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Applying Evidence-Based Practices to Community Corrections Supervision

An Evaluation of Residential Substance Abuse Treatment for High-Risk Probationers

Deanna M. Pérez
University of Colorado Denver

This study sought to evaluate the effectiveness of residential substance abuse treatment in reducing recidivism among high-risk offenders. The study employed a quasi-experimental research design to match 82 probationers who participated in residential drug treatment program to 82 probationers with similar demographics and criminal history who did not attend treatment. The findings revealed that residential substance abuse treatment had no statistically significant effect on several dichotomous measures of recidivism but that treatment participation substantially reduced the amount of criminal activity in which offenders engaged in during the 18-month follow-up period. Furthermore, among those arrested, the treatment group was more likely to be charged with a probation violation, whereas controls were substantially more likely to be arrested for a new criminal offense. The results serve as the foundation for future examinations into the efficacy of residential drug treatment for high-risk offenders under community supervision.

Keywords: *residential drug treatment; recidivism; community corrections; high-risk offenders; evidence-based practices*

Over the past decade, research has advanced the application of evidence-based practices (EBP), or what has come to be widely referred to as "what works" in the field of correctional rehabilitation (Cullen & Gendreau, 2000; Latessa, 2004; MacKenzie, 2000, 2001; Sherman, Gottfredson, MacKenzie, Eck, Reuter, & Bushway, 1997). EBP draws on science to inform the operational practice of services and programs for offenders. The aim is to employ empirically tested practices that produce reductions in recidivism among offenders (MacKenzie, 2005). A large and growing body of empirical research has identified those aspects of correctional programming that are common to the most effective treatment interventions.

Author's Note: Please address correspondence concerning this article to Deanna M. Pérez, PhD, Assistant Professor, University of Colorado–Denver, School of Public Affairs, 1380 Lawrence Street, Suite 500, Denver, CO 80217; e-mail: Deanna.Perez@ucdenver.edu.

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According to Cullen and Gendreau (2000), successful interventions are based soundly in theory and research and designed to target dynamic predictors of recidivism. Dynamic factors are those characteristics of offenders that are mutable, such as drug use, antisocial attitudes, and employment skills. Furthermore, the most successful programs apply cognitive-behavioral treatment (CBT) techniques to help offenders modify their thoughts regarding criminal and risky behaviors. CBT with correctional populations have been conceptualized as cognitive restructuring, cognitive or coping-skills development, and life skills training (Carey, 1997; Wilson, Bouffard, & MacKenzie, 2005). The focus of treatment is on restructuring the cognitive distortions and dysfunctional thought processes of the offender that lead to inappropriate, deviant, and illegal behavior.

Correctional research on EBP consistently finds that the principles of risk and needs are a necessary component of effective correctional interventions (Andrews, 2000; Andrews & Bonta, 1998; Gendreau & Goggin, 2000; Latessa, Cullen, & Gendreau, 2002). The risk principle states that supervision and treatment programming should be commensurate with the risk level, or probability of recidivism, of the offender (Andrews, 2002; Lowenkamp & Latessa, 2005). Specifically, intensive services should be directed at moderate to high-risk offenders rather than provided indiscriminately. Empirical research and meta-analyses have shown that correctional programs that follow the risk principle yield the largest reductions in recidivism (Dowden, Antanowicz, & Andrews, 2003; Lovins, Lowenkamp, Latessa, & Smith, 2007; Lowenkamp & Latessa, 2004).

The needs principle recommends that interventions for offenders target known predictors of crime and recidivism. In particular, correctional treatment should focus on dynamic risk factors, commonly referred to as "criminogenic needs" (Andrews et al., 1990; Cullen & Gendreau, 2000). Dynamic risk factors, such as low self-control, dysfunctional family ties, and antisocial values, are characteristics of an individual that are mutable. Whereas we know that certain static factors (e.g., offense history) highly predictive of recidivism cannot be modified, dynamic predictors can potentially be changed. Substance abuse is viewed as one of the most critical criminogenic needs among the offender population (Hiller, Knight, & Simpson, 2006; Karberg & James, 2005).

