

## RESEARCH NOTE

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# THE BALTIMORE CITY DRUG TREATMENT COURT: ONE-YEAR RESULTS FROM A RANDOMIZED STUDY

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*This evaluation of the Baltimore City Drug Treatment Court randomly assigned 235 eligible clients to either drug treatment court or "treatment as usual." The program provides an alternative to incarceration for drug-involved, nonviolent offenders. Drug court judges imposed harsher sentences but suspended these sentences conditional on compliance with the drug court regimen. Drug court clients were more likely than controls to participate in drug testing and treatment and to attend status hearings. During the 12 months following the date of randomization into the study, 48 percent of drug treatment court clients and 64 percent of controls were arrested for new offenses. Among the more serious cases heard in the circuit court, 32 percent of drug court clients versus 57 percent of controls were rearrested. When differences in the opportunity to reoffend are taken into consideration, controls were arrested at a rate nearly three times that of drug treatment court clients.*

During the 1980s, a dramatic increase in drug-related arrests and prosecutions clogged the criminal justice system. Court dockets became inundated with drug cases, and prisons were filled to overcrowding with drug offenders (The National Center on Addiction and Substance Abuse at Columbia University [CASA] 1998; U.S. General Accounting Office [GAO] 1997). Today,

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drug-involved offenders continue to tax the criminal justice system. According to the 1999 Arrestee Drug Abuse Monitoring Program (formerly the Drug Use Forecasting Program), at least one half of all adult men arrested in the participating jurisdictions tested positive for one or more drugs (National Institute of Justice 2000). Similarly, CASA (1998) reported that of the 1.7 million adults behind bars in 1996, 80 percent had been "seriously involved" in alcohol or other drug abuse.

These offenders place a great financial burden on the criminal justice system. In 1996, the nation spent approximately \$30 billion incarcerating drug-involved offenders (The National Center on Addiction and Substance Abuse at Columbia University 1998). Compounding this cost is the estimated 45 percent of offenders who are expected to recidivate (OJP Drug Court Clearinghouse and Technical Assistance Program 1998). Given this cycle of drugs and crime and the current levels of drug use, CASA (1998) projected that the cost of incarcerating drug-involved offenders would exceed \$100 million dollars per day by 2000.

#### *THE DRUG COURT CONCEPT*

Realizing that incarceration per se does not break the cycle of drugs and crime and that drug treatment has the potential to reduce drug usage and associated criminal activity, many jurisdictions have developed drug treatment courts (drug courts, for short) to process offenders with drug and alcohol addictions (OJP Drug Court Clearinghouse and Technical Assistance Program 1998). Drug courts are specialized courts that provide judicially monitored treatment, drug testing, and other services to drug-involved offenders. Drug courts typically process offenders through either a diversion program or postadjudication treatment. Diversionary drug courts typically enroll offenders into treatment shortly after arrest and dismiss charges on their graduation from the program. Postadjudication drug courts intervene after defendants have been tried and convicted, offering deferred or suspended sentences to those who complete treatment programs. Some drug courts employ a combination of these approaches.

Drug courts can differ greatly with respect to their target populations, treatment methods, and monitoring processes. Despite this variability, most

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exclusively target nonviolent, drug-abusing offenders. Treatment programs are typically one year in length and are provided largely on an outpatient basis. Inpatient services are reserved for those with special treatment needs. Treatment regimens are designed with three primary goals. First, an offender's physical dependence on drugs is to be eliminated through a period of detoxification. Second, the psychological "craving for drugs" is to be treated through medication, individual and group counseling, or drug education programs. Third, drug courts seek to increase offenders' educational levels and employment status. General education, vocational training, and job placement services are generally offered during this final phase of treatment (U.S. General Accounting Office 1997).

Throughout all phases of the program, a drug court judge monitors a defendant's progress through regularly scheduled status hearings. At these hearings, the judge reviews reports from the parole and probation agent (hereafter referred to simply as the probation agent) regarding the defendant's compliance with the program and the results of scheduled drug tests. On the basis of these reports, the judge prescribes graduated sanctions as needed. For example, a defendant's "dirty" urine sample or failure to attend treatment sessions may result in jail time, more frequent drug tests, treatment meetings, and/or status hearings. Whatever the penalty, drug courts prescribe sanctions designed to augment or enforce treatment regimens, not simply to punish offenders (U.S. General Accounting Office 1997).

