due to the limited range of options available to JPOs, judges and others in the system, and the fact that the juvenile justice system is often the

last resort for needy youth who cannot be handled by other agencies (e.g., schools, children’s services, foster care, mental health). Placement will certainly not optimally meet the needs of every youth who is placed, and court actors may not believe in the notion that incarceration will deter youth from further criminal activity, but when youth cannot abide by the orders of prior court contact without incident, the court’s limited range of options (and the limited time of actors) tends to push these youth further up the scale of sanctions. As Asquith (1983) posits, court officials seem to have adopted a “frame of relevance” to justify young offenders’ movement up the sanction scale; this frame of relevance is shaped by court ideologies about the purpose and function of various sanctions. The juvenile justice system is supposed to mete out individualized justice based on the unique needs and risk of each youth, but resource constraints and the broad diversity of problems that youth present inherently challenge this mandate. In the end, decision-makers must choose among a limited set of dispositional options – none of which may be appropriate for a particular youth. When options run out, or when re-offending appears likely in the absence of a restrictive intervention, placement is likely.

My findings illustrate the complex relationship between the official goals of juvenile justice and the ways that court actors attempt to meet those goals in their day-to-day work. The New York City Family Court system does not conduct routine recidivism analyses.^{xli} JPOs and judges are aware, however, of when youth

re-appear in court. In particular, when they have been non-compliant with prior orders, they are typically handled by the same JPO and often the same judge. But youth who get re-arrested may be adjudicated in another borough, or even another state, or they may age into the adult system. The point being that the court does not have a systematic understanding of recidivism risk, but is well aware of instances when youth fail to comply with its orders. In addition, it is intuitive and logical to move non-compliant youth up a standard sanction scale, as opposed to carefully (and systematically) considering a multitude of interrelated factors, as I have done in this dissertation. JPOs and judges simply do not have the time or energy to do this.

Future research should further investigate the precise means by which court actors assess delinquent youth, as well as the short- and long-term effects of these decisions. More qualitative work in this area is needed. Seminal studies by Cicourel (1968), Emerson (1969), and Asquith (1983) were informative in this regard, and effectively highlighted court operation and inter- relationships between critical actors. However, given the changes that have occurred in the perception and administration of justice in recent years, it would be useful to understand, in an empirically rich way, the reasons that officials believe young people should be incarcerated, and the impact that they believe incarceration will have on individual and collective welfare.

There already exists a body of social scientific research on the prediction of dispositions, as well as some work on identifying biases in dispositions and assessments (Bridges & Steen 1998; Carter 1979; Dannefer & Schutt 1982; Frazier, Bishop & Henretta 1992; Gross 1967; Horowitz & Pottieger 1991; Horwitz & Wasserman 1980; Kowalski & Rickicki 1982; McCarthy & Smith 1986; Phillips & Dinitz 1982; Sanborn 1996; Thomas & Cage 1977; Teilman & Landry 1981; Thornberry 1973; Tittle & Curran 1988). It is rare, however, for research on discretionary court actions to intersect with research on juvenile recidivism (but see Minor, Hartmann and Terry 1997). This intersection is in critical need of development, as it has profound implications for policy. This dissertation begins to fill this gap. Again, I identify distinct inconsistencies between the factors that drive placement and the factors that predict recidivism. Placement, it seems, is driven by factors representing youths' relationships with the court, while recidivism is driven by demographic and social factors. (Recidivism is also harder to predict.)

This dissertation also contributes to an understudied area of criminological scholarship – the impact of incarceration on juvenile populations. I move beyond the simple assessment of aggregate impact, and have attempted to discern differential effects by social and geographic characteristics of youth. In terms of the effect of placement, I find that, at least in the short term, placement has no apparent impact on re-offending. This is an important point, as it calls into

question the very reasons that officials cite for placement. In order to understand what juvenile incarceration is *for*, we must first understand what juvenile incarceration *does*. Placement does not seem to reduce recidivism for everyone. Though my findings in this regard are difficult to interpret, I believe that the degree to which youth are bonded to legitimate institutions is a promising area for future research. Subsequent studies should further develop measures of this bond and explore its role in conditioning recidivism and the effects of sanctioning. One limitation of this dissertation is that most of the data was collected from JPO-written reports. Not only are these reports colored by the unique personal and occupational perspectives of court officials, they are also subject to biases in interviews between JPOs, youth and parents. Self-censorship is certainly a concern. More reliable baseline information, which can be obtained through direct interviews with delinquent youth and their families or the cross-referencing of other types of official records (i.e., school records, family services records), would facilitate the rigorous exploration of the complex relationship between youth characteristics, sanctions, and criminal behavior. I would encourage research investigating the role of such characteristics as:

- Family engagement and conflict;
- Peer influences;
- Participation in organized activities;
- Participation in school and work;

- Traditional aspirations and values.

6.2 Implications for Policy

This research can also help to inform policy and practice in the juvenile justice system. I believe that there are three broad areas that can benefit:

- Highlighting the utility of standardized risk assessment;
- Clarifying the function of juvenile placement;
- Helping policymakers understand the role and function of social bonds.

The data used in this dissertation were originally intended to facilitate the design and implementation of a standardized risk assessment instrument in New York City. I helped to develop this instrument while employed at the Vera Institute of Justice. Because of some of the issues I have highlighted in this dissertation – namely, inconsistency in ad hoc assessment and lack of institutional knowledge about predictors of recidivism risk – the Department of Probation asked Vera to create an instrument that would classify youth according to their risk of re-offending. This instrument has been created and is now in use. JPOs use this instrument to make dispositional recommendations to judges based on a scored scale of factors that are empirically associated with recidivism.

My dissertation has not only highlighted characteristics that predict recidivism, it has also highlighted inconsistency between the factors that JPOs had previously considered important, and factors that are important. Adopting a locally-validated standard assessment instrument helps JPOs make recommendations based on research and data, and it also tempers inconsistency across JPOs and across boroughs. Recall that in chapter four I found statistically significant differences in recommendations and dispositions by borough. This raises serious ethical concerns, as youth adjudicated in the Bronx, controlling for other factors, are more likely than youth in other boroughs to be placed. The adoption of a risk assessment instrument addresses these concerns directly. Not only are borough-by-borough inconsistencies remedied, but differences by JPO and judge are also reduced.^{xlii,xliii}

Relatedly, the findings of this research can also help to clarify the function of juvenile incarceration in the minds of court actors. Knowing the characteristics that are associated with lesser and greater risk, and letting this knowledge inform practice, JPOs and judges can better identify those youth who are best served by placement, and those who should not be incarcerated. The use of this knowledge should be driven by the official goals of placement. If placement is meant to deter or rehabilitate, then those youth whose recidivism is most effectively reduced by placement (i.e., poorly-bonded youth) should be flagged, and efforts should be made to divert those who would benefit least (i.e., well-bonded youth) to

placement alternatives. If placement is merely meant to incapacitate, then perhaps only the most dangerous youth – those at highest risk of re-offending – should be placed. Finally, if placement is meant only as retribution, then this research is of little use, and only the most heinous offenders should be locked up. I would encourage the routine collection and analysis of data by family court officials, in order to ensure that placement is being used appropriately, and that negative effects (higher recidivism) are minimized.^{xliv}

My findings also illustrate that for young offenders, the role of social bonding needs to be given consideration in making decisions that will profoundly affect their lives. And this finding need not only be considered at disposition. Early interventions, such as pre-trial diversion and the assignment of adjournments in contemplation of dismissal (ACDs), can take degree of bonding into account – both in assessments of suitability and the assignment of appropriate services. Youth who do well in school can be favored with low-intensity supervision, and allowed to prove that their delinquency was not part of a repeating pattern of misbehavior. Youth who are not invested in school, conversely, might be given high-intensity educational programming as a precursor to placement. Failure to engage such a program can cement the identification of placement as a last resort measure to effectively serve the youth and protect public safety. Though not definitive, my findings suggest that youth who show themselves to be invested in traditional beliefs, practices and institutions should be “stepped up” the sanction

ladder more slowly than those who are more disconnected. Specifically, school engagement appears to be negatively related to the propensity to recidivate. Among those who demonstrate low engagement, every effort should be made to reestablish their ties to conventional practices and institutions.

