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**UNDERSTANDING EMPLOYMENT: A PROSPECTIVE EXPLORATION OF
FACTORS LINKED TO COMMUNITY-BASED EMPLOYMENT AMONG
FEDERAL OFFENDERS**

Christa A. Gillis

**A dissertation submitted to the Faculty of Graduate Studies and Research
of Carleton University in partial fulfillment
of the requirements for the degree of**

Doctor of Philosophy

**Department of Psychology
Carleton University
Ottawa, Ontario
January, 2002
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Linked to Community - based Employment among Federal Offenders"

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the degree of Doctor of Philosophy

Chair
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January, 2002

Abstract

Offender employment has played a pivotal role in corrections since the introduction of institutions (Funke, Wayson, & Miller, 1982; Gaes, Flanagan, Motiuk, & Stewart, 1999; Guynes & Greiser, 1986; Miller & Greiser, 1986; Townsend, 1996), and has long been a topic of interest within criminological and correctional theory and practice (Andrews, Pirs, Walker, & Hurge, 1980). However, little is known about the factors and processes that contribute to employment outcomes among offenders (Gillis, 2000, 2001; Ryan, 1998), as few systematic empirical studies have been conducted in this area (Gaes et al., 1999; Pearson & Lipton, 1999; Ryan, 1998). Furthermore, the employment construct has not been operationalized to adequately reflect its multidimensional nature (Andrews et al., 1980). A prospective approach was adopted in the present study to explore the contributions of static and dynamic factors to offender employment outcomes in the community. These factors were integrated within the personal-interpersonal-community-reinforcement perspective (PIC-R; Andrews, 1982a; Andrews & Bonta, 1998) on criminal conduct. Additionally, the PIC-R perspective was operationalized in this research according to the framework of the theory of planned behaviour (Ajzen, 1985, 1988). This model, which predicts criminal behaviour from beliefs, attitudes, subjective norm, perceived behavioural control and intention, was extended within the present study to account for additional factors (e.g., work attitudes) hypothesized to contribute to an offender's employability. Correlational and regression analyses were conducted to explore factors linked to employment status and quality of employment during the first and sixth month of male federal offenders' conditional release. The total number of weeks employed was also examined. Results support the influence of personal (e.g., intention to

find / keep a job), interpersonal (e.g., social support for employment) and broad social factors (e.g., unemployment rate) in contributing to community employment outcomes for offenders. Moreover, social support for employment was associated with offenders' community reintegration, with higher levels of support linked to a longer period of time in the community. Practical implications for employment-related assessment and intervention for federal offenders are discussed.

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Table of Contents

ABSTRACT	iii
ACKNOWLEDGEMENTS	v
INTRODUCTION.....	1
<i>OFFENDERS AND EMPLOYMENT.....</i>	<i>1</i>
<i>Risk/Need Factors and Recidivism.....</i>	<i>2</i>
<i>Treatment and Recidivism.....</i>	<i>11</i>
<i>Employment Programming and Outcome</i>	<i>16</i>
<i>PREDICTING EMPLOYMENT USING THE PIC-R PERSPECTIVE</i>	<i>24</i>
<i>Immediate Situation.....</i>	<i>29</i>
<i>Distal Factors.....</i>	<i>32</i>
<i>Beliefs.....</i>	<i>32</i>
<i>Attitude, Subjective Norm and Perceived Behavioural Control</i>	<i>39</i>
<i>Intention</i>	<i>47</i>
<i>Behaviour</i>	<i>48</i>
HYPOTHESES	51
METHOD	52
<i>PARTICIPANTS.....</i>	<i>52</i>
<i>MEASURES.....</i>	<i>54</i>
<i>Predictor Variables.....</i>	<i>55</i>
<i>Social Desirability.....</i>	<i>63</i>
<i>Outcome Variables.....</i>	<i>64</i>
<i>PROCEDURE</i>	<i>66</i>
RESULTS	69
<i>ONE MONTH</i>	<i>70</i>
<i>Descriptive Analyses.....</i>	<i>70</i>
<i>Correlational Analyses.....</i>	<i>83</i>
<i>Regression Analyses.....</i>	<i>93</i>
<i>ONE MONTH WITH SIX MONTH OUTCOMES.....</i>	<i>98</i>
<i>Correlational Analyses.....</i>	<i>98</i>
<i>SIX MONTHS.....</i>	<i>106</i>
<i>Descriptive Analyses</i>	<i>106</i>
<i>Correlational analyses.....</i>	<i>106</i>
<i>Regression Analyses.....</i>	<i>119</i>
<i>CRIME-RELATED OUTCOMES.....</i>	<i>126</i>
<i>Correlational Analyses.....</i>	<i>126</i>
<i>Regression Analyses.....</i>	<i>131</i>
DISCUSSION	135

REFERENCES.....	148
Appendix A: Community Employment Checklist	159
Appendix B: Work Attitudes Questionnaire.....	184
Appendix C: Stable employment composite measure	206
Appendix D: Stable education composite measure.....	207
Appendix E: Domains and Indicators	208
Appendix F: Informed Consent Form.....	209
Appendix G: Debriefing	211
Appendix H: Intercorrelation matrix: One-month predictor variables	212
Appendix I: Six Months	217
Appendix J: Correlation matrix: Six month predictor variables.....	225

List of Tables

Table 1:	Frequency of employment rate by city	70
Table 2:	Means and alphas for the behavioural beliefs measures: One month	71
Table 3:	Risk levels at intake	72
Table 4:	Previous federal offense categories.....	73
Table 5:	Current federal offense categories	74
Table 6:	Type of employment reported before incarceration.....	75
Table 7:	Type of work experience before incarceration.....	75
Table 8:	Type of work experience / training during incarceration.....	75
Table 9:	Employment training during incarceration	76
Table 10:	Need levels at intake	76
Table 11:	Employment need levels at intake	77
Table 12:	Need levels during the first six months of release	78
Table 13:	Employment need levels at release	78
Table 14:	Means and alphas for the attitude measures: One month.....	79
Table 15:	Means and alphas for the associates measures: One month.....	80
Table 16:	Means and alphas for the self efficacy measures: One month	80
Table 17:	Distribution of the intention variable	81
Table 18:	Distribution of the chance of finding/maintaining employment variable	82
Table 19:	Employment status at one month.....	82
Table 20:	Type of employment at one month	82
Table 21:	Means and alphas for covariates: One month	83
Table 22:	Correlations between broad social factors and employment outcomes at one month	84
Table 23:	Intercorrelations among distal factors.....	84
Table 24:	Correlations between distal factors and employment outcomes at one month	84
Table 25:	Intercorrelations among behavioural belief variables	86
Table 26:	Correlations between behavioural belief variables and employment outcomes at one month.....	87
Table 27:	Intercorrelations among history variables	88

Table 28: Correlations between history variables and employment outcomes at one month	89
Table 29: Intercorrelations among attitude variables at one month	90
Table 30: Correlations between criminal attitudes and employment outcomes at one month	90
Table 31: Correlations between attitudes variables and employment outcomes at one month	91
Table 32: Intercorrelations among associates variables	91
Table 33: Intercorrelations among self efficacy variables	91
Table 34: Correlations between self efficacy variables and employment outcomes at one month	92
Table 35: Intercorrelations among intention variables.....	92
Table 36: Correlations between intention variables and employment outcomes at one month	92
Table 37: Intercorrelations among employment outcome measures at one month.....	93
Table 38: Summary of hierarchical stepwise regression analysis for variables predicting employment status at one month.....	94
Table 39: Summary of hierarchical stepwise regression analysis for variables predicting quality of employment at one month	96
Table 40: Correlations between broad social factors and employment outcomes at six months.....	98
Table 41: Correlations between distal factors and employment outcomes at six months.....	98
Table 42: Correlations between behavioural belief variables and employment outcomes at six months	99
Table 43: Correlations between history variables and employment outcomes at six months.....	99
Table 44: Correlations between attitude variables and employment outcomes at six months.....	100
Table 45: Correlations between associates variables and employment outcomes at six months.....	100
Table 46: Correlations between self efficacy variables and employment outcomes at six months.....	101
Table 47: Correlations between intention variables and employment outcomes at six months.....	101
Table 48: Intercorrelations among employment outcome measures at six months	101

Table 49: Summary of hierarchical stepwise regression analysis for one month variables predicting employment status at six months.....	102
Table 50: Summary of hierarchical stepwise regression analysis for one month variables predicting quality of employment at six months.....	103
Table 51: Summary of hierarchical stepwise regression analysis for one month variables predicting number of weeks employed at six months.....	105
Table 52: Correlations between broad social factors and employment outcomes at six months.....	107
Table 53: Intercorrelations among distal factors at six months	107
Table 54: Correlations between distal factors and employment outcomes at six months	107
Table 55: Intercorrelations among behavioural beliefs variables at six months	109
Table 56: Correlations between behavioural beliefs variables and employment outcomes at six months	110
Table 57: Intercorrelations among history variables at six months	111
Table 58: Correlations between history variables and employment outcomes at six months.....	112
Table 59: Intercorrelations among attitude variables at six months.....	113
Table 60: Correlations between attitude variables and employment outcomes at six months.....	113
Table 61: Intercorrelations among associates variables at six months.....	114
Table 62: Correlations between associates variables and employment outcomes at six months.....	114
Table 63: Intercorrelations among self efficacy variables at six months	114
Table 64: Correlations between self efficacy variables and employment outcomes at six months.....	115
Table 65: Correlations between intention variables and employment outcomes at six months.....	115
Table 66: Correlations between one month, six month, and six month predictors with one month effects partialled and employment status at six months.....	117
Table 67: Correlations between one month, six month, and six month predictors with one month effects partialled and quality of employment at six months	118
Table 68: Correlations between one month, six month, and six month predictors with one month effects partialled and number of weeks employed at six months	119
Table 69: Summary of hierarchical stepwise regression analysis for variables predicting employment status at six months	121

Table 70: Summary of hierarchical stepwise regression analysis for variables predicting quality of employment at six months.....	123
Table 71: Summary of hierarchical stepwise regression analysis for variables predicting number of weeks employed at six months.....	125
Table 72: Correlations between broad social factors and criminal outcomes.....	126
Table 73: Correlations between distal factors and criminal outcomes.....	126
Table 74: Correlations between behavioural belief variables and criminal outcomes..	127
Table 75: Correlations between history variables and criminal outcomes.....	128
Table 76: Correlations between attitude variables and criminal outcomes.....	128
Table 77: Correlations between associates variables and criminal outcomes.....	129
Table 78: Correlations between self efficacy variables and criminal outcomes	129
Table 79: Correlations between intention variables and criminal outcomes	130
Table 80: Intercorrelations among criminal outcomes.....	130
Table 81: Correlations between employment outcomes and criminal outcomes.....	131
Table 82: Summary of hierarchical stepwise regression analysis for variables predicting any violation after completion of assessment at one month	132
Table 83: Summary of hierarchical stepwise regression analysis for variables predicting number of violations after completion of assessment at one month.....	133
Table 84: Summary of hierarchical stepwise regression analysis for variables predicting survival time.....	134

List of Figures

Figure 1: A general personality and social psychological perspective on criminal conduct.....	26
Figure 2: Integration of the PIC-R perspective and the theory of planned behaviour....	27
Figure 3: Integration of the PIC-R perspective and the theory of planned behaviour....	28
Figure 4: The psychological situation in a general personality and social psychology of criminal conduct	30
Figure 5: Integration of work attitudes within the PIC-R perspective	31
Figure 6: Scales to assess components of the PIC-R perspective.....	35

Understanding Employment: A Prospective Exploration of Factors Linked to Community-Based Employment among Federal Offenders

Offenders and Employment

Work is a central force in many people's lives (Brown, 1996) and contributes to an individual's sense of personal identity and social status. Given the important role allocated to paid employment and the "work ethic" in Western society, it is recognized that unemployment constitutes a serious problem (Pryor & Ward, 1985). Many offenders enter the correctional system with little employment experience and skills in the community (Finn, 1998; Glaser, 1964; Guynes & Grieser, 1986; Motiuk, 1997b; Ryan, 1998; Taggart, 1972). Indeed, the Offender Intake Assessment (OIA) process identified three quarters of offenders as exhibiting employment needs upon entry to Canadian federal correctional institutions (Motiuk, 1997a). Consequently, unstable employment and lack of conventional ambition have been identified as important risk and need factors within this population (Andrews & Bonta, 1998; Dowden, 1998; Gendreau, Little, & Goggin, 1996; Gendreau, Goggin, & Gray, 1998; Motiuk, 1996b; Motiuk, 1997b). 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.

The following section describes empirically-derived correlates of criminal behaviour and explores employment as a factor that merits further systematic examination for its contribution to offender community reintegration.

Risk/Need Factors and Recidivism

Advances in the empirical identification of risk and need factors linked to criminal behaviour are attributable to the statistical technique of meta-analysis. Meta-analysis provides an objective and empirically-based method of examining correlates of criminal behaviour. One of the outcomes of meta-analysis has been to replicate, confirm, and clarify findings described in narrative reviews of the literature (Gendreau & Andrews, 1990; Gendreau et al., 1996). Meta-analysis provides a common measure of effect (typically a Pearson coefficient) that allows for the comparison of findings from diverse studies. Thus, future replication of the meta-analytic review is made possible, due to the provision of objective and quantifiable findings (Glass, McGraw, & Smith, 1981).

Gendreau and his colleagues (1996) reported on some of the most extensive meta-analytic results conducted to date, in their examination of factors related to recidivism. More specifically, their review identified the major predictors of recidivism, and assessed the predictive ability of dynamic versus static predictor domains. Preliminary results of the meta-analysis were reported by Gendreau, Andrews, Goggin and Chanteloupe (1992). The strongest predictors of recidivism were antisocial attitudes/associates ($r = .22$) and temperament/misconduct/personality ($r = .21$). Mid-range predictors included parental/family factors ($r = .18$) and personal education/vocational achievement ($r = .12$). The weakest predictors, according to the meta-analysis, were personal distress/psychopathology ($r = .08$) and lower-class origins ($r = .06$). These factors consistently predict across gender, age and race, and different research methodologies (Andrews and Bonta, 1998).

Similar results were reported by Simourd and Andrews (1994), in their meta-analysis examining correlates of delinquency across gender from 60 published and unpublished studies over the past 30 years. Their results indicate that the same risk factors generally parallel the patterns observed by Gendreau et al. (1992). Correlations ranging from $r = .35$ to $.40$ were observed for antisocial peers and attitudes, and temperament or misconduct problems. Educational problems ($r = .23$ to $.24$), poor parent-child relations, and minor personality variables exhibited mid-range correlations ($r = .18$ to $.22$), whereas variables traditionally conceived as important in criminological research (e.g., lower social class, family structure, and personal distress) yielded substantially lower correlations (range, $r = .06$ to $.10$) (Simourd & Andrews, 1994). However, given that the focus was on youth, no data were available on employment factors.

In 1996, Gendreau and colleagues reported on the overall results of their meta-analysis. They initially classified predictors into 18 domains that were eventually collapsed into the following 8 categories: age/gender/race, criminal history, criminogenic needs, family factors, intellectual functioning, personal distress, socio-economic status, and social achievement. All predictor domains significantly predicted recidivism. However, the collapsed version of criminogenic need factors ($r = .17$) (consisting of antisocial personality [$r = .18$], companions [$r = .18$], attitude [$r = .19$] and behaviour regarding education and employment [$r = .15$]) was most predictive of recidivism. Adult criminal history ($r = .18$) and criminogenic needs (consisting of antisocial attitudes and education/employment behaviour) produced the greatest frequency of significant differences across the predictor domains. Social achievement ($r = .15$), comprised of dynamic factors such as marital status and education level, age/gender/race ($r = .14$) and

family factors ($r = .12$) produced mid-range correlations with recidivism. Intellectual functioning, socioeconomic status and personal distress variables were least predictive (range, $r = .06$ to $.07$). Furthermore, when the predictor domains were collapsed into static versus dynamic, the mean correlations ($r = .12$ and $r = .15$, respectively) were significantly different (Gendreau et al., 1996). These results support the important role of dynamic factors in contributing to recidivism. More importantly, meta-analytic results illustrate the relevance of dynamic risk factors when assessing one's risk for involvement in delinquency, and thus provide direction not only for effective assessment, but also for intervention and follow-up of offenders at risk.

Empirical support substantiating the specific link between offender employment deficits and recidivism was provided in an expansion of their meta-analysis as part of a larger project evaluating the Dynamic Factors Identification and Analysis (DFIA) protocol, from the OIA process (see Gendreau et al., 1998). The OIA process, used to evaluate offenders' criminogenic needs upon entry to federal correctional institutions, incorporates employment as one of the seven major offender need areas in the DFIA (Motiuk, 1997a). In their meta-analysis Gendreau et al. (1998) reported education/employment ($r = .26$), employment needs at discharge ($r = .15$), and employment history ($r = .14$) as some of the most powerful predictors of recidivism within the employment domain. The average correlation with recidivism of the 200 effect sizes from 67 studies was $r = .13$.

Bonta, Law, and Hanson (1998), in a meta-analysis of the correlates of recidivism among mentally disordered offenders, obtained virtually identical results to Gendreau et al. (1996), with the exception of findings related to attitude and employment. They

claimed that because mentally disordered offenders have traditionally received differential treatment from non-disordered offenders, antisocial attitude is not a variable typically assessed in this population. To this end, they were capable of identifying only two studies that examined the relationship between attitudes and recidivism among mentally disordered offenders. Although employment was not predictive of general recidivism among mentally disordered offenders, it was the strongest predictor ($r = .22$) of violent recidivism within this population.

Uggen (2000) explored employment as a key factor in contributing to desistance among offenders. He conducted complex statistical analyses of the National Supported Work Demonstration Project data, derived from an employment program designed for people referred by criminal justice, social service, and job-training agencies and randomly assigned to experimental (minimum-wage jobs) and control conditions from March 1975 to July 1977. Briefly, he found that the employment intervention had an effect, but it was moderated by age, with older offenders (27 or older) reporting less crime than individuals in the control group. The impact of the employment intervention did not hold for younger offenders.

In sum, whether employment is viewed as a protective factor or a deficit, empirical evidence supports the role of employment in contributing to community outcomes for offenders. Given these findings, the accurate identification and measurement of risk factors is integral to the effective functioning of correctional systems. Although static risk factors predict criminal behaviour, they are unalterable, and therefore insensitive to change over time. Risk factors, however, are useful in contributing to institutional placement and supervision decisions (Jones, 1996), and in

providing information regarding level of programming intensity that will best meet an offender's needs (Andrews, Bonta, & Hoge, 1990; Andrews & Bonta, 1998). The risk principle (Andrews, Bonta et al., 1990; Andrews & Bonta, 1998) guides practitioners in how much treatment should be allocated to individual offenders to optimally address the level of risk she or he presents for re-offending. As has been noted in meta-analytic reviews of treatment effectiveness (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990), intervention is most effective when intensive services are directed toward individuals who present a high risk for recidivism (Andrews & Bonta, 1998; Andrews, Bonta et al., 1990).

Conversely, dynamic factors are susceptible to change, and consequently may be employed in risk prediction to improve predictive validity (Andrews, 1982b; Andrews & Bonta, 1998; Bonta, 1996). Dynamic factors, or needs, are divided into criminogenic versus noncriminogenic needs (Andrews & Bonta, 1998; Andrews, Bonta et al., 1990). Andrews and his colleagues refer to criminogenic needs as factors that, when altered, increase or decrease the likelihood that an individual will become involved in future criminal behaviour. Thus, criminogenic needs serve as treatment targets and effective short-term predictors of behaviour (Andrews, Bonta et al., 1990; Andrews & Bonta, 1998). Dynamic needs extend the field by moving beyond simple prediction to providing information regarding the type of treatment required to address criminogenic factors (Gendreau, Cullen, & Bonta, 1994). The need principle (Andrews, Bonta et al., 1990; Andrews & Bonta, 1998) states that effective treatment of criminogenic needs contributes to a decrease in the likelihood of future involvement in crime.

The principles of effective classification have been used in a variety of contexts, including risk prediction, a field that has progressed considerably. In the past decade, the field has evidenced movement from second generation (Bonta, 1996) risk prediction instruments, comprised primarily of static or historical items (e.g., the Salient Factor Score [SFS81]; Hoffman, 1983; the Statistical Information on Recidivism [SIR]; Nuffield, 1982) to third generation (Bonta, 1996) assessments, comprised of static and dynamic (risk-need) factors. One of the most frequently-employed risk-need scales, identified as most predictive of recidivism among the existing dynamic actuarial scales (Gendreau et al., 1996), is the Level of Service Inventory-Revised (LSI-R; Andrews and Bonta, 1995). Formerly known as the Level of Supervision Inventory (LSI; Andrews, 1982b), the LSI-R, which developed out of the social psychological approach to the study of criminal conduct (Andrews, 1982a), was initially used to assist in classifying offenders for the level of supervision required on probation (Andrews, 1982b; Andrews & Robinson, 1984). Early research demonstrated that the scale displayed adequate psychometric properties and predictive criterion validity (Andrews, 1982b; Andrews & Robinson, 1984).

The LSI-R has been successful in predicting various outcomes for probationers and incarcerated offenders. The LSI-R has contributed to the prediction of the following among probationers: intake assessment decisions regarding level of supervision required; amount of supervision during probation; parole officer assessments of probationers' success on supervision; level of supervision recorded in Casebook entries; early versus regular terminations of supervision; recidivism, including charges and reconviction; multiple reconvictions; incarceration; and self-reported criminal activity. Furthermore,

among incarcerated offenders, the LSI-R has predicted successful halfway house residency, institutional misconducts, parole outcome and recidivism one year following release (Andrews & Bonta, 1995). These findings, consistent with the risk and need principles of effective classification (Andrews, Bonta et al., 1990; Andrews & Bonta, 1998), reiterate the role of appropriate assessment of offenders' risk and need levels and the importance of advocating differential levels of service to offenders who vary in risk and needs.

A number of studies have reported the interrelationships between the employment subscale from the LSI-R, and various outcomes. Motiuk (1991) reported employment as one of the dynamic items from the LSI-R that significantly and consistently predicted community adjustment outcome measures in a sample of provincial offenders on day parole. Rowe (1995) examined the relationships between the education/employment subscale from the LSI and: (a) revocations; (b) violent recidivism, and (c) reincarcerations within a sample of 389 provincial offenders over a one-year follow-up period. Although no significant correlations were obtained for revocation, relationships were obtained for violent recidivism ($r = .16$) and reincarceration ($r = .21$). Moreover, he used a measure derived from parole officer ratings to examine the relationship between employment and the three outcome measures. Offenders with a positive outlook were those with concrete job opportunities available upon release, those with a mixed outlook had some chance for obtaining employment in the community, while offenders with a negative outlook (i.e., unstable) had no potential employment opportunities available prior to release. Rowe reported a significant relationship between employment instability

and all three outcome measures: revocations ($r = .21$), violent offending ($r = .15$) and reincarceration ($r = .18$).

Burke (1997) conducted a study exploring factors that contribute to community adjustment in a sample of 58 federal offenders on conditional release. Her study was directed specifically toward the assessment of offenders' perceptions of factors that contribute to outcome (successful and unsuccessful performance) on conditional release. A correlation of .67 was obtained for the relationship between the LSI-OR (Andrews, Bonta, & Wormith, 1995) and parole outcome. The employment/education subscale was also significantly related to outcome ($r = .56$). Moreover, employment was mentioned by offenders who were successful and those who were unsuccessful on release as one of the more influential factors affecting their release outcome. More specifically, employment was rated as the second most positive factor related to outcome (Burke, 1997).

The importance of employment status in contributing to success in the community has also been demonstrated using the Community Risk Needs Management Scale (CRNMS; Motiuk & Porporino, 1989). The CRNMS, like the LSI-R (Andrews & Bonta, 1995), was developed to assist in the systematic classification of offenders for different levels of community supervision. Moreover, the CRNMS is designed to assess dynamic need areas (e.g., behaviour, attitudes, personal circumstances) that, when decreased, lead to a reduction in the risk for re-offending (Motiuk, 1996a). 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.

In preliminary tests of the predictive validity of the scale, conducted with a sample ($n = 453$) of offenders released on day parole (25.2%), full parole (55.0%) or statutory release (19.8%), Motiuk and Porporino (1989) reported that the CRNMS: (a) differentiated offenders according to their levels of risk and need, and (b) predicted outcome on conditional release over a six-month period. All predictor domains, with the exception of mental ability and health, were related to outcome. Additionally, they examined the predictive ability associated with combining measures of risk (criminal history risk) and need (case needs). Within these classifications, offenders identified as low risk-low need evidenced few returns (only 5.1% and 1.9% for suspension and revocation, respectively), whereas almost half (47.5%) of the offenders rated as high risk-high need were suspended. Further research on the predictive validity of the CRNMS has confirmed these preliminary findings, with risk/needs assessments consistently relating to conditional release outcome (Gillis, Motiuk, & Belcourt, 1998; Motiuk, 1997b).

The DFIA, from the OIA, was derived from the CRNMS. More specifically, the DFIA collapses the 12 domains from the CRNMS to assess 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 conditional 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 area of unreliability and difficulty with workload were suspended within six months.

Additional support for the utility of CRNMS scores in predicting parole outcome was reported by Burke (1997). The criminal history risk rating and need ratings were highly predictive of outcome ($r = .73$ and $r = .67$, respectively). Employment pattern ($r = .49$) displayed one of the highest correlations, along with alcohol usage ($r = .46$), drug usage ($r = .42$), behavioural/emotional stability ($r = .46$) and attitude ($r = .41$).

The "Big Four" (i.e., antisocial attitudes, associates, personality and history of antisocial behaviour) have demonstrated the highest correlations with recidivism; however, employment has consistently appeared as a mid-range predictive factor, demonstrating its potential influence in contributing to community reintegration among offenders. Recognition of this potential reintegrative function of employment is also evident in various programs that have been designed to provide offenders with employability skills and work experience. The next section reviews research that has explored the relationship between program participation and recidivism. A more detailed examination of institutional employment programs and recidivism follows.

Treatment and Recidivism

Various meta-analyses of the effectiveness of correctional treatment have contributed to our knowledge base regarding "what works" (Andrews, Bonta, et al., 1990) in treating offenders. One of the most comprehensive meta-analyses conducted to date was by Lipsey (1990). Lipsey analysed the relationship between treatment and recidivism in 443 studies of juvenile offending and found support for the effectiveness of intervention in 64% of the treatment versus comparison studies. Whereas juveniles in the

comparison conditions, on average, evidenced a recidivism rate of 50%, offenders in the treatment conditions recidivated at an average rate of 45%. Although this represents a 10% reduction in recidivism in the favour of treatment conditions, Lipsey further corrected for the unreliability associated with official records of offending, and postulated that treatment effects were more likely in the range of 20% (from 50% recidivism to 40%).

Lipsey (1990) extended the analysis to explore factors associated with treatment effects, including type of study and type of treatment. After controlling statistically for various methodological factors (e.g., small sample size, attrition, etc.), he found that type of treatment contributed significantly to effect size estimates. He found that recidivism was reduced most substantively under treatment conditions that: (a) lasted longer (and had more meaningful contact with offenders), (b) were provided external to correctional settings and institutions, (c) were under the influence of the evaluator, (d) were behaviour-oriented, skill-oriented, and multimodal, (e) were provided to higher-risk cases, and (f) were provided with other relevant factors in mind (e.g., influence of family, peers). According to Lipsey, treatments that are structured and focused may contribute to an average 30% reduction in reoffending rates.

Lipsey (1995) also reported upon the relationship between treatment efficacy and various outcomes other than delinquency. In his analysis, he examined the global effects of treatment on the following non-delinquency outcomes: psychological outcome (e.g., attitudes, self-esteem), interpersonal adjustment (e.g., peer or family relationships), school participation (e.g., attendance, drop out), academic performance (e.g., grades, achievement tests), and vocational performance (e.g., job status, wages). An overall

‘success rate’ was calculated by splitting each of the outcome measures at the median; treatment and control groups were compared on their attainment of the minimum median value on outcome (i.e., their relative success rates). In a comparable fashion to delinquency outcome, positive treatment effects were found on each of the non-delinquency outcomes, ranging from 10% improvement to 30% improvement. An average effect of 10% was obtained for vocational accomplishment in the studies ($n = 44$) explored by Lipsey.

Lipsey (1995) extended the analysis to include a comparison of delinquency outcome with the additional outcomes. Significant correlations were obtained between delinquency outcome effect sizes and school participation ($r = .57$), vocational accomplishment ($r = .30$), and interpersonal adjustment ($r = .25$). In summary, Lipsey’s (1990, 1995) findings were pivotal in underscoring the importance of correctional treatment, and more significantly, appropriate treatment (i.e., multimodal, skills-oriented, and cognitive/behavioural), in contributing to improved outcomes for delinquents.

The role of appropriate treatment in contributing to a reduction in recidivism was specified in detail by Andrews, Zinger and colleagues (1990). As a response to the claim by Whitehead and Lab (1989) that “interventions have little positive impact on recidivism...” (p. 276), Andrews, Zinger et al. (1990) reanalysed the Whitehead and Lab data according to the principles of effective correctional intervention (Andrews, Bonta et al., 1990). In the replication and expansion of the juvenile and adult correctional literature, they found that appropriate correctional service, based on the principles of risk, need and responsivity (Andrews, Bonta et al., 1990), was more effective in reducing recidivism (mean $\phi = .30$) than unspecified correctional service ($-.06$) and nonservice

criminal sanctioning (-.07). Not only did they find support for appropriate treatment, but they also found that treatment effects were maintained across statistical controls for various methodological factors (e.g., sample size) that contributed to the effect size.

Andrews (1996) presented results from the expanded (294 tests) meta-analysis (Andrews, Zinger et al., 1990) that demonstrated an overall mean effect of treatment of $r = .09$. He differentiated between any human service ($r = .34$), behavioural service ($r = .47$) and appropriate correctional service ($r = .60$). Within the human service category, the mean effect of treatment ($r = .13$) was greater than criminal sanctions ($r = -.02$). Human service supplemented by behavioural approaches produced a greater effect size ($r = .25$) than human service that did not use behavioural techniques ($r = .08$). Additionally, inappropriate service was even less effective ($r = -.03$) than criminal sanctions ($r = -.02$) (although minimally), as well as unspecified service ($r = .13$) and appropriate correctional intervention ($r = .25$). Again, reflecting findings from the earlier meta-analysis (Andrews, Zinger et al., 1990), appropriate treatment was most effective in contributing to a reduction in recidivism. Furthermore, mirroring the earlier findings, these effects were consistent across type of case, setting, and study conditions. Finally, the meta-analysis supports the relevance of adhering to the risk principle in allocating treatment to individuals, as the study indicated a weak but significant main effect of risk. The lower risk category was comprised of non-delinquents, pre-delinquents, and those with status offences, versus offenders formally sentenced to probation and/or custody. In accordance with the risk principle, higher risk offenders evidenced greater treatment effects for both appropriate ($r = .26$ versus $.11$) and unspecified ($r = .13$ versus $.09$) treatment efforts (Andrews, 1996).

Dowden (1998) conducted an extended meta-analytic exploration of the Andrews, Zinger et al. (1990) data, with a particular focus on the need principle. Results support the previous orderings of criminogenic needs (see Andrews & Bonta, 1998) according to the magnitude of correlation with recidivism. In reporting on correlations of targeted criminogenic need factors with recidivism, Dowden noted that antisocial cognition was the intervention most highly correlated with effect size ($r = .36$), followed by addressing self-control deficits ($r = .33$). Family process ($r = .33$) and antisocial associates ($r = .28$) interventions were followed by matched individual need ($r = .30$), and school / work ($r = .21$). Notably, when school / work was divided into separate categories of school and vocational skills, correlations with effect size were $r = .21$ and $r = .04$, illustrating that vocational skills in isolation were not associated with a reduction in recidivism. However, when job placement (obtaining work) was added to vocational training, the correlation with effect size was significant, at $r = .24$. This finding reiterates one of Lipsey's key results, as noted by McGuire and Priestly (1995) that: "...the largest single effect size obtained (reducing recidivism by approximately 35%) was for employment-focused programmes in which clients were able to secure 'real' jobs." (p. 16). They note, however, that these results applied only to research in criminal justice-based interventions, and that they were based on a small number of studies.

The meta-analyses conducted by Andrews, Zinger and colleagues (1990) and by Lipsey (1990) represent the most intensive systematic exploration of the treatment literature to date (McGuire & Priestly, 1995). Subsequent meta-analytic reviews have replicated and confirmed these earlier findings (e.g., Dowden, 1998; Dowden & Andrews, 2000), including their applicability to women offenders (Dowden & Andrews,

1999a), young offenders (Dowden & Andrews, 1999b), and violent offenders (Dowden & Andrews, 2000). Additionally, results clearly favour the efficacy of correctional treatment (and particularly intervention efforts guided by program integrity as well as the principles of risk, need, and responsivity) in contributing to a reduced likelihood of recidivism. Notably, even though the enthusiasm for rehabilitation expressed by the authors noted above (Andrews, Zinger et al., 1990; Lipsey, 1990, 1995) has not been widely shared among all researchers (e.g., Whitehead & Lab, 1989), of the meta-analyses conducted to date, *all* reported results favouring correctional treatment over punishment-oriented intervention (Lösel, 1995; McGuire & Priestly, 1995).