Although most research into the effectiveness of correctional rehabilitation programs has focused on interventions within correctional facilities, less research has examined community corrections programming (Hiller et al., 2006). A limited number of outcome evaluations of community residential drug treatment have found mixed results for such programs (but see Krebs, Strom, Koetse, & Lattimore, 2009 who found that nonresidential treatment was more effective than residential treatment in delaying time to recidivism). For example, an evaluation of the Brooklyn Drug Treatment Alternative-to-Incarceration Program (DTAP), a program that diverts to residential drug treatment prison-bound offenders, found that 4% of DTAP participants were rearrested compared to 13% of similar nonparticipants (Sung, 2003). More recently, in their evaluation of a probation-based residential drug treatment

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facility, Hiller et al. (2006) found that treatment completers were significantly less likely to recidivate in the second year after treatment than noncompleters and controls, whereas all groups recidivated at the same rate in the first year. Given these mixed results, the evidence to date on the efficacy of residential drug treatment programs remains equivocal (Chanhatasilpa, MacKenzie, & Hickman, 2000; MacKenzie, 1997). To address this deficiency, the current study employs a quasi-experimental design to evaluate the effectiveness of residential substance abuse programs to reduce recidivism among offenders under community corrections supervision.

Method

This research used a quasi-experimental design to examine the hypothesis that high-risk offenders under community corrections supervision who participated in residential drug treatment would have lower rates of recidivism than a matched group of offenders who did not receive treatment. While randomization to the treatment or control condition is the "gold" standard (Maxfield & Babbie, 1995), this study was a retrospective evaluation of offenders who had previously participated in treatment; thus, it was not possible to conduct a randomized experiment. An alternative option was to match offenders on factors related to the dependent variable, recidivism (Cook & Campbell, 1979).

During the period December 2001 to June 2002, 82 probationers/parolees were funded to participate in residential drug treatment—these participants comprised the treatment group. The control group was constructed by matching the treatment participants to 82 offenders with similar demographics and criminal history who did not attend substance abuse treatment. The treatment participants were matched to controls based on sex, race, age, probation district, primary offense, and supervision level (a proxy for criminal history). It is possible that relevant variables were not included in the matching process; however, the literature has consistently found that the factors on which the offenders were matched are strongly related to recidivism (Chung, Hill, Hawkins, Gilchrist, & Nagin, 2002; Farrington, 1995; Hepburn & Albonetti, 1994). The follow-up period for the study was 18 months.

Program Description

The participants of this study were sampled from one of seven treatment facilities located in a southeastern state that provided residential drug treatment to offenders who were under the community supervision of the state department of corrections (DOC). The programs were designated approved providers and were similar in the services they provide their clients, each offering residential treatment that included individual and group therapy, family counseling, psycho-education, relapse prevention, and aftercare. All of the facilities also addressed similar issues in counseling, such as motivational issues to resist drug use, identifying triggers for

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drug use, reinforcing and creating new coping skills that do not involve drug use, replacing drug-using activities with non-drug-using activities, and the legal consequences of continued drug use. In addition, all of the facilities offered services to address domestic violence and physical abuse, HIV/AIDS testing and education, and postdischarge follow-up.

The treatment centers were also similar in the types of clients they treated. The average age of the clients they served was mid-30s and most frequently presented with cocaine or opiate abuse. Clients were primarily daily users, and most had been using drugs and/or alcohol since they were adolescents. All the facilities employed the services of recovering addicts and reported high completion rates for criminal justice clients.

