Outcome Research as an Integral Component of Performance-Based Offender Treatment

by Ralph Fretz, Kirk Heilbrum and Devon Brown

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Introduction

The purpose of this article is to illustrate the findings of an outcome research project that was designed by researchers from Drexel University and implemented in conjunction with New Jersey Department of Corrections. In an attempt to evaluate the outcomes of correctional treatment, New Jersey Governor James McGreevey's administration through Department of Corrections (DOC) Commissioner Devon Brown, specifically, endorsed and supported the following study. The New Jersey Department of Corrections has recognized the importance that its correctional treatment programs need to be performance-based with outcome data as a critical component in order to evaluate the effectiveness of programs.

National interest in the efficacy of correctional treatment for the offender population has continued to grow (Bonta & Andrews, 2003). Recidivism of offenders is a public safety concern with national rates of recidivism minimally exceeding 67% within the first three years post-incarceration (Bureau of Justice Statistics, 2002). More than two-thirds of the recidivism occurs within the first year post-incarceration. While it is important to protect society from dangerous offenders through incarceration, it is also important that proven risk reduction methods be used to decrease the offenders' rate of re-offending. The successful reintegration of ex-offenders back into society is a public health priority that is important from a public-safety, as well as a financial perspective.

Releasing an inmate into society with the necessary tools to be a productive citizen is sound public policy. Often, the co-creation of a partnership between correctional departments and private corporations with expertise in correctional treatment provides a vehicle to design correctional programs that are cost-effective and efficient. Cost-benefit analysis of reducing recidivism varies from savings of $6,000 per offender to $16,500 per offender in 1997 dollars. This figure takes into account the cost of offender treatment and is probably an underrepresentation of the costs associated with arresting and processing an offender (Cohen, 2001). Other ancillary benefits associated with effective treatment include: reduced incarceration costs, reduced welfare payments, reduced government-subsidized medical costs, and increased tax revenue (Cohen, 2001). Intangible benefits include an increase in public safety in the community and less victimization.

Although research has proved that correctional treatment is effective, programs vary in their ability to reduce recidivism, because some concentrate on promising targets for treatment, while others focus on less promising targets such as increasing the offender's self-esteem (Bonta & Andrews, 2003; Gendreau, Little & Goggins, 1996; Gendreau, 1996). Offender programs that administer a comprehensive risk and needs assessment are capable of differentiating between the high-risk offenders who should not be released into the community and/or need intensive treatment, from low-risk offenders who require minimal treatment and supervision to be successful (Bonta & Andrews, 2003). The comprehensive assessment data then guide the development of the treatment plan that is created for the offender targeting the most promising risk-reducing variables. Effective correctional programs include a continuum of care plan that provides a seamless transfer of information as the offender progresses through the penal system. There is risk that treatment gains will be lost if a continuum of care model is not followed. Treatment programs that include clean facilities, experienced staff, effective culture, evidence-based treatment, and aftercare decrease the risk that inmates will re-offend, and increase offenders' coping skills as they transfer from the correctional system back to society (Zamble & Quinsey, 1997.)

Programs that provide services to offenders are coming under greater scrutiny to produce outcome data that indicates the value of its treatment. To base a program's effectiveness on anecdotal evidence is not sufficient. Programs need to conduct outcome research in order to evaluate the effectiveness of its treatment, and provide "hard" data that recidivism has been significantly reduced in the treatment group. Outcome research is a critical component of any effective program as the results are used to evaluate the usefulness and fidelity of the treatment (Cooke & Philip, 2001).

The following description includes a normative study that was designed and implemented by Drexel University's Joint Law and Psychology Doctoral Program. The normative study was designed to evaluate select risk factors in a group similar to the treatment group. The outcome data was designed and implemented by Drexel University researchers in conjunction with staff from the New Jersey Department of Corrections. A list of inmates who were released in the year 2000 and completed the Community Education Centers (a private treatment corporation that partners with departments of corrections) continuum of care treatment, was forwarded to the New Jersey DOC staff. Staff randomly chose 177 offenders from the larger pool of inmates. This group was designated the treatment group. The NJDOC staff then randomly chose 400

inmates who were released from work camps during the year 2000 to act as a control or no-treatment group. The rate of recidivism for both groups was gathered by the DOC with the statistics for rearrests, reconvictions, and reincarcerations sent to Drexel University for data analysis. Drexel researchers also compared the treatment and no-treatment group rates of rearrest with the rates of rearrest from BJS's most recent national study on recidivism.