In light of these meta-analytic findings, theorising on treatment efficacy has progressed from the question “*Does* treatment work” for, as Lipsey (1995) contends, it is no longer a question of *whether* treatment is effective in reducing recidivism. We know that treatment works and we must use the information derived from research to develop effective intervention strategies for offenders who manifest employment needs.

Employment Programming and Outcome

The importance of dynamic risk factors in contributing to an enhanced understanding of offenders’ supervision and treatment needs is widely recognized. Employment, as a subset of dynamic needs, has received renewed interest in corrections for its potential role in contributing to post-release adjustment (Gillis, Robinson, & Porporino, 1996; Motiuk, 1991; Motiuk, 1996b; Saylor & Gaes, 1996). That said, the following comment from Andrews et al. (1980) is still widely applicable: “...the employment factor, for all of the traditional attention it has received in corrections, has not received the quality of attention that it deserves” (p. 3).

Just as employment assessment has often been conducted using a dichotomous approach to the identification of employment needs (i.e., absence/presence of needs), individual employment program evaluations have typically used an approach that limits the utility of the information provided. Methodological weaknesses have also been noted by numerous researchers attempting to review the employment literature (Gaes et al., 1999; Gerber & Fritsch, 1995; Pearson & Lipton, 1999; Ryan, 1998). For instance, many evaluations of employment intervention strategies have defined the independent variable in a dichotomous manner (i.e., participated / did not participate in an employment program). Such an approach precludes examination of integral program factors such as selection bias, quality of participation, length of time in the program, and reasons for attrition. Additionally, many program evaluations fail to report important information pertaining to offender employment needs and competencies prior to program participation. Moreover, the issue of comorbidity in offender needs, such as the combination of employment and substance abuse needs, is important to consider for its potential impact on work performance and treatment gain. Ryan (1998) summarized many of the methodological flaws that inhibit our ability to formulate conclusive evidence on the impact of offender employment training, including: “problems in research methodology and program development, including comparability of experimental and control groups, selection of participants, tracking of ex-offenders, differentiation between structural and subcultural variables, and definition of job retention” (E5). A comprehensive evaluation of employment program effectiveness must thus consider a variety of factors that may moderate the impact of the program on the

criterion of interest (e.g., job attainment and retention, successful community performance).

In assessing the impact of employment training, one must be cognizant of the aforementioned limitations. To date, findings have been equivocal (Gaes et al., 1999; Gerber & Fritsch, 1995; Pearson & Lipton, 1999; Ryan, 1998), with some studies reporting positive effects of employment on recidivism, and others reporting limited or no effects. Some reviewers, based on a qualitative analysis of the literature, have adopted a fairly optimistic outlook on the impact of employment training on recidivism (e.g., Braithwaite, 1980; Finn, 1998; Gerber & Fritsch, 1995). Recently, Pearson and Lipton (1999) summarized the state of the employment literature, based on results of their meta-analytic review of educational and vocational programs: “Although some types of educational and vocational programs appear *promising* in terms of reducing recidivism, due to a lack of studies using high-quality research methods we are unable to conclude that they have been *verified* effective in reducing recidivism” (Abstract, italics in original).

Regardless of the lack of systematic research on the efficacy of employment programs, important outcomes exist and should not be neglected. Institutional employment programs, traditionally comprised of industries operations, constitute one of the primary mechanisms for responding to offender employment needs. 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). Although goals have varied over time, Miller and Greiser (1986) described the contemporary era of prison industries as “characterized by a

resurgence of interest in prison industries and a new integrative philosophy” (p. 1), consistent with a rehabilitative approach to dealing with offenders. This view on the role of industries has been echoed in more recent offender employment-related research (Gaes et al., 1999; Gerber & Fritsch, 1995; Gillis, 1999, 2000, in press; Gillis et al., 1996; Ryan, 1998; Saylor & Gaes, 1996; Simon, 1999). The reintegrative value of institutional employment is recognized internationally, even by correctional systems differing radically in their guiding philosophies and ideologies (van Zyl Smit & Dunkel, 1998). However, 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 (Braithwaite, 1980; Markley, Flynn, & Bercaw-Dooen, 1983; Ryan, 1998; Taggart, 1972).

Guynes and Grieser (1986) present a typology of goals relating to correctional industries that address outcomes other than recidivism; prison employment may be evaluated for its impacts on offenders, institutions, 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. Moreover, research by Simon (1999) provided insights into the manner in which shop instructors and offenders participating in industries programs regard the institutional and reintegrative (community-based) impacts of institutional employment programs. Although reserved in their endorsement of the impact of institutional work experience on securing a job after release, instructors felt that industries work in prison contributed to positive outcomes for offenders at the institutional level. Similar sentiments were expressed by offenders; although only one quarter (of 117) of offenders surveyed felt that institutional employment offered any value in contributing to work opportunities on release, more than half (56%) reported that institutional work placement assisted them in coping with living in the institution. Gleason (1986) reported similar findings on offender perceptions of the value of institutional employment in her survey of offenders incarcerated in the state of Michigan.

Institutional employment, as conceptualized by Guynes and Grieser (1986), offers the potential to impact society, in addition the aforementioned institutional outcomes. *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 ultimate 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, Laplante, & Loza, 1996; Gillis et al., 1996; Mulgrew, 1996).

The ultimate objective of correctional employment is the provision of job skills and enhancement of positive work attitudes that will assist offenders in finding employment and facilitating their reintegration to the community upon release. These employability factors constitute some of the more proximal outcomes that are anticipated as a function of participation in institutional employment programming. These proximal outcomes are hypothesized to contribute to the ultimate objectives of reintegration and rehabilitation. It is postulated that the enhancement of positive work attitudes will ultimately translate into behavioural change. Results from a study conducted by Gillis

(1994) indicate that behavioural differences, in the form of punctuality ratings, were noted among offenders with more positive work attitudes and motivation. However, further research is required to address the potential impact of work attitudes on community employment and reintegration.

The Ottawa Employment Project (Andrews, Pirs, et al., 1980; Andrews, Pirs, & Hurge, 1981) represents one of the few systematic attempts to understand if change in employment status brought about through intervention efforts contributes to the enhancement of employability in the community for probationers. Although the design was intended to be functional in nature, the random assignment initially proposed in the research design was not adhered to, limiting the design to pseudo-experimental. In their research, they compared three groups of probationers: (a) 26 unemployed probationers who were not referred to the employment pool, (b) 79 unemployed probationers who received employment-related assessment, counseling and referrals, and (c) 21 unemployed probationers who received the same employment services as the 79 probationers, supplemented with social skills training.

Briefly, they found no significant effect of the employment pool services (assessment, counseling and referrals). Positive vocational outcomes were noted for more than half (55%) of the offenders who received probationary services only and for probationers who received probationary and employment services. The social skills training component was effective in increasing vocational status only for offenders under the age of 19, who presented with the most serious employment needs. Viewed from a risk/needs perspective, these findings make sense in that higher risk individuals benefited

most from the more intensive employment-related intervention techniques (i.e., the more intensive social skills element, in combination with basic employment services).

Finally, an overall improvement was noted in employment status or vocational program participation for offenders who increased anticriminal sentiments, increased sensitivity to conventional rules, and decreased their perception of limited opportunity. Interestingly, offenders who improved their employment/vocational status exhibited more awareness of the costs associated with a conventional (“straight”) life (Andrews et al., 1981). Andrews and his colleagues provided critical information regarding some of the dynamic factors that contribute to the assessment of the balance of costs and rewards for a criminal versus a more conventional (i.e., employment-oriented) lifestyle.

Research indicates that offenders differ in their capacity to obtain employment upon release. However, methodological weaknesses associated with numerous offender employment studies limit the conclusions that may be drawn regarding factors that contribute to offender employability in the community. The present study explores some of these factors, using a longitudinal research design that allows for assessment of change in dynamic factors that may relate to employment outcomes, and ultimately, to reintegration potential. Moreover, whereas numerous community employment studies have focused almost exclusively on recidivism as the sole criterion variable, the present study includes more proximal employment outcome measures (e.g., employment status, quality of employment). Finally, rather than focusing exclusively on risk factors, the present research explores strength or competency factors that may be linked to community employment outcomes.

The following section introduces the theoretical perspective used in the present study to predict employment stability from beliefs and attitudes. The personal-interpersonal-community-reinforcement (PIC-R) perspective introduced by Andrews (1982a; Andrews & Bonta, 1998) was operationalized by borrowing from Ajzen and Fishbein's (1980) theory of reasoned action / theory of planned behaviour (Ajzen, 1985, 1988). The following section presents a description of the theoretical framework incorporating criminal attitudes and relevant work attitudes that are postulated to impact upon offenders' community employment status.

Predicting Employment Using the PIC-R Perspective

The PIC-R perspective (Andrews, 1982a; Andrews & Bonta, 1998) was formulated to account for inhibitory and facilitory factors related to criminal offending. The theory employs a social learning perspective in its specification of the interrelationships between: (a) personally-mediated events, comprised primarily of the individual's attitudes, values and beliefs, and personality, which in turn, impact upon personally-mediated control (e.g., self regulation and cognitive functioning); (b) interpersonally-mediated control, consisting of the influence of others (i.e., associates/social support) via modelling, expressed approval, etc.; and (c) automatic rewards, which typically gain their rewarding properties through previous experience. These proximal factors, in interaction with more distal contextual elements (see Figure 1), influence the manner in which the individual perceives the costs/rewards for criminal behaviour (Andrews, 1995).

In the present study, the PIC-R perspective borrows from the theory of planned behaviour (Ajzen, 1985, 1988), using the framework provided by the theory to

operationalize the various constructs to predict employment status. Figure 2 portrays the integration of PIC-R and the theory of planned behaviour. As indicated in the figure, the pathway delineated by the theory of planned behaviour is retained, in its specification of intention as the immediate determinant of behaviour. Beliefs contribute to attitudes, which in turn contribute to intentions. However, as shown in Figure 3, the various components of the model are reconceptualized to fit the theoretical framework espoused by the PIC-R perspective. In accordance with the PIC-R perspective and the theory of planned behaviour, the individual is positioned in the immediate situation of action.

Figure 1

A general personality and social psychological perspective on criminal conduct

Note. From *The Psychology of Criminal Conduct, Second Edition* (p. 148), by D. A. Andrews and J. Bonta, 1998, Cincinnati: Anderson Publishing. Copyright 1998 by Anderson Publishing. Reprinted with permission.

Figure 2
Integration of the PIC-R perspective and the theory of planned behaviour

Note. From *Attitudes, Personality, and Behavior* (p. 133), by I. Ajzen, 1988, Milton Keynes: Open University Press. Copyright 1988 by I. Ajzen. Adapted with permission.

Figure 3
Integration of the PIC-R perspective and the theory of planned behaviour

Note. From *Attitudes, Personality, and Behavior* (p. 133), by I. Ajzen, 1988, Milton Keynes: Open University Press. Copyright 1988 by I. Ajzen. Adapted with permission.

As illustrated in Figure 4, within the PIC-R perspective, factors that influence the balance of costs and rewards may be construed in a variety of ways. Within the current integrated theoretical framework, the direct impact of the “Big Four” (i.e., antisocial attitudes, associates, personality, and history of antisocial behaviour) on behaviour is mediated by intention, following from Ajzen and Fishbein’s (1980) theory of reasoned action. In accordance with the original theories (Ajzen, 1985, 1988; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), the attitudinal variables within the revised theory of planned behaviour (i.e., attitude toward the behaviour and subjective norm) are influenced directly by relevant beliefs.

The present study, in predicting community employment status for a group of offenders on conditional release, incorporates relevant work attitudes within the PIC-R perspective. Therefore, in examining the factors presumed to affect community employment status, both criminal attitudes and work attitudes are postulated to have an impact (see Figure 5).

Immediate Situation

Andrews and Bonta (1998) refer to political, economic, cultural, and social-structural factors as contextual conditions that influence behaviour at the broadest level. A relevant broad social factor in the context of offenders' ability to find and retain work is unemployment rate. Within the present study, unemployment rate is assessed at the city level, and is therefore construed as an important component of the immediate situation, in terms of its impact on the direct availability of work.

Figure 4

The psychological situation in a general personality and social psychology of criminal conduct

Note. From *The Psychology of Criminal Conduct, Second Edition* (p. 146), by D. A. Andrews and J. Bonta, 1998, Cincinnati: Anderson Publishing. Copyright 1998 by Anderson Publishing. Reprinted with permission.

Figure 5
Integration of work attitudes within the PIC-R perspective

Note. From *Attitudes, Personality, and Behavior* (p. 133), by I. Ajzen, 1988, Milton Keynes: Open University Press. Copyright 1988 by I. Ajzen. Adapted with permission.

Distal Factors

The revised model proposes the interaction of various contributing factors to behaviour. Specifically, the modification proposes the indirect influence of distal factors (e.g., demographic variables) on behaviour. In accordance with the theory of reasoned action/planned behaviour, distal factors are viewed as operating upon the individual's belief system. This approach complements the PIC-R perspective, since the general personality and social psychological approach specifies distal factors as operating indirectly on criminal behaviour via their influence on the more proximal factors (i.e., the "Big Four"). Distal demographic factors postulated to be associated with employment status (Markley et al., 1983) and criminal behaviour (Andrews & Bonta, 1998) include age, gender, ethnicity, and marital status. Broader factors, such as neighbourhood and family of origin, are not included in Figure 5, as these variables were not measured in the current research.

Beliefs

Within the theory of planned behaviour (Ajzen, 1985, 1988), as in the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), beliefs contribute to attitudes toward the behaviour and to the individual's perception of social pressures to perform the behaviour. Additionally, control beliefs contribute to the individual's perception that he or she is capable of attaining the behaviour of interest.

Behavioural beliefs, which contribute to attitude toward the behaviour, are comprised of: (a) beliefs regarding the outcome of the behavior, and (b) the individual's evaluation of the outcome. The theory of planned behaviour suggests that positive attitudes result from the belief that performance of the behaviour will lead to favorable

outcomes, whereas negative attitudes toward the behaviour are a function of the belief that performance of the behaviour will lead to negative outcomes. Likewise, normative beliefs contribute to the individual's subjective norm. If an individual perceives it important that others think he or she should perform the behaviour, and he or she is motivated to comply with these people, then the subjective norm component will contribute to the individual's intention to perform the behaviour.

The individual's sense of control is derived from control beliefs, much the same as attitudinal and normative factors result from behavioural and normative beliefs. Ajzen (1985, 1988) contends that control beliefs consist of the interaction of potential performance opportunities and available resources required to perform the behaviour. Both modeling and past performance of similar behaviour contribute to an individual's perception of behavioural control. When an individual is presented with the opportunity and resources, and has previously observed the behaviour enacted by others, then he or she will likely feel that the behaviour is under his or her control. Thus, according to the theory of planned behaviour, behaviour is ultimately a function of the beliefs held by an individual (Ajzen & Fishbein, 1980; Ajzen, 1985).

Behavioural beliefs. The learning principles described in PIC-R play an integral role in defining the beliefs that behaviour leads to particular outcomes and the individual's evaluation of the outcomes. It is proposed that a component of the discriminative antecedent stimuli, signalled costs and rewards, contributes to beliefs regarding outcomes. Moreover, the individual evaluates outcomes on the basis of the density of these signalled costs and rewards. These beliefs operate such that if the outcomes relating to the behaviour are perceived as more rewarding than costly, then the

individual's general attitude toward the behaviour will be positive. Similarly, if he or she perceives the costs at a higher density than rewards, then his or her attitude toward the behaviour should be more negative (Andrews, 1982a; Andrews & Bonta, 1998).

In assessing behavioural beliefs, it is important to assess the individual's perceptions of the likelihood of ultimately obtaining employment, and the positive and negative aspects associated with obtaining employment. Important is the balance of the individual's assessment of the costs and rewards for legitimate employment versus criminal activity as a means of economic sustenance in the community. The concept of costs and rewards for employment versus crime were initially proposed by Andrews et al. (1980), in a series of hypotheses relating to the Ottawa Employment Project, expanding upon the motivational and control elements postulated to contribute to the enactment or avoidance of criminal behaviour (Andrews, 1982a). However, whereas the focus of the Ottawa Project was on the interrelationship of costs and rewards and their ultimate contribution to rehabilitation, the present focus relies upon the balance of costs and rewards for employment and crime and their contributions to employment outcomes.

For the beliefs component, it will also be necessary to assess generalized states of involvement in work, as well as deeply ingrained ideas regarding the value of employment. These constructs are typically operationalized using work involvement, work ethic, and value of employment measures (see Figure 6).

According to Kanungo (1979, 1982), the involvement literature is replete with conceptual ambiguity stemming from numerous theoretical and empirical conceptualizations of the construct, which has resulted in different operational definitions (Rabinowitz & Hall, 1977).

Figure 6
Scales to assess components of the PIC-R perspective

Note. From *Attitudes, Personality, and Behavior* (p. 133), by I. Ajzen, 1988, Milton Keynes: Open University Press. Copyright 1988 by I. Ajzen. Adapted with permission.

Furthermore, this confusion has been exacerbated by the manner in which job and work involvement concepts have been used interchangeably (Kanungo, 1979, 1982).

Kanungo's (1982) definition has been noted as the most conceptually refined operationalization of the construct (Brown, 1996). Both job and work involvement refer to a "cognitive or belief state of psychological identification" (Kanungo, 1982, p. 342), the development of which is dependent upon both the saliency of needs (extrinsic and intrinsic) and perceptions of the ability (of work or a job) to satisfy these needs. However, job involvement refers to a specific or particular job context, whereas work involvement is associated with a more generalized work context. Various studies have supported the conceptual independence of the constructs of work and job involvement (Elloy & Terpening, 1992; Gorn & Kanungo, 1980; Kanungo, 1982). Whereas job involvement is situationally-based, work involvement refers to a more stable characteristic that develops from the socialization process. Job involvement, as a contemporaneously caused belief, is viewed as more malleable, due to its situational nature, whereas work involvement is a normative belief resulting largely from more historical processes. Work involvement, in referring to a generalized state resulting from the socialization process, is closely related to the Protestant work ethic.

The Protestant work ethic construct, used to assess the centrality of work in one's life, has often been equated with work involvement, but it has been noted that the constructs are conceptually distinct (Kanungo, 1982; Morrow, 1983; Morrow, Eastman, & McElroy, 1991; Paterson & O'Driscoll, 1989). Protestant work ethic refers to a set of attitudes emphasizing the virtues of hard work and success in one's field and provides

“moral justification for the accumulation of wealth” (Ho & Lloyd, 1984, p. 321). Ho and Lloyd developed a work ethic scale in the attempt to gain a better understanding of attitudes toward unemployment among Australians. The *Australian Work Ethic* (AWE) scale identifies attitudes regarding the significance of work and also assesses the belief that effort contributes to success. In their study, respondents who scored high on the AWE scale attributed unemployment to intrinsic, rather than extrinsic factors and furthermore, indicated less willingness to assist the unemployed. The authors proposed that the scale be used to supplement the examination of job and work involvement in organizations. Moreover, Ho and Lloyd suggested the utility of the scale for exploring relationships between work ethic and adjustment among both employed and unemployed individuals.

Normative / associate beliefs. Within the model, normative beliefs are comprised of the individual’s perceptions of what important others think he/she should do regarding the behavioural criterion. To this end, it is important to assess the degree to which the significant others view employment as important.

Control beliefs / history. One of the modifications to the causal pathway of the theory of planned behaviour (Ajzen, 1985, 1988), through the incorporation of the PIC-R perspective (Andrews, 1982a; Andrews & Bonta, 1998) and consistent with the criminological literature relating past criminal behaviour to recidivism (Gendreau et al., 1996), is the inclusion of prior behaviour. Bentler and Speckart (1979) included past behaviour in their modification of the theory of reasoned action, to account for behaviours that are relatively habitual. In their model, past behaviour was viewed as contributing directly to both intention and behaviour. Likewise, in a comparison of Ajzen

and Fishbein's (1980) theory of reasoned action and Bentler and Speckart's modification to the theory, Fredricks and Dossett (1983) found a significant relationship between past and subsequent behaviour, in addition to past behaviour and intention.

However, given the inclusion of perceived behavioural control/self efficacy in the revised model, it is proposed that past behaviour better serves as contributing to control beliefs. That is, past behaviour is viewed as one of the factors that contributes to an individual's assessment that he/she is capable of performing future similar acts. It is proposed that past performance of criminal acts and work experience will serve as a particularly influential form of antecedent control, as the outcomes from these prior behaviours provide a good indication of the potential costs and rewards for future similar acts. In addition to past behaviour, it is proposed that the availability of resources serves as a discriminative stimulus, and personality variables (particularly impulsivity) contribute to the individual's perceived efficacy in controlling future behaviour. These elements are viewed in the present integrated model as important in contributing to self regulation. As such, control beliefs contribute to cognitive mediation prior to performance of the behaviour.

Given that the primary purpose of the present investigation is to examine factors relating to employment status, the examination of past employment experience is essential in assessing the individual's perception of his/her control in obtaining employment upon release. As illustrated in Andrews and colleagues (1980), within the employment history domain, the factor that appears to be most closely related to recidivism is employment *stability* prior to incarceration. Various studies indicate a direct relationship between employment stability and recidivism: the more unstable the

employment status prior to incarceration, the higher the rate of recidivism (Gendreau, Grant, Leipziger, & Collins, 1979; Glaser, 1964; Renner, 1978; Waller, 1974; as cited in Andrews et al., 1980). Additionally, resources that play an important role in contributing to control beliefs consist of institutional employment training and experience, and particularly training that responds to identified needs (employment and others).

Attitude, Subjective Norm and Perceived Behavioural Control

Attitude toward the behaviour is the individual's positive or negative evaluation of performing the behaviour. Whereas the attitude component reflects personal judgment regarding the favorability of performing the behaviour, the subjective norm component refers to the individual's perception of social pressures to perform or not perform the particular behaviour (Ajzen & Fishbein, 1980; Ajzen, 1985, 1988). Perceived behavioural control refers to the extent to which an individual perceives a behaviour as easy or difficult to perform (Ajzen, 1985, 1988).

Attitude toward the behaviour. Attitude has received a vast amount of attention in the social psychological literature in predicting behaviour (see Eagly & Chaiken, 1993), and has received increasing attention in corrections research and practice (Andrews & Wormith, 1984; Andrews, Wormith, & Kiessling, 1985; Simourd, 1997). In predicting employment status, both attitude toward work and attitudes toward criminal behaviour are posited to have an effect (Andrews et al., 1981).

Within the attitudinal domain, it is essential to gain an understanding of the value ascribed to legitimate employment versus criminal activity. It is posited that the individual's endorsement of procriminal sentiments and extent of criminal involvement will be important. Sykes and Matza (1957) provided an important contribution to the

antisocial attitudes literature, in their examination of what they termed “techniques of neutralization.” In contrast to subcultural theories (e.g., Cohen, 1955) that proposed delinquency as a form of opposition to the dominant culture, Sykes and Matza proposed that delinquents employ techniques of neutralization that serve to justify their criminal actions. Specifically, they suggested that delinquents may employ five such techniques: (a) denial of responsibility, (b) denial of injury, (c) denial of the victim, (d) condemnation of the condemners, and (e) appeal to higher loyalties. The theoretical orientation adopted by Andrews (1982a; Andrews & Bonta, 1998), much like that described by Sykes and Matza and refined by Bandura (1991), examines how self exonerating processes contribute to the individual’s perceptions of rewards and costs for criminal behaviour.

A scale that has been used extensively and which is associated with criminal behaviour is the *Tolerance for Law Violations* (TLV) subscale from the *Criminal Sentiments Scale* (CSS; Andrews, 1985; Andrews et al., 1985). Originating with Reckless (1967; Mylonas & Reckless, 1963), the scales were revised by Gendreau and colleagues (1979) and by Andrews (1985). Andrews (1985) describes the scales as reflective of “those personal attributes, values and beliefs which discredit the moral authority of the criminal justice system, directly justify illegal activity, and suggest positive identification with those who offend” (p. 2). *Tolerance for Law Violations* evaluates rationalizations/justifications for law violations, borrowing from Sykes and Matza’s (1957) techniques of neutralization, and reflects movement of attention from attitude content to attitude processes (Simourd, 1997). Thus, the CSS serve primarily to assess the attitudinal component of the “Big Four” (Andrews & Bonta, 1998), and relate to self exonerating processes and self talk (Andrews, 1982a; Andrews & Bonta, 1998; Bandura,

1991; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996), which serve to justify criminal conduct (Andrews, 1985). The *Identification with Criminal Others* (ICO) subscale from the CSS (Andrews et al., 1985) is an attitude measure that has been used to assess the extent to which individuals associate with other offenders. Andrews and Wormith (1984), in one of the few studies examining the dynamic nature of the CSS, found that changes in ICO were related to recidivism. More specifically, as offenders' identification increased from pre- to post-test, so did recidivism levels increase. As ICO is related to recidivism, it is important to assess the extent of criminal identification, as it potentially influences attitude toward convention (i.e., orientation to prosocial associates and legitimate employment).

The scales have been normed on a variety of populations (e.g., university students, probationers, and federally- and provincially-adjudicated offenders) in numerous research contexts and have been employed for evaluative and normative purposes, as well as assessment of therapeutic intervention effectiveness (Wormith & Andrews, 1995). Additionally, Wormith and Andrews reported the CSS to be predictive of official reconviction ($r = .33$) and self-reported involvement in criminal activity ($r = .44$). Wilkins (1975) and Morrison (1982) found the CSS subscales to be postdictive of self-reported criminal acts and arrests in a sample of university students ($r = .25$ and $.14$, respectively) (as cited in Andrews & Wormith, 1984). Furthermore, Robertson (1996), in an examination of antisocial attitudes, values and beliefs in a university sample, found a high correlation ($r = .64$) between the TLV subscale and behavioural criterion, self-reported delinquency.

Bandura and colleagues (1996) likewise describe “self exonerating processes” that serve the same function as the techniques of neutralization specified by Sykes and Matza (1957). Bandura’s (1991; Bandura et al., 1996) theoretical model is comprised of the various pathways that contribute to criminal behaviour through their influence on cognitions. According to Bandura’s (1991) theory, based in a social cognitive framework, moral reasoning contributes to self regulatory processes, which result in behaviour. Bandura describes moral conduct as mediated by the individual’s self regulatory processes; people regulate their actions according to the implications of those actions for themselves. People choose to perform behaviours that contribute to their self worth and satisfaction, and avoid behaviours that result in violation of their moral standards. Thus, moral conduct is a function of the “ongoing exercise of self influence” (Bandura et al., 1996, p. 364), as behaviour must correspond to the individual’s internal standards.

Self regulation, according to Bandura and his colleagues (1996) results from self monitoring, judgmental, and self-reactive functions. Individuals regulate their actions by evaluating them against situational constraints and internal standards. Thus, the individual evaluates the positive or negative consequences of the behaviour according to consistency or discrepancy with his or her internal standards, and forms a decision to perform the behaviour on this basis.

In a similar fashion to Sykes and Matza (1957), Bandura and his colleagues (1996) postulate various mechanisms that, when activated, may serve to disengage the individual, allowing for performance of behaviour that appears discrepant with moral standards. These processes, remarkably similar to those proposed by Sykes and Matza, include “reconstruing the conduct, obscuring personal agency, misrepresenting or

disregarding the injurious consequences of one's actions, and vilifying the recipients of maltreatment by blaming and devaluating them" (Bandura et al., 1996, p. 364).

Essentially, these exonerating processes parallel Sykes and Matza's denial of responsibility, denial of injury and denial of the victim, respectively. Bandura and colleagues developed a scale designed to assess the components of these self-exonerating processes. According to results reported by Bandura et al., the *Mechanisms of Moral Disengagement* scale shows promise for use in predicting delinquent behaviour.

In addition to examining criminal attitudes, it is important within the theoretical framework to assess relevant work-related attitudes. Although a number of work attitudes have been associated with employment outcomes (e.g., organization commitment, job involvement, etc.), the present study focuses on job involvement and intrinsic job motivation, due to their link with motivation.

Kanungo's (1981, 1982) reformulation of the job involvement construct, based in part on Maslow's (1954) hierarchy of needs, relates job involvement to perceived potential to fulfill salient needs. In a recent meta-analysis of the job involvement literature, Brown (1996) reported a strong positive relationship between work ethic endorsement, internal motivation, self esteem and job involvement. Additionally, work involvement, although a distinct construct, was highly related ($r = .53$) to job involvement. Moreover, Brown suggests, on the basis of his results, that job involvement does not appear to contribute directly to work performance, and postulates that other variables (such as motivation and effort) may mediate this relationship. However, as Brown cautions, these relationships have yet to receive empirical validation. Brown advocates examination of "the potential role of job involvement-alienation in initiating an

attitudinal-behavioral process leading to turnover” (p. 244). Therefore, job involvement fits well within the attitudinal domain of the model, with intention mediating the relationship between job involvement and employment status.

An additional factor that has received attention in the work attitudes literature is intrinsic job motivation. The intrinsic job motivation scale, developed by Warr, Cook and Wall (1979) measures the extent to which a person wants to perform well in his or her job to achieve intrinsic satisfaction.

Subjective norm / associates. Subjective norm refers to the individual’s perception that significant others want him/her to perform the behavior. In evaluating this component of the model, it is important to derive whether the individual is attached to prosocial or antisocial important others. Within the current framework, a meaningful measure is the evaluation of perceived social support for crime versus social support for obtaining employment. The role of social support for crime arose from theoretical roots provided by subcultural and differential association theory, and was refined in the social psychological approach to the study of criminal conduct (Andrews, 1982a; Andrews & Bonta, 1998). The *Social Support for Crime* scale (Andrews, 1985), was modified from Short (1957) and Hackler and Hagan (1975) to evaluate affective ties with offenders and access to resources. Within samples of undergraduates, the scale’s overall correlation with self reported offences was .46 (Wilkins, 1975) and arrest, .21 (Morrison, 1982). Morrison found that social support for crime moderated the impact of criminal sentiments; she reported that among undergraduate students with an intermediate number and variety of supports for crime, TLV was most strongly related to self-reported criminal activity.

Moreover, it is postulated within the current study that the offender's social support for obtaining employment will be influential in contributing to employment outcomes. Soothill and his colleagues (Soothill, Francis, & Ackerley, 1997; Soothill, Francis, & Escarela, 1999; Soothill & Holmes, 1981) conducted a series of follow-up studies exploring outcomes for offenders who received the services of a specialist employment agency (APEX) in the early 1970s. They found that offenders who received intensive services and who had three or more previous offenses benefited more (i.e., recidivated less) from APEX services than their counterparts who received less intensive services, and even compared to offenders with two or fewer offenses who received less intensive services. This finding held even for offenders who were not placed in jobs, but who maintained contact with the agency. The authors originally attributed this finding to motivation on the part of these offenders. Later conclusions derived from more sophisticated analyses were linked to the role of social support, and the risk principle elucidated by Andrews and colleagues (Andrews et al., 1990). Soothill et al. (1999) postulated that offenders with two or fewer offenses (i.e., low risk offenders) are more likely to maintain their social contacts than offenders who are more heavily involved in crime (i.e., high risk offenders with three or more offenses). The authors hypothesize that the intensive services provided by APEX to these higher risk offenders provided the ongoing support that might otherwise not exist for this group of offenders (Soothill, Francis, & Escarela, 1999). Thus, these findings corroborate the risk principle in the context of employment intervention and also demonstrate the potential influence of social support in contributing to offenders' community reintegration.

Perceived behavioural control / self efficacy. Ajzen (1985, 1988) maintains that an individual's level of control is influential in contributing to performance of nonvolitional behaviour, but acknowledges that accurate measurement of actual control is difficult. Therefore, he proposes perceived behavioural control as a proxy for actual control. Given that perceived behavioural control is defined as the extent to which an individual perceives a behaviour as easy or difficult to perform (Ajzen, 1985, 1988), it is highly related to Bandura's (1977) conception of self efficacy. Self efficacy, according to Bandura, refers to "the conviction that one can successfully execute (a given) behavior" (p. 193).