#### *THE APPEAL AND GROWTH OF DRUG COURTS*

The first drug court was established in Dade County, Florida, in 1989. Since that time, the number of drug courts has grown, in part because of their intuitive practicality and multifaceted appeal. Because traditional incarceration did not appear to break the cycle of drugs and crime, mandatory treatment emerged as a plausible and commonsense alternative. Drug courts appeal to the public and to policymakers on a variety of levels: (1) They offer more intensive community supervision than standard probation; (2) they treat drug cases more seriously than before, adding greater credibility to the criminal justice system; (3) they hold offenders to a higher degree of accountability for noncompliance with conditions of probation; (4) they may increase coordination between community providers, thereby reducing the duplication of services and taxpayer expense; and (5) they are intended to free other courts from processing drug cases, thereby allowing them to handle more serious felony charges (OJP Drug Court Clearinghouse and Technical Assistance Program 1998).

Because of these apparent advantages, drug courts have been embraced as an effective and efficient solution to the problems that drug-involved offenders pose for the criminal justice system. As of June 2001, drug court activity was under way in all 50 states as well as in the District of Columbia, Puerto Rico, Guam, a number of Native American tribal courts, and two federal districts. Since the first drug court appeared in 1989, approximately 697 programs have been established, with an additional 427 under development (OJP Drug Court Clearinghouse and Technical Assistance Project 2001). In addition to their growth in number, drug courts have also increased in scope. For example, drug courts have been developed in recent years to process drug-involved juveniles as well as drug-involved parents (Cooper and Bartlett 1998).

#### *THE SUCCESS OF DRUG COURTS*

Recent reviews of drug court programs have reported several positive outcomes. For example, despite the attrition typical of drug treatment, drug courts have maintained a high rate of participation in treatment. Belenko (1998) noted that one year after their enrollment into programs, approximately 60 percent of offenders continued to receive treatment. The GAO (1997) reported that approximately one third of all offenders enrolled in drug courts since 1989 have "graduated," with an additional 40 percent currently receiving treatment.<sup>1</sup> Among drug courts that are currently active, completion rates vary from 8 percent to 95 percent, with approximately one half of all participants graduating.

Nevertheless, effects on the outcomes of greatest interest, recidivism and drug use, are the least well documented. Many evaluations of drug courts have been conducted, but few allow confident conclusions to be drawn about their effects. The GAO (1997) found that two thirds of all drug court programs did not collect follow-up measures on drug relapse, and about half did not collect recidivism data. Among the handful of evaluations that have considered relapse and recidivism, nonequivalent comparison groups and short follow-up periods weaken the studies, and methodological differences across studies (e.g., differences in measurement, follow-up periods, etc.) make comparisons and generalizations to other programs difficult.

Despite these problems, research has demonstrated that drug use, as determined by urine tests, appears to be reduced while defendants are enrolled in drug court programs. Comparisons with groups not receiving services are also generally favorable: During programs, recidivism rates for participants are generally found to be lower than for comparison groups (Belenko 2001). Postprogram drug use and crime outcomes are less well understood. Most

studies have found that recidivism rates for drug treatment clients are often lower than for nonparticipants, but the differences are usually small (OJP Drug Court Clearinghouse and Technical Assistance Program 1998). In a review of recent evaluations of adult drug courts, Belenko (2001) reported that of six studies that examined one-year postprogram recidivism, four found a reduction for drug treatment clients relative to controls. None of these studies reported postprogram drug use, and they all employed nonrandomized designs, which did not rule out selection artifacts. Belenko (2001) concluded that there is a continuing need for more rigorous and detailed studies of drug courts. A recent National Research Council report on drug policy (Committee on Data and Research for Policy on Illegal Drugs 2001) similarly concluded that the effects of drug treatment courts are largely unknown and raised questions about the complex trade-offs involved in any intervention that imposes legal sanctions for drug use.

Despite the high likelihood that drug treatment courts do help solve the problem of overcrowding due to high rates of incarceration of drug abusers, there are many gaps in our understanding of the extent of their effectiveness. Belenko (1998) concluded that evaluations would be enhanced by (1) longer follow-up periods, (2) follow-up data on outcomes other than rearrest, (3) studies of mechanisms affecting outcomes, (4) studies of more "mature" drug treatment courts, (5) cost-benefit analyses, and (6) baseline measures that describe how drug offenders have historically been processed. The study of the Baltimore City Drug Treatment Court (BDTC) addresses the first four of these needs.

### *THE BDTC*

In 1994, Baltimore, Maryland, established a drug court program for non-violent adult offenders. The BDTC is a program for district and circuit court cases supervised by the Baltimore City Division of Parole and Probation.<sup>2</sup> A technical report (Gottfredson and Exum 2000) describes the eligibility criteria, screening and intake process, and major components of the program. It concludes that the BDTC is similar to the "typical" drug court in terms of its components. According to recent self-reports of operating drug courts (OJP Drug Court Clearinghouse and Technical Assistance Project 2001), 60 percent of adult drug courts involve participants both after conviction and at some other point (e.g., before trial, probation violators), as did the BDTC during the period covered by this study. The BDTC initially involved a preconviction ("diversion") track as well as a postconviction track but dropped the diversion track in December 1999. The results of an earlier survey of drug courts (Cooper 1997) showed that the typical drug court screens

