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RESEARCH

A Statewide Evaluation of New York's Adult Drug Courts

Identifying Which Policies Work Best

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Executive Summary

For almost 25 years, adult drug courts have provided a combination of court-ordered treatment and intensive judicial oversight of defendants with an underlying drug addiction. By the end of 2009, more than 1,300 adult drug courts had been established in the United States (Huddleston and Marlowe 2011). Previous research indicates that well-implemented adult drug courts reduce recidivism, with average differences in drug court and comparison group re-offending rates falling between eight and 12 percentage points (Gutierrez and Bourgon 2009; Mitchell et al. 2012; Shaffer 2011). However, not all drug courts reduce recidivism, and the literature reveals wide variations in the precise magnitude of the drug court impact from site to site. Understanding why some drug courts are more effective than others is a key research goal.

With funding from the Bureau of Justice Assistance, this study evaluated 86 adult drug courts in New York, the most sites ever included in a single drug court evaluation. The goal of the study was not primarily to examine whether these drug courts are successful on average, but to pinpoint why some drug courts are more successful than others.

Methodology

The study compared recidivism and sentencing outcomes between statistically matched samples drawn from 86 drug courts and conventional courts in the same jurisdictions. The samples came from cases that either enrolled in a drug court or were resolved in a conventional court in 2005 or 2006. Utilizing propensity score matching techniques, the final samples were virtually identical on key characteristics, including criminal history, charges, and demographic background.

The analysis assumed that the drug court impact might vary based on local context and specific court policies and practices. Consequently, select analyses included court-level measures drawn from either policy surveys administered to staff at the 86 drug courts or from data on the average characteristics and program experiences of participants who were enrolled at each site. Analyses were conducted in a hierarchical linear modeling (HLM) framework, which takes into account the possibility that program impacts might vary from jurisdiction to jurisdiction.

Profile of the Drug Court Sample

- Community Characteristics: The 86 drug courts were situated in a wide range of geographic contexts—including New York City (N=10), the surrounding suburbs (N=6), and upstate locations (N=70), the latter of which mostly include rural or semi-rural areas but also include the mid-sized cities of Albany, Buffalo, Syracuse, and Rochester.

- Demographics: The drug court sample was predominately male (76%). Nearly half (47%) of participants across the state were white, although more than four in five New York City (NYC) participants were black or Hispanic. Many participants were unemployed (64%), lacked a high school education (39%), or had been homeless at some point (30%). More than half (63%) reported some history of mental health issues.

- Drug Use: The drug court sample averaged 15 to 16 years of age at first use; and the majority had previously been in treatment (62%). The primary drug of choice was cocaine or crack for about one-third of all participants (32%), with 30% primarily abusing marijuana, 19% alcohol, 14% heroin, and 5% some other drug. In general, participants from New York City were particularly likely to use the "serious" drugs of cocaine, crack, or heroin; upstate participants were particularly likely to use alcohol.

- Criminal Justice Characteristics: More than four in five drug court participants (83%) had at least one prior arrest. On the case that brought them into drug court, well under half (37%) faced felony charges. The specific offenses involved drug sales or possession for about half (53%) of the sample; others faced an assortment of property, DUI, or other charges. Participants varied in their baseline predisposition to re-offend. The New York City programs tended to serve a relatively high-risk population, whereas the semi-rural/rural programs of the upstate region tended to serve a relatively low-risk population.

- Court Policies and Practices: Drug court policies varied widely across several domains, including legal and clinical eligibility; use of specific deterrence measures (e.g., frequent supervision, threat of jail for failing, and swift and certain sanctions for noncompliance); treatment practices; courtroom interaction; stakeholder collaboration; case processing; and graduation requirements. Court policies found to reduce re-arrest were highly inter-correlated, meaning that some drug courts tended to implement a wide array of effective policies, while other drug courts implemented few of these policies.

The Impact of New York's Drug Courts

- Drug Court Retention: Consistent with previous research, the one-year retention rate for drug courts statewide was 66%. The four-year retention rate was 53% (because the vast majority of cases are resolved after four years, the 53% figure is essentially a statewide graduation rate). Retention rates varied widely across the state—from a low of 23% to a high of 85% at four years across the 86 drug court sites.

- Impact on Recidivism: New York drug courts significantly reduced the incidence and prevalence of re-arrest after one-, two-, and three-year tracking periods. However, the effect sizes were relatively modest (below nationwide averages), and their magnitude diminished over time. New York drug courts also significantly reduced re-conviction rates.

- Impact on Sentencing: New York drug courts significantly reduced the use of prison on the initial case (4% vs. 8%). Drug court participants also spent significantly less time incarcerated on instant case sentences (49.0 vs. 64.5 days) as well as sentences stemming either from the instant case or from re-arrests over three years (143.7 vs. 168.2 days).

- Cross-Site Variation: The drug court impact varied greatly across sites. Some sites produced sizable reductions in re-arrest, others had no impact, and still others increased re-arrest.

Differential Effects Based on Target Population

- Risk of Re-Offense: Consistent with the *Risk Principle* (Andrews and Bonta 2010; Lowenkamp and Latessa 2004), drug courts were most effective with medium- and high-risk defendants (although there were diminishing benefits for those in the very highest risk category). Drug courts increased re-arrest among low-risk defendants.

- Need for Treatment: Drug courts produced generally similar effects regardless of their participants' estimated addiction severity and need for treatment—except that drug courts that admit participants who exclusively use marijuana performed worse than drug courts that limited eligibility to offenders whose addictions include drugs other than marijuana.

- Charge Type: Drug courts that served more felony-level defendants—who tend to face longer jail or prison sentences in the event of failing—reduced re-arrest by more than drug courts that served primarily misdemeanor defendants. In addition, participants facing drug-related charges experienced greater reductions in re-arrest than did participants facing property or other charges, whose criminogenic motivations may require evidence-based treatments for additional needs besides substance abuse.

- Demographic Characteristics: When controlling for other participant characteristics, the magnitude of the drug court impact did not vary by defendant age, sex, or race/ethnicity.

Differential Effects Based on Drug Court Policies and Practices

- Legal Leverage: Drug courts that created greater legal leverage (serving more felony offenders, requiring a guilty plea at entry, and imposing a predetermined jail/prison sentence on all participants who fail) produced larger impacts than other drug courts.

- Interim Sanctions: Drug courts that engaged in more certain sanctioning and adhered to a formal sanctions schedule produced larger impacts than others.

- Supervision: More frequent supervision in the form of judicial status hearings and drug testing did not significantly reduce re-arrest; more frequent case management meetings were effective in reducing re-arrest—but only among high-risk participants.

- Treatment: Drug courts that used more intensive initial treatment modalities—residential treatment specifically—outperformed drug courts that relied on less intensive options, particularly among highly-addicted, "high-need" participants. Drug courts that assessed for trauma and used cognitive behavioral therapy for criminal thinking were particularly effective with less addicted participants. (Such participants may more often require treatment for trauma, criminal thinking, or other needs besides substance abuse.)

- Collaboration: Drug courts with dedicated prosecutors and public defenders on their drug court team and in staffing meetings produced larger impacts than others.

Conclusion

This study documented a positive, if relatively modest, impact of New York's adult drug courts on re-arrest and re-conviction. The study also revealed significant variations in drug court policies and practices, which led to considerable variations in impact. Specifically, the evaluation found that New York drug courts have greater impacts on re-arrest when they:

- Serve a higher-risk population;
- Serve a population over whom the drug court has greater leverage to incentivize compliance (e.g., felony as opposed to misdemeanor defendants);
- Maximize legal leverage in other ways (e.g., through predetermined jail or prison alternatives that are imposed on those who fail);
- Impose certain sanctions for noncompliance;
- Include prosecutor and defense representatives on the drug court team;
- Make greater use of residential treatment for "high-need" participants with a serious drug addiction; and
- Apply cognitive behavioral therapy and other evidence-based practices where indicated (e.g., often with less seriously addicted participants who may have other criminogenic motivations besides substance abuse).

Many of these findings are consistent with or expand on recent drug court research (e.g., see especially Carey et al. 2012; Gottfredson et al. 2007; Rossman et al. 2011; Young and Belenko 2002). The findings relating to deterrence strategies—and specifically that greater legal leverage and certain sanctioning are more important than frequent status hearings and drug testing—were less clearly indicated in previous drug court studies. However, these findings echo a more general supervision literature, which has found that simple surveillance only works when combined with consistent consequences for noncompliance (Petersilia 1999; Sherman et al. 1997; Taxman 2002). Importantly, this study did not have strong measures of procedural justice and, in particular, of the role of conversational interactions between judge and participant in motivating behavioral change. However, other research has demonstrated that perceptions of procedural justice can have an impact on drug court effectiveness (Gottfredson et al. 2007; Marlowe et al. 2004; Rossman et al. 2011). Accordingly, this study, in combination with other recent research, can assist the drug court field in understanding how to revise eligibility criteria and other court policies and practices in order to maximize the effectiveness of adult drug courts.

Chapter 1
Introduction

For almost 25 years, adult drug courts have provided an alternative to conventional case processing for defendants with an underlying drug addiction. The first drug court opened in Miami-Dade County in 1989. By the end of 2009, more than 1,300 adult drug courts had opened in the United States (Huddleston and Marlowe 2011). Adult drug courts have served as a springboard for other specialized "problem-solving courts," including juvenile, family, and DWI drug courts; mental health courts; domestic violence courts; community courts; veterans courts; and reentry courts. Internationally, drug courts have spread to countries as varied as Australia, Canada, Chile, Jamaica, Mexico, Norway, New Zealand, and the United Kingdom.

Adult drug courts combine treatment with intensive judicial oversight of the treatment process. Participating defendants are regularly drug tested and attend frequent judicial status hearings before a specially assigned judge, who receives training on the pharmacology of addiction. At these judicial status hearings, the judge engages in a conversational interaction with each participant, administers interim sanctions in response to noncompliance, and provides praise or other tangible incentives in response to progress. Program graduates have the charges against them dismissed or reduced, whereas those who fail receive a jail or prison sentence. Drug courts also feature a high level of collaboration among justice and treatment system players. Many drug courts hold regular staffing meetings, in which the judge, an assigned prosecutor, an assigned defense attorney, probation officers, and community-based treatment staff discuss how various participants are progressing and arrive at consensus decisions regarding their treatment needs and the appropriateness of sanctions or incentives. Despite this general outline, however, drug courts vary widely in their target population, treatment resources, intensity of judicial oversight, courtroom dynamics, approach to collaboration, and other policies and procedures.

The research literature generally indicates that adult drug courts reduce recidivism, with average differences in drug court and comparison group re-arrest or re-conviction rates falling between eight and 12 percentage points (Gutierrez and Bourgon 2009; Mitchell et al. 2012; Shaffer 2011). However, the literature is less clear concerning which drug court policies are responsible for these positive effects. Of further concern, despite their positive average impact, not all individual drug courts reduce recidivism, and the literature reveals wide variations in the precise magnitude of the drug court impact from site to site. Understanding why some drug courts are more effective than others is a critical research priority.

With funding from the Bureau of Justice Assistance (BJA), the Center for Court Innovation, the Urban Institute, and the New York State Unified Court System collaborated on a statewide evaluation of 86 adult drug courts in New York, the most sites ever included in a single drug court evaluation. Our multi-site framework enabled us to determine the average statewide effect of all NY drug courts. More importantly, our design enabled a rigorous analysis of which policies and practices led some drug courts to outperform others.

Background on New York State Drug Courts

In October 1999, then New York (NY) Chief Judge Judith S. Kaye appointed a special commission to explore how the court system might better respond to the cycle of addiction, crime, and recidivism among drug offenders. New York's courts had been increasingly flooded with drug cases, with many defendants believed to have an underlying addiction. The commission recommended extending treatment to all nonviolent, drug-addicted defendants statewide and singled out drug courts as a promising model for statewide expansion. The state's first drug court opened in Rochester in 1995 (New York State Commission on Drugs and the Courts 2000).

In October 2000, the Chief Judge created a new office to implement commission recommendations, the Office of Court Drug Treatment Programs (OCDTP). The OCDTP agenda included:

- Making treatment available to nonviolent, drug-addicted defendants in all 62 counties;
- Implementing centralized screening to effectively identify drug-addicted defendants;
- Expanding court-based psychosocial assessment and monitoring capacity;
- Developing pilot programs for juveniles (i.e., juvenile drug courts);
- Designing "persistent misdemeanor" courts in New York City to extend court-mandated treatment to city-based misdemeanor offenders with particularly long rap sheets;
- Conducting a statewide training and education campaign; and
- Supporting statewide data collection and evaluation efforts.

New York State currently has 161 operational drug courts (92 criminal, 43 family, 19 juvenile, and 7 town and village drug courts).[1] In addition, NY created a centralized statewide drug court infrastructure; conducted comprehensive training; implemented a statewide drug court database; and participated in several drug court evaluations (Traficanti 2002). More than 60,000 defendants have enrolled in the state's adult drug courts to date, and more than 5,000 individuals have enrolled in New York's juvenile and family drug courts.

Genesis of This Evaluation

The current evaluation builds on a number of recent studies that have explored the effects of drug court policies and practices on outcomes (see Carey et al. 2012; Gottfredson et al. 2007; Marlowe et al. 2003; Mitchell et al. 2012; Rempel and DeStefano 2001; Rossman et al. 2011; Shaffer 2011; Young and Belenko 2002). Two studies in particular led directly to this one.

First, one decade ago, the Center for Court Innovation and the NY Unified Court System completed a statewide evaluation of several of the oldest and largest adult drug courts in the state (Rempel et al. 2003). The study included an impact evaluation of six sites, three in New York City (felony drug courts in the Bronx, Brooklyn, and Queens) one in the suburbs (Suffolk), and two in mid-sized upstate cities (Rochester and Syracuse). The evaluation found that all six sites

[1] In many of New York's smaller jurisdictions, town and village justice courts are the first level trial court. These courts are funded by local municipalities, rather than the state court system, and have jurisdiction over violations and misdemeanors committed in local townships, felony cases that have not yet been indicted, and some civil cases.

reduced recidivism over a three-year tracking period (five by a statistically significant margin), although the magnitude of impact varied by site. A rigorous analysis to determine why some of the six sites produced greater effects than others was not feasible. Other single-site evaluations found that adult drug courts in Brooklyn, Queens, and Staten Island reduced recidivism, but these evaluations also could not rigorously link their observed impacts to specific policies (Harrell et al. 2001; Labriola 2009; O'Keefe and Rempel 2006).

Second, two years ago, the Urban Institute, the Center for Court Innovation, and RTI International completed *NIJ's Multi-Site Adult Drug Court Evaluation* (Rossman et al. 2011). This study examined a wide range of criminal behavior, drug use, and other outcomes, comparing participants in 23 drug courts to similar defendants in six comparison jurisdictions. The study found that drug courts significantly reduced crime and drug use. The study also determined that the judge played a critical role in producing these effects: Drug court participants were more likely than comparison defendants to have favorable views of their interaction with the judge and these perceptions were strongly associated with reduced crime and drug use. Other findings suggested that more frequent drug testing and more undesirable legal consequences in the event of program failure also corresponded with positive program impacts. Despite these findings, this study was limited in the degree to which it could isolate effects attributable to court policies. From a statistical standpoint, having 23 drug court sites was still insufficient for a rigorous analysis of court-level policy effects. Drawing instead upon a rich interview dataset, including baseline and follow-up offender interviews, the multi-site evaluation drew policy implications mostly from analyses of offender perceptions and self-reported experiences. For example, since defendants with more positive perceptions of the judge had better outcomes, the logical implication was that drug courts should train judges to foster robust and respectful interactions.

Apart from the two aforementioned studies, the current study also emerges in a context of heightened interest in "evidence-based" programs. The Bureau of Justice Assistance and the National Institute of Justice recently formulated seven evidence-based principles for drug courts, drawn from both drug court and non-drug court literature (BJA/NIJ 2012). Research has recently increased on treatment practices that can enhance the effectiveness of any offender intervention, perhaps most notably the careful application of the Risk Principle, which recommends treating high-risk and medium-risk offenders, while avoiding excessive programming of low-risk offenders, who are unlikely to re-offend in any case (Andrews and Bonta 2010; Lowenkamp and Latessa 2004; Lowenkamp, Latessa, and Holsinger 2006). Other research has focused on deterring misbehavior through sanctions (Hawken and Kleiman 2009) and fostering compliance through efforts to increase the perceived legitimacy of courts (Tyler 1990; Tyler and Huo 2002). What these strands of research share is a focus not on whether multi-component programs "work" overall, but on distinguishing the extent to which individual practices are based on theory and evidence.

About this Evaluation

The current study includes virtually every NY adult drug court, regardless of region, size, data quality, or amenability to be studied. Since we conducted quantitative analyses of retrospective data, the 86 selected sites faced limited obligations to assist the evaluation, beyond filling out

two brief policy surveys. Since all NY drug courts use the same data collection system, obtaining the necessary data from all sites was unproblematic. In this regard, the present study is unique in the literature. Nearly all previous evaluations, even those with multiple drug court sites, engaged in at least some hand-picking of sites, involving a tendency to favor sites with comparatively large volume, strong local data collection protocols, and a willingness to participate. Accordingly, this study is unbiased by factors relating to the possibility that the kinds of sites that are usually evaluated, and that have staff who are more interested in opening themselves up to evaluation, may also be more successful than the true national average.

Of potentially greater import, by studying 86 sites with a single research design, this study can produce statistically valid findings that distinguish the direction and magnitude of the drug court impact by region, target population, and other court-level policies and practices.

Reflected in our original proposal to BJA, the current study sought to answer five questions:

1. What are the statewide program retention rates for NY drug courts?

2. Do NY drug courts produce significantly better outcomes than conventional case processing? Specifically, do these drug courts:
   a) Reduce the incidence and prevalence of re-arrest?
   b) Produce more favorable sentencing outcomes on the initial criminal case?
   c) Reduce incarceration?

3. Which target populations are more or less suited to the drug court intervention?

4. Which program policies lead different drug courts to be more or less effective?

5. Which, if any, community characteristics (e.g., population size, state region, racial makeup, or socioeconomic profile) lead different drug courts to be more or less effective?

This report is organized as follows: Chapter 2 describes the research design and methodology. Chapter 3 provides a socio-demographic profile of the drug court participants in our research sample. Chapter 4 includes a descriptive profile of the policies in the 86 drug courts under investigation. Chapter 5 presents statewide retention rates and statewide impacts on recidivism and sentencing outcomes. Chapter 6 presents findings related to the moderating role of target population. Chapter 7 explores the role of other policies and practices. Chapter 8 presents conclusions and implications for policy, practice, and research.

Chapter 2
Research Design and Methodology

This report presents the results of a quasi-experimental impact evaluation. Outcomes are compared between participants in 86 New York State (NY) drug courts and a comparison group composed of otherwise similar defendants processed in a conventional fashion during a contemporaneous period of time. Analyses are structured to determine whether drug courts influence key outcomes of interest (recidivism, case processing, sentencing, and incarceration); whether specific target populations are particularly responsive to the drug court intervention; and whether any court policies or community characteristics mediate the effectiveness of drug courts.

Sampling Plan

The Drug Court Sample

The court sample includes 86 adult drug courts that were in operation as of 2006. Ten of these courts are located in New York City, six in its suburbs, and 70 in upstate New York. The majority (N=46) accept both misdemeanor and felony cases, 34 courts accept felonies only, and six courts accept misdemeanors only. We excluded from the sample one drug court that had fewer than five participants available for the analysis and seven town and village drug courts, which are not overseen by the state's Unified Court System.

Table 2.1 lists all 86 drug courts, along with basic information about each court's location, opening date, and 2005-2006 participant sample size.

Potential cases were identified using New York's statewide drug court management information system, the Universal Treatment Application (UTA). Drug court participants who enrolled in one of the 86 drug courts in 2005 or 2006 were eligible. A total of 8,773 cases were eligible, of which 86% (N=7,535) had sufficient identifying information to be merged with criminal history and recidivism data obtained from the NY Division of Criminal Justice Services (DCJS).[2]

The Comparison Sample

To be eligible for the comparison group, cases were required to meet the following criteria:

- Felony or misdemeanor arrest in one of the same 86 city or county jurisdictions;
- Case was not a violent felony, an A level felony (NY felonies are ranked A-E and the most serious A felonies are virtually never drug court-eligible), or sex offense case.

[2] Only 13 drug courts lost one-quarter or more of eligible cases due to missing or incorrect data on key identifiers: Allegany County Treatment Court (33%); Buffalo City Treatment Court (41%); Delaware County Treatment Court (46%); Franklin County Treatment Court (74%); Hornell City Treatment Court (25%); Montgomery County Treatment Court (29%); Newburgh City Treatment Court (39%); Niagara Falls City Treatment Court (31%); North Tonawanda Treatment Court (25%); Oswego County Treatment Court (27%); Poughkeepsie City Treatment Court (25%); Steuben County Treatment Court (25%); and Sullivan County Treatment Court (31%).

Table 2.1. New York State Adult Drug Courts

Drug Court	County	Location	Opening Date	2005-2006 Participants	Eligible Cases Fel	Misd
Brooklyn Treatment Court	Kings	NYC	June 1996	635	✓	
Queens Treatment and DWI Court [1]	Queens	NYC	May 1998	290	✓	
Manhattan Treatment Court	New York	NYC	September 1998	217	✓	
Bronx Treatment Court	Bronx	NYC	March 1999	266	✓	
Manhattan Misdemeanor Treatment Court	New York	NYC	July 2000	108	✓	✓
Queens Misdemeanor Treatment Court	Queens	NYC	January 2002	236	✓	✓
Staten Island Treatment Court	Richmond	NYC	March 2002	128	✓	✓
Brooklyn Misdemeanor Treatment Court	Kings	NYC	February 2003	373		✓
Brooklyn STEP	Kings	NYC	February 2003	405	✓	
Bronx Misdemeanor Treatment Court	Bronx	NYC	April 2005	461		✓
Suffolk County Treatment Court	Suffolk	NYC Suburbs	September 1996	234	✓	✓
Mount Vernon City Treatment Court	Westchester	NYC Suburbs	October 2000	89	✓	✓
Yonkers City Treatment Court	Westchester	NYC Suburbs	January 2001	94	✓	✓
Nassau County Treatment Court	Nassau	NYC Suburbs	February 2002	117	✓	✓
White Plains City Treatment Court	Westchester	NYC Suburbs	October 2002	65	✓	✓
New Rochelle City Treatment Court	Westchester	NYC Suburbs	February 2003	57	✓	✓
Rochester/Monroe County Treatment Court	Monroe	Upstate	January 1995	722	✓	✓
Buffalo City Treatment Court	Erie	Upstate	December 1995	689	✓	✓
Lackawanna City Treatment Court	Erie	Upstate	January 1996	96	✓	✓
Niagara Falls City Treatment Court	Niagara	Upstate	December 1996	145	✓	✓
Rockland County Treatment Court	Rockland	Upstate	January 1997	48	✓	✓
Syracuse Community Treatment Court	Onondaga	Upstate	January 1997	595	✓	✓
Rensselaer County Treatment Court	Rensselaer	Upstate	November 1997	65	✓	
Ithaca Community Treatment Court	Tompkins	Upstate	January 1998	59	✓	✓
Troy City Treatment Court	Rensselaer	Upstate	March 1998	34	✓	✓
Tonawanda City Treatment Court	Erie	Upstate	April 1998	141	✓	✓
Fulton County Treatment Court	Fulton	Upstate	July 1998	64	✓	✓
Batavia City Treatment Court	Genesee	Upstate	February 1999	92	✓	✓
Oswego County Treatment Court	Oswego	Upstate	August 1999	50	✓	
Albany City Treatment Court	Albany	Upstate	January 2000	42	✓	✓
Jamestown City Treatment Court	Chautauqua	Upstate	February 2000	87	✓	✓
Otsego County Treatment Court	Otsego	Upstate	April 2000	41	✓	✓
Canandaigua City Treatment Court	Ontario	Upstate	July 2000	234	✓	✓
Lockport City Treatment Court	Niagara	Upstate	September 2000	139	✓	✓
Montgomery County Treatment Court	Montgomery	Upstate	February 2001	77	✓	
Tompkins County Treatment Court	Tompkins	Upstate	March 2001	47	✓	
Schenectady City Treatment Court	Schenectady	Upstate	August 2001	56		✓
Schenectady County Treatment Court	Schenectady	Upstate	August 2001	145	✓	
Kingston City Treatment Court	Ulster	Upstate	September 2001	67	✓	✓
Utica City Treatment Court	Oneida	Upstate	October 2001	116	✓	✓
Washington County Treatment Court	Washington	Upstate	December 2001	67	✓	
Albany County Treatment Court	Albany	Upstate	January 2002	184	✓	
Orange County Treatment Court	Orange	Upstate	January 2002	58	✓	

[1] Participants in the DWI Court were excluded from the participant sample.

Table 2.1. New York State Adult Drug Courts *(Continued)*

Drug Court	County	Location	Opening Date	2005-2006 Participants	Eligible Cases Fel	Misd
Putnam County Treatment Court	Putnam	Upstate	January 2002	36	✓	✓
Wayne County Treatment Court	Wayne	Upstate	January 2002	35	✓	
Poughkeepsie City Treatment Court	Dutchess	Upstate	February 2002	21	✓	✓
Jefferson County Treatment Court	Jefferson	Upstate	May 2002	47	✓	
Ontario County Treatment Court	Ontario	Upstate	June 2002	65	✓	
Schuyler County Treatment Court	Schuyler	Upstate	June 2002	58	✓	✓
Warren County Treatment Court	Warren	Upstate	September 2002	71	✓	
Steuben County Treatment Court	Steuben	Upstate	October 2002	42	✓	
Auburn City Treatment Court	Cayuga	Upstate	December 2002	90	✓	✓
Sullivan County Treatment Court	Sullivan	Upstate	January 2003	35	✓	
Yates County Treatment Court	Yates	Upstate	January 2003	23	✓	✓
Clinton County Treatment Court	Clinton	Upstate	February 2003	31	✓	
Saratoga County Treatment Court	Saratoga	Upstate	February 2003	47	✓	
Schoharie County Treatment Court	Schoharie	Upstate	February 2003	32	✓	
Chemung County Treatment Court	Chemung	Upstate	March 2003	48	✓	
North Tonawanda City Treatment Court	Niagara	Upstate	March 2003	66	✓	✓
Plattsburgh City Treatment Court	Clinton	Upstate	May 2003	15	✓	✓
Newburgh City Treatment Court	Orange	Upstate	June 2003	53		✓
Columbia County Treatment Court	Columbia	Upstate	August 2003	22	✓	✓
Greene County Treatment Court	Greene	Upstate	September 2003	11	✓	
Ogdensburgh City Treatment Court	St. Lawrence	Upstate	September 2003	16	✓	✓
Wyoming County Treatment Court	Wyoming	Upstate	October 2003	71	✓	✓
Herkimer County Treatment Court	Herkimer	Upstate	December 2003	13	✓	
Essex County Treatment Court	Essex	Upstate	January 2004	18	✓	
Franklin County Treatment Court	Franklin	Upstate	January 2004	19	✓	
Chenango County Treatment Court	Chenango	Upstate	February 2004	28	✓	
Corning City Treatment Court	Steuben	Upstate	February 2004	19		✓
Livingston County Treatment Court	Livingston	Upstate	February 2004	76	✓	
Port Jervis City Treatment Court	Orange	Upstate	March 2004	18	✓	✓
Delaware County Treatment Court	Delaware	Upstate	April 2004	13	✓	
Seneca County Treatment Court	Seneca	Upstate	June 2004	27	✓	
Hornell City Treatment Court	Steuben	Upstate	October 2004	17		✓
Middletown City Drug Court	Orange	Upstate	December 2004	27	✓	✓
Lewis County Drug Court	Lewis	Upstate	January 2005	21	✓	
Peekskill City Treatment Court	Westchester	Upstate	January 2005	31		✓
Allegany County Treatment Court	Allegany	Upstate	March 2005	26	✓	
Cortland City Treatment Court	Cortland	Upstate	March 2005	28	✓	✓
Orleans County Treatment Court	Orleans	Upstate	March 2005	46	✓	✓
Olean City Treatment Court	Cattaraugus	Upstate	August 2005	24	✓	✓
Elmira City Treatment Court	Chemung	Upstate	January 2006	22		✓

- Defendant was *not* screened for the drug court in 2005 or 2006; and
- Case ended in a conviction.

