Factors influencing the outcome of offender substance abuse treatment

Unfortunately, much of the assessment and treatment of offenders with substance abuse problems fails to recognize the varying severity of these problems.

Recent research has demonstrated that about 30% of offenders do not have substance abuse problems, 30% have low-severity problems, 17% have intermediate problems, 13% have substantial problems, and 10% have severe problems.(2)

These wide differences suggest that a range of programming is needed to meet the treatment needs of all offenders. Some individuals may need relatively little treatment to control or eliminate their substance use, while others may require more extensive intervention, administered over a longer time period, with formal maintenance and follow-up.(3) In short, not everyone needs the same amount or type of treatment.

Researchers also often fail to consider the risk of recidivism, despite the fact that research has repeatedly demonstrated a strong link between substance use and criminal behaviour.(4) The risk of recidivism may, therefore, be another important variable in predicting treatment outcome and offender post-release behaviour.

Finally, treatment performance may be crucial to predicting an offender's likelihood of controlling or eliminating their substance use. However, there are few, if any, Canadian correctional substance abuse treatment programs that comprehensively and objectively assess each participant's performance. As a result, little research has examined whether offender treatment performance influences post-release behaviour.

This article, therefore, examines the impact of these three potentially key factors (severity of the substance abuse problem, risk of recidivism and treatment performance) on the substance abuse treatment outcome of inmates who are subsequently released. The Offender Substance Abuse Pre-release program The treatment program used in this study was the prototype for a program that has since been modified and implemented nationally by the Correctional Service of Canada as the Offender Substance Abuse Pre-release (OSAP) program.(5)

Although this program was designed for offenders with intermediate alcohol and drug problems, offenders with problems of all severities (from low severity to severe) went through the program during the study period because of the lack of other available programming.

The program is highly structured and makes active use of various behavioural and cognitive behavioural approaches that have promise in changing substance abuse behaviour.(6) More specifically, the program addresses alcohol and drug education, self-management, problem solving, cognitive and behavioural skills training, social skills, job skills refresher training, leisure and lifestyle planning, relapse prevention, and pre-release planning.

The program also contains a comprehensive battery of measures designed to assess offender progress, both individually and collectively, from before entering the program to after its completion. Methodology
A total of 324 adult offenders (315 men and 9 women), ranging in age from 18 to 66, participated in the Offender Substance Abuse Pre-release program at Bath Institution between January 1990 and August 1992. Bath Institution was a minimum-security institution at the time of the study.

The final sample was ultimately made up of 317 offenders, as seven offenders did not complete the program. The average offender sentence length was 40.5 months. Just 2.5% of the sample were serving a life sentence, while almost 82% were experiencing their first term of federal incarceration (a sentence of two years or longer). Just over 37% of the sample had been convicted of a violent crime, with 28.4% having been convicted of a nonviolent offence and 34.1% having been convicted of a drug-or alcohol-related offence.

The small number of female participants precluded any analysis of potential gender differences.

The severity of offender alcohol and drug problems was assessed before offenders entered the program with three screening instruments (that were originally developed and standardized using non-offender populations): the Alcohol Dependence Scale,\(^\text{7}\) the Drug Abuse Screening Test\(^\text{8}\) and the Michigan Alcohol Screening Test.\(^\text{9}\)

The Community Risk / Needs Management Scale\(^\text{10}\) was used to determine the risk of recidivism, while offender program performance was assessed using a battery of eight measures that were administered before and after offender program participation.\(^\text{11}\)

Four of these measures focused specifically on aspects of alcohol use, including the negative effects of alcohol, strategies for declining offers of alcohol and ways of consuming alcohol responsibly. A fifth measure focused on the negative consequences of drug use, while the remaining three measures consisted of questions relating to both alcohol and drug use, such as the impact of substance use on employment.

The Offender Information System (which has since been replaced by the Offender Management System) provided all information on offender post-release criminal behaviour.

The system provided extensive quantitative information on release, conditional release revocations, reconvictions and offence types.

Information on offender post-release alcohol and drug use was obtained by examining parole officer reports in files maintained by the National Parole Board.

More than 90% of the offenders who completed the program ultimately received some form of conditional release. Of these offenders, 72.1% were released on day parole, 7.7% on full parole and 20.2% on statutory release.

