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# FORUM

on Corrections Research

January 2002, Volume 14, Number 1X

## Features issues

### Academic Contributions

Doctoral

Masters

Honours



Correctional Service  
Canada

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FORUM ON CORRECTIONS RESEARCH is published three times a year in both English and French for the staff and management of the Correctional Service of Canada and the international corrections community.

FORUM reviews applied research related to corrections policy, programming and management issues. It also features original articles contributed by staff of the Correctional Service of Canada and other international researchers and practitioners.

FORUM is prepared and published by the Research Branch of the Correctional Service of Canada.

FORUM invites contributions to any section of the magazine from researchers in the field. Please send your contributions to

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Canada Post  
Publication mail agreement no.  
1454455

**Editor:** Larry Motiuk

**Assistant Editor:** Dean Jones

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**Typesetting and Layout:** Acart  
Communications

**Printing:** National Printers

Sections of *FORUM on Corrections Research* without acknowledgement of authorship have been researched and written by the staff of the Research Branch, Correctional Service of Canada.

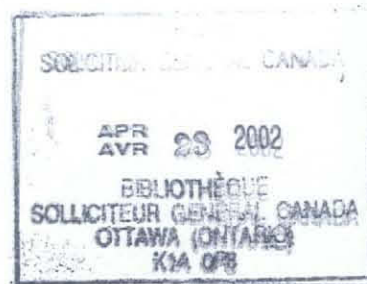
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# FORUM

on Corrections Research



## Doctoral

Understanding employment: A prospective exploration of factors linked to community-based employment among federal offenders Christa A. Gillis.....	3
Phallometric testing with sexual offenders against female victims: Limits to its value Yolanda Fernandez .....	7
Victimization, fear, and coping in prison Donna E. Chubaty .....	13
Consumption of psychoactive substances in Quebec prisons Chantal Plourde.....	16
Antecedents and outcomes of correctional officers attitudes towards federal inmates: An exploration of person-organization fit Michel Larivière.....	19
The dynamic prediction of criminal recidivism: A three-wave prospective study Shelley L. Brown.....	24
The utility of interpersonal circumplex theory in research and treatment of sexual offenders Dana Anderson.....	28
Classifying female offenders for effective intervention: Application of the case-based principles of risk and need Kelley Blanchette .....	31

## Masters

Impact of incarceration on the mothering role Julie J. Fournier .....	36
An examination of release decisions for sexual offenders: Do biases exist? Sara L. Johnson .....	38
The impact of traumatic events and post-traumatic stress disorder among correctional nurses Solange Lavack-Pambrun.....	41
Predictors of work stress among correctional officers William Millson .....	45

## Honours

Evaluation of the Living Without Family Violence program Nicole Allegri .....	48
--	----

## Research in brief

Sexual victimization and sexual delinquency: Vampire or Pinocchio syndrome? Michel St-Yves and Bruno Pellerin.....	51
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# Understanding employment: A prospective exploration of factors linked to community-based employment among federal offenders

Doctoral Dissertation, Carleton University<sup>1</sup>

Christa A. Gillis<sup>2</sup>

Advisor: Don Andrews

Committee Members: Don Andrews, Adelle Forth, Larry Motiuk, Katherine Kelly, Michel Gaulin, and Barbara Armstrong<sup>3</sup>

Offender employment has played a pivotal role in corrections since the introduction of institutions, and has long been a topic of interest within criminological and correctional theory and practice. Employment, as one of the "Big Eight" factors related to recidivism, offers potential for intervention on various levels. Although employment is an important rehabilitative tool, little is known about the factors and processes that contribute to employment stability among offenders, as few systematic empirical studies have been conducted in this area. Furthermore, although recognized as important in contributing to offender reintegration, the employment construct has not been operationalized to adequately reflect its multidimensional nature. This study adopted a multimethod prospective approach to the assessment of factors that contribute to offender employment outcomes in the community. These factors were integrated within Andrews' personal-interpersonal-community-reinforcement perspective (PIC-R) on criminal conduct. Additionally, the PIC-R perspective was operationalized within the current paper according to the framework of the theory of planned behaviour. 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 (for example, work attitudes) that are hypothesized to contribute to an offender's employability. This article presents the model, results exploring employment outcomes for offenders during their first six months of release, and implications for developing and enhancing current employment interventions for offenders.

## Predicting employment using the PIC-R perspective

The PIC-R perspective, formulated to account for factors related to criminal offending,<sup>4</sup> was operationalized by borrowing from Ajzen and Fishbein's theory of reasoned action and Ajzen's theory of planned behaviour. The theory employs a social learning perspective in its specification of the interrelationships between: personally-mediated events, comprised primarily of the individual's

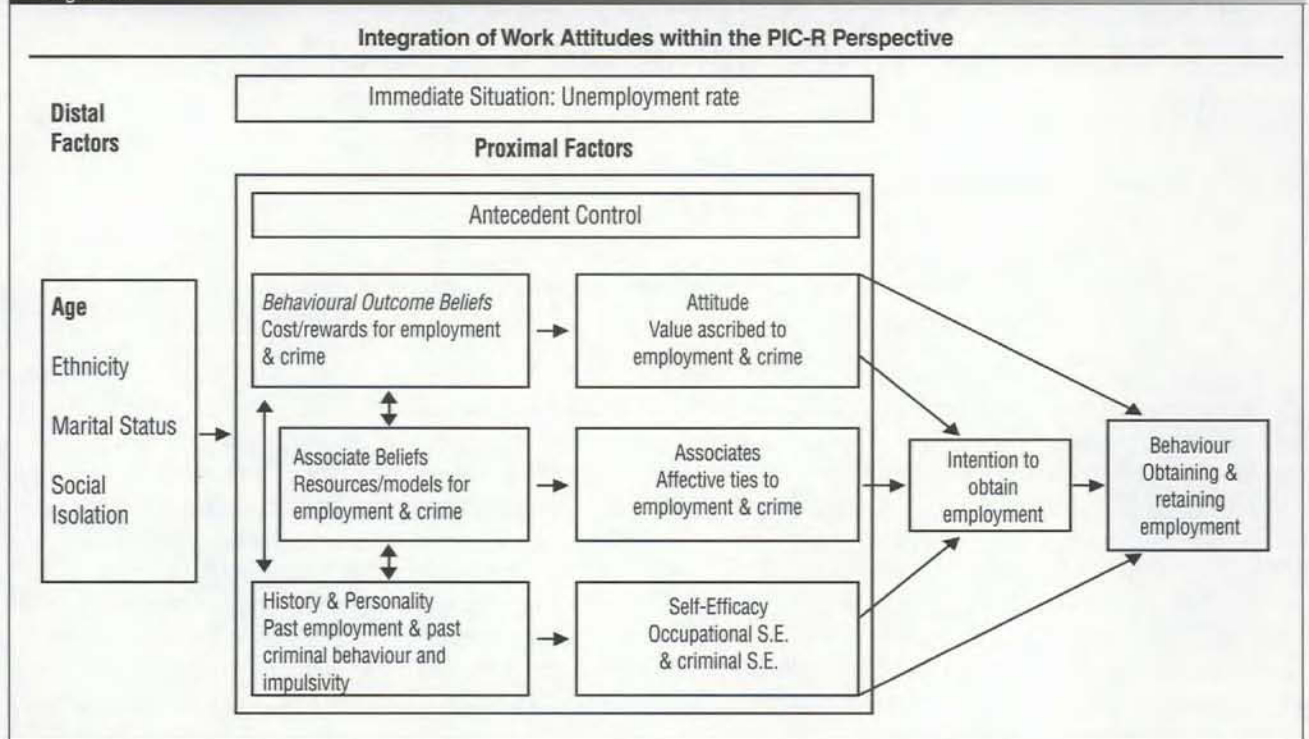
attitudes, values and beliefs, and personality, which in turn, impact upon personally-mediated control (such as, self-regulation and cognitive functioning); interpersonally-mediated control, consisting of the influence of others (such as, associates/social support) via modeling, expressed approval, etc.; and automatic rewards, which typically gain their rewarding properties through previous experience. These proximal factors, in interaction with more distal contextual elements, influence the manner in which the individual perceives the costs/rewards for criminal behaviour.