Concerning the last of these criteria, we required comparison cases to be convicted, because we assumed that a defense attorney and defendant would not have otherwise agreed to a year or more of drug court participation on cases when the defense could have obtained a dismissal.

Court Strata

We divided the 86 drug courts into six strata based on region (New York City, suburbs, or upstate) and charge severity (misdemeanor or felony). We then asked DCJS to draw separate random samples of comparison cases for each stratum, including about ten times the number of potential comparison cases as drug court cases. For example, there were 3,092 cases in the New York City (NYC) felony drug court sample; we thus requested a random sample of 31,090 potential comparison cases for the NY felony stratum. Requesting many more comparisons than drug court cases ensured that we would have a sufficient number of comparisons to identify the best possible matches for our drug court sample, as described in the next section.

Propensity Score Matching

The first two columns of Table 2.2 (titled "Original Samples") present the baseline characteristics of the initial drug court and comparison samples provided by DCJS along with p-values for the bivariate comparisons between the samples. Of the 62 baseline characteristics included in Table 2.2, the samples differed significantly on 53 variables ($p < .05$).

To address these differences, we implemented propensity score matching. It is considered a strong methodological alternative when random assignment is not feasible (Cochran and Rubin 1973; Rosenbaum and Rubin 1983; Rubin 1973). The approach creates a single summary measure—the propensity score—from an array of background characteristics. The propensity score reflects the predicted probability that the case falls into one as opposed to another of two groups—in this study, the drug court as opposed to the comparison sample. Once propensity scores are assigned, pairs of cases with similar or identical scores can be matched, ensuring that the final samples are comparable in their distribution of both propensity scores and constituent baseline characteristics.

In this study, propensity score matching proceeded as follows. First, we divided individual cases into six strata: NYC felony, NYC misdemeanor, suburban felony, suburban misdemeanor, upstate felony, and upstate misdemeanor. (Charge severity was based on the arrest charge.) We then performed the propensity score matching process separately for each stratum.

We first examined the p-values for all bivariate comparisons (see Appendix A). Next, we entered all characteristics into a backward stepwise logistic regression, for which the dependent variable was sample membership (0 = comparison, 1 = drug court). The independent variables consisted of those with any evidence of a possible difference between the samples, based on the bivariate comparisons. For this purpose, we applied the following decision rule: If there was a bivariate difference at a significance level of .50 or lower, the variable was included. The backward stepwise procedure then deleted those variables whose p-value was greater than .50 when

Table 2.2.
Comparison of Baseline Sample Differences: Original vs. Matched Samples

Matching Status	Original Samples		Matched Samples	
Sample Status	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	7,535	68,090	7,535	7,535
DEMOGRAPHICS				
Age	32.5**	32.1	32.5	32.7
Age categories	***			
16-19 years	13%	14%	13%	13%
20-25 years	23%	23%	23%	22%
26-35 years	23%	25%	23%	23%
36-45 years	29%	24%	29%	29%
46-65 years	13%	14%	13%	14%
Female	24%***	20%	24%	25%
Race/Ethnicity	***			
White or Asian	48%	43%	48%	48%
Black/African-American	36%	41%	36%	36%
Hispanic / Latino	16%	15%	16%	16%
Place of birth: United States	97%***	94%	97%	97%
CRIMINAL HISTORY				
Prior Arrests				
# prior arrests	8.6***	7.1	8.6	8.4
Base 10 log of # prior arrests	1.6***	1.6	1.6	1.6
Any prior arrest	83%***	77%	83%	84%
# drug arrests	2.7***	2.0	2.7	2.7
Base 10 log of # drug arrests	1.3***	1.2	1.3	1.3
Any drug arrest	55%***	46%	55%	55%
# felony arrests	2.6	2.6	2.6	2.6
Base 10 log of # felony arrests	1.3+	1.3	1.3	1.3
Any felony arrest	62%***	59%	62%	62%
# misdemeanor arrests	6.0***	4.5	6.0	5.8
Base 10 log of # misd. arrests	1.5***	1.4	1.5	1.5
Any misdemeanor arrest	78%***	71%	78%	79%
# violent felony arrests	0.6***	0.8	0.6	0.6
Base 10 log of # vio. fel. arrests	1.1***	1.1	1.1	1.1
Any violent felony arrest	29%***	35%	29%	29%
# weapons arrests	0.4***	0.6	0.4	0.4
Any weapons arrest	25%***	29%	25%	25%
# child victim arrests	0.2*	0.2	0.2	0.2
Any child victim arrest	13%**	14%	13%	13%
# sex offense arrests	0.1***	0.1	0.1	0.1
Any sex offense arrest	6%***	7%	5%	4%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Table 2.2. ***(Continued)***

Comparison of Baseline Sample Differences: Original vs. Matched Samples

Matching Status	Original Samples		Matched Samples	
Sample Status	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	7,535	68,090	7,535	7,535
Prior Convictions				
# prior convictions	4.3***	3.2	4.3	4.2
Base 10 log of # prior convictions	1.4***	1.3	1.4	1.4
Any prior conviction	60%***	57%	60%	60%
# drug convictions	1.3***	1.0	1.3	1.3
Base 10 log of # drg. convictions	1.1***	1.1	1.1	1.1
Any drug conviction	35%***	31%	35%	35%
# felony convictions	0.5***	0.6	0.5	0.5
Any felony conviction	27%***	31%	27%	27%
# misdemeanor convictions	3.8***	2.6	3.8	3.7
Base 10 log of # misd.convictions	1.3***	1.2	1.3	1.3
Any misdemeanor conviction	57%***	52%	57%	58%
# violent felony convictions	0.1***	0.1	0.1+	0.1
Any violent felony conviction	4%***	8%	4%	5%
# weapons convictions	0.1***	0.1	0.1	0.1
Any weapons conviction	5%***	9%	5%	6%
# youthful offender convictions	0.2***	0.2	0.2	0.2
Any youthful offender conviction	18%**	20%	18%	18%
Prior Incarceration				
# prior prison sentences	0.3***	0.4	0.3	0.3
Any prior prison sentence	14%***	18%	14%	14%
# of prior days in jail or prison	425.8***	521.9	425.8	409.1
Base 10 log # prior dys. ja. or pri.	2.0*	2.1	2.0	2.0
Prior Warrants and Revocations				
# prior cases with bench warrs.	1.7***	1.3	1.7	1.7
Base 10 log # cases with warrs.	1.2***	1.2	1.2	1.2
Any bench warr. on a prior case	45%***	42%	45%	46%
Any prior probation revocation	24%	23%	24%	24%
Any prior revocation: technical	17%	17%	17%	17%
Any prior revocation: new conv.	8%	8%	8%+	9%
Any prior parole revocation	9%***	12%	9%	9%
CURRENT CRIMINAL CASE				
Timing				
Arrest year	***		***	
2003 or earlier	7%	3%	7%	5%
2004	14%	18%	14%	15%
2005	45%	47%	45%	46%
2006	35%	32%	35%	35%
Disposition/drug court enroll. year				
2005	50%	51%	50%	50%
2006	50%	50%	50%	50%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Table 2.2. ***(Continued)***

Comparison of Baseline Sample Differences: Original vs. Matched Samples

Matching Status	Original Samples		Matched Samples	
Sample Status	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	7,535	68,090	7,535	7,535
Charges				
Arrest charge type	***			
Drug possession misdemeanor	19%	12%	19%	18%
Drug possession felony	13%	12%	13%	13%
Drug sales felony	20%	10%	20%	20%
Other drug charge[1]	1%	1%	1%	1%
DWI	14%	11%	14%	14%
Property-related[2]	21%	26%	21%	21%
Other[3]	12%	29%	12%	13%
Charge severity = felony	55%***	45%	55%	55%
Types of Counsel	***			
Legal Aid Society	45%	35%	45%	44%
Other public defender agency	20%	27%	20%	20%
18B assigned counsel	20%	18%	20%	21%
Private counsel	14%	17%	14%	14%
Pro se (self-represented)	1%	2%	1%	1%
COUNTY/COURT				
New York City	38%	25%	38%	39%
Bronx	9%	7%	9%	12%
Brooklyn	17%	5%	17%	9%
Manhattan	4%	8%	4%	12%
Queens	6%	4%	6%	5%
Staten Island	2%	1%	2%	1%
Suburb	8%	8%	8%	8%
Nassau	2%	3%	2%	2%
Suffolk	3%	4%	3%	3%
New Rochelle	1%	0%	1%	1%
White Plains	1%	0%	1%	1%
Yonkers	1%	1%	1%	1%
Upstate	54%	67%	54%	53%
Not Mid-sized City	33%	39%	33%	34%
Syracuse/Onondaga	7%	5%	7%	4%
Rochester/Monroe	8%	8%	8%	5%
Buffalo City	4%	9%	4%	6%
Albany	2%	6%	2%	4%

+p<.10, * p<.05, ** p<.01, ***p<.001.

[1] Other drug charges include marijuana-related charges 221.35 (15%) and 221.40 (85%).

[2] The most common property-related charges are petit larceny (8%); grand larceny (4%); criminal mischief (3%); burglary (2%); criminal possession of stolen property (2%); criminal trespass (2%); and theft of services (1%). No single other charge category contains more than 1% of all charges.

[3] The most common "other" charges are weapons-related charges (2%), forgery (2%), assault and menacing (1%), criminal contempt (1%), fraud (1%), and resisting arrest (1%). No single other charge category contains more than 1% of all charges.

included in a regression framework. Such liberal variable inclusion criteria maximize the balancing effect of the resulting propensity scores (see Rosenbaum 2002; Rubin and Thomas 1996). (For a sample propensity model for the NY felony stratum, see Appendix B.)

For cases that were missing data on one or more baseline characteristics included in the initial propensity model, propensity scores were computed based on more limited models that eliminated the variables with the missing data (see Rosenbaum and Rubin 1984).

We then employed a one-to-one matching strategy, in which each drug court participant's propensity score was compared to the pool of potential comparisons, and the comparison defendant with the closest score (of those not already selected) became the match. Matches across sites within the same stratum were allowable. Extremely small sample sizes in some of the sites made limiting all matched pairs to the same sites impractical. In addition, we sought to take advantage of a situation in which some jurisdictions had drug courts that served a large fraction of the eligible caseload, whereas other jurisdictions had drug courts that served a relatively small fraction of the eligible caseload. In effect, those drug courts that enrolled relatively few cases would have a disproportionately large number of appropriate matches that we could use in the comparison group, a situation that we sought to exploit in our sampling and matching strategy.

Upon completing the matching process, diagnostics were performed, comparing the baseline characteristics of the matched drug court and comparison samples in each stratum to validate the success of the matching process (see Appendix C). The last step was to recombine the strata. The right-most columns of Table 2.2 demonstrate the degree to which the final (cross-strata) statewide samples became more comparable after matching. Whereas there were significant differences on 53 variables prior to matching, the final samples were significantly different on only one variable ($p<.001$; arrest year). Even within each of the six individual strata, no final sample was significantly different on more than six variables ($p<.05$; see Appendix C). Table 2.2 and Appendix C indicate the absolute magnitude of all differences, making it clear that the final samples were well matched.

One of the advantages of propensity score matching is that it simplifies the analysis when testing for program impact. That is, without the use of propensity score matching, one would need to control for multiple background characteristics. Propensity score matching eliminates the need to do so, as the process creates a (near) equal distribution of the variations among those in the drug court and comparison samples.

Possible Unobserved Sample Differences

The propensity score matching process appeared to be highly effective in taking potential biases into account that were based on *observed* baseline characteristics. However, *unobserved* characteristics might still differentiate the samples. Like most drug court evaluations, but unlike a small few such as *NIJ's Multi-Site Adult Drug Court Evaluation* (Rossman et al. 2011), we could not match our samples on in-depth psychosocial characteristics, including substance abuse history, mental health, educational background, employment, and living situation. Some research indicates that the variables on which we *did* have data, including criminal history, charges, and age, are the variables that most strongly predict recidivism, suggesting a limited possibility of

real bias (e.g., see Gendreau, Little, and Goggin 1996; Zhang, Roberts, and Farabee 2011). Nonetheless, research makes clear that other factors, such as pro-criminal attitudes, associations with anti-social peers, employment, education, and substance abuse, all significantly predict recidivism as well (Andrews and Bonta 2010; Gendreau et al. 1996). Some of these latter factors are likely to be correlated with criminal history, potentially limiting the risk of bias. Nonetheless, we cannot rule out the presence of bias based on unobservable characteristics.

Of particular concern, drug court participation depends on having a substance abuse or dependence problem. Yet, we lacked the capacity to verify the presence of such a problem in our comparison group, making it highly likely that the final comparison sample contains fewer drug-addicted defendants than the final drug court sample. Since substance abuse predicts recidivism, our reported statewide impact of drug court participation on recidivism may err in a conservative direction, reporting a less positive main effect than is actually the case. This bias, however, cannot be assumed automatically, since other unobserved characteristics may exert small effects with reverse implications on our estimates. For instance, pro-criminal attitudes and anti-social peers are among the strongest predictors of recidivism, and it is not clear whether such important risk factors would be more prevalent in the drug court or in the comparison sample.

In sum, it is clear that our study may be affected by small biases based on unobservable characteristics; and the likely direction of any bias is in a conservative direction, showing a weaker magnitude of impact than may actually be the case. However, we would caution against overstating the ultimate size or import of these biases. Besides which, our primary research interest in this evaluation is less to test for main effects as to test for the mediating role of policy, practice, and target population factors. Biases based on unobservable characteristics are less likely to impinge on such mediation analyses.

Data and Measures

Individual-Level Measures

The data in Table 2.2 indicates the range of criminal history, charge, and demographic measures that we collected for both the drug court and comparison samples. In addition, for drug court participants only, the UTA supplied other psychosocial measures, including drug use history, treatment, mental health, educational attainment, and employment. We also had program compliance information necessary to compute program retention rates up to four years and to determine whether participants had graduated or failed the program, or were still open.

DCJS also provided case outcome and recidivism data for both the drug court and comparison samples. This data enabled analyzing re-arrests and re-convictions up to three years after drug court enrollment or, for the comparison group, up to three years following the case disposition. The use of multiple years of follow-up allowed for an examination of drug court impacts both during and after the period that most of those in the drug court sample were active participants. Specific recidivism measures could be computed for any recidivism as well as for recidivism on specific types of offenses (e.g., felony, misdemeanor, drug-related, or violent).

Additional measures of interest included case processing time (e.g., days from arrest to disposition); case outcomes (conviction and dismissal rates); sentencing decisions, and length of time sentenced to probation, jail, or prison (for offenders receiving one of those sentences).

Court- and Community-Level Measures

The 86 drug courts vary on many court policies and practices. To identify these variations, we drew on data from two policy surveys and one brief survey supplement administered to the 86 drug courts.[3] The first survey was administered statewide in 2006 as part of a previous, unrelated project of the NY Unified Court System. The second survey, which provided the vast majority of drug court policy data, was designed and funded as part of the current project and administered in 2010. The survey supplement was administered in 2012 and contained only five questions, designed to clarify court responses to a series of treatment-related questions from the prior survey that many respondents had trouble accurately completing. These surveys contained questions on a variety of operational and practice issues, including: drug court eligibility and screening; program length and progress through the program; case management and drug testing practices; legal implications of drug court graduation and failure; judicial monitoring and interaction; common sanctions or responses to noncompliance; common incentives or responses to achievements; available treatment providers; ancillary services; and court staffing (see Appendix D, Appendix E, and Appendix F for the full survey instruments and supplement).

In addition to the policies and practices reported by staff at the 86 drug courts, we created other policy and practice measures from individual-level UTA data. For example, rather than relying solely on a survey response stating that a given court always requires weekly court appearances during Phase 1, we utilized UTA data to create court-level variables measuring—on average—the number of court appearances and time between court appearances during comparable periods of time. In this way, we were able to capture not only what court personnel completing the policy surveys believed the court does, but the actual practices occurring in each court. Summary policy and practice variables created from the individual-level UTA data included: average time from intake to program participation; time from participation to graduation or failure; percent of participants with certain types of charges (e.g., felony, drug-related, or DWI); percent entering drug court as a condition of probation; mean length of the jail or prison alternative in the event of program failure; mean number/rate of court appearances; mean time between court appearances; mean number/frequency of drug tests; mean number of sanctions; mean number of treatment episodes; and average participant background characteristics (length of use, primary drug, age at first use, or presence of co-occurring disorder). Used in this way, the individual-level data enabled creating an average portrait of the target populations that each drug court served; and enabled quantifying key practices, such as judicial status hearing frequency, drug testing, or sanctions.

We also collected community-level characteristics, including region (e.g., NYC, suburbs, upstate) and specific characteristics for each jurisdiction, such as population density (urban, suburban, or rural), socioeconomic characteristics of the population, and population racial and ethnic heterogeneity. This information was drawn from census data.

[3] The 2012 survey supplement was sent to 82 of the original 86 courts, as four of the courts in our original sample—the Ogdensburgh City, Peekskill City, Port Jervis City, and Poughkeepsie City Treatment Courts—closed between 2010 and 2012. All 82 courts that received the survey supplement responded.

Latent Policy Constructs

To simplify the analysis of court policy mediators, we examined whether combinations of related policies and practices might be combined into overarching summary measures. In the first stage of this research, we used factor analysis to determine if there were sets of court policy variables that shared a common factor, termed a "latent construct." For example, in the same way a smile, looking someone in the eye and a firm handshake are part of the latent construct of friendliness, so different elements of a judge's interaction with participants are all part of the latent construct of adherence to procedural justice. More specifically, a latent construct of procedural justice might include whether the judge asks questions of the participants; discusses service needs; and discusses treatment progress. The attempt to form latent constructs, as with all factor analysis, is based on correlation and does not establish a causal or inherent link amongst policies or between policies and outcomes. However, the analysis can be helpful for drug courts seeking general policy guidance (e.g., identify ways to promote procedural justice) in lieu of highly detailed, specific, and lengthy prescriptions whose feasibility may vary from site-to-site (e.g., ask probing questions, remind participants of responsibilities, discuss treatment experiences, etc.).

The process of identifying latent constructs was an iterative one. We began by identifying potential latent constructs as suggested by relevant theories of offender intervention generally and of drug court effects specifically. For example, some posit that deterrence is the basis for drug court participant change, and we grouped questions about deterrence to test whether our drug court policy survey questions yielded correlated results and latent constructs. Once we had identified potential latent constructs, we tested their reliability empirically. We used a standard measure of reliability, performing an empirical test that yields a statistic known as a Cronbach's alpha (α), which reports whether the tested variables are highly correlated. We used the standard rule of thumb that a value of $\alpha \geq 0.70$ was evidence of the presence of a latent construct (possible α scores range from 0 to 1). We then added or removed variables to test whether the reliability of the latent construct could be improved, while still maintaining the theoretical integrity of the construct. For example, we ultimately created a certainty of response construct, but not a more general deterrence construct, based on the empirical data, which suggested that deterrence embodied too many specific manifestations, not all of which were well correlated. Each of the final constructs was coded from zero to one, with greater values indicating greater adherence to the concept. Thus, a court with a certainty of response score of 0.56 had practices in place that resulted in more adherence to certainty than did a drug court with a score of 0.23.

In some cases, we were unable to arrive at theoretically or empirically sound second-order constructs. Such an outcome did not mean that the mediating effect of the applicable policy orientation on re-arrest could not be tested but simply that individual items would have to be used for this purpose, rather than a summary index.

Final Latent Constructs for Analysis

As shown in Table 2.3, six latent constructs were created for the final analysis. (An additional six constructs were created but subsequently discarded, primarily due to low alphas.) They are: (1) alcohol focus, (2) certainty of court response, (3) diversity of sanctions and incentives, (4) ancillary service integration, (5) judicial communication with participants, and (6) counsel dedication. We note that these constructs are not entirely consistent with theory-driven

predictions. For instance, theory would suggest that incentives and sanctions be tested separately, and that the focus would be on the consistency or immediacy of response. However, empirical tests of latent constructs that had those features did not yield test statistics sufficient to warrant their inclusion. Thus, the constructs we tested represent the best possible approximations of theory tests given the responses of the drug courts to our policy survey.

- Alcohol Focus: This construct reflected the degree to which the drug court's primary focus was alcohol related offenses. Three variables composed this measure: percent of drug court participants who used alcohol as their primary drug; percent of participants with DWI arrests; and drug courts that admit defendants who exclusively have an alcohol problem (as opposed to other illegal drugs). These variables cohered well ($\alpha = 0.72$).

- Certainty of Court Response: This construct gauged the likelihood that a court would respond to noncompliance with sanctions. The original intention of the index was to gauge the likelihood of both detection of and response to noncompliance, so the variable included measures of likelihood of sanction imposition in response to various behaviors, the existence of formal sanction schedules, and court drug testing policy. The resulting alpha was too low to be a reliable measure ($\alpha = 0.60$) so the index was reconstituted as exclusively certainty of response to noncompliance, and variables outside this aspect of deterrence were removed entirely in the case of sanction schedule variables, or shifted into the intensity of supervision construct in the case of drug testing. This resulted in a significant improvement in reliability ($\alpha = 0.77$).

- Sanctions and Incentives: This construct was created to measure the diversity of sanctions and incentives utilized by courts. To access this construct the index included all of the different sanctions and rewards possible from the data set as well as additional items that might be construed as a sanction or reward, such as elicited applause or order of being called in court. The initial alpha for this construct was weak ($\alpha = 0.59$) and various attempts to improve this while remaining theoretically consistent were ineffective. Removing order in which participants were called in court did not change the alpha and removing applause as well to make the construct a count purely of formal sanctions and incentives reduced the alpha to $\alpha = 0.58$. Thus, we retained the original index, with all of the items displayed in Table 2.3.

- Ancillary Service Integration: This construct sought to measure the degree to which the drug court provided services and support beyond substance abuse treatment. The variables tested in the index include the availability of housing assistance, vocational training, GED and other education classes, physical and mental health services, and parenting courses. This selection of variables yielded an acceptable alpha ($\alpha = 0.76$).

- Judicial Communication with Participants: This construct accessed the degree to which the drug court judge communicated with participants about various aspects of the program. To this end, the variables included measured whether the judge asked probing questions of both compliant and noncompliant drug court participants, as well as which aspects of the drug court process the judge discussed with participants. The initial six variables selected had a satisfactory alpha ($\alpha = 0.73$).

Table 2.3. Latent Policy Constructs (N = 86 Drug Courts)

Constituent Variables	Mean	Standard Deviation	Factor Loading
Alcohol Focus (α=0.72)			
Percentage of participants with alcohol as their primary drug	33.26	25.19	0.80
Percentage of participants with a DWI arrest	31.18	26.63	0.79
Alcohol is the only clinical eligability criterion	0.72	0.45	0.76
Certainty of Court Response (α=0.77)			
Positive drug test - how often are sanctions imposed?	3.41	0.86	0.69
Missed drug test - how often are sanctions imposed?	3.29	0.92	0.77
Tampered drug test - how often are sanctions imposed?	6.08	14.43	-0.19
Lying about drug use - how often are sanctions imposed?	3.71	0.68	0.54
Treatment absence - how often are sanctions imposed?	3.17	0.79	0.71
Court absence - how often are sanctions imposed?	4.52	10.33	-0.30
Case management absence - how often are sanctions imposed?	5.07	14.62	-0.22
New arrest - how often are sanctions imposed?	4.76	10.31	-0.31
Poor attitude in treatment - how often are sanctions imposed?	2.98	0.87	0.64
Poor attitude in courtroom - how often are sanctions imposed?	4.00	10.42	-0.28
Diversity of Sanctions and Incentives (α=0.59)			
Common sanctions: Community service?	0.82	0.38	0.33
Common sanctions: Judicial admonishment?	0.89	0.31	0.07
Common sanctions: Essay?	0.86	0.35	0.28
Common sanctions: Jury box?	0.36	0.48	0.49
Common sanctions: Decrease in phase?	0.65	0.48	0.42
Common sanctions: Upgrade Tx modality?	0.71	0.45	0.32
Common sanctions: Increase judicial status hearings?	0.65	0.48	0.26
Common sanctions: Jail 1-3 days?	0.93	0.26	0.23
Common sanctions: Jail 4-7 days?	0.76	0.43	0.34
Common sanctions: Jail 8-14 days?	0.48	0.50	0.55
Common sanctions: Jail more than 14 days?	0.26	0.44	0.42
Common sanctions: Other?	0.23	0.42	0.27
Common rewards: Phase promotion?	0.90	0.31	0.39
Common rewards: Downgrade Tx modality?	0.50	0.50	0.35
Common rewards: Decrease judicial status hearings?	0.69	0.47	0.39
Common rewards: Sober coins?	0.35	0.48	0.03
Common rewards: Certificates?	0.77	0.42	0.16
2007: Common rewards: Judicial praise?	0.99	0.11	0.20
Common rewards: Event tickets?	0.16	0.37	0.33
Common rewards: Other?	0.22	0.42	0.31
Graduation - elicit courtroom applause?	0.98	0.15	-0.07
Phase advancement - elicit courtroom applause?	0.84	0.37	0.40
Specific clean time milestone - elicit courtroom applause?	0.79	0.41	0.31
Clean/in clompliance since last court date - elicit courtroom applause?	0.28	0.45	0.26
Employment/education - elicit courtroom applause?	0.59	0.49	0.45
Compliant participants - When are they called?	0.34	0.79	0.02
Noncompliant participants - When are they called?	0.65	1.28	0.04
Program Graduates - When are they called?	3.39	3.03	0.22
Program Failures - When are they called?	1.92	2.66	-0.15
New Drug Court Participants - When are they called?	0.81	1.18	0.02

Table 2.3. Latent Policy Constructs *(Continued)*

Constituent Variables	Mean	Standard Deviation	Factor Loading
Ancillary Service Integration (α = 0.76)			
Transportation - Provided onsite or offsite by court?	0.49	0.50	0.61
Housing assistance - Provided onsite or offsite by court?	0.73	0.45	0.62
Vocational services - Provided onsite or offsite by court?	0.91	0.29	0.50
Job placement services - Provided onsite or offsite by court?	0.73	0.45	0.56
GED/Adult education classes - Provided onsite or offsite by court?	0.88	0.32	0.60
Mental health services - Provided onsite or offsite by court?	0.92	0.28	0.46
Physical health services - Provided onsite or offsite by court?	0.65	0.48	0.60
Parenting classes - Provided onsite or offsite by court?	0.74	0.44	0.58
Anger management - Provided onsite or offsite by court?	0.86	0.35	0.56
Available mental Health services: Mental health-specific assessment?	0.62	0.49	0.42
Available mental health services: Psychiatric evaluation?	0.67	0.47	0.48
Available mental health services: Mental health Tx or referrals?	0.94	0.24	0.25
Communication with Participants (α=0.72)			
Does the judge typically ask probing questions of participants who are compliant?	2.99	0.94	0.74
Does the judge typically ask probing questions of participants who are noncompliant?	3.62	0.64	0.53
Does judge discuss treatment with participants during court?	3.64	0.65	0.65
Does judge discuss sobriety with participants during court?	3.69	0.54	0.70
Does judge discuss drug tests wth participants during court?	3.17	0.94	0.58
Does judge discuss service needs with participants during court?	2.93	1.03	0.66
Counsel Dedication (α=0.71)			
Dedicated defense attorney	1.82	0.54	0.79
Dedicated ADA	1.82	0.57	0.76
Roles represented on the DC team: Dedicated PD	0.83	0.38	0.59
Roles represented on the DC team: Dedicated ADA	0.89	0.31	0.49
Roles represented on the DC team: Public defender	0.92	0.28	0.59
Roles represented on the DC team: DA	0.90	0.30	0.56

- Counsel Dedication: This construct measured the presence of dedicated legal staff on the drug court team. As shown in Table 2.3, certain measures may appear somewhat duplicative, because we included measures from both the 2007 and 2010 policy surveys, which were somewhat differently worded but tapped the same concept of having a dedicated assistant district attorney and a dedicated public defender. The initial six variables tested well together (α = 0.71), so all of them were retained in the final construct. A variant of this index attempted in early analyses focused on the team approach and included membership on the drug court team of treatment, law enforcement, and community supervision representatives. However the resulting alpha was significantly lower (α = 0.48), so a more limited index focusing on the role of dedicated attorneys staff was used instead.