6.3 Final Note

This dissertation has used rich data to analyze patterns of family court action, as well as recidivism. The connection of these two areas of analysis is vital to the reform and improvement of juvenile justice in America. We must strive to understand the reasons why youth offend, the reasons behind harsh punishment, and the interrelationships between criminality, sanctioning, and court organization. Moreover, researchers must continue to pursue streams of inquiry into system biases and inequalities such as disproportionate minority confinement. Youth of color, for example, comprise roughly 94% of my study sample, while the 2000 U.S. Census reports that only 22% of New York City residents are people of color.

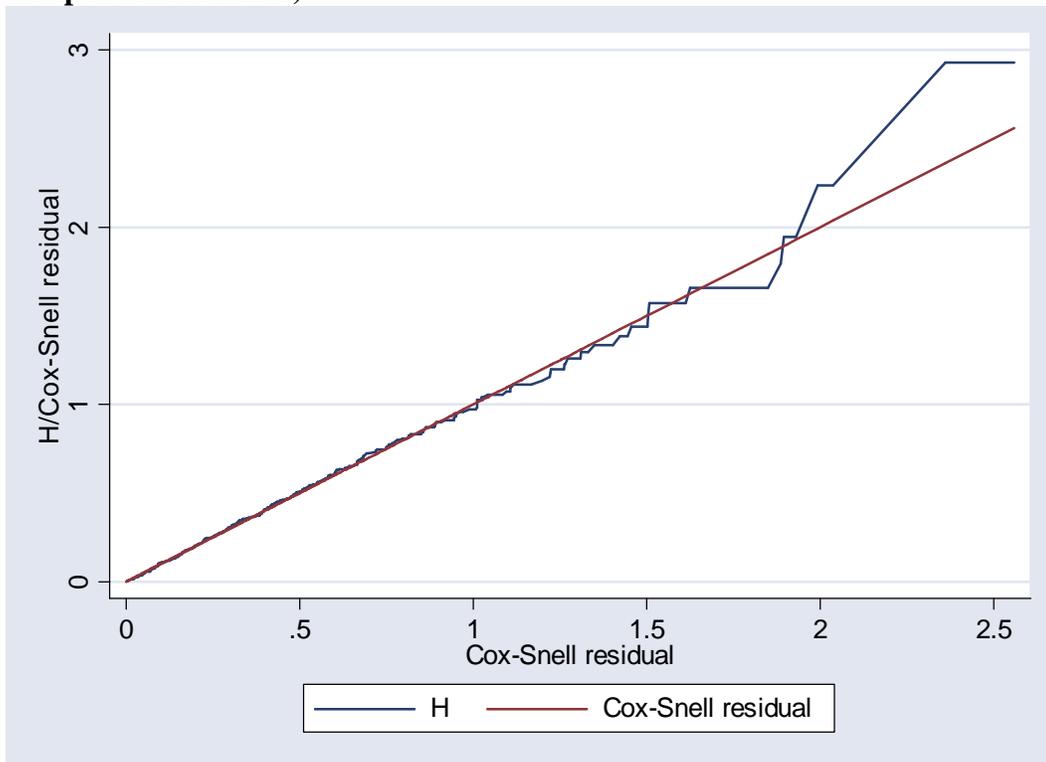
A holistic approach to the study of juvenile justice processing will allow the creation of a transparent, effective, and humane system for the most vulnerable members of our society. Given its potential consequences and the profound effects on those involved, the decision to incarcerate young people should not be taken lightly. As a society, we need to clearly establish the rationales for incarceration, and ensure that we abide by them.

Appendix A

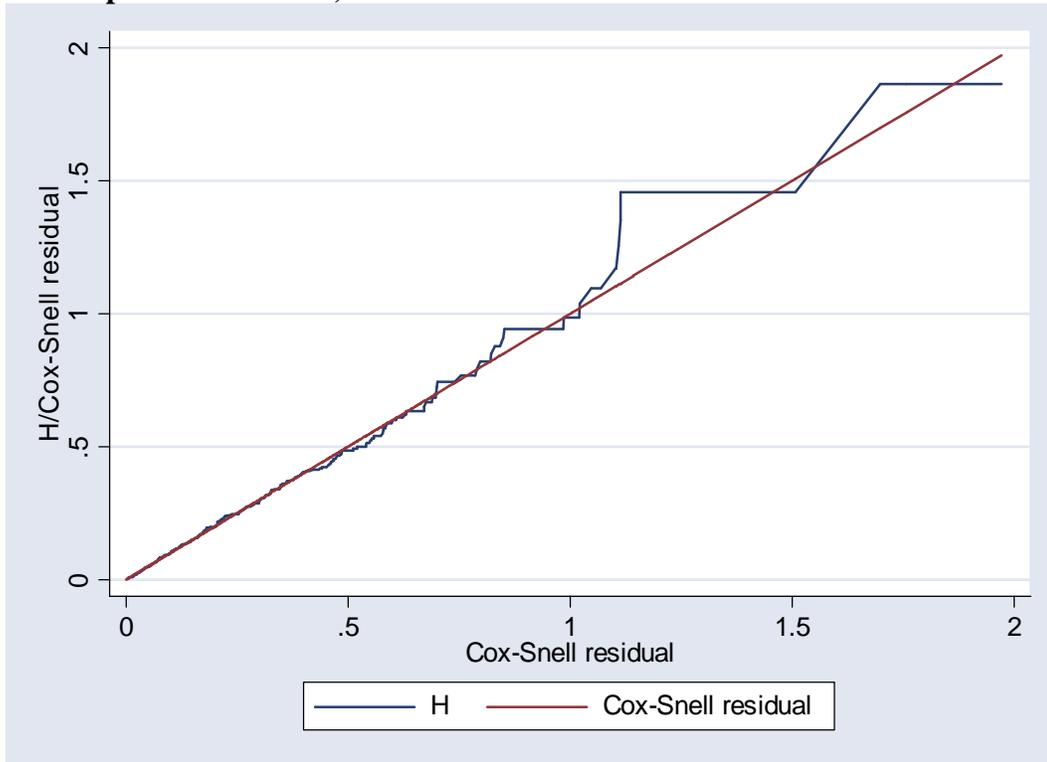
Survival Diagnostics

Below, I display eight plots of Cox-Snell residuals, which correspond to the eight multivariate survival models reported in Chapter 5.

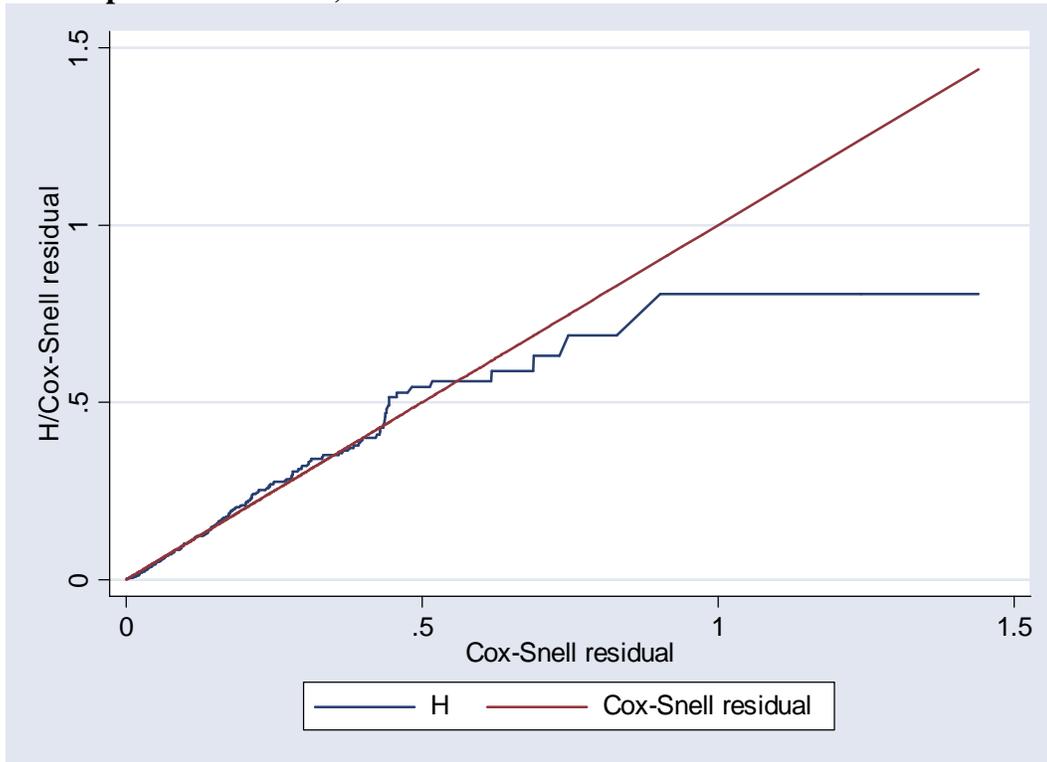
Dependent variable: Any re-arrest (PLACEMENT is not included as an independent variable)



