Criminal Justice Review
Volume 33 Number 3
September 2008 291-307

10.1177/0734016808322267
http://cjr.sagepub.com
hosted at
http://online.sagepub.com

Should Violent Offenders Be Excluded From Drug Court Participation?

An Examination of the Recidivism of Violent and Nonviolent Drug Court Participants

Christine A. Saum
Rowan University, Glassboro, NJ
Matthew L. Hiller
Temple University, Philadelphia, PA

Policy often stipulates drug court funding cannot be used for offenders with violent criminal histories, although it has been argued that increasing funding to community programs for these individuals represents an important means for controlling crime. Because little research has examined whether a violent offense history is related to recidivism following drug court participation, predrug court criminal history and postdrug court arrest and charge data have been collected for 452 offenders in a postplea drug court program. Bivariate analyses show violent offenders have higher rates of recidivism following drug court discharge. However, multivariate analyses controlling for age, ethnicity, drug of choice, time at risk, and discharge status show the extent of criminal history, not violent history, is significantly related to recidivism. Results suggest that violent offenders should not be systematically excluded from the opportunity to participate in the unique combination of treatment and supervision offered in drug court programs.

Keywords: *violent offenders; recidivism; drug court; policy*

As the number of substance-abusing offenders served by drug courts continues to escalate, an increasingly diverse population of clients is entering these judicially supervised treatment programs. Indeed, it is becoming more typical for drug court participants to have chronic substance abuse problems that require intensive treatment and to have extensive criminal records that frequently include a history of serious offending (Belenko, 1999, 2001; Gebelein, 2000; National Institute of Justice, 2006). This is not surprising given that it is routine for serious and violent offenders to be sentenced directly to both traditional and alternative forms of community supervision rather than incarcerated in jail or prison (Bureau of Justice Statistics, 2007; Petersilia, 1995). Trend data indicate that most

Authors' Note: This research was supported by grant R01 DA12424, Drug Court Offenders in Outpatient Treatment, by the National Institute on Drug Abuse. The contents of this article are solely the responsibility of the authors. Please address correspondence to Christine A. Saum, PhD, Department of Law and Justice Studies, Rowan University, 201 Mullica Hill Road, Glassboro, NJ 08028; e-mail: saum@rowan.edu.

drug court programs currently have a probation or postplea condition suggesting that drug courts are including higher-risk populations (Huddleston, Freeman-Wilson, Marlowe, & Roussell, 2005). To date, little is known about the ability of treatment-oriented drug courts, which were originally designed to divert less serious offenders from the criminal justice system, to successfully incorporate these more complex clients. A special report by the National Institute of Justice (2006) described this second decade of drug courts: "Increasingly courts have moved from targeting low-level and first-time offenders to focusing on those whose substance abuse and criminal activity may be more serious and pose a greater threat to society—and a greater challenge to drug courts" (p. 2). The goal of this article, therefore, is to examine recidivism outcomes for drug court participants who have serious and violent criminal histories to determine whether they pose a greater threat to society than do the less serious drug court offenders.

Early drug courts limited participation in their programs to nonviolent offenders (Cooper & Trotter, 1994), and most drug courts today continue to target nonviolent offenders (U.S. General Accounting Office, 2005). One reason for this is that federal funding for drug courts stipulates that offenders with any previous crimes of violence be excluded from participating in drug court. The Violent Crime Control and Law Enforcement Act of 1994 established the Drug Court Discretionary Grant Program, currently operated through the Bureau of Justice Assistance, to provide Federal funds each year (FY 2007 funding was US$10 million) for the implementation and enhancement of drug courts. Programs receiving these funds are required to target nonviolent offenders (see, for example, Bureau of Justice Assistance, 2007). Accordingly, a major goal for early drug courts, to better manage less serious offenders in the community to help ensure prison space for repeat and violent offenders (National Association of Drug Court Professionals, 1995) still appears to be a major goal of federal policy related to the establishment and operation of drug courts.

Despite this goal, there is evidence that some drug court programs have expanded their admission criteria to include more serious and high-risk offender populations (Huddleston et al., 2005; National Institute of Justice, 2006), particularly after federal funding has run out. Once a drug court is established, different funding streams and new resources may be secured, allowing for the continuation of the program with less restrictive eligibility requirements. It is advantageous as well for drug courts to have greater flexibility in terms of client selection to ensure that their programs are filled to capacity. Yet notwithstanding procedural changes in some jurisdictions, there are likely numerous substance-using offenders with a history of violent offending who are in need of treatment but for whom policies preclude the expenditure of federal drug court funds. Because community and political sentiments often do not favor spending money and/or offering programs to violent offenders and because of the community safety responsibility of the criminal justice system, courts may be hesitant to include those with a history of violence in drug courts, regardless of funding issues.

Evidence suggests that violent offenders have much to gain from substance abuse treatment under the supervision of a drug court. Research has shown an association between drugs, crime, and violence (Goldstein, 1985). Furthermore, because corrections-based drug treatment has been found to reduce substance use and criminal activity in serious and violent offender populations (Hiller, Knight, & Simpson, 1999; Martin, Butzin, Saum, & Inciardi, 1999), it may be a good policy to include offenders with a history of violence in intensive supervision and treatment programs such as drug court when these offenders are

held in the community. Indeed, the approach to substance-involved offenders must engage those convicted of violent crime so that more appropriate services and supervision can be provided to this population (Center on Addiction & Substance Abuse, 1998).