Excluded Latent Constructs

Despite several different theoretically appropriate groupings, a satisfactory variable describing drug court eligibility policies could not be created. Evaluating all eligibility data from the policy survey data set (i.e., essentially attempting to create a measure for the degree to which courts are generally inclusive vs. exclusive in their eligibility policies) resulted in a weak alpha ($\alpha = 0.50$). Even with extensive removal to create an alpha with only the most closely linked variables, the "best" possible eligibility index remained below acceptable alpha values ($\alpha = 0.64$). The one exception is that a measure combining whether the court accepts defendants with either an alcohol problem or a marijuana problem fit well together; but the resulting construct was not at all correlated with re-arrest at three years. Thus, in lieu of this measure, we opted for our more straightforward construct (involving one rather than two drugs) for whether the court had an alcohol focus. Our overall findings regarding the lack of theoretically and empirically justified latent constructs related to eligibility is supported by current research, which suggests that drug courts are fairly haphazard in whom they accept (Rossman et. al. 2011).

We also excluded an attempted latent construct measuring the nature and severity of the final legal consequence imposed for drug court failure or the final legal benefit imparted for drug court graduation. Combining variables that reflect this concept generated a weak alpha ($\alpha=0.24$), and no permutation or recoding offered a sufficient improvement on this number that would merit inclusion as a second-order construct.

Attempts to create a latent construct measuring how closely drug court participants are supervised during their participation were also unsuccessful. Included in the intensity index were frequencies of judicial status hearings, meetings with case managers, and drug testing during the first three months of drug court participation. The alpha for this selection was far too weak ($\alpha = -0.14$) to justify the creation of a single index.

It was also not possible to create a construct variable measuring access to drug treatment or testing. The variables representing different types of treatment consistently produced a negative alpha and no permutation generated a positive value (Appendix A). Because of this, a latent construct for treatment modalities was not tested in any regression model. Nor was it possible to create an index for drug testing performed by the court. Four variables were used when attempting to create an index of drug testing: recoded measures of how frequently participants are drug tested during the first three months at both treatment and court, whether the court conducts random drug tests, and whether those tests were observed. However, the alpha among these four indicators was too low ($\alpha=0.13$) to suggest the possibility of creating a strong index. Additionally, the testing variables were not strongly correlated with the outcome variables.

Hierarchical Modeling

As in all multi-site evaluations, the individual observations in our data—i.e., the individual defendants—do not comprise independent observations, as is required by the assumptions of standard statistical methods. Instead, the observations are each nested within one of 86 sites. In turn, these sites may have systematically varying police or prosecution policies, drug court policies, or community-level influences, which may lead re-arrest rates or other outcomes to vary (e.g., if police are more likely to make drug arrests in some than in other jurisdictions). Site-

specific differences may also lead the direction or strength of the drug court impact to vary. Hierarchical modeling enables taking these possibilities into account (see Raudenbush and Bryk 2002) by explicitly modeling the intercept and the impact of drug court participation as random effects (i.e., able to vary by site) rather than as fixed effects (assumed not to vary by site).

Table 2.4 shows the results of simple random effects models, performed in HLM 6.04 software. The models include the intercept and drug court status in predicting six key outcomes: (1) any re-arrest within two years; (2) any re-arrest within three years; (3) number of re-arrests within three years; (4) days from arrest to drug court enrollment/disposition; (5) days sentenced to jail/prison on the instant case; and (6) days sentenced to jail/prison on either the instant case or recidivism cases originating over the following three years.

In all six models, the random effect for the intercept was significant; in other words, there was significant between-site variance in the outcomes. In addition, the results indicate that there was significant between-site variance in the relative impact of drug court participation on outcomes. These results indicate that it would be most prudent to conduct all impact analyses in an HLM framework, enabling adjustments for site-specific tendencies. Of course, part of what we plan to accomplish in our analyses is to explore *why* these site-specific tendencies exist: that is, to explore precisely which court-level policies and community-level characteristics explain why some drug courts outperform others. That too was accomplished in an HLM framework.

Risk Scores

In examining which policies and practices lead some drug courts to be more effective than others, one concern is that the results could be spurious without controlling for background characteristics whose distributions might vary from site to site. Although propensity score matching balanced the samples when testing for *main* effects (i.e., the statewide impact of drug courts), matching did not balance the samples when testing for the mediating effects of different court policies. For example, when testing for the policy effect of more as opposed to less frequent judicial status hearings, we cannot be certain whether the average participant background characteristics in sites that employ more frequent hearings is comparable to the average background characteristics in sites that employ less frequent hearings.

One way to control for selection bias on policy variables would be to reconfirm any mediation results after controlling for numerous background covariates. However, that strategy would have involved employing potentially convoluted models with large numbers of independent variables. Such models would have entailed a substantial loss of degrees of freedom and would have raised the prospect of obtaining highly distorted estimates (e.g., due to multi-collinearity).

Instead, we created two summary risk scores that represent the combined effect of multiple background characteristics on outcomes. The first represented each defendant's predicted probability of re-arrest within three years, based on individual characteristics such as criminal history, charges, and demographics (see Table 2.5). The second risk score represented the predicted re-arrest rate for each site, based on community-level characteristics such as region, county vs. city court, and other census characteristics (see Table 2.6). Importantly, this second

Table 2.4. Random Effects Models for Major Outcomes: Intercept and Sample Status

Number of Cases (Level 1 Units)	**15,070**			
Number of Sites (Level 2 Units)[1]	**85**			
RECIDIVISM				
Re-Arrested within Two Years (Y/N)				
Regression specification		Logistic		
Random effects	*Variance*	*Stnd. Deviation*	*df*	*p value*
Level 2, U0	0.506	0.712	84	0.000
Level 2, U1	0.151	0.388	84	0.000
Re-Arrested within Three Years (Y/N)				
Regression specification		Logistic		
Random effects	*Variance*	*Stnd. Deviation*	*df*	*p value*
Level 2, U0	0.433	0.658	84	0.000
Level 2, U1	0.122	0.350	84	0.000
Number of Re-Arrests within Three Years				
Regression specification		Poisson		
Random effects	*Variance*	*Stnd. Deviation*	*df*	*p value*
Level 2, U0	0.443	0.666	84	0.000
Level 2, U1	0.181	0.426	84	0.000
CASE PROCESSING				
Days, Arrest to Disposition/Plea Date				
Regression specification		Ordinary Least Squares		
Random effects	*Variance*	*Stnd. Deviation*	*df*	*p value*
Level 2, U0	7,150.135	84.558	84	0.000
Level 2, U1	20,090.617	141.741	84	0.000
Level 1, R	126,516.865	355.692		
Intraclass correlation coefficient	0.178			
Days Sentenced on the Precipitating Case[2]				
Regression specification		Poisson		
Random effects	*Variance*	*Stnd. Deviation*	*df*	*p value*
Level 2, U0	1.465	1.211	84	0.000
Level 2, U1	3.772	1.942	84	0.000
Total Days Sentenced within Three Years				
Regression specification		Poisson		
Random effects	*Variance*	*Stnd. Deviation*	*df*	*p value*
Level 2, U0	0.483	0.695	84	0.000
Level 2, U1	2.335	1.528	84	0.000

+p<.10, * p<.05, ** p<.01, ***p<.001.

Note: Logistic regression (Bernoulli) models were run on all dichotomous outcome measures, Poisson regressions were run on outcome measures with a large number of zeros and a right-skewed distribution, and an ordinary least squares regression was run on days from arrest to disposition, which more closely approximates a normal than a Poisson distribution. Fixed effects were calculated as part of all models, but, because the purpose of this table is to illustrate random effects, the results are not displayed here.

[1] There were 86 drug courts in the analysis, but two drug courts in Brooklyn (Kings County) that handle different but overlapping types of cases arraigned on felony charges were combined with felony level comparison cases in Brooklyn under a single site-level identifier.

[2] The number of cases for this model is 13,758. A small number of cases were missing sentencing data on the precipitating criminal case (168 drug court and 33 comparison cases), and additional drug court participants were excluded from the analysis if they had not completed their program participation and received a final case disposition (1,111 drug court cases).

Table 2.5. Level 1 Risk Score: Logistic Regression of Individual-Level Baseline Characteristics on Re-Arrest within Three Years

Dependent Variable	**Re-Arrested within Three Years**
Number of Cases[1]	**7,463**
Re-arrested	**4,042 (54.2%)**
Not re-arrested	**3,421 (45.8%)**
Chi-square for final model	1640.029***
Lost degrees of freedom	12
Nagelkerke R^2 for final model	0.264
Independent Variables:	**Regression Coefficient**
Age	-.042***
Female sex	-.246***
Black race	.389***
Hispanic race	.405***
Base 10 logarithm of the number of prior arrests	1.031***
Prior bench warrant	.595***
Prior probation or parole revocation	.232**
Instant case drug possession charge	.221**
Instant case drug sales charge	.514***
Instant case driving while intoxicated (DWI) charge	-.937***
Instant case property-related charge	.104
Felony level arrest charge (vs. misdemeanor)	-.312***
Constant	-.522***

+p<.10, * p<.05, ** p<.01, ***p<.001.

[1] A total of 7,535 cases were entered into the logistic regression model, of which 72 (1.0%) were missing data on either or both of two variables: sex and/or race. As noted in our description of study methodology, a second regression was performed without those two variables to enable producing a risk score for all 7,535 cases. Thus, this illustrative model led to the computation of risk scores for 99.0% of cases.

Table 2.6. Level 2 Risk Score: HLM Logistic Regression of Court-Level Characteristics on Re-Arrest within Three Years

Dependent Variable	Re-Arrested within Three Years
Number of Cases (Level 1 Units)	**7,535**
Number of Courts (Level 2 Units)	**85**
Fixed Effects	**Regression Coefficient**
New York City misdemeanor court (vs. suburban)	.772***
Upstate court (vs. suburban)	-.529***
County court (vs. city court)	-.268**
Arrest rate in court jurisdiction[1]	.010**
Racial diversity index[2]	.554*
Intercept	-.030
Random Effects (Level 2, U0)	
Standard Deviation (Variance)	.345 (.119)
Degrees of freedom	165
Chi square	644.581***

+p<.10, * p<.05, ** p<.01, ***p<.001.

[1] Arrests per 1,000 residents annually.

[2] Index based on proportions black, white, Asian, American-Indian, and Pacific Islander race and proportion Hispanic ethnicity.

risk score is a site-level score that applies to whole jurisdictions (i.e., potentially reflecting jurisdictional variations in police or prosecutorial practices or other community characteristics). Both of the two scores were computed only with the comparison sample, so that each defendant's base risk of re-arrest could be defined independent of any program impact of drug court participation on that risk.

Analytic Plan

Main Effect of Drug Court Participation

Final impact analyses were conducted in HLM 6.04 software. As noted previously, we analyzed the impact of drug court status as a random effect. We then conducted logistic regressions on dichotomous outcomes (e.g., any re-arrest, any re-conviction, and sentenced to incarceration or not); Poisson regressions on right-skewed count distributions (e.g., time to disposition, days incarcerated); and ordinary least squares regressions on outcomes with an approximately normal distribution (e.g., days from arrest to disposition). For our results tables, we transformed the HLM regression coefficients for the intercept and drug court status to produce adjusted averages.

Thus, although many of our reported results appear to consist of simple percentages or averages, all such outcomes are never based on the raw data but are always adjusted with HLM regression procedures.

Some analyses also examine drug court retention rates. However, retention has no equivalent in the comparison sample, whose members are not necessarily participating in a program in which they may or may not be retained. Therefore, because analyses of retention do not concern the drug court *impact* in relation to a comparison group, we simplified the retention rate analyses, conducting them for the drug court sample only using SPSS 19.0 software (i.e., without the use of multi-level modeling techniques). (See Rossman et al. 2011, which adopted the same strategy for retention and other analyses that did not involve the comparison group.)

Individual-Level Interaction Effects

As part of our effort to determine whether the drug court intervention is more effective with some as opposed to other target populations, we added interaction terms to our main effect model for the core outcome of any re-arrest within three years. To illustrate how we proceeded, in examining the impact of offense type on re-arrest within three years, we divided the sample into the four most common arrest charge categories: drug sales, drug possession, property charges, and all other charges. We then computed a model in HLM whose independent variables were: (1) drug court (vs. comparison) status, (2) sales charge, (3) possession charge, (4) property charge, (5) drug court* sales, (6) drug court* possession, and (7) drug court* property. (All other non-drug charges comprised the reference category.) The coefficients for drug court status and the three interaction terms indicated whether the drug court intervention was particularly effective or ineffective for defendants who were arrested on each of the four offense types. We also used our risk score measures as control variables.

Besides offense type, we performed comparable interaction analyses for defendants who varied in prior arrests (both a continuous count and a categorical recode broken into zero, 1-3, or 4 or more); risk of re-arrest (both Level 1 risk score and by risk quintile);[4] and demographic background (age, race, and sex).

Court-Level Mediation Analyses

In some analyses, we sought to examine whether drug courts that have adopted certain policies and practices are more effective than other types of drug courts. In these instances, measures were coded at the court level rather than the individual level. That is, each of our 86 courts had site-level characteristics, such as state region and felony vs. misdemeanor court. In addition, each of our 86 drug courts had adopted distinct drug court policies and practices.

For these analyses, it became logical (not to mention technically necessary) to divide each of the 86 study jurisdictions into two: a drug court site, which operated according to a series of drug court-specific policies, and a comparison court site, which, obviously, did not operate according to any drug court-specific policies. In a typical analysis, the 85 comparison court sites[5] would be

[4] The model including risk quintile interaction terms does not include the Level 1 risk score.

[5] There were 86 drug courts in the analysis, but two drug courts in Brooklyn (Kings County) that handle different but overlapping types of cases that are arraigned on felony level charges were combined with the felony level comparison cases in Brooklyn under a single site-level identifier.

coded as "0" on each drug court policy measure, whereas the 86 drug court sites would be coded differently depending on whether or not they adopted the given policy (dichotomous measures) or on how much of the policy they employed (continuous measures).[6]

In conducting the actual mediation analyses, we proceeded as follows. As described above, we developed separate risk scores that respectively represented the individual-level and community-level risk of re-arrest. These risk scores provide two standard control variables that we included in all final multivariate models. The establishment of these standard control variables ensured that we did not mistakenly attribute an effect to court-level policies, when the courts that operated according to those policies may simply have had, for example, a lower-risk defendant population. Having established two standard control variables, we then entered into each analytic model: drug court sample status (drug court vs. comparison) and a particular policy construct of interest. Because comparison sites were coded as "0" on each of the policy measures, there was no need to include additional interaction terms; the coefficient for the policy construct indicated whether drug courts implementing that particular policy (or with a greater degree of that policy) were more effective. Based on the results obtained from these simple models, we then built up to more complex models that included multiple policy constructs, or multiple measures of the same underlying construct (e.g., deterrence, treatment). In this fashion, we sought to provide a rigorous analysis of the key *court-level* policy, practice, and target population factors that *explain* the direction and magnitude of the drug court impact on re-arrest within three years.

[6] The 85 comparison court responses were coded 0 (or corresponding coding for none, no, never, or N/A) with one exception: Eligible case types (charge type and severity) were coded to match the response of the drug court in the same jurisdiction, since eligible case types typically applied to both the drug court and comparison court. (For instance, if the drug court was located in a city court, it necessarily tended to focus on misdemeanor cases, as did the matched comparison court, whereas if the drug court was located in a county court or state Supreme Court, it necessarily tended to focus on felony cases, again as did the matched comparison court.)

Chapter 3
Profile of Drug Court Participant Characteristics

The final drug court sample included 86 drug courts and 7,535 participants who enrolled in 2005 or 2006. These participants were divided into eight categories based on charge severity (felony or misdemeanor) and region (New York City, suburbs, upstate rural/semi-rural areas, and upstate mid-sized cities). Both overall and for each category, Table 3.1 provides information on participant demographic characteristics, social ties, drug use history, mental health history, severity of charges, criminal history, prior incarceration history, and compliance history. This chapter describes key patterns in the resulting profile.

Demographics

Drug court participants were mostly male (76%), born in the United States (96%), and averaged 32 years of age. Nearly half (47%) of all participants were white, although in New York City, whites (combined with a small number of Asians) were relatively underrepresented (15%).

Social Ties

Drug court participants tended to be unmarried (87%). Although somewhat more than half (61%) had a high school diploma or GED, only about a third (36%) were employed or in school at intake, and 30% were homeless at some point in their lives. Compared to other courts, participants in New York City's misdemeanor drug courts were the most disadvantaged group. They were the least likely category to be employed or in school (21%), most likely to have been homeless at some point (49%), and most likely to have been homeless at intake (19%).

Drug Use and Mental Health

The age of first drug use is similar among participants across the state, averaging 15 or 16 years. Concerning primary drug of choice, about one-third of participants (32%) listed cocaine or crack, 14% listed heroin, and the remaining participants listed marijuana (30%), alcohol (19%), or some other drug (5%). However, more than three-quarters (76%) of NYC misdemeanants listed the serious drugs of cocaine, crack, or heroin as primary, again suggesting that the population targeted by these courts is among the most high-need in the state. Also notable, participants in upstate rural/semi-rural areas were particularly likely to list alcohol as primary (more than 40% in upstate rural/semi-rural areas compared to less than 20% elsewhere).

The majority of drug court participants (62%) had previously been in substance abuse treatment. Mental health issues were also prevalent, with 63% of participants statewide reporting a mental health issue, and 29% reporting that they previously received mental health treatment. The percentage of participants who reported previous physical, emotional, or sexual abuse was 27%.

Current Charges and Criminal History

Not unexpectedly, illegal drug possession was the most common charge (33%), followed by illegal drug sales (20%), although this latter percentage is driven almost entirely by the New York City felony drug courts, in which two-thirds of participants had a drug sales top charge. Driving while intoxicated (DWI) was the most common charge in upstate rural/semi-rural courts.

The majority of drug court participants were not new to the criminal justice system, with 83% having at least one prior arrest and a total of four priors on average. Participants in the New York City misdemeanor drug courts had particularly extensive prior criminal histories. In these courts, all participants (100%) had at least one prior arrest, with a total of 19 priors on average. Not surprisingly, NYC misdemeanants also averaged more prior convictions (11) than elsewhere.

Criminal Risk

The final section of Table 3.1 provides the average risk of re-offending—computed independent of how that risk might be affected by drug court participation. Overall, had they not participated in drug court, the full sample of participants would have averaged a 54.1% predicted risk of re-arrest over a three-year tracking period. However, there were wide variations based on region and charge severity, with participants in NYC drug courts averaging a significantly higher risk than those enrolling elsewhere: The NYC misdemeanor participants averaged a 77.2% risk of re-arrest, and the NYC felony participants averaged a 59.8% risk. On the other end of the spectrum, participants in the upstate rural/semi-rural drug courts averaged a 45.2% and 36.2% risk of re-arrest for upstate misdemeanor and upstate felony participants respectively. The table also shows the percentage of participants that fell into each of five risk "quintiles." Perhaps most remarkably, 90% of NYC misdemeanants, compared with no more than 45% of participants in any other region/charge category, were in the fourth or fifth quintiles (i.e., "high" or "very high" risk).

In general, the New York City misdemeanant population is unique, averaging the most severe social disadvantages, drug use history, and criminal history of any other charge and regional sub-category. This result reflects the explicit policies of NYC misdemeanor drug courts, all of which require defendants to meet a minimum number of prior convictions to be eligible.[7] This eligibility restriction, in turn, leads these courts to inherit a population that has a lengthy history of drug use, anti-social behavior, and socioeconomic dislocations.

[7] In New York City, misdemeanants *without* multiple priors generally face light sentences under conventional prosecution, raising a problem of legal disproportionality were they to be asked to complete a lengthy drug court mandate. This element of the legal context in New York City largely explains why its misdemeanor drug courts require the existence of multiple priors in order for defendants to enroll.

Table 3.1 Profile of Drug Court Participants

Region	New York City		Suburban		Upstate Rural/Semi-Rural		Upstate Mid-Sized Cities		All Courts
Charge Severity	**Misd.**	**Felony**	**Misd.**	**Felony**	**Misd.**	**Felony**	**Misd.**	**Felony**	
Number of Participants	960	1,916	442	158	1,025	1,470	966	564	7,535
DEMOGRAPHICS									
Age	39	25	38	29	30	32	34	30	32
% Female	18%	18%	31%	27%	30%	26%	29%	24%	24%
Race/Ethnicity									
White or Asian	14%	12%	47%	64%	84%	85%	46%	54%	47%
Black/African-American	53%	54%	43%	28%	12%	12%	44%	39%	36%
Hispanic / Latino	33%	34%	10%	8%	3%	3%	10%	7%	16%
Place of birth: United States	98%	95%	94%	94%	99%	99%	100%	100%	97%
SOCIAL TIES									
Married	14%	12%	10%	11%	14%	15%	12%	13%	13%
Education Status									
High School Education or GED	54%	42%	73%	74%	70%	77%	63%	70%	61%
Currently in School	3%	13%	8%	5%	6%	5%	3%	3%	7%
Employment									
Employed at time of participation	15%	22%	32%	36%	35%	41%	23%	29%	28%
Employed or in school?	21%	35%	41%	41%	42%	47%	24%	32%	36%
Primary Support									
Legal Employment	27%	32%	33%	30%	38%	44%	20%	23%	32%
Government Assistance	23%	18%	31%	18%	27%	23%	40%	34%	25%
Hustling	14%	7%	4%	7%	2%	1%	1%	0%	5%
Spouse, Family, Friends	23%	34%	22%	34%	23%	21%	18%	20%	25%
None/other	13%	9%	10%	10%	10%	12%	21%	22%	13%
Homelessness									
Ever Homeless	49%	28%	36%	20%	31%	22%	24%	18%	30%
Homeless at time of participation	19%	10%	14%	10%	10%	8%	12%	9%	11%
DRUG USE HISTORY									
Age of 1st drug use	15	15	16	15	15	15	16	16	15
Primary Drug of Choice									
Marijuana	20%	54%	15%	24%	19%	19%	24%	30%	30%
Alcohol	4%	5%	8%	6%	40%	44%	15%	16%	19%
Crack	29%	14%	30%	12%	19%	15%	26%	19%	20%
Cocaine	12%	12%	14%	17%	7%	9%	17%	19%	12%
Heroin	35%	13%	19%	19%	9%	7%	15%	11%	14%
Other	1%	4%	15%	23%	6%	6%	3%	5%	5%

Table 3.1 Profile of Drug Court Participants *(Continued)*

Region	New York City		Suburban		Upstate Rural/Semi-Rural		Upstate Mid-Sized Cities		All Courts
Charge Severity	**Misd.**	**Felony**	**Misd.**	**Felony**	**Misd.**	**Felony**	**Misd.**	**Felony**	
Number of Participants	960	1,916	442	158	1,025	1,470	966	564	7,535
DRUG USE HISTOR*Y (cont.)*									
Frequency of Drug Use									
Daily Drug Use	58%	54%	42%	38%	24%	19%	51%	47%	43%
Daily Drug Use - Not Marijuana	49%	26%	35%	27%	19%	15%	38%	33%	29%
Ever Previously in Drug Treatment	71%	34%	79%	71%	78%	74%	67%	69%	62%
MENTAL HEALTH HISTORY									
Ever abused	19%	17%	40%	33%	42%	39%	22%	20%	27%
Any reported MH issue	56%	59%	59%	69%	74%	70%	61%	42%	63%
Any treatment received for MH	17%	17%	31%	34%	48%	40%	34%	25%	29%
CURRENT CRIMINAL CASE									
Charges									
Arrest charge type									
Drug possession	62%	27%	60%	42%	26%	15%	36%	31%	33%
Drug sales	0%	67%	0%	7%	0%	10%	0%	6%	20%
DWI	0%	0%	10%	4%	29%	41%	5%	11%	14%
Petit larceny	24%	0%	20%	0%	14%	0%	24%	0%	9%
Other property	10%	6%	5%	29%	8%	19%	9%	32%	12%
Other	5%	0%	6%	18%	23%	14%	26%	20%	12%
Disposition Severity									
Violation	1%	1%	14%	21%	11%	2%	11%	3%	5%
Misdemeanor	97%	25%	86%	63%	80%	35%	87%	51%	58%
Felony	1%	74%	0%	16%	8%	63%	2%	47%	37%
CRIMINAL HISTORY									
Prior Arrests									
# prior arrests	19	3	6	3	3	4	5	3	4
Any prior arrest	100%	73%	91%	80%	85%	86%	81%	77%	83%
Any drug arrest	96%	65%	77%	55%	36%	32%	51%	40%	55%
Any felony arrest	95%	53%	70%	53%	51%	57%	64%	60%	62%
Any misdemeanor arrest	98%	67%	86%	73%	80%	82%	76%	70%	78%
Any violent felony arrest	63%	25%	28%	19%	18%	18%	37%	27%	29%
Any weapons arrest	56%	25%	19%	16%	15%	12%	28%	21%	25%

Table 3.1 Profile of Drug Court Participants *(Continued)*

Region	New York City		Suburban		Upstate Rural/Semi-Rural		Upstate Mid-Sized Cities		All Courts
Charge Severity	**Misd.**	**Felony**	**Misd.**	**Felony**	**Misd.**	**Felony**	**Misd.**	**Felony**	
Number of Participants	960	1,916	442	158	1,025	1,470	966	564	7,535
CRIMINAL HISTORY *(cont.)*									
Prior Convictions									
# prior convictions	11	0	2	1	1	1	1	1	1
Any prior conviction	94%	34%	74%	52%	57%	68%	62%	58%	60%
Any drug conviction	88%	31%	56%	35%	21%	19%	30%	25%	35%
Any felony conviction	64%	13%	35%	16%	16%	25%	32%	26%	27%
Any misdemeanor conviction	91%	32%	72%	50%	55%	66%	58%	54%	57%
Any violent felony conviction	14%	0%	4%	3%	3%	2%	8%	4%	4%
Any weapons conviction	19%	3%	2%	3%	3%	3%	7%	4%	5%
Prior Incarceration									
Any prior prison sentence	43%	7%	14%	6%	7%	8%	18%	15%	14%
Compliance History									
Any bench warr. on a prior case	86%	40%	66%	43%	31%	26%	51%	45%	45%
Any prior probation revocation	32%	7%	33%	21%	26%	25%	34%	34%	24%
Any prior parole revocation	32%	5%	7%	5%	4%	3%	13%	7%	9%
RISK OF RE-OFFENSE									
Average risk (absent intervention)	77.2%	59.8%	54.3%	45.7%	45.2%	36.2%	58.5%	49.2%	54.1%
Distribution by risk quintile									
Quintile 1: Low risk, 1-33%	0%	9%	19%	26%	30%	47%	11%	23%	20%
Quintile 2: Low-moderate, 33-49%	3%	17%	20%	32%	28%	28%	22%	27%	21%
Quintile 3: Moderate-high, 49-63%	7%	29%	21%	19%	18%	14%	22%	20%	20%
Quintile 4: High, 63-67%	28%	25%	26%	18%	16%	9%	23%	19%	21%
Quintile 4: Very high, 67-93%	62%	20%	15%	5%	8%	3%	22%	11%	20%

Note: When count is 85, the missing court is Buffalo. When the count is 81, the missing courts are Oswego, Rensselaer County, Beacon City, Schuyler County, and Steuben County.

Chapter 4
Profile of Drug Court Policy Characteristics and Constructs

The 86 statewide drug courts included 10 from New York City, six from the surrounding suburbs, and 70 from the upstate region of the state. The upstate region primarily consists of rural and semi-rural areas, although there are a number of small and medium-sized cities as well, of which the largest are Buffalo, Syracuse, Rochester, and the State Capitol, Albany. This chapter explores the policies of the 86 drug courts, drawing attention to important differences (where they exist) among policies that are more or less prevalent in each region. This chapter also discusses the development of latent constructs that combine conceptually related policies and practices into a smaller and more manageable number of summary indices.