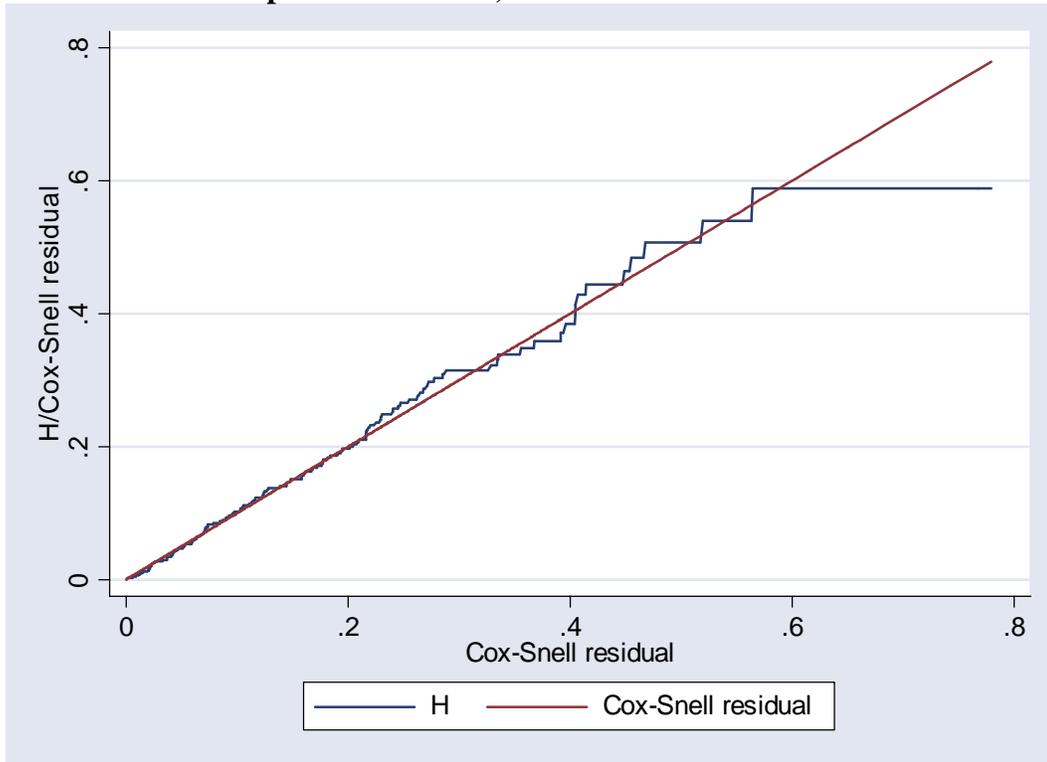
Dependent variable: Any felony re-arrest (PLACEMENT is not included as an independent variable)



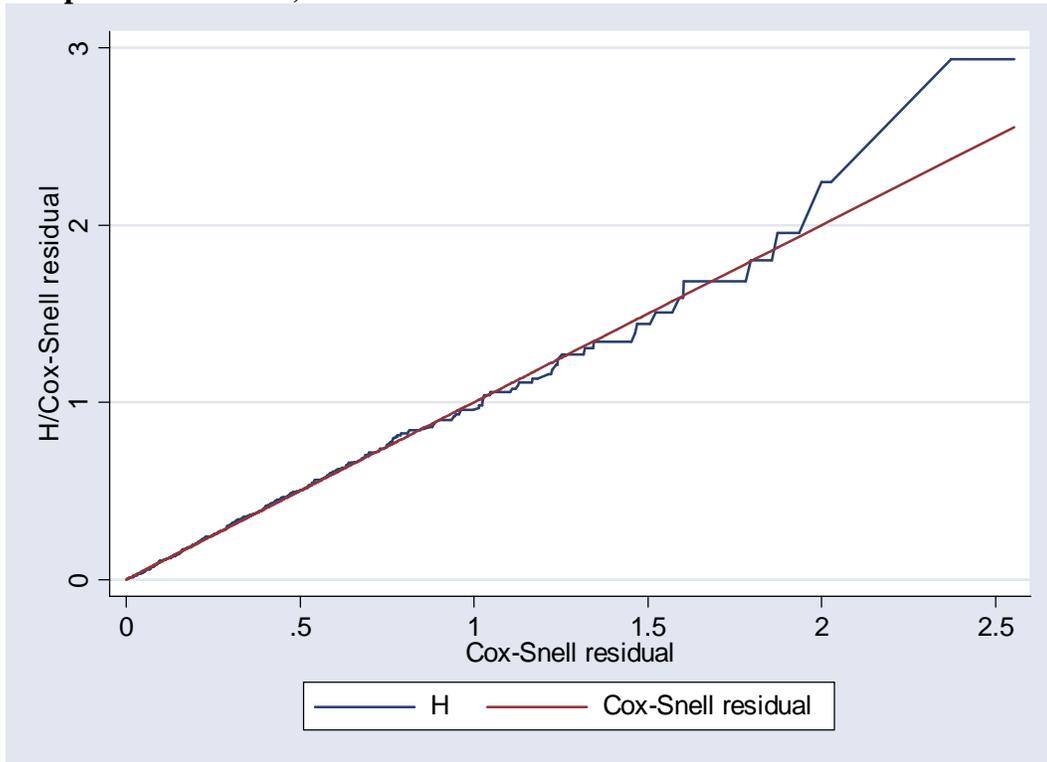
Dependent variable: Any violent re-arrest (PLACEMENT is not included as an independent variable)



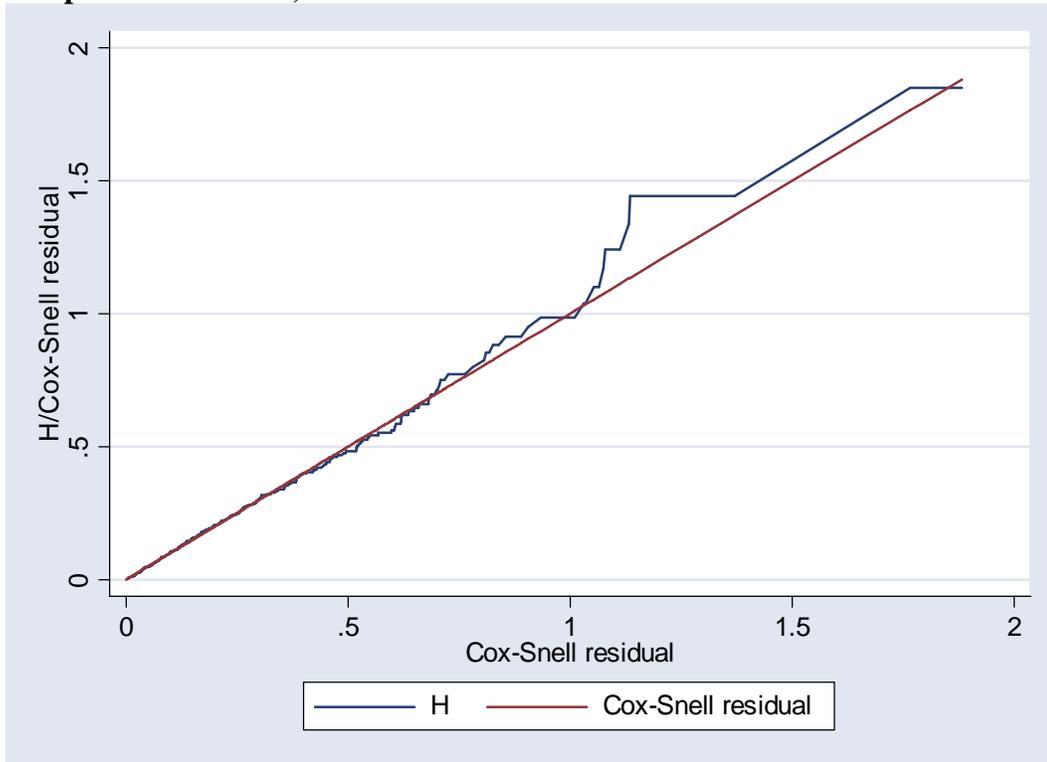
Dependent variable: Any violent felony re-arrest (PLACEMENT is not included as an independent variable)