It is important to determine whether drug court programs are in fact appropriate for these potentially more challenging participants because it is not yet clear whether the drug court model can be applied uniformly and effectively to the less serious participants in first-offender diversion programs and to the more serious, convicted offenders, who enter post-plea programs. Understanding any correlation between offenders' violent offense records and criminal justice outcomes, therefore, is critical. A major challenge is to meet the needs of offenders with the often limited substance abuse treatment options available to drug court systems while balancing potential risks to public safety from offenders with serious criminal histories (Goldkamp, 1994; Peters & Murrin, 2000).

National surveys reveal high rates of recidivism for criminal justice populations (Bureau of Justice Statistics, 1989, 2002), and mixed results have been found regarding the recidivism of violent offenders. Data indicate that 61.7% of all violent offenders are rearrested within 3 years of leaving prison (Bureau of Justice Statistics, 2002). Yet in comparison with other types of offenders (drug, property, and public order), those incarcerated for violent crimes recidivate less frequently. Studies examining offending in the pretrial period have found lower rates of recidivism for violent offenders compared to their nonviolent counterparts. Among criminal defendants across the country who were released to the community prior to case disposition, 39% of drug offenders were charged with pretrial misconduct, whereas only 23% of violent offenders received similar charges (Bureau of Justice Statistics, 1998). Similarly, a study of pretrial misconduct among New York City arrestees indicated that violent offenders were less likely to be charged with pretrial misconduct than were drug offenders (Belenko, Mara-Drita, & McElroy, 1992). In contrast, Nurco, Hanlon, Bateman, and Kinock (1991) classified substance-using offenders and determined that violent generalists, identified by type, amount, and severity of offense, committed a disproportionate amount of violent crime. It was recommended that these offenders be considered most appropriate for incapacitation and least appropriate for rehabilitation, indicating that traditional treatment would likely be ineffective. However, because treatment delivered within the context of a drug court program is not traditional, it challenges this assessment.

Drug court evaluations that include offenders who have a history of violence have been limited. Recidivism data collected in a Miami drug court diversion program indicated that defendants with prior robbery arrests had a higher probability of reoffending (Goldkamp, 1994). Additional analyses that combined robbery into a risk index that added variables, such as age, prior criminal history, education, and failure to appear before court, found that higher risk was related to higher rates of postdischarge arrests, whereas lower risk was associated with lower recidivism. These findings are congruent with the risk-needs principle (Andrews, 1986; Andrews & Dowden, 2006; Hannah-Moffat, 2005; Marlowe, Festinger, Lee, Dugosh, & Benasutti, 2006), suggesting that the higher-intensity programs such as drug court might best serve high-risk offenders for whom they may have the greatest impact but lower intensity programs such as traditional probation or parole be reserved for lower-risk offenders.

Researchers in Delaware examined a sample of seriously crime-involved offenders in a drug court program for probation violators (Saum, Scarpitti, & Robbins, 2001). Results

indicated that study participants with extensive criminal histories experienced the least favorable program outcomes. The specific relationship between history of violence and drug court graduation was complex. Offenders with at least one predrug court violent charge were more likely to fail the program than those with no history of violence. However, this relationship disappeared when controlling for total criminal history: Clients with long criminal records were also the most likely to have been charged with at least one lifetime violent offense. Subgroup analyses indicated that violent offenders amassed significantly more lifetime charges than did nonviolent offenders. In addition, violent offenders were most likely to be male, Black, younger, and crack users. Several of these client characteristics were also found to be predictive of drug court failure in multivariate analyses. Based on these results, it was recommended that drug court planners consider participant characteristics and behaviors including the extent of offenders' charges and the type and/or seriousness of the substance abuse problem, rather than only whether there is any history of violence when selecting candidates for drug court.

The research presented here extends the above study of the Delaware probation violators who attended drug court by collecting recidivism data for participants up to a period of 3 years postprogram participation. The study objective is to compare recidivism outcomes for drug court offenders with and without histories of violent crime. Examining the extent and type of offending by drug court clients can help us to explore how criminal history may affect success while in drug court and after community reentry. Moreover, as Belenko (1998, p. 27) stated, "The collection and analysis of recidivism data is crucial for addressing public safety concerns about placing felony offenders (even those without violent histories) into community-based drug treatment." Indeed, the follow-up period for this study, 3 years postdrug court participation, is significantly longer than most drug court studies and as such allows for a more comprehensive examination of recidivism of a drug court sample.

Therefore, the goals of this study are threefold. First, we will describe the predrug court criminal history and the recidivism of a relatively large sample ($N = 452$) of drug court participants extending follow-up up to 3 years postdischarge. Next, we will examine the simple relationships between violent offense history and recidivism. Finally, we will examine violent offense history within a multivariate context to determine whether it has a unique association with recidivism after controlling for other potentially confounding variables.

Method

Sample and Data Collection

This research was conducted as part of a larger project funded by the National Institute on Drug Abuse to examine drug court offenders in outpatient treatment. This study was based on the 452[1] consecutive admissions to the probation violators track of the New Castle County (Wilmington) Delaware Superior Court drug court between October 1993 and March 1997. The probation violators track of the drug court is designed for Superior Court probation clients who are arrested for a new criminal offense while serving their term. Probation violators who are assessed to have a substance abuse problem enter a guilty plea and are sentenced to participate in the drug court program. Delaware's Treatment Access Center (TASC), the state agency that acts as a liaison between the Court and the treatment

centers, is responsible for program placement, monitoring, and court representation of these drug court clients. Offenders may be court ordered to an in-prison or work-release treatment program, or more commonly, they are sentenced to participate in a program offered by state-contracted community treatment providers.