Drug Court Policies

Table 4.1 profiles drug court policies in the following core areas:

- Target Population, including
  - Legal Eligibility
  - Clinical Eligibility
- Deterrence/Incentives, including
  - Legal Leverage
  - Supervision (judicial status hearings, drug tests, and case management)
  - Sanctions and Incentives
- Treatment, including
  - Common Treatment Modalities
  - Evidence-Based Practices
  - Ancillary Services
- Procedural Justice/Courtroom Interaction
- Collaboration/The Drug Court Team
- Other Policies (time to enrollment, program length, and reason for court establishment).

Target Population

The previous chapter examined the psychosocial characteristics and average risk of re-offending of the individual members of the drug court sample. This chapter examines the legal and clinical eligibility policies that define the drug court target population—and in turn influence the psychosocial characteristics that emerge in the drug court sample.

Legal Eligibility

As shown in Table 4.1, only two drug courts (both upstate) accept participants with a violent felony arrest, but the majority of the state's drug courts (77%) accept participants with nonviolent felony charges. Fifty-seven percent of drug courts accept participants with a drug sales charge, and 83% accept participants with a non-drug charge. Seventy-six percent of drug courts accept DWI charges, a practice that is far more common in the upstate region (where 86% of the drug courts accept DWI charges) than in New York City (30%) or its suburbs (33%).

Notably, the New York City (NYC) programs are sharply divided into five drug courts that almost exclusively serve felony defendants; four drug courts that almost exclusively serve misdemeanants; and one combined felony/misdemeanor drug court in Staten Island. The misdemeanor-only drug courts generally serve defendants with a lengthy criminal history, because NYC misdemeanants without multiple priors do not face sufficient legal penalties for a lengthy stay in court-ordered treatment to be legally feasible. None of the four misdemeanor-only drug courts accept drug sales charges—all of which are felonies—whereas the six other NYC drug courts all accept drug sales cases.

Clinical Eligibility
The vast majority (99%) of drug courts finds substance-dependent participants eligible, and 73% of drug courts consider substance-abusing participants eligible as well. In addition, 21% serve substance "using" participants (whose substance problem is not technically severe enough to meet any DSM-IV criteria for a substance disorder). Some drug courts admit participants who *only* have substance problems involving alcohol or marijuana: 72% accept alcohol-only participants, and 77% accept marijuana-only participants.

Deterrence/Incentives
Deterrence and incentive policies are designed to manipulate the costs and benefits of different participant behaviors, inducing greater compliance.

Legal Leverage
In varying degrees, drug courts all motivate compliance through legal leverage, primarily the threat of a jail or prison sentence in the event of program failure. For one, to enroll, 85% of drug courts always require a guilty plea—thereby foreclosing the possibility that participants might litigate the legal case against them should they fail the program. On average, just prior to enrollment, over two drug court team members (2.47) explain the jail or prison alternative that participants will face in the event they fail the program. Sixty-seven percent of drug courts always send participants to jail or prison if they fail (90% of the NYC drug courts but two-thirds or less of the suburban or upstate courts). For program graduates, 20% of the state's drug courts dismiss the cases upon graduation. Whereas 70% of NYC and 67% of suburban drug courts dismiss cases for graduates, only 9% of upstate drug courts do so. In general, these results indicate that in the upstate region, the drug courts are much less likely to employ legal leverage.

Supervision
Participants receive supervision from judges, case managers, and other drug court staff to ensure that they are following program rules. The frequency of supervision varies from court to court. The majority of drug courts (66%) require one to three judicial status hearings per month in the first three months, while the frequency of drug tests varies more widely (details in Table 4.1). Fifty-eight percent of drug courts always require regular meetings with case managers, although significantly more NYC and suburban drug courts than upstate courts require regular case manager meetings (80% v. 86% v. 58%, respectively). As shown in Table 4.1, required case manager meetings are more frequent on average in the NYC drug courts than elsewhere.

Table 4.1. Drug Court Policies

	NYC	Suburbs	Upstate	Total
Number of Sites	10	6	70	86
TARGET POPULATION				
Legal Eligibility				
Violent felonies eligible	0%	0%	3%	2%
Nonviolent felonies	80%	33%	80%	77%
Drug sales eligible	60%	33%	59%	57%
Non-drug eligible	80%	100%	81%	83%
DWI eligible	30%	33%	86%	76%
Clinical Eligibility				
Substance dependent eligible	100%	100%	99%	99%
Substance abusing eligible	100%	83%	69%	73%
Substance using eligible	60%	17%	16%	21%
Alcohol-only eligible	70%	33%	76%	72%
Marijuana-Only eligible	90%	50%	77%	77%
DETERRENCE				
Legal Leverage				
Court requires guilty plea at entry				
Always	90%	83%	84%	85%
Sometimes	0%	0%	7%	6%
Never	10%	7%	9%	9%
# court team members who explain jail/prison alternative	2.40	3.00	2.43	2.47
Participants always receive jail/prison alt. upon failing	90%	67%	64%	67%
Participants always told legal benefits of graduation	100%	100%	91%	93%
Case is dismissed upon graduation	70%	67%	9%	20%
Supervision				
Judicial status hearings per month, 1st 3 months				
Less than 1 per month	20%	0%	3%	5%
1-2 per month	80%	50%	66%	66%
3 or more per month	0%	50%	31%	29%
Drug tests per month, 1st 3 months				
1 per month	30%	33%	37%	36%
2-9 per month	30%	0%	14%	20%
10 or more per month	40%	67%	43%	44%

Table 4.1. Drug Court Policies *(Continued)*

	NYC	Suburbs	Upstate	Total
Number of Sites	10	6	70	86
DETERRENCE *(cont.)*				
Supervision *(cont.)*				
Drug tests observed	50%	50%	48%	49%
Always requires regular meetings with case managers	80%	86%	52%	58%
Case management meetings per month, 1st 3 months				
Less than 1 per month	0%	0%	6%	5%
1-2 per month	30%	50%	51%	49%
3 or more per month	70%	50%	43%	47%
Sanctions				
Common sanctions				
Jury box	56%	0%	37%	36%
Decrease in phase of participation	67%	33%	67%	65%
Increase in judicial status hearing frequency	100%	67%	61%	65%
Upgrade to more intensive treatment modality	88%	100%	67%	71%
Community service	22%	83%	90%	82%
Essay	89%	83%	86%	86%
Judicial admonishment	100%	83%	89%	89%
Any short-term jail sanction	100%	100%	100%	100%
Jail sanction of 1-7 days	100%	100%	99%	99%
Jail sanction of 8 or more days	44%	33%	53%	51%
Sanctions always imposed for:				
Positive drug tests	21%	17%	33%	30%
Missed drug tests	21%	17%	30%	28%
Tampered drug tests	37%	50%	44%	44%
Lying about drug use	26%	25%	44%	41%
Treatment absence	21%	25%	20%	21%
Court absence	26%	25%	29%	28%
Case management absence	21%	8%	17%	17%
New arrest	42%	42%	38%	39%
Poor attitude in treatment	26%	25%	15%	17%
Poor attitude in courtroom	21%	33%	16%	18%
% of all sanctions that involve jail	12%	10%	18%	17%
% of first sanctions that involve jail	1%	3%	11%	10%
Court has a formal sanction schedule	80%	50%	30%	37%
Sanction schedule provided to participants	80%	50%	11%	22%
Sanction schedule is usually followed	50%	33%	30%	33%
Schedule is important factor in determining sanctions[1]	30%	17%	15%	16%

Table 4.1. Drug Court Policies *(Continued)*

	NYC	Suburbs	Upstate	Total
Number of Sites	10	6	70	86
DETERRENCE *(cont.)*				
Incentives				
Common Rewards				
Judicial praise	100%	100%	99%	99%
Phase promotion	90%	83%	90%	90%
Certificates	100%	100%	71%	77%
Decrease in judicial status hearing frequency	70%	50%	70%	69%
Downgrade to less intensive treatment modality	70%	100%	43%	50%
Sober coins	0%	67%	37%	35%
Event tickets	0%	33%	17%	16%
TREATMENT				
First Treatment Modality				
% of participants sent to residential	*39%*	*11%*	*7%*	*20%*
% of participants sent to short-term rehabilitation	*6%*	*25%*	*18%*	*14%*
% of participants sent to intensive outpatient	*34%*	*19%*	*22%*	*27%*
% of participants sent to regular outpatient	*21%*	*45%*	*53%*	*40%*
# of Available Tx Providers	94.0	76.3	20.1	34.1
Evidence-Based Practices				
% of treatment providers that are manualized	66%	56%	33%	39%
Any manualized providers	70%	100%	56%	62%
Any providers with cognitive-behavioral therapy (CBT)	100%	100%	97%	98%
Any providers with CBT for criminal thinking	40%	43%	40%	40%
Drug court assesses for trauma	30%	0%	5%	7%
Drug court can link participants to trauma treatment	30%	14%	6%	10%
Ancillary Services[2]				
Transportation	80%	33%	46%	49%
Housing assistance	80%	17%	77%	73%
Vocational services	100%	100%	89%	91%
Job placement services	100%	67%	70%	73%
GED/adult education classes	100%	100%	86%	88%
Physical health services	90%	33%	64%	65%
Parenting classes	80%	50%	76%	74%
Anger management	100%	67%	86%	86%

Table 4.1. Drug Court Policies *(Continued)*

	NYC	Suburbs	Upstate	Total
Number of Sites	10	6	70	86
PROCEDURAL JUSTICE				
Judge asks probing questions (always or usually)				
To compliant participants	80%	33%	74%	72%
To noncompliant participants	100%	67%	96%	94%
What does judge always discuss with participants				
Graduation	40%	33%	16%	20%
Treatment	80%	83%	70%	72%
Sobriety	70%	50%	74%	72%
Drug tests	80%	50%	46%	50%
Noncompliance	80%	83%	79%	79%
Service needs	40%	0%	43%	38%
COLLABORATION/DRUG COURT TEAM				
Who is Included on the Drug Court Team				
Judge	100%	100%	100%	100%
Drug court coordinator	80%	100%	90%	89%
Case manager(s)	89%	67%	44%	51%
Probation	40%	33%	76%	69%
Treatment	40%	67%	81%	75%
Law enforcement	0%	17%	57%	48%
Mental health	0%	33%	50%	43%
Public defender	100%	100%	90%	92%
Prosecutor	90%	100%	90%	90%
Regular staff meetings to discuss participant progress	60%	100%	96%	92%
OTHER POLICIES				
Average days from arrest to enrollment	68.0	169.7	273.4	240.3
Average days to graduate from the program	473.3	584.1	559.0	548.4
Voluntarily established drug court (not state-ordered)	70%	50%	42%	45%

[1] The reported percentages combine those who ranked the importance of the formal sanction schedule in determining sanctions as a "4" or a "5" (where "5" was explicitly defined as "most important").
[2] Ancillary services could either be available onsite at the court or at community-based programs.

Sanctions and Incentives

Interim sanctions can be imposed for a variety of reasons, and drug courts respond with an array of interim sanctions and incentives. Jail is the most common interim sanction, used by 100% of drug courts. Short jail sanctions of one to seven days (99%) are used by far more drug courts than longer jail sanctions of eight days or more (51%). Other commonly sanctions include judicial admonishment, (89%), an essay (86%), and community service (82%). NYC drug courts use community service to a much lesser extent (22%) than suburban (83%) and upstate (90%) courts. Seventeen percent of all drug court sanctions in New York involve jail, while 10% of *first* sanctions involve jail, suggesting a "graduated" approach that errs towards less serious sanctions in response to a participant's first infraction. Thirty-seven percent of drug courts have a formal sanction schedule, indicating which types of sanctions are imposed in response to various infractions. NYC has a much higher percentage of courts that have a formal sanctions schedule (80%, compared with 50% of suburban and 30% of upstate drug courts). Thirty-three percent of drug courts reported that a formal sanction schedule is usually followed, and 16% indicate that it is an important factor in determining sanctions in specific cases. Only 22% of courts provide their sanction schedule to participants (ranging from 80% of NYC to 11% of upstate courts). Regarding positive incentives, the most common ones are judicial praise (99%), phase promotion (90%), certificates (77%), and a decrease in the frequency of judicial status hearings (69%).

Treatment

Participants can receive any of four overarching treatment modalities: residential, short-term rehabilitation (generally 30 days or less of intensive inpatient), intensive outpatient, and regular outpatient. The majority (40%) of participants are sent to regular outpatient services as their first modality (ranging from 21% in New York City to 53% upstate), whereas 27% begin in intensive outpatient (34% in NYC, 19% in suburbs, and 22% upstate). Courts begin 20% of their participants in residential treatment, with NYC drug courts sending more participants there (39%) than drug courts from the other regions. Each drug court has, on average, 34.1 available treatment providers to which they can send their participants. NYC drug courts have a large average number of treatment providers (94.0), which is unsurprising as an urban setting provides for a larger number of options. Drug courts located in the suburbs also have a relatively large number of treatment providers (76.3) compared to upstate (20.1).

Concerning evidence-based treatment practices, upstate drug courts have the smallest percentage of "manualized" treatment providers that draw upon written lesson plans (33% manualized upstate compared to 56% of suburban and 66% of NY courts). Virtually all drug courts reported on the policy survey that they have treatment providers that use cognitive behavioral therapy (CBT), although we were unable to determine the precise percentages of treatment sessions at any program that employ evidence-based CBT methods. Interestingly, only 40% of drug courts reported utilizing treatment providers who provide CBT to address criminal thinking, despite the association of criminal thinking with future recidivism. (Even among the 40% of drug courts that reported using treatment for criminal thinking, answers to additional policy survey questions suggest that not all drug courts had available a valid evidence-based criminal thinking treatment.)

Seven percent of NY drug courts conduct assessments of participants for trauma (30% of NYC courts provide this service), and 10% of courts links their participants to trauma treatment. Many drug courts provide a host of other ancillary services designed to support their participants.

Services most often provided to participants include vocational services (91%), GED/Adult Educational Services (88%), and anger management (86%).

Procedural Justice/Courtroom Interaction

Procedural justice concerns the degree to which defendants perceive court procedures as fair and believe they were treated with dignity and respect. Since we neither interviewed defendants nor conducted direct observations of courtroom sessions (to assess whether elements of procedural justice were present), our information was exclusively dependent on interpreting responses to the drug court coordinator survey. The coordinators in 72% of the drug courts reported that the judge always or usually asks "probing questions" (involving more than one-word answers) of compliant participants, and 94% of coordinators reported that the judge always or usually asks probing questions of noncompliant participants. The coordinators reported that their judges most often discuss noncompliance (79%), as well as sobriety (72%) and treatment (72%).

Collaboration/ Drug Court Team

Team collaboration is a vital component of the drug court process, although the number of people involved in drug court teams varies from court to court. The most frequently represented positions on the drug court team include the judge (100%), public defender (92%), prosecutor (90%), coordinator (89%), treatment (75%), and probation (69%). The least commonly represented entities are case managers (51%), law enforcement (48%), and mental health providers (43%). Ninety-two percent of drug courts report regular meetings of the drug court team to discuss participant progress. Notably, only 60% of NYC drug courts report holding regular drug court team meetings, perhaps reflecting the high volume and more limited available time to hold meetings in NYC court settings.

Other Policies

Case processing time between the arrest and formal enrollment date varies greatly by region. New York City drug courts average the least amount of time between arrest and enrollment (mean of 68.0 days, compared with more than twice that length in both the suburbs and upstate). Although there is a small amount of variation in the average length of the program by region, all three regions have a mean program length ranging between one and two years, with a statewide average of 548.4 days—i.e., exactly 18.0 months. Of final interest, 70% of the NYC drug courts were established based upon the voluntary initiative of local stakeholders, whereas at least half of the drug courts in both the suburban and upstate regions were established as a result of the Unified Court System mandate of the early 2000s to establish a drug court in every county.

General Policy Orientations

Our methodology included looking at the relationship between important individual policies and drug court impacts. As described in Chapter 2, we also examined whether related policies and practices might be productively combined to form more general policy orientations, and whether site-to-site variation in these more general policy orientations were effective in explaining site-to-site variations in the drug court impact. We identified six general policy orientations that were both theoretically and empirically conducive to the development of summary constructs: (1) alcohol focus, (2) certainty of court response, (3) diversity of sanctions and incentives, (4)

ancillary service integration, (5) judicial communication with participants, and (6) counsel dedication. (Descriptions of each construct are in Chapter 2.)

Table 4.2 profiles the policies of the 86 drug court sites on these general measures, indicating for each construct the mean and standard deviation overall and within each geographic cluster. The information presented in the table generally reinforces the description of policies by region throughout the chapter. Upstate drug courts are far more likely than either NYC or suburban courts to focus on defendants with an alcohol addiction; ancillary services are less widely available in suburban courts; and judges in suburban courts engage in less intensive communication with drug court participants.

Table 4.2. Latent Policy Constructs

		NYC	Suburbs	Upstate	Total
Number of Sites		10	6	70	86
Alcohol Focus Scale					
	Mean	0.27	0.16	0.56	0.50
	(S.D.)	(0.18)	(0.23)	(0.25)	(0.28)
Certainty of Court Response Scale					
	Mean	0.78	0.70	0.83	0.82
	(S.D.)	(0.21)	(0.36)	(0.13)	(0.17)
Diversity of Sanctions and Incentives Scale					
	Mean	0.56	0.57	0.63	0.62
	(S.D.)	(0.17)	(0.29)	(0.13)	(0.15)
Ancillary Service Integration Scale					
	Mean	0.88	0.44	0.76	0.75
	(S.D.)	(0.14)	(0.26)	(0.21)	(0.23)
Communication with Participants Scale					
	Mean	0.88	0.60	0.84	0.82
	(S.D.)	(0.13)	(0.33)	(0.12)	(0.16)
Counsel Dedication Scale					
	Mean	0.83	0.83	0.90	0.89
	(S.D.)	(0.21)	(0.41)	(0.20)	(0.22)

Chapter 5
The Impact of New York State Adult Drug Courts

This chapter provides average statewide retention rates and impacts on recidivism, incarceration, and case resolutions for the 86 adult drug courts in the study.

Drug Court Retention Rates

Retention rates are a critical indicator of success. A one-year retention rate, for example, indicates the percentage of participants who, exactly one year after entry, had graduated or remained active in the program. The substance abuse treatment literature consistently links more time retained to more favorable post-treatment outcomes on measures such as drug use, criminal activity, and employment (Anglin, Brecht and Maddahian 1989; DeLeon 1988; Peters and Murrin, 1998; Taxman 1998; Taxman, Kubu, and Destefano 1999).

Drug courts have consistently been found to produce higher retention rates than community-based treatment programs accepting a combination of voluntary and court-mandated treatment participants (Condelli and DeLeon 1993; Lewis and Ross 1994). It is believed that this is due in part to the legal pressure created by the threat of incarceration in the event of drug court failure. Indeed, several studies confirm that greater legal leverage tends to improve both short-term and long-term treatment outcomes (Anglin et al. 1989; DeLeon 1988; Hiller, Knight, and Simpson 1998; Young and Belenko, 2002).[8]

Figure 5.1 presents statewide one-, two-, three-, and four-year retention rates for NY adult drug courts. The results show a one-year retention rate of 66%, which is consistent with other multi-site estimates of drug court retention (Belenko 1998; Rempel et al. 2003; Rossman et al. 2011). Since some participants who are still active in the program as of the open-year mark subsequently fail, the two-, three- and four-year retention rates are progressively lower than the one-year rates. The four-year rate of 53% is essentially equivalent to a statewide graduation rate, given that only 4% of drug court participants had still not reached their final status four years after enrollment (see Appendix G).

[8] It is also the case that a participant may not be retained in an individual community-based treatment program but may still be retained in the overall drug court program, which may re-refer the participant to another community-based program even after termination from the first one. Thus, to some extent, the drug court policy of affording multiple chances after initial treatment program terminations or other noncompliance inherently means that drug courts will be able to produce higher retention rates than individual treatment programs.

Figure 5.1. Statewide Drug Court Retention Rates

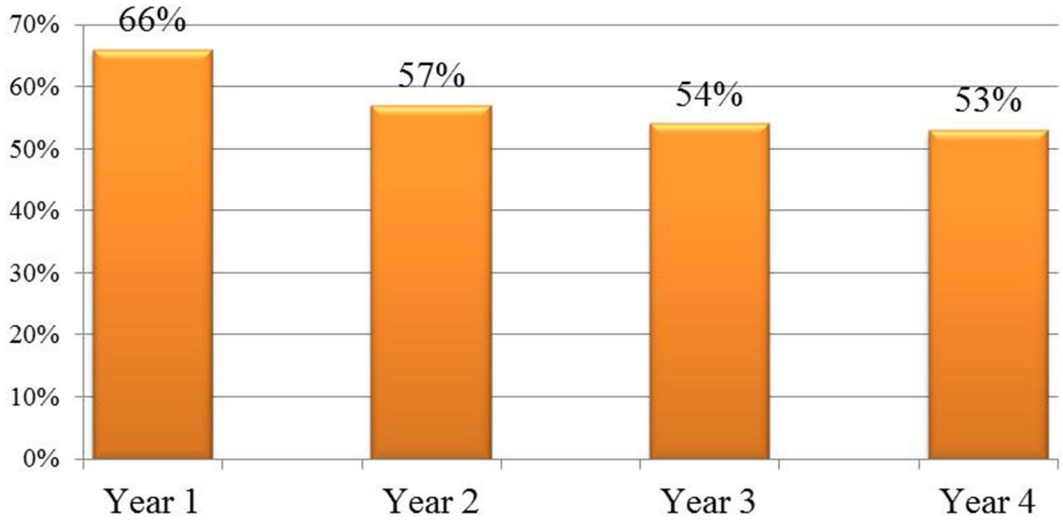


Figure 5.2 shows the four-year retention rate for each of the 86 drug courts in the study, organized by region. Overall and within each region, the retention rates vary widely (from 25% to 85% in the NYC courts; from 40% to 72% in the suburban courts; and from 23% to 94% in the upstate courts).

Main Effects on Recidivism

Table 5.1 shows recidivism impacts at one, two, and three years after drug court enrollment (or case disposition for the comparison group). After one year, drug court participants were significantly less likely than the comparison group to be re-arrested (22% vs. 25%). Participants were also significantly less likely to be re-arrested for a drug crime at the one-year mark (8% vs. 11%). As expected, by the two-year mark, re-arrests and drug re-arrests had increased in both samples. However, drug court participants were still significantly less likely to be re-arrested on any charge (32% vs. 36%) or on a new drug charge (13% vs. 15%).

Over the full three-year tracking period, across eight of the ten re-arrest outcomes shown in Table 5.1, drug court participants were re-arrested less than the comparison group, although the magnitude of the differences were modest and not always statistically significant. (For the remaining two outcomes, the results were identical between the drug court and comparison samples.) Overall, drug court participants appeared slightly less likely to be re-arrested at the three-year mark (40% vs. 42%, $p < .10$). Among statistically significant effects, the largest was for felony re-arrests (21% vs. 25%). The total number of re-arrests over the three-year tracking period was also significantly less for drug court than comparison offenders (1.03 vs. 1.19).

Table 5.1. Recidivism Outcomes

Outcome Measure	Drug Court	Comparison
Number of Cases	**7,535**	**7,535**
1. Re-Arrests		
One Year after Initial Disposition/Enrollment		
Any re-arrest	22%*	25%
Any drug re-arrest	8%**	11%
Two Years after Initial Disposition/Enrollment		
Any re-arrest	32%*	36%
Any drug re-arrest	13%*	15%
Three Years after Initial Disposition/Enrollment		
Average number of re-arrests	1.03**	1.19
Average number of drug re-arrests	0.33*	0.39
Any re-arrest	42%+	44%
Any drug re-arrest	17%	19%
Any drug sales re-arrest	4%***	6%
Any drug posession re-arrest	16%	16%
Any driving while intoxicated (DWI) re-arrest	6%	6%
Any felony re-arrest	21%**	25%
Any violent felony offense (VFO) re-arrest	6%	7%
Any property re-arrest (non-violent only)	18%	20%
2. Re-Convictions		
Three Years after Initial Disposition/Enrollment		
Any re-conviction	35%*	38%
Any drug re-conviction	14%	15%
3. Judicial Diversion 3-Year Recidivism Outcomes		
Felony Drug Cases	(N = 2,488)	(N = 2,447)
Average number of re-arrests	1.24***	1.89
Any re-arrest	51%***	59%
Felony Property Cases	(N = 800)	(N = 694)
Average number of re-arrests	1.41**	1.11
Any re-arrest	53%**	46%
All Judicial Diversion Cases	(N = 3,288)	(N = 3,141)
Average number of re-arrests	1.28***	1.72
Any re-arrest	52%**	56%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Note: Results were computed in HLM 6.04, defining the intercept and sample status as random effects (site n=86). Logistic or Poisson specifications were utilized, respectively for dichotomous and continuous outcome measures.

Along with re-arrest rates, Table 5.1 shows that the re-conviction rate at the three-year mark was significantly (although modestly) lower than for comparisons (35% vs. 38%).

Of final policy interest, we examined the impact of the state's drug courts with defendants whose charges made them eligible for treatment under Rockefeller Drug Law Reform, a major statewide drug law reform passed in 2009. Prior to reform, sentences for felony drug offenders were dictated by New York's Rockefeller Drug Laws, which were among the most punitive nationwide. These laws enabled some felony drug offenders to enroll in drug courts—but only with the permission of the prosecutor, who would have to agree to a reduction of the charges below the level at which the most punitive mandatory sentences applied. The reform law, by contrast, established a new procedure, defined as judicial diversion, which provided judges with full discretion to link an expanded array of felony drug and property offenders to court-ordered treatment, mainly though participation in drug courts. Given a high level of policymaker interest, we isolated judicial diversion-eligible charges within our sample and conducted a separate recidivism analysis. As shown in the bottom section of Table 5.1, we found that drug courts produced a significant reduction in re-arrests among felony drug cases (51% vs. 59%), while resulting in a significant increase in re-arrests among felony property cases that were affected by judicial diversion (53% vs. 46%). On net, combining these two case types, drug courts produced a significant decline in the re-arrest rate from 56% to 52%. These recidivism analyses were applied in a recently published cost-benefit analysis of judicial diversion (Waller et al. 2013).[9]

Main Effects on Case Processing, Outcomes, Sentencing, and Incarceration

Table 5.2 provides information on case processing, sentencing, and incarceration outcomes for the initial criminal case that led to inclusion in the drug court or comparison samples. Case processing times from arrest to program enrollment/initial case disposition were significantly higher for drug court than comparison offenders (276.0 vs. 213.5 days). Separate analyses suggested that these relatively high averages reflected results for a small fraction of all cases; the *median* times to enrollment/disposition were just under 100 days for both samples. Due to the substantial length of program participation, when considering the full period from arrest to final program exit for the drug court sample and from arrest to disposition for the comparison sample, processing time was clearly higher for drug court participants (746.6 vs. 213.5 days).

[9] The separate cost-benefit analysis of judicial diversion provided in Waller et al. 2012 also utilizes estimates, drawn from data collected as part of the current study, for the impact of drug court participation on days spent respectively in jail and prison and on probation and parole, over the full three-year recidivism tracking period. We found that among judicial diversion-eligible cases, drug courts did not lead to a significant change in jail days spent on recidivism cases over three years (25.10 vs. 23.42); led to a significant reduction in prison days (77.76 vs. 112.20) and probation days (64.94 vs. 84.60); and led to no change in parole days (exactly 18.96 for both samples).