Empirical studies that have examined the theory of planned behaviour tend to use the concept of perceived behavioural control and self efficacy interchangeably (Ajzen, 1988). The perceived behavioural control component is comprised of the self regulation skills proposed in the PIC-R (Andrews, 1982a; Andrews & Bonta, 1998) model. As Ajzen (1985, 1988) notes, when behaviour is completely under the actor's volitional control, then the theory of reasoned action is adequate for predicting behaviour (i.e., the perceived behavioural control component is unnecessary in predicting behaviour). Given the potentially influential role self efficacy plays in avoiding criminal activity and in obtaining legitimate employment, the present study will assess both criminal self efficacy and occupational self efficacy.

Brown, Zamble and Conroy (1996) developed a scale designed to assess self efficacy beliefs regarding criminal behaviour. The *Criminal Self Efficacy Scale* (CSES; Brown et al., 1996) is proposed in the present model to evaluate "the extent to which a person perceives him/herself as a resourceful criminal" (p. 1). The scale assesses specific

criminal ability, “one’s perceived ability in committing a variety of violent and nonviolent crimes successfully” and general criminal ability, “one’s belief in his/her general expertise in the criminal environment” (Brown et al., 1996, p. 1).

Although the extent to which individuals feel capable of obtaining employment will be affected largely by past experience, it is also contingent upon the degree to which they feel self efficacious with respect to their ability to obtain employment. The *Occupational Self Efficacy Scale* (Fletcher, Hanson, & Bailey, 1992) assesses adults’ beliefs in their continued ability to learn, adapt, and be productive in a changing workplace. Three components of the scale assess performance ability, learning ability and organizational skills. The overall scale correlates with intrinsic job motivation, previous employment success, and general self efficacy.

Intention

Intention, which expresses the likelihood or probability of performing one behavioural alternative over another, is the immediate determinant of behaviour. The strength of the correlation between intention and behaviour is contingent upon: (a) the correspondence, or compatibility, between intention and the behavioural measure (Ajzen & Fishbein, 1977, 1980; Ajzen, 1985, 1988); and (b) the stability of the intention over time (Ajzen & Fishbein, 1980; Ajzen, 1985, 1988; Fishbein & Ajzen, 1975). Intention mediates the relationship between the behavioural criterion and attitude toward the behaviour and subjective norm, respectively. Given that intentions are a function of the attitude toward the behaviour, subjective norm, and perceived behavioural control, then typically, an individual will intend to perform a behaviour when he or she holds a positive attitude toward the behaviour, when he or she perceives important others as

supportive of their performing the behaviour, and when he or she perceives the behaviour as attainable (Ajzen, 1985, 1988). In the present study, it will be important to assess the individual's intentions to obtain legitimate employment.

Behaviour

The behavioural component is important to explore, not only as the criterion variable, but additionally, as a means to an end. According to the PIC-R perspective (Andrews, 1982a; Andrews & Bonta, 1998), criminal behaviour serves as an operant or instrumental response. The behaviour itself establishes cost/reward contingencies that influence future occurrences of similar behaviours. The individual's assessment of the rewards and costs thus contributes to the consequent control associated with performance of a particular class of behaviours. The controlling properties are also associated with the density of the costs or rewards for commission of the criminal behaviour (Andrews, 1982a; Andrews & Bonta, 1998). Thus, the model can be conceived of as a feedback loop, with the assessment of costs and rewards contributing to the individual's belief and attitudinal systems regarding performance of the behaviour of interest. Additionally, inclusion of the feedback loop acknowledges the role of prior behaviour as highly predictive of future occurrences of similar classes of behaviour (Gillis & Andrews, 1997).

The theory of planned behaviour has been criticized (Eagly & Chaiken, 1993) for its specification that each component of the process is activated for each act performed by an individual. Use of the feedback loop, with assessment of the costs and rewards feeding into the belief and attitudinal components allows for a more "reflexive," or less cognitively-mediated process. Thus, when the individual encounters a particular situation that may be perceived as conducive to committing crime, then he or she assesses the

discriminative stimulus with reference to similar situations that have occurred in the past. According to the present theoretical model, the active processing postulated to occur at the belief and attitude level may be bypassed to the extent that the individual has performed the behaviour in the past, and has subsequently assessed the density of costs/rewards associated with the act (Gillis & Andrews, 1997).

Within the current theoretical framework, as behaviour is the ultimate criterion predicted from the various components of the model, it is important to gain an adequate representation of the criterion measure, employment. As such, various indicators of employment were assessed, including actual attainment of employment, quality of employment, and number of weeks employed. This approach is modeled after Andrews and colleagues (1980), who advocated an expansion of the conceptualization of employment outcomes beyond a simple measure of employment status. Moreover, research by Markley et al. (1983) explored employment success in a sample of offenders who had received job skills training. Although they found no effect of training in the experimental group, relative to a control group matched on age, sex, race, education and skill level prior to training, they used a "success index" to measure employment outcomes. This "success index" was comprised of months employed per year and yearly earnings during release, which represents progression from pure reliance on employment status as the sole outcome associated with employment training. Finally, Uggen (1999), in his research exploring employment outcomes for offenders who participated in National Supported Work Demonstration Project, found that job quality (the mean overall satisfaction scores obtained from a standardized employment survey) was associated with a reduction in recidivism among participants. This effect of high quality employment held

while controlling for personal characteristics, such as prior criminal record and substance use, and measures of socioeconomic status.

Hypotheses

A comprehensive approach to the exploration of employment outcomes (i.e., employment status, quality of employment, and number of weeks employed) was adopted in this study. The primary objective of this research was to explore whether the theoretical model, an integration of the PIC-R perspective (Andrews, 1982a; Andrews & Bonta, 1998) and theory of planned behaviour (Ajzen, 1985, 1988), would be relevant to the prediction of community-based offender employment outcomes. It was hypothesized that the constructs within the theoretical model would contribute to the prediction of employment outcomes.

Another purpose of this research was to explore the efficacy of dynamic versus static factors in predicting employment outcomes. The second hypothesis was that dynamic variables would enhance the prediction of employment outcomes over static variables. Analyses explored whether accounting for change through use of a dynamic assessment technique enhances the prediction of outcome.

Method

Participants

One month. Participants for this research were male federal offenders released to selected Canadian cities. Federal offenders are individuals who are sentenced to a prison term of two years or more, usually served in a penitentiary operated by the Correctional Service of Canada. A total of 666 federal offenders were released to the study sites from December 1998 to September 1999. Of this total, 46 did not fit the criteria for inclusion in the study (i.e., they had less than 6 months remaining on their sentence), and 72 were suspended before the research assistant could contact them; of the 666 offenders released to the 8 sites, 548 offenders were eligible to participate. Of the 548 offenders eligible, researchers were unable to contact 26 offenders, 213 refused, and one research assistant missed the timeline for seven offenders, yielding a participation rate of 55% (302/548). Background information on the 213 offenders who refused to participate is unavailable due to ethical (research) considerations surrounding their non-consent.

These 302 participants were adult male federal offenders released to one of six major centres within each of three regions (Atlantic [22.5%], Ontario [24.5%], and Prairies [53.0%]) to serve the remainder of their sentence on conditional release (day parole [64.2%], full parole [8.3%], or statutory release [27.5%]). Given that this study explored community-based outcomes for offenders during the first six months of release, it is not surprising that nearly two-thirds of offenders were on day parole. Day parole is the earliest type of release offered to offenders, with eligibility six months prior to one-third of the sentence served. Offenders are eligible for full parole at one-third or one-half of their sentence, depending on the type of admitting offense. All federal offenders are

legally required to be released at two-thirds of their sentence (i.e., statutory release), with the exception of those who meet the eligibility requirements to be detained for the remainder of their sentence.

The average age of participants, calculated on the basis of date of pre-test administration, was 33.7 years ($SD = 10.3$ years), with age ranging from 19 to 66 years. One half of the sample was Caucasian (50.8%); the remaining offenders were Innu (1.0%), Inuit (0.3%), Metis (5.4%), North American Indian (8.0%), Hispanic (4.0%), Arabic (14.4%), Black (10.0%), Asiatic (4.0%), East Indian (1.3%) and other (0.7%). To facilitate analyses, ethnicity was collapsed into a two level measure: Aboriginal (14.7%) and non-Aboriginal (85.2%). Marital status, derived from CSC's automated database, was collapsed to yield two categories: involved in a relationship (38.2%) or single (61.8%).

Six months. A total of 106 male federal offenders participated in the six-month assessment phase of the study. Of the original 302 who participated in the one month testing, 285 offenders were eligible to participate at six months, as 17 moved to another city. However, as 72 of the 285 offenders were suspended and/or revoked after their first assessment, only 213 were available to participate at six months. Of these 213 offenders, a total of 107 refused, yielding a participation rate of 50% (106/213) for the second phase of the study.

The average age of participants from the six month assessment phase was 35.9 years ($SD = 10.7$ years), with age ranging from 20 to 63 years. At six months, breakdown of the sample by ethnicity shows that 8.6% were Aboriginal and 91.4% non-Aboriginal. The majority of offenders who participated in the six month assessment were not married (60.3%).

Measures

Researchers concur that to enhance the efficacy of prediction, multi-method assessment and systematic reassessment of dynamic risk factors is paramount (Andrews & Bonta, 1998; Bonta, 1996; Gendreau et al., 1994; Gendreau et al., 1996; Monahan, 1996; Motiuk, 1996a). Systematic reassessment in this study allowed for evaluation of change in dynamic factors that may contribute to employment outcomes in the community. Data were collected at two points in time (during the first and sixth month of release) using automated file review, an interview conducted by research assistants, and offender self-reported work attitudes and related information.

The file review examined information contained with CSC's automated OIA and offense databases and included historical employment and criminal involvement information, and more dynamic variables such as offender needs. The *Community Employment Checklist* (see Appendix A) was developed for research assistants' use. The instrument, consisting of a short number of community employment-related variables, examined static factors such as institutional program participation, and dynamic variables, such as number of job interviews attended during the first six months of release. Moreover, the employment checklist included ratings of the work attitude constructs assessed in the offender work attitudes battery, for completion by research assistants. The *Work Attitudes Questionnaire* (see Appendix B) consisted of standardized scales designed to assess the attitude, motivation and efficacy-related constructs detailed within the PIC-R perspective (Andrews, 1982a; Andrews & Bonta, 1998).

Predictor Variables

The predictor variables in the present study incorporate the various components within the PIC-R perspective (Andrews, 1982a; Andrews & Bonta, 1998), organized according to the pathway specified by the theory of planned behaviour (Ajzen, 1985, 1988) as contributing to behaviour: immediate situation / broad social factors, distal factors, beliefs, attitudes, subjective norm, perceived behavioural control, and intentions. The measures used to assess the constructs specified at each level of the causal pathway are outlined in this section. As previously described, several methods were used to assess the components of the pathway. Standardized scales were employed to examine the constructs. The *Community Employment Checklist*, completed by parole officers, assessed historical employment-related information and work motivation. Finally, the file review provided additional information not directly assessed in the work attitudes questionnaire and employment checklist. Predictor variables, or sets of predictor variables, are presented in the following section as they appear in the model; the immediate situation, followed by beliefs, attitudes, then intention. Distal factors are not described, as they were presented in the *Participants* section.

Immediate situation. Outcomes of interventions are impacted by a variety of factors, including "broader social-structural, cultural and political-economic conditions" (Andrews & Kiessling, 1980; Hoge & Andrews, 1986; as cited in Andrews & Bonta, 1998, p. 89). Similarly, broad factors such as unemployment rates contribute to the availability of work, thus contributing to the offenders' immediate situation. Regional unemployment rates (unemployment rates per 100,000 people in each city participating in

the study) for 1999 were derived from data accompanying Statistics Canada's *Labour Market and Income Data Guide* (1999).

History. Static predictor variables examining criminal and employment history were derived from CSC's automated databases and from the *Community Employment Checklist*. The OIA provided information on previous involvement with the criminal justice system, including offender risk level and SIR-R1 score, developed originally by Nuffield (1982), and revised by the Correctional Service of Canada in 1996. The SIR-R1 scale is a static assessment instrument comprised of 15 risk factors (12 measuring past criminal involvement, and three assessing marital status, employment status, and whether the offender had dependents at the time of the current offense). Total scores can range from -30 to +27, with smaller values indicative of higher levels of risk (i.e., a greater likelihood of recidivism). Previous federal offenses (convictions incurred prior to the present sentence) and current federal offenses (convictions on the sentence linked to the current conditional release) were obtained from CSC's automated offense database. Overall, these data contribute to an understanding of the offenders' history of criminal offending.

Employment history, including type of employment in the year before incarceration, was obtained from the *Community Employment Checklist*. A dichotomous (i.e., skilled/unskilled) measure was compiled by collapsing employment categories: skilled labour, sales, supervisory, and managerial/professional positions were categorized as *skilled*; whereas student, homemaker, unskilled/semi-skilled and other was identified as *unskilled*.

A composite measure of stable employment history was created using all employment indicators from the employment domain within the OIA (see Appendix C for the list of items). Typically, indicators are endorsed by allocating a score of one if the indicator applies to the offender (i.e., as a risk factor). Indicators are then summed to reflect the extent of need -- the more items endorsed, the greater the need in that particular domain. For the purposes of this research, the reverse approach was adopted to reflect stability or competency in the employment domain; individual indicators that were not endorsed at intake (i.e., the indicator did not reflect the offender's need) were given a score of one, so that the fewer items that were endorsed at intake, the more stable the employment history. The same approach was adopted with the remaining education-related indicators from the employment domain to create a separate education composite measure (see Appendix D for the list of items), with fewer items endorsed representing a more stable educational background.

Finally, items from the *incarceration* section of the *Community Employment Checklist* administered at one month were used to develop a composite measure of employment and vocational training/experience obtained during incarceration. If offenders reported participating in CORCAN, vocational training, skills for employment training, or work release while they were incarcerated, they were given a score of one on the training variable. Otherwise, offenders who did not participate in work/vocational training during incarceration were given a score of zero on the composite variable.

Information on offender needs at intake was derived from the OIA, including overall need level and employment need rating (see Appendix E for a listing of individual indicators that comprise the employment domain). The employment need domain is given

a rating (*Asset, No problem, Some problems, Considerable problems*) following interviews with the offender and systematic review of the offender's file and collateral information. This information is used in the dichotomous rating of the individual indicators contained within the employment domain. The overall need rating for the domains is derived through the clinical judgement of the correctional professional (directed by rating guidelines). A similar process is used by CSC to assess offender needs upon release to the community, and every six months following release via the Community Intervention Scale (CIS [formerly the CRNMS]). For the present study, information from the CIS was used to evaluate ratings on the employment domains, and for overall need, during the first six months of release.

Behavioural beliefs. The extent to which offenders ascribe value to employment was assessed using standardized work involvement (Kanungo, 1982), work ethic (Ho & Lloyd, 1984), and value of employment (Andrews et al., 1985) scales, compiled in the *Work Attitudes Questionnaire*. Kanungo's *Work Involvement* scale was used to assess the individual's generalized cognitive identification with work and beliefs regarding the value of work. The scale, consisting of six items rated on a seven-point scale, has demonstrated adequate internal consistency ($\alpha = .75$) and test-retest reliability ($r = .67$). In an initial examination of the psychometric properties of the scale, Kanungo reported a mean of 20.70 ($SD = 5.97$) for a sample of 900 English- and French-speaking full-time industrial and governmental employees who were enrolled in evening extension courses.

The *Australian Work Ethic* scale (Ho & Lloyd, 1984) was used to assess the work ethic construct. Mirels and Garrett (1971) developed the most commonly used measure of

the Protestant work ethic (Ho & Lloyd, 1984; McHoskey, 1994), however, several studies (McHoskey, 1994; Tang, 1993) have provided evidence for the multidimensionality of their scale. Given the need for use of a parsimonious measure of the construct in the present study, the Ho and Lloyd measure of work ethic is preferable. The 7-item measure, rated on a 4-point scale (ranging from *Strongly disagree* to *Strongly agree*) has consistently displayed adequate internal reliability (range, $\alpha = .71$ to $.84$) (Furnham et al., 1991; Ho & Lloyd, 1984; Niles, 1993; Paterson & O'Driscoll, 1989), concurrent validity, and test-retest reliability (Paterson & O'Driscoll, 1989). In analyses of the psychometric properties of the scale, Ho and Lloyd reported means of 18.38 ($SD = 4.26$) and 17.77 ($SD = 3.58$) for males and females, respectively.

The *Value of Employment* measure used by Andrews and colleagues (1985) has adequate internal validity ($\alpha = .82$). Andrews et al. reported a mean of 60.85 ($SD = 6.56$) on intake assessment within a sample of probationers on the 18-item measure, anchored on a 5-point Likert scale (*Strongly Disagree* to *Strongly Agree*). Additionally, the present study used the *Expected Value of Crime* measure derived from Harris (1975), that assesses the potential costs and rewards related to criminal offending. For the present study, the scale was modified to assess perceived advantages and disadvantages of crime and employment. Offenders were asked to list the benefits associated with crime, the likelihood that they would achieve these benefits (on a scale ranging from 0 to 100), and how happy attainment of these outcomes would make them (on a scale ranging from 0 to 100). Likewise, offenders were asked to recount the disadvantages of crime and list the likelihood of these outcomes occurring and how unhappy these outcomes would make

them. The same approach was used to modify Harris' original crime scale to assess the perceived costs and benefits of employment.

Attitudes. The offender *Work Attitudes Questionnaire* was the primary instrument examining offenders' attitudes toward work and criminal attitudes. First, justifications for criminal behaviour were assessed using the *Tolerance for Law Violations* subscale from the *Criminal Sentiments Scale*. The TLV scale, comprised of 10 items scored on a five-point scale (*Strongly Disagree* to *Strongly Agree*), has demonstrated adequate internal reliability ($\alpha = .72 - .82$) and construct validity (Andrews et al., 1985; Robertson, 1996). Means for the subscale, collected with various samples of offenders, have ranged from 25.00 ($SD = 6.80$) to 30.50 ($SD = 6.80$) (see Andrews, 1985; Andrews et al., 1985; Andrews & Wormith, 1984).

Another scale designed to assess justifications for amoral or criminal behaviour is Bandura and colleagues' (1996) *Mechanisms of Moral Disengagement Scale*. The scale, recently validated by Bandura et al. (1996), provides a potentially powerful tool for operationalizing the self exonerating processes used to justify criminal actions and was modified for use with adults in the current study. The scale, in its existing form, consists of 32 items rated on a 4-point scale (four items per subscale), which form eight subscales: *moral justification, euphemistic labeling, advantageous comparison, displacement and diffusion of responsibility, distortion of consequences, dehumanization, and attribution of blame*. Bandura et al. (1996) reported an alpha reliability coefficient of .82 for the composite measure of moral disengagement.

Within the current theoretical framework, it is important to gain an understanding of the extent to which offenders cognitively identify with other offenders. One of the most frequently employed measures is the *Identification with Criminal Others* subscale from the *Criminal Sentiments Scale* (Andrews et al., 1985). Although the 6-item ICO subscale has not demonstrated very good reliability ($\alpha = .53$) in some samples (Andrews et al., 1985), other studies (e.g., Robertson, 1996) have reported more adequate alphas ($\alpha = .64$).

The attitudinal domain of the model likewise focuses on work motivation, which was operationalized using measures of job involvement (Kanungo, 1982) and intrinsic job motivation (Warr et al., 1979). Kanungo's *Job Involvement* scale, comprised of 10 items evaluated on a seven-point scale, has adequate internal consistency ($\alpha = .80$) and test-retest reliability ($r = .85$). On the initial examination of the psychometric properties of the scale, Kanungo reported a mean of 31.31 ($SD = 10.61$) for a sample of 900 English- and French-speaking full-time industrial and governmental employees.

The *Intrinsic Job Motivation* scale (Warr et al., 1979), comprised of six items rated on a seven-point scale, has good internal consistency ($\alpha = .82$) and adequate test-retest reliability. Warr and colleagues reported a mean of 36.25 ($SD = 5.51$) for a sample of blue-collar male employees in a manufacturing industry.

Associate beliefs. Associate beliefs were assessed by asking offenders to rate, on a three-point scale ranging from *Not much*, to *Somewhat*, to *Important*, the degree to which their spouse/significant other believes that having a job is important.

Associates. A variable postulated to be influential within the associates (social norm) component of the model is perceived social support. Two components of the offender's perceived social support were explored: social support for involvement in crime, and social support related to a more prosocial lifestyle (i.e., employment). The 7-item *Criminal Resources/Models* subscale and 4-item *Affective Ties to Offenders* subscale (rated on a 4-point scale ranging from *No* to *Definitely Yes*) form the 11-item *Social Support for Crime* scale. Andrews (1985) reported a moderate correlation between the *Social Support for Crime* scale and CSS ($r = .48$), as well as criminal personality scales ($r = .33$), indicating its construct validity. Means of 6.36 ($SD = 2.28$) and 12.48 ($SD = 4.19$) were reported on the respective subscales for a sample of probationers (Andrews et al., 1985). The *Support for Crime* scale was modified for the present study to reflect resources and affective ties to employment.

Criminal self efficacy. The offender's level of perceived behavioural control is equated with self efficacy within the present model. Two measures of self-efficacy were assessed in offenders: the extent to which they feel efficacious with respect to criminal offending, and occupational self efficacy. The ease with which offenders feel they are capable of committing crimes may have an impact on type of lifestyle adopted upon release. The *Criminal Self Efficacy Scale* (CSES; Brown et al., 1996) was used to assess "the extent to which a person perceives him/herself to be a resourceful criminal" (p. 1). The scale, which consists of 20 items scored in a true/false format, assesses specific criminal ability, "one's perceived ability in committing a variety of violent and nonviolent crimes successfully" and general criminal ability, "one's belief in his/her general expertise in the criminal environment" (Brown et al., 1996, p. 1). Preliminary

analyses indicate adequate construct validity, and internal reliability ($\alpha = .93$), with inter-item correlations ranging between .46 and .70.

Occupational self efficacy. It is also important to assess the extent to which offenders feel efficacious with regard to employment-related behaviours. The *Occupational Self Efficacy Scale* (Fletcher et al., 1992) comprised of performance ability, learning ability, and organizational skills, demonstrated adequate reliability ($\alpha = .94$) and construct validity in a sample of 136 adults employed at two manufacturing companies and an energy-related company (with both professional and non-professional job categories represented).

Intention. The final set of dynamic variables from the Community Employment Checklist were developed to assess intention. First, offenders were asked the simple question "Do you/did you intend to find a job" as a means of measuring the intention component of the model. Finally, offenders were asked a question designed to assess their chance of finding/maintaining employment: "How would you rate your chances of finding a job/keeping your job in the next 6 months?" with response options of *Poor*, *OK* or *Good*.

Social Desirability

The *Balanced Inventory of Desirable Responding* (BIDR; Paulhus, 1994) was included in the work attitudes battery to provide an assessment of offenders' tendency to respond in a socially desirable manner. The two-factor scale is comprised of *Self Deceptive Enhancement* (SDE), the tendency to unconsciously distort self-reports in an exaggeratedly positive manner, and *Impression Management* (IM), the purposeful attempt to impress others by responding in a socially desirable fashion. Each of the subscales is

comprised of 20 items, scored using a 7-point response format ranging from *Strongly Disagree* to *Strongly Agree*. Paulhus (1994) presented norms from a variety of sources, including undergraduate students and offenders. Interestingly, the data indicate virtually no differences on means between the students (Paulhus, Reid, & De Longis, 1989) and non-psychopathic offenders (Harper & Hare, 1988; cited in Paulhus, 1994) (SDE = 86.4, IM = 72.3 and SDE = 83.3, IM = 74.9, respectively), indicating its utility for the assessment of socially desirable responding among offender populations. For the present research, the BIDR was modified by deleting items "I have sometimes doubted my ability as a lover" and "I never read sexy books or magazines" from each of the Self Deceptive Enhancement and Impression Management scales, respectively, as offenders had expressed discomfort with these items in previous employment research (see Gillis, 1994). Additionally, item 13 "The reason I vote is because my vote can make a difference" was deleted from the Self Deceptive Enhancement scale, as federal offenders are not permitted to vote.

Outcome Variables

Behaviour. The primary dependent measure in the present study consists of various indicators of employment stability in the community. In accordance with the theory of compatibility, a variety of behavioural criterion variables were assessed, including job attainment, quality of employment, and job retention. Job attainment was simply a dichotomous measure of whether the offender was employed (yes/no) at the time of the assessment (at one month and at six months).

The following components were used to assess quality of employment at one month: (a) type of occupation (skilled/unskilled), (b) salary meeting needs (meets

needs/does not meet needs), (c) satisfaction with income (satisfied/not satisfied). Each component of the composite score was calculated on a three point scale, with 2 representing the highest score attainable. If the offender was not employed since release, he was allocated a score of 0 on each of the measures. If he was not currently employed but had been employed since release, his possible score for each of the three dimensions was calculated out of 1. If he was currently employed, each component was calculated out of 2. For example, for type of occupation at one month, if the offender had not been employed since release, he was given a score of 0; if he had been employed since release in a skilled occupation, he was given a score of 1 (*unskilled* = 0); and if he was currently employed in a skilled occupation, he was given a score of 2. Each of the three components of the quality of employment composite was scored using these criteria, to account for changes that may have occurred in the quality of employment since release. The same process was used to assess quality of employment during the second assessment at six months.

At six months, employment retention was assessed by evaluating: (a) number of weeks employed since release, and (b) longest period of continuous employment. Thus, the six month behavioural criterion accounted for frequent job changes evidenced by the offender. It is anticipated that these employment factors measure the *extent* to which the offender is employed, and avoids strict reliance on dichotomous assessment (employed/unemployed) that does not necessarily reflect change in employment status over time. These indicators were obtained from the Community Employment Checklist, administered verbally by the research assistant to the offender.

For the final set of analyses, criminal outcome data were explored. These data, derived from automated databases within CSC, were obtained to gain an indication of offenders' re-involvement with the federal system following completion of the one-month employment assessment in the community. Criminal outcome variables included *any violation* (any suspension, revocation and/or new offense), *number of violations*, the sum of all suspensions, revocations, and new offenses, and *survival time*. Survival time was a measure of the length of time (in months) that an offender remained in the community following release from the institution. The total potential survival time was standardized at 20 months, as this was the minimum length of follow-up from the latest offender release date, to the date criminal outcome data were collected (June 28, 2001).

Procedure

Before finalizing the selection of data collection sites, the researcher contacted district parole directors and parole managers from 8 major centres in three regions (Atlantic, Ontario, Prairies) to explain the project. Each representative indicated interest in pursuing the study in his respective office. The researcher followed up by providing each manager with a comprehensive information package describing the objectives and methodology of the study. Subsequent to receiving the package, each manager was contacted by the investigator and given the opportunity to ask questions about the study. Once managers discussed the study with the researcher, they were asked to assist in selecting a research assistant to conduct interviews at the parole office. More specifically, the investigator requested research assistants who were familiar with parole office procedures and who had experience working with offenders.

Once research assistants were selected, packages were supplied to both parole officers and research assistants. This information was supplemented with site visits at each selected parole office to facilitate communication between the researcher, parole officers and research assistants, and to allow for responses to any questions about the study rationale and procedure. Furthermore, this contact provided parole officers and research assistants with the opportunity to suggest any modifications to the employment instrument and work attitudes battery. After the general meeting explaining the purpose and procedure of the study, the researcher trained research assistants in application of the measures. After procedural and ethical issues were addressed, the researcher provided research assistants with a final version of all relevant materials.

The target group for the study included all male offenders who were released to each of the parole offices between December 1998 and September 1999 who had a minimum of six months remaining before their sentence expiry date. Research assistants obtained a list of offenders released to the office and examined the list to ensure that offenders had a minimum of six months remaining on their sentence to be served in the community. Once this process was complete, research assistants contacted each offender who met this criteria, requesting to meet with him once he had been in the community for a minimum of three weeks (and maximum of six weeks). Offenders who initially agreed to meet with the research assistant were first asked to read an informed consent form (see Appendix F), and requested to participate by the research assistant. They were assured that their participation was strictly voluntary (i.e., no remuneration) and would not impact on their release status or status within CSC. Additionally, they were informed that the study involved responding to employment- and crime-related questions posed by the

research assistant and completion of the self-report work attitude measures. They were then provided with the opportunity to ask questions about the procedure and purpose of the study. Finally, offenders were informed that the third component of the study involved completion of the work attitudes battery and employment checklist when they had been in the community for six months. Offenders who consented were interviewed by the research assistant and completed the work attitudes questionnaire. Six months later, offenders who has remained in the community were contacted by the research assistant and requested to complete the post-tests. Again, the purpose and procedure were explained, informed consent completed, and the post-test interview conducted and questionnaire completed. After the post-tests were completed, offenders were provided with a debriefing form (see Appendix G) which supplied them with additional information about the study, and contact numbers in the event that any questions or concerns should arise.

Data were sent on a monthly basis to the principal researcher at CSC's National Headquarters in Ottawa and were entered into a SAS database by a research assistant. All participants were assigned a subject number and names were not entered into the database.

Results

Results are presented in four main sections, with the first three focusing on relationships between predictor variables (e.g., distal factors, attitudinal measures) and employment outcomes (status, quality, and weeks employed), and the fourth dealing exclusively with follow-up data exploring criminal outcomes (suspensions, revocations, and new offenses). Within each section, descriptive information is presented, followed by correlational (intercorrelations among predictor variables, and correlations between predictor variables and outcome) and regression analyses. Data on the relationships between one month predictor variables and outcomes is followed by a section exploring associations between one month predictor variables and six month outcomes. The final employment portion presents data exploring relationships between six month predictor variables and six month outcomes.

Extensive data cleaning was performed prior to conducting statistical analyses, and all variables were examined for univariate and multivariate outliers. Composite variables were created, as described in the *Method* section, and total scores on standardized scales computed. Scales with fewer than 50% of scores missing were prorated. Mean scores were substituted for the few variables with missing total scores so equal *ns* would be available for each of the predictor variables. Raw scale scores are presented in the following frequency analyses and mean substitution scores were used in the correlational and regression analyses. Employment status, a dichotomous outcome variable, does not meet the assumptions of regression analysis. However, standard regression was used in order to compare results of the regressions across the multiple outcome measures (employment status, quality of employment, and number of weeks

employed). Logistic regression, the appropriate statistical technique to be used with dichotomous criterion variables, was conducted and yielded the same predictors.

One month

Descriptive Analyses

Descriptive analyses for this section are presented according to each of the nine components of the theoretical model, as detailed in the introduction. Comparisons are made between the sample and the national release population--offenders released to the community during the study year (1999)--on several offender characteristics (e.g., risk and need levels). These data provide an indication of the generalizability of the sample data to the general population of federal offenders on conditional release.

Immediate situation. Within the model, unemployment rate, a key economic indicator, is a distal, yet influential broad contextual factor. Table 1 presents unemployment rates (per 100,000 individuals) by major Canadian city. Regina had the lowest rate of unemployment, at 3.9%, whereas the highest rate of unemployment was found in Halifax (5.1%).

Table 1
Frequency of Unemployment Rate by City

City	Unemployment rate	Frequency
Halifax	5.1	62
Toronto	4.5	80
Winnipeg	5.3	47
Regina	3.9	18
Calgary	4.3	70
Edmonton	4.6	25

Note. $n = 302$.

Behavioural beliefs. Behavioural beliefs, an individual's evaluation of the outcome of behaviour, were comprised of the offender's perceptions about employment

(e.g., value of employment) and the positive and negative aspects associated with employment and crime, respectively. High mean values were obtained for the outcome expectancies associated with crime (i.e., chance of bad things happening with crime, and the extent to which it would cause unhappiness). Comparable means were obtained for the extent to which positive outcomes were associated with crime, and the degree to which it would induce happiness in the offender. Means on the remaining work beliefs scales were similar to those reported in the literature. The mean score on work ethic was higher than the mean of 18.38 ($SD = 4.26$) reported by Ho and Lloyd (1984), as was the mean score on value of employment, compared to that reported by Andrews 60.85 ($SD = 6.56$) in 1985. The mean score on work involvement was slightly lower than that reported by Kanungo (1982) (20.70, $SD = 5.97$). Alphas were in the acceptable range for each of these three employment behavioural beliefs scales, although the internal consistency for value of employment was lower than that reported by Andrews ($\alpha = .82$).

Table 2
Means and Alphas for the Behavioural Beliefs Measures: One Month

Behavioural Beliefs	<i>n</i>	<i>M</i>	<i>SD</i>	α^a
Crime measures				
Bad crime: Chance	269	85.3	21.6	
Bad crime: Unhappy	268	87.1	23.7	
Employment measures				
Good job: Chance	285	82.3	17.0	
Good job: Happy	285	84.3	45.4	
Australian Work Ethic	297	23.4	2.8	.70
Value of Employment	299	61.5	6.3	.69
Work Involvement	291	18.2	3.8	.72

^aAlphas were not conducted/computed on the first four measures as they are comprised of only one item.