There were two primary differences between the treatment centers. Length of stay in treatment varied by program; however, all of the programs required a minimum of 1 month stay. In addition, the facilities differed in the proportion of the population represented by criminal justice clients (i.e., clients currently in the system whose stay at the treatment center was funded by DOC). The two largest facilities reported that criminal justice clients were approximately 50% of their population, and the remaining five facilities estimated that criminal justice clients comprised 10% to 25% of the population. All of the treatment programs advised that the criminal justice and noncriminal justice populations interacted, both in programming and socially.

Data Collection

Official criminal records and probation officer and treatment provider reports were the sources for pretreatment data as well as posttreatment data for a period of 18 months following the completion date of treatment for the experimental group and the start date of supervision for the control group. For the experimental participants who did not complete treatment, the follow-up period began on the date of discharge from treatment to the community. A questionnaire was mailed to the probation officer of each study participant requesting information on demographic characteristics (i.e., sex, race, age, marital status, and education level); primary offense; criminal history; histories of substance abuse and mental health treatment; and number of technical violations, new criminal arrests, and revocations. Criminal history and recidivism data were also obtained from the state police criminal information database. This included historical and follow-up data on number and type of arrests and convictions. The state institution and local jail information systems were searched to locate historical and recommitment data.

Measures

Independent variables. The primary variable of interest was treatment participation. The study examined whether attending residential drug treatment reduced recidivism

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among high-risk offenders under community corrections. Those receiving treatment services were compared to a matched control group of offenders who did not receive treatment services.

The matching variables included sex and race of the offender, with males and African Americans coded 1. In addition, offenders were matched on date of birth, which was used to compute their age. The district in which offenders were supervised was used as a matching factor to account for potential regional effects. Offenders were matched by specific district; however, the variable was aggregated into central, eastern, or western region. The western region served as the reference category.

Offenders were also linked according to the crime codes for their primary offense. In instances where an exact match could not be made, a code within the same category was selected that had similar sentencing guidelines (e.g., if the treatment participant had a primary offense of Schedule I or II Drugs, Distribution, but an exact match was not available in the database; the offender was matched according to the most analogous offense, in this case, Schedule I or II Drugs, Possession, with intent to sell, distribute, etc.). After offense-specific matching was completed, offenses were aggregated into one of four categories: drug, property, violent, or other. The other group represented the variable of reference with three dummy variables included for the remaining offense categories. The final matching variable was supervision level, coded as intensive, regular, or relaxed, where relaxed served as the reference category and intensive and regular supervision were dummy variables.

Given the nonrandom design of this study, a number of risk factors identified as best predictors of recidivism were measured (Farrington, 1995).[1] These factors fall into the domains of social bonds, substance abuse, and criminal history. Two measures of social bonds were created: marital status and level of education. Marital status was comprised of three categories, single (the referent group), married/cohabitating, or divorced/separated, based on the hypothesis that the latter two variables represent stronger social bonds than being single. Education was a dummy variable coded 0 for high school dropout and 1 for high school graduate/more, where the latter indicated a stronger bond to society.

To capture substance abuse, two dichotomous measures were created. The first was a variable that measured history of alcohol/drug treatment based on the probation officers report. The second was a dichotomous measure for prior drug arrest. Although these two variables are not the optimal measure of substance abuse, they are frequently used in substance abuse research (Belenko, 1998) and were the best measures available.

Several measures of criminal history were created; all of the measures were based on official adult records. Arrest measures included an official record of at least one prior adult arrest, whether prior arrest included any violent offense, and mean number of prior arrests. Two variables representing conviction history were recorded: any official prior conviction and mean number of prior convictions. Last, a history of at least one prior incarceration was used to measure criminal history.

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Dependent variables. Multiple measures of recidivism were created from official criminal records for an 18-month time follow-up period. Official data were used to create the following variables: number of new arrests, number of new incarcerations, proportion of new arrests, type of offense, proportion of new convictions, and proportion of new incarcerations occurring during the 18-month follow-up period.