In the present study, the PIC-R perspective adopted the framework, and operationalized constructs used in predicting employment outcomes, according to the theory of planned behaviour. The pathway delineated by the theory of planned behaviour was retained, in its specification of intention as the immediate determinant of behaviour. Beliefs contribute to attitudes, which in turn contribute to intentions. Further, the various components of the model were reconceptualized to fit the theoretical framework espoused by the PIC-R perspective.

Moreover, the present study, in predicting community employment status for a group of offenders on conditional release, incorporated relevant work attitudes within the PIC-R perspective. The factors that were explored were either postulated to relate to employment outcomes (based on a comprehensive review of the literature), or those with a demonstrated empirical link to either employment outcomes, or reduced recidivism. Therefore, in examining the factors presumed to affect community employment status, both criminal attitudes and work attitudes were hypothesized to have an impact (see Figure 1).<sup>5</sup>

Given that this study is one of the first comprehensive explorations of employment outcomes for offenders, the analyses are exploratory and hypotheses were therefore proposed at a general level. The primary objective of this research was to gain an enhanced understanding of factors related to offender employment outcomes, and to determine if the

Figure 1



model would be of use in contributing to this enhanced understanding.

## Method

Newly released male federal offenders (between December 1998 and September 1999) from five different sites (in the Atlantic, Ontario and Prairies regions) were requested to participate in research designed to explore factors linked to community-based employment success. A total of 302 offenders volunteered to take part in the study. These participants shared similar risk and need profiles as the release population, with over 80% identified with medium to high-risk and need levels during intake assessment.

Offenders were asked to respond to a survey administered by a research assistant, and to complete a questionnaire. The survey explored issues related to employment experience prior to the current period of incarceration, during incarceration, and attempts to find work since release. The questionnaire was comprised of a number of standardized scales exploring the different constructs within each component of the model. The survey and questionnaire were supplemented with data derived from the Research Branch's automated systems, including the Offender Management System (OMS), offence and release databases. There were two assessment periods, the first approximately six weeks following release, and the second, six months after the first assessment period. The same survey and questionnaire were

re-administered during the six-month assessment period, with revisions in the checklist reflecting employment-related activity since release. Only 106 offenders participated in the six-month assessment; these offenders differed significantly from offenders who participated only in the one-month assessment,<sup>6</sup> somewhat limiting the conclusions that can be derived from the results.

This multiwave longitudinal design was used to assess change over time in the predictor variables (for example, attitudes, self-efficacy, etc.) and to track change in employment status during the first six months of release. Analyses were conducted to evaluate the factors most strongly linked to employment outcomes at one month (status, quality of employment) and six months (status, quality of employment, number of weeks employed).

Employment status 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). Forty four percent of the sample were employed at one month, and 70% (of the 106 remaining offenders) at six months. The following components were used to evaluate the quality of employment at one month: type of occupation (skilled/unskilled); salary meeting needs (meets needs/does not meet needs); satisfaction with income (satisfied/not satisfied), with a higher score indicating a higher perceived quality of employment. The same factors were used to assess quality of employment during the second assessment at six months.

At six months, employment retention was assessed by evaluating the number of weeks employed since release. 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.

## Results

A series of analyses were conducted to explore relationships between predictor and outcome variables at one and six months. First, correlational analyses explored the association between each component of the model (such as, distal factors, behavioural beliefs, etc.), and employment outcomes (status, quality, and number of weeks employed). Variables with significant relationships with the outcome variables were then entered into individual regression equations, and these variables with significant relationships were entered into an overall regression equation. This approach allowed for exploration of the contributions of individual variables within each component of the theoretical model.

Results showed that a number of variables were related to employment status and quality at one month. Not surprisingly, unemployment rates were negatively linked to employment status and quality, with higher rates linked to unemployment and a lower quality of employment at one month. Likewise, Offender Intake Assessment (OIA) employment need ratings and overall need ratings were both negatively associated with employment status. Offenders who reported higher levels of affective ties to employment were more likely to be employed. Similarly, offenders who said they had a good chance of finding/keeping a job over the next six months (with options ranging from "Poor," "OK," to "Good") were more likely to be employed at one month. Virtually identical findings were obtained for quality of employment at one month: unemployment rate, chance, and overall need were predictive. Additionally, skill level was linked, with skilled employment prior to incarceration associated with higher quality of employment. Finally, the extent to which offenders associate with individuals involved in the crime was negatively linked with quality of employment (those with more criminal association had lower levels of quality of employment).

At six months, unemployment rate was related to employment status, but not to quality of employment

or number of weeks employed. The offenders' perceived chance of finding/keeping employment was the primary predictor of employment status and number of weeks employed, whereas offenders' skill level prior to incarceration was the most important predictor of quality of employment at six months.

Finally, results obtained from the six month test re-administration showed that generally, dynamic assessment contributes incrementally to the prediction of employment outcomes at six months (see dissertation for a more detailed presentation of the results).

## Discussion and Implications

This study was one of the first to adopt a comprehensive theoretical model in the exploration of employment outcomes for offenders on conditional release. Preliminary results demonstrate that intention (chance) was one of the most important and consistent predictors of employment outcomes, which provides supports for the model, given its proximity to behaviour. Additionally, social support (and particularly, affective ties to employment) was significant in its contribution to employment outcomes. The model was useful in providing a framework for the study of employment, and will be subjected to further analyses to explore the relative contributions of each component of the model to employment outcomes.

Moreover, rather than pure reliance on risk factors to predict negative outcomes (for example, recidivism), the present study incorporated the assessment of relevant competencies, attitudes, values, and beliefs in exploring employment outcomes. Results indicated the utility of incorporating offender competencies, along with risk and need factors, in evaluating employment status, quality of employment, and retention.

This research demonstrated the importance of considering risk and 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 employment needs. Notably, these need ratings were predictive of employment outcomes, with employment needs consistently negatively related to work-related outcomes (for example, offenders with higher employment needs were less likely to find work).

Findings from the regression analyses reveal specific areas that should be targeted for 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.

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. Intention is intertwined with employment experience and the offender's sense of self efficacy; it is, therefore, amenable to change, in that the provision of relevant vocational/employment training and experience that contributes to skill development is likely to influence the offender's perception of what is attainable (for example, outcome expectancies). Furthermore, skill development emanating from vocational training is important, given the demonstrated relationship between skilled employment and quality of employment obtained in the community.

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 counsellors 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 counsellors can then monitor offenders' progress and guide them into

appropriate employment interventions (for example, job search and placement versus job skills training for offenders with fewer employment needs, intensive programming/training for offenders with considerable needs).