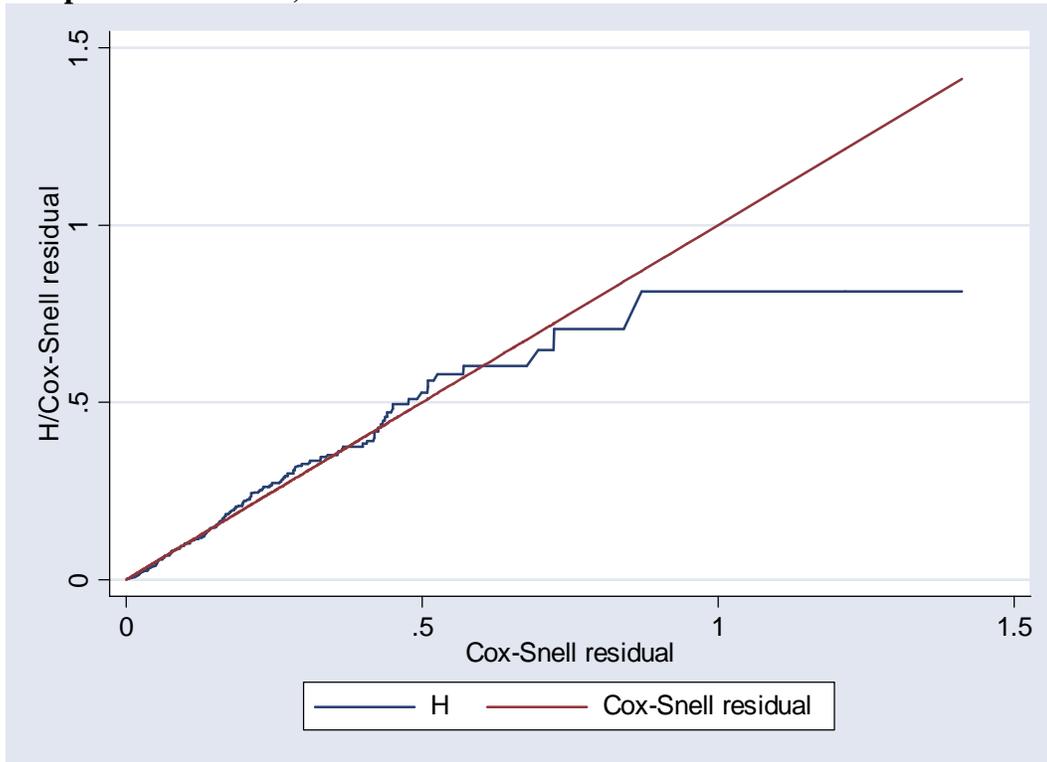
Dependent variable: Any re-arrest (PLACEMENT is included as an independent variable)



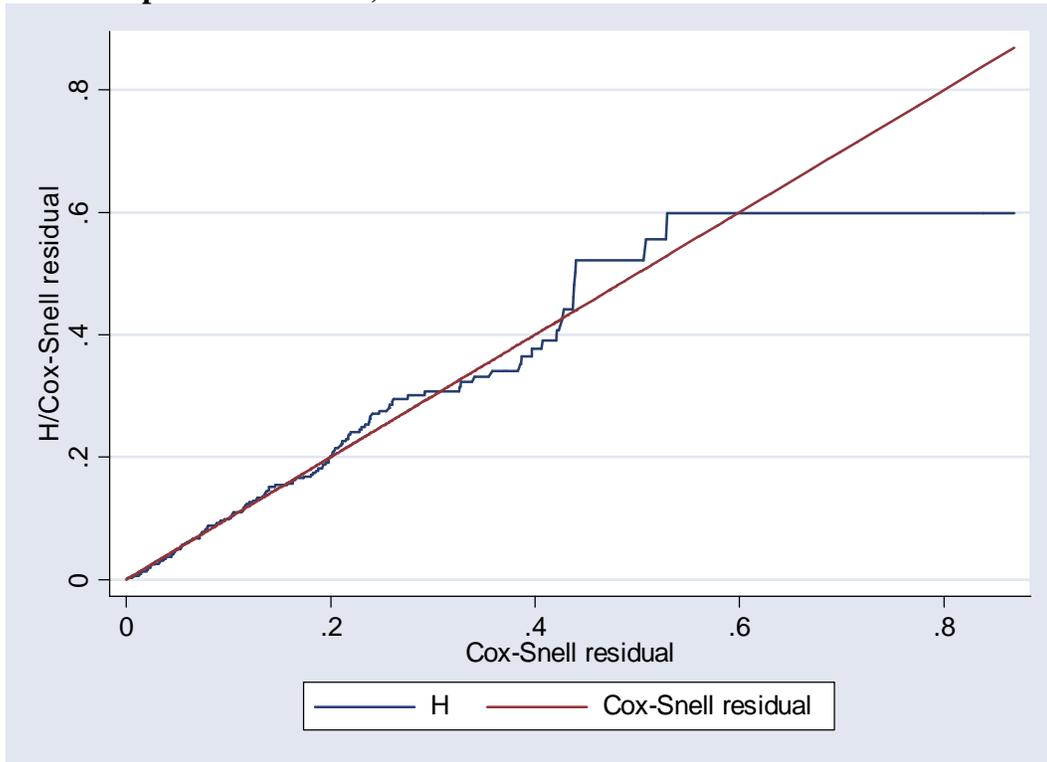
Dependent variable: Any felony re-arrest (PLACEMENT is included as an independent variable)



Dependent variable: Any violent re-arrest (PLACEMENT is included as an independent variable)



Dependent variable: Any violent felony re-arrest (PLACEMENT is included as an independent variable)



References

- Agnew R (1985). Social control theory and delinquency: A longitudinal test. *Criminology* 23(1).
- Akers R & Cochran J (1985). Adolescent marijuana use: A test of three theories of deviant behavior. *Deviant Behavior* 6.
- Albonetti CA (1991) The integration of theories to explain judicial discretion. *Sociological Quarterly* 27: 107-119.
- Anderson EA & Spanier SB (1980). Treatment of delinquent youth: The influence of the juvenile probation officer's perceptions of self and work. *Criminology* 17: 505-514.
- Archwamety T & Katsiyannis A (1998). Factors related to recidivism among delinquent females in a state correctional facility. *Journal of Child and Family Studies* 7: 59-67.
- Arnold WR (1971). Race and ethnicity relative to other factors in juvenile court dispositions. *American Journal of Sociology* 77: 211-227.
- Asquith S (1983). *Children and justice: Decision-making in children's hearings and juvenile courts*. New York: Columbia University Press.
- Bagwell CL, Coie JD, Terry RA, & Lochman JE (2000). Peer clique participation and social status in preadolescence. *Merritt-Palmer Quarterly* 46: 280-305.
- Baird SC (1984). *Classification of juveniles in corrections: A model systems approach*. Madison, WI: National Council on Crime and Delinquency.

Bartell T & Winfree, Jr. LT (1977) Recidivist impacts of differential sentencing practices for burglary offenders. *Criminology* 15(3): 387-395.

Barton WH (1976). Discretionary decision-making in juvenile justice. *Crime & Delinquency*, 22: 470-480.

Bazemore G & Umbreit M (1995). Rethinking the sanctioning function in juvenile court: Retributive or restorative responses to youth crime. *Crime and Delinquency* 41: 296-316.

Beccaria, C. 1764. *On Crime and Punishments*. New York: Bobbs-Merrill.

Beck JL & Hoffman PB (1976). Time served and release performance: A research note. *Journal of Research in Crime and Delinquency* 13: 127-132.

Becker HS (1963). *Outsiders*. New York: Free Press.

Bentham J (1823). *An introduction to the principles of morals and legislation*. London: Clarendon Press.

Bernard T (1992). *The cycle of juvenile justice*. New York: Oxford University Press.

Blau PM (1977). *Inequality and heterogeneity: A primitive theory of social structure*. New York: Free Press.