Data Analysis

Chi-square tests were conducted to examine differences between the prevalence of arrests, convictions, and incarcerations for the treatment and control groups. It is important to note that, due to the small sample sizes, analyses may have lacked the statistical power necessary to detect significant differences; thus sole reliance on statistical significance at the disregard of substantive significance is inadvisable (Cohen, 1988; Dixon, 2003). Analyses also included comparisons of mean changes in recidivism from the pre- to the postintervention period by group.

Findings

Sample Description

The present analysis included the 162 offenders who either participated in treatment or served as the matched comparison.[2] Chi-square and *t*-test procedures were utilized to compare the two experimental conditions. The descriptive analysis is presented in Table 1. An examination of the table suggests that the research design was successful in creating comparable groups of offenders on the matched factors.

Both the treatment and control groups consisted of 81 participants, 70% male and 30% female; and 62% African American and 38% White. Although the average age of the treatment group (mean = 36) was higher than that of the control group (mean = 34), this difference was not statistically significant according to conventional standards. Similarly, there were no significant differences in supervision level between the treatment and control group, with the majority of both groups on regular supervision or intensive supervision. Most of the offenders in the sample were supervised in the central region, and 30% of each group represented both the eastern and western regions.

The type of primary offense for which each offender was convicted also did not differ significantly between groups. For both the treatment and control groups, a drug conviction constituted the majority of cases, followed by a property and a violent offense.[3] There were slightly more property offenders in the control group, whereas more drug and violent offenders comprised the treatment group (*ns*).

In addition to the matching factors, a number of other characteristics of the probationers are presented in Table 1 by experimental condition. According to

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Table 1
Sample Characteristics by Experimental Condition, *N* = 162

Variable	Group	
	Treatment (%)	Control (%)
Sex		
Male	70	70
Female	30	30
Race		
African American	62	62
White	38	38
Mean age (*SD*)	36.0 (8.6)	33.7 (8.3)
Supervision level		
Relaxed	4	1
Regular	62	67
Intensive	35	32
Region		
Central	41	41
Eastern	30	30
Western	30	30
Primary offense at conviction		
Drug	49	46
Property	33	40
Violent	14	11
Other	4	4
Education		
Less than high school	54	48
HS graduate/GED/more	46	52
Marital status		
Single	60	64
Married/cohabitate	9	16
Divorced/separated	31	20
Employment status		
Full-time	38	46
Part-time/irregular	30	15
Unemployed	33	40
History drug treatment*	58	40
History drug arrest	68	57
Prior arrest(s)	98	96
Mean number prior arrests (*SD*)	8.9 (7.4)	7.5 (7.1)
Prior violent arrest(s)	64	52
Mean number prior convictions (*SD*)	7.9 (8.0)	5.9 (6.5)
Prior incarceration(s)**	88	68

*$p < .05$. **$p < .01$.

information provided by probation officers, a smaller proportion of offenders in the treatment group graduated from high school or received a GED compared

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to the control group. The vast majority of participants in both groups were single and treatment participants had a higher prevalence of divorce/separation and lower proportion of marriage/cohabitation than their counterparts. There were also some substantial differences in employment for the two groups: those in the control group were more likely to be either employed full-time or unemployed than those in treatment, whereas treatment clients were more likely to have either a part-time job or irregular work compared to controls.

With respect to drug treatment history, not surprisingly, probation officers reported that the treatment group had a significantly higher percentage of offenders with a history of participation in drug treatment in comparison to the control group ($\chi^2 = 5.21$, $p < .05$). Official criminal records indicated that offenders in the treatment group were more likely to have a prior drug arrest than controls but this difference was not significant.