A secondary outcome of this research relates to employment programming. 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).<sup>7</sup> Unfortunately, in the decades following Braithwaite's pivotal work, employment intervention has been eclipsed by other programs (such as, 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 (for example, employment placement and/or programs) for offenders with identified employment needs. 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. ■

<sup>1</sup> Abstract from Gillis, C. A. (2001). *Understanding employment: A prospective exploration of factors linked to community-based employment among federal offenders*. Doctoral dissertation, Ottawa, ON: Carleton University.

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<sup>4</sup> The PIC-R perspective explores both facilitating (i.e., risk) factors, such as a history of criminal behaviour, and inhibitory factors (i.e., strengths), such as endorsement of pro-social attitudes.

<sup>5</sup> These factors, unified into the theoretical model, include: beliefs regarding outcomes associated with employment and crime, work involvement, work ethic, and the value attributed to employment; social support for employment and crime (resources/models and

affective ties to employment and crime); employment history (employment stability and skill level before incarceration, employment needs) and criminal history (SIR score, risk/need levels, and previous number of offences); occupational and criminal self efficacy (the degree to which offenders feel they are competent with respect to employment and criminal behaviour); attitudes about employment and crime; and intention to find employment (chance of finding/maintaining work over the next six months).

<sup>6</sup> Offenders who participated in both assessments were older, lower risk as measured by the revised SIR scale, had a more stable history of employment and fewer offences prior to this sentence.

<sup>7</sup> Braithwaite, J. (1980). *Prisons, education and work: Towards a national employment strategy for prisoners*. Queensland, Australia: Australian Institute of Criminology.

# Phallometric testing with sexual offenders against female victims: Limits to its value

Doctoral Thesis, Queen's University<sup>1</sup>

Yolanda Fernandez<sup>2</sup>

Advisor: William L. Marshall

Committee Members: Ronald Holden, Brian Butler, James Hillen, and Philip Firestone<sup>3</sup>

**T**his article briefly summarizes a series of studies that explored issues related to the reliability (internal consistency and test-retest reliability) and criterion validity of phallometric testing with sexual offenders (incest offenders, extrafamilial child molesters, and rapists) against female victims. Three assessment sets were evaluated: (1) An Age-Gender set which presented slides of adults and children; (2) A Female Sexual Violence set which presented audio descriptions of consenting and forced sex between adults; and (3) A Child Sexual Violence set which presented audio descriptions of the sexual molestation of children by adults. A total of 280 incest offenders, 138 extrafamilial child molesters, and 139 rapists were included in the different analyses.

## Introduction

**I**n order to evaluate the adequacy of phallometry as a psychophysiological test, it is necessary to identify the standards against which the procedure is to be assessed. The value of a test is dependent on being standardized and can be shown to be both reliable and valid. At present, there is a paucity of research addressing the reliability of phallometric testing with sexual offenders and what little evidence is available is fraught with problems. Standards for acceptable levels of reliability vary according to a variety of factors, and there appears to be little agreement in the literature as to what exactly are satisfactory levels of reliability for phallometric testing.<sup>4</sup>

For criterion validity, phallometric results demonstrating differences between groups who are expected to differ need to be, within reason, consistently replicated. Extrafamilial child molesters have consistently been distinguished from non-offenders in terms of their responses to phallometric testing. However, the findings regarding rapists and incest offenders are less clear. While some studies have indicated that incest offenders respond more like non-offenders than do extrafamilial child molesters, other research has demonstrated no differences between extrafamilial child molesters and incest offenders.<sup>5</sup> In addition, while child molesters have been distinguished from rapists using child stimuli, only one study<sup>6</sup> has attempted to distinguish child molesters from rapists using adult rape stimuli, and

failed to find differences. Research addressing these inadequacies in the literature will have important implications for the interpretation and use of phallometric procedures in the assessment and treatment of sexual offenders.

## Definition

Phallometric testing is the measurement of male erectile responses (Penile Plethysmography) during the presentation of various sexual and non-sexual stimuli. The stimuli are chosen to represent categories of sexual behaviour thought to be relevant to various offence patterns. Typically, these stimuli are categorized as either deviant (involving children, adolescents, or forced sex with adults) or appropriate (mutually consensual sex between adults) and the man's relative arousal to these categories of stimuli is calculated. In most cases, an individual must respond to an estimated 10% full erection or 3mm of change for the results to be considered clinically interpretable. Following conversion to standardized z-scores, deviance differentials are calculated which compare the various stimulus categories. It is these within subject comparisons that determine the presence of inappropriate sexual preference or interest.<sup>7</sup>

## Method and procedure

Data were extracted from archival files on men currently serving federal sentences for offences against female victims (either adult or child). Based on their complete sexual offending history, offenders were classified according to their victim's age. Men with victims 18 years of age and older were classified as rapists, while men with victims younger than 14 years of age were classified as child molesters. The child molesters were further classified as either incest offenders or extrafamilial child molesters. Child molesters were assigned to the incest offender group if they had sexual contact with their daughter (biological, adopted or surrogate). In cases where the incest offender had multiple victims, all victims were required to be members of the nuclear family. Child molesters with both incestuous and extrafamilial victims were excluded, as were those offenders who had both child and adult victims. It has been recommended that a minimum response of 10% full

erection is required for a valid profile.<sup>7</sup> Using this criterion, offenders with invalid response profiles were then removed from the analysis. Offenders were initially tested during their Intake Assessment at the Millhaven Assessment Unit and then re-assessed at a later time in their incarceration prior to treatment at either the Warkworth Sexual Behaviour Clinic in Warkworth Penitentiary or at the Regional Treatment Centre (Ontario) in Kingston Penitentiary. The mean test-retest interval was 6 months (range .5 to 25 months).

Phallometric results may be represented as raw scores in the form of either millimeter change in the circumference of the penis, voltage changes, or volume changes. Other scoring methods include transforming raw scores to percentage of full erection or standard scores (z-scores). In the present series of studies phallometric data were collected in raw form as mm-stretch and voltage changes but were converted to percentage of full erection for the internal consistency study and z-scores for the test-retest and criterion validity studies. Differential indices were calculated by subtracting the average z-score

response to an inappropriate category (for example, prepubescent women) from the average z-score response to an appropriate category (such as, the adult female). Differential indices greater than 0.0 were interpreted to indicate appropriate arousal, and values of 0.0 or less were interpreted to indicate inappropriate arousal.

## Results

### Internal consistency

The internal consistency results are summarized in Table 1. Internal consistency coefficients for all three assessment protocols (Age-Gender, Child Sexual Violence, and Female Sexual Violence), when assessed separately by offence type and stimulus category, were primarily at the moderate level with a few categories obtaining a high level of reliability. The results for the extrafamilial child molester group were somewhat less consistent with three categories of the Child Sexual Violence Assessment and one category of the Female Sexual Violence Assessment demonstrating unacceptably low internal consistency.