Table 5.2. Case Processing, Sentencing, and Incarceration Outcomes

Outcome Measure	Drug Court	Comparison
Number of Cases	**7,535**	**7,535**
1. Case Processing (Initial Criminal Case)		
Days from arrest to disposition/enrollment	276.0**	213.5
Days from arrest to final disposition/completion	746.6***	213.5
2. Final Case Disposition (Initial Criminal Case)		
Convicted	88%	100%
Dismissed	10%	
Adjourned in contemplation of dismissal (ACD)	1%	
3. Final Sentence (Initial Criminal Case)		
Prison Sentence	4%**	8%
Jail Sentence	38%	35%
Straight probation	22%	19%
No incarceration/probation and not convicted	36%	38%
4. Incarceration		
Days incarcerated on initial criminal case	49.0**	64.5
Total days incarcerated: instant and recidivism cases	143.7*	168.2

+p<.10, * p<.05, ** p<.01, ***p<.001.

Note: Results are based on computations performed in HLM 6.04, defining both the intercept and sample status as random effects (site n = 86). Case processing outcomes were computed using an ordinary least squares specification. Disposition and sentencing outcomes were computed using a multinomial logistic regression specification. Incarceration outcomes were computed using a Poisson specification.

Regarding case dispositions, drug court participants had an 88% conviction rate. The other 12% of participants had their cases dismissed due to program graduation. The criminal cases of drug court participants were all presumably sufficient to merit a conviction under conventional prosecution; we therefore required comparison cases, as an inherent part of the research design, to have been convicted on the initial court case. Given these assumptions, 12% of drug court participants avoided what would otherwise have been a conviction.

Regarding case outcomes, drug court participants had a significantly lower rate of prison sentences than comparison offenders (4% vs. 8%). As a result, drug court participants averaged significantly fewer days than the comparison group spent incarcerated as a result of their sentence on the initial case (49.0 vs. 64.5 days). In addition, concerning the number of days incarcerated over the entire three-year tracking period, including recidivism cases, drug court participants again averaged significant less incarceration time (143.7 vs. 168.2 days).

Differential Effect Sizes by Drug Court

Figure 5.3 shows effect sizes for each site that had at least 50 participants in both the drug court and comparison samples (with sites organized by state region). The "effect size" was derived in an intuitively straightforward fashion by calculating the difference between the drug court and comparison group re-arrest rates over the three-year tracking period. Positive effect sizes indicate a positive effect of drug court participation (i.e., a lower re-arrest rate), whereas negative effect sizes indicate an iatrogenic effect of drug court participation (i.e., a higher re-arrest rate). Courts in all of the respective suburban and upstate regions with fewer than 50 participants or 50 comparison offenders were combined for this analysis.

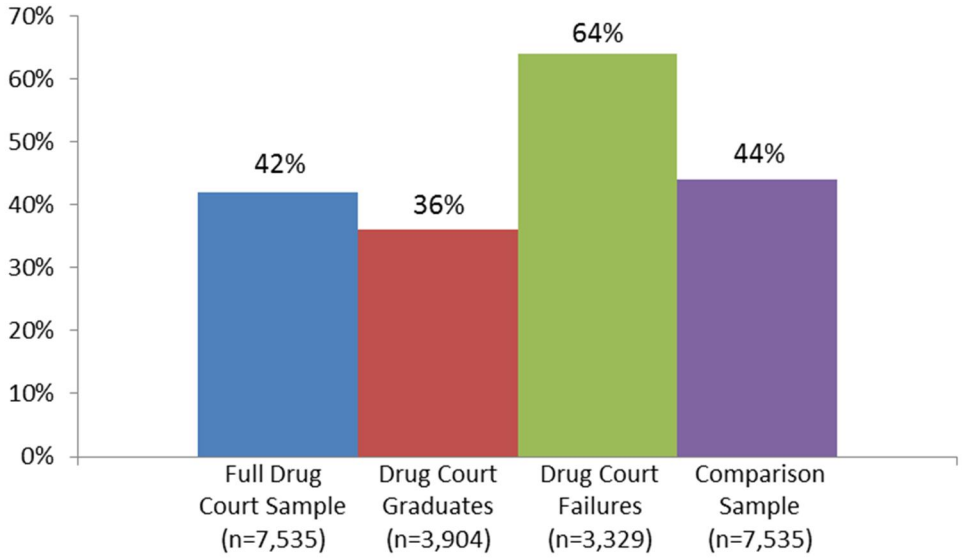
Of the ten NYC drug courts, eight had positive effect sizes, ranging from 2% to 21%, indicating that these courts generally had a lower three-year re-arrest rate than their same-jurisdiction comparisons. (The two other NYC drug courts had non-significant negative effect sizes of -2% and -1% respectively.) Effect sizes in the four suburban drug courts ranged widely from -13% to 8% (with two negative and two positive effect sizes). Among the 13 individual upstate courts that could be examined, the effect sizes also ranged widely (with nine negative and three positive effects, and one identical result in both the drug court and comparison group).

The large extent to which the direction and magnitude of the drug court impact evidently varies from site-to-site establishes the importance of the analyses that will be conducted in the next two chapters. Those analyses will assess which target population, policy, and practice factors lead some drug courts to produce more favorable effects than others.

Differences between Drug Court Graduates and Failures

Figure 5.4 shows the differences in three-year re-arrest rates between those who graduate and fail the drug court program. The results indicate that participants who failed were actually more likely than those in the comparison group to be re-arrested; thus, the overall positive impact of the drug court was driven by those participants who successfully graduated. Specifically, 36% of drug court graduates and 64% of those who failed the program were re-arrested, as contrasted with 44% in the comparison group. These findings suggest—although they do not rigorously prove—that maximizing graduation rates may be important, since it is primarily the graduates who contribute to drug courts' net positive impact. It is possible that over-programming drug court participants through highly taxing graduation requirements, resulting in a lower graduation rate and fewer participants who avoid jail or prison at the end of their participation, may yield worse outcomes than policies that enable achieving a higher graduation rate.

Figure 5.4. Differences in Re-Arrest at Three Years by Final Program Status



Note: Those participants whose cases were still open or warranted at three years were excluded from graduate and failure categories; participants who were still incomplete at three years were included with program failures.

Chapter 6
Differential Effects Based on Target Population

This chapter explores whether and how the drug court impact varies by target population. Previous research suggests that intensive interventions such drug courts, which can involve a several hundred hours or more of programming, may not work equally well with all offenders. The *Risk Principle* posits that intensive interventions are most effective with *medium-risk* or *high-risk* offenders—those who are especially predisposed to re-offend in the first place. Conversely, intensive interventions may have unintended iatrogenic effects with low-risk offenders by unnecessarily deepening their criminal justice involvement, for instance by requiring them to attend group sessions in the presence of their high-risk counterparts (Andrews and Bonta 2010; Lowenkamp and Latessa 2004; Lowenkamp, Latessa, and Holsinger 2006).

In a recent series of publications, Marlowe (2012a, 2012b) proposes a revised conception of how to classify offenders by distinguishing *risk* (of re-offense) and *need* (for substance abuse treatment) as separate dimensions. Marlowe proposes that the full drug court model is appropriate for offenders who are both high-risk and high-need, whereas other offenders might be better suited to less intensive approaches—less judicial monitoring for those who are lower-risk and less treatment for those who are lower-need. Little, if any, research has explicitly tested this revamped conception. However, pointing to the importance of treatment need, *NIJ's Multi-Site Adult Drug Court Evaluation* found that drug courts were more effective in reducing drug use among those who, at baseline, used drugs more often and had a more serious primary drug of choice than marijuana, such as cocaine, heroin, or methamphetamine (Rossman et al. 2011).

Other target population factors have also been the subject of previous research. Research both in and outside of drug courts indicates that interventions generally work better when the court has more *legal leverage* to monitor offender compliance and to penalize noncompliance (Hiller et al. 1998; Rempel and DeStefano 2001; Rossman et al. 2011; Young and Belenko 2002). The earlier 2003 statewide evaluation of NY drug courts found that in one site, the drug court was significantly more effective with those who committed drug sales or possession crimes than with those who committed property crimes, perhaps because other criminogenic factors besides substance abuse explained property-related criminal behavior (Rempel et al. 2003). Of final interest, there is relatively little preexisting evidence for the moderating role of offender demographics, such as age, sex, or race/ethnicity. However, court practitioners have often articulated a concern that young adults, racial/ethnic minorities, and women may not fare as well in drug courts as others, making it important to test this notion empirically (e.g., see Mammo and Weinbaum 1993; D'Angelo and Wolf 2002; Wolf 2009).

Accordingly, this chapter tests the moderating effects of key target population factors, including risk level, treatment need, criminal history, offense type, legal leverage, and demographic characteristics.

Brief Review of Methodology

As described in Chapter 2, some target population factors were measured at the individual level—using charge, criminal history, and demographic data on each individual offender. Other factors were measured at the court level, including drug court eligibility policies and court-level averages for certain background characteristics (e.g., average duration of drug use among participants and percentage of participants in each court who were arrested on felony charges).

Utilizing our hierarchical modeling framework, individual-level characteristics were measured at Level 1, and court-level characteristics (or court-level averages of individual characteristics) were measured at Level 2. Where appropriate, analyses also included our two risk score measures as control variables to avoid producing spurious results about other target population factors that might, instead, be correlated with and reducible to the moderating effect of risk level. Given these considerations, except where otherwise indicated, each regression model included drug court sample status (comparison group = 0, drug court = 1); the Level 1 and Level 2 risk scores; one or more target population factors; and one or more interaction terms.[10]

We used two core outcome variables for all analyses: whether there was any re-arrest within three years, analyzed with a logistic regression specification in HLM; and the total number of re-arrests within three years, analyzed with a Poisson regression specification in HLM.

Table 6.1 presents simple correlation coefficients among key target population measures. Many of these target population factors are inter-correlated. It is unsurprising that risk score is correlated with many of the other measures, since many of those other measures inherently contributed to the summary risk score variable (see Chapter 2). However, the other significant inter-correlations raise the prospect of spurious findings absent an appropriate multivariate framework (which we ultimately employ in our final results table).

Concerning our substantive findings, Table 6.2 presents the moderating effect of different target population characteristics of interest. Table 6.3 is based on transformations of the regression coefficients for select models into easily interpretable effect sizes (computed after setting the risk score variables at their mean). Table 6.4 presents several multivariate models indicating whether any of the effects revealed in the bivariate analyses might have been spurious.

[10] Where interaction terms are included, significant terms mean that the drug court produced especially better (or worse) outcomes than the comparison group for those with the given characteristic. In some cases, interaction terms could be omitted, because the target population factor itself could only be found in the drug court and not the comparison group. For example, drug court eligibility policies exist only in drug courts; thus comparison courts could all simply be coded with a zero on all eligibility variables, rendering further interaction terms duplicative.

Table 6.1. Correlation Matrix: Significant Target Population Characteristics

Variable Number	1	2	3	4	5	6	7	8	9	10	11
LEVERAGE (FELONY POPULATION)											
1 NYC Felony Court		-.104***	.185***	-.127***	.698***	.084***	-.115***	.444***	-.076***	.190***	-.119***
2 NYC Misdemeanor Court			-.311***	-.105***	-.040***	.264***	.106***	-.075***	.141***	.100***	.106***
3 Felonies Ineligible				-.042***	.243***	-.179***	-.109***	.218***	-.181***	-.176***	-.113***
4 Drug Sales Felonies Ineligible					.176***	-.145***	0.006	-.148***	.029***	-.111***	0.002
5 Percent Drug Ct. Sample with Felony Arrest						-.098***	-.075***	.240***	-.109***	.094***	-.092***
RISK OF RE-OFFENDING											
6 Level 1 Risk Score							.303***	.196***	.157***	.060***	-.186***
7 1 or More Prior Arrests								-.093***	-.013	-.029***	.236***
CHARGE TYPE											
8 Drug Sales Arrest									-.371***	.206***	-.137***
9 Drug Possession Arrest										-.008	.024**
NEED FOR TREATMENT											
10 Marijuana-Only Use Eligible											-.062***
BACKGROUND CHARACTERISTICS											
11 Age											

***p<.001 **p<.01 *p<.05 +p<.10

Table 6.2. Impact of Target Population Factors on Re-Arrest at Three Years

		Any Re-Arrest	Number of Re-Arrests
Number of Offenders[1]		15,070	
Number of Sites[1]		171	
CONTROL VARIABLES Intercept Drug Court Sample (vs. Comparison Group) Level 1 Risk Score (based on individual offender characteristics) Level 2 Risk Score (based on court-level characteristics)		*Included in each model, results not shown.*	
REGION			
Model 1	NYC Courts*Sample	-0.333*	-0.251*
	Suburban Courts*Sample	-0.220	-0.104
LEVERAGE (FELONY TARGET POPULATION)			
Model 2	NYC Felony Courts*Sample	-0.412*	-0.427**
	NYC Misdemeanor Courts*Sample	-0.122	0.021
Model 3	Felonies Ineligible for Drug Court	NS	0.134*
Model 4	Drug Sales Felonies Ineligible for Drug Court	NS	0.147+
Model 5	Percent of Drug Court Sample with Felony Arrest	-0.004**	-0.005***
RISK OF RE-OFFENDING			
Model 6	Level 1 Risk Score*Sample	-0.417+	NS
Model 7[2]	Risk Quintile 2 (Low-Risk)*Sample	-0.107	-0.141
	Risk Quintile 3 (Low- to Moderate-Risk)*Sample	-0.248+	-0.273*
	Risk Quintile 4 (Moderate- to High-Risk)*Sample	-0.516***	-0.428***
	Risk Quintile 5 (Very High-Risk)*Sample	-0.111	-0.254+
Model 8	Number of Prior Arrests*Sample	NS	NS
Model 9	Between 1 and 3 Prior Arrests*Sample	-0.451***	-0.298**
	4 or More Prior Arrests*Sample	-0.585***	-0.301**
CHARGE TYPE			
Model 10	Drug Sales Arrest*Sample	-0.299+	-0.208+
	Drug Possession Arrest*Sample	-0.125	-0.221**
	Property Arrest*Sample	-0.008	-0.043

Table 6.2. Impact of Target Population Factors *(Continued)*

		Any Re-Arrest	Number of New Arrests
NEED FOR TREATMENT			
Model 11	Average Duration of Drug Use > 10 Years	NS	NS
Model 12	Percent of Drug Court Sample with Daily Use[3]	NS	NS
Model 13	Percent of Drug Court Sample using Serious Drug[4]	NS	NS
Model 14	Drug Court has Alcohol Focus (Index)[5]	NS	NS
Model 15	Marijuana-Only Use Eligible for Drug Court	NS	0.134*
BACKGROUND CHARACTERISTICS			
Model 16	Age*Sample	-0.009*	NS
Model 17	Female*Sample	NS	NS
Model 18	Black*Sample	NS	NS
	Hispanic*Sample	NS	NS
PROGRAM RETENTION			
Model 19	Retained at 1 Year	-0.909***	-0.634***
Model 20	Retained at 2 Years	-1.015***	-0.732***
Model 21	Retained at 3 Years	-1.050***	-0.775***
Model 22	Retained at 4 Years	-1.055***	-0.784***

***p<.001 **p<.01 *p<.05 +p<.10

Note: Except where otherwise indicated, all significance levels are derived based upon multivariate models including the specified independent variable(s), along with the intercept, sample (drug court v. comparison group) and the Level 1 and Level 2 risk scores (described in Chapter 2). Where interaction terms are indicated, the multivariate model includes not only the relevant interaction term, but also the independent variable of interest (e.g., age*sample and age are included in Model 16).

[1] Due to missing data, the number of sites and offenders available for some models varies from the full sample. Available site/offender sample sizes for these models are 152/14,163 (Models 11, 12, and 15) and 168/15,010 (Models 13 and 14).

[2] This model does not include the Level 1 risk score. Based on the regression coefficient for the sample variable without the interaction term (not displayed in the table), it is possible to conclude that the drug court did not produce a significant difference in re-arrests for either outcome variable (in either direction) among those in quintile 1.

[3] Separate models examined daily use of any substance *other than* marijuana, and results were not notably different.

[4] Results are based on primary drug of choice, with "serious" drugs defined as cocaine, crack, and heroin. (Ordinarily, select other drugs, including methamphetamine in particular, might be defined as "serious," but no other potentially serious drugs were identified as the primary drug of choice by more than a handful of drug court participants in this study.

[5] The alcohol focus index is described in Chapter 2.

Table 6.3. Effect Size by Target Population

Target Population Characteristic	N (Courts or Offenders)	Drug Court	Comparison	Difference
Region				
New York City (NYC)	19	47%*	54%	7%
NYC Suburbs	12	45%	49%	4%
Upstate	140	51%	50%	-1%
Focus on Felony-Level Cases				
NYC felony court	11	46%**	58%	12%
Other court (NYC misdemeanor or non-NYC)	160	50%	51%	1%
Risk Level[1]				
Quintile 1: Low-Risk (1- 33%)	3,016	23%	20%	-3%
Quintile 2: Low- to Moderate-Risk (33-49%)	3,011	38%	38%	0%
Quintile 3: Moderate- to High-Risk (49-63%)	3,012	50%+	53%	3%+
Quintile 4: High-Risk (63-77%)	3,018	56%***	65%	9%***
Quintile 5: Very High-Risk (77-93%)	3,013	79%	78%	-1%
Number of Prior Arrests				
Zero (0)	2,484	53%**	43%	-10%
One (1) to three (3)	4,209	56%***	57%	1%
Four (4) or more	8,377	45%***	50%	5%
Arrest Charge Type				
Drug sales	3,107	41%+	48%	7%
Drug possession	5,236	47%	50%	3%
Property	3,236	54%	52%	-2%
Other charges	3,491	52%	52%	0%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Note: Results are based on transformations of regression coefficients in Table 6.1, with applicable risk score variables set at their mean.
[1] Numbers in parentheses represent the range of possible probabilities of re-arrest for the given risk category. These probabilities assume that the defendant did *not* participate in drug court (i.e., they represent risk levels absent the potential mitigating effects of the drug court intervention).

Results of the Analysis

Differential Effects Based on State Region

Model 1 in Table 6.1 examines the moderating effect of court region. The results indicate that the New York City drug courts significantly reduced re-arrest. While not statistically significant, the coefficients for suburban drug courts suggest that they also outperformed the largely rural or semi-rural drug courts in the upstate region.[11] Table 6.2 reveals that the New York City drug courts reduced re-arrest rates by seven percentage points on average. Suburban drug courts produced a smaller (and non-significant) impact (4%), and upstate drug courts slightly increased re-arrest rates, although this last effect was not significant.

Differential Effects Based on Legal Leverage (Felony Focus)

Drug court participants who enter on felony-level charges generally face lengthier jail or prison sentences if they fail the program, effectively affording the court more legal leverage. The analysis explores whether, as expected, focusing on a felony population yields greater program impacts. (The next chapter examines the effects of a more nuanced set of drug court policies beyond felony/misdemeanor status that are also intended to maximize legal leverage.)

Model 2 suggests that it is in fact the six *felony* drug courts in New York City that are responsible for the apparent regional differences reported previously in Model 1. Conversely, the NYC misdemeanor drug courts typically target chronic misdemeanants over whom the drug court has less leverage; and indeed, the results in Model 2 suggest that this lack of leverage is associated with a far weaker program impact.[12] Table 6.2 further shows that the NYC felony drug courts reduced re-arrest rates by 12 percentage points, whereas the other 80 drug courts in the study did not produce a significant impact (non-significant effect size of 1%).

The results in Models 3, 4, and 5 all confirm that focusing on felony offenders produces larger drug court impacts. Specifically, those drug courts that do *not* define felony cases as eligible produce *more* rather than fewer re-arrests (see Model 3). Drug courts that do not define felony drug sales charges as eligible appear to produce more re-arrests as well (Model 4, $p < .10$). Finally, we coded each drug court with the precise percentage of its participants who entered on a felony arrest charge and detected a strong relationship between enrolling higher percentages of felony defendants and reducing re-arrest by greater magnitudes (Model 5).

Differential Effects Based on Offender Risk Level

By definition, offenders with a higher risk score are more likely to be re-arrested, whether they are in the drug court or the comparison group. However, the relevant research question is not whether higher-risk individuals are more likely to be re-arrested in general, but whether the drug court makes a greater relative difference with high-risk or low-risk offenders.

[11] Separate analyses (not shown) did not detect a significant difference between the impact of upstate rural/semi-rural drug courts and upstate drug courts in the mid-sized cities (Albany, Buffalo, Rochester, or Syracuse).

[12] Even though limiting eligibility in the NYC misdemeanor drug courts to offenders with multiple priors increases the leverage of the court over them (i.e., increases the legal exposure of the participant population), misdemeanants in New York City still face relatively lighter legal sanctions in the event of program failure as felony offenders.

Confirming the *Risk Principle*, the results in Model 6 suggest that higher-risk offenders benefit more from their drug court participation than do lower-risk offenders ($p < .10$). Model 7 refines the analysis by breaking offenders into five approximately equal-sized risk quintiles. Each quintile includes offenders with an increasingly high predicted risk of re-arrest. Whereas in quintiles 2 and 3, drug court participation produced modest reductions in re-arrest, in quintile 4, drug court participation produced a discernibly greater effect. Interestingly, the drug court impact then receded somewhat among the "very high-risk" participants in quintile 5 (those whose base risk of re-arrest exceeds 77%), suggesting that drug court participation may produce diminishing returns at the very highest point on the risk continuum. (Drug court participants in quintile 5, however, still outperformed those in the lowest-risk quintile 1.)

Table 6.2 includes more easily interpretable effect sizes by risk quintile. The findings show a modest decrease in three-year re-arrest rates among participants in quintile 3 (3%, $p < .10$) and a significant decrease among participants in the "high-risk" quintile 4 (9%, $p < .001$).

In results not shown, we analyzed the effect of risk quintile separately for drug court participants in the NYC felony drug courts and in other drug courts. Confirming earlier findings related to leverage, we found that the NYC felony drug courts produced larger effect sizes than the other drug courts *within each of the five risk quintiles*. In short, leverage and risk level appear to operate as independent moderators; higher-risk offenders generally perform better than lower-risk offenders, but it is also the case that legal leverage can improve outcomes for those at any risk level. When combining ideal target population factors in terms of *both* leverage and risk level, NY drug courts produce substantial positive impacts. Specifically, in results not shown, we found that the NYC felony drug courts produced a 10% effect size in risk quintile 3 (moderate-to high-risk) and a 16% effect size in quintile 4 (high risk).

Since criminal history is among the most powerful factors that contribute to risk, Models 8 and 9 examine whether prior arrests in themselves serve as significant moderators of the drug court impact. Although the total number of prior arrests (Model 8) was not a significant moderator of the drug court impact, further analysis suggests that this lack of a relationship is because extremely high numbers of priors do not continue to have added moderating effects after a certain point.[13] As shown in Model 9, it is clear that drug courts significantly reduced re-arrests among those with at least one prior and significantly reduced re-arrests by a slightly greater magnitude among those with four or more priors. Table 6.2 presents these effects more simply: Participants with four or more priors have a 5% lower re-arrest rate than the comparison group; and participants with one to three priors have a 1% lower re-arrest rate; but among offenders without any priors, the drug court led to a 10% *increase* in re-arrest rates.

Different Effects Based on Charge Type

As shown in Model 10 of Table 6.1, there is modest support for the notion that drug courts may be more effective with offenders who committed drug-related crimes than property-related or other crimes. Drug courts reduced re-arrest among offenders arrested on drug sales or drug possession charges (with some effects at only the .10 level), whereas drug courts did not have any impact on re-arrest among other categories of offenders. Table 6.2 presents the resulting

[13] A separate regression model that used the base 10 of the number of prior arrests, effectively shrinking the right tail of the prior arrest distribution, detected a significant effect of the interaction term for sample*priors.

effect sizes and shows that drug courts had their greatest effect among those facing drug sales charges, reducing the re-arrest rate by seven percentage points for this subgroup.

Differential Effects Based on Need for Treatment

NY drug courts do not utilize a validated risk-needs assessment tool, rendering problematic any effort to classify participants by treatment need. Nonetheless, we identified several proxy measures, as shown in Table 6.1, Models 11-15. In general, the findings do *not* offer strong support for the hypothesized benefit of focusing on a higher-need clientele. Drug courts that serve participants with longer substance abuse histories (Model 11), daily drug use (Model 12), or more serious primary drugs of choice (Model 13) did not have significantly improved outcomes. Neither did drug courts perform better that focus on alcohol-addicted participants (Model 14). However, we found that drug courts that accept participants who use marijuana *only*—arguably the lowest need subgroup of drug users—fare *worse* than others (Model 15).

Differential Effects Based on Demographic Background

The results in Model 16 of Table 6.1 show that older offenders fare significantly better in the drug court than younger offenders. Despite the common belief among practitioners that women in drug courts face particularly severe barriers to recovery, our results did not suggest a differential drug court impact among men and women (Model 17). Neither did we find differential impacts for black or Hispanic as compared to white participants (Model 18).

Differential Effects Based on Drug Court Retention

Models 19 through 22 of Table 6.1 examine the import of program retention. Not surprisingly, drug court participants who were retained—i.e., who were still active or had successfully completed the program—were significantly less likely to be re-arrested and had significantly fewer re-arrests relative to the comparison group than those who were not retained. This is true when looking at retention over all periods, with impacts increasing as the retention period increases (see the slightly increase in the raw coefficients from Models 19 to 22).

Multivariate Results

For each re-arrest outcome, the multivariate models included those independent variables that were potentially significant in Table 6.2 ($p < .10$ or better).[14] The results generally confirm the previously reported findings regarding the *positive* moderating effects of leverage, prior arrests, and drug-related charges, and the *negative* effect of admitting a low-need marijuana-only population.[15] (As previously reported, most of our proxy measures for treatment need in particular were *not* significant moderators.)

The most notable finding that was *not* maintained in Table 6.4 concerned age: Whereas the previous results suggested that older offenders benefited more than did younger offenders from

[14] The risk score measures are not included in the multivariate models, but separate test models that controlled simultaneously for risk- and leverage-based measures (not shown) demonstrated that both remained significant. In addition, only two of the four leverage measures that showed a potentially significant effect in Table 6.1 were included to avoid excessive duplication of comparable measures and the threat of multi-collinearity.

[15] Inspection of the regression coefficients suggests that the effect of charge type in particular (drug sales, vs. drug possession vs. other charges) was noticeably attenuated after controlling for other potential moderators.

their drug court participation, the moderating effect of age disappeared in a multivariate framework.

Summary

The findings provide support for most of our hypotheses related to target population. Medium- and high-risk offenders benefit increasingly from the drug court intervention as compared with low-risk offenders. We detected some evidence, however, there is not a simple linear relationship between risk and program impact; instead, the magnitude of the drug court impact declined among those at the very highest risk level. Other findings suggest that offenders over whom the drug court exerts greater legal leverage—i.e., those facing felony charges and hence greater penalties in the event of program failure—perform better. There was less support for the notion that higher-need offenders benefit especially from the drug court intervention, although we did find that drug courts that serve those who exclusively use marijuana perform worse than drug courts that require an addiction to a more serious drug. Although less prior literature exists on this last subject, we confirmed prior NY research that offenders arrested on drug-related charges fared better than those arrested on property or other charges, whose criminogenic motivations may exceed what can be addressed through substance abuse treatment. Of final interest, when controlling for other factors, the drug court intervention performed equally well regardless of the offender's demographic background, specifically age, sex, or race/ethnicity.

Table 6.4. Target Population: Multivariate Predictors of Re-Arrest at Three Years

	Any Re-Arrest (Logistic Regression)	Number of Re-Arrests (Poisson Regression)
Number of Offenders	15,035	
Number of Sites	171	
Fixed Effects		
Intercept	-2.693***	-2.448***
Level 1 Risk Score	3.731***	2.985***
Age	-0.011***	-0.002
Age*Sample	-0.006	-0.002
1 or More Prior Arrests	0.567***	0.238***
1 or More Prior Arrests*Sample	-0.529***	-0.316**
Drug Sales Arrest	-0.183	-0.209**
Drug Sales Arrest*Sample	-0.110	-0.121
Drug Possession Arrest		-0.058
Drug Possession Arrest*Sample		-0.189*
Random Effects		
Sample (Drug Court vs. Comparison Group)	0.882***	0.663**
Level 2 Risk Score	1.353***	1.654***
NYC Felony Court	0.409*	0.380**
NYC Felony Court*Sample	-0.191	-0.059
Percent of Drug Ct. Sample with Felony Arrest	-0.005**	-0.007***
Marijuana-Only Use Eligible for Drug Court		0.114*

***p<.001 **p<.01 *p<.05 +p<.10

Chapter 7
Differential Effects Based on Drug Court Policies and Practices

This chapter explores the "how" of drug courts—that is, whereas the previous chapters examined whether (Chapter 5) and for whom (Chapter 6) drug courts work, this chapter considers the effects of specific drug court policies and practices in reducing re-arrest.