The drug court program requires that clients appear regularly before the drug court judge during status hearings, attend treatment sessions, and meet weekly with their probation officer and TASC worker. The number of status hearings and treatment sessions decrease or increase as needed based on recommendations from the participants' caseworker to the judge. Thus, the length of the program varies according to participant progress; those who are doing well may advance through the program in 9 to 12 months, whereas others may take significantly longer. Sanctions imposed by the judge for program violations such as repeated positive urine screens or missed treatment and/or court sessions may include moving the participant to a more restrictive level of probation or placing the participant in jail for a brief period of time. Provided that they satisfy all requirements of the drug court program including being drug free for a minimum of 9 months, participants are officially graduated by the Court and may be granted reduced periods of probation or other reductions in their sentence. Participants who are charged with a new crime while in the program and those who receive multiple sanctions for noncompliance may be terminated by the judge. For a more detailed description of the Delaware Superior Court drug court programs, including a diversion program for first-time drug offenders, see Butzin, Saum, and Scarpitti (2002).

The Delaware Statistical Analysis Center and Delaware TASC provided the original data for this analysis. The TASC contributed the demographic, drug use, treatment, and drug court program outcome data and the Statistical Analysis Center extracted criminal history and recidivism data from the Delaware Justice Information System databases for most of the drug court clients in the sample. The data were updated, cleaned, merged, and coded for the present analysis by researchers at the Center for Drug and Alcohol Studies at the University of Delaware.

The demographic characteristics of the sample are displayed in Table 1. The mean age of the participants in this study was 30, and the majority of the clients were male (79%) and African American (66%). The major substances of abuse were cocaine/crack (34%), opiates (24%), alcohol (21%), and cannabis (15%).

The 452 offenders in this sample amassed 1,381 violent charges in Delaware prior to beginning the drug court program. Violent crimes comprised 8% of the total number of all charges accumulated by these offenders prior to entering the program. Stated another way, 76% of the drug court participants had been charged with at least one violent offense in their lifetime before entering the program. For comparison purposes, 81% of participants had also been charged during their lifetime with at least one property offense, 83% a drug offense, 95% a public order offense, and 95% a court offense (contempt, failure to appear, violations of probation or parole).

Measurement of Variables

Sociodemographic background. Data were coded on the sociodemographic background of drug court participants. These data included gender (0 = *female*; 1 = *male*), race or ethnicity, age, and drug use. Because African American or White proportionately represented

Table 1
Delaware Drug Court Treatment Program: Sociodemographic and Criminal History Characteristics of Sample ($N = 452$)

	Number	Percentage
Gender		
Female	97	21.5
Male	355	78.5
Race/ethnicity		
Black	297	65.7
White	123	27.2
Hispanic	27	6.0
Other	5	1.1
Age		
Average	30	
Range	18-59	
Primary drug of choice		
Alcohol	97	21.4
Cannabis	66	14.6
Cocaine	73	16.2
Crack	80	17.7
Opiates	107	23.7
Other[a]	29	6.4
Criminal history (charges)		
Total	17,963	—
Violent	1,381	76
Property	3,870	81
Drug	1,870	83
Public order	2,929	95
Court	4,575	95
Traffic	2,170	70
Other	1,168	75

a. Other includes amphetamines, barbiturates, lysergic acid diethylamide, and phencyclidine.

the two largest ethnicity categories, two dummy variables were created to enable comparison between them. One variable recorded whether the participant was African American and another reflected whether the participant was White. Hispanic and other ethnicities were collapsed into a referent category. In addition to this, because violence is often associated with alcohol and to a lesser extent with narcotics (Boles & Miotto, 2003; Parker, 2004), a series of dummy variables were created to enable comparisons between those who listed alcohol as their primary drug of choice and those who listed opioids or cocaine as their primary drug of choice (marijuana and other drugs were the referent category).

Criminal history. Data were gathered on the (adult) predrug court offenses of this sample. Because the focus of the current article is to extend the limited findings for violent offenders in drug court, participants' violent criminal history data are presented in greater detail than are other types of criminal offending. A comprehensive record of predrug court criminal activity is presented elsewhere (see Saum, Scarpitti, & Robbins 2001).

The offenders' criminal backgrounds were examined from age 18 until the age at which they entered the drug court program. Because each separate charge for each arrest was coded into one of seven categories— violent, property, public order, drug, court, traffic, and other—to allow for a detailed examination of the types of crimes committed by the drug court participants before program entry, no hierarchy rule was needed to guide the charge that attributed to the arrest (an arrest could have only one charge, or it could have numerous charges stemming from it). Although the State of Delaware Criminal Code designates many drug offenses as violent crimes, drug offenses were not included in the violent history category for this study. Instead, the general coding scheme followed that of the Uniform Crime Reports and maintained separate categories for violent offenses and drug offenses. A review of the data during the coding process showed that the majority of the violent crimes not only consisted of assaults but also included robberies, rapes, homicides, weapons offenses and attempts to commit these crimes.

Because of its relevance to the current analyses, a variable was created to specifically reflect whether a participant had been arrested prior to drug court for a violent offense (0 = *not arrested*; 1 = *arrested*). In addition to this, to present a more comprehensive picture of the participants' entire criminal history, another variable was included that reflected the total number of charges he or she had received during their lifetime.

