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**Prison Work Program (Corcan)
Participation: Post-release Employment
and Recidivism**



**PRISON WORK PROGRAM (CORCAN) PARTICIPATION:
POST-RELEASE EMPLOYMENT AND RECIDIVISM**

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EXECUTIVE SUMMARY

This study extends Motiuk and Belcourt's (1996) initial examination of the impact of correctional employment (CORCAN) on recidivism rates for a sample of offenders ($n = 300$) who were employed by CORCAN for a minimum of six months prior to release. In addition to information regarding dispositions incurred during the follow-up period, the present study examined employment-related variables, including employment status in the first six months of release. The current study reports on a subsample consisting of 99 offenders whose employment status within the first six months of release was known.

Results from studies examining correctional employment programs and release performance have been equivocal, with some demonstrating a positive impact of correctional employment on recidivism (Canestrini, 1993; Motiuk & Belcourt, 1996; Saylor & Gaes, 1995), and others with no demonstrable effects (Markley, Flynn & Bercaw-Dooen, 1983; see Taggart, 1972). This study was conducted to investigate the impact of CORCAN on offender employability in the community and effect upon recidivism.

The results, consistent with the risk prediction literature, display an interaction between risk and identified needs and employment status in the first six months of release. Furthermore, the study illustrates the relationship between obtaining employment and subsequent recidivism; offenders who were employed in the first six months of release evidenced fewer convictions than offenders who were unemployed. Moreover, analysis of the relationship between type of release and recidivism indicated significant differences in the percentage of new violent convictions for offenders who received statutory release, compared with offenders released on day and full parole.

Implications for safe reintegration into the community and future research within CORCAN are discussed.

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PRISON WORK PROGRAM (CORCAN) PARTICIPATION, POST-RELEASE EMPLOYMENT AND RECIDIVISM

INTRODUCTION

As many offenders enter the correctional system with little employment experience and skills (Glaser, 1964; Guynes & Greiser, 1986; Taggart, 1972), unstable employment and lack of conventional ambition have been identified as important dynamic risk factors within this population (Andrews & Bonta, 1994; Gendreau, Little, & Goggin, 1996; Motiuk, 1996a; Motiuk, 1997b). The importance of dynamic risk factors in contributing to an enhanced understanding of offenders' supervision and treatment needs is widely recognized (Andrews, Bonta, & Hoge, 1990; Andrews & Bonta, 1994; Motiuk, 1996a). Employment, as a subset of dynamic needs, has received renewed interest in corrections for its potential role in contributing to safe reintegration (Gillis, Robinson, & Porporino, 1996; Motiuk, 1991; Motiuk, 1996b; Motiuk & Belcourt, 1996; Saylor & Gaes, 1996).

Recognition of the prevalence of employment needs among offenders is not limited to the empirical literature. Offenders, themselves, have expressed the need for enhanced employment skills and experience. In a survey conducted by Erez (1987), two thirds of offenders identified lack of education and employability skills as contributing to their criminogenic needs, and viewed employment training as integral for successful community reintegration. Similarly, the Offender Intake Assessment (OIA) process recently identified two thirds of offenders as exhibiting employment needs upon entry to Canadian federal correctional institutions (Motiuk, 1997a).

The assessment of criminogenic needs has progressed over the past decade, moving from reliance on first generation (clinical) evaluation to third generation techniques, which incorporate the assessment of dynamic items within actuarial tools (Bonta, 1996). This approach allows for systematic re-assessment, capable of monitoring change over time, that contributes important

information regarding supervision and more importantly, treatment, needs (Andrews & Bonta, 1994; Andrews et al., 1990; Bonta, 1996; Gendreau, Cullen, & Bonta, 1994; Motiuk, 1996a).

The Level of Service Inventory¹ (LSI; Andrews & Bonta, 1995), one of the most widely-employed third generation tools, has provided important information on the relationship between dynamic needs and recidivism. Importantly, numerous studies conducted with the LSI have provided evidence for the relationship between employment needs and recidivism (Burke, 1997; Motiuk, 1991; Rowe, 1995).

Another third generation assessment instrument (Bonta, 1996) designed specifically to incorporate dynamic risk factors is the Community Risk/Needs Management Scale (CRNMS; Motiuk & Porporino, 1989; Motiuk, 1993). The CRNMS provides information on the following dynamic need areas: academic/vocational, financial management, companions/significant others, living arrangements, behavioural/emotional stability, alcohol usage, drug usage, mental ability, health, and attitude. An overall case needs rating (low, medium, or high) is derived from a systematic review of community case file information, and the professional judgment of community case managers. A criminal history risk rating is based on the length of the criminal history, severity of the offence(s), the National Parole Board (NPB) release risk assessment, Statistical Information on Recidivism (SIR) score, likelihood of serious harm if the offender re-offends, and other risk factors. Offenders receive a criminal history risk rating of “low” or “high” based on these factors in combination with the professional judgment of the case manager.