Associate beliefs. Offenders were asked to rate the extent to which their significant other believes it is important to find work, as a measure of associates' beliefs regarding employment. Only 6.0% replied *Not very*, 3.8% said *A little*, and most (90.2%)

responded that is *Important*. Unfortunately, only 235 (of the 302 possible) responses were generated, with little variability in the responses, as 90% of responses were concentrated in the *Important* category. Although associate beliefs regarding employment are integral to the model, this component not included in further analyses due to the low response rate.

History. The theoretical framework adopted in the study postulates the influence of past behaviour as contributing to an individual's assessment that he is capable of performing similar acts in the future. Past criminal activity and employment history are influential in whether an offender will be successful in his endeavors to find work following release (Andrews et al., 1980; Andrews & Bonta, 1998; Dowden, 1998; Gendreau et al., 1996, 1998; Motiuk, 1996b, 1997b). This section explores both criminal and employment historical factors.

Information on offender risk level assessed at intake, presented in Table 3, shows 83.0% of the sample were identified as medium to high risk. This percentage is very similar to risk ratings for the 1999 release population ($n = 7225$) of federal offenders, with 86.2% identified as medium to high risk.

Table 3
Risk Levels at Intake

Risk level	Frequency	Percentage
Low	50	17.0
Medium	118	40.1
High	126	42.9
Total	294	100.0

Note. Risk ratings were not available for 8 offenders.

SIR score was available for 270 participants. Scores ranged from -21 to 23, with a mean score of 1.4 ($SD = 9.8$, median score = 0). Mean SIR score for the release population ($n = 6211$) was -1.7 ($SD = 10.6$, median score = -3.0, range = -25 to 27), demonstrating that overall, offenders in the sample are very similar in risk level to offenders in the overall release population.

The total number of previous federal offenses, was calculated using automated data from CSC's offense database, ranged from 0 to 31, with a mean of 1.6 ($SD = 4.0$) and median of 0. It is important to note that 75% of the sample did not have a previous federal offense on their record. Previous federal offense categories, presented in Table 4, were derived by considering the offenders' most serious federal offense prior to the current sentence. Violence against a person (34.2%) and theft/fraud (28.8%) were committed by the highest percentages of offenders. The remaining categories of federal offenders each consisted of less than 15% of the sample. Due to the small number of offenders in each offense category, these types of crime were not used in further analyses.

Table 4
Previous Federal Offense Categories

Offense category	Frequency	Percentage
Violence against person	25	34.2
Sex	5	6.9
Robbery	8	11.0
Drug	10	13.7
Theft/fraud	21	28.8
Other	4	5.4
Total	73	100.0

The total number of current offenses ranged from 1 to 21, with a mean of 3.9 ($SD = 3.1$). Current offense categories, presented in Table 5, show almost one quarter (23.8%)

of the sample as being incarcerated for violence against a person; one-fifth had been convicted of either robbery or drug-related offenses. Approximately 15% of offenders were convicted of theft/fraud offenses and the remaining 20% were divided between sex offenses (11.7%) and other offenses (9.7%).

Table 5
Current Federal Offense Categories

Offense category	Frequency	Percentage
Violence against person	72	23.8
Sex	36	11.9
Robbery	60	19.9
Drug	58	19.2
Theft/fraud	47	15.6
Other	29	9.6
Total	302	100.0

A number of relevant employment factors were derived from the *Checklist*, and from the OIA database. The average number of items endorsed on the composite pre-incarceration employment stability variable was 12.8 ($SD = 4.0$, range 2 to 20). The composite education stability variable showed an average of 8.4 ($SD = 3.1$, range 1 to 12) items endorsed. As composite scores on each of the measures were available for only 250 offenders, the mean score was inserted to insure that a total score was available for all offenders in the sample.

Table 6 shows the distribution of type of employment reported by offenders in the year prior to incarceration; the majority (62%) were employed in unskilled or semi-skilled positions.

Table 6
Type of Employment Reported Before Incarceration

Type of employment	Frequency	Percent
Unskilled or semi-skilled	168	62.0
Skilled	54	19.9
Sales	12	4.4
Supervisor	15	5.5
Manager/Professional	9	3.3
Other	13	4.8
Total	271	100.0

Note. 31 offenders reported not working in the year prior to incarceration.

As previously described, these categories were collapsed to reflect *skilled* and *unskilled* employment. Table 7 shows that fewer than one-third of offenders in the sample reported working in a skilled job prior to current period of incarceration.

Table 7
Type of Work Experience Before Incarceration

Type of work	Frequency	Percentage
Unskilled	212	70.2
Skilled	90	29.8
Total	302	100.0

Note. 31 offenders who did not work in the year prior to incarceration were included in the unskilled category.

Information on the percentage of the total sample of offenders who participated in CORCAN, vocational training, skills for employment program or work release during their most recent period of incarceration is presented in Table 8. Less than 40% of offenders in the sample participated in any type of employment or vocational training during their incarceration.

Table 8
Type of Work Experience/Training During Incarceration

Work experience/training	Frequency	Percentage
CORCAN	116	38.4
Vocational training	107	35.4
Skills for employment	13	4.5
Work release	36	11.9

Note. The Skills for Employment program is only currently offered to offenders in the Prairie region.

These categories were collapsed (as described in the *Methods* section) to represent a dichotomous indicator of *any* training. Although less than 40% of offenders reported involvement in any particular training category (e.g., CORCAN, work release) offenders are able to participate in more than one course; the dichotomous training variable reflects the fact that the training areas are not mutually exclusive. The employment training composite variable shows 60% of offenders reported participating in some type of work experience or vocational training during incarceration (see Table 9).

Table 9
Employment Training During Incarceration

Training	Frequency	Percentage
No	121	40.1
Yes	181	59.9
Total	302	100.0

Although overall need levels are changeable (i.e., dynamic) they are included in the employment history section as they represent results of an assessment prior to the incarceration period, and are therefore linked to employment history. Offender intake need levels, presented in Table 10, show that 83.3% of the sample were classified with medium to high needs. These numbers are slightly lower than the percentage of overall needs (87.8%) identified in the release population of federal offenders ($n = 7225$).

Table 10
Need Levels at Intake

Need level	Frequency	Percentage
Low	49	16.7
Medium	122	41.5
High	123	41.8
Total	294	100.0

Note. Need ratings were not available for 8 offenders.

The employment need rating in Table 11 shows 62.2% of offenders were identified as having employment needs when they entered the institution. Notably, less than 7% of the sample had employment identified as a beneficial component linked to community reintegration (i.e., an asset). This distribution is very similar to that obtained in the release population ($n = 7278$), with 63.8% of offenders identified with needs at intake and 6.8% with employment identified as an asset.

Table 11
Employment Need Levels at Intake

Need level	Frequency	Percentage
Asset	20	6.8
No need	91	31.0
Some need	133	45.2
Considerable need	50	17.0
Total	294	100.0

Note. Employment need ratings were not available for 8 offenders.

Each of the seven need domains is re-assessed, using the Community Intervention Scale (CIS), as offenders are released to the community. This re-assessment is conducted to evaluate change in overall needs, and specific need domains. Table 12 presents the percentage of offenders identified with overall needs, derived from the first assessment conducted during the six months following release to the community. Approximately two-thirds of offenders had needs identified during their first six months of release, which is substantially lower than the 83% identified with needs at intake (as depicted previously in Table 10) and significantly lower than the 88.3% of the release population identified with medium to high needs.

Table 12
Need Levels During the First Six Months of Release

Need level	Frequency	Percentage
Low	94	31.6
Medium	126	42.4
High	77	26.0
Total	297	100.0

Note. Need ratings were not available for 5 offenders.

Table 13 presents the distribution of specific offender employment needs. Only 55% of offenders in the sample had identified employment needs during their first six months of release. This percentage is lower than the 62.8% of the release population with identified employment needs.

Table 13
Employment Need Levels at Release

Need level	Frequency	Percentage
Asset	16	7.0
No need	86	37.4
Some need	103	44.8
Considerable need	25	10.9
Total	230	100.0

Note. Employment need ratings were not available for 72 offenders.

Personality. Personality factors, and impulsivity in particular, may moderate offenders' perceived efficacy in controlling their behaviour. During intake assessment, more than half (57.3%) of the offenders in the sample were identified as impulsive ($n = 248$). Due to the high number of missing responses, and given the dichotomous nature of the variable (i.e., impulsive: *yes* = 1, *no* = 0), the impulsivity indicator was not used in subsequent analyses.

Attitude. Attitude is conceptualized as an important proximal variable in predicting behaviour (Ajzen, 1985, 1988; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1977). In the exploration of employment and criminal outcomes, both attitude toward

work and attitudes toward criminal behaviour are postulated to have an effect. Descriptive analyses for the attitude measures are presented in Table 14. Each of the measures demonstrates an adequate level of internal reliability, with the exception of the Identification with Criminal Others scale, which has an alpha less than .60 ($\alpha = .57$), the minimum level typically accepted by researchers (Tabachnick & Fidell, 1989). However, the alpha for ICO is comparable to that obtained in previous research by Andrews and colleagues (1985) and was retained in the correlational and regression analyses. Mean scores on the TLV and ICO criminal attitude measures are lower than those reported by Andrews (1985). The mean values on the employment attitudinal measures are very similar to those reported in the literature; Kanungo (1982) obtained a mean score of 31.31 ($SD = 10.61$) on the job involvement scale, and Warr et al. (1979) reported a mean of 36.25 ($SD = 5.51$) on the intrinsic job motivation scale.

Table 14
Means and Alphas for the Attitude Measures: One Month

Attitudes	<i>n</i>	<i>M</i>	<i>SD</i>	α
Crime measures				
Tolerance for Law Violations	294	21.9	5.8	.81
Identification with Criminal Others	294	14.8	3.5	.57
Mechanisms of Moral Disengagement	295	57.8	13.1	.95
Employment measures				
Job Involvement	281	30.7	6.3	.83
Intrinsic Job Motivation	286	33.9	4.4	.70

Associates. The theoretical framework for this study proposes associates (i.e., social norm) as influential in contributing to behavioural outcomes. In this research, social support for employment and crime are conceptualized as important contributing factors to an offenders' intention to find work. The social support for crime measure displayed adequate internal reliability. Likewise, the social support for employment scale,

modified from the original social support for crime scale, had an acceptable alpha of .83. Offenders endorsed more items on the social support for employment scale, as reflected in the substantially higher mean scores, than the social support for crime scale. A mean score on the overall social support for crime scale was not reported by Andrews (1985), as he examined the criminal resources/models and affective ties to offenders subscales individually.

Table 15
Means and Alphas for the Associates Measures: One Month

Affective ties	<i>n</i>	<i>M</i>	<i>SD</i>	α
Crime measures				
Social Support for Crime	292	4.8	1.4	.70
Employment measures				
Social Support for Employment	281	12.4	3.1	.83

Self efficacy. Self efficacy, the belief that one can successfully perform a given behaviour, was explored in relation to criminal activity and occupation. Each of the self efficacy scales demonstrated high levels of internal reliability, consistent with previously-reported results (Brown et al., 1996; Fletcher et al., 1992). Fletcher and her colleagues reported a comparable, although slightly higher mean score (120.8), for a sample of male respondents.

Table 16
Means and Alphas for the Self Efficacy Measures: One Month

Self efficacy	<i>n</i>	<i>M</i>	<i>SD</i>	α
Crime measures				
Criminal Self Efficacy	294	4.8	4.2	.85
Employment measures				
Occupational Self Efficacy	297	111.1	16.8	.95

Intention. Intention, within the theoretical model in the present study, is the factor most proximal to behaviour. Given that this research was primarily concerned with the prediction of employment outcomes, offenders were asked about their intention to find work (but were not asked to divulge their intentions regarding the commission of crime). Information on intention to find/keep work in the following six months was available for 298 offenders; 5.7% of the sample indicated that they did not intend to find/keep work, 3.0% said *maybe*, and 91.3% indicated *yes*, they intended to find/maintain a job.

Table 17

Distribution of the intention variable

Intention	Frequency	Percent
No	17	5.7
Maybe	9	3.0
Yes	272	91.3
Total	298	100.0

Note. Information on intention was missing for 4 offenders

Of the 294 offenders who responded to the question asking them to rate their chance of finding/keeping a job in the next six months, 7.1% said it was *poor*, 13.9% said they had an *OK* chance, and 78.9% indicated that they had a *good* chance (see Table 18). This *chance* measure of intention will be used in subsequent analyses, as it is less transparent than simply asking offenders if they intend to find work, yet it is highly correlated with the pure measure of intention ($r = .57$). This approach was adopted given the high percentage of offenders with employment needs, and because offenders, themselves, acknowledge the critical reintegrative role of employment (Erez, 1987). Moreover, the chance measure was more evenly distributed than that of pure intention.

Table 18
Distribution of the chance of finding/maintaining employment variable

Chance	Frequency	Percent
Poor	21	7.1
OK	41	13.9
Good	232	78.9
Total	294	100.0

Note. Information on chance of finding/maintaining employment variable was missing for 8 offenders

Behaviour. Behaviour is the ultimate criterion predicted from the various components of the model. Given that researchers have advised against use of oversimplified measurement of employment outcome (Andrews et al., 1980; Braithwaite, 1980; Hodanish, 1976, Markley et al., 1983; Ryan, 1998), several indices of employment were assessed, including status and quality. Table 13 shows that nearly the same percentage of offenders were employed (43.7%), as unemployed (56.3%), at one month.

Table 19
Employment Status at One Month

Employment status	Frequency	Percent
Unemployed	170	56.3
Employed	132	43.7
Total	302	100.0

The breakdown of job categories, found in Table 20, shows that nearly two thirds of the sample were employed in unskilled or semi-skilled positions following release from prison.

Table 20
Type of Employment at One Month

Type of employment	Frequency	Percent
Unskilled or semi-skilled	85	64.4
Skilled	27	20.5
Sales	8	6.1
Supervisor	6	4.6
Manager/Professional	3	2.2
Other	3	2.2
Total	132	100.0

The other outcome measure at one month is quality of employment, the composite variable comprised of the following items: type of occupation since release (skilled/unskilled), salary meets needs (e.g., housing costs, bill payment), and satisfaction with salary. Scores ranged from 0 to 3, with a mean score of 0.78 ($SD = 1.1$). Originally, responses ranged from 0 to 6 but were collapsed to maintain a substantial n at each level of the outcome variable.

Social Desirability. Descriptive information on the social desirability measures is presented in Table 21. Although the internal consistency of the self deceptive enhancement scale is low ($\alpha = .66$), it was used in further analyses. Likewise, the alpha for the impression management sub-scale was only .49, but it was retained, as a measure of social desirability is important when self report measures are used in research. The mean values on the SDE and IM scales were lower than those reported by Harper & Hare (1988; as cited in Paulhus, 1994) on the respective scales (83.3 and 74.9). However, the scales were modified in the present study, and these lower scores may reflect the missing items.

Table 21
Means and Alphas for Covariates: One Month

Balanced Inventory of Desirable Responding	n	M	SD	α
Self deceptive enhancement	295	71.8	12.0	.66
Impression management	295	68.4	11.0	.49

Correlational Analyses

Before exploring the relationships between predictor and outcome variables, it is important to gain an understanding of associations among predictor variables. This section presents intercorrelations among sets of predictor variables, organized according

to the model (see Appendix H for intercorrelations among all predictor variables), and correlations between predictor and outcome variables.

Immediate situation. Unemployment rate was negatively related to employment status and quality of employment at one month, as illustrated in Table 22.

Table 22

Correlations between Broad Social Factors and Employment Outcomes at One Month

Broad social factors	Employment status	Quality of employment
Unemployment rate	-.28****	-.28****

Note. $n = 302$.

**** $p \leq .0001$.

Distal factors. No significant relationships were observed between distal factors, as demonstrated in Table 23.

Table 23

Intercorrelations among Distal Factors

Distal factors	1	2	3
1. Age	--	.06	.08
2. Race		--	.07
3. Marital status			--

Note. $n = 302$.

Table 24 shows that non-Aboriginal offenders were more likely to obtain employment, and have higher scores on quality of employment, than Aboriginal offenders. Age and marital status were also positively correlated with quality, indicating that offenders who were older and married retained higher quality employment.

Table 24

Correlations between Distal Factors and Employment Outcomes at One Month

Distal factors	Employment status	Quality of employment
Age	.08	.12*
Race	.12*	.17**
Marital status	.07	.12*

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$.

Behavioural beliefs. The Harris outcome expectancy variables were all positively related, with the strongest correlation ($r = .45$) between the crime variables (see Table 25). The Harris variable assessing chance of good things happening if employed was positively correlated with each of the remaining predictor variables. Correlations between work involvement, work ethic and value of employment ranged from $r = .19$ to $r = .39$.

Table 26 shows that only two significant relationships were obtained between behavioural beliefs predictor variables and outcomes. Value of employment was positively correlated with both employment status and quality, and work ethic was positively related to quality of employment.

Table 25
Intercorrelations among Behavioural Belief Variables

Behavioural beliefs	1	2	3	4	5	6	7
1. Bad crime: Chance	--	.45****	.26****	.10	.08	.07	.13*
2. Bad crime: Unhappy		--	.26****	.06	.02	-.08	.07
3. Good job: Chance			--	.20***	.12*	.23****	.23****
4. Good job: Happy				--	.06	.07	.06
5. Work involvement					--	.19***	.39****
6. Work ethic						--	.33****
7. Value of employment							--

Note. $n = 302$.

* $p \leq .05$. *** $p \leq .001$. **** $p \leq .0001$.

Table 26
Correlations between Behavioural Belief Variables and Employment Outcomes at One Month

Behavioural beliefs	Employment status	Quality of employment
Crime measures		
Bad crime: Chance	.03	.07
Bad crime: Unhappy	.03	-.03
Employment measures		
Good job: Chance	.08	.10
Good job: Happy	.07	.10
Work involvement	.00	-.01
Work ethic	.09	.11*
Value of employment	.15**	.17**

Note. $n = 302$.

* $p \leq .05$ ** $p \leq .01$

History. Table 27 presents intercorrelations among criminal history and employment history predictor variables. Most of the history variables were intercorrelated, with correlations ranging from very high ($r = .58$ for risk and need, $r = .50$ for stable employment with employment need), to moderate (e.g., r s in the .30 to .40 range for SIR-R1 score with other criminal history factors), to low (e.g., r s in the .10 to .20 range for relationships between previous and current offenses and other predictors).

Table 27
Intercorrelations among History Variables

History	1	2	3	4	5	6	7	8	9	10
1. Risk	--	-.29****	.17**	.10	.58****	-.26****	-.08	-.10	.27****	.21****
2. Sirscore		--	-.35****	-.36****	-.40****	.44****	.12*	.27****	-.09	-.39****
3. No. prev of			--	.13*	.19***	-.11	-.08	-.09	.13*	.15**
4. No. curr of				--	.16**	-.04	.01	.02	-.00	.05
5. Need level					--	-.33****	-.18**	-.19***	.23****	.37****
6. Stablemp						--	.33****	.33****	-.12*	-.50****
7. Education							--	.16**	.07	-.29****
8. Skilled								--	-.04	-.31****
9. Training									--	.13*
10. Emp need										--

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Table 28 shows the negative correlations obtained between criminal history variables and employment status and quality. Overall need level was the criminal history variable most highly correlated with both employment status ($r = -.23$) and quality of employment ($r = -.23$). Conversely, with the exception of employment need levels, all significant correlations between employment history and outcome were positive. The strongest relationships were obtained for stable employment history prior to incarceration ($r = .21$), skilled employment prior to incarceration ($r = .23$) and employment need quality ($r = -.21$), with quality.

Table 28

Correlations between History Variables and Employment Outcomes at One Month

History	Employment status	Quality of employment
Criminal history		
Risk	-.08	-.11
SIR Score	.14*	.12*
Total no. previous offenses	-.04	-.06
Total no. current offenses	-.04	-.02
Need	-.23****	-.21***
Employment history		
Stable employment	.14*	.21***
Education	.13*	.10
Skill level	.17**	.23****
Training	-.08	-.09
Employment need	-.18**	-.21***

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Attitudes. The criminal attitude measures shared high intercorrelations, with r s ranging from .50 to .67. Intrinsic job motivation was significantly related to each of the attitude measures, although correlations only ranged from $r = -.20$ to .32 (see Table 29).

Table 29
Intercorrelations among Attitude Variables at One Month

Attitudes	1	2	3	4	5
1. Tolerance law violations	--	.65****	.67****	-.17**	-.26****
2. Identification crim other		--	.50****	-.14*	-.20***
3. Mech moral disengage			--	-.09	-.21***
4. Job involvement				--	.32****
5. Intrinsic job motivation					--

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Table 30 shows that ICO was the only variable correlated with employment status, whereas all attitudinal measures, with the exception of mechanisms of moral disengagement, were significantly related to quality of employment. Identification with criminal others was most highly correlated with quality of employment, although the correlation was negative, indicating that higher endorsement of this scale was associated with lower levels of quality of employment. The work attitude scales were only mildly correlated with quality.

Table 30
Correlations between Attitude Variables and Employment Outcomes at One Month

Attitudes	Employment status	Quality of employment
Criminal attitudes		
Tolerance for law violations	-.07	-.14*
Identification criminal others	-.14*	-.23****
Mech moral disengagement	-.07	-.10
Work attitudes		
Job involvement	.05	.11*
Intrinsic job motivation	.03	.13*

Note. $n = 302$.

* $p \leq .05$. **** $p \leq .0001$.

Associates. As illustrated in Table 31, the social support for crime and social support for employment measures were not correlated with each other.

Table 31
Intercorrelations among Associates Variables

Associates	1	2
1. Social support for crime	--	-.06
2. Social support for employment		--

Note. $n = 302$.

Social support for employment was consistently positively related to one month employment outcomes, whereas social support for crime was negatively associated with quality (see Table 32).

Table 32
Correlations between Associates Variables and Employment Outcomes at One Month

Associates	Employment Status	Quality of employment
Crime measures		
Social support for crime	-.06	-.11*
Employment measures		
Social support for employment	.28****	.29****

Note. $n = 302$.

* $p \leq .05$. **** $p \leq .0001$.

Self Efficacy. Similarly, as shown in Table 33, criminal and occupational self efficacy were not significantly correlated ($r = -.02$).

Table 33
Intercorrelations among Self Efficacy Variables

Self efficacy	1	2
1. Criminal self efficacy	--	-.02
2. Occupation self efficacy		--

Note. $n = 302$.

Only occupational self efficacy was significantly related to employment outcomes, although the magnitude of the correlations was low (see Table 34).

Table 34
Correlations between Self Efficacy Variables and Employment Outcomes at One Month

Associate beliefs	Employment Status	Quality of employment
Crime measures		
Criminal self efficacy	.03	-.07
Employment measures		
Occupation self efficacy	.16**	.21***

Note. $n = 302$.

** $p \leq .01$. *** $p \leq .001$.

Intention. As illustrated in Table 35, the two measures of intention were highly positively correlated.

Table 35
Intercorrelations among Intention Variables

Intention	1	2
1. Intention	--	.57****
2. Chance of finding/keeping job		--

Note. $n = 302$.

**** $p \leq .0001$.

Each of these predictors was positively correlated with each of the measures of employment outcome; however, higher correlations were obtained for the *chance* variable, as evidenced in Table 36.

Table 36
Correlations between Intention Variables and Employment Outcomes at One Month

Intention	Employment Status	Quality of employment
Intention	.19***	.15**
Chance of finding/keeping job	.28****	.28****

Note. $n = 302$.

** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Behaviour. Table 37 shows a strong positive correlation between employment status and quality of employment.

Table 37
Intercorrelations among Employment Outcome Measures at One Month

Outcome	1	2
1. Employment status	--	.73****
2. Quality of employment		--

Note. $n = 302$.

**** $p \leq .0001$.

Social desirability. Correlational analyses were conducted to explore the association between the covariate measures, self deceptive enhancement and impression management, and the predictor and outcome variables. Results showed significant relationships between criminal predictors and these measures of socially desirable responding; however, no such relationships were noted between employment predictors and these measures. All regressions were performed with the effects of the SDE and IM measures removed.

Regression Analyses

Given that this research is exploratory, and that the intention was to examine the influence of the various predictor variables (e.g., broad social factors, distal factors, behavioural beliefs, etc) on employment outcomes (status and quality of employment at one month), hierarchical stepwise regression was used to determine the unique variance in outcome attributable to each of the predictor variables. The social desirability measures (impression management and self deceptive enhancement) were forced into the equation on the first step, given their significant relationship with the criminal predictor variables. In the next step, all predictors that had significant univariate correlations with employment status were entered into a stepwise regression, with employment status as the dependent variable. Table 38 displays the results of this stepwise regression exploring the relationship between significant predictor variables and employment status.

Table 38
*Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting
 Employment Status at One Month (N = 302)*

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.00	.00	-.07
Impression management	.00	.00	.02
Step 2			
Self deceptive enhancement	-.00	.00	-.06
Impression management	-.00	.00	-.02
Unemployment rate	-.34	.07	-.29****
Step 3			
Self deceptive enhancement	-.00	.00	-.03
Impression management	.00	.00	.00
Unemployment rate	-.35	.06	-.30****
Overall need rating	-.17	.04	-.24****
Step 4			
Self deceptive enhancement	-.00	.00	-.02
Impression management	-.00	.00	-.02
Unemployment rate	-.31	.06	-.26****
Overall need rating	-.15	.04	-.21****
Social support for employment	.02	.01	.21****
Step 5			
Self deceptive enhancement	-.00	.00	-.02
Impression management	-.00	.00	-.03
Unemployment rate	-.27	.06	-.23****
Overall need rating	-.14	.04	-.20****
Social support for employment	.02	.01	.18***
Intention	.15	.05	.18***

Note. $R^2 = .00$ for Step 1; $R^2 = .09$ for Step 2 ($p < .0001$); $R^2 = .14$ for Step 3 ($p < .0001$); $R^2 = .18$ for Step 4 ($p < .0001$); $R^2 = .21$ for Step 5 ($p < .001$). No other variable met the .10 significance level for entry into the model.

*** $p \leq .001$. **** $p \leq .0001$.

As illustrated in Table 38, the social desirability measures were not significantly associated with employment status. Unemployment rate was the first predictor to enter the equation, demonstrating the importance of broad social factors to offenders' employment status during the first month of release. Likewise, in the next step, offenders' overall level of need was negatively related to employment status. Social support for

employment was the third predictor to enter the equation, illustrating the positive link between having resources for employment and affective ties to employment. The final predictor variable to enter was the offenders' intention to find or maintain employment, which was positively associated with employment status.

This first regression analysis demonstrates the influence of the most proximal factor within the model (intention), in addition to other proximal predictor variables such as social support. Moreover, individual characteristics reflective of need level (which incorporates an individual's history and experience), and the broad social factor of unemployment rate all contribute to employment status during the first month of release.

The second hierarchical stepwise regression was performed to explore the relationships between predictor variables assessed at one month, and quality of employment during the first month of release. Again, social desirability measures were entered into the equation on the first step, in order to partial their influence from the criminal predictor variables. Table 39 displays results from this hierarchical stepwise analysis.

Table 39

Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting Quality of Employment at One Month (N = 302)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.01	.01	-.13
Impression management	.00	.01	.03
Step 2			
Self deceptive enhancement	-.01	.01	-.10
Impression management	-.00	.01	-.00
Social support for employment	.06	.01	.28****
Step 3			
Self deceptive enhancement	-.01	.01	-.09
Impression management	-.00	.01	-.03
Social support for employment	.05	.01	.24****
Unemployment rate	-.60	.14	-.24****
Step 4			
Self deceptive enhancement	-.01	.01	-.07
Impression management	-.00	.01	-.01
Social support for employment	.05	.01	.22****
Unemployment rate	-.63	.14	-.25****
Overall need rating	-.28	.08	-.19****
Step 5			
Self deceptive enhancement	-.01	.01	-.07
Impression management	-.00	.01	-.02
Social support for employment	.04	.01	.19***
Unemployment rate	-.56	.14	-.22****
Overall need rating	-.26	.08	-.17***
Intention	.32	.10	.18***
Step 6			
Self deceptive enhancement	-.01	.01	-.06
Impression management	-.00	.01	-.00
Social support for employment	.03	.01	.16**
Unemployment rate	-.56	.13	-.22****
Overall need rating	-.25	.08	-.17**
Intention	.30	.10	.17**
Identification with criminal other	-.04	.02	-.12*

Table continued

Step 7			
Self deceptive enhancement	-.00	.01	-.05
Impression management	.00	.01	.01
Social support for employment	.03	.01	.14*
Unemployment rate	-.54	.13	-.21****
Overall need rating	-.22	.08	-.15**
Intention	.30	.10	.17**
Identification with criminal other	-.04	.02	-.12*
Skill level prior to incarceration	.25	.12	.11*

Note. $R^2 = .01$ for Step 1; $R^2 = .09$ for Step 2 ($p < .0001$); $R^2 = .15$ for Step 3 ($p < .0001$); $R^2 = .18$ for Step 4 ($p < .0001$); $R^2 = .21$ for Step 5 ($p < .001$); $R^2 = .22$ for Step 6 ($p < .05$); $R^2 = .23$ for Step 7 ($p < .05$). No other variable met the .10 significance level for entry into the model.

* $p \leq .05$. ** $p \leq .01$. **** $p \leq .0001$.

Results of this second regression analysis predicting quality of employment

replicated those for the prediction of status, with two additional variables entering the equation. By step 5, the same predictors had entered into the equation predicting quality; social support for employment was the first predictor to enter, followed by unemployment rate, overall need and intention. Moreover, identification with criminal others, an attitudinal and proximal predictor variable, was negatively related to quality of employment. Finally, skilled employment prior to incarceration was associated with higher quality of employment during the first month of release. This analysis demonstrated the influence of the most proximal factors in the model--intention, social support (associates) and attitude, in addition to personal characteristics reflective of need and experience (i.e., overall need rating and skilled employment). Furthermore, these analyses demonstrated the added contribution of broad social factors (unemployment rate) to personal attributes, social support, and attitudes, in predicting quality of employment.

One Month with Six Month Outcomes

Correlational Analyses

Immediate situation. A similar series of correlations were obtained between unemployment rate and employment outcomes at six months, as were found for one-month outcomes. Table 40 shows that unemployment rate was significantly negatively related to each of the outcome measures: status, quality, and number of weeks employed.

Table 40

Correlations between Broad Social Factors and Employment Outcomes at Six Months

Broad social factors	Employment status	Quality of employment	Number of weeks employed
Unemployment rate	-.27**	-.24*	-.21*

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$.

Distal factors. Marital status was the only distal factor significantly related to each of the outcome measures, with correlations ranging from $r = .20$ to $r = .25$ (see Table 41).

Table 41

Correlations between Distal Factors and Employment Outcomes at Six Months

Distal factors	Employment status	Quality of employment	Number of weeks employed
Age	-.16	-.05	-.07
Race	.09	.04	.12
Marital status	.20*	.22*	.25*

Note. $n = 106$.

* $p \leq .05$.

Behavioural beliefs. Table 42 presents correlations between behavioural beliefs variables and employment outcomes at six months. The only significant relationship in the behavioural beliefs set of predictors was a low positive correlation ($r = .21$) between the Harris (1975) chances of good things happening when employed measure, and quality of employment.

Table 42
Correlations between Behavioural Belief Variables and Employment Outcomes at Six Months

Behavioural beliefs	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Bad crime: Chance	.01	.08	.03
Bad crime: Unhappy	.04	.04	.04
Employment measures			
Good job: Chance	.16	.20*	.12
Good job: Happy	-.06	.05	.02
Work involvement	-.17	-.02	-.19
Work ethic	-.10	-.02	-.06
Value of employment	-.13	.04	-.06

Note. $n = 106$.

* $p \leq .05$.

History. As illustrated in Table 43, no significant relationships were obtained between the criminal history or employment history variables, and employment status or number of weeks employed. However, skilled and stable employment prior to incarceration were positively correlated with quality of employment at six months.

Table 43
Correlations between History Variables and Employment Outcomes at Six Months

History	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Risk	-.08	-.07	-.09
SIR Score	.02	.12	.11
Total no. prev. offenses	.02	-.13	-.01
Total no. current offenses	.02	-.08	-.16
Need	-.12	-.16	-.12
Employment measures			
Stable employment	.13	.20*	.17
Education	.15	.19	.17
Skill level	.05	.32***	.09
Training	.02	-.14	-.06
Employment need	.06	.03	-.01

Note. $n = 106$.

* $p \leq .05$. *** $p \leq .001$.

Attitude. The mechanisms of moral disengagement measure was, surprisingly, positively correlated with employment status and quality of employment. No other significant correlations were obtained between attitudinal predictor variables and outcomes, as illustrated in Table 44.

Table 44

Correlations between Attitude Variables and Employment Outcomes at Six Months

Attitudes	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Tolerance for law violations	.15	.07	.12
Identification criminal others	.15	-.01	.04
Mechanisms moral disengagement	.19*	.19*	.11
Employment measures			
Job involvement	-.16	.02	-.16
Intrinsic job motivation	-.03	.07	.10

Note. $n = 106$.