Blumstein A, Cohen J & Nagin D (eds.) (1978). *Deterrence and incapacitation: Estimating the effects of criminal sanctions on crime rates*. Washington DC: National Academy of Sciences.

Blumstein A & Cohen J (1979). Estimation of individual crime rates from arrest records. *Journal of Criminal Law and Criminology* 70: 561-585.

Bortner MA (1986). Traditional rhetoric, organizational realities: Remand of juveniles to adult court. *Crime and Delinquency* 32: 53-73.

Branham LS (1992). *The use of incarceration in the United States: A look at the present and future*. Washington, DC: American Bar Association, Criminal Justice Section.

Brennan WC & Khinduka SK (1970). Role discrepancies and professional socialization: The case of the juvenile probation officer. *Social Work* 15: 87-94.

Bridges GS & Steen S (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms. *American Sociological Review* 63(4): 554-570.

Brodsky SL (1975). *Families and friends of men in prison: The uncertain relationship*. London: Lexington Books.

Brundage JM (1984). Predicting recidivism: One court's experience. *Juvenile and Family Court Journal* 35: 15-21.

Carter T (1979). Juvenile court dispositions: A comparison of status and non-status offenders. *Criminology* 17: 341-59.

Carter RM & Wilkins LT (1967). Some factors in sentencing policy. *Journal of Criminal Law, Criminology, and Police Science* 58: 503-514.

Cavender G & Knepper P (1992). Strange interlude: An analysis of juvenile parole revocation decision making. *Social Problems* 39: 387-399.

- Chambliss W (1973). The Saints and the Roughnecks. *Society* 11(11): 24-31.
- Chambliss W & Mankoff M (1976). *Whose law, what order? A conflict approach to criminology*. New York: Mayfield.
- Champion DJ (1989) Teenage felons and waiver hearings: Some recent trends, 1980-1988. *Crime and Delinquency* 35: 577-585.
- Chesney-Lind M & Shelden RG (1992). *Girls, delinquency, and juvenile justice: Second edition*. Wadsworth: Belmont.
- Cicourel AV (1968). *The social organization of juvenile justice*. New York: John Wiley and Sons.
- Cloward R & Ohlin L (1960). *Delinquency and opportunity*. New York: Columbia.
- Clynch E & Neubauer D (1981). Trial courts as organizations: A critique and synthesis. *Law and Policy Quarterly* 3(1): 69-94.
- Cohn Y (1963). Criteria for the probation officer's recommendations to the juvenile court judge. *Crime and Delinquency* 9: 262-275.
- Cohen B, Eden R & Lazar A (1991). The efficacy of probation versus imprisonment in reducing recidivism of serious offenders in Israel. *Journal of Criminal Justice* 19: 263-270.
- Cohen LE & Felson M (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review* 44: 588-608.

- Cohen LE & Kluegel JR (1978). Determinants of juvenile court dispositions. *American Sociological Review* 43: 162-176.
- Cohen LE & Kluegel, JR (1979). Selecting delinquents for adjudication. *Journal of Research in Crime and Delinquency* 16: 143-163.
- Coie JD, Terry RA, Lenox K, Lochman JE & Hyman C (1995). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder. *Development and Psychopathology* 7: 697-713.
- Cottle C, Lee RL & Heilbrun, K (2001). The prediction of criminal recidivism in juveniles: A meta-analysis. *Criminal Justice and Behavior* 28: 367-394.
- Crittenden KS (1983). Sociological aspects of attribution. *Annual Review of Sociology* 9: 425-446.
- Cullen FT, Gilbert KE & Cullen, JB (1983). Implementing determinate sentencing in Illinois: Conscience and convenience. *Criminal Justice Review* 8: 1-16.
- Curtis RL & Reese WA (1994). Framed attributions and shaped accounts: A study of dispositional process in juvenile justice. *Criminal Justice Review* 19: 244-270.
- Dannefer D & Schutt R (1982). Race and juvenile justice processing in court and police agencies. *American Journal of Sociology* 87: 1113-1132.
- De Li S (1999). Legal sanctions and youths' status achievement. A longitudinal study. *Justice Quarterly* 16(2): 377-402.
- DeJong C (1997). Survival analysis and specific deterrence: Integrating theoretical and empirical models of recidivism. *Criminology* 35: 561-575.

DeJong C & Jackson KC (1998). Putting race into context: Race, juvenile justice processing and urbanization. *Justice Quarterly* 15(3): 487-504.

Dembo R, Schmeidler J, Nini-Gough B, Sue C, Borden P & Manning D (1998). Predictors of recidivism to a juvenile assessment center: A three year study. *Journal of Child and Adolescent Substance Abuse* 7: 57-77.

Dorren B, Bullis M & Benz MR (1996). Predicting the arrest status of adolescents with disabilities in transition. *The Journal of Special Education* 29: 363-380.

Edin K, Nelson TJ & Paranal R (2004). Fatherhood and incarceration as potential turning points in the criminal careers of unskilled men. In Pattillo M, Weiman D & Western B (Eds.), *Imprisoning America: The social effects of mass incarceration*. New York: Russell Sage.

Eisenstein J & Jacob H (1977). *Felony justice: An organizational analysis of criminal courts*. Boston: Little, Brown & Co.

Elliott DS & Menard S (1996). Delinquent friends and delinquent behavior: Temporal and developmental patterns. In Hawkins JD (Ed.), *Delinquency and crime: Current theories*. New York, NY: Cambridge University Press.

Emerson RM (1969). *Judging delinquents: Context and process in juvenile court*. Chicago: Aldine.

Fader JJ, Harris PW, Jones PR & Poulin ME (2001). Factors involved in decisions on commitment to delinquency programs for first-time juvenile offenders. *Justice Quarterly* 18(2): 323-342.

Fagan J (1996). The comparative advantage of juvenile versus criminal court sanctions on recidivism on adolescent felony offenders. *Law and Policy* 18(1-2): 77-113.

Faris R (1948). *Social disorganization*. Chicago: Ronald Press.

Farrington DP (1983). Offending from 10 to 25 years of age. In Van Duren K and Mednick S (Eds.), *Prospective studies of crime and delinquency*. Boston: Kluwer-Nijhoff.

Farrington DP (1989). Early predictors of adolescent aggression and adult violence. *Violence and Victims* 4: 79-100.

Farrington DP (1991). Childhood aggression and adult violence: Early precursors and later-life outcomes. In Pepler DJ & Rubin KH (Eds.), *The development and treatment of childhood aggression*. Hillsdale, NJ: Erlbaum.

Farrington DP (1995). The development of offending and antisocial behavior from childhood: Key findings from the Cambridge Study in Delinquent Development. *Journal of Child Psychology and Psychiatry* 36:929–964.

Farrington DP (1998). Predictors, causes, and correlates of male youth violence. In M Tonry & MH Moore (Eds.), *Youth violence, vol. 24*. Chicago: University of Chicago Press.

Farrington DP & Hawkins JD (1991). Predicting participation, early onset, and later persistence in officially recorded offending , criminal behavior and mental health. *Criminal Behavior and Mental Health* 1: 1-33.

Feld BC (1987). The juvenile court meets the principle of the offense: Legislative changes in juvenile waiver statutes. *Journal of Criminal Law and Criminology* 78: 471-533.

Feld BC (1990). The punitive juvenile court and the quality of procedural justice: Disjunctions between rhetoric and reality. *Crime and Delinquency* 36: 443-466.

Feld BC (1993). Juvenile (in)justice and the criminal court alternative. *Crime and Delinquency* 39: 403-424.

Feld BC (1998). Juvenile and criminal justice systems' responses to youth violence. In M Tonry & MH Moore (Eds.), *Youth violence, vol. 24*. Chicago: University of Chicago Press.

Feld BC (1999). *Bad kids: Race and the transformation of juvenile court*. New York: Oxford University Press.

Felson M, & Cohen L (1980). Human ecology and crime: A routine activity approach. *Human Ecology* 8: 389-405.

Forst M, Fagan J, & Vivona TS (1989). Youth in prisons and training schools: Perceptions and consequences of the treatment-custody dichotomy. *Juvenile and Family Court Journal* 40: 1-14.

Frazier CE, Bishop DM, and Henretta JC. (1992). The social context of race differentials in juvenile justice dispositions. *Sociological Quarterly* 33: 447-58.