Motiuk and Porporino (1989), in a preliminary field test of the CRNMS, found that it adequately differentiated criminogenic needs among offenders and furthermore, that it consistently predicted conditional release outcomes over a six month follow-up period. Further research on the predictive validity of the CRNMS has confirmed these preliminary findings, with risk/needs assessments consistently relating to conditional release outcome (Motiuk, 1997b).

¹ Formerly the Level of Supervision Inventory

The Case Needs Identification and Analysis, derived from the CRNMS, assesses seven need areas: employment, marital/family, associates/social interaction, substance abuse, community functioning, personal/emotional orientation, and attitude. Motiuk and Brown (1993) found that within a sample ($n = 573$) of federally-released offenders, all seven domains predicted suspension on release. Within the employment domain, nearly one-half (47.4%) of the offenders had an unstable job history. Of this group, nearly 30% were suspended during the follow-up period. Additional items related to employment performance included unreliability on the job (15.5%), difficulty with workload requirements (6.9%), and poor interpersonal skills at work (9.3%). Approximately 30% of offenders classified as exhibiting needs in the areas of unreliability and difficulty with workload were suspended within six months.

The study results presented above illustrate the extent to which offender exhibit employment deficits, and demonstrate the relationship between employment needs and recidivism. Various options have been proposed and enacted in the attempt to respond to employment skills deficits in offenders. Institutional employment programs, traditionally comprised of industries operations, constitute one of the primary mechanisms for responding to offender employment needs. The following section briefly reviews the institutional employment literature for its impact on work-related outcomes for offenders.

The role of prison industries

Prison industries play an important role in the daily operation of correctional facilities, particularly with respect to providing structure and maintaining order among offenders (Greiser, 1996; Guynes & Greiser, 1986). Moreover, correctional industries have received increasing recognition for their potential rehabilitative benefits (Gillis et al., 1996; Saylor & Gaes, 1996).

The perception of the role of prison industries has fluctuated with dominant correctional ideology (Miller & Grieser, 1986). As Funke, Wayson and Miller (1982) note, the role of prison industries has changed radically from its

inception. Prison industry, regarded primarily as a punitive means to “reform the misguided” in the eighteenth century, was later envisioned as an important component in the rehabilitative process (Funke et al., 1982). However, disenchantment with rehabilitative programs, generally, culminated in Martinson’s (1974) “nothing works” allegation. A more critical analysis of correctional programs resulted in recognition of the need for meaningful programs that adequately address offenders’ needs. More recently, the role of prison industries is conceptualized as providing employment skills and habits that contribute to reintegration upon release (Fabiano, LaPlante, & Loza, 1996; Funke et al., 1982; Gillis et al., 1996).

Guynes and Grieser (1986) present a typology of goals relating to correctional industries that addresses the impact of prison employment on the offender, the institution, and society. Institution-based goals contribute to the orderly operation of the institution and include the attainment of such objectives as reducing idleness, structuring daily activities, and reducing costs within the correctional agency (Greiser, 1996; Guynes & Greiser, 1986). The reduction of idleness has been a goal since the inception of offender-based employment programs, as it addresses the important custodial function of occupying offenders in a constructive manner during incarceration (Greiser, 1996; Maguire, 1996). Additionally, offenders employed with prison industries may adapt better to institutional life (Flanagan & McGuire, 1987; Gleason, 1986). For example, Maguire (1996) reported that prison industry contributed to a reduction in the number of institutional infractions incurred by offenders employed by correctional industries, relative to a comparison group who did not participate in industrial programs. Similarly, Saylor and Gaes (1995) found that relative to a comparison group, offenders who participated in industries, vocational training or apprenticeship programs were less likely to receive misconduct reports in the year prior to release.

Society-based goals involve repayment to society through such means as financially assisting dependents in the community, and providing victims with restitution. These goals are based on the premise that offenders are responsible for repaying the costs resulting from their criminal actions. Furthermore, their

contribution to the production of goods for the state serves to defray some of the costs associated with their incarceration (Guynes & Greiser, 1986).