Associates. The only significant relationship between associates measures and outcome, as illustrated in Table 45, was a positive correlation between social support for employment and number of weeks employed. No other significant correlations were found between the social support measures and outcome.

Table 45

Correlations between Associates Variables and Employment Outcomes at Six Months

Associates	Employment Status	Quality of employment	Number of weeks employed
Crime measures			
Social support for crime	.13	.02	.05
Employment measures			
Social support for employment	.06	.13	.22*

Note. $n = 106$.

* $p \leq .05$.

Self efficacy. Criminal self efficacy, like the mechanisms of moral disengagement scale, was positively associated with both employment status and number of weeks

employed. Occupational self efficacy, likewise, was positively correlated with number of weeks employed (see Table 46).

Table 46

Correlations between Self Efficacy Variables and Employment Outcomes at Six Months

Associate beliefs	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Criminal self efficacy	.20*	.13	.20*
Employment measures			
Occupation self efficacy	.10	.18	.26**

Note. $n = 106$.

* $p \leq .05$.

Intention. As illustrated in Table 47, Both measures of intention were positively correlated with all outcome variables; however, chance of finding/keeping employment had slightly higher correlations than the pure measure of intention.

Table 47

Correlations between Intention Variables and Employment Outcomes at Six Months

Intention	Employment status	Quality of employment	Number of weeks employed
Intention	.28**	.22*	.33***
Chance of finding employment	.31**	.27**	.41****

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Behaviour. Each of the outcome measures shared high intercorrelations, with r s ranging from .69 to .73.

Table 48

Intercorrelations among Employment Outcome Measures at Six Months

Outcome	1	2	3
1. Employment status	--	.73****	.72****
2. Quality of employment		--	.69****
3. Number of weeks employed			--

Note. $n = 106$.

**** $p \leq .0001$.

Regression Analyses

A series of hierarchical stepwise regression analyses were performed to explore relationships between predictor variables assessed during the first month of release, and outcome variables assessed at six months. As with the one month analyses, the measures of social desirability were entered into the regression equations first, to control for their effects on the criminal predictor variables. Following this step, all predictor variables with significant univariate correlations with the six month outcomes were entered into the stepwise regression predicting outcome.

As illustrated in Table 49, the only variables to enter the equation predicting employment status at six months were intention to find/keep a job, which was positively related to employment status and unemployment rate, which was negatively associated with status.

Table 49
Summary of Hierarchical Stepwise Regression Analysis for One Month Variables Predicting Employment Status at Six Months (N=106)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	.00	.01	.07
Impression management	.00	.00	.07
Step 2			
Self deceptive enhancement	.00	.00	.05
Impression management	.00	.00	.10
Intention	.24	.07	.32***
Step 3			
Self deceptive enhancement	.00	.00	.06
Impression management	.00	.00	.09
Intention	.20	.07	.27**
Unemployment rate	-.24	.10	-.21*

Note. $R^2 = .01$ for Step 1; $R^2 = .12$ for Step 2 ($p < .01$); $R^2 = .16$ for Step 3 ($p < .01$). No other variable met the .10 significance level for entry into the model.

* $p \leq .05$. **** $p \leq .0001$.

Results from the second hierarchical stepwise regression analysis, presented in Table 50, show that skilled employment prior to incarceration was the first predictor variable to enter the equation predicting quality of employment at six months. Intention to find/keep employment was also positively related to quality of employment. A somewhat puzzling finding was the positive relationship between mechanisms of moral engagement, a measure of justification for criminal involvement, and quality of employment. Interestingly, unemployment rate did not enter as a significant predictor of quality of employment at six months.

Table 50

Summary of Hierarchical Stepwise Regression Analysis for One Month Variables Predicting Quality of Employment at Six Months (N=106)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	.00	.01	.03
Impression management	-.00	.01	-.05
Step 2			
Self deceptive enhancement	.01	.01	.06
Impression management	.00	.01	.03
Skill level prior to incarceration	.81	.23	.34***
Step 3			
Self deceptive enhancement	.01	.01	.05
Impression management	.01	.01	.07
Skill level prior to incarceration	.87	.22	.37****
Intention	.54	.16	.30***
Step 4			
Self deceptive enhancement	.00	.01	.02
Impression management	.01	.01	.06
Skill level prior to incarceration	.90	.22	.38****
Intention	.54	.16	.29***
Mechanisms moral disengage.	.02	.01	.22*

Note. $R^2 = .00$ for Step 1; $R^2 = .11$ for Step 2 ($p < .01$); $R^2 = .20$ for Step 3 ($p < .0001$); $R^2 = .24$ for Step 4 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

* $p \leq .05$. *** $p \leq .001$. **** $p \leq .0001$.

A similar pattern of findings was noted in results of the regression equation predicting number of weeks employed during the first six months of release. Again, intention entered the equation first, followed by criminal self efficacy, which was positively related to the number of weeks employed. The offenders' total number of current offenses were negatively related to number of weeks employed. Finally, stable employment prior to incarceration was positively associated with number of weeks employed during the first six months of release.

Table 51
*Summary of Hierarchical Stepwise Regression Analysis for One Month Variables
Predicting Number of Weeks Employed Six Months (N=106)*

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.10	.10	-.10
Impression management	.13	.09	.15
Step 2			
Self deceptive enhancement	-.12	.09	-.13
Impression management	.17	.08	.20*
Intention	6.90	1.44	.43****
Step 3			
Self deceptive enhancement	-.21	.09	-.22*
Impression management	.14	.08	.17
Intention	7.07	1.40	.44****
Criminal self efficacy	.72	.26	.27**
Step 4			
Self deceptive enhancement	-.20	.09	-.22*
Impression management	.15	.08	.18
Intention	6.98	1.37	.43****
Criminal self efficacy	.81	.25	.30**
Total number of current offenses	-.69	.30	-.20*
Step 5			
Self deceptive enhancement	-.20	.09	-.22*
Impression management	.15	.08	.18
Intention	6.57	1.36	.41****
Criminal self efficacy	.96	.26	.35****
Total number of current offenses	-.69	.30	-.20*
Stable employment prior	.48	.22	.19*

Note. $R^2 = .02$ for Step 1; $R^2 = .20$ for Step 2 ($p < .0001$); $R^2 = .26$ for Step 3 ($p < .0001$); $R^2 = .30$ for Step 4 ($p < .0001$); $R^2 = .33$ for Step 5 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

* $p \leq .05$. ** $p \leq .01$. **** $p \leq .0001$.

Six Months

Descriptive Analyses

Descriptive analyses were repeated for the subset of offenders who participated in the six month evaluation and are presented in Appendix I. It is important, given the high attrition rate, to compare offenders who participated at both time periods with offenders who only participated in the one-month testing. A series of t-tests were performed to test for differences in mean scores on all continuous variables from each component of the model. Offenders who participated in both assessment phases were significantly older ($p \leq .001$) and lower risk as measured by SIR score ($p \leq .0001$), total number of previous offenses ($p \leq .01$), and total number of current offenses ($p \leq .001$). These offenders also had significantly lower scores on the social support for crime ($p \leq .001$) and criminal self efficacy scales ($p \leq .001$). Finally, offenders who participated at time two had higher mean scores on stable employment prior to incarceration ($p \leq .05$).

Correlational analyses

A series of correlational analyses were conducted to explore intercorrelations among predictor sets at six months (see Appendix J for the correlation matrix containing all predictors at six months), and relationships between predictor variables assessed during the sixth month of release, and outcome variables evaluated at six months. Although results for the historical variables (e.g., distal factors, criminal and employment history) were presented in the previous section exploring one month predictors with six month outcomes, they are included again in the following results for comparison

purposes with the correlations between dynamic variables and outcome (e.g., attitudes with employment status).

Immediate situation. Unemployment rate was negatively correlated with each of the outcome measures, as shown in Table 52.

Table 52
Correlations between Broad Social Factors and Employment Outcomes at Six Months

Broad social factors	Employment status	Quality of employment	Number of weeks employed
Unemployment rate	-.27**	-.24*	-.21*

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$.

Distal factors. Within the distal factors predictor set, only age and race were significantly correlated ($r = .19$), as illustrated in Table 53. Marital status was the only distal predictor significantly correlated with each of the outcome measures, with r s ranging from .20 to .25 (see Table 54).

Table 53
Intercorrelations among Distal Factors at Six Months

Distal factors	1	2	3
1. Age	--	.19*	.10
2. Race		--	.11
3. Marital status			--

Note. $n = 106$.

* $p \leq .05$.

Table 54
Correlations between Distal Factors and Employment Outcomes at Six Months

Distal factors	Employment status	Quality of employment	Number of weeks employed
Age	-.16	-.05	-.07
Race	.09	.04	.12
Marital status	.20*	.22*	.25*

Note. $n = 106$.

* $p \leq .05$.

Behavioural beliefs. Moderate to high positive correlations ($r = .25$ to $.51$) were obtained among the Harris outcome expectancy variables, as depicted in Table 55.

Outcome expectancies regarding employment were positively associated with the work beliefs scales. Similarly, the work beliefs scales were positively related, with r s ranging from $.21$ to $.39$.

Table 55
Intercorrelations among Behavioural Belief Variables at Six Months

Behavioural beliefs	1	2	3	4	5	6	7
1. Bad crime: Chance	--	.25*	.33***	.29**	.02	.08	.14
2. Bad crime: Unhappy		--	.10	.34***	-.03	.10	.12
3. Good job: Chance			--	.51***	.14	.38***	.32***
4. Good job: Happy				--	.22*	.22*	.21*
5. Work involvement					--	.21*	.47***
6. Work ethic						--	.39***
7. Value of employment							--

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Table 56 shows that the Harris (1975) expectancy measure of chance of bad things happening as an outcome of crime was the only behavioural beliefs variable related to employment status. The nature of the relationship was that higher scores (e.g., negative expectancy) were related to a higher likelihood of being employed. Each of the employment behavioural beliefs measures, with the exception of work involvement, was positively correlated with quality of employment. No significant associations were noted between behavioural beliefs predictor variables and number of weeks employed.

Table 56

Correlations between Behavioural Belief Variables and Employment Outcomes at Six Months

Behavioural beliefs	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Bad crime: Chance	.22*	.18	.13
Bad crime: Unhappy	.15	.09	-.01
Employment measures			
Good job: Chance	.15	.19*	.11
Good job: Happy	.15	.27**	.14
Work involvement	-.00	.09	.01
Work ethic	.11	.28**	.12
Value of employment	.06	.21*	.11

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$.

History. Overall need and employment need were the only dynamic variables within this grouping of historical predictor variables. Although a similar pattern of intercorrelations emerged among these predictor variables at six months as was evidenced at one month, a noteworthy difference was the significantly reduced correlations between risk and the re-assessed need and employment need.

Table 57
Intercorrelations among History Variables at Six Months

History	1	2	3	4	5	6	7	8	9	10
1. Risk	--	-.31**	.07	.10	.19*	-.29**	-.08	-.23*	.31**	.18
2. Sirscore		--	-.37****	-.30**	-.29**	.53****	.04	.29**	-.19	-.32***
3. No. prev of			--	.10	.07	-.33***	-.02	-.13	.23*	-.00
4. No. curr of				--	.10	-.07	.04	.09	.08	-.03
5. Need level					--	-.32***	-.33***	-.21*	.11	.30**
6. Stablemp						--	.41****	.38****	-.24*	-.42****
7. Education							--	.19*	-.11	-.37****
8. Skilled								--	-.29**	-.36***
9. Training									--	.01
10. Emp need										--

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Notably, as illustrated in Table 58, of the crime measures, only the dynamic variable was linked to outcome. Overall need demonstrated a consistent negative relationship with each of the outcome variables (with r s ranging from $-.19$ to $-.23$), whereas employment need was only related to number of weeks employed ($r = -.20$). The only additional significant relationships were obtained between employment variables and quality of employment. A stable history of employment and education, as well as skill level prior to incarceration, were positively correlated with quality.

Table 58

Correlations between History Variables and Employment Outcomes at Six Months

History	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Risk	-.08	-.07	-.09
SIR Score	.02	.12	.11
Total no. prev. offenses	.01	-.12	-.01
Total no. current offenses	.02	-.08	-.16
Need	-.19*	-.21*	-.23*
Employment measures			
Stable employment	.13	.20*	.17
Education	.15	.19*	.17
Skill level	.05	.32***	.09
Training	.02	-.14	-.06
Employment need	-.15	-.12	-.21*

Note. $n = 106$.

* $p \leq .05$. *** $p \leq .001$.

Attitude. Table 59 depicts intercorrelations among attitudinal measures. High correlations were obtained among the criminal measures, and likewise, between the work attitude scales. A consistent negative relationship was evident between the criminal attitude and work attitude measures.

Table 59
Intercorrelations among Attitude Variables at Six Months

Attitudes	1	2	3	4	5
1. Tolerance law violations	--	.59****	.72****	-.22*	-.30**
2. Identification crim other		--	.51****	-.24*	-.28**
3. Mech moral disengage			--	-.14	-.18
4. Job involvement				--	.54****
5. Intrinsic job motivation					--

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$. **** $p \leq .0001$.

Relationships between the attitudinal measures and employment outcomes at six months (status, quality and number of weeks employed) are portrayed in Table 60. The criminal sentiments sub-scales of tolerance for law violations and identification with criminal others were both significantly negatively correlated with quality of employment, indicating that a higher endorsement of these scales was associated with lower quality of employment. Likewise, the identification with criminal others sub-scale was negatively related to the number of weeks employed at six months. Conversely, job involvement scores were positively related to quality of employment.

Table 60
Correlations between Attitude Variables and Employment Outcomes at Six Months

Attitudes	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Tolerance for law violations	-.14	-.27**	-.18
Identification with criminal others	-.11	-.22*	-.23*
Mechanisms of moral disengagement	.00	-.18	-.16
Employment measures			
Job involvement	.10	.21*	.17
Intrinsic job motivation	-.11	.02	-.00

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$.

Associates. A low negative correlation was obtained between the social support measures, as illustrated in Table 61.

Table 61

Intercorrelations among Associates Variables at Six Months

Associates	1	2
1. Social support for crime	--	-.22*
2. Social support for employment		--

Note. $n = 106$.

Table 62 shows that social support for employment was consistently positively correlated with the outcome variables. Alternatively, social support for crime was negatively correlated with quality of employment.

Table 62

Correlations between Associates Variables and Employment Outcomes at Six Months

Associates	Employment Status	Quality of employment	Number of weeks employed
Crime measures			
Social support for crime	-.02	-.20*	-.07
Employment measures			
Social support for employment	.27**	.33***	.33***

Note. $n = 106$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Self efficacy. As demonstrated in Table 63, there was no relationship between criminal and occupational self efficacy.

Table 63

Intercorrelations among Self Efficacy Variables at Six Months

Self efficacy	1	2
1. Criminal self efficacy	--	.02
2. Occupation self efficacy		--

Note. $n = 106$.

Occupational self efficacy was positively related to number of weeks employed at six months (see Table 64). No significant relationships were obtained between criminal self efficacy and employment outcomes.

Table 64

Correlations between Self Efficacy Variables and Employment Outcomes at Six Months

Associate beliefs	Employment status	Quality of employment	Number of weeks employed
Crime measures			
Criminal self efficacy	.04	-.10	-.02
Employment measures			
Occupation self efficacy	.14	.18	.23*

Note. $n = 106$.

* $p \leq .05$.

Intention. At six months, very high correlations were obtained between intention measures and each of the outcomes.

Table 65

Correlations between Intention Variables and Employment Outcomes at Six Months

Intention	Employment status	Quality of employment	Number of weeks employed
Intention	.51****	.38****	.49****
Chance of finding employment	.69****	.57****	.58****

Note. $n = 106$.

**** $p \leq .0001$.

Social desirability. Comparable to the correlations obtained between predictors assessed at one month and the social desirability measures, it was primarily criminal attitudes that were significantly related to SDE and IM. However, one work scale--job involvement--was significantly related to socially desirable responding. Regression analyses were performed while controlling for each of the BIDR measures.

Change Analyses

A series of correlational analyses were conducted to explore relationships between predictor variables at one month and six months, and six months with the effects of one month statistically controlled, with outcomes at six months (employment status, quality of employment, and number of weeks employed). Tables 66 through 68 display results from correlational analyses exploring employment status and quality at six months, and number of weeks employed since release.

The general pattern observed was the consistent negative relationship between criminal predictor variables and employment outcome measures (with the exception of the anomalous findings of positive correlations between mechanisms of moral disengagement and criminal self efficacy with one-month employment outcomes). Conversely, work-related predictor variables demonstrated consistent positive correlations with employment outcomes, with the exception of employment needs, which were negatively correlated with employment outcomes.

An additional general pattern that emerged was the increase in correlations between predictor variables measured at six months and outcome (versus one-month assessment of predictors). This finding typically held (and was even augmented in certain instances) when the effects of the one-month predictor variables were statistically controlled. These findings illustrate the incremental predictive ability of re-assessment over time.

Table 66
Correlations between One Month, Six Month, and Six Month Predictors with One Month Effects Partialled and Employment Status at Six Months

Variables	One month <i>r</i>	Six months <i>r</i>	Partial <i>r</i>
Behavioural beliefs			
Bad crime: Chance	.01	.22*	.22*
Bad crime: Unhappy	.04	.15	.16
Good job: Chance	.16	.15	.15
Good job: Happy	-.06	.15	.17
Work involvement	-.17	-.00	.11
Work ethic	-.10	.11	.16
Value of employment	-.13	.06	.14
History			
Need	-.12	-.19*	-.16
Employment need	.06	-.15	-.25*
Attitudes			
Tolerance for law violations	.15	-.14	-.27**
Identification with criminal others	.15	-.11	-.22*
Mechanisms of moral disengagement	.19*	.00	-.11
Job involvement	-.16	.10	.25**
Intrinsic job motivation	-.03	-.11	-.10
Associates			
Social support for crime	.13	-.02	-.11
Social support for employment	.06	.27**	.27**
Self efficacy			
Criminal self efficacy	.20*	.04	-.08
Occupational self efficacy	.10	.14	.10
Intention			
Intention	.28**	.51****	.45****
Chance of finding employment	.31**	.69****	.65****

Note. $n = 106$.

* $p \leq .0001$. ** $p \leq .0001$. **** $p \leq .0001$.

Table 67
Correlations between One Month, Six Month, and Six Month Predictors with One Month Effects Partialled and Quality of Employment at Six Months

Variables	One month <i>r</i>	Six months <i>r</i>	Partial <i>r</i>
Behavioural beliefs			
Bad crime: Chance	.08	.18	.17
Bad crime: Unhappy	.04	.09	.09
Good job: Chance	.20	.19*	.20*
Good job: Happy	.05	.26**	.26**
Work involvement	-.02	.09	.12
Work ethic	-.02	.28**	.31**
Value of employment	.04	.21*	.22*
History			
Need	-.16	-.21*	-.17
Employment need	.03	-.12	-.18
Attitudes			
Tolerance for law violations	.07	-.27**	-.37****
Identification with criminal others	-.01	-.22*	-.25**
Mechanisms of moral disengagement	.19*	-.18	-.34***
Job involvement	.02	.21*	.25**
Intrinsic job motivation	.07	.02	-.01
Associates			
Social support for crime	.02	-.20*	-.24*
Social support for employment	.13	.33***	.31**
Self efficacy			
Criminal self efficacy	.13	-.10	-.19*
Occupational self efficacy	.18	.18	.08
Intention			
Intention	.22*	.38****	.32***
Chance of finding employment	.27**	.57****	.53****

Note. *n* = 106.

* $p \leq .0001$. ** $p \leq .0001$. *** $p \leq .0001$. **** $p \leq .0001$.

Table 68

Correlations between One Month, Six Month, and Six Month Predictors with One Month Effects Partialled and Number of Weeks Employed at Six Months

Variables	One month <i>r</i>	Six months <i>r</i>	Partial <i>r</i>
Behavioural beliefs			
Bad crime: Chance	.03	.13	.13
Bad crime: Unhappy	.04	-.01	-.01
Good job: Chance	.12	.11	.11
Good job: Happy	.02	.14	.14
Work involvement	-.19	.01	.14
Work ethic	-.06	.12	.15
Value of employment	-.06	.11	.16
History			
Need	-.12	-.23*	-.20*
Employment need	-.01	-.21*	-.26**
Attitudes			
Tolerance for law violations	.12	-.18	-.29**
Identification with criminal others	.04	-.23*	-.29**
Mechanisms of moral disengagement	.11	-.16	-.25*
Job involvement	-.16	.17	.34***
Intrinsic job motivation	.10	-.00	-.04
Associates			
Social support for crime	.05	-.07	-.12
Social support for employment	.22*	.33***	.27**
Self efficacy			
Criminal self efficacy	.20*	-.02	-.15
Occupational self efficacy	.26**	.23*	.07
Intention			
Intention	.33***	.49****	.39****
Chance of finding employment	.41****	.58****	.50****

Note. *n* = 106.

* $p \leq .0001$. ** $p \leq .0001$. *** $p \leq .0001$. **** $p \leq .0001$.

Regression Analyses

A series of hierarchical stepwise multiple regression analyses were conducted to predict each of the employment outcome measures at six months: status, retention and quality, from historical factors and from predictor variables assessed at six months. The impression management and self deceptive enhancement measures of social desirability were forced into the regression equation to control for their relationship with the criminal

predictor variables, and were followed in step 2 by the predictor variables assessed at one month, whose corresponding six month predictor variables had significant univariate correlations with each of the outcome measures at six months. Step 3 contained the predictor variables that displayed significant univariate correlations with outcome measures at six months.

Table 69 displays results from the first hierarchical stepwise regression analysis exploring the relationship between predictor variables and employment status assessed during the sixth month of release. Intention and unemployment rate were the only variables from the one month predictor set to enter into the regression equation (in steps 2 and 3, respectively). In step 4, although unemployment rate remained significantly negatively related to employment status, intention at one month did not remain in the equation, but was replaced by intention assessed at six months. The Harris measure evaluating the likelihood of bad things happening to the individual if he were to become involved in crime was positively related to employment status, indicating that a higher score on the measure was associated with a higher likelihood of the offender being employed. Thus, these findings illustrate the influence of beliefs related to perceived outcomes of crime with employment status, in addition to the broad social factor of unemployment rate, and the most proximal factor within the model, intention (as assessed at six months). These results support the efficacy of re-assessment in predicting outcomes that are more proximally linked in time.

Table 69
*Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting
 Employment Status at Six Months (N= 106)*

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.00	.01	-.02
Impression management	.00	.01	.01
Step 2			
Self deceptive enhancement	.00	.01	.02
Impression management	.00	.01	.04
Intention	.24	.07	.32***
Step 3			
Self deceptive enhancement	.00	.01	.06
Impression management	.00	.01	.00
Intention	.21	.07	.28**
Unemployment rate	-.24	.11	-.22*
Step 4			
Self deceptive enhancement	-.00	.00	-.08
Impression management	.00	.00	.07
Intention	.02	.06	.03
Unemployment rate	-.17	.08	-.15*
Intention (six months)	.41	.05	.66****
Step 5			
Self deceptive enhancement	-.00	.00	-.09
Impression management	.00	.00	.04
Intention	.00	.06	.00
Unemployment rate	-.20	.08	-.18*
Intention (six months)	.41	.05	.65****
Bad crime: chance (six months)	.00	.00	.18*

Note. $R^2 = .00$ for Step 1; $R^2 = .10$ for Step 2 ($p < .05$); $R^2 = .14$ for Step 3 ($p < .01$); $R^2 = .51$ for Step 4 ($p < .0001$); $R^2 = .54$ for Step 5 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

A comparable set of variables emerged in the equation predicting quality of employment at six months (see Table 70). Skilled employment prior to incarceration again emerged as a significant predictor of quality of employment, as did intention to find/keep a job. When the predictor variables assessed at six months were allowed to enter the equation, the six month intention variable replaced the one month intention variable, but skilled employment remained in the equation. Similar to results obtained in the regression equation predicting employment status at six months, one of the Harris behavioural beliefs variables entered the final step of the equation. The extent to which individual's perceived good things happening as a function of being employed was positively related to quality of employment. In sum, employment history (skill level), intention to find/keep a job, and beliefs regarding the positive impact of work were related to the quality of offenders' employment assessed at six months.

Table 70

Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting Quality of Employment at Six Months (N= 106)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.00	.01	-.04
Impression management	-.01	.01	-.10
Step 2			
Self deceptive enhancement	-.01	.01	-.07
Impression management	-.00	.01	-.02
Skill level before incarceration	.74	.23	.31***
Step 3			
Self deceptive enhancement	-.00	.01	-.04
Impression management	.00	.01	.02
Skill level before incarceration	.81	.22	.34****
Intention	.52	.17	.28**
Step 4			
Self deceptive enhancement	-.01	.01	-.15
Impression management	.01	.01	.08
Skill level before incarceration	.85	.18	.36****
Intention	.12	.15	.06
Intention (six months)	.88	.12	.57****
Step 5			
Self deceptive enhancement	-.01	.01	-.14
Impression management	.01	.01	.09
Skill level before incarceration	.80	.17	.34****
Intention	.23	.15	.12
Intention (six months)	.82	.12	.54****
Good job: Happy (six months)	.02	.01	.22**

Note. $R^2 = .02$ for Step 1; $R^2 = .11$ for Step 2 ($p < .01$); $R^2 = .19$ for Step 3 ($p < .0001$); $R^2 = .47$ for Step 4 ($p < .0001$); $R^2 = .51$ for Step 5 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

A different set of variables emerged in the equation predicting number of weeks employed during the first six months of release, as illustrated in Table 71. The social desirability measures, forced into the equation first, did not contribute to the prediction of number of weeks employed. Intention to find/maintain a job, assessed during the first month of release, was the first predictor to enter the equation. Intention was also the first of the post-measures to enter the equation, after all of the one-month predictors were allowed to enter. Notably, the one-month measure of intention still contributed a significant proportion of variance to number of weeks employed. Finally, social support for employment (assessed at six months) was the only other variable to enter the equation. Thus, only personal (intention) and interpersonal (social support) factors were associated with the number of weeks employed. Additionally, these variables are the most proximal factors within the model, and they are both dynamic, indicating their amenability to change.

Table 71

Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting Number of Weeks Employed at Six Months (N= 106)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.04	.11	-.05
Impression management	-.01	.11	-.08
Step 2			
Self deceptive enhancement	.00	.10	.00
Impression management	-.04	.10	-.05
Intention	6.46	1.49	.40****
Step 3			
Self deceptive enhancement	-.08	.09	-.09
Impression management	.00	.09	.00
Intention	3.28	1.39	.20*
Intention (post)	6.88	1.15	.51****
Step 4			
Self deceptive enhancement	-.06	.09	-.07
Impression management	-.03	.08	-.03
Intention	3.57	1.34	.22**
Intention (post)	6.08	1.13	.45****
Social support for employ. (post)	.48	.16	.24**

Note. $R^2 = .01$ for Step 1; $R^2 = .17$ for Step 2 ($p < .0001$); $R^2 = .39$ for Step 3 ($p < .0001$); $R^2 = .44$ for Step 4 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

** $p \leq .01$. **** $p \leq .0001$.

Crime-Related Outcomes

Correlational Analyses

A series of correlational analyses were conducted to explore the relationships between predictor variables and the following crime-related outcomes: any violation, number of violations, and survival time.

Immediate situation. No significant relationships were obtained between unemployment rate and criminal outcomes, as shown in Table 72.

Table 72

Correlations between Broad Social Factors and Criminal Outcomes

Broad social factors	Any violation	No. violations	Survival time
Unemployment rate	.05	.05	-.09

Note. $n = 302$.

Distal factors. Table 73 shows that age was consistently negatively correlated with each of the criminal outcome measures.

Table 73

Correlations between Distal Factors and Criminal Outcomes

Distal factors	Any violation	No. violations	Survival time
Age	-.22****	-.23****	.22****
Race	-.03	-.07	.08
Marital status	.02	.10	-.06

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Behavioural beliefs. Only one variable within the behavioural beliefs predictor set was significantly related to criminal outcome; value of employment was negatively correlated with any violation (see Table 74).

Table 74
Correlations between Behavioural Belief Variables and Criminal Outcomes

Behavioural beliefs	Any violation	No. violations	Survival time
Crime measures			
Bad crime: Chance	.04	.00	-.05
Bad crime: Unhappy	.07	.02	-.06
Employment measures			
Good job: Chance	.03	-.02	-.01
Good job: Happy	.08	.03	-.10
Work involvement	.05	.04	-.08
Work ethic	-.05	-.06	.01
Value of employment	-.14*	-.09	.11

Note. $n = 302$.

* $p \leq .05$.

History. As depicted in Table 75, with the exception of overall risk level, all predictor variables were significantly correlated with, minimally, one of the criminal outcome measures. The greater the number of previous and current offenses, the higher the offender's overall need and employment need, and the lower the sir score (indicating higher need), the greater the likelihood of violations occurring. Conversely, employment and educational stability, as well as skill level, were negatively correlated with violations (i.e., the higher the stability, the lower the likelihood of committing a violation). The opposite was true for survival time, with negative correlations between criminal measures and outcome; and positive correlations between employment stability measures and survival time. One notable exception was the negative relationship between employment/vocational training and survival time--training was associated with a lower amount of time in the community.

Table 75
Correlations between History Variables and Employment Outcomes at Six Months

History	Any violation	No. violations	Survival time
Crime measures			
Risk	.09	.11	-.10
SIR Score	-.38****	-.35****	.37****
Total no. previous offenses	.22****	.23****	-.24****
Total no. current offenses	.17**	.16**	-.18**
Need	.21****	.18**	-.24****
Employment measures			
Stable employment	-.16**	-.13*	.11
Education	-.06	-.12*	.10
Skill level	-.16**	-.15**	.19**
Training	.07	.01	-.13*
Employment need	.14*	.13*	-.15**

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. **** $p \leq .0001$.

Attitudes. Table 76 shows the correlations between attitudinal measures and criminal outcomes. The identification with criminal others sub-scale was the only measure consistently linked with criminal outcomes. Low positive correlations were obtained between ICO and violations, indicating that higher endorsement of the scale was associated with a greater likelihood of incurring a violation. Consequently, higher scores on ICO were related to less survival time in the community.

Table 76
Correlations between Attitude Variables and Criminal Outcomes

Attitudes	Any violation	No. violations	Survival time
Crime measures			
Tolerance for law violations	.11	.09	-.09
Identification with criminal others	.14*	.17**	-.13*
Mechanisms moral disengagement	-.02	-.02	-.03
Employment measures			
Job involvement	-.07	-.03	.02
Intrinsic job motivation	-.10	-.12	.10

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$.

Associates. Social support for employment was one of the few dynamic work scales significantly and consistently correlated with criminal outcomes (see Table 77). Higher scores on the scale were associated with fewer violations, and a longer survival time. Conversely, endorsement of the social support for crime scale was positively associated with any violations, and negatively related to survival time.

Table 77

Correlations between Associates Variables and Criminal Outcomes

Associates	Any violation	No. violations	Survival time
Crime measures			
Social support for crime	.12*	.09	-.13*
Employment measures			
Social support for employment	-.17**	-.25****	.24****

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$.

Self Efficacy. As shown in Table 78, a similar pattern of correlations was observed for the self efficacy measures. Endorsement of the criminal self efficacy measure was positive associated with any violation and less survival time, whereas the exact opposite finding was observed with occupational self efficacy.

Table 78

Correlations between Self Efficacy Measures and Criminal Outcomes

Self efficacy	Any violation	No. violations	Survival time
Crime measures			
Criminal self efficacy	.15**	.08	-.15**
Employment measures			
Occupation self efficacy	-.15**	-.18**	.15**

Note. $n = 302$.

* $p \leq .05$. ** $p \leq .01$.

Intention. Neither of the intention measures was significantly related to the criminal outcome variables, as depicted in Table 79.

Table 79
Correlations between Intention Measures and Criminal Outcomes

Intention	Any violation	No. violations	Survival time
Intention	.01	.02	-.04
Chance of finding employment	-.03	-.01	.01

Note. $n = 302$.

Behaviour. Extremely high correlations were observed between the three criminal outcome measures, with r s exceeding .75 (see Table 80).

Table 80
Intercorrelations among Criminal Outcomes

Outcome	1	2	3
1. Any violation	--	.76****	-.80****
2. No. violations		--	-.77****
3. Survival time			--

Note. $n = 302$.

**** $p \leq .0001$.

Table 81 shows results of correlational analyses exploring the relationships between employment outcome variables at one and six months, and criminal outcomes. Quality of employment was the only employment outcome associated with criminal outcomes, with a low positive correlation indicating that higher quality of employment was associated with a longer survival time. A similar trend was noted for number of weeks employed and survival time, but due to the lower n at six months, there was not enough power to attain statistical significance. The pattern of correlations between employment outcomes and criminal outcomes, although non-significant, indicates that employment outcomes were negatively related to violations committed after release.