Frederick B (1999). *Factors contributing to recidivism among youth placed with the New York State Division for Youth: Technical report*. Albany, NY: New York State Division for Criminal Justice Services.

Goffman E (1963). *Stigma: Notes on the management of spoiled identity*. New York: Simon & Schuster.

Gottfredson DC & Barton WH (1993). Deinstitutionalization of juvenile offenders. *Criminology* 31(4): 591-607.

- Gottfredson DM (1999). *Effects of judges' sentencing decisions on criminal careers*. National Institute of Justice: Research in brief. Washington, DC: US Department of Justice.
- Gottfredson DM, Gottfredson MR, & Garofalo J (1977). Time served in prison and parole outcomes among parolee risk categories. *Journal of Criminal Justice* 5: 1-12.
- Gottfredson DM, Neithercutt MG, Nuffield J, & O'Leary V (1973). *Four thousand lifetimes: A study of time served and parole outcomes*. Davis, CA: National Council on Crime and Delinquency.
- Gottfredson M, & Hirschi T (1990). *A general theory of crime*. Stanford: Stanford University Press.
- Grisso T, Tomkins A, & Casey P (1988). Psychosocial concepts in juvenile law. *Law and Human Behavior* 12: 403-437.
- Gross SZ (1967). Prehearing juvenile report - Probation officers' conceptions. *Journal of Research in Crime and Delinquency* 4: 212-217.
- Hagan J (1975). The social and legal construction of criminal justice: A study of the presentence process. *Social Problems* 22: 620-637.
- Hagan J, Hewitt J, & Alwin D (1979). Ceremonial justice: Crime and punishment in a loosely coupled system. *Social Forces* 58: 506-527.
- Hawaii Department of the Attorney General (1984). *Re-arrest after release from prison, 1978-1979*. Hawaii Department of the Attorney General.

Hawkins JD, Herrenkohl T, Farrington DP, Brewer D, Catalano RF, & Harachi TW (1998). A review of predictors of youth violence. In R Loeber & DP Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage.

Hirschi T (1969). *Causes of delinquency*. Berkeley: University of California Press.

Hoge RD, Andrews DA, & Leschied AW (1996). An investigation of risk and protective factors in a sample of youthful offenders. *Journal of Child Psychology and Psychiatry* 37: 419-424.

Hood R (1966). A study of the effectiveness of pre-sentence investigations in reducing recidivism. *British Journal of Criminology* 6: 303-310.

Horowitz R & Pottieger AE (1991). Gender bias in juvenile justice handling of seriously crime-involved youths. *Journal of Research in Crime and Delinquency* 28: 75-100.

Horwitz A & Wasserman M (1980). Some misleading conceptions in sentencing research: An example and a reformulation in the juvenile court. *Criminology* 18: 411-24.

Irwin J & Austin J (1997). *It's about time: America's imprisonment binge*. Belmont, CA: Wadsworth.

Jacobs MD (1990). *Screwing the system and making it work*. Chicago: University of Chicago Press.

- Katsiyannis A & Archwamety T (1997). Factors related to recidivism among delinquent youths in a state correctional facility. *Journal of Child and Family Studies* 6: 43-57.
- Keenan K, Loeber R, Zhang Q, Stouthamer-Loeber M, and Van Kammen WB (1995). The influence of deviant peers on the development of boys' disruptive and delinquent behavior: A temporal analysis. *Development and Psychopathology* 7: 715-726.
- Kent v. United States, 383 U.S. 542 (1966).
- Kowalski G & Rickicki J (1982). Determinants of juvenile post-adjudication decisions. *Journal of Research in Crime and Delinquency* 19: 66-83.
- Krisberg B, Schwartz IM, Litsky P, & Austin J (1986). The watershed of juvenile justice reform. *Crime and Delinquency* 26: 5-38.
- Latessa EJ (1993). *An analysis of pre-sentencing recommendations and judicial outcomes in Cuyahoga County Adult Probation Department*. Cincinnati: OH: Department of Criminal Justice, University of Cincinnati.
- Le Blanc M, Cote G, & Loeber R (1991). Temporal paths in delinquency: Stability, regression and progression analyzed with panel data from an adolescent and delinquent sample. *Canadian Journal of Criminology* 33: 23-44.
- Lemert EM (1952). Primary and secondary deviation. In *Social Pathology*, New York: McGraw-Hill.
- Lemert EM (1972). *Human deviance: Social problems and social control* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Levitt SD (1998). Juvenile crime and punishment. *Journal of Political Economy* 106(6): 1156-1185.

Lichtenstein S (1993). Transition from school to adulthood: Case studies of adults with learning disabilities who dropped out of school. *Exceptional children* 59: 336-347.

Lipsey MW (1999). Can rehabilitative programs reduce the recidivism of juvenile offenders? *Virginia Journal of Social Policy* 6(3): 611-641.

Maguin E & Loeber R (1996). Academic performance and delinquency. In M Tonry (Ed.), *Crime and justice: A review of research, vol. 20*. Chicago: University of Chicago Press.

Maltz MD (1984). *Recidivism*. Orlando, FL: Academic Press.

Marion N (2002). Effectiveness of community-based correctional programs: A case study. *The Prison Journal* 82(4): 478-497.

Matsueda, RL (1988). The current state of differential association theory. *Crime and Delinquency* 34(3): 277-306.

McCarthy B & Smith BL (1986). The conceptualization of discrimination in the juvenile justice process: The impact of administrative factors and screening decisions on juvenile court dispositions. *Criminology* 24(1): 41-64.

Meade A (1973). Seriousness of delinquency, the adjudicative decision and recidivism: A longitudinal configuration analysis. *Journal of Criminal Law and Criminology* 64: 478-485.

Merton R (1938). Social structure and anomie. *American Sociological Review* 3: 662-682.

Messner S & Rosenfeld R (1994). *Crime and the American dream*. California: Wadsworth Publishing Company.

Minor KI, Hartmann DJ & Terry S (1997). Predictors of juvenile court actions and recidivism. *Crime and Delinquency* 43: 328-344.

Moore J (1996). Bearing the burden: How incarceration policies weaken inner-city communities. In *The unintended consequences of incarceration*. New York: Vera Institute of Justice.

Murray CA & Cox LA (1979). *Beyond probation: Juvenile corrections and the chronic delinquent*. Beverly Hills, CA: Sage.

Myers DL (2001). *Excluding violent youth from juvenile court*. New York: LFB Scholarly Publishing.

Neubauer D (1974). *Criminal justice in middle America*. Morristown, NJ: General Learning Press.

Office of Juvenile Justice and Delinquency Prevention (1995). *Guide for implementing the comprehensive strategy for serious, violent, and chronic juvenile offenders*. Washington DC: US Department of Justice.

Orcutt JD (1987). Differential association and marijuana use: A closer look at Sutherland (with a little help from Becker). *Criminology* 25(3): 341-358.

Orsagh T & Chen J (1988). The effect of time served on recidivism: An interdisciplinary theory. *Journal of Quantitative Criminology* 4: 155-171.

Paternoster R (1987). The deterrent effect of the perceived certainty and severity of punishment: A review of the evidence and issues. *Justice Quarterly* 4: 173-217.

Paternoster R (1991). *Capital punishment in America*. New York: Lexington Books.

Paternoster R & Iovanni L (1986). The deterrent effect of perceived severity: A reexamination. *Social Forces* 64: 751-777.

Petersilia J, Turner S, & Peterson J (1986). *Prison versus probation in California: Implications for crime and offender recidivism*. Santa Monica, CA: RAND.

Phillips CD & Dinitz S (1982). Labeling and juvenile court dispositions: Official responses to a cohort of violent juveniles. *Sociological Quarterly* 23:267-278.

Pollard R, Pollard CJ & Meers GD (1995). A sociological, psychological and educational profile of adjudicated youth with disabilities. *Journal for Vocational Special Needs Education* 17: 56-61.

Puzzanchera CM (2002). *Juvenile court placement of adjudicated youth, 1989-1998*. Washington, DC: US Department of Justice, Office of Justice Programs.

Reese WA, Curtis RL, and Richard, Jr A (1989). Juvenile justice as people-modulating: A case study of progressive delinquent dispositions. *Journal of Research in Crime and Delinquency* 26: 329-57.

Reese WA, Curtis RL & Whitworth, JE (1988). Dispositional discretion or disparity: The juvenile probation officer's role in delinquency processing. *Journal of Applied Behavioral Sciences* 24: 81-100.