clients for substance use; assigns clients to treatment provided by community-based organizations; and requires at least three contacts per week with treatment providers, two urine tests per week, and weekly or biweekly contact with drug court judges in the initial phases. The typical drug court uses increased frequency of court status hearings, urinalysis, and treatment as sanctions for relapse, and 60 percent use short periods of incarceration. Finally, the typical drug court imposes incarceration sentences on defendants who are unsuccessfully terminated from the program. The BDTC is like the typical drug court on these dimensions. It is atypical in the type of population it serves (primarily African American, male heroin addicts) and the active involvement of the Division of Parole and Probation in the operation of the program. For example, the initial screening for substance use problems is conducted by this division in Baltimore, but in only 16 percent of drug courts nationwide. Also, intensive probation supervision is an element of the BDTC but is not generally found elsewhere. Other unusual aspects of the BDTC include its large size (as of spring 2001, 1,218 clients had either graduated or were currently enrolled) and the extensive screening conducted prior to program participation (e.g., the Psychopathy Checklist is used to screen out offenders who are likely to be unsuitable for the program).

*Initial evaluation.* In 1995, researchers at the University of Maryland's Department of Criminology and Criminal Justice, in conjunction with the Division of Parole and Probation, began an evaluation of the BDTC program (Gottfredson, Coblenz, and Harmon 1997). In all, 145 offenders assigned to the BDTC from district court, circuit court, and violation of probation hearings were compared to a control group of more than 500 offenders receiving traditional parole and probation services. Although control group members were selected to match the BDTC treatment group as closely as possible, preexisting differences across groups were found. In general, the pretreatment offenses committed by the BDTC group were more serious than those of the comparison group.

The findings of this short-term (six-month), quasi-experimental evaluation were promising. It found that the BDTC program was successfully targeting nonviolent, drug-involved offenders and that after controlling for the preexisting differences across the treatment and control groups, participation in the BDTC program was associated with a 50 percent decrease in the odds of rearrest for a new offense. However, the researchers concluded that a more rigorous evaluation was needed to yield conclusive results. The study's authors recommended repeating the evaluation with a longer follow-up period, a larger number of study participants, and random assignment of BDTC-eligible study participants to treatment and control conditions. The results of this second study are reported here.

### *METHODS*

The second study of the BDTC began in February 1997, when the University of Maryland research personnel began to randomly assign clients who were eligible for drug treatment court to be placed in the drug treatment court or in "treatment as usual." Clients came from three distinct sources: circuit court cases supervised by the Division of Parole and Probation, district court cases supervised by the Division of Parole and Probation, and less serious district court cases to be processed by the Alternative Sentencing Unit. The randomization of study participants to treatment and control conditions was added as a final step in the process of identifying drug treatment court clients. Once potential study participants were identified according to normal procedures as eligible, they were given "conditional" drug court offers. That is, they were told that they would have a 50 percent (circuit court) or 67 percent (district court)<sup>3</sup> chance of being assigned to the drug treatment court if they accepted the conditional offers. Those who accepted these conditions were randomly assigned to treatment and control conditions. The randomization results were given to the judge as a recommendation and were followed in most cases (because the judges had agreed to participate in the study). Randomization continued through August 1998, by which time 235 clients had been assigned randomly to one of the two conditions.

Data were collected on prior offense history, the offense that resulted in inclusion in the study, recidivism through 12 months following entry into the program, and several intake measures. These included demographic characteristics, educational and employment status, and drug use history. Data are also being collected on the nature and duration of the drug treatment experiences, interactions with the criminal justice system (e.g., meetings with parole officers, hearings, warrants, technical violations), and recidivism (arrests, dispositions, sentences, and time incarcerated) through 36 months following entry into the program. All of the data for this study are from the official records of the Maryland Department of Public Safety and Correctional Services and Baltimore Substance Abuse Services, an organization that coordinates drug treatment services in Baltimore.

This report summarizes the results of an analysis of intake data, prior criminal history records, and 12-month treatment and recidivism data for the study participants. In all analyses, participants were treated as assigned. That is, participants randomly assigned to the drug court were analyzed as members of the treatment group regardless of their actual treatment, and participants randomly assigned to the control group were analyzed as members of the control group regardless of their actual treatment. This conservative strategy was adopted to preserve the comparability of the study groups. When treatment and control participants were compared, *t* tests or chi-square tests

were used. Because the randomization procedure blocked on the originating court and used different selection ratios for cases from the district and circuit courts, analyses were conducted to control for the originating court. One set of analyses weighted the data according to the originating court. All participants originating in the circuit court were given a weight of 1 because these participants were randomly assigned to the drug court and control conditions using a one-to-one ratio. District court cases were weighted so that control and treatment participants received weights of 1.5 and 0.75, respectively. These weight values were used (as opposed to 2 and 1) because they produced a weighted sample size equal to the unweighted sample size ( $N = 235$ ) while creating roughly equal numbers in the drug court ( $n = 118$ ) and control ( $n = 117$ ) samples. A second set of analyses used an ANOVA to explicitly control for the originating court and test for interaction effects between the experimental condition (drug court or control) and the originating court (district or circuit). The results of these two sets of analyses were similar to the unweighted and uncontrolled analyses presented in the text. Instances in which the different analyses produced different results are noted.