Most important in relation to rehabilitation and reintegration, offender-based goals include such areas as attainment of positive work habits, real work experience/vocational training, and more concrete objectives, including money management skills and gate money (Guynes & Greiser, 1986). The focus within an offender-based framework is reintegration and rehabilitation (Guynes & Greiser, 1986; Flanagan, 1988).

The development of positive work habits is the foremost objective subsumed under offender-based goals (Guynes & Greiser, 1986). Employment is provided to offenders in the anticipation that work habits and attitudes will generalize across different work situations (i.e., in the community upon release). The focus on general employability skills, as opposed to very concrete and job-specific skills, has received increasing attention in the Canadian correctional employment system (see Fabiano et al., 1996; Gillis et al., 1996; Mulgrew, 1996). This focus on generic employability skills encompasses increased accountability and responsibility in the work-place, and serves to contribute to the personal development of the offender, in accordance with the correctional mission (Correctional Service of Canada, 1997). Recently, in the attempt to address employability issues, CORCAN has undertaken the operationalization and measurement of employability skills within their shops, according to the guidelines specified by the Conference Board of Canada (1993) in the Employability Skills Profile. The profile, which describes the competencies required to attain and maintain employment, is comprised of academic (thinking and learning), personal management (responsibility and adaptability) and teamwork skills.

The ultimate objective of correctional employment is the provision of job skills and enhancement of positive work attitudes that will assist offenders in their reintegration to the community upon release. It is postulated that the enhancement of positive work attitudes will ultimately translate into behavioural change. Results from a recent study (see Gillis, 1994) indicate that behavioural differences, in the form of punctuality ratings, have been noted among offenders

with more positive work attitudes and motivation. However, further research is required to address the potential impact of work attitudes and specific employability skills on community employment and reintegration.

Employment programs and post-release recidivism

Although early reviews of previous study findings were equivocal in their evaluation of the impact of institutional employment on recidivism (see Taggart, 1972), many studies did not use methodologically rigorous designs. However, several well-controlled studies have explored the impact of correctional employment on post-release recidivism.

Markley et al. (1983), in a study examining employment success in a sample of offenders who had received job skills training, found no effect for training in the experimental group, relative to a control group matched on age, sex, race, education and skill level prior to training. More specifically, offenders who had received vocational training did not differ from the control group on the “success index,” which measured months employed per year and yearly earnings during release. Furthermore, no significant differences were obtained between the groups on the average amount of time spent in the community.

Conversely, several studies have reported that participation in correctional employment does reduce recidivism. Saylor and Gaes (1995) evaluated the impact of institutional employment and vocational training on offenders’ post-release performance. Study group participants consisted of offenders who had participated in prison industries (57%), combined industrial and vocational experience (19%) and vocational and/or apprenticeship training (24%). Additionally, the study included a statistically matched comparison sample of offenders released in the same calendar quarter as the employment group. Long-term follow-up (range 8 to 12 years) provided important information about the impact of training on post-release recidivism.

The study examined not only federal recommitment (i.e., for a new offence or supervision revocation) but also time in community until

recommitment. Men who participated in correctional industries survived in the community 20% longer than the comparison group, and the vocational or apprenticeship training group, 28% longer. Although results for the employment/training group were not statistically significant, the same trend was noted. Saylor and Gaes (1995) suggest that additional employment-related variables should be examined for their impact on community adjustment following release from prison. Moreover, the results indicated an effect of correctional employment on recommitment for a new offence.

A follow-up study of offenders from the state of New York correctional system was conducted to examine the impact of participation in industries programs on post-release recidivism (Canestrini, 1993). The performance of offenders who participated in the industries program between April 1988 and August 1993 and who were released a minimum of 12 months in the community was assessed. Participants were classified as either successful program completers ($n = 249$) or unsuccessful completers ($n = 56$), indicating their removal from the industries program for disciplinary infractions. Recidivism, referring to any return to the institution, as well as time to return, was assessed using survival analysis. Additionally, the performance of program participants (successful and unsuccessful) was compared to offenders released in the same period who had not participated in industries programs ($n = 82, 600$). Results of the analyses indicated that the performance of successful completers differed significantly from both the comparison group and the unsuccessful participants. Although the probability of return was somewhat comparable at 12 months following release (8% for successful program participants, 11% for unsuccessful program participants and 12% for the comparison group), the rate of return at 60 months for unsuccessful participants and the comparison group (55% and 52%, respectively) more than doubled that of successful program participants, at 25%. Therefore, the study provides important implications for monitoring quality of program participation, as well as providing an indication of the potential positive impact of correctional industrial programming on successful reintegration in the community. Additionally, these findings illustrate a possible confound in previous

studies that did not differentiate between the performance of successful and unsuccessful program completers.