Table 81
Correlations between Employment Outcomes and Criminal Outcomes

Associate beliefs	Any violation	No. violations	Survival time
Currently employed: One month	-.07	-.09	.11
Quality of employment: One month	-.09	-.10	.12*
Currently employed: Six months	-.01	-.03	.08
Quality of employment: Six months	-.04	-.07	.10
Number of weeks employed	-.06	-.09	.13

Note. $n = 302$ for the one month outcomes. $n = 106$ for the six month outcomes.

Regression Analyses

A series of hierarchical regression analyses were conducted to explore the unique variance in criminal outcomes attributable to predictors that had significant univariate correlations with criminal outcome, with the effects of the social desirability measures removed. Table 82 presents results from the hierarchical stepwise regression predicting any violation after the first community-based employment assessment was conducted. As illustrated in Table 82, SIR score and social support for employment were the only variables that predicted any violation after the one-month assessment. This is a noteworthy finding, in that an employment-related factor was important to the prediction of criminal outcome. Moreover, although SIR score is a static measure, social support is dynamic and may thus be changed. These results illustrated that criminal recidivism can be impacted by addressing selected dynamic employment variables.

Table 82
Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting Any Violation After Completion of Assessment at One Month (N= 302)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	.00	.00	.09
Impression management	.00	.00	.01
Step 2			
Self deceptive enhancement	.00	.00	.05
Impression management	-.00	.00	-.05
Sirscore	-.02	.00	-.38****
Step 3			
Self deceptive enhancement	.00	.00	.04
Impression management	-.00	.00	-.04
Sirscore	-.02	.00	-.37****
Social support for employment	-.01	.01	-.11*

Note. $R^2 = .01$ for Step 1; $R^2 = .15$ for Step 2 ($p < .0001$); $R^2 = .16$ for Step 3 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

** $p \leq .01$. **** $p \leq .0001$.

Likewise, Table 83 depicts the negative relationship between social support for employment and number of violations. Again, SIR score is negatively associated with criminal outcome, illustrating the obvious link between higher risk and criminal involvement. Two additional factors emerged in the prediction of number of violation: the number of offenses prior to the current incarceration period was predictive of future offenses, and age was negatively associated with violations.

Table 83

Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting Number of Violations After Completion of Assessment at One Month (N= 302)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.00	.01	-.02
Impression management	.01	.01	.05
Step 2			
Self deceptive enhancement	-.00	.01	-.06
Impression management	-.00	.01	-.00
Sirscore	-.04	.01	-.36****
Step 3			
Self deceptive enhancement	-.01	.01	-.07
Impression management	.00	.01	.03
Sirscore	-.04	.01	-.33****
Social support for employment	-.04	.01	-.21****
Step 4			
Self deceptive enhancement	-.01	.01	-.07
Impression management	.00	.01	.02
Sirscore	-.03	.01	-.28****
Social support for employment	-.04	.01	-.21****
Total no. previous offenses	.03	.02	.12*
Step 5			
Self deceptive enhancement	-.01	.01	-.08
Impression management	.00	.01	.02
Sirscore	-.03	.01	-.23****
Social support for employment	-.04	.01	-.20****
Total no. previous offenses	.04	.02	.15**
Age	-.02	.01	-.15*

Note. $R^2 = .00$ for Step 1; $R^2 = .13$ for Step 2 ($p < .0001$); $R^2 = .17$ for Step 3 ($p < .0001$); $R^2 = .18$ for Step 4 ($p < .000$); $R^2 = .20$ for Step 5 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

** $p \leq .01$. **** $p \leq .0001$.

Virtually identical findings were obtained for the prediction of community survival time, as illustrated in Table 84. A positive relationship was obtained SIR score and survival, and number of previous offenses was negatively associated with survival time. Social support and age served as protective factors--older offenders, and those with more social support survived longer periods of time in the community.

Table 84

Summary of Hierarchical Stepwise Regression Analysis for Variables Predicting Survival Time (N= 302)

Variables	B	SE B	β
Step 1			
Self deceptive enhancement	-.04	.03	-.08
Impression management	.02	.04	.05
Step 2			
Self deceptive enhancement	-.02	.03	-.04
Impression management	.06	.04	.10
Sirscore	.25	.04	.39****
Step 3			
Self deceptive enhancement	-.01	.03	-.03
Impression management	.04	.03	.08
Sirscore	.23	.04	.36****
Social support for employment	.22	.06	.18***
Step 4			
Self deceptive enhancement	-.01	.03	-.03
Impression management	.05	.03	.09
Sirscore	.20	.04	.31****
Social support for employment	.21	.06	.18***
Total no. previous offenses	-.19	.08	-.13*
Step 4			
Self deceptive enhancement	-.01	.03	-.02
Impression management	.05	.03	.08
Sirscore	.17	.04	.26****
Social support for employment	.20	.06	.18***
Total no. previous offenses	-.23	.08	-.16**
Age	.07	.03	.12*

Note. $R^2 = .00$ for Step 1; $R^2 = .15$ for Step 2 ($p < .0001$); $R^2 = .18$ for Step 3 ($p < .0001$); $R^2 = .19$ for Step 4 ($p < .000$); $R^2 = .21$ for Step 5 ($p < .0001$). No other variable met the .10 significance level for entry into the model.

** $p \leq .01$. **** $p \leq .0001$.

Discussion

Results of this research are consistent with the theoretical framework and support the influence of personal, interpersonal and broad social factors (i.e., the immediate situation) in contributing to community-based employment outcomes for offenders. Major findings include the influence of unemployment rate, offenders' intention to find work, and the role of social support in contributing to job attainment and retention. Another key result obtained through use of the prospective longitudinal approach to data collection is the incremental predictive ability of dynamic, over static, assessment. These results provide a foundation from which we may derive practical implications for assessment and treatment. In the following discussion, these primary findings and practical implications are addressed.

This study is one of the first to apply a comprehensive theoretical model in the exploration of employment outcomes for offenders on conditional release. Rather than purely relying upon static prediction of recidivism, the present study incorporated the assessment of offender competencies, attitudes, values, and beliefs in exploring employment in a community setting. The approach used in this research is consistent with that espoused by Gendreau et al. (1998), in their assertion of the need to progress toward improved dynamic assessment of employment-related attitudes, values, and beliefs. This research demonstrates the benefits of appraising both offender needs *and* competencies. The amalgamation of static and dynamic risk and needs assessment protocols effectively assess competencies that potentially contribute to safe reintegration, in addition to evaluating factors that place the individual at risk for job instability and/or future involvement in crime.

Numerous authors (e.g., Andrews et al., 1981; Braithwaite, 1980; Hodanish, 1976; Markley et al., 1983; Ryan, 1998) advocated looking beyond recidivism as the sole outcome associated with employment interventions and promoted examination of valued employment-based outcomes such as job placement and retention. Thus, in accordance with research conducted by Andrews et al. (1981), the present study employed multiple measures of employment over time. Results of the regression analyses demonstrated differential patterns of relationships between predictors and the various employment outcome measures, while certain predictors appeared across multiple outcomes and over time.

The role of unemployment rate in predicting employment outcomes for offenders fits well within the model in the present research, as it demonstrates the influence of broad social factors, beyond the individual's personal characteristics. Within a counseling context, employment specialists and parole officers need to be aware of the broader social context in their local areas, for its impact on limiting or expanding jobs available to offenders at a particular point in time in a particular environment. To this end, consideration should also be given to awareness of particular types of employment available in the labour market (MacDonald, 1998). This is important, as research has shown that jobs traditionally sought by offenders (e.g., manual and/or unskilled labour) are no longer as plentiful as they were in previous decades (Simon, 1999).

One of the most robust findings of this study is the strength of the relationship between intention and the various employment outcomes. Intention, whether measured using the "pure" intention variable, or the *chance of finding/keeping employment* variable, contributed a significant proportion of variance to the prediction of all measures of

employment outcome. This finding lends considerable support to the theory of planned behaviour (Ajzen and Fishbein, 1980; Ajzen, 1985, 1988; Fishbein & Ajzen, 1975).

Offender intention to find employment clearly appears as an important proximal factor related to behaviour, as supported by the model in the present study.

Social support for employment is an important factor in the prediction of employment outcomes--both status and quality--at one month. This is a key finding, as it is both intuitively appealing and most significantly, a factor readily amenable to change. This study provides empirical evidence for the role of social support in contributing to positive employment outcomes for offenders. This link between social support and employment outcomes is evident during the first six weeks of release, which argues for an immediate focus on employment, and specifically, supportive employment-based interventions for offenders as they are released to the community. Social support for employment is a particularly strong contributing factor to the number of weeks offenders were employed, and perhaps more importantly, to survival time in the community. This linkage between social support and community adjustment argues for continuity in the provision of employment resources for offenders, from the time they are released throughout the duration of their sentence. Such ongoing support for employment, adopted in the UK with high risk offenders involved in the APEX job placement program, decreased the likelihood that these offenders would recidivate (Soothill et al., 1999). The present results also suggest that continuous support and resources for employment may help federal offenders in their reintegration process.

Thus, results support the utility of the model as a guiding framework for the exploration of employment outcomes among offenders. The second hypothesis, that

dynamic assessment would enhance the prediction of employment outcome, is supported by the study findings. Results provided confirmation for the incremental predictive ability of dynamic assessment. Dynamic variables had higher correlations with outcome at six months than static variables. Moreover, correlational and regression analyses showed that dynamic variables assessed at six months maintained strong correlations with outcome when effects of their corresponding one-month measures were controlled. These incremental effects held even when static measures (e.g., skill level) and one-month predictor variables were entered first into the regression analyses.

These findings argue for a dynamic approach to risk assessment, as more proximally measured variables have higher correlations with employment outcomes. Although the federal correctional system uses a dynamic approach to the assessment of offender needs, the current results support the expansion of this approach to incorporate assessment of specific employment needs and competencies during incarceration and following release to the community. This would allow for continuity in the evaluation process and for exploration of change in employment needs as a function of training (e.g., a reduction in employment needs due to vocational training). The ability to effectively track such changes, however, requires more systematic and intensive measurement of employment needs at the time of entry into employment programs / training and measurement of skills acquisition as a function of training or work experience. Findings of this exploratory research can be used to develop and pilot a tool to evaluate salient employment indicators (needs and competencies) associated with community employment outcomes. This tool can be used throughout the correctional process to evaluate offenders' progress in the realm of employment. Incorporation of the results of

this assessment tool into an easily accessed automated database would allow for systematic evaluation of offenders' movement on the employment domain and would facilitate access to pertinent employment information.

Another assessment issue relates to the different patterns of relationships found between work attitudes and employment outcomes, and criminal attitudes and employment outcomes. Consistent with the theory of compatibility espoused by Ajzen and Fishbein (1977, 1980), work attitudes were more strongly correlated with employment outcomes than were criminal attitudes. Traditionally, correctional research and evaluation has focused on criminal attitudes as a primary area of interest, as they constitute some of the best known correlates of criminal behaviour (Andrews & Bonta, 1998; Gendreau et al., 1992; Gendreau et al., 1996). The present findings provide directions for assessment within the context of employment interventions for offenders. Many offenders present with a multitude of needs that require intervention (i.e., they may have different issues to be addressed in employment programs than other individuals with employment deficits). Despite this reality, the present results indicate that employment training / programming should focus on employment-related constructs, as they are associated with community-based employment outcomes. Other areas (e.g., pro-criminal attitudes) are important and may need to be addressed in programming, but they should complement employment-specific interventions (e.g., as potential responsivity issues or moderating factors). Interestingly, several employment predictor variables were significantly correlated with criminal outcomes; all employment history variables (e.g., stable employment history, skilled employment prior to incarceration) shared significant univariate correlations with at least one of the three outcome variables: any violation,

number of violations, or survival time. Moreover, social support for employment and occupational self efficacy were significantly related to all criminal outcome measures, with higher scores on these predictor variables associated with less likelihood of (re-)offending and a longer period of time in the community. Therefore, selected employment measures, and notably those amenable to change (social support and self efficacy), were positively associated with community adjustment.

Limitations

A number of limitations are associated with this study. Both the participation rates and attrition rates were problematic. Due to the voluntary nature of this research, it is possible that only the most motivated offenders initially agreed to participate. However, comparison of risk and need profiles of the sample with the population profiles showed that the full sample was representative of the release population on those variables. Additionally, this was a study of employment among federal offenders on conditional release. This represents a high-risk, high-need group of offenders; results may thus be relevant only for federal offenders on conditional release.

Furthermore, due to study attrition (i.e., refusals) and suspension / revocation, only one third of the original sample participated in the second assessment phase (at six months). It is suggested for future research involving offenders in the community, that researchers attempt to involve relevant staff (e.g., parole officers) in describing the study and in recruiting participants. Although this approach was attempted in the current study, the researcher was unable to gain “buy in” from all parole officers, which may have impeded the research assistants’ ability to recruit offenders. In future, considerations

should include further exploration of the research with individuals with the most contact with offenders to ensure better buy in. As for attrition rates, it is difficult to involve offenders in research as they become increasingly busy as they settle into the community. Unfortunately, researchers are unable to offer compensation to offenders for participating in research, which may result in a lower participation rate than if such inducements were available.

Practical Applications

Numerous implications may be derived from this research, including areas in which to allocate resources, with the intention of increasing the likelihood that offenders are able to attain and retain employment. First, the increased knowledge of factors linked to employment status, quality of employment, and length of time employed since release derived from this research can be used to complement current assessment procedures. This will enable parole officers and employment counselors to systematically evaluate and track offenders' progress on factors that have been identified as problematic and that have a demonstrated link with community-based employment outcomes for offenders. With the ability to better identify individuals who have employment needs, parole officers and employment counselors can then monitor offenders' progress and guide them into appropriate employment interventions (e.g., job search and placement versus job skills training for offenders with fewer employment needs, intensive programming / training for offenders with considerable needs).

In 1980, Braithwaite advocated the following: "On the face of it, the solution seems simple enough -- train prisoners in legitimate occupational skills which will enable

them to get a job which is remunerative and satisfying; then criminal behaviour will become a relatively less satisfying option" (p. 15). Unfortunately, in the decades following Braithwaite's pivotal work, employment intervention has been eclipsed by other programs (e.g., cognitive skills programming), to the extent that we cannot unequivocally claim that employment interventions systematically reduce recidivism. Employment must be reinstated as an important need area requiring intensive and systematic consideration. Findings from the present research can be used to complement our existing knowledge of program effectiveness as a gateway to the development, implementation, and evaluation of effective intervention strategies (i.e., employment placement and/or programs) for offenders with identified employment needs. Existing programs such as cognitive skills can be used to supplement core employment interventions, thus meeting the specific needs of offenders.

It is only by providing offenders with effective programming that allows for skills development and work experience (provided in accordance with their level of identified employment need), that they will be given a legitimate opportunity to successfully reintegrate into the community. Employment counselors play a critical role in the process of employment programming, including assessment of clients' needs, competencies and vocational / employment interests; liason with community employers and agencies; employment counseling; and follow-up. It is critical that an effective and ongoing process employment counseling process is established, as the present research illustrates the important role of social support in contributing to employment outcomes for offenders. Numerous authors (e.g., Braithwaite, 1980; Pryor & Ward, 1985) have cautioned against over-reliance on insufficient counseling / placement services, as they may raise

expectations, thereby engendering a sense of despair in offenders when these are not met. They have also warned that although the role of job counselor is to facilitate finding work, simply placing individuals into just "any job" is an insufficient and unacceptable response. Counselors should not only assist individuals in finding a job, but extend their role to helping them keep the job, thus facilitating the transition from unemployment to work (Pryor & Ward, 1985).

Pryor and Ward (1985) describe concrete techniques to be employed by counselors in preparing clients for job searches and interviews. These include: relaxation training, systematic desensitization, assertiveness training, modeling, and video role play as ways to decrease the anxiety associated with approaching prospective employers and for dealing with the interview situation. Moreover, they provide suggestions for finding and keeping employment, including strategies for coping with frustration in the workplace and avoiding confrontation.

As described above, employment counselors can play an integral role in assisting offenders in their efforts to address employment deficits. Employment programming is essential to reduce needs and contribute to offenders' sense of competency / self efficacy. Successful employment intervention will follow the tenets of effective treatment programs, as elaborated the numerous meta-analytic studies previously described (Andrews, Zinger, et al., 1990; Dowden, 1998; Lipsey, 1990, 1995). One such criterion is adherence to the need principle. This research demonstrated the importance of considering need factors for their contributions to employment outcomes for offenders. Results provide further validation of the ability of the OIA process to accurately identify offenders with needs. Notably, need ratings were predictive of employment outcomes,

with overall needs consistently negatively related to work outcomes (e.g., offenders with higher needs were less likely to find work). These findings illustrate the importance of advocating differential levels of service to offenders who vary in need levels, consistent with the principles of effective corrections.

Within the federal system, needs assessment is paramount to an effective correctional process. Research demonstrates that the system adequately evaluates offender needs and that these assessments consistently link with important correctional outcomes (Motiuk, 1996a, 1996b, 1997b; Motiuk & Brown, 1993; Motiuk & Porporino, 1989). Focus must now be placed on the development and implementation of effective employment programs that better address offenders' employment-related needs. It is imperative to derive and apply findings from the treatment effectiveness literature, in combination with results from the present study to focus on program development, implementation, and evaluation in order to improve employment outcomes for offenders.

Findings from the regression analyses reveal specific areas that should be targeted through intervention. A finding of particular interest was the strong relationship between the offender's rating of his chance of finding / maintaining a job over the six months and employment outcomes. These ratings are useful in that they show that offenders' employment outcomes are strongly linked to their intention to find and / or keep a job, which offers potential for intervention. Additionally, skills development emanating from vocational training is important, given the demonstrated relationship between skilled employment and quality of employment obtained in the community. These findings support previous research on skills development and link with community reintegration. Glaser (1964), for instance, in his pivotal piece on pre-release preparation, post-release

employment and recidivism, found that successful probationers were twice as likely to make use of the skills they had developed through institutional work programs than probationers who were unsuccessful during their release.

Moreover, information derived from the adapted Harris (1975) measure illustrates that offenders' perceptions of the costs and benefits for employment and crime are important and may be used to guide treatment. Specific areas of intervention can be derived from offenders' lists of advantages and disadvantages of employment and crime; these items can serve as an important starting point for exploration of cognitions in treatment -- factors upon which to focus to order to shift the balance of costs and rewards for employment over crime. Such an approach is consistent with the theoretical perspective used in the present research and with the PIC-R model (Andrews, 1982a; Andrews, 1995; Andrews & Bonta, 1998). Furthermore, a program emphasizing cognitions associated with criminal behaviour and employment is consistent with the focus on cognitive-behavioural interventions within the CSC, and with findings in the treatment effectiveness literature on general responsivity (Andrews, Zinger, et al., 1990; Dowden, 1998). Thus, findings from this research may be used in a treatment setting to identify rewards for crime and to attempt to shift these rewards to the realm of employment (i.e., to increase rewards for legitimate employment).

This research provides an indication of directions to pursue in order to impact offenders' likelihood of becoming re-involved in crime. Although employment outcomes were not strongly linked with criminal outcomes, several employment predictor variables were related (e.g., social support for employment, occupational self efficacy, and

employment needs), suggesting concrete areas in which to intervene in order to ultimately reduce recidivism.

Future Directions

A more intensive systematic exploration of employment outcomes is necessary in order to attain a better understanding of the impact of institutional employment programs on various outcomes. As described by Guynes and Greiser (1986), institutional employment programs have the potential to impact the institution, the offender, and society. Future research should measure and evaluate proximal factors linked to employment training / experience obtained during incarceration, including: institutional adjustment, and the development and enhancement of both generic skills and specific skills / skill sets. This information should be collected through multi-source, multi-method assessment techniques involving offender perceptions of skills and self efficacy prior to-, during- and following training and instructors' perceptions of the same. Moreover, behavioural indicators of skills acquisition would provide a concrete measure of the impact of employment programming. Societal impacts involve the potential for reduced recidivism when offenders find and maintain steady work, which contributes to a reduction in costs to taxpayers for re-incarceration.

Moreover, given that meta-analytic results support the increased efficacy of community-based treatment over institutional intervention (Andrews et al., 1990; Lipsey, 1990), more focus should be placed on community-based employment initiatives for offenders. Although institutional employment opportunities may contribute to an offender's potential for safe reintegration (Saylor & Gaes, 1996), more intensive effort

should focus on community-based initiatives that offer job readiness training, job placement strategies and on-the-job training opportunities. Additionally, there is need for follow-up sessions and systematic intervention at the community level. More specifically, community employment placement and training opportunities are required to: facilitate the linkage and ease the transition to the community, provide financial support and promote peer support and effective prosocial models to offenders upon release. This approach would be an intervention that follows naturally from the finding that social support for employment is one of the key factors in contributing to positive employment-based outcomes for offenders during their first month of release, as well as number of weeks employed during the first six months of release.

Federal offenders enter and leave the institution with significant employment needs, which are associated with their ability to successfully reintegrate into the community following release. It is imperative, given the link between employment deficits and recidivism, to effectively address offender employment needs. This research points to concrete areas that may be addressed in order to facilitate this community adjustment.

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Appendix A**Community Employment Checklist**

<p>PRE-INCARCERATION:</p>	<p>Did you have work experience before incarceration? No _____ Yes _____</p>	<p><i>If yes,</i> Occupation in year prior to incarceration: Student _____ Homemaker/caretaker _____ Semi-skilled or unskilled labour (construction, factory, cashier) _____ Skilled labour (mechanic, plumber, machinist) _____ Clerical, sales (insurance, auto dealer, computer) _____ Lower management/supervisory (foreman, store manager, self employed, small businessman) _____ Managerial/professional (executive, teacher, doctor, lawyer) _____ Other (specify): _____</p>
<p>DURING INCARCERATION:</p>	<p>Did you participate in vocational training during incarceration? No _____ Yes _____</p>	<p><i>If yes,</i> Type of vocational training during incarceration (check all that apply): Aquaculture-fish hatchery _____ Autobody _____ Basic skills _____ Cabinet making _____ Carpentry _____ Cell study _____ Computers _____ Cooking _____ DEP accountancy _____ Electronics _____ Gas engines _____ General _____ Hairdressing/barbering _____</p>

		Horticulture Industrial cleaning certificate program (FSW) Industrial drawing Industrial services Machine shop Mechanical Photography Plumbing Printing Sewage treatment Technological studies Upholstery Vocational training in the community Welding/metal trades
		Did you complete the program(s)? No (specify which program[s]): Yes (specify which program[s]):
		<i>If no,</i> Reason for not completing any of the above program(s): Participation in other program(s) Transfer to another institution Released Lack of job prospects in this area Changed/lost interest Conflict with instructor Dropped out Other (specify):

	<p>Did you work for CORCAN during incarceration?</p> <p>_____ No</p> <p>_____ Yes</p>	<p><i>If yes,</i></p> <p>Type of CORCAN shop (check all that apply):</p> <p>_____ Agribusiness (farming, meat processing and baked products, forestry and environmental services)</p> <p>_____ Construction (on-the-job construction training and/or certification on construction projects)</p> <p>_____ Manufacturing (shops, including wood/cabinetry, metal and upholstery operations)</p> <p>_____ Services (printing and graphic services; imaging, microfilm and CD-ROM; data entry and data base creation; telemarketing and distribution)</p> <p>_____ Textiles (manufactured clothing; textiles products [canvas, upholstery]; laundry services)</p> <p>Length of time working for CORCAN:</p> <p>_____ Less than three months</p> <p>_____ Three to six months</p> <p>_____ Six months to one year</p> <p>_____ One year or more</p> <p>Reason for leaving CORCAN:</p> <p>_____ Participation in other program(s)</p> <p>_____ Transfer to another institution</p> <p>_____ Released</p> <p>_____ Lack of job prospects in this area</p> <p>_____ Changed/lost interest</p> <p>_____ Conflict with instructor</p> <p>_____ Dropped out</p> <p>_____ Other (specify): _____</p>
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	<p>Did you participate in the Employment and Career Planning Program* (3 week program) or other employment training program – specify: _____?</p> <p> ☐ No ☐ Yes ☐ N/A: Not available in this region </p> <p>* Program currently offered at: Saskatchewan Penitentiary Drumheller Institution Stoney Mountain Bowden </p>	<p><i>If yes,</i> Did s/he complete the program? ☐ No ☐ Yes </p> <p><i>If no,</i> Reason for not completing program: ☐ Participation in other program(s) ☐ Transfer to another institution ☐ Released ☐ Lack of job prospects in this area ☐ Changed/lost interest ☐ Conflict with instructor ☐ Dropped out ☐ Other (specify): _____ </p>
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	<p>Did you participate in the Skills for Employment Program (3 month program)?</p> <p> ☐ No ☐ Yes ☐ N/A: Not available in this region </p> <p>* Program currently offered at:</p> <p> Saskatchewan Penitentiary Drumheller Institution Stoney Mountain Bowden </p> <p>Move to p. 6, "work release" question if N/A</p>	<p><i>If yes,</i></p> <p>Area of concentration (check all that apply):</p> <p> ☐ Auto body ☐ Baker ☐ Beef herdsman ☐ Boiler technician ☐ Bricklayer ☐ Building maintenance worker ☐ Bullet/sign painter ☐ Cabinet maker/carpentry ☐ Cleaner ☐ Concrete product fabricator ☐ Electrician ☐ Farm equipment operator ☐ Farm hand ☐ Farm repair person ☐ Field crop worker ☐ Food preparation worker ☐ Food server ☐ Garage service worker ☐ General ☐ Greenhouse worker ☐ Groundskeeper ☐ Industrial painter ☐ Laundry worker ☐ Library assistant ☐ Maintenance painter ☐ Meat cutter ☐ Metal fabricator ☐ Needles trades worker ☐ Office clerk/manager ☐ Pallet/shipping crate builder ☐ Pastry cook ☐ Peer counsellor ☐ Plumber ☐ Printer/graphic artist ☐ Recreational worker </p>
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	<p>Did you participate in work release (offered through the temporary absence program) while in the institution?</p> <p>____ No ____ Yes</p>	<p><i>If yes,</i> Did you successfully complete the work release? ____ No ____ Yes</p> <p>If no, reason for unsuccessful completion: ____ Participation in other program(s) ____ Transfer to another institution ____ Released ____ Lack of job prospects in this area ____ Changed/lost interest ____ Other (specify): _____</p>
<p><u>COMMUNITY STATUS</u></p> <p>Are you currently employed? ____ No ____ Yes</p>	<p><i>If yes,</i> When did you obtain employment? ____ / ____ / ____ (Y/M/D)</p>	
	<p>Employment status: ____ Part-time ____ Full-time ____ Self-employed ____ Other (specify): _____</p>	<p>Number of hours worked per week (on average): ____ hours</p> <p>Salary earned per week (take home): _____</p> <p>Does your salary meet your basic needs (e.g., rent, bills, food, etc.)? ____ No ____ Yes</p>

		Are you satisfied with this income? _____ No _____ Yes
	Type of occupation: _____ Student _____ Homemaker/caretaker _____ Semi-skilled or unskilled labour _____ (construction, factory, cashier) _____ Skilled labour (mechanic, plumber, _____ machinist) _____ Clerical, sales (insurance, auto dealer, _____ computer) _____ Lower management/supervisory _____ (foreman, store manager, _____ self employed, small businessman) _____ Managerial/professional (executive, _____ teacher, doctor, lawyer) _____ Other (specify): _____	Is your current employment related to work experience before incarceration: _____ No _____ Yes _____ Not applicable (not employed before _____ incarceration) Is your current employment related to vocational training: _____ No _____ Yes _____ Not applicable (haven't taken vocational training) Is your current employment related to CORCAN work: _____ No _____ Yes _____ Not applicable (did not work for CORCAN) Is your current employment related to Skills for Employment training: _____ No _____ Yes _____ Not applicable (did not take program)

<p>If you are unemployed now, were you employed since release?</p> <p>___ No ___ Yes ___ Not applicable (retired, disability)</p>	<p>If yes, Employment status:</p> <p>___ Part-time ___ Full-time ___ Self employed ___ Other (specify): _____</p>	<p>Number of hours worked per week (on average): ___ hours</p> <p>Salary earned per week (take home): ___ Take home</p> <p>Did your salary meet your basic needs (e.g., rent, bills, food, etc)? ___ No ___ Yes</p> <p>Were you satisfied with this income? ___ No ___ Yes</p>
	<p>Type of occupation:</p> <p>___ Student ___ Homemaker/caretaker ___ Semi-skilled or unskilled labour (construction, factory, cashier) ___ Skilled labour (mechanic, plumber, machinist) ___ Clerical, sales (insurance, auto dealer, computer) ___ Lower management/supervisory (foreman, store manager, self employed, small businessman) ___ Managerial/professional (executive, teacher, doctor, lawyer) ___ Other (specify): _____</p>	

	Why are you no longer employed? Seasonal/temporary work _____ Contract ended _____ Quit _____ Fired _____ Left for school/training _____ Suspended _____ Revoked _____ Other: _____	
If you were unemployed at any time since release,	Source of income/financial support: Social support (welfare) _____ Partner/family _____ Other family members _____ Friends/acquaintances _____ Other (specify): _____	
Have you been refused employment due to your criminal record? No _____ Yes _____	If yes, Reason given by employer: Nature of offence _____ Does not want ex-offenders working for him/her _____ Nature of the job _____ Other (specify): _____	How many times did this happen? Once _____ Twice _____ Three or more times _____

NOTE: IF THE OFFENDER IS CURRENTLY UNEMPLOYED, COMPLETE THIS PAGE.

INTERVIEW THE OFFENDER FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with your work behaviours.

Is finding a job on your correctional plan?	No	Yes
Is job training/school on your correctional plan?	No	Yes
Do you follow the employment condition of your correctional plan?	No	Somewhat Yes N/A
Is job search a condition of release?	No	Yes
Were you referred to an employment counsellor?	No	Yes
Do you have regular contact with an employment counsellor?	No	Somewhat Yes
Have you been referred to any community employment/training programs?	None	Some Several
Have you participated in job training programs/workshops since release?	None	Some Several
Do you have a regular job search routine?	No	Somewhat Yes
Do you have a résumé?	No	Yes
Have you handed out any résumés since release?	None	Some Many
Have you gone to any job interviews since release?	None	Some Many
How satisfied are you with your job search to date?	Not Very	Somewhat Satisfied
Do you think your criminal record holds you back from finding a job?	No	A little A lot
Do you avoid job interviews because of your criminal record?	No	Sometimes Often
How confident are you in your ability to work?	Not Very	Somewhat Confident
How would you rate your level of motivation to find a job?	A little	Somewhat Motivated
Do you intend to find a job?	No	Maybe Yes
How would you rate your chances of finding a job in the next 6 months?	Poor	OK Good
How important do you think having a job is?	Not Very	Somewhat Important
How would you rate your work ethic?	Poor	Average Strong
How much support do you have from your spouse/ significant other(s) for finding work?	Not Much	A little Good Support
How much does your spouse/important other(s) believe that having a job is important?	Not Very	Somewhat Important

INTERVIEW IS COMPLETE
Thank-you for your participation.

NOTE: IF THE OFFENDER IS CURRENTLY EMPLOYED, COMPLETE THIS PAGE.

INTERVIEW THE OFFENDER FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with your work behaviours.

Is finding a job on your correctional plan?	No	Yes
Is job training/school on your correctional plan?	No	Yes
Is job search a condition of release?	No	Yes
Were you referred to an employment counsellor?	No	Yes
Did you have regular contact with an employment counsellor?	No	Somewhat
Were you referred to any community employment/training programs?	None	Some
Did you participate in job training programs/workshops since release?	None	Some
Did you have a regular job search routine?	No	Somewhat
Do you have a résumé?	No	Yes
Did you hand out any résumés since release?	None	Some
Did you go to any job interviews since release?	None	Some
How satisfied were you with your job search?	Not Very	Somewhat
Did you think your criminal record would hold you back from finding a job?	No	A little
Did you avoid job interviews because of your criminal record?	No	Sometimes
How confident are you in your ability to work?	Not Very	Somewhat
How would you rate your level of motivation to find a job (before you found one)?	A little	Somewhat
Did you intend to find a job?	No	Maybe
How would you rate your chances of keeping your job in the next 6 months?	Poor	OK
How important do you think having a job is?	Not Very	Somewhat
How would you rate your work ethic?	Poor	Average
How much support do you have from your spouse/ significant other(s) for keeping work?	Not Much	A little
How much does your spouse/important other(s) believe that having a job is important?	Not Very	Somewhat
		Important

INTERVIEW IS COMPLETE
Thank-you for your participation

NOTE: IF THE OFFENDER IS CURRENTLY UNEMPLOYED, COMPLETE THIS PAGE.