Table 1

Internal consistency reliability coefficients for the three assessments protocols by offence type								
Age-Gender Assessment								
Subject type		Women			Men			Neutral
		Adult	Prepubescent	Pubescent	Adult	Prepubescent	Pubescent	
Incest Offenders	(N = 143)	.90	.89	.95	.88	.90	.87	.92
Extrafamilial Child Molesters	(N = 67)	.87	.84	.84	.88	.85	.84	.87
Child Sexual Violence Assessment								
Subject type		Women		Child			Neutral	
		Adult	Child	Passive	Coercive	Sexual Violence		Non-sexual Violence
Incest Offenders	(N = 76)	.74	.78	.85	.85	.92		
Extrafamilial Child Molesters	(N = 31)	.83	.45	.65	.73	.63		
Subject type		Men		Child			Neutral	
		Adult	Child	Passive	Coercive	Sexual Violence		Nonsexual Violence
Incest Offenders	(N = 76)	.92	.94	.91	.75	.75		
Extrafamilial Child Molesters	(N = 31)	.98	.76	.43	.70	.40		
Female Sexual Violence Assessment								
Subject type		Consent Partner	Consent Narrator	Rape Sexual	Rape Anger	Violence Robbery	Violence Anger	Neutral
Incest Offenders	(N = 61)	.62	.86	.67	.68	.61	.84	.75
Extrafamilial Child Molesters	(N = 40)	.78	.79	.52	.85	.90	.80	.85
Rapists	(N = 139)	.80	.85	.71	.79	.71	.75	.69

### Test-retest reliability

When the test-retest reliability of the Age-Gender and Female Sexual Violence Assessments was calculated separately for distinct offender groups, the correlation coefficients were generally less than acceptable (see Table 2). Only two of the stimulus categories from the Age-Gender Assessment (adult women and adult men) obtained acceptable (and then only moderate) levels of test-retest reliability. Among the differential deviance indices only three indices, from the gender preference analyses of the Age-Gender Assessment reached minimal acceptable levels of reliability. None of the stimulus categories and none of the differential deviance indices from the Female Sexual Violence Assessment reached acceptable levels of test-retest reliability. These data do not support the test-retest reliability of either assessment protocol for the two subjects types included in the present study.

### Criterion validity based on contrasted groups

#### *Incest offenders versus extrafamilial child molesters*

The extrafamilial subjects were more deviant than the incest offenders in response to the Age-Gender Assessment (See Figure 1). In contrast, the incest offenders and the extrafamilial child molesters had similar response levels to the Child Sexual Violence Assessment (See Figure 2). Interestingly, however,

neither the responses to the Age-Gender Assessment nor the responses to the Child Sexual Violence Assessment, accurately identified group membership. While this is not surprising for the Child Sexual Violence Assessment, since both groups were equally deviant on this assessment set, it is somewhat puzzling that the responses to the Age-Gender Assessment did not predict group membership.

Within the incest offender group, subjects displayed more deviant arousal when assessed using the audiotaped presentation of stimuli (Child Sexual Violence) than when they were assessed using the slide presentation of stimuli (Age-Gender). In addition, more incest offenders were classified as deviant in response to the Child Sexual Violence Assessment than in response to the Age-Gender Assessment. In contrast, for the Extrafamilial child molesters there was no difference in terms of frequency of classification as deviant or non-deviant between the Child Sexual Violence and Age-Gender Assessments. Both assessment sets identified a substantial number of these subjects as deviant (See Table 3).

#### *Rapists versus child molesters*

Surprisingly, the rapists did not respond more deviantly to the Female Sexual Violence Assessment than did either the incest offenders or the extrafamilial child molesters (See Figure 3). In addition,

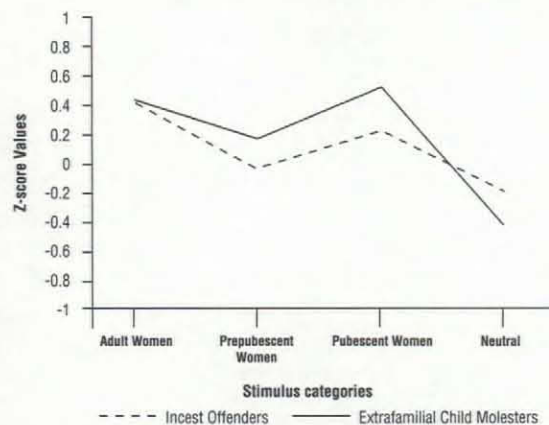
Table 2

Test-retest reliability coefficients for the three assessment protocols by offence type

Subject type		Age-Gender Assessment						Neutral
		Women Adult	Prepubescent	Pubescent	Men Adult	Prepubescent	Pubescent	
Extrafamilial Child Molesters	(N = 40)	.75	.18	.42	.74	.47	.49	.13
		<i>Differential Deviance Indices</i>						
		Women-Male	Adult Women-Men	Child Female-Male				
		.68	.79	.36				
		Adult Women-Prepub.	Adult Women-Pub.	Adult Men-Prepub.	Adult Men-Pub.			
		.56	.59	.74	.55			
Rapists (N = 51)		Female Sexual Violence Assessment						Neutral
		Consent Partner	Consent Narrator	Rape Sexual	Rape Anger	Violence Robbery	Violence Anger	
		.48	.22	.32	.35	-.11	.11	.26
		<i>Differential Deviance Indices</i>						
		Consent-Rape	Consent-Violence	Violence-Rape				
		.56	.27	.16				

Figure 1

Mean responses of incest offenders and extrafamilial child molesters on the Age-Gender Assessment (women stimuli only)



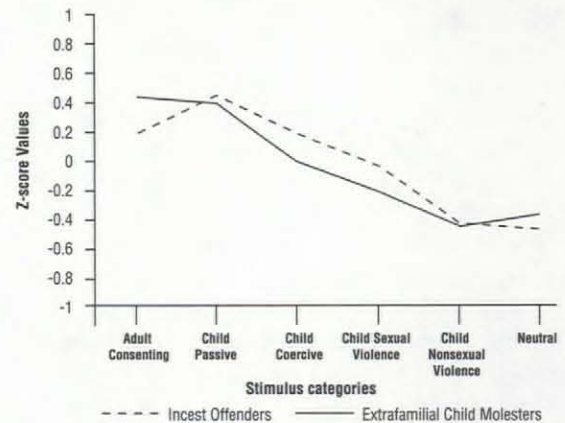
the Female Sexual Violence Assessment did not accurately predict group membership and did not classify as deviant more of the rapists than either the incest offenders or the extrafamilial child molesters.

### Discussion

To date, the research on the psychometric properties of phallometric testing has been limited and inconsistent. Although previous internal consistency studies have often resulted in acceptable internal consistency coefficients, critics have argued that these studies have used unacceptably small samples sizes, and typically collapsed over stimulus categories and offender types, thereby possibly inflating the correlations.<sup>8</sup> The present study, to

Figure 2

Mean responses of incest offenders and extrafamilial child molesters on the Child Sexual Violence Assessment (women stimuli only)



some degree, has put these criticisms to rest. Examining internal consistency levels for distinct stimulus categories and offender types resulted in satisfactory internal consistency to a limited degree. Acceptable internal consistency for each assessment set was limited to certain offender types. It should be noted, however, that the present study did not examine internal consistency for a group of "normals" or non-offender males and consequently, it is possible that internal consistency levels may be different for this group.