#### *Study Participants*

The participants in this study included the 235 arrestees who were assigned randomly to receive either BDTC services or treatment as usual in the criminal justice system. The numbers of participants randomly assigned, by condition and source, were as follows: Of the 54 district court cases supervised by the Division of Parole and Probation, 32 participants were assigned to the treatment condition and 22 to the control condition. Of the 72 district court cases supervised by the Alternative Sentencing Unit, 52 participants were assigned to the treatment condition and 20 to the control condition. Of the 109 circuit court cases supervised by the Division Parole and Probation, 55 participants were assigned to the treatment condition and 54 to the control condition. Across all sources, 139 participants were assigned to the treatment condition and 96 to the control condition. Table 1 shows the demographic characteristics of the study sample. These study participants were all adults with an average age of 35. Seventy-four percent were male, and 89 percent were African American.

Table 2 shows information about the criminal histories of the study participants. The drug court clients had considerable criminal histories, with an average of 12 prior arrests and 5 prior convictions. For 71 percent, the arrest that made the participant eligible for inclusion in the study (henceforth called the initial arrest) involved a drug charge. Only 1 percent were charged with violent crimes in their initial arrests.



TABLE 1: Demographic Characteristics by Experimental Status

Demographic Characteristic	Experimental Status	
	Treatment (n = 139)	Control (n = 96)
Percentage African American	89.2	89.6
Percentage male	74.1	74.0
Age as of February 1, 1997		
<i>M</i>	34.8	34.7
<i>SD</i>	7.5	7.9

NOTE: No differences between treatment and control groups were statistically significant at  $p < .05$ .

No significant differences and no meaningful differences between the experimental and control groups were found on the following variables: percentage African American; percentage male; age at initial arrest; number of prior arrests; number of prior convictions; or percentage whose initial arrests included violent, property, drug, sex, violation of probation, or "other" charges. Therefore, the groups appear similar.

Information from the initial assessment prior to drug treatment court participation for the treatment cases<sup>4</sup> showed that the study participants had several problems that usually accompany chronic substance abuse: Only 23 percent were employed, 47 percent had at least a high school education, and only 16 percent were married. Data from the Addiction Severity Index based on interviews conducted by assessment staff members prior to randomization and available for only 49 participants, showed that 69 percent had severe drug problems and 18 percent had severe alcohol problems. Most (87 percent) named heroin as their primary or secondary drug of choice, although 58 percent also used cocaine and 29 percent used alcohol. Seventy-two percent reported daily use of crack, cocaine, or heroin, and the majority (55 percent) had already experienced some form of drug treatment. Clearly, the population being served in the BDTC is at high risk for continued substance use and criminal behavior.

*Generalizability of the study participants to the BDTC population.* As noted above, the random assignment of defendants occurred between February 1997 and August 1998. It did not, however, occur continuously during that period. Randomization was halted periodically, mostly as a result of staff turnover in the central booking office or in one of the many offices that participated in the process (e.g., the Office of the Public Defender, the State's Attorney's Office, the Division of Parole and Probation). During these

**TABLE 2: Offense History and Current Offense Characteristics by Experimental Status**

<i>Offense History and Current Offense Characteristic</i>	<i>Experimental Status</i>	
	<i>Treatment (n = 139)</i>	<i>Control (n = 96)</i>
Prior arrests		
<i>M</i>	12.0 (139)	11.3 (95)
<i>SD</i>	8.8	7.1
Prior convictions		
<i>M</i>	5.3 (137)	4.6 (95)
<i>SD</i>	4.3	3.4
Current offense: percentage of participants with at least one		
Violence or sex charge	1.4 (138)	4.2 (96)
Property charge	21.0 (138)	18.8 (96)
Drug charge	71.0 (138)	71.9 (96)
Prostitution or solicitation charge	5.8 (138)	4.2 (96)
Violation of probation charge	2.2 (138)	4.2 (96)
Weapons charge	.7 (138)	3.1 (96)
Public order charge	10.9 (138)	4.2 (96)

NOTE: No differences between treatment and control groups were statistically significant at  $p < .05$ . Numbers in parentheses are the numbers of cases for which valid data were available.

periods, study participants were assigned to the drug treatment court according to the procedures that existed prior to the randomization and were not included in the study. To check on the possibility that these lapses in randomization might have affected the generalizability of the results of the study sample to the population of drug treatment court clients, we obtained demographic information for all participants supervised by the Division of Parole and Probation who were assigned to the drug treatment court between the first and last randomization date but who were not randomly assigned and included in our study. These 574 participants did not differ in terms of race, gender, or age from the sample of 87 participants supervised by the Division of Parole and Probation who were included in our study.