PROVIDE YOUR PERCEPTIONS FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with the offender's work-related attitudes and behaviours.

How confident are you in her/his ability to work?	Not Very	Somewhat	Confident
How would you rate her/his level of motivation to find a job?	A little	Somewhat	Motivated
Does s/he intend to find a job?	No	Maybe	Yes
How would you rate her/his chances of finding a job in the next 6 months?	Poor	OK	Good
How important does s/he think having a job is?	Not Very	Somewhat	Important
How would you rate her/his work ethic?	Poor	Average	Strong
How much support does s/he have from spouse/significant other(s) for finding work?	Not Much	A little	Good Support
How much does her/his spouse/important other(s) believe that having a job is important?	Not Very	Somewhat	Important

CHECKLIST IS COMPLETE

NOTE: IF THE OFFENDER IS CURRENTLY EMPLOYED, COMPLETE THIS PAGE.

PROVIDE YOUR PERCEPTIONS FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with the offender's work-related attitudes and behaviours.

How confident are you in her/his ability to work?	Not Very	Somewhat	Confident
How would you rate her/his level of motivation to find a job (before s/he found one)?	A little	Somewhat	Motivated
Did s/he intend to find a job?	No	Maybe	Yes
How would you rate her/his chances of keeping your job in the next 6 months?	Poor	OK	Good
How important does s/he think having a job is?	Not Very	Somewhat	Important
How would you rate her/his work ethic?	Poor	Average	Strong
How much support does s/he have from spouse/significant other(s) for keeping work?	Not Much	A little	Good Support
How much does her/his spouse/important other(s) believe that having a job is important?	Not Very	Somewhat	Important

CHECKLIST IS COMPLETE

Community Employment Checklist

For completion during the 6th month of offender's release

Name:

FPS:

Type of release:

Administration site:

Date administered:

<p><u>In the last six months, how many weeks have you been employed?</u> <u> </u> weeks (Indicate 0, if unemployed since release)</p>		
<p>In the last six months, how many jobs have you held? <u> </u> jobs (All jobs, including any mentioned during the first interview).</p>	<p><u>Type of job(s): (Check all that apply)</u></p> <p>☐ Student</p> <p>☐ Homemaker/caretaker</p> <p>☐ Semi-skilled or unskilled labour (construction, factory, cashier)</p> <p>☐ Skilled labour (mechanic, plumber, machinist)</p> <p>☐ Clerical, sales (insurance, auto dealer, computer)</p> <p>☐ Lower management/supervisory (foreman, store manager, self employed, small businessman)</p> <p>☐ Managerial/professional (executive, teacher, doctor, lawyer)</p> <p>☐ Other (specify): <u> </u></p>	<p><u>Length of time in each job: (Check each corresponding job)</u></p> <p><u> </u> weeks</p> <p><u> </u> weeks</p> <p><u> </u> weeks</p> <p><u> </u> weeks</p> <p><u> </u> weeks</p> <p><u> </u> weeks</p> <p><u> </u> weeks</p> <p><u> </u> weeks</p>
<p>What is the longest continuous period of time you have been employed since release? <u> </u> weeks (List number of weeks of uninterrupted work, including moving from one job to another, if less than one week of unemployment in between two jobs).</p>		

Are you currently employed? ☐ No ☐ Yes ☐ Not applicable (retired, disability)	<i>If yes,</i> When did you obtain employment? ____/____/____ (Y/M/D)	
	Current employment status: ☐ Part-time ☐ Full-time ☐ Self-employed ☐ Other (specify): _____	Number of hours worked per week (on average): _____ hours Salary earned per week (take home): _____ Does your salary meet your basic needs (e.g., rent, bills, food, etc.)? ☐ No ☐ Yes Are you satisfied with this income? ☐ No ☐ Yes
	Type of occupation: ☐ Student ☐ Homemaker/caretaker ☐ Semi-skilled or unskilled labour (construction, factory, cashier) ☐ Skilled labour (mechanic, plumber, machinist) ☐ Clerical, sales (insurance, auto dealer, computer) ☐ Lower management/supervisory (foreman, store manager,	Is your current employment related to work experience before incarceration: ☐ No ☐ Yes ☐ Not applicable (not employed before incarceration) Is your current employment related to vocational training: ☐ No ☐ Yes ☐ Not applicable (haven't taken vocational training)

	self employed, small businessman) Managerial/professional (executive, teacher, doctor, lawyer) Other (specify): _____	Is your current employment related to CORCAN work: _____ No _____ Yes _____ Not applicable (did not work for CORCAN) Is your current employment related to Skills for Employment training: _____ No _____ Yes _____ Not applicable (did not take program)
If you are unemployed now, were you employed since release? _____ No _____ Yes _____ Not applicable (retired, disability)	If yes, Employment status: _____ Part-time _____ Full-time _____ Self employed _____ Other (specify): _____	Number of hours worked per week (on average): _____ hours Salary earned per week (take home): _____ Take home Did your salary meet your basic needs (e.g., rent, bills, food, etc)? _____ No _____ Yes Were you satisfied with this income? _____ No _____ Yes

	<p>Type of occupation:</p> <p>____ Student</p> <p>____ Homemaker/caretaker</p> <p>____ Semi-skilled or unskilled labour (construction, factory, cashier)</p> <p>____ Skilled labour (mechanic, plumber, machinist)</p> <p>____ Clerical, sales (insurance, auto dealer, computer)</p> <p>____ Lower management/supervisory (foreman, store manager, self employed, small businessman)</p> <p>____ Managerial/professional (executive, teacher, doctor, lawyer)</p> <p>____ Other (specify): _____</p>	
	<p>Why are you no longer employed?</p> <p>____ Seasonal/temporary work</p> <p>____ Contract ended</p> <p>____ Quit</p> <p>____ Fired</p> <p>____ Left for school/training</p> <p>____ Suspended</p> <p>____ Revoked</p> <p>____ Other: _____</p>	
<p>If you were unemployed at any time since release,</p>	<p>Source of income/financial support:</p> <p>____ Social support (welfare)</p> <p>____ Partner/family</p> <p>____ Other family members</p> <p>____ Friends/acquaintances</p> <p>____ Other (specify): _____</p>	

	<p>Why were you unemployed?</p> <p> ☐ No work available in my field ☐ Lack of work experience ☐ Lack of job skills/training ☐ Criminal record held me back ☐ Not that interested in working ☐ Too busy with other programs ☐ Family responsibilities ☐ On disability ☐ Retired ☐ Other: _____ </p>	
<p>Since your interview during your first month of release:</p>	<p>How many jobs have you applied for? _____ jobs</p>	<p>What type of jobs have you applied for (check all that apply)?</p> <p> ☐ Semi-skilled or unskilled labour (construction, factory, cashier) ☐ Skilled labour (mechanic, plumber, machinist) ☐ Clerical, sales (insurance, auto dealer, computer) ☐ Lower management/supervisory (foreman, store manager, self employed, small businessman) ☐ Managerial/professional (executive, teacher, doctor, lawyer) ☐ Other (specify): _____ </p>
	<p>How many interviews have you attended? _____ interviews</p>	

	How many job offers did you receive? _____ None _____ One _____ Two _____ Three or more	
	How many job offers did you accept? _____ None _____ One _____ Two _____ Three or more _____ N/A (no jobs were offered)	<i>If none, why did you not accept?</i> _____ Not interested in this type of work _____ Pay was inadequate _____ Too busy with other programs _____ Family responsibilities _____ Other: _____
Have you been refused employment due to your criminal record during the past six months? _____ No _____ Yes	<i>If yes,</i> Reason given by employer: _____ Nature of offence _____ Does not want ex-offenders working for him/her _____ Nature of the job _____ Other (specify): _____	How many times did this happen? _____ Once _____ Twice _____ Three or more times

PLACE THE NUMBER FROM THE FOLLOWING LIST IN THE SECOND COLUMN IN THE TABLE ON PAGE 7 (TYPE OF PROGRAM):

1. Cognitive Skills Training
2. Living Without Violence
3. Family Life/Parenting Skills
4. Leisure Education
5. Community Integration
6. Anger/Emotion Management
7. Substance Abuse Programming
8. Sex Offender Treatment
9. Literacy
10. Family Violence
11. Other Violence Programming
12. Counterpoint (attitudes program)
13. Education
14. Vocational Training
15. Employment Programs (e.g., offered through HRDC or through CSC)
16. Other

NOTE: IF THE OFFENDER IS CURRENTLY UNEMPLOYED, COMPLETE THIS PAGE.

INTERVIEW THE OFFENDER FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with your work behaviours.

Is finding a job on your correctional plan?	No	Yes
Is job training/school on your correctional plan?	No	Yes
Do you follow the employment condition of your correctional plan?	No	Somewhat Yes N/A
Is job search a condition of release?	No	Yes
Were you referred to an employment counsellor?	No	Yes
Do you have regular contact with an employment counsellor?	No	Somewhat Yes
Have you been referred to any community employment/training programs?	None	Some Several
Have you participated in job training programs/workshops since release?	None	Some Several
Do you have a regular job search routine?	No	Somewhat Yes
Do you have a résumé?	No	Yes
Have you handed out any résumés since release?	None	Some Many
Have you gone to any job interviews since release?	None	Some Many
How satisfied are you with your job search to date?	Not Very	Somewhat Satisfied
Do you think your criminal record holds you back from finding a job?	No	A little A lot
Do you avoid job interviews because of your criminal record?	No	Sometimes Often
How confident are you in your ability to work?	Not Very	Somewhat Confident
How would you rate your level of motivation to find a job?	A little	Somewhat Motivated
Do you intend to find a job?	No	Maybe Yes
How would you rate your chances of finding a job in the next 6 months?	Poor	OK Good
How important do you think having a job is?	Not Very	Somewhat Important
How would you rate your work ethic?	Poor	Average Strong
How much support do you have from your spouse/ significant other(s) for finding work?	Not Much	A little Good Support
How much does your spouse/important other(s) believe that having a job is important?	Not Very	Somewhat Important
What percentage of the past six months have you worked?	Less than 25%	25-49% 50-74% More than 75%

INTERVIEW IS COMPLETE

NOTE: IF THE OFFENDER IS CURRENTLY EMPLOYED, COMPLETE THIS PAGE.

INTERVIEW THE OFFENDER FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with your work behaviours.

Is finding a job on your correctional plan?	No	Yes
Is job training/school on your correctional plan?	No	Yes
Is job search a condition of release?	No	Yes
Were you referred to an employment counsellor?	No	Yes
Did you have regular contact with an employment counsellor?	No	Somewhat
Were you referred to any community employment/training programs?	None	Some
Did you participate in job training programs/workshops since release?	None	Some
Did you have a regular job search routine?	No	Somewhat
Do you have a résumé?	No	Yes
Did you hand out any résumés since release?	None	Some
Did you go to any job interviews since release?	None	Some
How satisfied were you with your job search?	Not Very	Somewhat
Did you think your criminal record would hold you back from finding a job?	No	A little
Did you avoid job interviews because of your criminal record?	No	Sometimes
How confident are you in your ability to work?	Not Very	Somewhat
How would you rate your level of motivation to find a job (before you found one)?	A little	Somewhat
Did you intend to find a job?	No	Maybe
How would you rate your chances of keeping your job in the next 6 months?	Poor	OK
How important do you think having a job is?	Not Very	Somewhat
How would you rate your work ethic?	Poor	Average
How much support do you have from your spouse/ significant other(s) for keeping work?	Not Much	A little
How much does your spouse/important other(s) believe that having a job is important?	Not Very	Somewhat
What percentage of the past six months have you worked?	Less than 25%	25-49% 50-74% More than 75%

INTERVIEW IS COMPLETE

NOTE: IF THE OFFENDER IS CURRENTLY UNEMPLOYED, COMPLETE THIS PAGE.

PROVIDE YOUR PERCEPTIONS FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with the offender's work-related attitudes and behaviours.

How confident are you in her/his ability to work?		Not Very	Somewhat	Confident
How would you rate her/his level of motivation to find a job?		A little	Somewhat	Motivated
Does s/he intend to find a job?		No	Maybe	Yes
How would you rate her/his chances of finding a job in the next 6 months?		Poor	OK	Good
How important does s/he think having a job is?		Not Very	Somewhat	Important
How would you rate her/his work ethic?		Poor	Average	Strong
How much support does s/he have from spouse/significant other(s) for finding work?		Not Much	A little	Good Support
How much does her/his spouse/important other(s) believe that having a job is important?		Not Very	Somewhat	Important

CHECKLIST IS COMPLETE

NOTE: IF THE OFFENDER IS CURRENTLY EMPLOYED, COMPLETE THIS PAGE.

PROVIDE YOUR PERCEPTIONS FOR THE SECTION BELOW.

Instructions: Please provide the answer that you think corresponds with the offender's work-related attitudes and behaviours.

How confident are you in her/his ability to work?		Not Very	Somewhat	Confident
How would you rate her/his level of motivation to find a job (before s/he found one)?		A little	Somewhat	Motivated
Did s/he intend to find a job?		No	Maybe	Yes
How would you rate her/his chances of keeping your job in the next 6 months?		Poor	OK	Good
How important does s/he think having a job is?		Not Very	Somewhat	Important
How would you rate her/his work ethic?		Poor	Average	Strong
How much support does s/he have from spouse/significant other(s) for keeping work?		Not Much	A little	Good Support
How much does her/his spouse/important other(s) believe that having a job is important?		Not Very	Somewhat	Important

CHECKLIST IS COMPLETE

Appendix B

Work Attitudes Questionnaire

Instructions: This is not a test and there are no “right” or “wrong” answers. We are interested in your ideas and opinions about work and life in the community. Your answers will give us a better idea of some of the things that help inmates on release to find and keep a job.

Please indicate your feelings about all the questions by circling one of the answers.

Example:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

1. The most important things that happen to me involve my job. 1 2 3 4 5

For this question, if you **Agree** that the most important things that happen to you involve your job, you would circle 4.

1. The most important things that happen to me involve my job. 1 2 3 ④ 5

If you **Disagree** with the statement, you would circle 2.

1. The most important things that happen to me involve my job. 1 ② 3 4 5

If you **Did Not Agree and Did Not Disagree** with this statement, you would circle 3.

1. The most important things that happen to me involve my job. 1 2 ③ 4 5

Please ask if you have any questions before you begin. If you are not sure what a question means when you are filling out the questionnaire, feel free to ask for help.

Australian Work Ethic

Instructions: Please indicate how much you agree or disagree with the following items, using the scale provided.

	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
1. People who work deserve success.	1	2	3	4
2. Hard work is fulfilling in itself.	1	2	3	4
3. Nothing is impossible if you work hard enough.	1	2	3	4
4. If you work hard you will succeed.	1	2	3	4
5. You should be the best at what you do.	1	2	3	4
6. By working hard, an individual can overcome most obstacles that life presents and make his or her own way in the world.	1	2	3	4
7. Hard work is not a key to success.	1	2	3	4

Social Support for Employment

Instructions: Please indicate the response that best describes your position since release.

None 1	Few 2	Several 3	Most 4
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1. Think of your best friends: that is, those close friends who you have seen most frequently since release:

a.	Do any of them have full-time jobs?	1	2	3	4
b.	Are any of them the type of person who enjoys working for a living?	1	2	3	4

2. Think of the people you know and have been associating with since release.

a.	Do any of them have full-time jobs?	1	2	3	4
b.	Are any of them the type of person who enjoys working for a living?	1	2	3	4

	No 1	Not Sure 2	Yes 3	Definitely Yes 4
3. If I want to find a job, I'd know where to go or who to see.	1	2	3	4
4. If I want to get some information about finding work, I'd know where to go, or who to see.	1	2	3	4
5. If I was planning to find a job, I know some people who could and would help me to find one.	1	2	3	4
6. While I might not call them friends and I might not see them very often, I know some people who have full-time jobs.	1	2	3	4
7. I know of at least one person in my neighbourhood or area of town who appears to be doing "just fine" as a result of his/her employment.	1	2	3	4
8. In my neighbourhood or area of town, there are people who have jobs and are liked and respected by others in the neighbourhood.	1	2	3	4
9. In my neighbourhood or area of town, there are people who have jobs and they are disliked and not respected by others in the neighbourhood.	1	2	3	4

Job Involvement

Instructions: Please answer the following questions, thinking about your job right now. If you are not working right now, think back to your last job and answer these questions in relation to that job.

Please indicate whether the next 10 questions refer to:

_____ **Your job now**
 _____ **Your last job**
 _____ **Never employed**

Note: If never employed, then do not complete the scale on this page and move to the scale on the next page.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	1	2	3	4	5
1. The most important things that happen to me involve my present job.	1	2	3	4	5
2. To me, my job is only a small part of who I am.	1	2	3	4	5
3. I am very much involved personally in my job.	1	2	3	4	5
4. I live, eat and breathe my job.	1	2	3	4	5
5. Most of my interests are centred around my job.	1	2	3	4	5
6. I have very strong ties with my present job which would be very difficult to break.	1	2	3	4	5
7. Usually I feel detached from my job.	1	2	3	4	5
8. Most of my personal life goals are job-oriented.	1	2	3	4	5
9. I consider my job to be very central to my existence.	1	2	3	4	5
10. I like to be absorbed in my job most of the time.	1	2	3	4	5

Work Involvement

Instructions: These next questions ask about work in general. Please indicate how much you agree or disagree with these questions, using the scale below.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

11. The most important things that happen in life involve work.	1	2	3	4	5
12. Work is something people should get involved in most of the time.	1	2	3	4	5
13. Work should be only a small part of one's life.	1	2	3	4	5
14. Work should be considered central to life.	1	2	3	4	5
15. In my view, an individual's personal life goals should be work-oriented.	1	2	3	4	5
16. Life is worth living only when people get absorbed in work.	1	2	3	4	5

Value of Employment

Instructions: Please indicate how much you agree or disagree with these statements, using the following scale.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
1. If a person doesn't want to work, it is his/her own business.	1	2	3	4	5
2. Work is a good character builder.	1	2	3	4	5
3. Work is a way of being of service to God.	1	2	3	4	5
4. Work helps you forget about your personal problems.	1	2	3	4	5
5. To work is to be worthwhile to society.	1	2	3	4	5
6. A person can only earn the respect of family and friends if he/she is working.	1	2	3	4	5
7. For most people, work is being told what to do and making a profit for someone else.	1	2	3	4	5
8. I work only because I am compelled to.	1	2	3	4	5
9. An employable person who is not working is not a good citizen.	1	2	3	4	5
10. I see no value in work except the pay cheque.	1	2	3	4	5
11. Lack of work is the source of all evil.	1	2	3	4	5
12. Work is a good learning experience.	1	2	3	4	5
13. A person is foolish to keep working if s/he doesn't have to.	1	2	3	4	5
14. I believe a person needs to work in order to feel that s/he has a real place in the world.	1	2	3	4	5
15. A regular job is good for one.	1	2	3	4	5
16. The happiest persons are those who work only when they need money.	1	2	3	4	5
17. Every person should have a job that gives him/her a steady income.	1	2	3	4	5
18. Work can be a tremendous source of satisfaction.	1	2	3	4	5

Occupational Self Efficacy

Instructions: For the following items, indicate how you would compare yourself to the average worker your own age, using the rating scale provided. If you are not working right now, imagine how you think you would compare to other workers.

Worse than most workers		Same as most workers		Better than most workers			
1	2	3	4	5			
1.	Dependability		1	2	3	4	5
2.	Pride in a job well done		1	2	3	4	5
3.	Contribution to the company		1	2	3	4	5
4.	Efforts to continually learn more about my job		1	2	3	4	5
5.	Interest in further career growth		1	2	3	4	5
6.	Judgment		1	2	3	4	5
7.	Ability to deal with people		1	2	3	4	5
8.	Co-workers can trust me		1	2	3	4	5
9.	Ability to help co-workers with job-related problems		1	2	3	4	5
10.	Energy level (endurance)		1	2	3	4	5
11.	Perseverance on difficult jobs		1	2	3	4	5
12.	Ability to remember job details		1	2	3	4	5
13.	Ability to be retrained for new jobs		1	2	3	4	5
14.	Ability to handle complex jobs		1	2	3	4	5
15.	Ability to adapt to changes in work group		1	2	3	4	5
16.	Ability to communicate clearly on the job		1	2	3	4	5
17.	Ability to support co-workers with personal problems		1	2	3	4	5

Worse than most workers		Same as most workers		Better than most workers			
1	2	3	4	5			
18.	Ability to get along with “difficult” co-workers		1	2	3	4	5
19.	Relevant experience		1	2	3	4	5
20.	Ability to control quality of my work		1	2	3	4	5
21.	Job safety habits/record		1	2	3	4	5
22.	Ability to meet my work goals		1	2	3	4	5
23.	Current skills		1	2	3	4	5
24.	Ability to plan effectively		1	2	3	4	5
25.	Knowledge of the latest technologies		1	2	3	4	5
26.	Ability to learn from experienced workers		1	2	3	4	5
27.	Ability to teach/manage others		1	2	3	4	5
28.	Knowing where to go in company for most kinds of help		1	2	3	4	5
29.	Knowing how to get cooperation from other departments, co-workers		1	2	3	4	5

Intrinsic Job Motivation

Instructions: Please answer the following questions, thinking about your job right now. If you are not working right now, think back to your last job and answer these questions in relation to that job.

Please indicate whether the next 10 questions refer to:

☐ *Your job now*
☐ *Your last job*
☐ *Never employed*

Note: If never employed, then do not complete the scale on this page and move to the scale on the following page.

Disagree Strongly 1	Disagree 2	Disagree slightly 3	Neutral 4	Agree Slightly 5	Agree 6	Agree strongly 7
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1.	I feel a sense of personal satisfaction when I do this job well.	1	2	3	4	5	6	7
2.	My opinion of myself goes down when I do this job badly.	1	2	3	4	5	6	7
3.	I take pride in doing my job as well as I can.	1	2	3	4	5	6	7
4.	I feel unhappy when my work is not up to my usual standard.	1	2	3	4	5	6	7
5.	I like to look back on the day's work with a sense of a job well done.	1	2	3	4	5	6	7
6.	I try to think of ways of doing my job effectively.	1	2	3	4	5	6	7

Social Support for Crime

Instructions: Please circle the number that best describes your situation since release.

None 1	Few 2	Several 3	Most 4
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1. Think of your best friends: that is, those close friends who you have seen most frequently since release:

a. Are any of them involved in activities such as stealing (cars, money, property) or fraud?	1	2	3	4
--	---	---	---	---

b. Are any of them the type of person who enjoys fighting and/or destroying things and/or gets into fights whether they enjoy it or not?	1	2	3	4
--	---	---	---	---

2. Think of the people you know and have been associating with since release.

a. Are any of them involved in activities such as stealing (cars, money, property) or fraud?	1	2	3	4
--	---	---	---	---

b. Are any of them the type of person who enjoys fighting and/or destroying things and/or gets into fights whether they enjoy it or not?	1	2	3	4
--	---	---	---	---

	No 1	Not Sure 2	Yes 3	Definitely Yes 4
3. If I want to purchase some stolen goods at a reduced price, I'd know where to go or who to see.	1	2	3	4
4. If I want to get some money for some stolen goods, I'd know where to go, or who to see.	1	2	3	4
5. If I was planning to commit a crime, I know some people who could and would help me plan it.	1	2	3	4
6. While I might not call them friends and I might not see them very often, I know some people who are involved in criminal activity.	1	2	3	4
7. I know of at least one person in my neighbourhood or area of town who appears to be doing "just fine" as a result of his/her criminal activity.	1	2	3	4
8. In my neighbourhood or area of town, there are people who are involved in criminal activity and are liked and respected by others in the neighbourhood.	1	2	3	4
9. In my neighbourhood or area of town, there are people who are involved in criminal activity and they are disliked and not respected by others in the neighbourhood.	1	2	3	4

Mechanisms of Moral Disengagement

Instructions: Please indicate how much you agree or disagree with the following items.

	Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
1. It is okay to fight if you are protecting your friends.	1	2	3	4
2. Slapping and shoving someone is just a way of joking.	1	2	3	4
3. Damaging property is no big deal when you consider that others are beating people up.	1	2	3	4
4. One person in a group should not be blamed for any trouble that the group causes.	1	2	3	4
5. If a person is living under bad conditions, he/she should not be blamed for being aggressive.	1	2	3	4
6. It is okay to tell small lies because they are not harmful.	1	2	3	4
7. Some people deserve to be treated like animals.	1	2	3	4
8. When people get in trouble, it is usually someone else's fault.	1	2	3	4
9. It is okay to beat someone up who bad mouths your family.	1	2	3	4
10. It is okay to hit someone who bothers you because it is just teaching them 'a lesson'.	1	2	3	4
11. Stealing a little money is not too serious compared to those who steal a lot of money.	1	2	3	4
12. A person who only suggests doing something illegal should not be blamed if others go ahead and do it.	1	2	3	4
13. People should not be blamed for causing trouble if they have not been raised properly.	1	2	3	4
14. People do not mind being teased because it gives them attention.	1	2	3	4
15. It is okay to mistreat someone who behaves like 'a jerk'.	1	2	3	4

Strongly Disagree		Disagree	Agree	Strongly Agree	
1		2	3	4	
16.	If people are careless where they leave their things, it is their own fault if their things get stolen.	1	2	3	4
17.	It is okay to fight when your friend's honour is threatened.	1	2	3	4
18.	Taking someone's car without their permission is just 'borrowing it'.	1	2	3	4
19.	It is okay to insult someone because beating him/her is worse.	1	2	3	4
20.	If a whole group decides to do something illegal, it is unfair to blame any one person in the group for it.	1	2	3	4
21.	A person should not be blamed for having a foul mouth if all their friends do too.	1	2	3	4
22.	Teasing someone does not really harm them.	1	2	3	4
23.	Someone who is really annoying does not deserve to be treated like a human being.	1	2	3	4
24.	People who get mistreated usually deserve it.	1	2	3	4
25.	It is okay to lie to keep your friends out of trouble.	1	2	3	4
26.	It is not a bad thing to 'get high' once in a while.	1	2	3	4
27.	Taking some things from a store is not very serious when compared to some of the illegal things other people do.	1	2	3	4
28.	It is unfair to blame a person who only had a small part in the harm caused by a group.	1	2	3	4
29.	People should not be blamed for misbehaving if their friends pressured them.	1	2	3	4
30.	Insults do not really hurt anyone.	1	2	3	4
31.	Some people have to be treated roughly because they do not have feelings that can be hurt.	1	2	3	4
32.	People should not be blamed for misbehaving if their parents were hard on them.	1	2	3	4

Tolerance for Law Violations and Identification with Criminal Others

Instructions: Following are some statements with which you may agree or disagree. Circle the answer that best fits the way you feel about the statement.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
1. Sometimes a person like me has to break the law in order to get ahead.	1	2	3	4	5
2. Most successful people used illegal means to become successful.	1	2	3	4	5
3. People who have been in trouble with the law have the same sort of ideas about life as I have.	1	2	3	4	5
4. People should always obey the law no matter how much it interferes with their personal ambition.	1	2	3	4	5
5. I would rather associate with people who obey the law than those who don't.	1	2	3	4	5
6. It's all right for a person to break the law if s/he doesn't get caught.	1	2	3	4	5
7. I'm more like the people who can make a living outside the law than I am like those who only break the law occasionally.	1	2	3	4	5
8. Most people would commit crimes if they know they wouldn't get caught.	1	2	3	4	5
9. People who have been in trouble with the law are more like me than people who don't have trouble with the law.	1	2	3	4	5
10. There is never good cause for breaking the law.	1	2	3	4	5
11. I don't have much in common with people who never break the law.	1	2	3	4	5
12. A hungry person has the right to steal.	1	2	3	4	5
13. It's all right to evade the law if you don't actually violate it.	1	2	3	4	5
14. No person can violate the law and be my friend.	1	2	3	4	5
15. A person should obey only those laws which seem reasonable.	1	2	3	4	5
16. A person is a fool to work for a living if s/he can get by some easier way; even if it means violating the law.	1	2	3	4	5

Balanced Inventory of Desirable Responding

Instructions: Using the scale below as a guide, circle the number beside each statement to indicate how true it is.

	Not true 1		2		3		Somewhat true 4		5		6		Very true 7
1.	My first impressions of people usually turn out to be right.											1 2 3 4 5 6 7	
2.	It would be hard for me to break any of my bad habits.											1 2 3 4 5 6 7	
3.	I don't care to know what other people really think of me.											1 2 3 4 5 6 7	
4.	I have not always been honest with myself.											1 2 3 4 5 6 7	
5.	I always like to know why I like things.											1 2 3 4 5 6 7	
6.	When my emotions are aroused, it biases my thinking.											1 2 3 4 5 6 7	
7.	Once I've made up my mind, other people can seldom change my opinion.											1 2 3 4 5 6 7	
8.	I am not a safe driver when I exceed the speed limit.											1 2 3 4 5 6 7	
9.	I am fully in control of my own fate.											1 2 3 4 5 6 7	
10.	It's hard for me to shut off a disturbing thought.											1 2 3 4 5 6 7	
11.	I never regret my decisions.											1 2 3 4 5 6 7	
12.	I sometimes lose out on things because I can't make up my mind soon enough.											1 2 3 4 5 6 7	
13.	The reason I vote is because my vote can make a difference.											1 2 3 4 5 6 7	
14.	My parents were not always fair when they punished me.											1 2 3 4 5 6 7	
15.	I am a completely rational person.											1 2 3 4 5 6 7	
16.	I rarely appreciate criticism.											1 2 3 4 5 6 7	
17.	I am very confident of my judgments.											1 2 3 4 5 6 7	
18.	It's all right with me if some people happen to dislike me.											1 2 3 4 5 6 7	
19.	I don't always know the reasons why I do the things I do.											1 2 3 4 5 6 7	

	Not true 1	2	3	Somewhat true 4	5	6	Very true 7
20. I sometimes tell lies if I have to.						1 2 3 4 5 6 7	
21. I never cover up my mistakes.						1 2 3 4 5 6 7	
22. There have been occasions when I have taken advantage of someone.						1 2 3 4 5 6 7	
23. I never swear.						1 2 3 4 5 6 7	
24. I sometimes try to get even rather than forgive and forget.						1 2 3 4 5 6 7	
25. I always obey laws, even if I'm unlikely to get caught.						1 2 3 4 5 6 7	
26. I have said something bad about a friend behind his/her back.						1 2 3 4 5 6 7	
27. When I hear people talking privately, I avoid listening.						1 2 3 4 5 6 7	
28. I have received too much change from a salesperson without telling him or her.						1 2 3 4 5 6 7	
29. I always declare everything at customs.						1 2 3 4 5 6 7	
30. When I was young I sometimes stole things.						1 2 3 4 5 6 7	
31. I have never dropped litter on the street.						1 2 3 4 5 6 7	
32. I sometimes drive faster than the speed limit.						1 2 3 4 5 6 7	
33. I have done things that I don't tell other people about.						1 2 3 4 5 6 7	
34. I never take things that don't belong to me.						1 2 3 4 5 6 7	
35. I have taken sick leave from work or school even though I wasn't really sick.						1 2 3 4 5 6 7	
36. I have never damaged a library book or store merchandise without reporting it.						1 2 3 4 5 6 7	
37. I have some pretty awful habits.						1 2 3 4 5 6 7	
38. I don't gossip about other people's business.						1 2 3 4 5 6 7	

Advantages of Employment

Instructions: Now I'd like you to imagine having a steady job (if you don't already have one). People say that certain good things can go along with this. Like a nice house, a good car, and good money.

What are some good things you associate with having a steady job? List as many as you can think of:

What do you think the *chances* would be of getting things like these if you had a steady job?

No Chance		Low Chance		Some Chance		Good Chance		High Chance		Completely Certain
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

How *happy* do you think you would be if you got things like these?

Not Happy At All	A Little Happy		Somewhat Happy		Pretty Happy		Very Happy		Completely Happy	
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

Disadvantages of Employment

Instructions: Again, imagine having a steady job (if you don't already have one). People say that some bad things can go along with having a steady job. Like no free time, working for someone else, etc.

What are some bad things you associate with having a steady job? List as many as you can think of:

What do you think the *chances* would be of having things like this happen if you had a steady job?

No Chance		Low Chance		Some Chance		Good Chance		High Chance		Completely Certain
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

How *unhappy* do you think you would be if you got things like these?

Not Unhappy At All	A Little Unhappy		Somewhat Unhappy		Pretty Unhappy		Very Unhappy		Completely Unhappy	
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

Advantages of Crime

Instructions: Again, this part refers to your committing crime. People say that certain good things can go along with this. Like lots of money, respect, etc.

What are some good things you associate with committing crime? List as many as you can think of:

What do you think the *chances* are of getting things like these by committing crime?

No Chance		Low Chance		Some Chance		Good Chance		High Chance		Completely Certain
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

How *happy* do you think you would be if you got things like these?