Previous studies of the test-retest reliability of phallometric testing have resulted in inconsistent results, although several studies reported acceptable levels of test-retest reliability. However, these studies

Table 3

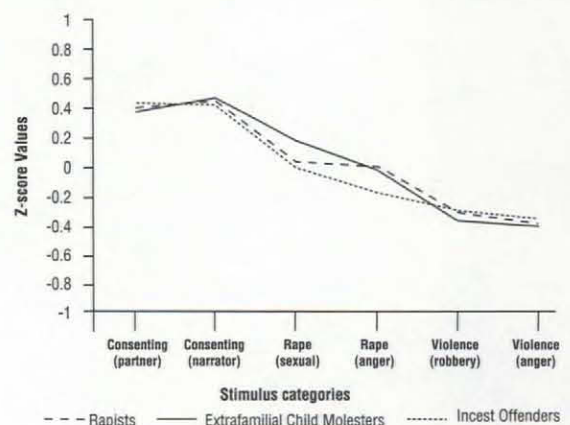
Comparison of deviance classification for Incest Offender and Extrafamilial Child Molester Groups

	Age-Gender Assessment n (%)	Child Sexual Violence Assessment n (%)
<b>Incest Offenders</b>		
Deviant	73(51)	57(75)
Non-deviant	70(49)	19(25)
<b>Extrafamilial Child Molesters</b>		
	Age-Gender Assessment n (%)	Child Sexual Violence Assessment n (%)
<b>Incest Offenders</b>		
Deviant	46(69)	20(67)
Non-deviant	21(31)	10(33)

Note: Values in parentheses are percent of total sample

Figure 3

Mean responses of incest offenders and extrafamilial child molesters on the Child Sexual Violence Assessment (women stimuli only)



typically examined the stability of phallometric testing over a relatively short period of time. This strategy is acceptable when the research to be conducted may not involve repeated testing or when repeated testing is to occur over a brief time span. However, the present results indicate that the test-retest reliability of at least two stimulus sets (Age-Gender and Female Sexual Violence) is clearly unacceptable when the testing period is extended to several months. Thus when long-term stability is needed, phallometric testing does not meet acceptable criteria. Obviously, however, the present finding needs to be replicated and future research studies will need to include the Child Sexual Violence Assessment, as this was not examined in the present series of studies.

The ability of phallometric test results to distinguish between groups of sexual offenders is directly relevant to the presumed role of sexual motivation in theories of sexual offending. Early theoretical perspectives suggested that sexual offenders enacted their deviant behaviours because they had developed conditioned arousal to the persons or actions involved in their deviant acts prior to enacting deviant behaviour.<sup>9</sup> These theoreticians suggested various ways by which these deviant sexual preferences were acquired (for example, unexpectedly seeing a child while sexually aroused or while masturbating) but they were all said to result from conditioning processes that associated the stimuli with sexual arousal. The early theorists appeared to believe that *all* sexual offenders were driven by these acquired sexual preferences. Later conditioning theorists however, have suggested that only some sexual offenders have acquired deviant preferences.<sup>10</sup> In any event, conditioning theories, and indeed most of the more comprehensive etiological accounts of sexual offending suggest that a substantial number of these men will display deviant sexual arousal at phallometric testing. In addition, the current popular use of phallometry certainly suggests that an underlying assumption operating in clinical settings is that sexual preferences function as a trait and is not remarkably influenced by circumstance. The exception to this rule, however, appears to be incest offenders, who are generally accepted as being more opportunistic (or as regressing to more juvenile modes of responding) than motivated by sexual preferences for children.

In the present study, the responses of extrafamilial child molesters to the slides of unfamiliar children suggest this group may have a more generalized interest in children than do the incest offenders. However, the incest offenders responded more deviantly to the audio presentation of stimuli. Perhaps the generally accepted notion that incest

offenders are opportunistic offenders rather than being motivated by a sexual attraction to children may be in error. It is possible that incest offenders do not have a broadly generalized sexual attraction to children, but instead are specifically sexually attracted to their own victims. In that case the results suggest that incest offenders are more likely to respond to children in a particular set of circumstances (within the home and under their authority) but are not likely to feel sexually attracted to children in general (for example, children playing on a playground). Extrafamilial offenders, who typically molest several different children, would by this same reasoning, be expected to have expanded or generalized their responses to the general class of children and might be expected to display sexual arousal toward children independent of circumstances. The results of the present series of studies then suggests that the distinction between extrafamilial child molesters and incest offenders, in terms of whether or not their offending is sexually motivated may have been misdirected. Instead perhaps theories of sexual offending against children should focus on different offender characteristics and perhaps situational features that lead to the offending behaviour.

Unfortunately, the data on the importance of sexual motivation for rapists, as assessed using the Female Sexual Violence Assessment, is considerably less convincing. The results of this study demonstrated that the responses to the Female Sexual Violence Assessment did not provide any information unique to rapists. Rapists and child molesters did not respond differently to the assessment and neither group demonstrated a preference for rape stimuli. These data do not support the sexual preference hypothesis, as it has been applied in theories about rapists. Consequently, the issue of deviant arousal in rapists and the processes by which rapists acquire deviant arousal may not be relevant to understanding the motivation of rapists to commit their offences (in so far as phallometry is considered an index of deviant arousal). Instead theorists may need to consider explanations of rape that take into account factors apart from the sexual motivation and, in particular, sexual preferences. In fact, many theories of rape propose that a need to exert power over and to humiliate women is the prime motivation for rape.<sup>11</sup> Another approach may be for theorists to consider that sexual preferences may not function as a trait but rather may be dependant upon current internal state (high arousal, negative mood states, intoxication) or novelty of the stimuli (never seen before). Some researchers have already focussed their efforts on the effects of such factors on deviant sexual arousal as assessed by phallometric testing.

Finally, the failure to detect deviant arousal in rapists, and the findings concerning arousal to children among incest offenders and non-familial child molesters (approximately 50% of the incest offenders and 70% of the extrafamilial child molesters displayed deviant arousal to the Age-Gender Assessment), casts doubt on the external validity of phallometric testing. These results

suggest a poor match between deviant sexual preferences revealed at phallometric evaluations and a history of actual deviant behaviour. Although the present results suggest this as a possibility, a more rigorous study is needed that includes an examination of responses and sexual history of both identified offenders and non-offending men, before this issues can be said to be addressed satisfactorily. ■

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## Research in Brief

*The Research Branch of Correctional Service of Canada (CSC) has developed a publication entitled Research in Brief. This is a series of one-page summaries of research reports specifically designed to more broadly disseminate correctional knowledge to others.*

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# Victimization, fear, and coping in prison

Doctoral Thesis, University of Manitoba<sup>1</sup>

Donna E. Chubaty<sup>2</sup>

Advisor: John Schallow

Committee Members: Michael Thomas, Rayleen DeLuca, Edward Boldt, and Edward Zamble<sup>3</sup>

*As human beings, we are affected by our life experiences. Our reactions may be influenced by the way we perceive and approach the world around us, which may impact on our present and future experiences. From childhood on, we absorb information and respond to situations based on what we have learned in the past. Painful events challenge us and force us to gather our coping skills. At times, such events limit our available resources, or our perception of resources, and we may find ourselves in similar difficulty again. For example, some people who have had earlier abusive experiences could develop psychological symptoms, which may make them vulnerable to further abuse.*<sup>4</sup>

Inmates tend to report significant painful and personal life experiences, more so than non-criminals. Specifically, inmates report more family related disruptive and abusive experiences. For many, these negative experiences have been associated with later criminal behaviour that may be a contributing factor towards conditional release failure. Research suggests that for many inmates, the prison setting itself magnifies the negative impact of earlier life experiences.<sup>5</sup> In prison, vulnerable inmates are readily targeted and their coping skills and options are limited. When they enter a stressful prison environment, psychological symptoms from earlier traumas, such as intrusive memories, denial, and emotional numbing, return. This emotional response is thought to increase vulnerability to further violence, repeating a cycle of traumatic experience and response.

Fortunately, all people are not passive, and people do make active efforts to address and cope with problem situations and the emotions around them. Unfortunately, inmates and former inmates have generally been found to lack adequate coping skills in addressing their personal problems. Coping strategies typically identified among criminal populations include avoidance, momentary relief of problems with little thought to consequences, and aggressive behaviour. Such approaches, likely selected out of familiarity and past experience, tend to worsen problem situations. As unhealthy coping is continued, problems again worsen, and the pattern continues.