Drug court discharge status. Discharge status for the drug court participants was measured as follows: graduated (32%), failed (45%), and neutral (23%). Graduates met all of the necessary requirements for program completion such as attending court status hearings and satisfying treatment criteria. Failed clients were those, for example, who quit the program or committed a new crime while in drug court. A neutral classification was assigned to clients who left before completion due to medical reasons, clients who were reincarcerated on an earlier charge, and clients whose charges resulting in their drug court sentence were later revoked. Because graduated and failed categories represented the individuals who had the opportunity to complete the program, and the neutral group was made up of individuals who did not have the opportunity to complete, two variables were created to enable comparisons between these three groups (i.e., graduated, failed, and neutral). These variables included graduated (0 = *no*; 1 = *yes*) and failed (0 = *no*; 1 = *yes*), with neutral as the referent category.

Time at risk. Because the length of time between when a participant was discharged from the drug court and when the official records search was performed varied, a time-at-risk variable was computed to be added as a statistical control variable during multivariate modeling of participant recidivism. This variable was calculated by subtracting the date of discharge for each participant from March 9, 2000, the date the criminal records query for determining recidivism was conducted for state databases and by omitting any time during which the individual was in a controlled environment and thus, not at risk.

Recidivism. As noted above, information was collected on postdrug court recidivism beginning with the day after participants were discharged from the program and continuing through March 9, 2000. Arrest data were coded for each individual, including offense severity (i.e., felony or misdemeanor) and offense type (i.e., violent, property, drug, public order,

traffic, or court). A series of recidivism variables were created using this information to represent the total number of arrests (regardless of which charge was assigned), the total number of misdemeanor arrests, total felony arrests, total arrests for violent charges, and total for property charges, public order charges, traffic charges, and court charges. Based on these measures, separate variables were created to reflect whether (0 = *not arrested*; 1 = *arrested*) a participant had been arrested for any type of offense–for a felony offense, for a violent offense, a property offense, or a drug offense—after being discharged from drug court.

Data Analysis

The initial analysis of recidivism data involved computing descriptive statistics to show what proportion of drug court participants had been rearrested for any type of offense, for felony and misdemeanor offenses, and for various types of offenses, including drug, property, violent, and public order crimes. Next, to assess the bivariate relationship between violent offense history and the different measures of recidivism, a series of chi-squares were calculated that compared those with a violent offense history with those who did not have a violent offense history on the proportion of each group that had been rearrested. Because, 97% of participants were at risk for rearrest for at least 1 year following program discharge (the majority, 70%, were at risk for 3 years), and because recidivism data are often reported for discrete time intervals following discharge from drug court (Belenko 1998, 1999), results are presented for two time periods: 1-year postdrug court discharge and 3-year postdrug court discharge to allow for comparison with data from other studies using similar timeframes. Bivariate correlations were also calculated to assess the relationships between the sociodemographic, criminal history and status variables, and recidivism. The final analytic step involved constructing multivariate logistic regression models using several variables (e.g., age, gender, prior criminal history) frequently found to be related to recidivism as statistical controls (Gendreau, Little, & Goggin, 1996) to determine whether violent offense history, net the influence of these potential confounds, showed a statistically significant relationship with recidivism. Exact values for the odds ratios were reported only for variables that showed a statistically significant relationship with recidivism. Because some predictors had large standard errors associated with them, the 95% confidence interval is presented for all predictors. As noted by Morgan, Vaske, Gliner, and Harmon (2003), it is difficult to interpret exact odds ratios when the standard error is large, particularly when they appear to suggest a substantial effect even though they have not achieved statistical significance. In these situations the B coefficient represents an unstable estimate of the relationship between the predictor and the outcome, and it is helpful to examine the confidence intervals to verify that they each overlap a value of 1.0, and thus do not support the decision to reject the null hypothesis.

Results

Description of Postdrug Court Recidivism

Postdrug court recidivism findings indicate that participants had a total of 1,726 contacts with the criminal justice system after they were discharged from drug court. These contacts

Table 2
Postdrug Court Recidivism: Number and Percentage of Charges by Offense Type and Number and Percentage of Participants With Charges

Offense Category	Total Number of Charges	Percentage of Total Charges	Number of Clients Charged[a]	Percentage With Type of Charge
Violent	267	6.6	106	23.5
Property	515	12.8	122	27.0
Public order	551	13.7	186	41.2
Drugs	344	8.5	102	22.6
Court	1071	26.7	262	58.1
Other	148	3.7	79	17.5
Traffic	1127	28.0	204	45.2
Total	4,021	100.0		

Note: The postdrug court period includes all charges obtained after drug court discharge through April 2000.
a. This is the number of clients who have had at least one postdrug court charge in the offense category.

included arrests, court violations, and traffic offenses. The criminal justice contacts involved 78% of the drug court clients, with participants accumulating 4,021 charges after leaving the program. Of these offenses, 82% were classified as misdemeanors and the rest (18%) as felonies. Referring to Table 2, we note that study participants obtained fewer violent charges relative to most other types of criminal activity following drug court discharge. Violent crimes were charged to 106 of the former drug court clients. Thus, about one fourth of the study participants received a violent criminal charge in the postdrug court period. These clients acquired a total of 267 charges for violent crimes, accounting for about 7% of all offenses on record after drug court.

Bivariate Analysis of Recidivism and Past Violent Criminal History

Because the focus of the current study was on understanding the extent to which having a history of violent offending related to recidivism following drug court, a series of bivariate analyses compared the likelihood that those with a history of violent offense prior to drug court entry (compared to those without a violent offense history) would be rearrested for any offense—for a felony offense, for a drug offense, for a property, a violent, and a public order offense—after discharge from the program.

As shown in Table 3, with respect to the 12 months following drug court, offenders with a history of violent offending were significantly more likely to have made any contact with the criminal justice system (67%) than participants with no previous record of violence (42%). However, there were no statistical differences in types of offending between these two groups; violent and nonviolent offenders were equally likely to receive a felony arrest or to be arrested for a drug, property, violent, or public order offense.