Reiss AJ & Roth JA (1993). *Understanding and controlling violence. Report of the National Academy of Sciences Panel on the Understanding and Control of Violence*. Washington, DC: National Academy Press.

Rogers JW & Williams JD (1994). The predisposition report, decision-making, and juvenile court policy. *Juvenile and Family Court Journal* 45: 47-56.

Rosecrance J (1985). The probation officers' search for credibility: Ball park recommendations. *Crime and Delinquency* 31: 539-554.

Rudman C, Hartstone E, Fagan J, & Moore M (1986). Violent youth in adult court: Process and punishment. *Crime and Delinquency* 32: 75-96.

Rush JP (1992). Juvenile probation officer cynicism. *American Journal of Criminal Justice* 16: 1-16.

Sampson RJ & Groves WB (1989). Community structure and crime: Testing social disorganization theory. *American Journal of Sociology* 94: 774-802.

Sampson RJ & Laub (1990). Crime and deviance over the life course: The salience of adult social bonds. *American Sociological Review* 55: 609-627.

Sampson RJ, Raudenbush SW, & Earls F (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science* 277: 918-924.

Sanborn JB (1994). Remnants of *parens patriae* in the adjudicatory hearing: Is a fair trial possible in juvenile court? *Crime and Delinquency* 40: 599-615.

Sanborn, JB (1996). Factors perceived to affect delinquent dispositions in juvenile court: putting the sentencing decision into context. *Crime and Delinquency* 42: 99-113.

Schneider AL & Ervin L (1990). Specific deterrence, rational choice, and decision heuristics: Applications in juvenile justice. *Social Science Quarterly* 71(3): 585-601.

Sherman LW (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency* 30(4): 445-473.

Simons RL, Wu CI, Conger RD & Lorenz FO (1994). Two routes to delinquency: Differences between early and late starters in the impact of parenting and deviant peers. *Criminology* 32: 247–276.

Skolnick JH (1997). Rethinking the drug problem. In LK Gaines & PB Kraska (Eds.) *Drugs, crime, and justice*. Prospect Heights, IL: Waveland Press.

Smith CP, Black TE & Weir AW (1980). *A national assessment of case disposition and classification in the juvenile justice system: Inconsistent labeling. Vol. 2. National Institute for Juvenile Justice and Delinquency Prevention, Law Enforcement Assistance Administration*. Washington, DC: Government Printing Office.

Smith LG & Akers RL (1993). A comparison of recidivism of Florida's Community Control and prison: A five-year survival analysis. *Journal of Research in Crime and Delinquency* 30: 267-292.

Smith P, Goggin C & Gendreau P (2002). *The effects of prison sentences and intermediate sanctions on recidivism: General effects and individual differences (User Report 2002-01)*. Ottawa: Solicitor General Canada.

Sondheimer DL (2001). Young female offenders: Increasingly visible yet poorly understood. *Gender Issues*.

Song L & Lieb L (1993) *Recidivism: The effect of incarceration and length of time served*. Olympia: Washington State Institute for Public Policy. Doc#: 93-09-1201.

Spitzer S (1975). Toward a Marxian Theory of Deviance. *Social Problems* 22: 638-51.

Spohn C & Holleran D (2002). The effect of imprisonment on recidivism rates of felony offenders: A focus on drug offenders. *Criminology* 40(2): 329-357.

Susman, J (1973). Juvenile justice: Even-handed or many-handed? *Crime and Delinquency* 19: 493-507.

Sutherland EH (1937). *The professional thief*. Chicago: University of Chicago Press.

Sutherland EH (1947). *Principles of criminology (4th ed.)*. Philadelphia: J.B. Lippincott.

Sutherland EH & Cressey D (1960). A sociological theory of criminal behavior. In *Principles of Criminology*. New York: JP Lippincott Company.

Teilmann KS & Landry PH (1981). Gender bias in juvenile justice. *Journal of Research in Crime and Delinquency* 18: 47-80.

Thomas CW & Bishop D (1984). The effect of formal and informal sanctions on delinquency: A longitudinal comparison of labeling and deterrence theories. *Journal of Criminal Law and Criminology* 75(4): 1222-1245.

Thomas CW & Cage R (1977). The effect of social characteristics on juvenile court dispositions. *Sociological Quarterly* 18: 237-52.

Thornberry T (1973). Race, socioeconomic status, and sentencing in the juvenile justice system. *Criminology* 64: 90-98.

- Tittle CR & Curran DA (1988). Contingencies for dispositional disparities in juvenile justice. *Social Forces* 67: 23-58.
- Tomkins AJ (1990). Dispositional decisionmaking in the juvenile justice system: An empirical study of the use of offense and of offender information. *Nebraska Law Review* 69: 298-345.
- Tonry M (1995). *Malign neglect: Race, crime, and punishment in America*. New York: Oxford University Press.
- Ulmer J (1997). *Social worlds of sentencing: Court communities under sentencing guidelines*. Albany, NY: State University of New York Press.
- US Department of Justice, Office of Policy and Communications (1992). *The case for more incarceration*. USDOJ: Washington DC
- Visher C, Lattimore PK & Linster RK (1991). Predicting the recidivism of serious youthful offenders using survival models. *Criminology* 29 (3): 329-366.
- Walker N (1987) The unwanted effects of long-term imprisonment. In Bottoms AE and Light R (Eds.) *Problems of Long-Term Imprisonment*. Gower: Aldershot.
- Walker N, Farrington DP, & Tucker G (1981). Reconviction rates of adult males after different sentences. *British Journal of Criminology* 21(4): 357-360.
- Walsh A (1985). The Role of the probation officer in the sentencing process: Independent professional or judicial hack? *Criminal Justice and Behavior* 12: 289-303.

Warner BD, & Rountree PW (1997). Local social ties in a community and crime model: Questioning the systemic nature of informal social control. *Social Problems* 44(4): 520-536.

Wasserman GA, Keenan K, Tremblay RE, Coie JD, Herrenkohl TI, Loeber R, & Petechuk D (2003). *Risk and protective factors for child delinquency*. Washington, DC: US Department of Justice, Office of Justice Programs.

Wasserman GA, Miller L, Pinner E, & Jaramillo BS (1996). Parenting predictors of early conduct problems in urban, high-risk boys. *Journal of the American Academy of Child and Adolescent Psychiatry* 35: 1227-1236.

Weiler J (1999). *An overview of research on girls and violence*. Institute for Urban and Minority Education, Teachers College.

Wheeler GR & Hisson RV (1988) A survival time analysis of criminal sanctions for misdemeanor offenders: A case for alternatives to incarceration. *Evaluation Review* 12(5): 510-527.

Wiatrowski M, Griswold D & Roberts M (1981). Social control theory and delinquency. *American Sociological Review* 46: 525-541.

Wilcox P, Land KC, & Hunt SA (2003). *Criminal circumstance: A dynamic, multicontextual, criminal opportunity theory*. New York: Aldine de Gruyter.

Winship C & Morgan SL (1999). The estimation of causal effects from observational data. *Annual Review of Sociology* 25: 659-706.

Wooldredge J (1988). Differentiating the effects of juvenile court sentences on eliminating recidivism. *Journal of Research in Crime and Delinquency* 25: 264-300.

Zimmerman MK & Chein DB (1981). Decision making in the juvenile court.
Social Work Research and Abstracts 17: 14-21.

ENDNOTES

ⁱ By “benefit,” I refer to reduction in subsequent recidivism.

ⁱⁱ In the New York State juvenile justice system, “placement” refers to the incarceration of youth in state-run facilities. Placement is the most severe sentence a young person can receive from the New York family court.

ⁱⁱⁱ This figure (annual cost of placement) is not readily available, but is generally cited as being between sixty thousand and eighty thousand dollars.

^{iv} “Involved” is the semantic equivalent of “guilty” in the New York State juvenile justice system.

^v This has changed. The data used in this dissertation was originally used to design a structured risk assessment instrument for use by JPOs (I was part of the original research team). This instrument was introduced in New York City juvenile probation offices in 2004, with the goal of reducing disparities in discretionary recommendation patterns, and more ambitiously, to reduce the overall level of placement in the city. The impacts of this instrument’s adoption are not yet clear, as there has not been sufficient time for a follow-up study.