Therefore, support exists for the efficacy of correctional industries programs in contributing to a reduction in recidivism rates for offenders released to the community. However, several authors have suggested that recidivism should not be the sole criterion measure of program effectiveness (Hodanish, 1976) as increased employability, itself, is a potentially important outcome of correctional employment experience (Taggart, 1972). A number of studies have examined the influence of institutional employment on community adjustment.

Employment and other outcomes

Glaser (1964) reported that successful probationers were more than twice as likely to make use of the skills they had developed through institutional work programs than probationers who were unsuccessful during their release. Likewise, Moors and Naoum (1982) reported that participation in an industries program at a Canadian federal penitentiary increased offender employability. Saylor and Gaes (1996) reported that offenders who participated in industries, vocational or apprenticeship programs, or a combination of the two, were 24% more likely to obtain employment on conditional release than a matched control group. Therefore, these outcomes suggest that employability and community employment status merit further study.

Major Aim of Study

Given the identified relationship between employment and recidivism in recent, well-controlled studies, an examination of the impact of correctional employment on release performance is warranted. A preliminary investigation of the impact of CORCAN employment on offenders' post-release recidivism was conducted by Motiuk and Belcourt (1996). In their study, they documented the progress of 277 offenders who had participated in CORCAN a minimum of six

months prior to release. They found that post-release performance for former CORCAN participants was related to risk levels, with high risk offenders receiving significantly more re-admissions (any) and convictions for new offences than low risk offenders. The results also indicated that offenders released on full parole received substantially fewer re-admissions than offenders released on day parole or statutory release. Furthermore, offenders released on statutory release received significantly more re-admissions for a new offence than offenders released on day parole or full parole.

This study extended Motiuk and Belcourt's (1996) preliminary investigation of the impact of CORCAN experience on post-release recidivism to include an additional year of follow-up. In addition to post-release recidivism, the present study assessed employment-related variables (derived from the CRNMS) that were not available in the preliminary report. Thus, in accordance with Taggart's (1972) suggestions, the second objective of the present study included examination of community employment status as a more proximal measure of the impact of correctional employment on reintegration. Furthermore, the present study extended the scope of the preliminary investigation by examining the impact of obtaining community employment on recidivism.

METHOD

Data Gathering Strategy

Motiuk and Belcourt (1996) gathered three types of information. First, background characteristics, including admission date, release date, release status, region, age, ethnicity, type of offence, and sentence length were obtained from the Correctional Service of Canada's Offender Management System (an automated database). Secondly, the CORCAN work sites provided information regarding work programs: institution, type of program, start date, end date, and time spent in the program. Finally, post-release recidivism data (information on re-admission to custody and new convictions) was provided by the Canadian Police Information Centre (CPIC) system.

Sample Selection

The total sample was comprised of 300 adult male offenders who spent a minimum of six months in CORCAN between 1992 and 1994. From the total of 2,026 offenders who spent at least six months in a CORCAN employment program, 300 were selected due to the proximity (within one month) of their release date. In the original study, 277 offenders spent at least one year in the community, and were therefore placed in the follow-up sample. The present study extended the follow-up period by one year to May 1996, which increased the sample size to 300. Follow-up offence information was available for 294 of the 300 offenders.

For the present study, reconviction data, obtained from CPIC, was collected for the entire sample ($n = 294$) for the extended follow-up period. Data obtained from CPIC included new offences (federal and provincial) and dispositions for all convictions incurred during the post-release period.

In addition to offences and dispositions incurred during the follow-up period, the study examined post-release employment status within the first six

months following release from an institution. The employment information, obtained from the Community Risk/Needs Management Scale (CRNMS), was available for 99 offenders within the time period specified above. The extended post-release offence database ($n = 294$) and the CRNMS database ($n = 129$) were then merged with the original database compiled by Motiuk & Belcourt (1996). Only offenders who had the CRNMS completed ($n = 129$) were included in the final sample.

RESULTS

Sample Characteristics

Although follow-up offence information was available for 294 offenders, only 129 offenders were administered the CRNMS. In the attempt to assess whether offenders in the CRNMS group differed from those who had not been administered the CRNMS, a series of analyses were performed to compare the two groups on various demographic variables. No significant differences between the groups were noted for age, race, marital status, federal term, or release type.

The mean age of offenders in the sub-sample ($n = 129$) was 36.5 (range 23-72), with half younger than 35. Over 90% were non-Native, 62% single, and almost 70% serving their first federal term of incarceration.