The 36-month postdrug court recidivism data revealed both similarities to and differences from the 12-month follow-up data. In terms of overall contact with the criminal justice system, it was more common for violent offenders to have made some criminal justice system contact and also to have been charged with a property crime compared to the nonviolent offenders. No differences were found with regard to any arrest, felony arrest, drug

Table 3
Percentage of Clients Recidivating at 12 and 36 Months Postdischarge by Past History of Violence

	12 Months		36 Months	
	Not Violent	Violent	Not Violent	Violent
Any contact with criminal justice system	42	67***	75	87*
Any arrest[a]	22	31	46	58
Any felony arrest	13	15	23	36
Any drug arrest	4	8	14	19
Any property arrest	6	10	12	27*
Any violent arrest	6	6	9	24*
Any public order arrest	12	13	34	41

a. Excludes arrests for traffic and court charges.
*$p < .05$. ***$p < .001$.

or public order offenses. Yet almost one quarter of the violent offenders had recidivated with a crime of violence compared to less than one tenth of the nonviolent offenders.

Other Bivariate Analyses

Additional bivariate analyses were completed to assess the simple relationships between recidivism (any arrest, any felony arrest, any arrest for drug, property, and violent offenses) and the remaining sociodemographic background (gender, ethnicity, age, drug of choice), criminal history (i.e., total number of lifetime charges), and status variables (i.e., time at risk, drug court discharge). These analyses are presented in Table 4. Findings indicated that sociodemographic background was associated with specific types of recidivism. For example, men were more likely than women to be rearrested for a violent offense, $\chi^2(1, n = 444) = 5.55$, $p < .05$, and participants who were White were significantly less likely to be rearrested for a drug offense, $\chi^2(1, n = 444) = 16.34$, $p < .05$. A statistically significant inverse relationship was found between age and all recidivism indicators except the likelihood of being rearrested for a property offense ($r = –.06$, p = ns). Alcohol as one's primary drug choice was related to higher rates of rearrest for a violent offense, $\chi^2(1, n = 444) = 8.77$, $p < .05$. Total lifetime charges and time at risk were significantly positively related to all recidivism variables except being rearrested for a drug offense. In addition to this, graduating from the program was significantly inversely related to being rearrested and to being rearrested for a property offense, $\chi^2(1, n = 444) = 7.87$, $p < .05$.

Multivariate Analysis

As shown in Table 5, a consistent pattern of findings emerged among the variables that predicted the various types of recidivism following discharge from drug court. That is, age, time at risk, and the number of charges a participant had received during their lifetime were significantly associated with recidivism in almost every model. For example, for every 1-year increase in age, there was a 5% decrease in the likelihood that one would be rearrested for

Table 4
Postdischarge Recidivism by Additional Demographic, Status, and Criminal History Variables

Characteristic	Any Rearrest	Any Felony Rearrest	Any Drug Rearrest	Any Property Rearrest	Any Violent Rearrest
Gender (%)					
Female	74.7	34.7	16.8	26.3	**14.7**
Male	79.7	37.8	24.6	27.8	**26.4**
Race/ethnicity (%)					
African American	80.1	39.4	**28.4**	29.1	24.7
Hispanic	84.4	40.6	**21.9**	25.0	21.9
White	73.3	30.8	**10.0**	24.2	22.5
Age	**–.10**	**–.19**	**–.14**	–.06	**–.11**
Drug of choice (%)					
Alcohol	78.9	40.0	15.8	28.4	**30.5**
Cocaine	76.8	33.8	23.8	24.5	**19.2**
Opioids	80.7	39.4	27.5	33.0	**18.3**
Other	78.7	37.1	23.6	24.7	**31.5**
Time at risk	**.18**	**.20**	.07	**.15**	**.21**
Discharge status (%)					
Failed	**84.2**	41.1	24.8	**31.2**	25.7
Graduated	**71.3**	29.4	22.4	**18.9**	20.3
Neutral	**77.8**	40.4	20.2	**32.3**	25.3
Lifetime charges	**.15**	**.17**	**.17**	**.21**	.06

Note: Chi-square analysis was used for comparing the distribution of the arrest variables across categorical variables. Point-biserial correlation coefficients are reported for analyses that involved an interval-scale independent (e.g., age) and a nominal-dependent variable (e.g., any arrest). Emboldened percentages or coefficients denote statistically significant relationships.

a drug offense (odds ratio = 0.95), a 3% decrease in the likelihood of be rearrested for a felony (odds ratio = 0.97), and a 4% decrease in the likelihood of being rearrested for a violent offense (odds ratio = 0.96). With respect to time at-risk, for every day a participant was at risk during the follow-up interval, there was a 0.1% increase in the likelihood of being rearrested (odds ratio = 1.001), a 0.1% increase in a felony offense (odds ratio = 1.001), a 0.1% increase in a property offense (odds ratio = 1.001), and a 0.1% increase in being arrested for a violent crime (odds ratio = 1.001). Finally, for each additional charge a participant had received during their lifetime, there was a 2% increase in the probability they would be rearrested during the follow-up (odds ratio = 1.02), a 1% increase in the probability or a rearrest for a felony (odds ratio = 1.01), and a 1% increase in a violent and a 2% increase for a property rearrest (odds ratio = 1.01 and 1.02, respectively). No other variable was significantly associated with recidivism. Thus, after statistically controlling for other potential confounds, having a violent offense history was not found to be predictive of recidivism following discharge from drug court.