CEC Characteristics Versus National Correctional Sample

Drexel University researchers randomly selected the files of 585 offenders (see Table 1). The CEC sample means were compared against national means from the 2002 BJS study. Inmates from the BJS national sample were released in 1994 and followed for three years post-incarceration. This sample included inmates from 15 states, among them New Jersey.

Table 1. Profile of Offender Characteristics

	CEC (N=585)	BJS (N= 272,111)
Gender		
Male	100%	91.3%
Female	0%	8.7%
Mean Age	31	31
Race/Ethnicity		
Black	71.3%	48.5%
Hispanic	14.7%	12.6%
White	13.3%	38.9%

As may be seen from Table 1, the mean ages for the CEC and BJS samples were comparable. The CEC sample includes a higher proportion of black offenders (71.3 percent versus 48.5 percent) than the national sample. The mean number of arrests for the CEC sample was 11.4, with a mean number of 6.8 convictions. A more extensive criminal history is universally considered a risk factor for re-offending. All of the CEC offenders were male, whereas the BJS sample was 91.3% male. Research literature indicates that males offend at a significantly higher rate than females.

CEC Outcomes Versus New Jersey DOC

Next, project researchers considered the CEC continuum of care process in relation to recidivism. Researchers compared the rates of rearrests, reconvictions, and reincarcerations for CEC residents who successfully completed the continuum of care process with the rate of rearrests, reconvictions, and reincarcerations for offenders who were released into the community from the New Jersey DOC work camps. The DOC offenders served as a comparison group. The rearrest rate for CEC residents was also compared with the national norms as developed by the 2002 BJS recidivism study.

Researchers provided the DOC with a list of all offenders who completed treatment in a New Jersey CEC Assessment Center, and graduated a to a CEC-operated treatment/work release program during the year 2000. From this group, the DOC randomly selected 177 residents. A comparison group of 400 offenders was also randomly selected by the NJDOC from the total population of offenders released from DOC work camps during 2000. The two groups were matched on race. All CEC residents had current serious substance abuse problems and extensive criminal histories. However, this was not the case with the DOC comparison sample -- the latter group was not screened for substance abuse, so it is unclear what proportion had a substance abuse problem.

The CEC group was significantly younger than the DOC group. Of the CEC group, 19.9 percent was in the 18 to 25 age range, while 3.8 percent of the DOC group was in the 18 to 25 age range. In addition, 23.3 percent of the CEC group was in the 36 to 45 age range, while 32.8 percent of the DOC group was in that range. Statistical analysis of the two groups' ages indicated that that there was a significant difference between the two groups. The results of a T-test for equality of means indicated that the difference was significant at the 0.002 level. Research on recidivism has found that younger offenders are rearrested, reconvicted, and reincarcerated at a higher rate than older offenders.

The post-release outcomes of each group included whether subjects had been rearrested, reconvicted, and/or reincarcerated. Comparisons of the groups were made at three times: six months after release, nine months after release and twelve months after release.

The 2002 BJS national recidivism study found that the first year is the period when much of the recidivism occurs, accounting for nearly two-thirds of all the recidivism of the first three years. After six months, the CEC group had been rearrested at a significantly lower rate than the

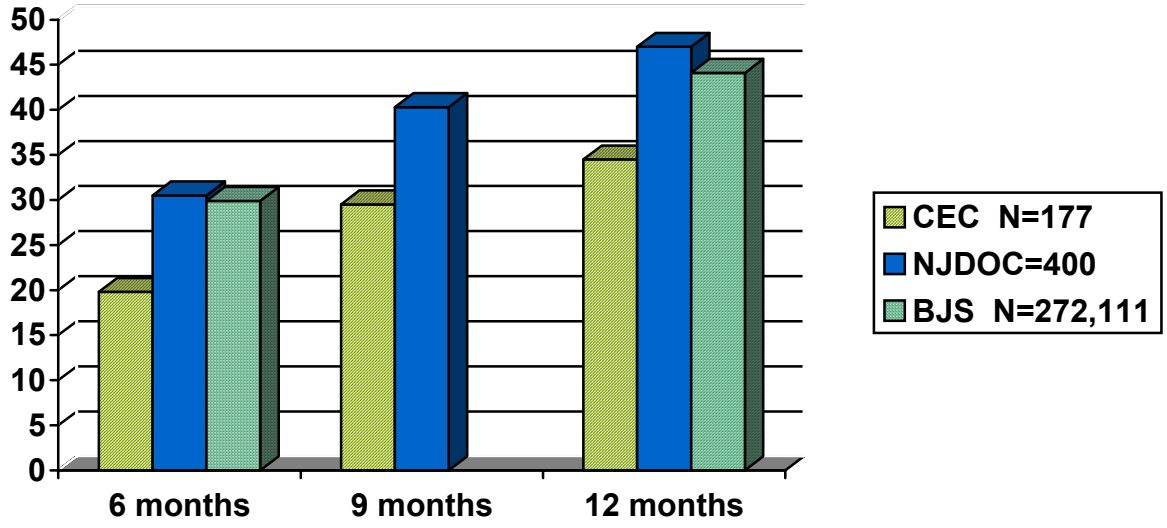
DOC group. For nine months and one year post-incarceration, the CEC group's rearrest rate was again lower than that of the DOC sample. A chi-square analysis that analyzed the one-year post-incarceration rearrest rate between the two groups found that the difference was significant (chi-square value = 11.8; $p < 0.05$).