The offenders participated in CORCAN programs in 19 different institutions in the following programs: agriculture (27.8%), cabinet making (7.0%), industrial warehouse (5.2%), industries (21.7%), metal plant (5.2%), metal assembly (0.9%), microfilming (0.9%), paint/industrial finishing (6.1%), print shop (0.9%), sheet metal shop (3.5%), sign shop (0.9%), upholstery shop (1.7%) and welding shop (2.6%). Job ID codes were unavailable for less than one-fifth (15.7%) of the sample.

Of the 129 offenders in the follow-up sample, 22 (17.1%) were released on day parole, 35 on full parole (27.1%) and more than half (55.8%) on statutory

release. The average time in the community was 23.2 months (range = 16.6 months to 36.9 months).

Although 129 offenders were administered the CRNMS, complete information for the individual scale items was available for only 117 offenders; only total risk/needs scores were available for the remaining 12 offenders. Table 1 presents percentages obtained on the individual need areas that comprise the CRNMS. Employment was noted as one of the more salient needs, with more than 50% of the sample presenting with either some need, or considerable need for improvement. Other needs that were most apparent within the sample include academic/vocational (48.7%), financial management (52.1%) and behavioural/emotional stability (55.2%).

Table 1: Needs identified on the Community Risk/Needs Management Scale

| | Factors seen as an asset | No immediate need for improvement | Some need for improvement | Considerable need for improvement |
|--|---------------------------------|--|----------------------------------|--|
| Academic/vocational | N/A | 51.3 (60) | 35.9 (42) | 12.8 (15) |
| Employment | 5.1 (6) | 38.5 (45) | 42.7 (50) | 13.7 (16) |
| Financial management | 1.7 (2) | 46.2 (54) | 34.2 (40) | 17.9 (21) |
| Marital/family relationships | 9.5 (11) | 47.4 (55) | 27.6 (32) | 15.5 (18) |
| Companions | 61.5 (72) | 1.7 (2) | 24.8 (29) | 11.1 (13) |
| Living arrangements | 0.9 (1) | 82.1 (96) | 15.4 (18) | 1.7 (2) |
| Behavioural/emotional stability | N/A | 44.8 (52) | 39.7 (46) | 15.5 (18) |
| Alcohol usage | N/A | 70.9 (83) | 16.2 (19) | 12.8 (15) |
| Drug usage | N/A | 73.5 (86) | 12.0 (14) | 14.5 (17) |
| Mental ability | N/A | 88.8 (103) | 1.7 (2) | 9.5 (11) |
| Health | N/A | 88.8 (103) | 6.9 (8) | 4.3 (5) |
| Attitude | 64.7 (75) | 23.3 (27) | 6.9 (8) | 5.2 (6) |

Table 2, which presents criminal history risk rating and case needs ratings obtained from the CRNMS, shows that almost 60% of the CRNMS sample were classified as high risk offenders. Furthermore, 90% evidenced medium to high case needs ratings.

Table 2: Distribution of criminal history risk rating and case needs rating

| Rating | Criminal history risk rating | Case needs rating |
|---------------|-------------------------------------|--------------------------|
| Low | 41.9 (54) | 9.3 (12) |
| Medium | N/A | 50.4 (65) |
| High | 58.1 (75) | 40.3 (52) |

Risk and need scores were combined to yield overall risk/need categories, presented in Table 3. Notably, over 50% of the sample were classified as high risk/medium need or high risk/high need. The next highest classification consisted of the low risk/medium need offenders, which comprised almost 30% of the sample.

Table 3: Distribution of risk/need scores

| Risk / need levels | Frequency |
|------------------------------|------------------|
| Low risk/low need | 7.8 (10) |
| Low risk/medium need | 28.7 (37) |
| Low risk/high need | 5.4 (7) |
| High risk/low need | 1.6 (2) |
| High risk/medium need | 21.7 (28) |
| High risk/high need | 34.9 (45) |

Post-release Employment

Community Risk/Needs Management Scale information was available for 44.6% ($n = 129$) of the entire sample of offenders during the first 6 months of their release. Of the remaining 55.4% of the sample, 21.5% of the CRNMS were conducted six months or greater after release, and 33.9% had no CRNMS conducted. Although the CRNMS was conducted on 129 offenders, information on employment status was available for only 116 offenders in the first six months following release. As Table 4 indicates, almost one third of the sample was employed, more than half unemployed, and one sixth classified as other.

Table 4: Employment status in the first six months following release

| Employment Status | Percentage |
|--------------------------|-------------------|
| Employed | 31.0 (36) |
| Unemployed | 54.3 (63) |
| Other | 14.7 (17) |
| Total | 100.0 (116) |

Note: Other includes training/student, pension and disability.