Table 1 also indicates that both groups had fairly extensive criminal histories. Nearly all study participants had at least one prior official arrest (98% of the treatment group and 96% of the control group). The two groups were relatively similar on prevalence of conviction but they differed significantly on history of at least one prior incarceration. A significantly greater proportion of those in the treatment group having experienced a period of incarceration either in jail or prison relative to the control group (88% vs. 68%, respectively; $\chi^2 = 9.14$, $p < .01$). There were three criminal history measures for which the differences between groups approached significance: the treatment group had an average of 8.9 prior arrests, 7.9 prior convictions, and 64% had a violent arrest on their record. For these three measures, the criminal history of the control group was less serious: controls had an average of 7.5 prior arrests and 5.9 prior convictions, and 52% were previously arrested for at least one violent offense. These findings suggest the treatment group presents a more serious risk than the control group. The evidence that our participants displayed a history of substantial criminal involvement adheres to the principles set forth by Cullen and Gendreau (2000) recommending that treatment be directed at moderate to high-risk offenders to obtain the largest benefit.

Comparison of Residential Treatment vs. Matched Control Group

Chi-square tests were performed to investigate the hypotheses that the treatment group would perform better than the control group on a number of recidivism measures. The analyses of postprogram recidivism for the full sample are presented in the top half of Table 2.[4] In all, 55% ($N = 89$) of the sample was arrested during the 18-month follow-up period. There were slightly more recidivists in the treatment group with approximately 58% of treatment participants versus 52% of the control group evidencing an official arrest. Also, 48% of offenders in treatment were incarcerated during the follow-up period compared to 36% of those in the control group. Conversely, roughly 36% of controls had a new conviction in comparison to 30% of those in treatment.[5]

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Table 2
Recidivism Outcomes by Experimental Condition

Recidivism Measure	Group	
	Treatment (%)	Control (%)
Full sample ($N = 162$)		
% Arrest	58	52
% Conviction	30	36
% Incarcerated	48	36
Arrest subsample ($N = 89$)		
% Property arrest	15	24
% Violent arrest	13	21
% Drug arrest	13	21
% Other arrest*	60	33

*$p < .05$.

To determine whether residential treatment had an effect on the type of criminal behavior, those arrested were compared on offense type. The bottom half of Table 2 presents chi-square test results of differences between the arrested treatment and control group. There was a statistically significant difference between the two groups for "other" offense, with those in treatment displaying a greater proportion of other arrests (60%) than those in the control group (33%; $\chi^2 = 6.13$, $p < .05$). Probation violation made up the majority of the cases in the other offense category and, in most instances, the charge was for a violation of supervision requirements rather than a new crime.

It is noteworthy to mention that the differences between groups, while not significant, were substantial for property, violent, and drug arrests. Given the small number of cases that were arrested in the follow-up period (i.e., 47 from treatment and 42 from the control group), differences would have to be quite large to obtain a statistically significant effect. Nevertheless, the findings indicate that the treatment group fared better than controls when compared on offense type. Among the arrested subsample, 15% of treatment participants compared to 24% of controls were arrested for a property offense. Similarly, controls who were arrested displayed a greater proportion of arrests for violent offenses than offenders in treatment who were arrested (21% vs. 13%, respectively). Finally, 21% of arrested control participants compared to 13% of treatment participants were arrested for a new drug offense.

In all, the findings show that the treatment group was more likely to be charged with a probation violation, whereas controls were substantially more likely to be arrested for a criminal offense. The literature has consistently indicated that intensive supervision significantly increases rates of technical violations (Petersilia & Turner, 1993). That was also the case in this sample of offenders. For example, among the offenders on intensive probation supervision, treatment participants were drug tested an average of 18 times compared to a mean of 11.5 for the control group

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Table 3
Mean Change in Measures of Recidivism, Pre- to Postintervention

	Arrest			Incarceration		
Group	Pre	Post	Change[a]	Pre	Post	Change[a]
Treatment	1.370	1.235	–0.135	2.321	1.049	–1.272
Control	1.469	1.642	+0.173	1.519	0.667	–0.852
Difference			.308			.420

a. Plus sign indicates an increase and minus sign indicates a decrease in the difference between mean averages from T1 to T2.

(t = 1.54, *ns*). Among those on regular probation, urinalyses were administered to those in treatment an average of 16 times, double that of controls with a mean of 8 (t = 3.04, $p < .01$).