A secondary analysis was conducted comparing the CEC sample with the 2002 BJS national sample for rates of rearrest. After six months, the CEC group's rate was significantly lower than that of the BJS sample (chi-square value = 8.7; $p = 0.01$). The BJS study did not calculate rearrests at a nine-month interval, so no comparison could be made at this time interval. The CEC group's rate of rearrest was significantly lower one year post-incarceration than that of the national sample (chi-square value = 6.7; $p = 0.01$). Comparison of reconviction and reincarceration rates of the BJS sample with the treatment and control group was not illustrated because BJS appeared to use a different method of calculation. Although this secondary analysis is not as important as the treatment versus control group investigation, it is considered of interest because the inclusion of national data enhances the generalizability of the findings**.**

Figure 1 shows the rearrest rates for the CEC sample, the DOC sample and the BJS sample. For six months post-incarceration, 19.8 percent of the treatment group (CEC) was rearrested while 30.5 percent of the control group (DOC) and 29.9 percent of the BJS group were rearrested. At nine months post-incarceration, 29.5 percent of the treatment group was rearrested while 40.3 percent of the no-treatment group was rearrested. After one year post-incarceration, 34.5 percent of the treatment group had been rearrested while 47 percent of the control group was rearrested and 44.1 percent of the BJS group was rearrested.