Examination of model fit showed that all models provided an adequate fit to the data, but some models provided better fit than others. For example, using the Hosmer and Lemeshow goodness-of-fit test (see Hosmer & Lemeshow, 2000) analyses showed the model predicting

Table 5
Multiple Logistic Regressions for Predicting Postdischarge Recidivism Among Drug Court Participants

	Any Rearrest		Any Felony Rearrest		Any Drug Rearrest		Any Property Rearrest		Any Violent Rearrest	
Predictors	B	95% CI Exp(B)	B	95% CI Exp(B)	B	95% CI Exp(B)	B	95% CI Exp(B)	B	95% CI Exp(B)
Male	–.08	(.51-1.66)	–.34	(.42-1.23)	.27	(.69-2.49)	–.33	(.41-1.29)	.40	(.76-2.93)
White	–.84	(.15-1.29)	–.60	(.23-1.33)	–.89	(.14-1.20)	–.18	(.32-2.20)	–.35	(.26-1.95)
African American	–.30	(.26-2.08)	–.05	(.43-2.12)	.39	(.60-3.67)	.20	(.50-2.96)	.04	(.41-2.65)
Age	–.03	(.94-1.001)	**–.07****	**(.90-.96)**	**–.06****	**(.91-.98)**	–.03	(.94-1.0)	**–.04***	**(.93-.99)**
Alcohol	–.08	(.42-2.01)	.35	(.74-2.76)	–.39	(.31-1.49)	.23	(.62-2.56)	–.05	(.48-1.90)
Cocaine	–.29	(.36-1.56)	–.07	(.50-1.76)	.01	(.50-2.02)	–.12	(.45-1.75)	–.67	(.26-1.02)
Opioids	–.02	(.45-2.15)	–.30	(.70-2.60)	.16	(.58-2.40)	.44	(.78-3.11)	–.74	(.23-1.0)
Time at risk	**.001****	**(1.001-1.002)**	**.001****	**(1.001-1.002)**	.001	(1.0-1.001)	**.001***	**(1.0-1.001)**	**.001****	**(1.001-1.002)**
Failed drug court	.44	(.81-2.96)	–.12	(.52-1.52)	.15	(.62-2.16)	–.15	(.50-1.50)	.04	(.57-1.90)
Graduated drug court	–.15	(.46-1.62)	–.38	(.38-1.23)	.29	(.68-2.61)	–.59	(.29-1.04)	–.03	(.50-1.87)
Lifetime charges	**.02****	**(1.007-1.03)**	**.01****	**(1.005-1.02)**	.01	(.99-1.02)	**.02****	**(1.01-1.03)**	**.01****	**(1.005-1.02)**
Violent offense history	.18	(.68-2.09)	.46	(.92-2.74)	.29	(.72-2.50)	.40	(.82-2.74)	.46	(.83-3.05)

Note: Coefficients and confidence intervals in bold indicate a statistically significant relationship.
*$p < .05$. **$p < .01$.

the likelihood that a felony rearrest occurred provided the best overall fit ($\chi^2 = 4.99$, $p = .759$), but the model predicting the likelihood of any rearrest had the lowest overall fit ($\chi^2 = 12.77$, $p = .12$). Values for Nalgerke r^2 ranged from .19 for the model predicting the likelihood of felony rearrest to .13 for the model predicting rearrest for a drug offense.

Discussion and Conclusions

Although national surveys indicate that violent offending is prevalent among general correctional populations (Bureau of Justice Statistics, 2002, 2007), little is known about the impact of drug court clients' violent criminal background on postprogram offending despite the fact that federal policy prohibits the inclusion of these types of offenders in the programs they fund. Thus, research is needed to determine whether drug courts are both an appropriate and effective model of treatment and supervision for the many probationers and other offenders across the country who have lengthy criminal histories, including violence. One way of determining this is to directly examine whether offenders with a violent criminal history recidivate at a higher rate than those who do not have history of criminal violence. Such a comparison was made in the current study to determine whether there are empirical grounds for systematically excluding violent offenders from participating in drug courts.

Although current findings showed that there was a significant bivariate relationship between violent offense history and recidivism, when this was examined in a multivariate context that controlled for time at risk, number of lifetime charges, sociodemographics, and drug court discharge status, it was found that offenders with a history of violence were statistically no more likely than those with no history of violent offending to be rearrested during the postdrug court follow-up period. This was true of all types of rearrests examined, including felony, drug, property, and violent arrests. With violent and nonviolent offenders recidivating at statistically similar rates following drug court, our findings suggest that excluding all violent offenders from drug court participation does not appear to improve public safety. Indeed, using the crime-control rationale for investing in community corrections developed by Petersilia (1995), and incorporating the risk-needs principle (Andrews 1986; Hannah-Moffat 2005) that high-risk offenders should receive the most intensive services, it may be unwise to exclude all violent offenders from participating in drug court. It is possible that the greater levels of supervision and services characteristic of drug courts might afford greater community protection than traditional forms of community supervision for these individuals both during and after participating in drug court. The current study, however, did not directly test this possibility. Therefore, future research is needed that uses more rigorous designs (preferably using random assignment) to compare whether violent offenders who participate in drug court have lower recidivism rates than those who do not participate in drug court.

Also consistent with the risk-needs principle, findings from the current study showed that participants with more extensive criminal histories had higher rates of recidivism. It is unclear, however, whether the drug court directly affected this because we were unable to assign high-and low-risk participants randomly to drug court or to a comparison group. This is important because a meta-analysis that reviewed the effectiveness of drug courts found that courts where offenders had longer criminal histories were more effective than

courts serving first-time offenders (Lowenkamp & Latessa, 2004). In addition, a specific application of this principle was performed by Marlowe and colleagues (2006) where the effectiveness of judicial supervision in drug court was found to vary according to the risk level of drug court offenders, with more intensive supervision leading to better outcomes among higher-risk offenders. It may be that in the current study, drug court had a substantially larger effect on high-risk participants compared to those with low risk. Again, additional research is needed to directly explore this possibility.