For the analyses of outcome for offenders in the community, only the employed and unemployed categories were used. The number of cases presented in the follow-up analyses was therefore reduced to 99. As illustrated in Table 5, one third of the sample was employed, and two thirds unemployed.

Table 5: Employment status in the first six months following release

| Employment Status | Percentage |
|--------------------------|-------------------|
| Employed | 36.4 (36) |
| Unemployed | 63.6 (63) |
| Total | 100.0 (99) |

The relationship between age (as of May 1996) and employment status in the first six months of release is presented in Table 6. No significant differences

were obtained between the groups in terms of employment status, however, the majority of offenders in the sample were in the first two age categories, and very few over 50 years of age, which affects the reliability of the analysis.

Table 6: The relationship between age and employment status in the first six months following release.

| Age categories | Unemployed | Employed |
|-----------------------|-------------------|-----------------|
| Under 30 | 59.3 (16) | 40.7 (11) |
| 30-49 | 66.7 (46) | 33.3 (23) |
| 50-64 | 33.3 (1) | 66.7 (2) |
| 65 and over | 0 (0) | 0 (0) |
| Total | 63.6 (63) | 36.4 (36) |

Table 7 presents results from analyses examining the relationship between employment needs as identified in the CRNMS, and employment status in the first six months of release. Whereas 75% of offenders with no need identified were employed, only 10% of offenders with employment needs identified obtained employment in the first six months of release ($p = .001$).

Table 7: Employment need level by employment status in the first six months of release.

| Need level | Unemployed | Employed |
|------------------------------------|-------------------|-----------------|
| Asset/no need | 25.0 (10) | 75.0 (30) |
| Some/ considerable need | 89.9 (53) | 10.1 (6) |
| Total | 63.6 (63) | 36.4 (36) |

The relationship between risk rating and employment status in the first six months of release is presented in Table 8. The analyses indicate that 61% of low risk offenders were employed during the first six months of release, whereas only 19% of high risk offenders were employed ($p = .001$). Alternately, the data can be interpreted from an unemployment perspective, with twice as many high risk offenders (81%) unemployed as low risk offenders (39%).

Table 8: Criminal history risk rating by employment status in the first six months of release.

| Criminal history risk rating | Unemployed | Employed |
|-------------------------------------|-------------------|-----------------|
| Low | 39.0 (16) | 61.0 (25) |
| High | 81.0 (47) | 19.0 (11) |
| Total | 63.6 (63) | 36.4 (36) |

Results presented in Table 9 illustrate the relationship between case needs ratings and employment status during the first six months of release. The percentage of employed offenders decreases with increases in needs ratings (i.e., the higher the need, the lower the percentage of employed offenders). Whereas 55% of low risk offenders were employed, only 20% of offenders classified as high risk were employed. Alternatively, the lower the case needs rating, the higher the percentage of offenders who were employed in the first six months of release ($p < .05$).

Table 9: Case needs rating by employment status in the first six months of release.

| Case needs rating | Unemployed | Employed |
|--------------------------|-------------------|-----------------|
| Low | 45.5 (5) | 54.5 (6) |
| Medium | 56.6 (30) | 43.4 (23) |
| High | 80.0 (28) | 20.0 (7) |
| Total | 63.6 (63) | 36.4 (36) |

As Table 10 indicates, approximately 60% or more of low risk offenders were employed (range 57% to 75%), whereas the percentage of high risk offenders who obtained employment in the first six months of release ranges from only 0 to 28% ($p = .001$).

Table 10: Risk/need level by employment status in the first six months of release.

| Risk/need level | Unemployed | Employed |
|------------------------------|-------------------|-----------------|
| Low risk/low need | 33.3 (3) | 66.7 (6) |
| Low risk/medium need | 42.9 (12) | 57.1 (16) |
| Low risk/high need | 25.0 (1) | 75.0 (3) |
| High risk/low need | 100.0 (2) | 0.0 (0) |
| High risk/medium need | 72.0 (18) | 28.0 (7) |
| High risk/high need | 87.1 (27) | 12.9 (4) |
| Total | 63.6 (63) | 36.4 (36) |

Post-release Employment and Recidivism

Recidivism data for the CRNMS sample of offenders is presented in the following sections. Recidivism outcome was classified as any conviction (new federal and/or provincial convictions, including technical violations), admission for a new conviction (federal and/or provincial) and admission for a new violent conviction (federal and/or provincial). As Table 11 indicates, 35.4% were admitted for either a technical offence or new violation, 32.3% for a new offence and 15.2% for a violent offence.