Mean Change in Recidivism, Pre- versus Postintervention Period, by Group

Thus far, the analysis has focused on absolute differences in recidivism, or the observed difference in proportion between the treatment and control groups. Given that the measures of social bonds and criminal history indicated the treatment group was more high risk than the control group, a comparison at one point in time fails to account for these differences. Therefore, analyses were conducted to examine relative differences, or mean changes, in offending behavior. Table 3 illustrates the change in average number of rearrests and incarcerations (to jail and/or prison) within the treatment and control groups and the difference in mean change in arrests and incarcerations between the treatment and control groups from the pre- to the postintervention (T1 to T2) period.

At the preintervention period, the average number of arrests in the 18 months prior to program entry was 1.37 for the treatment group and 1.47 for the control group. At T2, the average number of official arrests decreased to 1.24 for the treatment group but increased to 1.64 for controls. This amounts to a mean reduction in number of arrests from T1 to T2 of .13 for the treatment group, whereas the control group showed a mean increase of .17. The change score between these two values equals .308. These findings indicate that exposure to treatment reduces recidivism in the form of decreasing the average number of rearrests.

The average change in number of incarcerations from T1 to T2 decreased for both groups. For the treatment group, the mean reduction in number of incarcerations was 1.27 compared to .85 for the control group. The change score equals .420. The treatment group experienced a larger reduction in mean incarcerations in comparison to the control group, again suggesting a positive effect of residential drug treatment.

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Conclusions

The current study used a quasi-experimental research design to evaluate the effectiveness of residential drug treatment in reducing recidivism for high-risk offenders under community corrections supervision. Specifically, 82 probationers who attended one of seven drug treatment programs were matched to 82 probationers who did not attend treatment on sex, race, age, probation district, primary offense, and supervision level. The findings revealed mixed support for the efficacy of drug treatment.

Based on statistical convention, the groups did not differ on absolute measures of arrest, conviction, and incarceration during the postintervention period. For both official arrests and convictions, there was a 6% point difference (*ns*) between groups; arrests were more prevalent among treatment participants whereas control participants had a greater percentage of convictions. Furthermore, the results also showed that a substantially greater proportion of offenders who participated in treatment were incarcerated postintervention in comparison to offenders in the control group (48% vs. 36%, respectively; *ns*). Although this outcome may call into question the efficacy of treatment, it was not unexpected.

Residential drug treatment is considered the "end of the line" in community corrections sanction options. In other words, placement in a drug treatment facility is one of the final options afforded to an offender before the probationer is sent to jail/prison. Therefore, the offenders who made up the treatment group had generally exhausted the less-intensive sanctions, such that any subsequent violations or crimes would lead to incarceration. This may also partially explain why the treatment group was more high-risk than the control group.

In examining the subsample of offenders arrested, the findings showed that those in treatment had a significantly larger proportion of "other" offenses compared to controls. The other offenses were predominantly charges for a violation of supervision requirements rather than a new crime. These results are consistent with findings from the intensive supervision probation (ISP) literature that has shown that ISP participants have higher revocation rates, primarily for technical violations, but similar rates of new crimes than other offenders (Petersilia & Turner, 1993; Turner, Petersilia, & Deschenes, 1992). Although participants in this sample were matched according to supervision level, results indicated that probationers who received residential drug treatment were supervised more intensively than controls. It is possible, then, not that treatment and control participants were in violation of supervision at differing rates, but that offenders in treatment were more likely to be detected because of stricter monitoring levels placed on them by their supervising officer.