The follow-up period was, on average, about 15 months, post-release. During this period, 31.4% of the sample were returned to custody -19.9% because of technical conditional release violations and 13.6% for new offences (2.1% returned because of both a technical violation and a new offence).

Review of the National Parole Board files revealed that about 73% of the offenders who were returned to
custody had used alcohol and/or drugs while on release and that substance use had contributed to the termination of their release. Severity of the substance abuse problem Offender alcohol and drug severity scores were pooled to classify each offender according to their most severe substance abuse problem (alcohol, drugs or both).

Under this classification, 16.2% of the offenders were identified as having a low-level substance abuse problem, 19.7% had an intermediate problem, 40.5% had a substantial problem, and 20.1% had a severe problem. Interestingly, 3.5% of the sample were not assessed as having either an alcohol or drug problem.

These findings indicate that approximately 80% of the offenders had alcohol problems, drug problems or combined alcohol and drug problems of sufficient severity to warrant their participation in the Offender Substance Abuse Pre-release program. The remaining 20% (those without a substance abuse problem or with a low-level problem) probably gained admittance to the program because of other information (such as case file information or interviews) identifying them as appropriate candidates.

The rate of readmission into custody (for any reason) increased dramatically according to the severity of offender substance abuse problems (see Figure 1). These differences were statistically significant ($p < .05$).

![Figure 1](image)

**Figure 1**

**Readmission Rate and Substance Abuse Severity Levels**

<table>
<thead>
<tr>
<th>Severity level</th>
<th>Readmission Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>22%</td>
</tr>
<tr>
<td>Low</td>
<td>21%</td>
</tr>
<tr>
<td>Moderate</td>
<td>24%</td>
</tr>
<tr>
<td>Substantial</td>
<td>37%</td>
</tr>
<tr>
<td>Severe</td>
<td>44%</td>
</tr>
</tbody>
</table>

Risk of recidivism Approximately 38.2% of the offenders released were assessed as being at low risk of recidivism, while the remaining 61.8% were determined to be high risk. The ultimate offender readmission rate differed significantly according to risk level ($p < .0001$). Just 14% of low-risk offenders were returned to custody (for any reason), compared to 39.4% of high-risk offenders (see Figure 2).
A similar pattern emerged in a subgroup of high-risk / high-need offenders with intermediate to severe substance abuse problems. Program performance Most of the offenders who participated in the program improved significantly on almost all assessment measures. However, a simple analysis of changes in offender responses to the battery of assessment measures (from pre- to post-program participation) revealed nothing about offender release behaviour.

A five-level performance index was, therefore, created by classifying offenders based on the number of measures on which they demonstrated improvement from the beginning to the end of the program. Interestingly, offender program performance was found to be unrelated to the rate of readmission for technical conditional release violations.

However, program performance was significantly related to the readmission rate for new offences ($p < .05$). This readmission rate dropped from 46% for the offenders with the poorest program performance to 11% for the offenders with the best performance (see Figure 3).
Offender post-release "survival" rates (those not returned to custody) were also examined by tracking offenders after release. The offenders who scored poorest on the performance index had the worst survival rate after the initial seven to eight months of release (see Figure 4). The differences were again statistically significant ($p < .05$). Key factors This study demonstrates that three important factors influence offender post-release behaviour (as measured by readmission into custody for technical conditional release violations or new offences). First, offenders with more serious substance abuse problems (alcohol and/or drugs) were returned to custody at a significantly higher rate than offenders with less severe problems.

Second, offenders identified as being at higher risk of returning to their criminal ways returned to custody at a higher rate than low-risk offenders. Similar patterns were secured for even the highest risk/highest
need offenders.

Finally, offender program performance (based on pre- and post-program assessment measures) was related to offender post-release outcome. Specifically, program performance was related to the likelihood of conviction for new offences.

Unfortunately, this study lacked a comparison group of offenders who did not receive substance abuse treatment. This would have allowed for a determination of the relative outcome improvement of treated offenders as compared to those without treatment.

Nevertheless, these findings clearly indicate that differences in the severity of offender substance abuse problems, their risk of recidivism and their program performance are important factors in predicting who is likely to return to custody after release.

The results underscore the need for a range of correctional treatment options, as well as the need for close monitoring and assessment of offender program performance during treatment. E