Brief Review of Methodology

As described in Chapter 2, the court policy measures were derived from a series of policy surveys completed by court personnel. In some instances, individual policy measures were combined to form larger policy constructs (ancillary service integration, certainty of sanctions, judicial communication, etc.). Other components of the drug court model that could not be identified through summary constructs were operationalized through individual court policy survey items. We also created several court-level averages for participants based on individual-level drug court data, for instance the average number of judicial status hearings per month during the first three months of participation; and the average percentage of sanctions involving jail. The analytic plan was otherwise the same as in the preceding chapter.

Results of the Analysis

Table 7.1 presents simple correlation coefficients among key drug court policies. Many of these policy measures are inter-correlated, presaging the possibility (examined and discussed below) that some drug courts may employ consistently effective policies across multiple domains.

Table 7.2 presents the mediating effect of all court policies of interest—those related to legal leverage; supervision; sanctions and incentives; treatment; judicial communication; collaboration; time to graduation; and other policies. Table 7.3 is based on transformations of the regression coefficients for select models into easily interpretable effect sizes. Additional analyses respectively adopt a multivariate framework and test whether certain policies are more or less influential among high-risk vs. low-risk offenders and among high-need vs. low-need offenders.

Mediating Effect of Deterrence Policies

We examined three components of offender deterrence: (1) legal leverage; (2) frequent supervision; and (3) use of interim sanctions and incentives.

Legal Leverage: Legal leverage concerns the incentive participants have to complete the program successfully. As indicated in the previous chapter, NY drug courts produce greater impacts among participants over whom the court has more leverage, although the work of Young and Belenko (2002) suggests that offender perceptions further *mediate* this relationship. That is, they find that leverage becomes more effective when program rules and repercussions for noncompliance are clearly communicated to participants (Young 1997; Young and Belenko 2002). *NIJ's Multi-Site Adult Drug Court Evaluation* (MADCE) includes both *having* explicit

Table 7.1. Correlation Matrix: Significant Drug Court Policies

Variable Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LEGAL LEVERAGE															
1 NYC Felony Court		.172*	.150+	.063	-.046	.114	.041	-.036	.024	.026	.003	.152+	.273***	.208**	.008
2 Percent of Drug Ct. Sample with Felony Arrest			-.197*	.773***	.001	.636***	.743***	.423***	.815***	.772***	.040	-.631***	.435***	.181*	.794***
3 Percent of High Risk (Risk Quintile 4) Participants				-.077	.058	.011	-.007	-.025	-.065	-.045	.065	.192*	.151*	.092	-.043
4 Court Always Requires Guilty Plea at Entry					-.150+	.655***	.849***	.551***	.847***	.868***	.134+	-.660***	.406***	.230**	.847***
5 Court Sometimes Requires Guilty Plea at Entry						.220	.185*	-.079	.133+	.112	-.005	-.118	-.060	-.034	.071
6 Defendants Always Receive Jail Alternative upon Failure							.690***	.352***	.659***	.660***	.134+	-.548***	.409***	.207**	.640***
7 Defendants Always Told Benefits of Graduation								.532***	.899***	.908***	.137+	-.635***	.462***	.211**	.888***
SUPERVISION															
8 Frequency of Case Management Meetings									.588***	.556***	.007	-.369***	.341***	.228**	.611***
SANCTIONS & REWARDS															
9 Certainty of Response Scale										.945***	.169*	-.687***	.483***	.207**	.930***
10 Diversity of Rewards & Sanctions Scale											.136+	.713***	.431***	.167*	.934***
11 Formal Schedule=Important in Determining Sanctions												-.105	.014	.004	.148+
12 % of First Sanctions that do not Involve Jail													-.205*	.035	.709***
TREATMENT															
13 % of Defendants in Residential, 1st Tx Modality														.241**	.452***
14 Court Assesses for Trauma															.216**
COLLABORATION															
15 Counsel Dedication Scale															

***p<.001 **p<.01 *p<.05 +p<.10

legal consequences for drug court failure and *communicating* them to participants in its leverage measure; the results suggest that high-leverage drug courts were significantly more effective than others at preventing re-arrest; and that high- and medium-leverage drug courts were more effective than low-leverage courts at preventing future substance use (Rossman et al. 2011).

Beyond the repercussions of program failure, the manner in which participants *enter* the drug court also influences leverage. That is, courts requiring a plea prior to drug court entry (i.e., post-plea model) hold greater leverage over participants than those courts utilizing a pre-plea (diversion) model, in which the criminal case can still be argued after program failure. One study confirms a positive impact of the post-plea model with court-mandated treatment participants (*not* a drug court per se, see Sung 1999). However, other studies have yielded inconsistent findings regarding the impact of plea status (Goldkamp et al. 2001; Mitchell et al. 2012; Shaffer 2011).

The results in Models 1 through 6 in Table 7.2 represent our bivariate results with regard to legal leverage. Model 1 indicates that offenders in post-plea courts have significantly fewer re-arrests than offenders in pre-plea or mixed-model courts (in which some participants can enroll pre-plea and some post-plea). Table 7.3 shows the difference in re-arrest between drug court and comparison offenders for drug courts that always require a guilty plea and for drug courts that never or sometimes require a guilty plea. Whereas post-plea drug courts reduce the re-arrest rate by 4%, other drug courts increase the re-arrest rate by 6% on average.

The results in Models 3 and 4 in Table 7.2 confirm that both the certainty and severity of the jail or prison sentence to be imposed in the event of program failure influences re-arrest outcomes. Model 3 shows that drug courts where participants always receive the predetermined jail/prison alternative significantly reduced re-arrest and Model 4 shows that drug courts with longer jail/prison alternatives reduced re-arrest.[16] Table 7.3 shows that drug courts that always impose the predetermined jail/prison alternative produced a 4% reduction in the re-arrest rate, whereas drug courts that never or sometimes impose the alternative have a 6% higher re-arrest rate.

Leverage can involve both the negative incentive of facing certain jail or prison time in the event of program failure and the positive incentive of receiving a legal benefit in the event of graduation. Model 5 in Table 7.2 shows that drug courts where participants are always told the legal benefit of graduation at the outset of program participation produced a significant reduction in re-arrest, unlike drug courts where such benefits are not explicitly delineated. However, the specific benefit of vacating the guilty plea and dismissing the case was not significant (Model 6).

Overall, although specific effects varied by measure, the results generally support court policies to promote leverage.

[16] Forty-five drug courts were missing data for length of jail alternative. Due to the large amount of missing data, comparison courts from the same jurisdictions were also excluded. The greatly reduced final sample size (site level N=89; offender N=8,896) resulted in our decision to exclude this variable from subsequent multivariate models.

Table 7.2. Impact of Court Policies on Re-Arrest at Three Years

		Any Re-Arrest	Number of New Arrests
Number of Offenders[1]		15,070	
Number of Sites[1]		171	
CONTROL VARIABLES Intercept Drug Court Sample (vs. Comparison Group) Level 1 Risk Score (based on individual offender characteristics) Level 2 Risk Score (based on court-level characteristics)		*Included in each model, results not shown.*	
DETERRENCE			
Legal Leverage			
Model 1	Court Always Requires Guilty Plea at Entry	-0.203	-0.399**
	Court Sometimes Requires Guilty Plea at Entry	0.361*	0.045
Model 2	# of Individuals who Explain Jail Alternative to Defendants	NS	NS
Model 3	Participants Always Receive Jail Alternative upon Failure	-0.230*	-0.254**
Model 4	Average Length of Jail Alternative	-0.001+	-0.001**
Model 5	Participants Always Told Benefits of Graduation	NS	-0.399**
Model 6	Plea is Vacated upon Graduation	NS	NS
Supervision			
Model 7	Frequency of Drug Testing[2]	NS	NS
Model 8	Rate of Judicial Status Hearings/Month[2]	NS	-0.054+
Model 9	Frequency of Case Management Meetings[2]	-0.076*	NS
Sanctions and Incentives			
Model 10	Certainty of Response Index	-0.718*	-0.701**
Model 11	Court has a Formal Sanction Schedule	NS	NS
Model 12	Formal Schedule=Important in Determining Sanctions	-0.010***	-0.007***
Model 13	Noncompliant Defendants Returned to Court w/in 1 Week	NS	NS
Model 14	% of Sanctions that do not Involve Jail	NS	-0.283*
Model 15	% of First Sanctions that do not Involve Jail	-0.163+	-0.171*
Model 16	Diversity of Rewards & Sanctions Index	-0.686*	-0.693**

Table 7.2. Impact of Court Policies on Re-Arrest at Three Years *(Continued)*

		Any Re-Arrest	Number of New Arrests
TREATMENT			
Model 17	Ancillary Service Integration Index	NS	-0.279+
Model 18[3]	% of Participants in Residential, 1st Tx. Modality	-0.005*	-0.003
	% of Participants in Short-Term Rehab., 1st Tx. Modality	-0.001	0.001
	% of Participants in Intensive Outpatient, 1st Tx. Modality	-0.002	-0.003+
Model 19	Any Manualized Providers	NS	NS
Model 20	Percentage of treatment providers that use CBT	NS	NS
Model 21	Any CBT Providers	NS	NS
Model 22	Any CBT for Criminal Thinking	NS	-0.155+
Model 23	Court Assesses for Trauma	-0.232+	NS
Model 24	Court Links to Trauma Treatment	NS	NS
PROCEDURAL JUSTICE/JUDICIAL COMMUNICATION			
Model 25	Courtroom Communication Index	NS	NS
Model 26	# of Criminal Justice Stakeholders Addressed by Judge	NS	NS
Model 27	Judge Asks Probing Questions (Compliant Participants)	NS	NS
Model 28	Judge Asks Probing Questions (Noncompliant Participants)	NS	NS
COLLABORATION			
Model 29	Counsel Dedication Index	-0.444**	-0.434**
Model 30	# of Roles on the DC Team	NS	-0.050+
Model 31	Court has Regular Staffing Meetings	NS	-0.122+
OTHER POLICIES			
Immediacy			
Model 32	Average Time in from Arrest to Participation	NS	NS
Graduation Requirements			
Model 33	Minimum Months to Graduate	NS	NS
Model 34	Average Actual Time in Program (Graduates Only)	NS	NS
Model 35	Number of Graduation Requirements	NS	NS
History of Drug Court Establishment			
Model 36	Voluntarily Established Drug Court (v. State Mandated)	NS	-0.132+

***p<.001 **p<.01 *p<.05 +p<.10

Note: Except where otherwise indicated, all significance levels are derived based upon multivariate models including the specified independent variable(s), along with the intercept, sample (drug court v. comparison group) and the Level 1 and Level 2 risk scores (described in Chapter 2).

[1] Due to missing data, the number of sites and offenders available for some models varies from the full sample. Available site/offender sample sizes for these models are: 170/14,957 (Model 39); 170/14,766 (Model 25); 169/15,055 (Model 19); 169/15,020 (Model 37); 167/15,005 (Models 26, 29, and 30); 167/14,695 (Model 35); 166/14,958 (Models 25, 27, 28); 166/14,610 (Model 7); 164/14,683 (Model 9); 164/14,317 (Models 36); 160/12,530; (Model 17); 158/12,984 (Model 15); 151/12,440 (Model 16); 147/13,623 (Model 19); 89/8,896 (Model 4).

[2] Frequency is based on all program participants and is computed over the first three months of participation.

[3] The reference category is regular outpatient treatment, which generally includes treatment sessions on 1 to 3 days per week.

Table 7.3. Effect Size by Drug Court Policy Categories

Policy Characteristic	Number of Sites	Drug Court	Comparison	Difference
Participants Always Plead Guilty at Entry				
Yes	73	47%***	51%	4%
No	13	57%*	51%	-6%
Failures Always Receive Jail/Prison Alternative				
Yes	58	47%***	51%	4%
No	28	57%*	51%	-6%
Certainty of Sanctions				
None	1	54%	51%	-3%
Moderate	40	52%	51%	-1%
Highest	45	47%	51%	4%
Counsel Dedication and Collaboration				
None	6	58%*	51%	-7%
Moderate	25	53%	51%	-2%
Highest	55	48%**	51%	3%

+p<.10, * p<.05, ** p<.01, ***p<.001.

[1] Numbers in parentheses represent the range of possible probabilities of re-arrest for the given risk category. These probabilities assume that the defendant did *not* participate in drug court (i.e., they represent risk levels absent the potential mitigating effects of the drug court intervention).

Supervision

We conceptualized supervision as comprised of three distinct components: judicial status hearings, drug testing, and case management. Previous research has suggested that frequent judicial status hearings—particularly those that feature praise and other supportive feedback—can be effective (Farole and Cissner 2005; Goldkamp et al. 2002; Gottfredson et al. 2007; Marlowe et al. 2004; Senjo and Leip 2001). Conversely, an evaluation of the Las Vegas drug court attributed negative evaluation results largely to the negative and stigmatizing comments made by the judge during status hearings in that program (Miethe et al. 2000). There is little in the way of rigorous research on the importance of drug testing or case management within drug courts. However, several studies not focusing specifically on a drug court have found that when paired with certain sanctions for noncompliance, regular drug testing can contribute to reduced drug use and recidivism (Harrell, Cavanagh, and Roman 1998; Hawken and Kleiman 2009).

Models 7 through 9 in Table 7.2 examine the impact of supervision. The results suggest that more frequent judicial status hearings (Model 8, $p < .10$) and more frequent case management meetings (Model 9, $p < .05$) reduced re-arrests, although more frequent drug testing did not.

Table 7.4. Impact of Supervision with Low-Risk and High-Risk Offenders

		Low-Risk Offenders	High-Risk Offenders
Number of Offenders		7,535	7,535
Number of Sites		171	163
CONTROL VARIABLES Intercept Drug Court Sample (vs. Comparison Group) Level 1 Risk Score (based on individual offender characteristics) Level 2 Risk Score (based on court-level characteristics)		*Included in each model, results not shown.*	
Model 1	Rate of Judicial Status Hearings/Month	NS	NS
Model 2	Frequency of Drug Testing	NS	NS
Model 3	Frequency of Case Management Meetings	NS	-0.122**

***p<.001 **p<.01 *p<.05 +p<.10

Note: Offenders were divided into high- and low-risk categories based on the Level 1 risk score. Offenders with risk scores in the upper 50% were deemed "high-risk;" offenders with risk scores in the lower 50% were deemed "low risk." Regarding independent variables, all three supervision measures were computed for all program participants and based on the first three months of participation.

Further explaining the conditions under which intensive supervision is effective, some research suggests that it works especially well with high-risk offenders (Marlowe et al. 2004; Marlowe 2012a, 2012b). To test this expectation, we divided the sample into low-risk and high-risk halves (with equal numbers of offenders in each subgroup), based on the Level 1 risk score. As shown in Table 7.4, more frequent meetings with case managers during the first three months of program participation indeed reduced re-arrest among the high-risk offenders ($p<.01$), but not among low-risk offenders. This finding may be of particular interest to drug courts trying to determine how to allocate scarce case management resources. However, neither judicial status hearings nor drug testing were differentially effective with low- and high-risk subgroups.

Sanctions and Incentives

Deterrence theory generally holds that negative reinforcement and punishment discourages individuals from engaging in crime (Nagin 1998, Nagin and Pogarsky 2001, Paternoster 1987). Research also indicates that for sanctions to act as a deterrent, they must be certain, swift, and appropriately severe (Andenaes 1974; Gibbs 1975). Previous research has been mixed with regard to the impact of sanctions in drug court settings, although this literature has been plagued

by severe methodological limitations.[17] It is also the case that many drug courts do not apply sanctions according to best practices, especially by not imposing a certain sanction for each infraction (Rempel et al. 2003; Rossman et al. 2011). In this study, the 86 drug courts could be rated on the extent to which they actually follow best sanctioning policies, with variations in these sanctioning policies in turn correlated with impacts.

Models 10 through 17 in Table 7.2 explore the effects of different sanctioning policies. Model 10 indicates that drug courts that more faithfully apply sanctions with certainty reduced re-arrest more than other drug courts. Simply having a formal sanction *schedule* is not enough to significantly reduce re-arrest (Model 11); however, drug courts that reported *prioritizing* such a schedule when actually determining sanctions significantly reduced re-arrest (Model 12).

The results did *not* confirm the importance of "celerity" (swiftness of response); drug courts that reported bringing participants back to court within one week of learning of noncompliance did not significantly reduce re-arrests in comparison with drug courts that take longer to bring noncompliant participants back to court (Model 13).

Concerning severity, the results suggest that drug courts that do not over-rely on the most severe sanctions (i.e., jail sanctions) fared better; both drug courts that used fewer jail sanctions overall (Model 14) and fewer jail sanctions in response to first infractions (Model 15) reduced re-arrests more than drug courts that more frequently imposed jail sanctions. In addition, drug courts that, in general, employ a greater *diversity* of sanctions and incentives (e.g., versus primary reliance on jail) also performed better than other drug courts (Model 16).

Multivariate Results: Deterrence

Table 7.5 presents the final multivariate models examining the impact of multiple deterrence-based policies on re-arrest. Only those independent variables found to be significant in Table 7.2 (at the $p<.10$ level) were included in the multivariate models.

The results reconfirm that drug courts that always require a guilty plea produced significantly fewer re-arrests than other drug courts. Drug courts with certain jail/prison alternatives that are always imposed and that implement greater certainty of interim sanctions significantly reduced re-arrest as well. Several deterrence measures, however, dropped out of significance. When controlling for other policies, we did not find that clearly conveying the positive legal benefits of drug court graduation improved outcomes. (The raw coefficient continues to suggest a modest positive effect of conveying the legal benefits of graduation, though it was not statistically significant.) Diversity of sanctions and incentives as well as frequency of supervision also dropped-out, as did frequency of case management meetings (in test models, not shown).

[17] For instance, both Goldkamp et al. (2001) and Finigan et al. (2007) found use of sanctions to be associated with higher re-arrest rates; however, participants who received sanctions in these studies were generally less compliant than participants who receive no sanctions and, thus, may simply have been more prone to continued noncompliance (i.e., re-arrest). In contrast, Listwan et al. (2003) found no relationship between sanctions and re-offense. None of the previous studies in the drug court literature analyze the application of sanctions at the court policy level, rather than as in-program characteristics of individuals, precluding a rigorous causal analysis that disentangles the policy of using sanctions from the practical reality that in any drug court setting, sanctions will be used more often on participants who are noncompliant—and hence more likely to continue their noncompliance in the future.

Table 7.5. Deterrence-Related Predictors of Re-Arrest at 3 Years

	Any Re-Arrest (Logistic Regression)	Number of Re-Arrests (Poisson Regression)
Number of Offenders	15,035	
Number of Sites	171	
Fixed Effects		
Intercept	-2.738***	-2.356***
Level 1 Risk Score	4.058***	3.031***
Random Effects		
Drug Court	0.677**	0.991***
Level 2 Risk Score	1.416***	1.918***
Court Always Requires Plea at Entry	-0.172	-0.253*
Court Sometimes Requires Plea at Entry	0.269+	0.055
Participants Always Receive Jail Alternative on Failing	-0.201*	-0.219**
Participants Always Told Legal Benefits of Graduation		-0.208
Rate of Judicial Status Hearings/Month[1]		-0.023
Certainty of Response Index	-0.530*	-0.566**
Formal Schedule=Important in Determining Sanctions	-0.007***	-0.004***
Diversity of Sanctions and Incentives Index	-0.092	-0.071

***p<.001 **p<.01 *p<.05 +p<.10

[1] Frequency is based on all program participants and is computed over the first three months of participation.

Differential Impact Based on Treatment

Treatment is fundamental to the drug court model, but remains a difficult construct to capture. However, the general treatment literature (i.e., not drug court specific) indicates that treatment programs with certain characteristics are better than others at preventing relapse and recidivism. In their review of the treatment literature, Johnson, Hubbard, and Latessa (2000) identify several practices as particularly relevant for drug courts, including cognitive behavioral approaches; effective classification based on risk assessment; sufficiently intensive modalities to produce a change in behavior; a continuum of care, including aftercare; and provider accountability.

The current study operationalizes treatment through a number of variables, presented in Models 17 through 25 in Table 7.2. Model 17 looks at the impact of ancillary service provision and finds that drug courts with more services integrated into the program (e.g., mental and physical health, vocational, educational services) were marginally more successful in reducing re-arrest ($p < .10$).

Regarding core substance abuse treatment services, drug courts that initially referred participants to a more intensive treatment modality (i.e., residential) significantly reduced re-arrest as compared with drug courts that relied more often on outpatient treatment as the initial modality. Within the same model, reliance on intensive outpatient also appeared to have some benefits as compared to regular outpatient treatment.

Models 19 through 24 test many of the best practices identified by Johnson et al. (2000). We did not find that reliance upon providers that structure treatment according to a program manual significantly improved outcomes (Model 19); neither did our findings suggest that drug courts that reported using cognitive behavioral approaches (CBT) significantly reduced re-arrest (Models 20 and 21). We did find modest support ($p < .10$) for the use of cognitive behavioral programming addressing criminal thinking patterns that may underlie participants' criminal involvement (Model 22). Drug courts that assess for trauma also saw modest reductions in re-arrest (Model 23, $p<.10$), although actually linking participants to trauma treatment was not a significant mediator (Model 24). It is worth noting that very few drug courts outside New York City reported assessing for trauma. It is also worth noting that our evidence-based treatment measures were relatively crude, relying on a drug court policy survey rather than site visits coupled with researcher-led ratings of actual fidelity to best practices among community-based treatment providers. Therefore, it is quite possible that treatment programs identified by drug court staff as employing manualized curricula, CBT, or other best practices did not always do so regularly or with fidelity.

Intensive Treatment for High-Need Offenders

We sought to examine whether adherence to treatment best practices might have a particular benefit for higher- as opposed to lower-need drug court participants. Accordingly, we divided the sample into those with a "serious," non-alcohol primary drug (i.e., crack, powder cocaine, or heroin) and low-need participants (i.e., the remainder of the drug court participant sample).[18] Since we did not have primary drug information for comparison offenders, members of the comparison group were each categorized identically to the drug court participant to whom they were matched during propensity score matching (see Chapter 2).[19] We then isolated only those variables from Table 7.2 having to do with treatment (i.e., Models 17-24).

As shown in Table 7.6, drug courts that sent a higher percentage of participants to residential treatment as the first modality significantly reduced re-arrest among high-need offenders, but not among low-need offenders. Similarly, drug courts with access to at least one treatment provider that uses cognitive behavioral therapy produced somewhat improved outcomes among high-need offenders ($p<.10$), but not low-need offenders.

[18] We repeated the bivariate analyses using an alternative definition of high-need—i.e., percentage of participants with daily (non-marijuana) drug use—with consistent results.

[19] We also tried a classification of low- versus high-need *courts*—defined as drug courts with serious drug use among at least 33% of participants coupled with the comparison courts from the same jurisdiction. Results were consistent in direction, if not exact size, to the results presented here. Ultimately, we felt that the rationale for an individual-level division was more compelling.

Table 7.6. Impact of Treatment with Low-Need and High-Need Offenders

		Low-Need Offenders	High-Need Offenders
Number of Offenders		8,689	6,077
Number of Sites		169	163
CONTROL VARIABLES Intercept Drug Court Sample (vs. Comparison Group) Level 1 Risk Score (based on individual offender characteristics) Level 2 Risk Score (based on court-level characteristics)		*Included in each model, results not shown.*	
Model 1	% of Participants in Residential, 1st Tx. Modality	NS	-0.007**
Model 2	% of Tx. Providers that are Manualized	NS	NS
Model 3	Any Manualized Providers	NS	NS
Model 4	Any CBT Providers	NS	-0.355+
Model 5	Any CBT for Criminal Thinking Providers	NS	NS
Model 6	Assess for Trauma	-0.227*	-0.398*

***p<.001 **p<.01 *p<.05 +p<.10

Note: Drug court participants were divided into high- and low-need categories based on whether their primary drug of choice was a serious drug (i.e., cocaine, crack, heroin). Comparison group offenders were grouped with the drug court participant to whom they were propensity score matched. Additional analyses were conducted where drug courts were rated as high- (>33% of participants with serious primary drug) or low-need (<33% serious primary drug), with corresponding comparison courts assigned the same high/low rating. Results based on this division did not vary notably from our prefered grouping. Additional analyses using an alternative definition of treatment need based on the percentage of participants with daily (non-marijuana) drug use did not differ notably from the findings presented here.

Multivariate Results: Treatment

Table 7.7 presents final multivariate models examining the impact of treatment-based practices on re-arrest. Only those independent variables found to be significant in Table 7.2 (at the $p < .10$ level) were included. Results for all offenders and for separate models isolating low-need and high-need offenders are shown. The findings indicate that drug courts that initially mandate more participants to residential treatment perform slightly better than drug courts that utilize less intensive treatment modalities; in addition, consistent with what would be hypothesized, this relationship of modality to outcomes was significant for high-need but not for low-need offenders. On the other hand, offering cognitive behavioral therapy for criminal thinking, and assessing participants for trauma, produced improved impacts among low-need but not for high-need offenders. These last findings suggest that offenders with a low need for substance abuse treatment may have other criminogenic motivations and, therefore, be especially likely to benefit from appropriate ancillary services—such as for cognitive behavioral therapy for criminal thinking and trauma assessment.

Table 7.7. Treatment Policy Predictors of Re-Arrest at 3 Years

	ALL OFFENDERS		LOW NEED		HIGH NEED	
	Any Re-Arrest (Logistic Regression)	Number of Re-Arrests (Poisson Regression)	Any Re-Arrest (Logistic Regression)	Number of Re-Arrests (Poisson Regression)	Any Re-Arrest (Logistic Regression)	Number of Re-Arrests (Poisson Regression)
Number of Offenders	14,701		8,653		6,032	
Number of Sites	166		165		158	
Fixed Effects						
Intercept	-2.782***	-2.398***	-2.832***	-2.381***	-2.712***	-2.393***
Level 1 Risk Score	4.053***	3.057***	3.912***	2.943***	4.256***	3.200***
Random Effects						
Drug Court	0.009	-0.007	-0.001	-0.043	0.037	0.039
Level 2 Risk Score	1.488***	1.963***	1.721***	2.109***	1.215***	1.749***
% Participants in Residential Tx.	-0.004+	-0.002	-0.002	0.001	-0.006*	-0.002
Any CBT for Criminal Thinking		-0.156+		-0.197*		-0.074
Court Assesses for Trauma	-0.155	-0.141	-0.174	-0.276**	-0.244	-0.066

***p<.001 **p<.01 *p<.05 +p<.10

Differential Impact Based on Procedural Justice

In general, research indicates that offenders are more likely to comply with court orders when they believe that they have been treated fairly and with respect (Tyler 1990). Previous studies involving in-person interviews with program participants have found a positive impact of procedural justice—and of the role of the judge in particular (Gottfredson et al. 2007; Rossman et al. 2011). Because this study did not include offender interviews or researcher-led courtroom observations, our measures for procedural justice were limited to those derived from the court policy surveys—reflecting what drug court staff told us about judicial practices, rather than participant report or direct observation. As shown in Models 25 through 28 in Table 7.2., none of the limited array of measures we could construct significantly mediated drug court impacts.

Differential Impact Based on Collaboration

Models 29 through 31 in Table 7.2 examined the impact of stakeholder collaboration. Confirming the recent findings of Carey et al. (2012), our results suggest that drug courts with a dedicated prosecutor and defense attorney significant reduced re-arrest (Model 29), as did drug courts with more broadly inclusive teams (Model 30) and that have regular staffing meetings (Model 31). However, once all three measures of collaboration were included in a multivariate framework (see Table 7.8), only having dedicated prosecutors and defense attorneys significantly reduced re-arrest. The results in Table 7.3 further illustrate the benefits of dedicated counsel: those drug courts with the highest level of counsel inclusion reduced re-arrest by 3%, whereas the few drug courts with absolutely *no* dedicated counsel produced a 7% increase in re-arrest.