Conversely, the study found that treatment participants arrested at follow-up had a substantially lower prevalence of property, violent, and drug arrests than controls who were arrested. Given the strong relationship between substance use and crime (Exum, 2002; Goldstein, Bellucci, Spunt, & Miller, 1991; Klein, Maxson, & Cunningham, 1991; Lennings, Copeland, & Howard, 2003; Lurigio & Swartz, 1999; Spiess &

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Fallow, 2000), one possible explanation is that these types of criminal behavior were lower for those in treatment as a result of decreased drug use. Unfortunately, this conjecture is not testable with the existing data as there is no reliable information on drug test outcomes. Nevertheless, the reduction in arrests translates into increased public safety and potential correctional cost benefits. Decreases mean fewer victims (Klaus, 2002) as well as savings in costs related to detaining a defendant pending trial (VanNostrand, 2003).

An examination of mean changes in offending from pre- to postintervention indicated that the treatment group fared better than the control group in new arrests and incarcerations. Specifically, the average number of arrests from T1 to T2 decreased for the treatment group but increased for the controls. Furthermore, while the mean number of incarcerations decreased from T1 to T2 for both groups, the decrease for the treatment group was larger than that of the controls. Overall, the findings are promising and provide partial support for the hypothesis that high-risk offenders who participate in residential drug treatment will have lower rates of recidivism than a matched group of offenders who did not receive treatment. These study results justify continued examination into the efficacy of substance abuse treatment for high-risk offenders under community corrections supervision.

The findings of this study highlight a number of important considerations in treatment assignment and delivery. First, the offenders participating in residential treatment were clearly moderate to high-risk offenders. According to the risk principle of evidence-based practices, residential treatment directed at high-risk offenders will produce the most positive treatment effects (Andrews, 2002; Lowenkamp & Latessa, 2005; Lowenkamp, Latessa, & Holsinger, 2006; Wexler, Melnick, & Cao, 2004). The research has also shown that intensive drug treatment is most cost effective among high-risk cases (Griffith, Hiller, Knight, & Simpson, 1999). The descriptive analysis showed that the treatment group was comprised of offenders with poor social bonds and a serious criminal history, including incidents of violence and prior incarceration(s). Large proportions of offenders lacked a high school diploma, were unemployed or only employed part-time or irregularly, were largely single or divorced, and evidenced substantial drug problems. Although this study was not able to compare high-risk to low-risk offenders on outcomes to test the veracity of the risk principle, the findings do indeed suggest that high-risk offenders were amenable to treatment and that treatment does work in reducing reoffending among individuals often perceived to be impervious to change.

Second, in this study, the treatment group was more high risk than the control group based on measures of social bonds, substance abuse, and criminal history. For this reason, it was important to consider relative behavior change. The study found that the average number of arrests and incarcerations decreased for those participating in treatment from pre- to postintervention. It would be imprudent to assume all criminal behavior would be eliminated based on one treatment episode. The evidence consistently shows that relapse rates are high among substance abusers, ranging

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from 50% to 80% and that, given the chronic nature of the disease, addiction often requires multiple episodes of treatment to achieve abstinence (National Institute on Drug Abuse, 2000). Nevertheless, these results indicated that treatment participation substantially reduced the amount of criminal activity in which offenders participated; thus, drug treatment is an effective crime-reducing option for high-risk offenders.

To date, there are few treatment studies that utilize experimental methods to determine drug treatment effectiveness. The present study employed a quasi-experimental research design (i.e., matched treatment and control group) to address some of the methodological shortcomings in current treatment research. The findings were encouraging; nevertheless, there exist a number of limitations that should be noted. First, although rigorous in comparison to much of the existing drug treatment literature, because this study was not a randomized experiment, there may exist other important variables not accounted for that may distinguish the two groups. Although these other factors may explain the results, the significant findings detected in the present study could arguably be a conservative estimate of the true treatment effect as the treatment group, with a more extensive criminal history, was at higher risk for reoffending than the control group. Second, a larger sample size would have been preferable. Beyond decreasing the chance of a Type 2 error, a larger sample size would allow for additional types of comparisons, such as by offender characteristics or program components, to determine mediating effects.