*Integrity of treatment.* The randomization was upheld by the judges in most cases. Of the 139 participants randomly assigned to the treatment, we found records to indicate that 93 percent were actually assigned to the drug treatment court. Only 4 percent of the participants randomly assigned to the control condition were dealt with in the drug treatment court. Graduation records as of February 2001 indicated that 31 percent of the treatment participants and 5 percent of the control participants had graduated from the program.

Data on the level of implementation of the various drug court components suggest that the BDTC is implemented unevenly across participants. During the first year following entry into the study, 77.9 percent of treatment participants and only 14.0 percent of control participants were tested for drugs ( $p < .01$ ). Although a similar percentage of treatment and control participants received probation supervision during the study period (68.9 percent vs. 63.5 percent, *ns*), the average number of days under probation supervision for those supervised at all was 248.7 for treatment participants and 218.7 for control participants ( $p < .10$ ), a difference of about one month. Drug treatment court clients were far more likely to receive judicial monitoring (78.4 percent vs. 7.3 percent,  $p < .01$ ), but the number of status hearings attended with judges was only 7.6 for those treatment participants attending at least one hearing. Table 3 shows the percentage of participants receiving drug treatment. In the Baltimore program, a jail-based acupuncture program is used as a sanction for relapsing participants. This program, although considered a treatment, is not a certified drug treatment program. Therefore, it is separated in the table from the other certified drug treatments. The table shows that 66.2 percent of the group randomly assigned to treatment received some form of treatment, as compared with 15.6 percent of the control group ( $p < .01$ ). When only certified drug treatment is considered, the figures are 48.2 percent and 13.5 percent ( $p < .01$ ). After jail-based acupuncture, the most common types of treatment were outpatient (23.7 percent) and intensive outpatient (19.4 percent). Differences between these types of treatment were statistically significant ( $p < .01$ ). Among individuals who received treatment, the number of days in treatment and the number of treatment episodes were higher for drug treatment court cases, but not significantly so. The program therefore sharply increased the drug testing, judicial monitoring, and drug treatment of drug court clients relative to controls, but the amount of these services received by the typical client was not as high as intended.

#### *CRIMINAL JUSTICE SYSTEM RESPONSE TO THE INITIAL ARREST*

An important motivating factor built into postconviction drug court programs is the threat of the reimposition of an initial incarceration sentence that was suspended in exchange for participation in the program. Evidence that this aspect of the court is being implemented as planned can be found in Table 4, which shows data related to the handling of the initial arrest (i.e., the arrest that led to participation in the study). The table shows that drug treatment court participants were more often found guilty of at least one of the charges included in the initial arrest, with 92 percent of BDTC and 80 percent of

TABLE 3: Drug Treatment Experiences 12 Months after Entry into Study

Treatment Variable	Experimental Status	
	Treatment	Control
All participants		
Percentage receiving		
Any treatment	66.2*** (139)	15.6 (96)
Certified drug treatment	48.2*** (139)	13.5 (96)
Methadone maintenance	5.0 (139)	7.3 (96)
Outpatient	23.7*** (139)	3.1 (96)
Residential	7.2 (139)	4.2 (96)
Correctional	1.4 (139)	0.0 (96)
Detoxification	2.2 (139)	0.0 (96)
Intensive outpatient	19.4*** (139)	2.1 (96)
Other treatment	1.4 (139)	0.0 (96)
Jail-based acupuncture	39.6*** (139)	4.2 (96)
Participants receiving treatment		
Duration of treatment		
<i>M</i>	125.5 (92)	98.9 (15)
<i>SD</i>	101.7 (92)	97.7 (15)
Number of treatment episodes	1.7 (92)	1.3 (15)

NOTE: Numbers in parentheses are the numbers of cases for which valid data were available.

\*\*\*Difference between treatment and control groups was significant at  $p < .01$ .

control group study participants being found guilty.<sup>5</sup> This tendency for drug court participants to receive harsher verdicts is as expected. As part of their case preparation, drug court clients agree to plead guilty and accept harsher sentences with the understanding that much of this sentence will be suspended.

Table 4 also shows that study participants found guilty were often sentenced to some jail time. Most often, the study participants received split sentences (e.g., some combination of jail and probation). Among sentenced study participants, those assigned to the BDTC were more likely than controls to receive either no incarceration or a combination of probation and incarceration, and control study participants were more likely than those in the BDTC to receive stand-alone incarceration sentences. One surprising finding was that nearly 11 percent of the offenders randomly assigned to drug treatment court received incarceration-only sentences, given that the aims of the program are to keep offenders out of prison and provide intensive probation supervision. Closer examination revealed that more than half of these sentences were for treatment participants who had not actually been assigned to the drug court.