Findings also indicated that younger participants and those with longer at-risk periods were more likely to be rearrested postdrug court and these findings are consistent with prior research. The inverse relationship between age and recidivism found in our study is similar to findings from other drug court studies (Gottfredson, Najaka, Kearley, & Rocha 2006; Peters & Murrin 2000; Taxman & Bouffard 2005) and mirrors general criminal justice statistics that find younger age groups have the highest involvement in the criminal justice system. Because younger participants have higher recidivism rates, it may be important to examine them in greater detail to identify the criminogenic risks and needs within this subgroup that lead to higher levels of recidivism. Understanding these, in turn, could suggest specific modifications to extant drug courts such as the development of specialized tracks for young offenders designed to address the unique risks and needs of this subgroup.

As noted earlier, findings regarding the relationship between time at risk and recidivism found in our study coincide with other drug court follow-up studies that reveal increasingly poorer recidivism outcomes as the length of the postdischarge interval increases (Wilson, Mitchell, & Mackenzie, 2006). Although intuitive and logical, the current examination of time at risk only presented a partial picture of the temporal relationships in recidivism following drug court. Additional research is needed to expand this through the application of survival analysis. It is possible that the length of time until rearrest varied between violent and nonviolent participants, particularly for different types of offenses (i.e., violent). If time to rearrest is found in subsequent analyses to be an important way to differentiate groups, specific modifications to extant practice could be made. For example, if violent offenders had significantly shorter time to rearrest for violent offenses and the majority of violent rearrests occurred within the first 6 months of discharge, drug courts could modify existing practice to continue some form of supervision with violent offenders during this time frame.

In addition to the suggestions described above for future research, it is important to acknowledge limitations in the current study. First, only a single drug court program was examined and findings may not generalize to other programs and particularly to drug courts whose target population or program structure are inconsistent with those of the program we studied. Replication of this study in multiple settings is needed to determine whether findings presented here are externally valid. Another limitation to the current study is associated with the manner in which we defined violent offender. Although our definition is consistent with that specified by the Bureau of Justice Assistance in their annual funding announcements for drug courts, the manner in which these definitions classify offenders into two discrete categories (i.e., nonviolent and violent) ignores important sources of variation within the individuals' criminal history. For example, offenders with a single violent arrest are treated the same as those with 20 violent arrests. The level of risk presented by each offender is likely different, and future analyses should focus on identifying types (based on the frequency and/or type violent offenses) of violent offenders to determine

whether some do in fact present a much greater risk to public safety (i.e., have significantly higher rates of recidivism) than others.

In summary, data were gathered and analyzed during the current study in an effort to determine whether recidivism outcomes following drug court differed among offenders with and without violent histories. The primary contribution of this study is that it showed that violent and nonviolent offenders had statistically comparable recidivism rates. This suggests that a unilateral decision to exclude all violent offenders probably is not the best choice because the additional resources allocated to the supervision and treatment of offenders in these programs may have additional benefits for improving public safety.

Note

1. Records indicated that 456 offenders entered the program during the lifetime of the study. However, recidivism information could not be located for 4 participants due to missing identifiers.

References

Andrews, D. A. (1986). The risk principle of case classification: An outcome evaluation with young adult probationers. *Canadian Journal of Criminology, 28,* 377-384.

Andrews, D. A., & Dowden, C. (2006). Risk principle of case classification in correctional treatment: A meta-analytic investigation. *International Journal of Offender Therapy and Comparative Criminology, 50,* 88-100.

Belenko, S. (1998). Research on drug courts: A critical review. *National Drug Court Institute Review, 1*(1), 1-42.

Belenko, S. (1999). Research on drug courts: A critical review 1999 update. *National Drug Court Institute Review, 2*(2), 1-58.

Belenko, S. (2001). *Research on drug courts: A critical review: 2001 update.* New York: The National Center on Addiction and Substance Abuse at Columbia University.

Belenko, S., Mara-Drita, I., & McElroy, J. (1992). Drug tests and the prediction of pretrial misconduct: Findings and policy issues. *Crime & Delinquency, 38*, 557-582.

Boles, S. M., & Miotto, K. (2003). Substance abuse and violence: A review of the literature. *Aggression and Violent Behavior, 8,* 155-174

Bureau of Justice Assistance (2007). Adult drug court discretionary grant program FY 2008 competitive grant announcement. Washington, DC: U.S. Department of Justice.

Bureau of Justice Statistics. (1989). *Recidivism of prisoners released in 1983.* Washington, DC: U.S. Department of Justice.

Bureau of Justice Statistics. (1998). *Felony defendants in large urban counties, 1994.* Washington, DC: U.S. Department of Justice.

Bureau of Justice Statistics. (2002). *Recidivism of prisoners released in 1994.* Washington, DC: U.S. Department of Justice.

Bureau of Justice Statistics. (2007.) *Probation and parole in the United States, 2006.* Washington, DC: U.S. Department of Justice.

Butzin, C.A., Saum, C. A., & Scarpitti, F. R. (2002). Factors associated with completion of a drug court diversion program. *Substance Use and Misuse, 37*, 1615-1633.

Center on Addiction and Substance Abuse. (1998). *Behind bars: Substance abuse and America's prison population.* New York: Columbia University Press.