Table 7.8. Collaboration Predictors of Re-Arrest at 3 Years

	Any Re-Arrest (Logistic Regression)	Number of Re-Arrests (Poisson Regression)
Number of Offenders	14,118	
Number of Sites	163	
Fixed Effects		
Intercept	-2.719***	-2.327***
Level 1 Risk Score	4.048***	3.006***
Random Effects		
Drug Court	0.720**	0.606**
Level 2 Risk Score	1.355***	1.870***
Counsel Dedication Index	-0.404**	-0.353*
# of Roles on the DC Team	-0.111	-0.026
Court has Regular Staffing Meetings	-0.024	-0.087

***p<.001 **p<.01 *p<.05 +p<.10

Differential Impact Based on Other Court Policies

Several studies found that early treatment engagement predicted better retention outcomes (Rempel and DeStefano 2001; Rempel et al. 2003), but as shown in Model 32 in Table 7.2., the present study did *not* confirm this relationship. As further shown in Models 33 through 35, graduation requirements, including the number of months of program participation required, did not mediate drug court impacts. Finally, in Model 36, we sought to test whether the initial impetus for creating the drug court had lasting effects on outcomes, hypothesizing that drug courts created due to local interest may have greater stakeholder buy-in and, correspondingly, better results; indeed, the findings suggest a slight benefit of voluntarily establishing drug courts as opposed to operating them due to a statewide mandate ($p < .10$).

Summary

The findings suggest that several policies related to deterrence, treatment, and collaboration mediate the drug court impact. Specifically, drug courts performed better that require a guilty plea prior to program entry; establish certain jail or prison alternatives that will be imposed in the event of program failure; engage in certain sanctioning of noncompliance; and adhere to a formal sanctions schedule. These findings were supported by final multivariate models including policy measures across several domains (see Appendix H) and point to legal leverage and the use of certain and consistent interim sanctions as particularly important ingredients of successful programs. In addition, drug courts performed better when they referred more participants to

intensive treatment modalities, residential treatment in particular. Not surprisingly, the importance of referral to residential treatment applied to high-need participants, whereas low-need participants—who may still have serious risks and needs in areas *other than* substance abuse specifically—benefitted from participation in drug courts that utilize cognitive behavioral therapy for criminal thinking and that assess for trauma. Drug courts with dedicated defense attorneys and prosecutors integrated in the drug court team also performed better than courts without dedicated counsel, underlining the importance of interagency collaboration. The results did not generally find that the frequency of judicial status hearings, drug testing, or case management was critical—although more frequent case management improved outcomes for high-risk participants. The results also did not confirm expectations regarding procedural justice; however, as noted above, our operationalization of procedural justice was particularly weak, since we did not obtain participant perceptions of procedural justice or results from researcher-led structured observations of court sessions.

Finally, it is worth noting that many of the policies significantly related to re-arrest were highly inter-correlated (see Table 7.1). These high inter-correlations suggest that effective drug courts tend to implement an *array* of key policies—many of which improve outcomes—whereas less effective drug courts tend to implement few or none of these policies.

Chapter 8
Conclusions

This study sought to examine seven research questions. Each one is related below, with answers provided and briefly discussed. Study limitations are discussed as well.

1. ***Retention:*** **What are the statewide program retention rates for New York's drug courts?** Across the 86 sites, 66% of drug court participants were retained at one year. Retention rates diminish over time, as additional participants fail after the first year. The four-year statewide retention rate of 53% effectively represents a graduation rate, as very few participants remain active in the program after four years. Retention rates varied greatly across the state, with four-year rates ranging from a low of 23% to a high of 94%.

2. ***Re-Arrest:*** **Do New York's drug courts reduce the incidence and prevalence of re-arrest over conventional case processing?** The size of this effect diminishes over the three-year tracking period, but drug court participants remained less likely than comparison offenders to have any re-arrest, and participants averaged fewer total re-arrests, up to three years after drug court enrollment (or after case disposition for the comparison defendants). Impact on re-arrest varied greatly across the state, with one drug court reducing the three-year re-arrest rate by 21 percentage points and other drug courts *increasing* re-arrest by as much as 16 points. In general, the largest reductions in re-arrest were seen in the New York City sites. Notably, due to an average effect size that was well above-average among drug felony defendants, New York's drug courts significantly reduced re-arrest for the defendant sub-population whose access to treatment was expanded under the state's 2009 Rockefeller Drug Law Reform (see also the findings in Waller et al. 2013).

3. ***Sentencing:*** **Do New York's drug courts produce more favorable sentencing outcomes compared conventional case processing?** Drug court participants were significantly less likely than defendants in the comparison sample to receive the most severe sentences, including prison time.

4. ***Incarceration:*** **Do New York's drug courts reduce incarceration compared to conventional case processing?** Because drug court participants were less likely than the comparison group to be sentenced to prison, participants also averaged significantly fewer total days incarcerated on the instant case (in either state prisons or local jails). In addition, due to reductions both in jail/prison time on the instant case and reductions in jail/prison sentences on avoided future re-arrests, drug court participants spent fewer total days incarcerated on *all* criminal cases arising over a three-year tracking period.

5. ***Target Population:*** **Which target populations are more or less suited to the drug court intervention?** Those defendants over whom the drug court has greater legal leverage—that is, those who face longer jail or prison sentences in the instance of program failure—fare better. Consequently, drug courts that serve more felony-level participants outperform courts that accept primarily misdemeanants. In addition, offenders with a higher risk of re-arrest

(e.g., younger, male, and with an extensive prior criminal history) benefit more from their drug court participation than do lower-risk offenders, although the enhanced benefits of the drug court are diminished for the very highest risk offenders (i.e., chronic misdemeanants whose criminality is at an extreme, recalcitrant end of the spectrum). Drug courts also appear to be more effective with participants arrested on drug-related charges (sales or possession), as opposed to property-related or other charges. Drug courts that accept participants who use only marijuana—arguably the lowest need subgroup of drug users—fare worse than drug courts that exclude marijuana-only users. However, no other measure of addiction severity or substance abuse treatment need resulted in disparate court impacts. In addition, participants benefited equally from the drug court intervention regardless of their demographic background, including their sex, age, or race/ethnicity.

6. ***Court Policies:*** **Which program policies lead different drug courts to be more or less effective?** Drug courts that require a guilty plea prior to drug court entry; establish certain jail or prison alternatives that will be imposed in the event of program failure; engage in certain sanctioning of noncompliance; and adhere to a formal sanctions schedule outperform courts that do not implement these policies. Drug courts with dedicated defense attorneys and prosecutors also perform better than drug courts with a less collaborative approach.

   Whereas drug courts implementing more frequent judicial status hearings, drug testing, or case management did *not* perform any better than courts with less intensive supervision models for the entire drug court participant population, drug courts that required more frequent case management did improve outcomes for *high-risk offenders*.

   Drug courts that initially refer participants to residential treatment modalities outperformed courts that refer to less intensive initial modalities, particularly among *high-need* participants. Participants with lower substance abuse treatment needs—who may still have substantial risks and needs other than substance abuse specifically—performed better in drug courts that utilize cognitive behavioral therapy for criminal thinking and that assess for trauma. In this regard, it is critical to keep in mind that in distinguishing high-need and low-need drug court participants in the statistical analyses presented in this report, the reference is strictly to needs directly stemming from substance abuse. Individuals who are low-need in regard to substance abuse may still have a multiplicity of other risk/need factors, for instance involving criminal thinking, anti-social peers, or employment deficits; correspondingly, these individuals would appear particularly likely to benefit from assessment protocols and treatment offerings that can address some of these additional non-substance related problems.

7. ***Community Characteristics:*** **Which community characteristics lead different drug courts to be more or less effective?** Although certain results suggested that the drug courts in New York City were particularly effective, further analyses indicated that it was not region per se that was decisive; for instance, the New York City drug courts also tended to serve a higher-risk, higher-leverage population than other drug courts, which largely explains the New York City advantage; in fact, within New York City, due to their lower leverage to incentivize compliance, the city's misdemeanor drug courts did not perform as well as the city's felony-level drug courts. In general, community characteristics per se were not critical mediators of the drug court impact, as contrasted with target population and court policy factors.

Study Strengths and Limitations

The multi-site framework utilized in the study produced findings with strong external validity. Nonetheless, the external validity of this study is qualified by its limitation to a single state court system. We looked at a large number of jurisdictions across the state—including urban, suburban, and rural sites and sites whose policies and practices varied numerous respects—but the study remains limited to courts in New York State only.

Besides a reasonable claim to external validity, a second strength of the study design is the use of rigorous propensity score modeling methods to control for selection bias. Although a randomized controlled trial (RCT) would be a stronger design, randomly assigning defendants to the drug court across 86 sites was not practical. By, instead, using a propensity score matching strategy, this study was able to achieve comparable samples across a wide array of individual demographic, charge-related, and criminal history characteristics.

A third strength of the study is the sample size, with more than 15,000 cases available for all main effect analyses. Of particular importance, the sample size was sufficient to enable a rigorous study of subgroup effects, enabling the examination of relative impacts for high-risk versus low-risk and high-need versus low-need sub-samples. In addition to the large individual-level sample size, the inclusion of 86 drug court sites enabled multi-level analyses to tease out precisely which drug court policies most contributed to greater or lesser impacts. However, it is worth noting that court policy measures were derived solely from court responses to policy surveys, rather than researcher-led observations of actual court practices. Therefore, several key findings rely on relatively soft measures of court policies.

The selection of a contemporaneous comparison sample represents an additional strength of the study. By drawing comparison cases from the same time period as the drug court sample, the study reduces the possibility of historic bias created through unmeasured changes in identification, enforcement, or arrest of drug crimes over time.

The current study also suffered from several important limitations. For one, without assessment, drug use, and treatment history measures for the comparison sample, we are not absolutely certain that those offenders selected for the comparison sample actually face substance abuse and addiction problems comparable to those faced by offenders found eligible for the drug court. While the propensity score matching strategy implemented effectively accounts for observed differences between the samples on key criminal history, charge, and demographic measures, without addiction measures, it is impossible to be certain that comparison sample were, indeed, drug using or addicted. Without measures of employment, educational status, or mental health, it is similarly possible that the samples also varied on other psychosocial characteristics and needs. As noted in Chapter 2, we anticipate that any bias created by these shortcomings renders our estimates *more* conservative, particularly since substance abuse predicts recidivism.

It is also notable that many of the policy measures included in the study were derived solely from court responses to policy surveys, rather than researcher-led observations of actual court and treatment practices. Therefore, several key findings rely on relatively soft and potentially

problematic measures. In particular, our operationalization of procedural justice measures suffers from the lack of participant interviews or direct court observation. Our operationalization of evidence-based treatment (e.g., manualized curricula, cognitive-behavior therapy, trauma-focused treatment, and criminal thinking treatment) similarly suffers from its dependence on policy survey responses rather than direct observations and coding of treatment sessions.

Finally, this study focuses exclusively on official criminal justice outcomes: re-arrest, case processing speed, and sentencing outcomes. The study does not examine drug use, captured through offender self-report, post-program drug testing, or other types of outcomes.

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Appendix A. Comparison of Baseline Differences by Strata: Original Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1,916	9,835	957	6,815	158	2,009	443	3,919	2,046	18,907	2,012	26,605
DEMOGRAPHICS												
Age	29.3***	32.3	37.7*	37.0	31.0	32.0	36.5***	32.0	32.7***	31.3	32.7***	31.3
Age categories	***		***		+		***		***		***	
16-19 years	21%	14%	3%	5%	11%	14%	5%	14%	12%	15%	13%	16%
20-25 years	31%	24%	12%	14%	27%	22%	17%	23%	22%	23%	21%	24%
26-35 years	18%	23%	20%	24%	27%	27%	21%	26%	28%	27%	24%	25%
36-45 years	20%	23%	44%	36%	29%	24%	36%	24%	27%	22%	29%	23%
46-65 years	10%	16%	20%	22%	7%	13%	21%	14%	11%	12%	13%	12%
Female	18%*	16%	18%**	13%	27%**	19%	31%***	22%	26%***	19%	30%***	23%
Race/Ethnicity	***		**		***		***		***		***	
White or Asian	13%	13%	14%	10%	64%	43%	47%	45%	76%	55%	65%	53%
Black/African-American	53%	50%	53%	60%	28%	38%	10%	20%	19%	36%	28%	38%
Hispanic / Latino	33%	36%	33%	31%	8%	19%			4%	8%	6%	8%
Place of birth: United States	95%***	89%	98%***	94%	94%***	82%***	94%***	80%	99%***	97%	99%***	97%
CRIMINAL HISTORY												
Prior Arrests												
# prior arrests	6.2***	8.3	23.9***	15.9	4.9	4.9	9.3***	4.6	5.3**	5.7	7.2***	5.9
Base 10 log of # prior arrests	1.5***	1.6	2.2***	2.0	1.5	1.4	1.7***	1.4	1.5+	1.5	1.6***	1.5
Any prior arrest	73%***	80%	100%***	100%	80%**	70%	91%***	64%	83%***	77%	83%***	72%
# drug arrests	3.1***	4.2	9.7***	6.3	1.3+	1.6+	3.2***	1.2	0.8***	1.0	1.1**	1.0
Base 10 log of # drug arrests	1.3***	1.4	1.8***	1.6	1.2+	1.1+	1.3***	1.1	1.1***	1.1	1.1*	1.1
Any drug arrest	65%**	70%	97%***	88%	55%***	39%	77%***	37%	34%*	36%	43%***	34%
# felony arrests	2.0***	3.5	7.5***	6.0	1.5*	2.1	2.4***	1.7	1.6***	2.1	2.0	1.9
Base 10 log of # felony arrests	1.2***	1.4	1.7	1.6	1.2*	1.2	1.3***	1.2	1.2***	1.2	1.2	1.2
Any felony arrest	53%***	67%	95%***	92%	53%	53%	70%***	44%	57%	58%	57%***	51%
# misdemeanor arrests	4.2*	4.8	16.4***	10.0	3.4+	2.8	6.9***	2.9	3.7	3.6	5.2***	4.0
Base 10 log of # misd. arrests	1.4**	1.4	2.0*	1.8	1.4*	1.3	1.6***	1.3	1.4***	1.4	1.5***	1.4
Any misdemeanor arrest	67%***	72%	98%***	96%	73%***	62%	86%***	58%	79%***	70%	78%***	66%
# violent felony arrests	0.5***	0.8	1.8	1.9	0.3***	0.6	0.5	0.6	0.3***	0.7	0.6+	0.6
Base 10 log of # vio. fel. arrests	1.1***	1.1	1.2	1.2	1***	1.1	1.0	1.1	1***	1.1	1.1	1.1
Any violent felony arrest	25%***	38%	63%*	65%	19%***	30%	28%	27%	20%***	31%	27%*	30%
# weapons arrests	0.4***	0.7	1.3	1.4	0.2**	0.4	0.3	0.4	0.2***	0.5	0.4**	0.4
Any weapons arrest	25%***	35%	56%**	59%	16%***	23%	19%	21%	15%***	25%	21%*	24%
# child victim arrests	0.1***	0.2	0.3*	0.3	0.1	0.1	0.1***	0.1	0.2	0.2	0.2	0.2
Any child victim arrest	9%***	17%	24%+	22%	5%	4%	9%***	4%	14%	13%	13%	13%
# sex offense arrests	0.0***	0.1	0.1***	0.1	0.0**	0.1	0.0**	0.1	0.1***	0.1	0.1**	0.1
Any sex offense arrest	2%***	5%	7%***	11%	2%**	5%	2%+	4%	5%***	7%	6%**	8%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix A. ***(Continued)***

Comparison of Baseline Sample Differences by Strata: Original Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1916	9835	957	6815	158	2009	443	3919	2046	18907	2012	26605
Prior Convictions												
# prior convictions	2.6***	3.9	15.3***	9.0	2.3	2.3	5.3***	2.2	2.2+	2.3	2.8***	2.3
Base 10 log of # prior convictions	1.2***	1.3	2.0***	1.7	1.2	1.2	1.5***	1.2	1.3	1.3	1.3***	1.2
Any prior conviction	34%***	54%	94%***	93%	52%	50%	74%***	41%	65%***	59%	59%***	50%
# drug convictions	1.2***	2.0	5.5***	3.3	0.8	0.6	1.7***	0.6	0.3***	0.5	0.4	0.4
Base 10 log of # drg. convictions	1.1***	1.2	1.6*	1.4	1.1	1.1	1.2***	1.1	1.0***	1.0	1.0	1
Any drug conviction	31%***	49%	88%***	71%	35%**	25%	56%***	23%	20%**	24%	25%***	22%
# felony convictions	0.2***	0.7	1.6***	1.3	0.2***	0.6	0.5***	0.4	0.4***	0.5	0.4	0.4
Any felony conviction	13%***	35%	64%**	62%	16%***	30%	35%***	22%	25%***	30%	24%	24%
# misdemeanor convictions	2.4***	3.2	13.7***	7.7	2.0	1.8	4.8***	1.8	1.8	1.8	2.4***	1.9
Base 10 log of # misd.convictions	1.2***	1.3	1.9**	1.6	1.2	1.2	1.4***	1.2	1.2+	1.2	1.2***	1.2
Any misdemeanor conviction	32%***	47%	91%***	84%	50%	46%	72%***	38%	63%***	53%	56%***	47%
# violent felony convictions	0.0***	0.0	0.2***	0.3	0.0**	0.1	0.1***	0.1	0.0***	0.1	0.1*	0.1
Any violent felony conviction	0%***	0%	14%***	24%	3%**	10%	4%***	8%	2%***	8%	5%**	7%
# weapons convictions	0.0***	0.1	0.2+	0.3	0.0*	0.1	0.0***	0.1	0***	0.1	0.1***	0.1
Any weapons conviction	3%***	8%	19%*	20%	3%*	8%	2%***	7%	4%***	9%	5%***	8%
# youthful offender convictions	0.1***	0.2	0.3**	0.3	0.2	0.2	0.2	0.2	0.2*	0.3	0.3	0.2
Any youthful offender conviction	10%***	18%	25%***	22%	16%	18%	15%	14%	21%	21%	21%*	19%
Prior Incarceration												
# prior prison sentences	0.1***	0.4	1***	0.8	0.1**	0.3	0.2	0.2	0.2***	0.4	0.3	0.2
Any prior prison sentence	7%***	21%	43%***	38%	6%**	15%	14%**	11%	10%***	18%	12%	13%
# of prior days in jail or prison	189.6***	566.9	1462.2*	1128.9	205.1+	562.2	643.2*	411.8	206.5***	530.8	350.5	354.8
Base 10 log # prior dys. ja. or pri.	1.6***	2.1	3.4***	3.0	1.7*	2	2.4***	1.8	1.8***	2	2**	1.9
Prior Warrants and Revocations												
# prior cases with bench warrs.	1.4***	1.9	5.5***	3.5	1**	1.2	2.3***	1.1	0.7***	0.9	1.2***	1
Base 10 log # cases with warrs.	1.1***	1.2	1.6**	1.4	1.1*	1.1	1.3***	1.1	1.1***	1.1	1.1***	1.1
Any bench warr. on a prior case	40%***	53%	86%***	77%	43%	40%	66%+	36%	32%**	35%	41%***	36%
Any prior probation revocation	7%***	17%	32%***	24%	21%	24%	33%***	18%	27%	27%	30%***	24%
Any prior revocation: technical	4%***	7%	12%***	10%	15%	14%	23%***	12%	23%	21%	26%***	19%
Any prior revocation: new conv.	4%***	11%	22%***	16%	7%**	11%	13%***	7%	7%	8%	5%	6%
Any prior parole revocation	5%***	13%	32%***	26%	5%***	9%+	7%	7%	4%***	12%	9%	10%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix A. ***(Continued)***

Comparison of Baseline Sample Differences by Strata: Original Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1916	9835	957	6815	158	2009	443	3919	2046	18907	2012	26605
CURRENT CRIMINAL CASE												
Timing												
Arrest year	***		***		***		***		***		***	
2003 or earlier	0%	0%	0%	1%	3%	7%	3%	6%	10%	5%	14%	3%
2004	7%	19%	5%	5%	16%	27%	15%	22%	21%	26%	17%	15%
2005	49%	46%	42%	50%	47%	45%	49%	43%	43%	46%	44%	48%
2006	45%	35%	53%	44%	34%	21%	32%	28%	27%	24%	25%	34%
Disposition/drug court enroll. year			***				*				*	
2005	49%	48%	42%	51%	51%	52%	55%	50%	50%	51%	53%	51%
2006	51%	52%	58%	49%	49%	48%	45%	51%	50%	49%	47%	49%
Charges												
Arrest charge type	***		***		***		***		***		***	
Drug possession misdemeanor			58%	44%			60%	22%			30%	16%
Drug possession felony	27%	42%			42%	12%			19%	18%		
Drug sales felony	67%	43%			7%	10%			9%	10%		
Other drug charge †			4%	3%	4%	13%	0%	0%			1%	1%
DWI							10%	20%	33%	18%	17%	12%
Property-related	6%	12%	34%	36%	30%	36%	24%	30%	23%	30%	28%	26%
Other			5%	17%	17%	29%	6%	28%	16%	24%	25%	46%
Charge severity = felony	100%	100%	0%	0%	100%	100%	0%	0%	100%	100%	0%	0%
Types of Counsel	***				***		***		***		***	
Legal Aid Society	55%	48%	70%	70%	34%	34%	30%	21%	37%	30%	34%	28%
Other public defender agency	14%	16%	19%	18%	0%	0%	0%	0%	26%	30%	28%	38%
18B assigned counsel	20%	25%	9%	10%	26%	13%	41%	19%	16%	20%	24%	16%
Private counsel	11%	11%	2%	2%	34%	44%	23%	40%	21%	20%	12%	16%
Pro se (self-represented)	0%	0%	0%	0%	6%	8%	6%	20%	0%	0%	2%	2%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix A. ***(Continued)***

Comparison of Baseline Sample Differences by Strata: Original Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1916	9835	957	6815	158	2009	443	3919	2046	18907	2012	26605
COUNTY/COURT												
New York City	***		***									
Bronx	18%	28%	36%	32%								
Brooklyn	52%	20%	34%	24%								
Manhattan	11%	32%	9%	30%								
Queens	15%	17%	20%	12%								
Staten Island	5%	4%	1%	2%								
Suburb					***		***					
Not Suburb					9%	3%	15%	3%				
Nassau					14%	38%	20%	38%				
Suffolk					47%	44%	31%	41%				
New Rochelle					9%	3%	9%	3%				
White Plains					13%	4%	9%	5%				
Yonkers					9%	9%	16%	10%				
Upstate									***		***	
Not Upstate									72%	61%	52%	57%
Syracuse/Onondaga									8%	7%	16%	7%
Rochester/Monroe									11%	11%	18%	13%
Buffalo City									3%	12%	12%	15%
Albany									6%	8%	2%	9%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix B. Logistic Regression of Baseline Characteristics on Sample Status: Strata 1: New York City Felony Arrest

Dependent Variable	**Sample (Drug Court vs. Comparison)**
Number of Cases[1]	**10,207**
Drug Court Participants	**1,646 (16.1%)**
Comparison Group Candidates	**8,561 (85.9%)**
Number of steps	9
Chi-square for final model	1402.956***
Lost degrees of freedom	34
Nagelkerke R^2 for final model	0.219
Independent Variables:	**Regression Coefficient**
Age (continuous)	-.017***
Ages 16-19 years	.123
Ages 20-25 years	.222*
Ages 36-45 years	.255**
Hispanic race	-.157*
Born in the United States	.827***
Base 10 logarithm of the number of prior arrests (continuous)	.440**
Prior arrest	-.112
Prior drug arrest	.232*
Prior felony arrest	-.115
Prior violent felony arrest	-.262**
Prior weapons-related arrest	.138
Prior arrest with a child victim	-.246*
Prior sex offense arrest	-.183
Prior conviction	-.083
Prior drug conviction	-.312**
Prior felony convictions (continuous)	-.176*
Prior felony conviction	-.542***
Prior weapons-related conviction	-.706***
Prior youthful offender conviction	-.282**
Prior prison sentence	-.242
Base 10 logarithm of prior days in jail or prison (continuous)	-.114*
Number of prior cases with bench warrants (continuous)	.064***
Prior bench warrant	-.222**
Prior probation revocation	-.316**
Prior parole revocation	.150
Instant case arrest in 2004 (despite 2005-2006 disposition)	-2.563***
Instant case arrest in 2005	-1.177***
Instant case disposition in 2006 (vs. 2005)	-1.231***
Instant case drug possession charge	.211
Instant case drug sales charge	1.368***
Defendant represented by the Legal Aid Society	-.168+
Defendant represented by other public defender agency	-.410**
Defendant represented by other indigent defense counsel	-.604***
Constant	-.963**

+p<.10, * p<.05, ** p<.01, ***p<.001.

Note: The following variables were deleted during the stepwise procedure (removal at p > .50): ages 26-35, sex, black race, base 10 logarithm of the number of prior drug arrests, base 10 logarithm of the number of prior felony arrests, number of prior violent felony arrests, base 10 logarithm of the number of prior convictions, and base 10 logarithm of the number of prior drug convictions.

[1] A total of 11,752 cases were entered into the propensity model, of which 1,545 (13.1%) were missing data on at least one of the independent variables and therefore excluded from the computations. As noted in our description of study methodology, additional propensity models were computed that deleted select variables with missing data, such that a propensity score was ultimately obtained for all 11,752 cases. In this illustrative table, we provide results for the main model that led to the computation of scores for 86.9% of strata 1 cases.