**TABLE 4: Participant Dispositions and Sentences Resulting from Initial Arrest by Source and Experimental Status**

<i>Disposition or Sentence</i>	<i>Source</i>							
	<i>Parole and Probation</i>							
	<i>District Court</i>		<i>Circuit Court</i>		<i>Alternative Sentencing Unit</i>		<i>Total</i>	
	<i>Treatment</i>	<i>Control</i>	<i>Treatment</i>	<i>Control</i>	<i>Treatment</i>	<i>Control</i>	<i>Treatment</i>	<i>Control</i>
Disposition received, all participants <sup>a</sup>	<i>n</i> = 29	<i>n</i> = 21	<i>n</i> = 53	<i>n</i> = 54	<i>n</i> = 41	<i>n</i> = 20	<i>n</i> = 123	<i>n</i> = 95
Percentage of participants found guilty <sup>b</sup>	86.2**	57.1	100.0**	92.6	85.4	70.0	91.9**	80.0
Sentence received, guilty participants only <sup>b</sup>	<i>n</i> = 24	<i>n</i> = 12	<i>n</i> = 53	<i>n</i> = 50	<i>n</i> = 35	<i>n</i> = 14	<i>n</i> = 112	<i>n</i> = 76
% no incarceration and no probation	4.2	0.0	0.0	0.0	5.7	7.1	2.7	1.3
% no incarceration but some probation	12.5	0.0	0.0	2.0	20.0	0.0	8.9	1.3
% incarceration without probation	16.7	58.3	5.7	14.0	14.3	50.0	10.7	27.6
% incarceration with probation	66.7	41.7	94.3	84.0	60.0	42.9	77.7	69.7
Chi-square	7.4*		3.2		8.6**		12.6***	

a. Numbers of cases for which valid data were available.

b. Also includes participants with dispositions of probation before judgment.

\*Difference between treatment and control groups was significant at  $p < .10$ .

\*\*Difference between treatment and control groups was significant at  $p < .05$ .

\*\*\*Difference between treatment and control groups was significant at  $p < .01$ .

Table 5 shows the average number of days in the incarceration and probation sentences for all study participants.<sup>6</sup> The figures indicate that these sentences were much harsher in the circuit court than in the district court and that in both courts, most of the incarceration days were usually suspended. Because the longer sentences levied in the circuit court dominate the totals in these data, it is important to look at each source separately. In each source, BDTC study participants received harsher sentences than control study participants, both in terms of incarceration and probation sentences. But consistent with expectations, a greater proportion of the incarceration days were suspended for BDTC study participants. This provides evidence that the judges were acting in accord with the drug court model insofar as the handling of the initial offenses was concerned. Also, for BDTC participants more so than for controls, the portion of the incarceration sentence that was not suspended was for days that had already been served prior to the disposition date. The table shows that the actual incarceration sentences (e.g., assigned days minus suspended days) and the remaining days to be served after preadjudication days had been credited were also considerably shorter for BDTC participants than for controls. This savings in potential days behind bars was especially evident among circuit court cases, for which the typical control participant received 421 days and the typical BDTC participant received 133 days, a difference of more than nine months. These results suggest that the BDTC is intended as an alternative to incarceration. Whether or not this intention results in fewer days actually incarcerated will be examined in a subsequent report.

#### *ONE-YEAR RECIDIVISM COMPARISONS*

Table 6 shows the comparisons between treatment and control participants on recidivism outcomes, including the 12-month period beginning with the date of randomization into the study. BDTC study participants were significantly ( $p < .05$ ) less likely than control study participants to be rearrested: Forty-eight percent of BDTC participants and 64 percent of control study participants were rearrested. The BDTC resulted in an absolute reduction of 16 percent in the rate of rearrest during the year following assignment into the program. The numbers of new arrests (1.3 vs. 0.9) and charges (2.4 vs. 1.6) were also lower for treatment members than for control group members, and these differences were also statistically significant ( $p < .05$ ). The most common type of offense for which study participants were rearrested was a drug offense, followed by public order and property offenses. Relatively few study participants were rearrested for violent offenses, but nearly four times as