Furthermore, although the residential treatment programs operated primarily from a cognitive-behavioral theoretical orientation and generally provided similar types of services (e.g., 12-Step attendance, drug education, relapse prevention, family therapy), there were potential differences between the programs that could account for the results or mask potential treatment effects. For example, not all of the treatment programs provided dual diagnosis treatment; however, research consistently finds that a large proportion of substance abusers, both in the general and offender population, also exhibit a co-occurring mental health disorder(s) (Bradizzi, Stasiewicz, & Paas, 2006; Grella, Greenwell, Prendergast, Sacks, & Melnick, 2008; Kessler et al., 1997; McMillan et al., 2008; Swartz & Lurigio, 1999). Given that treating co-occurring disorders simultaneously is necessary to improve psychological functioning and reduce relapse (Curran, Flynn, Kirchner, & Booth, 2000; Hasin et al., 1996; Ouimette, Moos, & Finney, 2003; Sacks et al., 2008), it is possible that study participants who received mental health services in addition to substance abuse treatment would experience more positive outcomes than those not treated for mental illness. Similarly, because these were community-based residential programs contracted by the DOC to provide substance abuse treatment, the programs differed in the proportion of criminal justice clients who received services. Differences in client characteristics could influence the content of programming to the extent that treatment providers focus more or less on offender-specific needs in therapy. Consistent with EBP research on offenders, programs that primarily target criminogenic needs for change should have the greatest impact on reducing recidivism.[6]

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Nevertheless, clients in all of the treatment programs received individual counseling where criminal justice participants could address their particular needs. Unfortunately, it was not possible to examine differences across treatment programs because of the limited sample size. Finally, the study would have benefited greatly had reliable indicators of drug use, both during and postintervention, been available. As this was a retrospective design, a systematic data collection mechanism was not in place for recording of urinalysis results. Collecting data on drug use during treatment is essential as not only does it signal relapse but it is also a strong indicator that the offender will also return to criminal behavior.

Although we have amassed a wealth of evidence that shows "treatment works" to reduce recidivism among offenders, many policymakers continue to advocate for punitive responses for drug offenders (e.g., mandatory minimum sentences). These "get-tough" policies and practices, spurned on by the "war on drugs," have contributed to the dramatic increase in the incarceration rate that has characterized our Nation's correctional system for more than 30 years (Pew Center, 2008). The findings from the present study provide evidence that many drug offenders can safely be monitored and treated in the community. Many legislators and constituents either do not know this or do not believe it to be true—in either case, it is necessary to educate policymakers and the public about the efficacy of best practices in community corrections to increase support for prison alternatives. As many addicted offenders are aware and criminal justice practitioners will acknowledge, drug treatment is not a "slap on the wrist" but rather an effective correctional mechanism to hold offenders accountable for their actions. To suggest otherwise dismisses the fact that getting and staying clean and sober is arduous work.

Notes

1. The measures of sex, race, and region were excluded from the analysis because of the exact match across groups for these variables. Included were age, supervision level and primary offense given some differences across the treatment and control groups.

2. The analysis excluded 2 participants, 1 from each group, who died during the study period.

3. Other offenses accounted for 4% of both the treatment and control groups primary offense; these were mainly driving-related offenses, such as driving with a revoked license.

4. Additional multivariate analyses were conducted to control for potential confounding factors, including age, days at risk, history of drug treatment, and criminal history. The results from the multiple logistic regressions mirrored those obtained in the bivariate analyses. The results are available from the author on request.

5. None of the differences in proportion were significant.

6. Although this does not suggest that other needs, such as trauma or self-esteem, are not important factors to address in drug treatment to reduce substance abuse, there is no evidence that noncriminogenic needs are related to a reduction in recidivism (Cullen & Gendreau, 2000).

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Deanna M. Pérez is an assistant professor in the School of Public Affairs at the University of Colorado Denver. She received her PhD in criminology and criminal justice from the University of Maryland. Her research interests include correctional rehabilitation and evidence-based practices, offender substance-abuse and treatment issues, and gender and crime.

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