This article abstracted from the author's doctoral thesis outlines the research methodology sought to establish connections between certain earlier life events of inmates and their experiences within prison. The research was exploratory in nature. The goal of the project was to better identify inmates who may be vulnerable or problematic based on information obtainable on intake to the prison system, and to illustrate the cyclical nature of unhealthy coping skills among inmates. It was hoped that points of intervention could be identified.

## Methodology

The sample for this study was drawn from Stony Mountain Institution and the Saskatchewan Penitentiary. Both are medium-security federal prisons, each housing several hundred inmates. Inmate participants were recruited through a mail-in request, as well as the recruitment of clients on individual caseloads of counselors and psychologists at Stony Mountain Institution. Inmates were also asked for permission to access their files for information regarding their institutional behaviour. In all, 91 inmates participated in the study, 53 from Stony Mountain Institution and 38 from Saskatchewan Penitentiary. Seventy participants allowed access to their files. Inmates completed consent forms and questionnaires in groups of approximately eight, supervised by Correctional Service of Canada (CSC) staff members to ensure privacy of responding.

## Demographic information and earlier experiences

As part of the broader study, inmates were asked questions about numerous areas of their backgrounds, based on a questionnaire developed by Zamble and Porporino.<sup>6</sup> These included items regarding demographics, parental loss, experiences with physical and sexual abuse in childhood, and information about siblings.

## Victimization experiences in prison

Participants were asked about their experience with robbery, physical assault, sexual assault, and threats of violence during their period of incarceration.

Questions were worded in such a way as to distinguish between assaults and mutual fights. In particular, when asked about such incidents, respondents were asked to indicate who initiated the physical confrontation and whether they were able to defend themselves successfully.

### Institutional behaviour

As part of a section on coping with the possibility of violence in prison, participants were asked about their use of anti-social coping strategies, specifically using drugs and alcohol, becoming aggressive first, carrying a weapon, and joining a gang. In order to gather further information about inmate behaviour, files were reviewed for information about institutional infractions.

## Results

### The sample

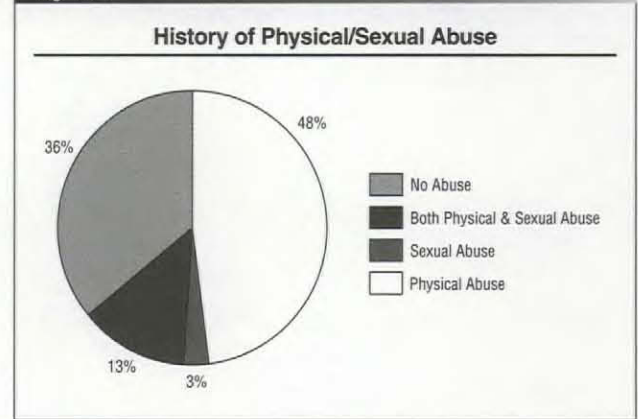
The sampled population used in this study was demographically similar to federally incarcerated men in Canada as a whole, with a mean age of 31.9 years and range of 18 – 68 years of age. Fifty-eight percent of the sample were of First Nations/Metis descent, and 38.6% Caucasian. Violent, non-sexual offences (such as, robbery and murder/manslaughter) accounted for over half (58.6%) of the primary offences of the sample, which was generally consistent with the broader population of incarcerated federal offenders. The 12.5% of sexual offenders in the present sample is a slight underrepresentation of the total population of sex offenders as only general prison population inmates participated in the study. Sex offenders who were placed in administrative segregation were not included in this study.

### Earlier life experiences

With regards to family experiences, just over two-thirds of inmates (67.8%) reported that their mother had died when the inmate was at an average age of 25 years, with over one-third (37.2%) reporting the death of a father at an average age of 26 years. In particular, the rate of maternal death was considerably higher than that found in previous research. Having experienced the death of one parent was significantly correlated with the loss of the other ( $r = .56, p < .001$ ). As such, within this relatively young sample, parental death appeared to be the norm rather than the exception. Most inmates reported having siblings (80% at least one brother and 84.5% at least one sister), with over one-third of sampled inmates having had at least one sibling incarcerated. Two of the participants indicated that they had 11 and 14 siblings that had been incarcerated.

The majority of respondents acknowledged abusive childhood experiences. Figure 1 shows that nearly two-thirds of participants (64%) reported being abused as a child, considerably higher than those reported in a file review of Canadian federal offenders.<sup>7</sup> Of the sample, 16% reported sexually abusive experiences, generally consistent with that reported in the prison research, and double the rate in the community.<sup>8</sup> Although retrospective, these data speak to the childhood experiences of loss and dysfunction which may create a context for the development of criminal behaviour.

Figure 1



### Victimization experiences in prison

While incarcerated, the majority of inmates in the study indicated no personal experiences with victimization. One-third of the participants acknowledged having been threatened with assault in the last year, with one-fifth describing at least one experience with physical assault. Small subgroups of individuals acknowledged being repeatedly threatened (17.6%) or physically assaulted (9%) by other inmates. Results for sexual victimization are not reported given the very few affirmative responses to those items.

### Negative institutional behaviour

With regards to negative institutional behaviour, over half (54.1%) of inmates had received some form of institutional charge, of which only a small proportion involved violence towards staff and other inmates (7.9%). This was consistent with the data extracted from the Offender Management System. Over half of the inmates indicated that they used drugs and/or alcohol to cope with the possibility of violence in their environment. A significant number of inmate participants admitted to carrying a weapon, being the aggressor, and joining a gang as their means of self-protection.

### Correlational analysis

Earlier experience with parental loss and abuse did not significantly correlate with increased self-reported victimization in prison. However, family variables did correlate with later institutional behaviour. Having more brothers was significantly associated with more institutional charges in general ( $r = .49$ ,  $p < .001$ ), as well as institutional assault charges against staff ( $r = .43$ ,  $p < .001$ ). As the number of siblings who have been imprisoned increased, so did a number of other problems, such as institutional charges ( $r = .54$ ,  $p < .001$ ), as well as institutional assault charges against inmates ( $r = .42$ ,  $p < .001$ ) and staff ( $r = .73$ ,  $p < .001$ ). There were no significant associations between family experiences and self-reported anti-social coping practices.

### Summary and conclusions

Significant to the study sample are the high rates of parental loss and child abuse reported during earlier years. In community samples, early loss of a parent has been associated with later difficulties, including anxiety, desire to die, persistent guilt, compulsive self-reliance, and aggressive outbursts. One may suspect that the impact of parental loss would be compounded for individuals who have other risk factors for criminal behaviour (for example, existing behavioural problems).

It is worthwhile to note that within the sample population, those offenders emanating from highly criminalized dysfunctional families, tended to be more disruptive in prison as indicated by institutional charges, in particular, for assaultive behaviour. This finding likely reflects the prevalence of criminal/assaultive behaviour in general among those who have a social background characterized by the acceptance of crime. However, this significant correlation is somewhat remarkable given the host of other variables, which impact on behaviour. As such, family criminality may be one of the many valuable pieces of information for prison intake workers to

take into consideration when placing and monitoring inmates.