Cooper, C. S., & Trotter, J. A. (1994). Recent developments in drug case management: Re-engineering the judicial process. *Justice System Journal, 17*, 83-94.

Gebelein, R. (2000, May). The rebirth of rehabilitation: Promise and perils of drug courts. *Sentencing and corrections: Issues for the 21st Century.* Washington, DC: U.S. Department of Justice.

Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offenders recidivism: What works!. *Criminology, 34*, 575-608.

Goldkamp, J. (1994). Miami's treatment drug court for felony defendants: Some implications of assessment findings. *The Prison Journal, 73*, 110-166.

Goldstein, P. J. (1985). Drugs and violent behavior. *Journal of Drug Issues, 15*, 493-506.

Gottfredson, D. C., Najaka, S. S., Kearley, B. W., & Rocha, C. M. 2006. Long-term effects of participation in the Baltimore City drug treatment court: Results from an experimental study. *Journal of Experimental Criminology, 2*, 67-98

Hannah-Moffat, K. (2005). Criminogenic needs and the transformative risk subject: Hybridizations of risk/need in penality. *Punishment & Society, 7*, 29-51.

Hiller, M. L., Knight, K., & Simpson, D. D. (1999). Risk factors that predict dropout from corrections-based treatment for drug abuse. *The Prison Journal, 79*, 411-430.

Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression*. New York: Wiley.

Huddleston, C. W., Freeman-Wilson, K., Marlowe, D. B., & Roussell, A. (2005). *Painting the current picture: A national report card on drug courts and problem solving court programs in the United States.* Alexandria, VA: National Drug Court Institute.

Lowenkamp, C. T., & Latessa, E. J., (2004). Understanding the risk principle: How and why correctional interventions can harm low risk offenders. In *Topics in community corrections* (pp. 3-8). Washington, DC: National Institute of Corrections.

Marlowe, D. B., Festinger, D. S., Lee, P. A., Dugosh, K. L., & Benasutti, K. M. (2006). Matching judicial supervision to clients' risk status in drug court. *Crime & Delinquency, 52*, 52-76.

Martin, S. S., Butzin C. A., Saum, C. A., & Inciardi, J. A. (1999). Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare. *The Prison Journal, 79*, 294-320.

Morgan, G. A., Vaske, J. J., Gliner, J. A., & Harmon, R. J. (2003). Logistic regression and discriminant analysis: Use and interpretation. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*, 994-997

National Association of Drug Court Professionals. (1995). *Facts on drug courts.* Alexandria, VA: Author.

National Institute of Justice. (2006). *Drug courts: The second decade*. Washington, DC: U.S. Department of Justice.

Nurco, D. N., Hanlon, T. E., Bateman, R. W., & Kinock, T. W. (1991). Drug abuse treatment in the context of correctional surveillance. *Journal of Substance Abuse Treatment, 12*, 19-27.

Parker, R. N. (2004). Alcohol and violence: Connections, evidence and possibilities for protection. *Journal of Psychoactive Drugs,* Suppl. *2,* 157-263.

Peters, R., & Murrin, M. R. (2000). Effectiveness of treatment-based drug courts in reducing criminal recidivism. *Criminal Justice and Behavior, 27*, 72-96.

Petersilia, J. (1995). A crime control rationale for reinvesting in community corrections. *The Prison Journal, 75*, 479-497.

Saum, C. A., Scarpitti, F. R., & Robbins, C. (2001). Violent offenders in drug court. *Journal of Drug Issues, 31*, 107-128.

Taxman, F. S., & Bouffard, J. A. 2005. Treatment as part of drug court: The impact on graduation rates. *Journal of Offender Rehabilitation, 42*, 23-50.

U.S. General Accounting Office. 2005. Adult drug courts: Evidence indicates recidivism reductions and mixed results for other outcomes. Washington, DC: Author.

Wilson, D. B., Mitchell, O., & Mackenzie, D. L. (2006). A systematic review of drug court effects on recidivism. *Journal of Experimental Criminology, 2*, 459-487.

Christine A. Saum, PhD, is an assistant professor in the Department of Law and Justice Studies at Rowan University. She received her PhD at the University of Delaware and is a faculty associate with the Center for Drug and Alcohol Studies at the University of Delaware. She has extensive experience managing grants, conducting process evaluations, collaborating with corrections and courts officials, and working with drug-involved offender populations in both the juvenile and criminal justice systems. She has previously served as coprincipal

investigator for multiyear federally funded studies of drug court offenders in outpatient treatment and studies of offenders in prison and community-based treatment programs. She has also worked on interventions involving reentry strategies for juvenile offenders and HIV prevention in corrections. Currently, she is a consultant on a national drug court management information systems project called eCourt. She has published in the areas of women offenders, corrections-based substance abuse treatment, drug policy and the drug legalization debate, drug courts, sex in prison, and date-rape drugs and has coauthored a book on cocaine-exposed infants.

Matthew L. Hiller, PhD, is an associate professor in the Department of Criminal Justice at Temple University. He received his PhD in experimental psychology from Texas Christian University in 1996 and previously held research positions at the Institute of Behavioral Research at Texas Christian University and the Center on Drug and Alcohol Research at the University of Kentucky. He has served as principal investigator on several projects with funding from the Bureau of Justice Assistance, National Institute of Justice, State Justice Institute, and the Center for Substance Abuse Treatment. He also has served as a coprincipal investigator on several studies funded through the National Institute on Drug Abuse. He has authored numerous articles on corrections-based substance abuse treatment, drug courts, mental health, HIV risk behaviors, motivation, health services utilization, and treatment engagement.