Appendix C. Comparison of Baseline Differences by Strata: Final Matched Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1916	1916	960	960	158	158	443	443	2046	2046	2012	2012
DEMOGRAPHICS												
Age	29.3	29.5	37.7	37.7	31.0	31.7	36.5	35.7	32.2	32.6	32.7	32.7
Age categories												
16-19 years	21%	21%	3%	4%	11%	12%	5%	4%	12%	12%	13%	13%
20-25 years	31%	30%	12%	12%	27%	23%	17%	19%	22%	21%	21%	20%
26-35 years	18%	19%	20%	19%	27%	28%	21%	24%	28%	28%	24%	23%
36-45 years	20%	20%	45%	44%	29%	31%	36%	33%	27%	27%	29%	32%
46-65 years	10%	11%	20%	21%	6%	6%	21%	19%	12%	13%	14%	12%
Female	18%	18%	18%	19%	27%	29%	31%	27%	26%	26%	30%	21%
Race/Ethnicity												
White or Asian	13%	14%	14%	15%	64%	66%	47%	47%	76%	76%	66%	67%
Black/African-American	53%	54%	53%	52%	28%	26%	43%	43%	19%	20%	28%	28%
Hispanic / Latino	33%	33%	33%	33%	8%	8%	10%	11%	4%	4%	6%	5%
Place of birth: United States	95%	95%	98%	98%	94%	98%	94%	93%	99%+	98%	99%	99%
CRIMINAL HISTORY												
Prior Arrests												
# prior arrests	6.2	6.3	23.9	22.9	4.9	4.3	9.3	8.2	5.3	5.4	7.2	6.9
Base 10 log of # prior arrests	1.5	1.5	2.2	2.2	1.5	1.4	1.7	1.7	1.5	1.5	1.6	1.6
Any prior arrest	73%	74%	100%	100%	80%	82%	91%	90%	83%*	86%	83%	82%
# drug arrests	3.1	3.2	9.7	9.1	1.6	1.4	3.2	3.0	0.8	0.8	1.1	1.0
Base 10 log of # drug arrests	1.3	1.3	1.8	1.8	1.2	1.2	1.3	1.3	1.1+	1.1	1.1+	1.1
Any drug arrest	65%	66%	96%	97%	55%	55%	77%	74%	34%	34%	43%	42%
# felony arrests	2.1	2.1	7.5	7.6	1.5	1.5	2.4	2.4	1.6	1.6	2.0*	1.8
Base 10 log of # felony arrests	1.2	1.2	1.7	1.7	1.2	1.2	1.3	1.3	1.2	1.2	1.2+	1.2
Any felony arrest	53%	53%	95%	96%	53%	53%	70%	68%	58%	60%	57%	55%
# misdemeanor arrests	4.2	4.2	16.0	15.0	3.4	2.8	6.9+	5.8	3.7	3.8	5.2	5.1
Base 10 log of # misd. arrests	1.4	1.4	2.0	2.0	1.4	1.3	1.6+	1.6	1.4	1.4	1.5	1.5
Any misdemeanor arrest	67%	68%	98%	98%	73%	73%	86%	86%	79%	80%	78%	78%
# violent felony arrests	0.5	0.5	1.8	1.8	0.3	0.3	0.5	0.5	0.3	0.3	0.6+	0.5
Base 10 log of # vio. fel. arrests	1.1	1.0	1.2	1.2	1.0	1.0	1.0	1.0	1.0*	1.0	1.1+	1.1
Any violent felony arrest	25%	26%	63%	65%	19%	20%	28%	28%	20%	20%	27%	25%
# weapons arrests	0.4	0.4	1.3	1.3	0.2	0.2	0.3	0.3	0.2	0.2	0.4	0.3
Any weapons arrest	25%	26%	56%	59%	16%	15%	19%	20%	15%	14%	21%	21%
# child victim arrests	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Any child victim arrest	9%	10%	24%	25%	5%	5%	9%	8%	14%	14%	13%	12%
# sex offense arrests	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1+	0.1
Any sex offense arrest	2%	2%	7%	8%	2%	2%	2%	3%	5%	5%	6%+	5%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix C. ***(Continued)***

Comparison of Baseline Sample Differences by Strata: Final Matched Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1916	1916	960	960	158	158	443	443	2046	2046	2012	2012
Prior Convictions												
# prior convictions	2.6	2.6	15.3	14.4	2.3*	1.9	5.3	4.4	2.2	2.2	2.8	2.9
Base 10 log of # prior convictions	1.2	1.2	2.0	2.0	1.2*	1.2	1.5	1.4	1.3	1.3	1.3	1.3
Any prior conviction	34%	36%	94%	94%	52%	52%	74%	71%	65%	67%	59%	58%
# drug convictions	1.2	1.2	5.5	5.2	0.8	0.7	1.7	1.7	0.3+	0.4	0.4	0.4
Base 10 log of # drg. convictions	1.1	1.1	1.6	1.6	1.1	1.1	1.2	1.2	1.0+	1.0	1.0	1
Any drug conviction	31%	31%	88%	89%	35%	35%	56%	54%	20%	22%	25%+	23%
# felony convictions	0.2	0.3	1.6	1.7	0.2	0.2	0.5	0.6	0.4	0.4	0.4	0.4
Any felony conviction	13%	14%	64%	63%	16%*	11%	35%	38%	25%	27%	24%	22%
# misdemeanor convictions	2.4	2.4	13.7	12.7	2.0*	1.7	4.8+	3.9	1.8	1.8	2.4	2.5
Base 10 log of # misd.convictions	1.2	1.2	1.9	1.9	1.2*	1.2	1.4	1.4	1.2	1.2	1.2	1.3
Any misdemeanor conviction	32%	34%	91%	92%	50%	52%	72%	68%	63%	65%	56%	56%
# violent felony convictions	0.0	0.0	0.2	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.1+	0.1
Any violent felony conviction	0%	0%	14%	20%	3%	4%	4%	3%	2%	3%	5%+	4%
# weapons convictions	0.0	0.0	0.2+	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Any weapons conviction	3%	3%	19%	20%	3%	3%	2%	3%	4%	3%	5%	5%
# youthful offender convictions	0.1	0.1	30.0**	29.0	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
Any youthful offender conviction	10%	11%	25%**	23%	16%	14%	15%	15%	21%	21%	21%	21%
Prior Incarceration												
# prior prison sentences	0.1	0.1	1.0	1.1	0.9	0.9	0.2	0.2	0.2	0.2	0.3**	0.2
Any prior prison sentence	7%	8%	43%	42%	6%	6%	14%	13%	10%	11%	12%+	10%
# of prior days in jail or prison	190.0	172.3	1458.6	1477.3	205.1	123.8	643.2	415.9	206.5	241.1	350.5	316.6
Base 10 log # prior dys. ja. or pri.	1.6	1.6	3.4	3.3	1.7	1.6	2.4	2.4	1.8	1.8	2.0	2.0
Prior Warrants and Revocations												
# prior cases with bench warrs.	1.4	1.4	5.5	5.3	1.0	0.9	2.3	2.1	0.7	0.7	1.2	1.1
Base 10 log # cases with warrs.	1.1	1.2	1.6	1.6	1.1	1.1	1.3	1.3	1.1	1.1	1.1	1.1
Any bench warr. on a prior case	40%	42%	86%	88%	43%	39%	66%	66%	32%	32%	41%	41%
Any prior probation revocation	7%	9%	32%	33%	20%	19%	33%	31%	27%	29%	30%	29%
Any prior revocation: technical	4%	3%	12%	13%	15%	11%	23%	22%	23%	24%	26%	24%
Any prior revocation: new conv.	4%*	5%	22%	21%	7%	9%	13%	12%	7%	7%	5%	6%
Any prior parole revocation	5%	5%	32%	32%	5%	5%	7%	7%	4%	4%	9%	7%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix C. ***(Continued)***

Comparison of Baseline Sample Differences by Strata: Final Matched Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1916	1916	960	960	158	158	443	443	2046	2046	2012	2012
CURRENT CRIMINAL CASE												
Timing												
Arrest year					+				*		***	
2003 or earlier			0%	1%	3%	10%	3%	3%	10%	8%	14%	7%
2004	7%	6%	5%	4%	16%	15%	15%	16%	21%	21%	17%	23%
2005	49%	50%	42%	44%	47%	47%	49%	47%	43%	42%	43%	46%
2006	45%	44%	53%	51%	34%	29%	32%	35%	27%	29%	25%	23%
Disposition/drug court enroll. year							+				***	
2005	49%	49%	42%	42%	51%	48%	55%	49%	50%	48%	53%	56%
2006	51%	51%	58%	59%	49%	52%	45%	51%	50%	52%	47%	44%
Charges												
Arrest charge type							*		+			
Drug possession misdemeanor			58%	59%			60%	54%			30%	28%
Drug possession felony	27%	27%			42%	40%			19%	20%		
Drug sales felony	67%	68%			7%	5%			11%	9%		
Other drug charge †			4%	3%			0%	1%			1%	1%
DWI					4%	5%	10%	10%	33%	30%	17%	19%
Property-related	6%	6%	34%	32%	29%	29%	24%	25%	23%	24%	28%	26%
Other			5%	6%	18%	21%	6%	10%	16%	15%	25%	26%
Charge severity = felony	100%	100%	0%	0%	100%	100%	0%	0%	100%	100%	0%	0%
Types of Counsel												
Legal Aid Society	54%	53%	70%	70%	34%	39%	30%	32%	37%	36%	34%	35%
Other public defender agency	14%	14%	19%	19%	0%	1%	0%	0%	26%	25%	28%	27%
18B assigned counsel	20%	21%	9%	10%	26%	19%	41%	39%	15%	18%	24%	25%
Private counsel	11%	12%	2%	2%	34%	34%	23%	23%	21%	21%	12%	12%
Pro se (self-represented)	0%	0%	0%	0%	6%	8%	6%	7%	0%	0%	1%	2%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix C. ***(Continued)***

Comparison of Baseline Sample Differences by Strata: Final Matched Samples

Strata	1. NYC Felony		2. NYC Misdemeanor		3. Suburban Felony		4. Suburban Misdemeanor		5. Upstate Felony		6. Upstate Misdemeanor	
Sample	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**	**Drug Court**	**Comparison Group**
Number of Cases	1916	1916	960	960	158	158	443	443	2046	2046	2012	2012
COUNTY/COURT												
New York City	+											
Bronx	18%	28%	36%	33%								
Brooklyn	52%	22%	34%	24%								
Manhattan	11%	30%	9%	31%								
Queens	15%	16%	20%	9%								
Staten Island	5%	4%	1%	3%								
Suburb					*							
Not Suburb							15%	7%				
Nassau					14%	31%	20%	29%				
Suffolk					47%	41%	31%	32%				
New Rochelle					9%	6%	9%	6%				
White Plains					13%	10%	9%	11%				
Yonkers					9%	10%	16%	16%				
Upstate									***			
Not Upstate									72%	67%	52%	59%
Syracuse/Onondaga									8%	7%	16%	10%
Rochester/Monroe									11%	10%	18%	11%
Buffalo City									3%	9%	12%	13%
Albany									6%	8%	2%	8%

+p<.10, * p<.05, ** p<.01, ***p<.001.

Appendix D.
2006 NY Drug Court Policy Survey

Drug Court_____ **Date Opened**_____

1. What charge severities are eligible for your drug court?

   Violent felony
   Nonviolent felony
   Violent misdemeanor
   Nonviolent misdemeanor
   Violation

2. What charge types are eligible for your drug court?

   Drug sales
   Drug possession
   DUI/DWI
   Non-drug
   Probation Violator
   Parole Violator

3. Which criminal histories are eligible for your drug court?

   Prior violent felony conviction
   Prior nonviolent felony conviction
   Prior violent misdemeanor conviction
   Other
   Explain other_____

4. Which clinical characteristics are eligible for your drug court?

   Substance dependent
   Substance abusing
   On methadone at intake
   Marijuana use only
   Alcohol use only

5. What are other characteristics that might make a defendant INELIGIBLE?

   Severe mental illness
   Too young
   Illegal immigrant
   Other
   Explain other_____

6. If a defendant is ineligible due to severe mental illness, what are other options in your jurisdiction?

   Mental health court
   Jail diversion / alternative-to-incarceration program
   Explain _____
   Other
   Explain other_____

7. Can defendants enter drug court while on methadone?

   No policy exists
   Yes, there are no restrictions
   Yes, but must agree to methadone-to-abstinence
   No
   Other
   Explain other_____

8. What are the most common ways for a defendant to be referred to the drug court?

Automatic for certain charges
District Attorney
Defense attorney
Coordinator/case manager
Non-drug court judges
Multiple referral sources
Other
Explain other_____

9. Are defendants required to plead guilty before entering the drug court?

No policy exists
Yes
No
Some
Explain some_____

10. Are defendants required to sign a contract before entering the drug court?

Yes
No
Some
Explain some_____

11. Are participants told of a jail alternative when they enter the drug court?

Yes, exact incarceration amount (ex., 1 year)
Yes, approx. incar. amount (ex., up to 1 yr; 1-3 yrs)
Yes, a promise of incar. w/o a specific time period
No
Sometimes
Explain sometimes_____

12. What additional mental health services are available for participants? (Select all that apply)

Mental health-specific psychosocial assessment
Psychiatric evaluation
Mental health treatment or referrals
Other service referrals, such as supported housing or intensive case management
Other
Explain other _____

13. Do you use phases?

Yes (How many? _____)
No

14. How frequently are judicial status hearings? (If differs by phase, please list for each phase)

_____

15. Are regular meetings required with the case manager and the participant?

Yes
No
As needed
Sometimes
Explain sometimes_____

16. How frequently are required case manager meetings? (If differs by phase, please list for each phase)

_____

17. How frequently are participants drug tested *at court*? (If differs by phase, please list for each phase)

_____

18. How frequently are participants drug tested *at treatment?* (If differs by phase, please list for each phase) _____

19. Which treatment modalities are *most* commonly used? (Select *TWO)*
Outpatient (less than 3 days/week)
Intensive outpatient (3 or more days/week)
Rehab (28-30 days)
Residential

20. Which sanctions do you commonly use?
Community service
Judicial admonishment
Essay
Jury box
Decrease in phase
Upgrade of treatment modality
Increased frequency of judicial status hearings
Jail, 1-3 days
Jail, 4-7 days
Jail, 8-14 days
Jail, more than 14 days
Other
Explain other_____

21. Which rewards do you commonly use?
Phase promotion
Downgrade of treatment modality
Decreased frequency of judicial status hearings
Sober coins
Certificates
Judicial praise
Tickets to an event (movies, sports, etc.)
Other
Explain other_____

22. What are your graduation requirements?
Minimum months in program (_____ months)
Minimum months clean (_____ months)
Fees
Community services (_____ hours)
Employed or in school
HS degree/GED
Complete treatment program
Graduation application
Other
Explain other_____

23. Can participants graduate while still on methadone (if clinically recommended by their treatment program)?
No policy exists
Yes
No
Some
Explain some_____

24. In practice, how long do participants commonly spend in the drug court? (If differs by charge, please explain) _____ months

25. What most commonly happens when someone graduates?
Plea vacated, all charges dismissed
Plea is taken on lower charge (charge reduced)

Conviction stands, sentenced to ACD or CD
Conviction stands, discharged from probation
Conviction stands, probation continued
Other
Explain other_____

26. What commonly happens when someone fails? (If differs by charge, please explain)

No incarceration, plus probation
Incarceration, less than 6 months
Incarceration, more than 6 months, less than 1 year
Incarceration, 1 year
Incarceration, more than 1 year
Other
Explain other_____

27. Is there a dedicated Assistant District Attorney?

Yes
No

28. Is there a dedicated Defense Attorney?

Yes
No

29. Who employs the case manager(s)?

Drug Court
Probation
TASC
Treatment Provider(s)
Other
Explain other_____

30. Do you have regular staffings to discuss participant progress?

Yes
No

31. What roles are represented on your team?

Drug court judge
Coordinator
Case manager(s)
Representative from District Attorney's office
Representative from public defenders
Representative from probation
Representative from parole
Representative from treatment agency
Representative from law enforcement
Representative from a mental health agency
Other
Explain other_____

Appendix E.
2010 NY Drug Court Policy Survey
Background Information

Name of Court: _____
Your Name: _____
Your Position: _____
Court Address: _____
Phone: _____
E-mail: _____
Name of Drug Court Judge, 2005-2006: _____

Please answer the following questions to the best of your knowledge. If your policies have recently changed, please indicate what was in effect for participants enrolling in 2005 and 2006. Please do not include policies precipitated recently by changes to the Rockefeller Drug Laws.

I. DRUG COURT ELIGIBILITY

1. Which clinical characteristics are eligible for your drug court? ***Check all that apply.***

   □ Substance dependent
   □ Substance abusing
   □ Substance using (not abusing or dependent)
   □ Uses alcohol only – *no other drugs*
   □ Uses marijuana only – *no other drugs*
   □ Takes methadone at intake – *any level*
   □ Takes methadone at intake – *only if below the following level:* _____
   □ Takes methadone at intake – *only if defendant agrees to become abstinent by graduation*
   □ Other clinical criteria: _____

2. Can participants who have previously entered and failed drug court enter your court?

   □ Yes
   □ No

3. Can participants enter as a direct result of a probation violation? ***Check all that apply.***

   □ Yes – with new arrest
   □ Yes – with technical violation
   □ No

4. Are defendants with a severe mental illness found ineligible?

   □ Yes
   □ No

5. Is any other group of defendants categorically ineligible for your court (e.g., defendants with too few prior convictions, defendants charged with drug sales)? If so, please explain:

   _____

   _____

II. LEGAL IMPLICATIONS OF DRUG COURT PARTICIPATION

6. Prior to drug court entry, is one person consistently responsible for informing eligible defendants of the drug court policies and procedures?

   □ Yes
   □ No

7. Prior to drug court entry, who provides the defendant with an overview of drug court policies and procedures? ***Check all that apply.***

   □ Drug Court Judge
   □ Another Judge
   □ Defense Attorney
   □ Prosecutor
   □ Project Director/Coordinator
   □ Case Manager
   □ Probation Officer

8. Who always informs new participants of the jail/prison alternative or other legal consequence in the event of failing? ***Check all that apply <u>always</u>.***

   □ Specified in the drug court contract
   □ Judge
   □ Case manager
   □ Defense attorney
   □ Prosecutor
   □ Other: _____

9. What most commonly happens when someone fails the drug court? ***Check one.***

   □ Sentenced to jail or prison

   □ Sentenced to probation as new sentence

   □ Continuation of previous probation sentence

   □ Other (Explain: _____)

10. Upon failure, will participants always receive the jail/prison alternative that was specified at the time of drug court entry?

    □ Yes (always or virtually always)
    □ No
    □ Sometimes (Explain _____)

11. Are participants told the exact legal benefits of graduation at the time of entry?

    □ Yes
    □ No
    □ Sometimes (Explain _____)

III. TREATMENT

12. Please complete the chart below.

	Total # of providers used by the court	**# of manualized providers used by the court**
Outpatient		
Intensive Outpatient		
Rehab (28-30 days)		
Residential		
Methadone		
Other: _____		

IV. DRUG TESTING

13. Does the *court* conduct *random* drug tests?

    □ Yes, <u>all</u> participants are subject to random drug tests

    □ Yes, <u>some</u> participants are subject to random drug tests (Explain _____)

    □ No

14. On average, how frequently are participants drug tested at court during the first three months of drug court participation? _____

15. On average, how frequently are participants drug tested by other sources (e.g., probation, treatment providers) during the first three months of drug court participation? _____

16. Is drug testing at court consistent across participants in the same phase? ***Check all that apply.***

    □ Yes, all or nearly all participants are tested on a similar schedule

    □ No, participants who have had a dirty test are tested more frequently

    □ No, participants are tested based on their case manager/program modality/etc.
    (Explain which _____)

    □ No, participants are tested based on some other criteria (Explain _____)

V. JUDICIAL SUPERVISION

17. On average, how frequent are judicial status hearings during the first three months of drug court participation for a compliant participant? _____

18. Does the frequency of judicial status hearings change over time? ***Check all that apply.***

    □ Yes, judicial status hearings become less frequent as participants advance

    □ Yes, judicial status hearings become more frequent in response to noncompliance

    □ No

    □ Other (Explain _____)

19. At what point in the drug court calendar are the following types of defendants called?

	First cases called	**Last cases called**	**Distributed throughout**	**N/A (Cases aren't on the calendar)**
Compliant participants				
Noncompliant participants				
Program graduates				
Program failures (for re-sentencing)				
New drug court participants				
Drug court candidates pending enrollment				
Non-drug court cases				

20. Do compliant participants and noncompliant participants typically spend the same amount of time before the judge during court appearances?

    □ Yes, they typically spend the same amount of time in front of the judge

    □ No, noncompliant participants typically spend more time in front of the judge

    □ Other (Explain _____)

21. Are participants required to remain in the courtroom for the entire drug court calendar (e.g., even after their case has been called)?

    □ Always/Almost Always

    □ Sometimes (Explain _____)

    □ Never

22. Based on your knowledge of courtroom layout and acoustics, would you say that "on the record" comments are <u>clearly audible</u> to those sitting in the back of the courtroom?

    □ Always/Almost Always

    □ Sometimes

    □ Never/Almost Never

VI. JUDICIAL INTERACTION

Remember, throughout the survey we are asking you to recall your court's policies and practices during 2005 through 2006.

23. Who was the dedicated judge in your drug court in all or most of 2005 and 2006?

    _____

24. Does the judge speak directly to participants during court?

    □ Always
    □ Sometimes (Explain _____)
    □ Never

25. During regular judicial status hearings, besides the participant, who does the judge usually talk to? ***Check all that apply.***

    □ Prosecutor
    □ Defense attorney
    □ Participants' family members
    □ Treatment providers
    □ Probation
    □ Case managers
    □ Other participants

26. In a typical drug court calendar, how many bench conferences are there?

    □ None
    □ 1 – 2
    □ 3 or More

27. Does the judge typically ask probing questions of participants who are compliant? *(A probing question is one that requires more than a one-word/one-phrase answer.)*

    □ Always
    □ Usually
    □ Sometimes
    □ Rarely
    □ Never

28. Does the judge typically ask probing questions of participants who are noncompliant? *(A probing question is one that requires more than a one-word/one-phrase answer.)*

- □ Always
- □ Usually
- □ Sometimes
- □ Rarely
- □ Never

29. Which of the following does the judge typically discuss with participants during court? ***Check one box for each row.***

	Always	**Usually**	**Sometimes**	**Rarely**	**Never**
Graduation					
Treatment					
Sobriety					
Drug Tests					
Non-Compliance					
Service Needs					

30. Which of the following events typically elicit courtroom applause? ***Check all that apply.***

- □ Graduation
- □ Phase advancement
- □ Specific clean time milestone (30 days, 90 days, etc.)
- □ Clean or in compliance since last court date
- □ Employment- or education-related achievement
- □ Other (Explain: _____)
- □ None

VII. **INCENTIVES AND SANCTIONS**

31. How often are sanctions imposed in response to the following infractions? ***Check one box for each row.***

	Always	**Usually**	**Sometimes**	**Rarely**	**Never**
Positive drug test					
Missed drug test					
Tampered drug test					
Lying about drug use					
Treatment absence					
Court absence					
Case management absence					
New arrest					
Poor attitude in treatment					
Poor attitude in courtroom or courthouse					
Other _____					

32. Does the judge ask participants if they will test dirty if given a drug test?

□ Yes

□ No

□ Sometimes

32a. If yes, are defendants who answer honestly that they will test positive treated differently than those who use and lie about it?

□ No, both receive equivalent sanction

□ No, neither receive a sanction

□ Yes, defendants who use and admit to it are treated less severely

□ Other (Explain _____)

33. When the court receives a report of noncompliance, how soon are clients returned to the court calendar?

□ Within one week, regardless of the court appearance schedule
□ Within two weeks, regardless of the court appearance schedule
□ Within one month, regardless of the court appearance schedule
□ At the next scheduled court appearance
□ Other (Explain _____)

34. Does the court have a formal sanction schedule defining which sanctions to impose in response to different infractions or combinations of infractions?

□ Yes
□ No

34a. If yes, is the sanction schedule given to participants?

□ Yes (When? _____)
□ No

34b. If yes, how often is the sanction schedule followed?

□ Never
□ Rarely
□ Sometimes
□ Usually
□ Never

35. On a scale from 1 (Least Important) to 5 (Most Important), how important are the following factors in determining which sanction a defendant will receive?

	Least Important				**Most Important**
The formal sanction schedule	1	2	3	4	5
Severity of the infraction	1	2	3	4	5
Number of prior infractions of same type	1	2	3	4	5
Number of prior infractions of any type	1	2	3	4	5
Knowledge of the participant's specific character or situation	1	2	3	4	5
Other _____	1	2	3	4	5

VIII. CASE MANAGEMENT

36. If regular case management meetings are required, how frequent are they during the first three months of drug court participation? _____

37. On average, how many drug court participants does each case manager have on their caseload? _____

38. What supplemental services does your court provide (either onsite or offsite)? ***Check all that apply.***

- □ Transportation
- □ Housing assistance
- □ Vocational services
- □ Job placement services
- □ GED or adult education classes
- □ Mental health services
- □ Physical health services
- □ Parenting classes
- □ Anger management
- □ Other (Explain _____)

IX. **STAFFING/TEAM APPROACH**

39. If your court has regular staffings, does the judge participate in staffings?

- □ Yes
- □ No
- □ Some (Explain _____)
- □ N/A, our court does not have regular staffings

40. If your court has regular staffings, which cases do you discuss?

- □ All cases
- □ "Problem" cases only
- □ Other (Explain _____)
- □ N/A, our court does not have regular staffings

41. Why did your jurisdiction start a drug court?

- □ Interested local stakeholders wanted a drug court
- □ The NY court system mandated the drug court
- □ Other (Explain _____)

42. Did members of your court's staff attend offsite drug court training in 2005 or 2006? ***Check all that apply.***

- □ Yes, staff attended one or more national or statewide training
- □ No, but staff attended training after 2006
- □ Don't know, but staff attended training after 2006
- □ Don't know, but staff did not attend training after 2006

Appendix F.
2012 NY Drug Court Policy Survey Supplement

Name of Court: _____
Your Name: _____
Your Position: _____
Phone: _____
E-mail: _____

Please answer the following questions to the best of your ability. Please remember that the particular answers you provide for your court will remain confidential.

43. The chart below concerns the substance abuse treatment that participants receive at your drug court. Please complete it to the best of your knowledge.

	Total # of substance abuse treatment providers used by the drug court
Outpatient	
Intensive Outpatient	
Rehab (28-30 days)	
Residential	
Methadone	
Other: _____	

44. The chart on the next page also asks about the substance abuse treatment that participants receive at your drug court. For the purposes of this chart, please use the following definitions:

"**Manualized providers**" use a formal, written curriculum (i.e., a manual), which clearly describes the content of each treatment session and each step in the treatment process.

"**Cognitive-behavioral therapy**" (CBT) seeks to restructure maladaptive thoughts, attitudes, and decision-making that can lead to drug use. CBT does not focus on education (e.g., information about the bio-chemical effects of different drugs or about the effects of drug use on children or family members) and does not focus on aftercare issues.

If you are not sure whether one of your providers uses these methods, please do not include it in your count of providers in the table below.

	# of manualized providers	# of providers using CBT curricula	*Of CBT providers only:*	
			# with separate treatment for women	# with separate young adult treatment
Outpatient				
Intensive Outpatient				
Rehab (28-30 days)				
Residential				
Methadone				
Other: _____				

45. Does your drug court link any of its participants to a CBT treatment that is designed to reduce pro-criminal attitudes, beliefs, and behaviors? *(Check all that apply.)*
    - □ No
    - □ Yes, Thinking for a Change (T4C)
    - □ Yes, Moral Reconation Therapy (MRT)
    - □ Yes, Reasoning and Rehabilitation (R&R)
    - □ Yes, Interactive Journaling
    - □ Yes, Some Other Treatment: What is it called? _____

3. Does your drug court conduct a formal assessment for trauma?
    - □ No
    - □ Yes: What is the name of the assessment tool? _____

4. Does your drug court link any of its participants to an evidence-based trauma treatment?
    - □ No
    - □ Yes: What is the name of the treatment? _____

5. Concerning your answers to the previous questions, could you please note any answers that would have been different had the survey concerned past policies in effect *more than four years ago*?

    _____

    _____

6. Is there anything else you would like to share about treatment at your drug court?

    _____

    _____

Appendix G. Statewide Retention Status up to Four Years after Enrollment

Program Status	One Year	Two Years	Three Years	Four Years
Open	55%	13%	4%	1%
Graduated	11%	44%	50%	52%
Warranted	9%	5%	3%	3%
Failed	24%	36%	40%	42%
Incomplete	1%	2%	2%	2%
Retained	66%	57%	54%	53%

Note: All drug court participants (n = 7,535) are available for all analyses, except 2 cases, whose enrollment date fell just short of four years prior to the analysis (and which were therefore unavailable for the four-year analysis).

Appendix H. Cross-Domain Multivariate Predictors of Re-Arrest at 3 Years

	Any Re-Arrest (Logistic Regression)	Number of Re-Arrests (Poisson Regression)
Number of Offenders	14,695	
Number of Sites	167	
Fixed Effects		
Intercept	-3.051***	-2.523***
Level 1 Risk Score	3.958***	2.989***
1 or More Prior Arrests [1]	0.432***	0.215***
1 or More Prior Arrests*Sample	-0.544***	-0.304**
Random Effects		
Drug Court	1.440***	1.262***
Level 2 Risk Score	1.369***	1.875***
NYC Felony Courts [2]	0.160+	0.170+
Court Always Requires Guilty Plea at Entry	-0.303***	-0.305***
Defendants Always Receive Jail Alternative upon Failure	-0.251**	-0.265***
Certainty of Response Scale [1]	-0.537*	-0.538**
Formal Schedule=Important in Determining Sanctions	-0.007***	-0.004***
Counsel Dedication Scale [1]	-0.219	-0.272*

***p<.001 **p<.01 *p<.05 +p<.10

[1] Separate models included Risk Quintile 4 (and interaction term) rather than prior arrests; results did not notably differ from those presented.

[2] Separate models included percent of drug court sample with a felony arrest rather than NYC felony courts; results did not notably differ from those presented.

[3] The Certainty of Response and Counsel Dedication Scales are described in Chapter 4.