Given the similarity in percentages for any conviction and new conviction (approximately one third of the sample), the remaining sections present only the results relating to any conviction and violent conviction.

Table 11: Reconviction rates.

| Reconviction | Type of reconviction | | |
|--------------|----------------------|----------------|--------------------|
| | Any conviction | New conviction | Violent conviction |
| Yes | 35.4 (35) | 32.3 (32) | 15.2 (15) |

Table 12 presents results from analyses examining the relationship between employment status within the first six months of release and reconviction. Offenders who were employed were convicted of less than half the convictions (22.2% versus 42.9%) and one quarter of the new violent convictions (5.6% versus 20.6%) of offenders who did not obtain employment in the first six months of release ($p < .05$).

Table 12: Employment status in the first six months of release and reconviction rates.

| Employment status | Any conviction | Violent conviction |
|-------------------|----------------|--------------------|
| Unemployed | 42.9 (27) | 20.6 (13) |
| Employed | 22.2 (8) | 5.6 (2) |
| Total | 35.4 (35) | 15.2 (15) |

Table 13 presents findings examining the interaction between employment status in the first six months of release and identified needs, and the relationship to outcome. These results were not significant, indicating that the effect of employment status on recidivism appears to be more salient than the interaction between employment status and identified need. Additionally, the numbers in some categories are small, limiting the reliability of the analyses. However, it is notable that offenders in the employed categories evidenced fewer convictions (any and violent) than offenders in the unemployed categories.

Table 13: The interaction between employment status, identified needs and reconviction.

| Employment status and needs identified | Any conviction | Violent conviction |
|---|-----------------------|---------------------------|
| Employed, no need | 23.3 (7) | 6.7 (2) |
| Employed, need | 16.7 (1) | 0.0 (0) |
| Unemployed, no need | 50.0 (5) | 10.0 (1) |
| Unemployed, need | 41.5 (22) | 22.6 (12) |
| Total | 35.4 (35) | 15.2 (15) |

The differences between identified needs and conviction rates are presented in Table 14. Although offenders with identified needs are convicted at higher rates than offenders without needs, these differences are not statistically significant.

Table 14: Employment needs and reconviction.

| Employment need identified | Any conviction | Violent conviction |
|-----------------------------------|-----------------------|---------------------------|
| No need | 30.0 (12) | 7.5 (3) |
| Some/ considerable need | 39.0 (23) | 20.3 (12) |
| Total | 35.4 (35) | 15.2 (15) |

Table 15 presents the distribution of employment needs for the sample, in addition to employment status and conviction rates. Almost 60% of the CRNMS sample were identified as exhibiting employment needs, and only 6% had employment classified as an asset. Of the offenders identified as having employment as an asset, all were employed, and none convicted of new offences in the follow-up period. Of the 34 offenders with no employment needs, 70% were employed in the first six months of release. Approximately one third of these offenders were convicted of a new offence, and almost 10% for a new violent conviction.

More than 40% of offenders were identified as displaying some employment needs, and only 14% obtained employment in the first six months of release. Slightly more than one third of offenders with some identified needs received a conviction in the follow-up period, and 20% a new violent conviction.

Of the offenders with considerable needs, none obtained employment in the first six months of release, one half received a conviction and one fifth, a new violent conviction.

Table 15: Distribution of employment needs, employment status and reconviction.

| | Level of need | | | |
|-------------------------------|---------------|---------------|---------------|-------------------|
| | Asset | No need | Some need | Considerable need |
| Employment need | 6.1% (6) | 34.3% (34) | 44.4% (44) | 15.2% (15) |
| Employed | 100.0% (6) | 70.6% (24) | 13.6% (6) | 0.0% (0) |
| Any conviction | 0.0% (0) | 35.3% (12) | 36.4% (16) | 46.7% (7) |
| New violent conviction | 0.0% (0) | 8.8% (3) | 20.5% (9) | 20.0% (3) |

Post-release Recidivism: Readmission

Table 16 presents new admissions and convictions by type of release. Whereas Motiuk and Belcourt's (1996) preliminary study findings indicated that offenders released on full parole returned to federal custody at much lower rates than offenders released on day parole or statutory release, the present results indicate lower rates of return for both day and full parole offenders, relative to offenders who received statutory release. Although offenders released on statutory release had more readmissions and new offences than their counterparts released on day and full parole, these differences are not statistically reliable.