**TABLE 5: Sentence Lengths Resulting from Initial Arrest by Source and Experimental Status, All Participants**

<i>Sentence Length</i>	<i>Source</i>							
	<i>Parole and Probation</i>							
	<i>District Court</i>		<i>Circuit Court</i>		<i>Alternative Sentencing Unit</i>		<i>Total</i>	
	<i>Treatment (n = 28)</i>	<i>Control (n = 21)</i>	<i>Treatment (n = 52)</i>	<i>Control (n = 54)</i>	<i>Treatment (n = 41)</i>	<i>Control (n = 20)</i>	<i>Treatment (n = 121)</i>	<i>Control (n = 95)</i>
Assigned days	436*	221	2,564*	2,163	359	233	1,324	1,327
Suspended days	397**	178	2,431***	1,742	340	184	1,252	1,068
Assigned minus suspended days	39	43	133***	421	19	49	72***	259
Credited days	8	14	79***	140	6	7	38***	84
Remaining days to serve	31	29	54**	281	13	42	35**	175
Probation days <sup>a</sup>	483***	190	1,102*	927	472***	210	745*	613

NOTE: Numbers in parentheses are the numbers of cases for which valid data were available.

a. Includes probation days resulting from probation before judgment dispositions.

\*Difference between treatment and control groups was significant at  $p < .10$ .

\*\*Difference between treatment and control groups was significant at  $p < .05$ .

\*\*\*Difference between treatment and control groups was significant at  $p < .01$ .

TABLE 6: One-Year Recidivism Outcomes by Experimental Status

Recidivism Measure	Experimental Status	
	Treatment (n = 139)	Control (n = 96)
Percentage rearrested	48.2 <sup>***a</sup> (39.8 to 56.6)	63.5 (53.7 to 73.4)
Percentage reconvicted	30.6 (22.7 to 38.5)	35.4 (25.7 to 45.2)
Average number of new arrests	.9 <sup>***a</sup> (.7 to 1.1)	1.3 (1.0 to 1.5)
Average number of new charges	1.6 <sup>**</sup> (1.2 to 2.1)	2.4 (1.7 to 3.2)
Average number of new convictions	.5 (.3 to .7)	.5 (.4 to .7)
Percentage of participants with at least one new		
Violent or sex charge	2.9 <sup>***</sup> (.1 to 5.7)	11.5 (5.0 to 18.0)
Property charge	19.6 (12.9 to 26.3)	24.0 (15.3 to 32.7)
Drug charge	28.3 (20.7 to 35.9)	37.5 (27.6 to 47.4)
Prostitution or solicitation charge	3.6 (.5 to 6.8)	3.1 (-.4 to 6.7)
Public order charge	21.6 (14.7 to 28.5)	27.1 (18.0 to 36.1)
Weapons charge	0.0 <sup>a</sup> (—)	2.1 (-.8 to 5.0)
Other charge	0.0 (—)	1.0 (-1.0 to 3.1)

NOTE: Values in parentheses are 95 percent confidence intervals. *N* values range from 133 to 139 for treatment participants and 95 to 96 for control participants.

a. Difference between treatment and control groups was slightly larger and significant at the  $p < .01$  level when data were weighted according to originating court. In these analyses, the percentages rearrested are 46.6 and 65.0, and the numbers of arrests are 0.8 and 1.4, respectively.

\*\*Difference between treatment and control groups was significant at  $p < .05$ .

\*\*\*Difference between treatment and control groups was significant at  $p < .01$ .

many control study participants as treatment study participants were arrested for violent offenses (12 percent vs. 3 percent,  $p < .01$ ).

A breakdown of these recidivism outcomes by court shows that the overall difference in recidivism rates between the treatment and control groups was due primarily to cases heard in the circuit court: the felony cases. Among these participants, 57 percent of the controls and 32 percent of the treatment participants were rearrested in the first year. This difference was statistically significant ( $p < .01$ ).

The recidivism comparisons are conservative because they do not control for the opportunity to reoffend. Significantly more controls than treatment study participants were assigned to additional days behind bars following the dispositions for the offenses that got them into the study, and control study participants were given longer incarceration sentences. The disposition data suggest, then, that a higher percentage of drug treatment court participants than controls were “on the street” and hence had greater opportunities to reoffend. Data on actual days served are not yet available, but when the



number of days sentenced to incarceration is taken into consideration, the number of arrests per day free in the community during the 12 months following randomization (e.g., 365 – Days Sentenced to Incarceration – Suspended Days) is nearly three times greater for controls than for treatment participants.<sup>7</sup> This difference was statistically significant ( $p < .05$ ).

### *LIMITATIONS*

Many of the limitations of the study are related to the preliminary nature of the findings. This report covers the first year of a three-year study. Data on additional outcomes and intervening mechanisms that will eventually be available to provide a more detailed analysis of the BDTC are not yet available. Currently under way is an extension of the original study that tracks and interviews the 235 study participants to obtain client perceptions of how the drug treatment court experience affected their lives. This extension will (1) augment the existing official records on criminal activity, substance abuse treatment experiences, and criminal justice involvement with self-reports of the same; (2) assess the effectiveness of the BDTC in improving the following outcomes: criminal activity and substance use (according to client self-reports), welfare status, employment status, educational level, mental health, physical health, and family and social relationships; and (3) measure the relative importance of the different mechanisms through which drug treatment courts might work. These include increased supervision and monitoring (e.g., through intensive supervision, frequent hearings, and drug testing), increased personal accountability for behavior and empowerment (e.g., through graduated sanctions), drug treatment and other services (employment, legal, medical, psychological), and perceptions of procedural justice. Subsequent reports will also extend the follow-up period to cover the three-year period following sentencing.