Participants in the study acknowledged engaging in a high rate of anti-social behaviours within prison. Perhaps it is no surprise that those who engage in anti-social behaviour in the community continue to do so in prison. However, it is telling that even in a controlled environment, which attempts to rehabilitate people, many individuals continue to struggle with their coping abilities. The social context of prison is likely important in this regard. In particular, inmates are faced with conflicting social rules and expectations. For example, inmates are expected to be loyal to one another, yet not trust each other. In this way, a "partially unstable system"<sup>9</sup> is set up, always at risk for violence. Given the uncertainty of this social context, it is likely that inmates resort to familiar coping strategies. The specific impact of social expectations on inmate behaviour and coping would provide useful material for future research.

Inmates who reported abusive backgrounds did not appear to be at greater risk for victimization within prison. At least among the study sample, earlier experiences with abuse did not appear to be repeated in prison. Rather, it is likely that other factors, such as physical size, sex offender status, gang membership, and participation in the underground prison economy provide a greater influence on the likelihood of being victimized in prison. In addition, inmates who have been victimized have been known to respond with aggressive behaviour rather than increased vulnerability. Finally, in the present study it is possible that respondents downplayed their experiences with violence in prison, given self-image demands, fears of being identified as a victim in prison, and social pressures within prison not to "rat" on others. As such, it is important to take into consideration the context and the impact of a broad range of life experiences, and to appreciate individual differences in coping with victimization. ■

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# Consumption of psychoactive substances in Quebec prisons

Doctoral Thesis, Université de Montréal<sup>1</sup>

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This article provides a summary regarding the self-reported consumption of psychoactive substances by federal prisoners in Quebec. Among the various factors considered in the thesis, the following were selected for this article: the prevalence of self-reported consumption by security level, types of substances consumed and frequency of use, motivations and perceived psychological state, and the reported perception of guards' tolerance and subject-reported drug availability.

## Problem

There have been only a very few studies on drug consumption during incarceration,<sup>4</sup> and the phenomenon is widely misunderstood because of the difficulties involved in investigating it. For most people, consumption inside prison walls spells danger, whether from the violence inherently associated with the drug trade or from misbehaviour by those under the influence. Many staff members can remember incidents that threatened people's physical safety. However, if we want to explain the presence of psychoactive substances in prisons, we need to examine a number of factors that are often overlooked during discussions of issues, such as the pre-incarceration consumption history, the large number of inmates incarcerated for drug-related offences, recent changes in the prison environment, and the nature of routine inmate management. These are the factors that underlie this study, and are vital to an understanding of the context within which drugs are used. A final point, which bears mention is that consumption during incarceration cannot be separated from issues of adjustment to prison life, since substance use can play a role in adjustment.

## Objectives and methodology

The study aims to reveal the prevalence of drug consumption in Quebec federal institutions and the path inmates follow with respect to such consumption. The objectives, as well as certain ethical considerations, dictated the use of a questionnaire to be filled out during an interview. A total of 317 randomly selected inmates at 10 federal institutions in Quebec participated. Table 1 shows the characteristics of the sample.

## Results

### Consumption

As explained in detail in Plourde & Brochu<sup>5</sup>, 16% of subjects reported they had consumed alcohol and 29% used one or more illicit drugs during the three months preceding the interview. The combined result for alcohol and drugs together was 33%, which suggests that the majority of respondents (67%) had not used alcohol or drugs during the preceding three months. There was more consumption at maximum-security institutions (52%) and medium-security institutions (35%) than at minimum-security institutions (19%) ( $\chi^2(2) = 16.91, p < .000$ ).

### Substances consumed and frequency of use

The majority of subjects who reported they had used drugs in the previous three months, reported cannabis (91%) as their drug of choice during incarceration, while 7% reported heroin. Cannabis was also by far the most frequently consumed substance: 91% said they mainly consumed cannabis, while 6% named heroin.<sup>6</sup> These results are far from surprising and confirm the common notion that cannabis is the drug most used in prisons.<sup>7</sup>

Reviewing the consumption patterns of respondents who had used during the three months before the interview (alcohol = 50/317; drugs = 91/317) revealed that in prison, frequency is much higher among drug users than among alcohol users. With regard to drugs specifically, 87% reported changes in consumption since they arrived in prison (change of substance, reduced frequency, and reduced quantities). Still, among the 91 users, 15% reported daily use, and 62% reported using at least once a week, which differs considerably from the results for alcohol consumption.

### Motivation and mental state

With regard to the motivations for using drugs before and during incarceration, the majority who had used drugs in the previous three months did so to relax (62%), whereas previously they had used drugs in order to forget their problems (38%), for recreational purposes (31%), or to relax (21%). The *McNemar* test was used to examine changes in motivation among subjects who had used drugs recreationally prior to incarceration. The results show that 25 of that 31% who had been recreational

Table 1

## Profile of institutions, sample and participation rate

Institutions	Number of inmates <sup>1</sup>	Segregated <sup>2</sup>	Outside institution <sup>3,4</sup>	Regular population	Sample (10% or at least 30)	Rate of refusal	Response rate (including refusals and absences)
<b>Minimum security</b>							
Federal Training Centre	410	15	67	328	33	20%	65%
Montée St-François	265	5	62	198	30	9%	68%
Ste-Anne-des-Plaines	173	2	29	142	30	6%	83%
<b>Total</b>	<b>848</b>	<b>22</b>	<b>158</b>	<b>668</b>	<b>93</b>	<b>12%</b>	<b>72%</b>
<b>Medium security</b>							
Cowansville	368	15	-	353	36	22%	67%
Leclerc	540	28	152 <sup>5</sup>	360	36	16%	82%
Archambault	370	14	-	356	36	26%	67%
Drummondville	230	28	-	202	30	20%	75%
La Macaza	302	10	-	292	30	6%	94%
<b>Total</b>	<b>1,810</b>	<b>95</b>	<b>152</b>	<b>1,563</b>	<b>168</b>	<b>18%</b>	<b>77%</b>
<b>Maximum security</b>							
Donnacona	268	42	-	226	26	43% <sup>6</sup>	51%
Port-Cartier	268	48	-	220	30	12%	88%
<b>Total</b>	<b>536</b>	<b>90</b>	<b>-</b>	<b>446</b>	<b>56</b>	<b>28%</b>	<b>70%</b>
<b>TOTAL</b>	<b>3,194</b>	<b>207</b>	<b>310</b>	<b>2,677</b>	<b>317</b>	<b>18%</b>	<b>74%</b>

<sup>1</sup> Figures give the approximate number of inmates in the institution (included escapees and others unlawfully at large) at the time the sample was selected between August and December 1999.

<sup>2</sup> Administrative segregation or punitive dissociation.

<sup>3</sup> Inmates who were outside the institution on work release or on escorted temporary absence for community service or personal development.

<sup>4</sup> Inmates who were outside the institution when the interviews were being conducted (due to appointment, private family visit, illness, etc).

<sup>5</sup> Post-suspension inmates in temporary detention.

<sup>6</sup> Among the inmates who refused to participate at Donnacona Institution ( $n = 22$ ), 10 were prospects for recruitment to groups of criminal biker gang members, or hangers-on of these groups; 2 were members of an inmate group, and 5 were informally associated with these groups.

users now (that is, in prison) use drugs to relax or to forget their problems — a significantly higher figure inside prison than outside ( $p = 0.001$ ).

The data on subjects' psychological state indicate a perceived improvement when intoxicated ( $Z = -5.54, p < 0.000$ ).