Not Happy At All	A Little Happy		Somewhat Happy		Pretty Happy		Very Happy		Completely Happy	
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

Disadvantages of Crime

Instructions: Now we're going to do the same thing, but this time think about your committing crime. People say that certain bad things can go along with this. Like being in jail, bad nerves, shame and a record.

What are some bad things you associate with committing crime? List as many as you can think of:

What do you think the *chances* are of things like these happening to you when you commit crime?

No Chance		Low Chance		Some Chance		Good Chance		High Chance		Completely Certain
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

How *unhappy* do you think you would be if things like these happened to you?

Not Unhappy At All	A Little Unhappy		Somewhat Unhappy		Pretty Unhappy		Very Unhappy		Completely Unhappy	
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

Criminal Self Efficacy

Instructions: The following questions refer to your life on the outside. Circle F (for false) if it is not correct for you when you are living on the outside; circle T (for true) if it is correct for you when you are living on the outside.

1.	If someone I knew wanted a score done, they would probably ask for my help.	False	True
2.	I do not have much experience breaking into cars.	False	True
3.	I would probably get caught if I tried to shoplift.	False	True
4.	I could get just about anything I would want on the street.	False	True
5.	I am not sure I could break into a store without setting off the alarm.	False	True
6.	I know where to find guns that can not be traced.	False	True
7.	If I was on the run, the police would find me in no time.	False	True
8.	I am not a very good street fighter.	False	True
9.	If I stole a car, I would know where to find the nearest 'chop shop'.	False	True
10.	If someone gave me a stolen check I would have no trouble faking the signature.	False	True
11.	I do not see myself as a professional criminal.	False	True
12.	If I wanted to sell some stolen goods, it would take a while to make the right connections.	False	True
13.	If I was ever shot or stabbed I would know where to get help without going to the hospital.	False	True
14.	I could fast talk just about anyone out of a few bucks.	False	True
15.	I do not think I am physically capable of killing a man with my bare hands.	False	True
16.	Guys on the street know not to mess with me.	False	True
17.	Certain drugs would be hard for me to find on the street.	False	True
18.	I could not support myself by crime alone.	False	True

Appendix C

Stable employment composite measure

1. Lacks a skill area/trade/profession
2. Dissatisfied with skill area/trade/profession
3. Has physical problems that interfere with work
4. Unemployed at the time of arrest
5. Unemployed 90% or more
6. Unemployed 50% or more
7. Has an unstable job history
8. Often show up late for work
9. Has poor attendance record
10. Has no employment history
11. Has difficulty meeting workload requirements
12. Lacks initiative
13. Has quit a job without another
14. Has been laid off from work
15. Has been fired from a job
16. Salary has been insufficient
17. Lacks employment benefits
18. Job lacks security
19. Has difficulty with co-workers
20. Has difficulty with superiors
21. Prior vocational assessment(s)
22. Has participated in employment programs
23. Has completed an occupational development program

Appendix D

Stable education composite measure

1. Has less than grade 8
2. Has less than grade 10
3. Has no high school diploma
4. Finds learning difficult
5. Has learning disabilities
6. Has physical problems which interfere with learning
7. Has memory problems
8. Has concentration problems
9. Has problems with reading
10. Has problems with writing
11. Has problems with numeracy
12. Has difficulty comprehending instructions

Appendix E

Domains and Indicators

Employment Domain

1. Has less than grade 8
2. Has less than grade 10
3. Has no high school diploma
4. Finds learning difficult
5. Has learning disabilities
6. Has physical problems which interfere with learning
7. Has memory problems
8. Has concentration problems
9. Has problems with reading
10. Has problems with writing
11. Has problems with numeracy
12. Has difficulty comprehending instructions
13. Lacks a skill area/trade/profession
14. Dissatisfied with skill area/trade/profession
15. Has physical problems that interfere with work
16. Unemployed at the time of arrest
17. Unemployed 90% or more
18. Unemployed 50% or more
19. Has an unstable job history
20. Often shows up late for work
21. Has poor attendance record
22. Has no employment history
23. Has difficulty meeting workload requirements
24. Lacks initiative
25. Has quit a job without another
26. Has been laid off from work
27. Has been fired from a job
28. Salary has been insufficient
29. Lacks employment benefits
30. Job lacks security
31. Has difficulty with co-workers
32. Has difficulty with superiors
33. Prior vocational assessment(s)
34. Has participated in employment programs
35. Has completed an occupational development program

Appendix F

INFORMED CONSENT FORM

The purpose of an informed consent is to make sure that you understand the purpose of the study and how you will be involved in the project. The informed consent provides enough information so you have the chance to decide if you want to participate in the study.

Research title:

Predicting employment status in a sample of federal offenders on conditional release.

Research personnel:

The following people are involved in this study and may be contacted at any time: Christa Gillis (Main Researcher, 613 995-3340), Dr. D. Andrews (Faculty Sponsor, 613 520-2600, ext. 2662), or Dr. Brian Grant (Research Branch, CSC, 613 943-8871). If you have any ethical concerns about this study then please contact Dr. M. Gick (Chair, Dept. of Psychology Ethics Committee, 520-2600, ext. 2664) or Dr. K. Matheson (Chair, Dept. of Psychology, 520-2600, ext. 2648).

Purpose and requirements:

The purpose of the study is to examine different factors that may help offenders on conditional release find employment. If you participate, you will complete two sets of questionnaires. First, it will take about 20 minutes to answer employment questions asked by the research assistant. Also, it will take about one hour to complete the second questionnaire, which asks your opinions about work and crime. The questionnaires will be completed at the parole office. Another part of the study involves looking at your intake (e.g., identified need areas) and community files. Also, your performance on release will be followed, to examine how employment relates to success on release.

Right to withdraw:

There is no reward for participating, and no penalty for not participating in the study. You may withdraw at any time from the study. This means you may refuse to participate or answer any of the questions.

Anonymity/Confidentiality:

Your participation is completely voluntary and information gathered in the study will be kept confidential. All information will be coded so that your name is not associated with the data. In addition, the coded data will be made available only to the researchers involved in this project. Individual offenders will not be identified in any reports on this study.

Signatures:

I have read the above description of research on employment status for offenders on conditional release. I give my permission to the researcher to make use of the information gathered in the study. I also give permission to do a file review and to obtain follow-up information about my performance on release for research purposes only.

Full Name (Print):

Participant Signature:

Date:

Researcher Name:

Researcher Signature:

Appendix G

DEBRIEFING

Thank you for your participation in this study. The purpose of the study was to gain an understanding of what factors help offenders find and keep jobs in the community. The checklist administered by the researcher examined different behaviours related to finding a job upon release to the community. The questionnaire you completed examined different attitudes about working and attitudes about crime. The purpose of completing the questionnaire and job checklist was to gain a better understanding of the factors that may help you in finding work in the community. Also, you were asked to complete the checklist and questionnaire twice, so we can examine if there were any changes in your employment situation, and also if any of your attitudes about crime and employment changed during the first 6 months of your release. Your answers will be examined to determine if any change in these factors influenced your ability to find work in the community.

This study was carried out by Christa Gillis, through the Research Branch of the Correctional Service of Canada, as part of a requirement for her Doctoral thesis at Carleton University.

If you have any questions or comments about this study, you can contact Christa Gillis, Research Officer, at (613) 995-3340, Dr. Brian Grant, Director of Operations, at (613) 943-8871 or Dr. Don Andrews, Professor, Carleton University, at (613) 520-2600 Ext. 2662. If you have any ethical concerns about this research then please contact Dr. M. Gick (Chair, Department of Psychology Ethics Committee, 520-2600, ext. 2664) or Dr. K. Matheson (Chair, Department of Psychology, 520-2600, ext. 2548). Also, if you have any concerns about employment, you can contact your parole officer, or local employment counsellor.

Thank you for the time and effort you took to participate in this research.

Appendix H**Intercorrelation matrix: One-month predictor variables****Table IA*****Intercorrelations Among Predictor Variables at One Month***

Variables	1	2	3	4	5	6	7	8	9
1. Unemployment rate	--	-.08	-.16**	-.08	-.05	-.05	-.07	-.04	-.01
2. Age		--	.06	.08	.06	-.03	.02	-.01	.07
3. Race			--	.07	-.02	.05	-.06	.03	-.03
4. Marital status				--	.04	.08	.10	.08	-.06
5. Bad crime: Chance					--	.45****	.26****	.10	.08
6. Bad crime: Unhappy						--	.26****	.06	.02
7. Good job: Chance							--	.20***	.12*
8. Good job: Happy								--	.06
9. Work involvement									--
10. Work ethic									
11. Value of employment									
12. Risk									
13. Sirscore									
14. No. previous offenses									
15. No. current offenses									
16. Need									
17. Stable employment									
18. Education									
19. Skilled									
20. Training									
21. Employment need									
22. Tolerance law viol.									
23. Ident. criminal others									
24. Moral disengagement									
25. Job involvement									
26. Intrinsic job motivation									
27. Social support crime									
28. Social support employ.									
29. Criminal self efficacy									
30. Occupat. self efficacy									
31. Chance finding work									
32. Intention									

Table continued

Variables	10	11	12	13	14	15	16	17	18
1. Unemployment rate	-.01	-.08	-.07	-.00	.06	-.03	-.06	-.06	-.10
2. Age	.00	.28***	-.01	.34***	.07	-.13*	-.10	.33***	.01
3. Race	.01	.00	-.11*	-.00	.02	.07	-.09	.08	.01
4. Marital status	-.07	.01	-.12*	.00	.19***	.10	-.15*	.13*	.02
5. Bad crime: Chance	.06	.13*	.00	.02	.11*	-.10	.06	.12*	.10
6. Bad crime: Unhappy	-.08	.07	.04	-.07	.02	-.02	.02	.05	.03
7. Good job: Chance	.23***	.23***	.01	-.01	.03	-.01	-.04	.05	.03
8. Good job: Happy	.07	.06	-.04	-.02	-.03	-.05	.04	.04	.05
9. Work involvement	.19**	.39***	-.02	.17**	-.04	-.07	-.13*	.00	-.05
10. Work ethic	--	.33***	-.00	.03	.01	-.05	.03	.05	-.02
11. Value of employment		--	.04	.15*	.03	.01	-.04	.15**	.01
12. Risk			--	-.29***	.17**	.10	.58***	-.26***	-.08
13. Sirscore				--	-.35***	-.36***	-.40***	.44***	.12*
14. No. previous offenses					--	.13*	.19***	-.11	-.08
15. No. current offenses						--	.16**	-.04	.01
16. Need							--	-.33***	-.18**
17. Stable employment								--	.33***
18. Education									--
19. Skilled									
20. Training									
21. Employment need									
22. Tolerance law viol.									
23. Ident. criminal others									
24. Moral disengagement									
25. Job involvement									
26. Intrinsic job motivation									
27. Social support crime									
28. Social support employ.									
29. Criminal self efficacy									
30. Occupat. self efficacy									
31. Chance finding work									
32. Intention									

Table continued

Variables	19	20	21	22	23	24	25	26	27
1. Unemployment rate	-.12	.04	.02	.04	.04	.01	.01	-.03	.09
2. Age	.32****	-.01	-.26****	-.23****	-.16**	-.13*	.13*	.22****	-.27****
3. Race	.14*	-.07	-.02	-.03	-.03	-.01	-.01	.03	-.10
4. Marital status	.07	-.09	-.01	-.12*	-.07	-.03	-.01	.01	-.05
5. Bad crime: Chance	-.07	.09	-.08	-.22****	-.24****	-.14*	.09	.05	.00
6. Bad crime: Unhappy	-.07	-.03	-.00	-.04	-.15**	-.06	-.04	-.02	-.06
7. Good job: Chance	.05	.02	-.11*	-.17**	-.21***	-.17**	.05	.09	-.10
8. Good job: Happy	.07	.03	-.05	-.05	-.10	.01	.09	.08	.10
9. Work involvement	.01	-.04	-.01	-.17**	-.12*	-.09	.58****	.26****	-.25****
10. Work ethic	.07	-.00	-.06	-.24****	-.17**	-.30****	.29****	.26****	-.11*
11. Value of employment	.20***	.03	-.14*	-.36****	-.31****	-.33****	.33****	.36****	-.26****
12. Risk	-.10	.27****	.21***	.01	.04	-.06	.02	.01	-.02
13. Sirscore	.27****	-.08	-.39****	-.18**	-.24****	-.08	.18**	.12*	-.26****
14. No. previous offenses	-.09	.13*	.15**	.02	.10	-.01	-.05	.07	.07
15. No. current offenses	.02	-.00	.04	.03	.04	.00	-.11	-.04	.16**
16. Need	-.19***	.23****	.37****	.05	.12*	-.00	-.08	-.10	.16**
17. Stable employment	.33****	-.11*	-.50****	-.20***	-.21***	-.12*	.11	.12*	-.11
18. Education	.16**	.08	-.29****	-.11	-.14*	-.05	-.13*	.00	.04
19. Skilled	--	-.04	-.31****	-.18**	-.13*	-.07	.17**	.11	-.22****
20. Training		--	.13*	-.03	.04	-.08	-.04	-.04	.05
21. Employment need			--	.26****	.29****	.17**	-.05	-.11	.15*
22. Tolerance law viol.				--	.65****	.67****	-.17**	-.26****	.37****
23. Ident. criminal others					--	.50****	-.09	-.21***	.25****
24. Moral disengagement						--	.09	-.21***	.25****
25. Job involvement							--	.32****	-.20***
26. Intrinsic job motivation								--	-.11*
27. Social support crime									--
28. Social support employ.									
29. Criminal self efficacy									
30. Occupat. self efficacy									
31. Chance finding work									
32. Intention									

Table continued

Variables	28	29	30	31	32
1. Unemployment rate	-.19**	-.07	-.17**	-.20***	-.06
2. Age	.11*	-.28***	.22***	-.05	-.14*
3. Race	.15**	-.02	.04	.06	-.02
4. Marital status	.03	-.10	.06	.07	.10
5. Bad crime: Chance	.08	-.04	.09	.04	-.02
6. Bad crime: Unhappy	.13*	.00	.04	-.01	-.01
7. Good job: Chance	.25***	-.05	.25***	.12*	.01
8. Good job: Happy	.12*	.03	.04	.07	.04
9. Work involvement	.02	-.21***	.14*	.04	.01
10. Work ethic	.21***	-.06	.23***	.05	-.00
11. Value of employment	.21***	-.20***	.38***	.16**	.10
12. Risk	-.07	.04	.02	.02	.02
13. Sit score	.16**	-.34***	.20***	.03	-.03
14. No. previous offenses	-.06	.10	-.07	.06	.02
15. No. current offenses	-.11*	.19***	-.11	.04	.09
16. Need	-.11	.17**	-.10	-.10	-.01
17. Stable employment	.24***	-.15**	.27***	.07	-.09
18. Education	.20***	.05	.25***	.12*	.09
19. Skilled	.23***	-.23***	.23***	.10	.01
20. Training	-.05	.12	.02	.03	.08
21. Employment need	-.29***	.21***	-.24***	-.11	.06
22. Tolerance law viol.	-.23***	.33***	-.33***	-.11	.05
23. Ident. criminal others	-.29***	.28***	-.29***	-.12*	.04
24. Moral disengagement	-.17**	.19***	-.29***	-.10	.03
25. Job involvement	.04	-.21***	.20***	-.04	-.07
26. Intrinsic job motivation	.20***	-.07	.43***	.04	-.07
27. Social support crime	-.06	.61***	-.15**	-.08	.03
28. Social support employ.	--	-.10	.40***	.22***	.04
29. Criminal self efficacy		--	-.02	.05	.07
30. Occupat. self efficacy			--	.17**	.03
31. Chance finding work				--	.57***
32. Intention					--

Appendix I

Six Months

Descriptive statistics

Frequencies for the various components of the model (with the exception of unemployment rate) for the subsample ($n = 106$) who participated at six months are presented in the following pages for comparison purposes to the entire sample who participated at one month ($n = 302$).

Behavioural beliefs. The mean scores on the behavioural beliefs measures are very similar to those obtained for the full sample at one month.

Table I1

Means and Alphas for the Behavioural Beliefs Measures: Six Months

Measure	<i>n</i>	<i>M</i>	<i>SD</i>	α
Crime measures				
Bad crime: Chance	84	87.7	21.1	
Bad crime: Unhappy	84	89.2	20.9	
Employment measures				
Good job: Chance	95	85.6	16.3	
Good job: Happy	95	84.3	15.8	
Australian Work Ethic	101	23.0	3.5	.85
Value of Employment	100	60.7	6.8	.73
Work Involvement	101	18.1	3.5	.71

History. The percentage of offenders rated as medium to high risk was somewhat lower (77.9%) than the ratings obtained for the full sample (83.0%).

Table I2

Risk Levels at Intake

Risk level	Frequency	Percentage
Low	23	22.1
Medium	37	35.6
High	44	42.3
Total	104	100.0

Note. Risk ratings were not available for 2 offenders.

SIR score was available for 101 participants. Scores ranged from -17 to 23, with a mean score of 4.7 ($SD = 10.1$, median score = 3). Mean SIR score for the full sample was 1.4 ($SD = 9.8$), which shows that offenders who completed the second assessment were slightly lower risk. These results are consistent with the findings depicted for risk in Table I2.

The total number of previous federal offenses ranged from 0 to 17, with a mean of 0.8 ($SD = 2.5$) and median of 0. The vast majority (85.9%) of offenders who participated in the research at six months did not have any federal offenses prior to their current sentence (see Table I3). This percentage is considerably higher than that obtained for the entire sample, as 75% did not have previous involvement with the federal correctional system. Previous federal offense categories show that the majority of offenders were previously convicted of violence against a person. However, the numbers in each category are so small that it is not possible to interpret the percentages in any meaningful way.

Table I3
Previous Federal Offense Categories

Offense category	Frequency	Percentage
Violence against person	5	33.3
Sex	2	13.3
Robbery	0	0.0
Drug	3	20.0
Theft/fraud	4	26.7
Other	1	6.7
Total	15	100.0

The total number of current offenses ranged from 1 to 20, with a mean of 3.4 ($SD = 2.8$), which is almost identical to the mean for the entire sample (3.9). The distribution

of current offenses, presented in Table I4, differs somewhat from that obtained for the entire sample. Although the highest percentage of offenders were concentrated in the violence against a person category for both the full sample (34.2%) and subsample (23.6%), the remaining categories for the subsample were fairly evenly distributed. Almost 30% of the full sample had been incarcerated for commission of a theft / fraud offense.

Table I4
Current Federal Offense Categories

Offense category	Frequency	Percentage
Violence against person	25	23.6
Sex	16	15.1
Robbery	19	17.9
Drug	18	17.0
Theft/fraud	11	10.4
Other	17	16.0
Total	106	100.0

The average number of items endorsed on the employment stability variable was 13.7 ($SD = 4.4$, range 3 to 20) and on the education stability variable, 8.7 ($SD = 3.0$, range 1 to 12) items. These means are comparable to those obtained for the full sample.

Table I5 shows the type of work experience reported by offenders in the year prior to incarceration; slightly less than two-thirds were employed in unskilled positions, which was comparable to the 70.2% reported by the full sample.

Table I5
Type of Work Experience Before Incarceration

Type of work	Frequency	Percentage
Unskilled	69	65.1
Skilled	37	34.9
Total	106	100.0

Note. 31 offenders who did not work in the year prior to incarceration were included in the unskilled category.

Table I6 presents information on the percentages of the sample of offenders who participated in CORCAN, vocational training, skills for employment program or work release during their most recent period of incarceration. This distribution is very similar to that obtained for the full sample.

Table I6
Type of Work Experience/Training During Incarceration

Work experience/training	Frequency	Percentage
CORCAN	33	31.1
Vocational training	40	37.7
Skills for employment	6	5.8
Work release	13	12.3

Note. The Skills for Employment program is only currently offered to offenders in the Prairie region.

The employment training composite variable, shows that more than 50% of offenders reported participating in some type of work experience or vocational training during incarceration (see Table I7).

Table I7
Employment Training During Incarceration

Training	Frequency	Percentage
No	45	42.4
Yes	61	57.6
Total	106	100.0

Offender intake need levels, presented in Table I8, classified 76.8% of the sample with medium to high overall needs. These numbers are consistent with, but somewhat lower than the percentage of the full sample with medium to high needs (83.3%).

Table I8
Need Levels at Intake

Need level	Frequency	Percentage
Low	24	23.1
Medium	47	45.1
High	33	31.7
Total	104	100.0

Note. Need ratings were not available for 2 offenders.

The employment need rating in Table I9 shows that 50% of offenders were identified as having some to considerable employment needs when they entered the institution, which is considerably lower than the 62.2% obtained for the full sample. Notably, almost twice as many offenders in this sample had employment identified as an asset (11.5% versus 7%).

Table I9
Employment Need Levels at Intake

Need level	Frequency	Percentage
Asset	12	11.5
No need	40	38.5
Some need	36	34.6
Considerable need	16	15.4
Total	104	100.0

Note. Employment need ratings were not available for offenders.

Table I10 presents the percentage of offenders identified with medium to high overall needs (57.8%) during the first six months of release. Within the full sample, approximately two-thirds of offenders had medium to high needs.

Table I10
Need Levels During the First Six Months of Release

Need level	Frequency	Percentage
Low	43	42.2
Medium	44	43.1
High	15	14.7
Total	102	100.0

Note. Need ratings were not available for 4 offenders.

Table I11 presents the distribution of specific offender needs. Only 35.7% of offenders had identified employment needs during their first six months of release, which is much lower than the 68.4% obtained for the full sample.

Table I11
Employment Need Levels at Release

Need level	Frequency	Percentage
Asset	11	13.1
No need	43	51.2
Some need	23	27.4
Considerable need	7	8.3
Total	84	100.0

Note. Employment need ratings were not available for 72 offenders.

Personality. Finally, almost half (48.3%) of the sample ($n = 42$) were identified as impulsive at intake, which is similar to the 57.3% obtained for the full sample. This variable was not used in further analyses due to the number of missing responses (i.e., 19).

Attitude. Virtually identical mean scores were obtained on the attitudinal measures for the subsample of offenders who participated in both assessments.

Table I12
Means and Alphas for the Attitude Measures: Six Months

Measure	<i>N</i>	<i>M</i>	<i>SD</i>	α
Tolerance for Law Violations	102	21.3	5.8	.85
Identification with Criminal Others	100	14.6	3.2	.54
Mechanisms of Moral Disengagement	103	57.5	14.0	.96
Job Involvement	97	30.7	6.7	.85
Intrinsic Job Motivation	100	33.7	5.0	.83

Associates. Table I13 shows that mean scores on each of the social support measures were much higher than those obtained for the full sample, as means of only 4.8 and 12.4 were obtained for social support for crime and employment, respectively, at one month.

Table I13

Means and Alphas for the Associates Measures: Six Months

Measure	<i>n</i>	<i>M</i>	<i>SD</i>	α
Social Support for Crime	103	17.1	6.0	.89
Social Support for Employment	103	35.4	5.1	.84

Self efficacy. Identical mean scores were obtained on the self efficacy measures for the full sample and subsample of offenders who participated at six months (see Table I14).

Table I14

Means and Alphas for the Self Efficacy Measures: Six Months

Measure	<i>n</i>	<i>M</i>	<i>SD</i>	α
Criminal Self Efficacy	93	4.2	4.1	.82
Occupational Self Efficacy	101	111.1	18.9	.97

Intention. Information on intention to find/keep work in the following six months is presented in Table I15; 10.4% of the sample indicated that they did not intend to find/keep work, 2.8% said *maybe*, and the majority (86.8%) indicated *yes*, they intended to find / keep a job. Slightly more offenders reported that they did not intend to find a job at six months (10.4% versus 5.7% of the full sample).

Table I15

Distribution of the intention variable

Intention	Frequency	Percent
No	11	10.4
Maybe	3	2.8
Yes	92	86.8
Total	106	100.0

Of the 105 offenders who responded to the question asking them to rate their chance of finding/keeping a job in the next six months, 14.3% said it was *poor*, 14.3% said they had an *OK* chance, and 71.4% indicated that they had a *good* chance. At six

months, slightly more offenders responded that they had a poor chance of finding work (14% compared to 7.1%), which may be a reflection of their employment experience since release (see Table I16).

Table I16

Distribution of the chance of finding/maintaining employment variable

Chance	Frequency	Percent
Poor	15	14.3
OK	15	14.3
Good	75	71.4
Total	105	100.0

Note. Information on chance of finding/maintaining employment variable was missing for 1 offender.

Behaviour. Table 13 shows more than twice as many offenders were employed (69.8%) than unemployed (30.2%), at six months. The percentage of offenders employed was much greater than the 43.7% of the full sample who were employed at one month.

Table I17

Employment Status at One Month

Employment status	Frequency	Percent
Unemployed	32	30.1
Employed	74	69.8
Total	106	100.0

The mean score on quality of employment at six months (1.4, SD = 1.1, range 0 to 3), was higher than that obtained for the full sample at one month (0.8).

Appendix J**Correlation matrix: Six month predictor variables****Table J1*****Intercorrelations Among Predictor Variables at Six Months***

Variables	1	2	3	4	5	6	7	8	9
1. Unemployment rate	--	.01	-.30**	-.18	.08	.15	.03	.14	.07
2. Age		--	.19*	.10	.05	.13	.12	.10	.21*
3. Race			--	.11	.06	.12	-.02	.04	-.25*
4. Marital status				--	.01	.01	.02	.07	.06
5. Bad crime: Chance					--	.25*	.33***	.29**	.02
6. Bad crime: Unhappy						--	.10	.34***	-.03
7. Good job: Chance							--	.51***	.14
8. Good job: Happy								--	.22
9. Work involvement									--
10. Work ethic									
11. Value of employment									
12. Risk									
13. Sirscore									
14. No. previous offenses									
15. No. current offenses									
16. Need									
17. Stable employment									
18. Education									
19. Skilled									
20. Training									
21. Employment need									
22. Tolerance law viol.									
23. Ident. criminal others									
24. Moral disengagement									
25. Job involvement									
26. Intrinsic job motivation									
27. Social support crime									
28. Social support employ.									
29. Criminal self efficacy									
30. Occupat. self efficacy									
31. Chance finding work									
32. Intention									

Table continued

Variables	10	11	12	13	14	15	16	17	18
1. Unemployment rate	.00	.02	.10	-.14	.28**	.04	.12	-.13	-.02
2. Age	.07	.37****	-.06	.31***	-.00	.04	-.19	.24*	-.11
3. Race	-.24*	-.24*	-.04	-.05	.06	-.04	.05	-.02	.03
4. Marital status	.12	.13	-.25**	.17	.11	-.10	-.33***	.24*	.15
5. Bad crime: Chance	.08	.14	.07	-.04	-.02	.01	-.16	.15	.23*
6. Bad crime: Unhappy	.10	.12	-.04	.04	.01	.07	-.11	.14	.02
7. Good job: Chance	.38****	.32***	.05	.14	.00	.06	-.09	.15	.15
8. Good job: Happy	.22*	.21*	-.17	.12	.04	-.03	-.19*	.15	.08
9. Work involvement	.21*	.47****	-.14	.22*	-.08	-.04	-.05	.18	.03
10. Work ethic	--	.39****	-.12	.26**	-.20*	-.16	-.12	.32***	.04
11. Value of employment		--	-.21*	.27**	-.11	-.13	-.14	.34***	.09
12. Risk			--	-.31**	.07	.10	.19*	-.29**	-.08
13. Sirscore				--	-.37****	-.30**	-.29**	.54****	.04
14. No. previous offenses					--	.10	.07	-.33***	-.03
15. No. current offenses						--	.10	-.07	.04
16. Need							--	-.32***	-.33***
17. Stable employment								--	.41****
18. Education									--
19. Skilled									
20. Training									
21. Employment need									
22. Tolerance law viol.									
23. Ident. criminal others									
24. Moral disengagement									
25. Job involvement									
26. Intrinsic job motivation									
27. Social support crime									
28. Social support employ.									
29. Criminal self efficacy									
30. Occupat. self efficacy									
31. Chance finding work									
32. Intention									

Table continued

Variables	19	20	21	22	23	24	25	26	27
1. Unemployment rate	-.13	.18	.12	-.07	-.08	-.13	.06	.03	.12
2. Age	.30**	-.14	-.19*	-.25**	-.22*	-.20*	.22*	.35***	-.36***
3. Race	.08	-.13	-.08	.01	.03	.07	-.22*	-.06	.00
4. Marital status	.09	-.20*	-.18	-.23*	-.20*	-.18	.11	.13	-.12
5. Bad crime: Chance	-.02	-.12	-.05	-.17	-.08	-.07	.19	.14	-.01
6. Bad crime: Unhappy	.14	-.06	-.12	-.25**	-.13	-.09	.06	.13	-.10
7. Good job: Chance	.15	-.13	-.21*	-.29**	-.24*	-.10	.25*	.26**	-.03
8. Good job: Happy	.10	.02	-.02	-.34***	-.15	-.24*	.17	.10	-.12
9. Work involvement	.09	-.17	.02	-.22*	-.31***	-.12	.59***	.22*	-.26**
10. Work ethic	.24*	-.21*	-.17	-.35***	-.26**	-.24*	.43***	.24*	-.23*
11. Value of employment	.27**	-.14	-.25**	-.49***	-.53***	-.35***	.47***	.48***	-.23*
12. Risk	-.23*	.31**	.18	.16	.19	.19	.01	-.10	.10
13. Sircore	.29**	-.19	-.32***	-.23*	-.25*	-.13	.17	.13	-.24*
14. No. previous offenses	-.13	.23*	-.00	.09	.10	.07	-.03	.09	.15
15. No. current offenses	.09	.08	-.03	.10	.09	.11	-.12	-.01	.13
16. Need	-.21*	.11	.30**	.26**	.19	.18	-.08	-.11	.01
17. Stable employment	.38***	-.24*	-.42***	-.34***	-.26**	-.20*	.29**	.24*	-.24*
18. Education	.19	-.11	-.37***	-.11	-.12	-.13	.02	-.09	-.08
19. Skilled	--	-.29**	-.36***	-.20*	-.21*	-.19	.13	.18	-.19*
20. Training		--	.01	.08	.10	.05	-.24*	-.15	.06
21. Employment need			--	.24*	.23*	.11	-.15	-.17	.09
22. Tolerance law viol.				--	.59***	.72***	-.22*	-.30**	.39***
23. Ident. criminal others					--	.51***	-.24*	-.28**	.45***
24. Moral disengagement						--	-.14	-.18	.29**
25. Job involvement							--	.54***	-.15
26. Intrinsic job motivation								--	-.07
27. Social support crime									--
28. Social support employ.									
29. Criminal self efficacy									
30. Occupat. self efficacy									
31. Chance finding work									
32. Intention									

Table continued

Variables	28	29	30	31	32
1. Unemployment rate	-.25**	-.02	-.22*	-.15	-.02
2. Age	.15	-.18	.22*	-.23*	-.27**
3. Race	.11	-.07	.06	-.03	-.12
4. Marital status	.09	.03	.13	.14	.12
5. Bad crime: Chance	.11	-.13	.12	.08	.07
6. Bad crime: Unhappy	.05	-.08	-.02	.02	-.00
7. Good job: Chance	.29**	-.22*	.31**	.02	.02
8. Good job: Happy	.23*	-.20*	.09	.07	.01
9. Work involvement	.10	-.26**	.06	-.06	.05
10. Work ethic	.40****	-.16	.35***	.08	-.03
11. Value of employment	.41****	-.14	.40****	.09	-.02
12. Risk	-.05	.16	-.05	-.04	.09
13. Sirscore	.22*	-.21*	.23*	.09	.11
14. No. previous offenses	-.23*	.12	-.05	-.07	-.02
15. No. current offenses	-.09	-.04	-.11	-.16	-.09
16. Need	-.28**	-.11	-.24*	-.10	-.10
17. Stable employment	.42****	-.25*	.37****	.16	.08
18. Education	.37****	-.03	.28**	.22*	.28**
19. Skilled	.34***	-.15	.29**	-.04	-.14
20. Training	-.11	.11	-.04	.09	.13
21. Employment need	-.35***	.03	-.39****	-.12	-.11
22. Tolerance law viol.	-.41****	.25**	-.34***	-.11	.05
23. Ident. criminal others	-.31**	.29**	-.36***	-.16	-.03
24. Moral disengagement	-.33***	.13	-.32***	-.12	.01
25. Job involvement	.27**	-.11	.30**	.15	.16
26. Intrinsic job motivation	.11	-.04	.50****	-.01	-.11
27. Social support crime	-.22*	.57****	-.12	-.10	-.08
28. Social support employ.	--	-.10	.62****	.21*	-.02
29. Criminal self efficacy		--	.02	.02	-.06
30. Occupat. self efficacy			--	.17	-.08
31. Chance finding work				--	.71****
32. Intention					--