^{vi} If the family court is closed (i.e., in the evening or on the weekend), arrested youth may be detained in New York City Department of Juvenile Justice (DJJ) facilities until their first court appearance. Or, if the arresting officer deems it appropriate, youth may be released to their families and told when to show up for their first court appointment.

^{vii} Serious youthful offenders who commit one or more of fifteen specified felonies (e.g., murder) are termed “juvenile offenders” and processed in adult criminal court.

^{viii} In the adult system, adjustment is commonly called “diversion.”

^{ix} Personal communication with Casey Eiseman, Intake Coordinator for the Esperanza/Hope program, New York, NY.

^x Secure detention is reserved for youth who are considered most dangerous or likely to abscond. Limited secure detention is given to less-risky youth. The court can also order “open” detention, allowing DJJ to make the decision based on available bed space and their assessment of risk. Between court dates, detention

status can change. The judge can decide to *parole* the youth to his or her family (or foster care, or a group home). The judge may order a previously paroled youth to be detained; this often happens when a youth is re-arrested while on parole. The judge may also change the restriction level of detention. Changes in detention status usually occur as a result of DJJ reports about a youth's behavior.

^{xi} When involvement is established but the charges are not very serious (e.g., turnstile-jumping, petit larceny, disorderly conduct), the judge may order an *adjournment in contemplation of dismissal* (ACD). This decision effectively delays the dispositional decision for six months, with attached conditions. The youth will be told to remain arrest-free, attend school, refrain from substance use, and avoid negative peers. If six months pass without incident, the case is dismissed and sealed. If the youth gets into trouble, the case is reopened and a harsher disposition is assigned.

^{xii} This is generally done by contacting the Administration for Children's Services (ACS) and inquiring about existing or pre-existing complaints.

^{xiii} For minor cases that make it through the adjudication stage, judges can order an "adjournment in contemplation of dismissal" (ACD). This is not unlike JPO adjustment. The youth is ordered to stay out of trouble for six months, at which point the case is retroactively dismissed. If the youth does get into trouble, by getting re-arrested or failing to attend school or some other means, the original case is re-opened and a disposition is issued.

^{xiv} Today, a program called Esperanza/Hope has been added to this roster of alternative-to-placement options. Esperanza provides family-based therapy in the community for youth who would have otherwise been placed.

^{xv} Literally: "parent of the country."

^{xvi} Interestingly, Fader et al. also find that while decisions to place first-time offenders are driven heavily by family functioning factors, decisions to place youths with prior offense histories are based principally on legal factors, suggesting that the *parens patriae* doctrine may apply more strongly to those with shorter records.

^{xvii} To date, most literature that has looked exclusively at the actions of POs has focused on the background characteristics of POs that influence recommendation outcomes. In terms of educational attainment, it is not surprising that PO's with a background in social work tend to lean towards rehabilitative recommendations,

while those without social work backgrounds give higher priority to punitive sanctions (Anderson & Spanier 1980; Brennan & Khinduka 1970). Similarly, younger POs and those who reported being delinquent themselves were less likely to recommend rehabilitative strategies (Reese, Curtis & Whitworth 1988). Burnout and cynicism were also found to contribute to the attitudes, behaviors, and ultimately, the decisions of POs (Rush 1992).

^{xviii} Some research on the juvenile court suggests that “demeanor” actually cloaks differential attributions of criminal character that are rooted in the race of the accused. Bridges and Steen (1998) find that JPOs are more likely to explain black youths’ criminality through *internal* attributions such as a “bad character,” while the acts of white youth are more often linked to *external* factors such as peer group or family conflict. The effect of race is mediated by the type of assigned attribution. Black youth are more likely to receive harsher sanctions because their behavior is more likely to be explained by internal factors (see also Cicourel 1968; Emerson 1969).

^{xix} Here, it is important to note the limitations of sample matching as a quasi-experimental method. Because the most serious prisoners have no comparable cases in the probation sample, and the least serious probationers have no comparable prison cases, this type of sample matching essentially simulates an experimental comparison between “softer” prisoners and “harder” probationers. Consequently, it is impossible to draw conclusions about sentencing effects on the most serious prisoners and the least serious probationers. However, this type of design is useful in determining the effects of competing dispositions on offenders who might realistically end up in either sample due to discretionary court dynamics.

^{xx} Nationally, the number of adjudicated juvenile cases that resulted in out-of-home placement rose from 119,700 in 1989 to 163,800 in 1998 - an increase of 37% (Puzzanchera 2002).

^{xxi} Levitt’s (1998) aggregate state-level analysis of the relationship between state sanctioning and juvenile criminal involvement serves as a test of the general deterrent effects of juvenile sanctions. Levitt finds that crime rates decrease with associated increases in sentencing severity, providing some support for the idea of general deterrence.

^{xxii} More generally, in a study of English youth, De Li (1999) finds that (all) legal sanctions are associated with increases in subsequent delinquent activity, and indirectly associated with decreased status achievement.

^{xxiii} Delinquent peer and family influences have been found to be predictive of youth delinquency in general (Elliott & Menard 1996; Farrington 1995; Keenan et al. 1995; Simons et al. 1994; Wasserman et al. 2003).

^{xxiv} This sample of juvenile delinquents does *not* include the most serious offenders (termed “juvenile offenders” in New York), who commit one or more of fifteen specified felonies (e.g. murder), and whose cases are waived to adult criminal court.

^{xxv} One data coder, who had extensive justice system experience and displayed an excellent understanding of family court processing, was eventually promoted, and stood in as a senior staff member for some of the data collection.

^{xxvi} Presumably, some (unknown) number of these youth are being truthful. They may indeed have had minimal involvement, but have erroneously been judged “involved” by the family court.

^{xxvii} Stepparents, adopted parents, and other adult family members such as grandparents and aunts were counted as parental figures. During data collection, we examined case files for evidence of adult caretakers in the household, and counted all relevant figures as “parents.” Thus, if a youth lives with his mother and his grandmother, and both have some degree of authority over and responsibility for the youth, both are counted as parents.

^{xxviii} “Moving between family units” means that the figures in the household actually changed, not just that the youth had moved residences. A typical scenario would involve a youth moving from his mother’s house to his grandmother’s house.

^{xxix} School characteristics reflect behavior in the three months preceding arrest. If this three-month period included summer vacation, we collected data on the three months that the youth had last been in school.

^{xxx} STATA Version 8.

^{xxxi} In recidivism analyses, follow-up time is sometimes also termed “time at risk.”

^{xxxii} http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DE_C_2000_SF3_U&lang=en&ts=74694218710

^{xxxiii} Ethnic heterogeneity represents the “chance expectation that two randomly chosen persons do not belong to the same (ethnic) group” (Blau 1977, p.78). To create this measure, I subtract the sum of the squared proportions of persons (p) within each ethnic group from one ($1-\sum p_i^2$), which accounts for the total number of groups represented in the population, and the distributions of persons among the groups (Blau 1977; Warner & Rountree 1997).

^{xxxiv} In true “experimental” designs, such as random treatment/control group assignment, these problems do not exist, as treatment and control groups are presumably identical on measured and unmeasured characteristics.

^{xxxv} Patricia Brennan, Deputy Commissioner of Family Court Services; Pamela Hardy, Assistant Commissioner of Family Court Services.

^{xxxvi} The Cox and Snell R^2 for this model was 0.506. The Nagelkerke R^2 was 0.695.

^{xxxvii} The crude proxy of zip code for “neighborhood” may also dilute the accuracy of this measurement. See chapter 5 for further discussion.

^{xxxviii} The Cox and Snell R^2 for this model was 0.476. The Nagelkerke R^2 was 0.634.

^{xxxix} When youth are discharged from OCFS placement, they are placed on OCFS aftercare for some period of time (typically a few months). Aftercare is the juvenile equivalent of adult parole.

^{xl} For the sake of clarity in table 5.3, I recoded *age at disposition* from a continuous measure to a dichotomous one.

^{xli} But see Frederick (1999), who conducted a sophisticated one-time recidivism analysis of youth leaving New York State placement facilities.

^{xlii} The instrument is not totally binding. JPOs and their supervisors can override the recommendation in cases where they deem it warranted. Therefore, differences in patterns of override can still cause some bias.

^{xliii} Unfortunately, I could not analyze recommendation and disposition differences across individual JPOs and judges. While this information was collected, I was forced to strip the data away for my dissertation analyses.

^{xliv} This effort is also underway in New York City.