A limitation not related to the preliminary nature of the study is that the results reported here pertain to BDTC clients assigned to the program between February 1997 and August 1998. During this time, program administrators were concerned about keeping the drug treatment court slots filled to capacity. This is in stark contrast to the current situation, which according to newspaper accounts (Francke and Dresser 2000) is one of overcrowding, waiting lists, and closing down the intake of newly referred cases because the program cannot effectively handle all of the cases currently assigned to it. The positive results obtained during the period examined in this study may not be achieved in a program that has higher caseloads and fewer treatment slots available.

*CONCLUSION AND DISCUSSION*

The BDTC set out to provide drug treatment to drug-involved, nonviolent offenders; increase the swiftness and certainty of punishment for continued offending behavior; and improve perceptions of procedural justice. The program was intended also to provide these services in the community as opposed to a secure setting, therefore saving criminal justice dollars. The results of the first year following random assignment to the program show that the program succeeded at targeting high-rate, drug-involved offenders at high risk for continued offending. The study also shows that the mean nonsuspended incarceration sentence for control study participants is 187 days longer than for drug court participants. This overall difference in days sentenced behind bars is statistically significant and practically meaningful. The overall difference masks an even larger difference among the more serious cases processed in the circuit court. In this court, the difference in sentenced days that are not suspended is 288, more than nine months. Clearly, the program is used as an alternative to incarceration, particularly for the most serious cases. Data on actual time served are currently being analyzed and will be included in a subsequent report.

Other aspects of program implementation suggest that the program was implemented unevenly across the intended population. Sixty-six percent of the group randomly assigned to treatment received some form of treatment, 48 percent received certified drug treatment, 84 percent judicial monitoring, 78 percent drug testing, and 69 percent intensive supervision. The level of services received was not as high as anticipated, however. Among clients receiving any judicial monitoring in the form of status hearings, the typical client attended only eight hearings. Among those who received drug treatment, the typical participant received 125 days.

BDTC study participants received harsher sentences than control study participants, but a greater proportion of the incarceration days were suspended for BDTC study participants. This suggests that the judges are manipulating the severity of the punishment for potential subsequent offenses, because this suspended sentence can be reimposed when a client recidivates. Whether or not swiftness and certainty are also manipulated remains to be examined. Although less than ideal implementation of the critical elements undoubtedly dilutes the effects of the drug court intervention, it also creates heterogeneity that might be useful for understanding the relative influence of the different intervening mechanisms hypothesized to alter drug use and crime. Examination of these mechanisms—treatment, deterrence, and perceptions of procedural justice—are the subject of a subsequent report on the BDTC.

Research on drug treatment courts is still in its early stages. Beyond the obvious value of the information provided by this study to the Maryland criminal justice community, this study will add one additional data point for future studies that seek to learn about the critical components of drug treatment courts. The Baltimore experience is in some ways similar to and in other ways dissimilar from the typical drug treatment court in the nation. It is not possible in the current study to determine which of the many contextual factors surrounding the Baltimore experience contribute to its success. The task of future reviews and meta-analyses is to use this and other local studies to generalize knowledge about drug treatment courts.

### NOTES

1. The remainder of study participants were either terminated from programs or withdrew voluntarily, or their status was "unknown."

2. District court cases supervised by the city's Alternative Sentencing Unit (which presides over less serious cases) were also eligible for the program during the first several years of program operation, but this unit was disbanded in December 1999.

3. Study participants were randomly assigned at ratios of one treatment to one control for circuit court cases and two treatment to one control for district court cases. This was done at the request of the district court judge, who was concerned that all drug treatment court slots might not be filled if we kept a one-to-one ratio.

4. Intake data were not available for the study participants who entered the BDTC through the Alternative Sentencing Unit, and records could not be located for most of the control cases. Only the 87 treatment cases supervised by the Division of Parole and Probation (31 from district court and 56 from circuit court) are included in this discussion.

5. Note that the disposition of the initial arrest could not be located for 25 percent of the drug treatment court participants supervised by the Alternative Sentencing Unit. This is consistent with the diversionary nature of the program: The Alternative Sentencing Unit participants were diverted from normal processing and had their charges dropped on successful completion of the program.

6. These figures were also examined for only guilty participants. The pattern of results was similar.

7. This analysis excludes 15 controls and 3 treatment participants who were incarcerated for the entire year.

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