Offenders who received statutory release were convicted of new violent offences (22.8%) at more than three and five times the rate of offenders

released on day parole (6.3%) or full parole (3.9%), respectively ($p < .05$). However, it should be noted that the number of offenders released on day and full parole who were convicted of new violent offences is small, limiting the reliability of the analyses. These findings are consistent with preliminary results reported by Motiuk and Belcourt (1996); offenders on statutory release evidenced two to eight times the rate of re-admission for violent offences of offenders released on day and full parole, respectively.

Table 16: Reconviction rates by release type.

| Release type | Any admission | Violent offence |
|--------------------------|----------------------|------------------------|
| Day parole | 25.0 (4) | 6.3 (1) |
| Full parole | 23.1 (6) | 3.9 (1) |
| Statutory release | 43.9 (25) | 22.8 (13) |
| Base rate | 35.4 (35) | 15.2 (15) |

Table 17 presents results from analyses examining the relationship between risk level and new conviction rates. Although offenders classified as higher risk returned at higher rates than low risk offenders for both any convictions and violent convictions, these differences are not statistically reliable.

Table 17: Outcomes of CORCAN participants by risk level.

| Risk level | Any conviction | Violent conviction |
|-------------------|-----------------------|---------------------------|
| Low | 26.8 (11) | 12.2 (5) |
| High | 41.4 (24) | 17.2 (10) |
| Base rate | 35.4 (35) | 15.2 (15) |

Analyses were performed to examine the relationship between need levels from the CRNMS and the reconviction variables. No significant relationships were obtained between overall need and the offence outcome variables.

Table 18: Outcomes of CORCAN participants by need level.

| Need level | Any admission | Violent offence |
|-------------------|----------------------|------------------------|
| Low | 45.5 (5) | 9.1 (1) |
| Medium | 34.0 (18) | 11.3 (6) |
| High | 34.3 (12) | 22.9 (8) |
| Base rate | 35.4 (35) | 15.2 (15) |

DISCUSSION

More than half of the offenders in the sample exhibited employment needs on release and furthermore, two thirds experienced difficulty obtaining employment in the first six months of release. These findings are consistent with previous research that has examined the post-release employment experience of offenders. Furthermore, offenders identified with employment needs at release are more likely to experience employment difficulties than offenders without these needs. These findings suggest that the CRNMS is properly identifying individuals with employment needs.

When overall risk and needs scores were examined in relation to employment status in the first six months of release, the analyses indicated that offenders classified as higher risk were much less likely to be employed than lower risk offenders. Thus, in accordance with correctional theory that advocates more intensive services for higher risk offenders (e.g., Andrews, Bonta, & Hoge, 1990; Andrews & Bonta, 1994), more effort should be directed toward offenders identified as higher risk, particularly when these individuals have demonstrated deficits in the area of employment. This would allow for reallocation of resources to offenders who require more intensive services and supervision on release.

This suggestion seems particularly relevant in light of results demonstrating the relationship between obtaining employment in the first six months and reoffending. Offenders who were employed were convicted at less than half the rate of unemployed offenders (17% versus 41%) and committed only one quarter as many new violent offences as unemployed offenders (6% versus 21%). When employment needs were subdivided into their four components (“asset,” “no need,” “some need,” “considerable need”), it is particularly telling that all offenders identified as having employment as an asset were employed, and none recidivated in the follow-up period. Conversely, no offenders identified with considerable needs obtained employment, and almost half (43.8%) were convicted of a new offence in the follow-up period.

These findings strengthen the argument promoted by earlier employment researchers (e.g., Taggart, 1972) that assessment of community employment status should be an integral component in the evaluation of institutional employment program effectiveness. Although many studies have relied solely on recidivism as the outcome measure, community employment status, as a more proximal measure of program effectiveness, provides a solid indication of progress toward reintegration.

In summary, the findings indicate that the CRNMS is properly identifying employment needs. Consequently, enhanced resources should be directed toward overseeing the employment status of offenders with employment needs, given the interaction with recidivism. The CNRMS provides valuable information regarding offender's employment status and provides for assessment of change in employment status and needs over time.

To truly examine the impact of CORCAN participation on community adjustment, a matched control group of offenders who did not receive employment training/experience should be compared with CORCAN participants on employment status and time spent in the community. Future research should also incorporate a thorough examination of employment indicators, including work attitudes and motivation, for their impact on the post-release performance of offenders. Although this was attempted in the present study, this in-depth information was not available from the CRNMS data in isolation.

Currently, initiatives are underway to explore the relationships between work attitudes and motivation and community employment status, in addition to subsequent effects on community adjustment (i.e., recidivism).

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