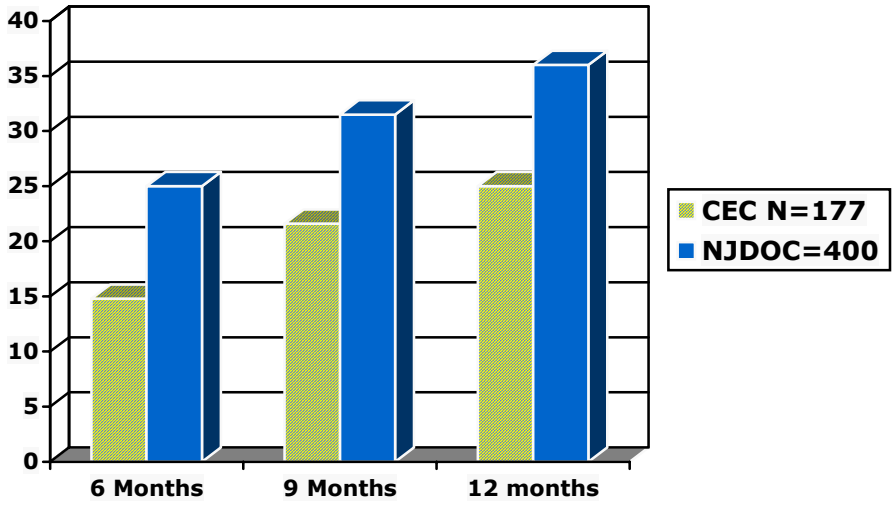
Figure 1

Treatment (CEC) Versus No-Treatment (DOC and BJS) Offender Rearrest Rates



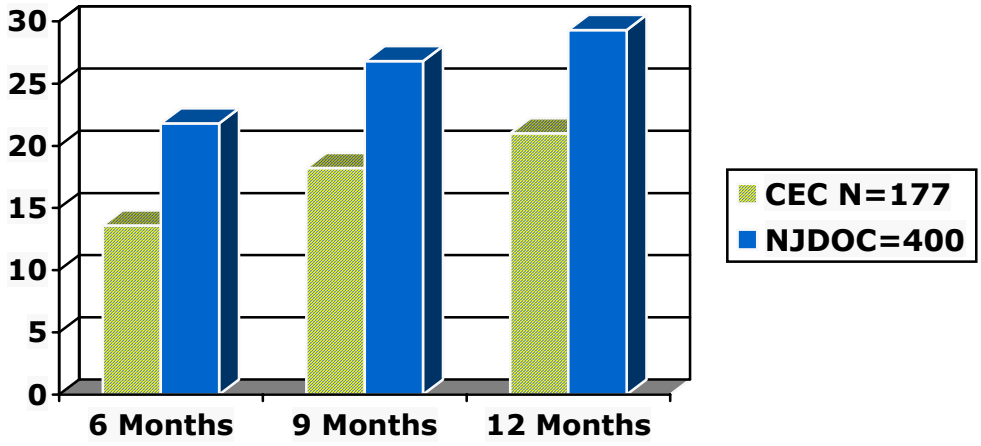
As Figure 2 indicates, the rate of reconvictions for the CEC group was significantly lower than the rate of reconvictions for the DOC group. The CEC group was reconvicted at a significantly lower rate for the first six months post-incarceration and significantly lower rate for both the first nine months and the first year post-incarceration (chi-square value = 84.23; p = 0.001 at one-year post incarceration). After six months, 14.8 percent of the treatment group had been reconvicted while 25 percent of the control group had been reconvicted. After nine months, 21.6 percent of the treatment group was reconvicted while 31.5 percent of the control group had been reconvicted.

Figure 2. Treatment (CEC) Versus No-treatment (DOC) Offender Reconviction Rates (for first rearrests)



As Figure 3 illustrates, the reincarceration rate for the CEC group was also significantly lower compared with the rate of reincarceration for the DOC group (chi-square value = 36.38; p = 0.001). The CEC group was reincarcerated at a significantly lower rate than the DOC control group for the first six months post-incarceration, at a significantly lower rate for the first nine months post-incarceration, and at a significantly lower rate of reincarceration for the first year post-incarceration.

Figure 3. Treatment (CEC) versus No-Treatment (DOC) Offender Reincarceration



Comment

This article described the results of an outcome study that was designed and implemented by Drexel University researchers in conjunction with data gathering conducted by the New Jersey DOC staff. The results of the study indicate that effective correctional treatment impacts positively on reducing the risk of recidivism in terms of rearrest, reconviction, and reincarceration during the first year post-incarceration—a time period when twi-thirds of the re-offenses occur.

When compared with a same-state samples, the treatment (CEC) sample had a significantly lower recidivism rate as reflected in fewer rearrests, reconvictions, and reincarcerations during a one-year post-release outcome period. In addition, the rates of rearrest for the CEC group was significantly lower than the national sample. This lower recidivism rate for the treatment group is noteworthy, considering that in some respects it would be considered a "high-risk sample" relative to the other two groups because it comprises offenders who:

- Have a history of more arrests and convictions than the national sample;
- Have a 100 percent prevalence rate of substance abuse problems, as contrasted with the other two groups in which this prevalence was not measured and is therefore unknown;
- Are significantly younger than the DOC group, and
- Are all males.

The statistically significant age difference, with the treatment group being much younger than the no-treatment group, is an important factor to take into consideration when reviewing the results of the study. Youth of the offender is considered the most significant risk factor along with criminal history for re-offending (Zamble, E. & Quinsey, V.L. 1997). Another significant risk factor for the treatment group was the members' documented serious substance abuse needs. Substance abuse is another risk factor that significantly impacts on rates of recidivism (Bonta & Andrews, 2003).

CEC's model of services includes a comprehensive assessment of an offender's risk and needs level, evidence-based treatment services (primarily cognitive-behavioral treatment), an effective treatment culture, and appropriately designed facilities. CEC's treatment program includes group didactics accompanied by small group interactions that integrate the lecture topics. Individual sessions are scheduled to design and to implement specific treatment goals that address the offender's criminogenic thinking patterns. Vocational, familial and educational services are offered to enhance offenders' employment opportunities, and to stabilize their family system as they prepare to re-enter their communities. The treatment culture in CEC's facilities is designed to reinforce prosocial behavior and to extinguish antisocial behavior. The treatment program adheres to the evidence-based model of program delivery that has proven to reduce recidivism in earlier research (Gendreau, Little, & Goggin, 1996)**.** The present findings suggest that this model is associated with reduced recidivism in a high-risk population, which would make this model of service delivery appealing on public safety and cost-effectiveness grounds, as well as having value for the individuals who are served. Cost estimates vary on the specific savings of reduced recidivism, but clearly, a 30 percent reduction would constitute savings of millions of dollars to the State (Cohen, 2001).

CEC is committed to partnering with the DOC and university researchers to continue to provide comprehensive treatment services with the goal of reducing recidivism. Outcome research is an important component of the CEC model, as data such as those in this article provide feedback about how well the intervention is working and have implications for more controlled investigations of the program outcomes.

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