### Perception of tolerance and availability of psychoactive substances

During the interview, inmates had to indicate on a scale their perception of how tolerant correctional officers are with regard to alcohol, hard drugs, and soft drugs. Keeping in mind the limitations on an exercise in which inmates simply report their opinions, it does seem that there is greater tolerance for soft drugs than for alcohol or hard drugs. Seventy percent believe guards are "not at all" or "not very" bothered by cannabis, as compared to 6% for hard drugs and 19% for alcohol. Note that it is the respondents at maximum-security institutions who most often believe that the guards are "not at all" bothered by soft drugs (33%), as compared to 17% at minimum-security institutions and 7% at medium-security institutions ( $\chi^2(8) = 29.49, p < .000$ ). The percentage for inmates who feel that guards are "not very" bothered show more uniformity among the security levels.

With regard to the inmates perception of their ability to obtain the various substances, 90% versus 77% of inmates reported that it is fairly easy (always easy or sometimes easy) to obtain the alcohol or drugs they want. At minimum-security institutions, 88% of subjects reported that it was either "always" or "sometimes" easy to obtain the drugs or alcohol they want. The figure for medium-security institutions was 73% and for maximum-security institutions 72%. It seems that it is easier to obtain drugs at minimum-security institutions. Although there appears to be less consumption of drugs at minimum-security institutions, the perception of availability suggests that this factor has a considerable influence on inmates. The argument that minimum-security inmates have more to lose appears to have some merit.

### Limitations and conclusion

The interpretation and import of the study results are subject to several limitations, specifically as regards the methodological biases in the recruitment of subjects, the measuring instrument and the research topic itself. The results are all based on the subjective reports of the inmates; no additional method was used for corroboration.

In considering the results, it is important to bear in mind the theoretical, methodological, political and social context. Inmates' motivation for using is of the greatest interest because it is part of a continuum that extends from the period prior to incarceration to (probably) the post-incarceration period. Thus it would be preferable not to confine our examination of substance use at penitentiaries to the matter of the imperfect effectiveness of the system for punishing dealers; it would be better to look at it from the point of view of safety but also, and mainly, from a clinical and public health standpoint.

For some years now, it has been common to speak of "harm reduction" to identify certain intervention models that focus on the problems caused by consumption rather than on the consumption itself.<sup>8</sup> The aim of these new approaches is to achieve greater retention, which is increasingly seen as the main factor in successful treatment.<sup>9</sup> Harm reduction does have its limitations, but experience with it shows that it better meets client needs because people are dealt with in terms of "where they are" rather than "where they should be".

The question thus arises whether it is possible to adopt a harm reduction approach to drug consumption in penitentiaries, rather than an approach focused on abstinence and punishment. Is it appropriate to talk about harm reduction in view of the function of incarceration, its punitive role, and the fact that most psychoactive substances are prohibited at penitentiaries? The mission of the correctional services and the current status of drugs in Canada represent limitations which must be considered when looking at solutions to the drug problem other than punishment.

According to Riley,<sup>10</sup> adopting a harm reduction approach in a prison context would require recognition that some substances, such as cannabis, are less harmful to the institution than others because they are less likely to lead to aggressive behaviour. It must also be recognized that drugs are not simply a pharmacological or moral issue; other factors are involved such as infection (from injection or needle sharing), inmate health, and violence induced by drugs or inherent in the drug trade. According to Fuhrer and Nelles,<sup>11</sup> a harm reduction approach is essential if the penal system is to succeed in socializing inmates. Some studies in Australia and Europe have shown the effectiveness of programs based on a harm reduction approach.

Based on the results of our study, it would seem that several aspects of the current situation in federal institutions lend themselves to interpretation in terms of harm reduction: the use of cannabis, the abandonment of more harmful substances, smoking rather than injection, the reduced frequency of consumption and reduced quantities ingested, and the perceived tolerance of cannabis by guards. The

incarcerated user is engaged in a process which may be involuntary but which nevertheless has a considerable affect on behaviour. Since inmates believe it is fairly easy to obtain the substances they want, and since very few of them identify fear of being caught as a factor affecting their consumption, it is plausible to think that the punishments administered cannot by themselves explain the changes in behaviour. Other factors must be playing a role, specifically the motivation to consume and the fact that subjects feel good when intoxicated. Access to this source of "momentum" is of undeniable importance in educating inmates to engage in less risky behaviour, and taking advantage of the opportunity thus afforded amounts to adopting a harm reduction strategy.

To conclude, the impact of incarceration on the use of psychoactive substances need not be measured solely by the extent to which inmates abandon drug use (the ideal of abstinence is not the "opposite" of dependency, and it does not represent a cure, according to Jacques<sup>12</sup>); the impact of incarceration can also be measured in terms of the extent to which inmates adopt behaviour that is less harmful to the individual and, implicitly, to society. It would thus be useful, bearing in mind the whole context involved, to reconsider the impact of strategies that are aimed at interrupting the supply of drugs or punishing users. ■

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- 2 340 Laurier Avenue West, Ottawa, Ontario, K1A 0P9.
- 3 Dan Kaminski, Université catholique de Louvain, Belgium.
- 4 Plourde, C., Brochu, S., and Lemire, G. (2001). *Drogues et prison : Faits et enjeux actuels*, *Revue internationale de Criminologie et de police technique et scientifique*, 2, (in press).
- 5 Plourde, C., and Brochu, S. *Drogue et alcool durant l'incarcération : Examen de la situation des pénitenciers québécois*, *Revue canadienne de criminologie* (submitted for publication).
- 6 Plourde, C., and Brochu, S. (2001). Drug use during incarceration: A break into the trajectory, *Substance Use and Misuse*, 37, in press.
- 7 There is no point in comparing institutions of differing security levels, because of the degree of uniformity in the consumption profiles "before" and "during" incarceration and because of the small number of inmates who use drugs other than cannabis.
- 8 Beauchesne, L. (1997). *Legalization of Drugs: Responsible Action towards Health Promotion and Effective Harm Reduction Strategies in Harm Reduction: A new direction for drug policies and programs* (p. 32-46). In P. G. Erickson, D. M. Riley, Y. W. Cheung, & P. A. O'Hare (eds.), Toronto, Buffalo, London: University of Toronto Press; see the full text of the thesis for other literature.
- 9 Brochu, S., and Schneberger, P. (1999). *L'impact des contraintes judiciaires dans le traitement de la toxicomanie*. Montreal, Quebec: Comité permanent de lutte à la toxicomanie.
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# Antecedents and outcomes of correctional officers' attitudes towards federal inmates: An exploration of person-organization fit

Doctoral thesis, Carleton University<sup>1</sup>

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Advisor: David Robinson

Committee members: Adelle Forth, Brian Grant, Charles Gordon, and Alan Leschied<sup>3</sup>

**C**orrectional officers (COs) receive considerable attention from social scientists and policy makers. They represent the largest occupational group of the prison system and are responsible for maintaining the security, peace and order of institutions. These duties are carried out within the context of their employer's guiding philosophy, which in organizations such as the Correctional Service of Canada (CSC) includes the ideals of empathy, humane treatment and rehabilitation.

**G**iven their number and influence, COs are ideally placed to implement this value system and in turn positively influence the inmates with whom they interact frequently. It is important, therefore, to gain insight into their attitudes, particularly as these attitudes relate to inmates and the prison system. It is equally important to understand their overall work adjustment by measuring their job stress, job satisfaction and organizational commitment.

This article summarizes a larger-scale study contained in the thesis. It highlights the strong influence of attitudes on work adjustment and lends support to person-organization fit theory. In essence, the theory predicts better overall adjustment for workers whose attitudes and values are congruent with those of their employer. For CSC, this means that empathic, non-punitive and pro-rehabilitation employees should demonstrate the highest levels of work adjustment. However, adjustment should also be influenced by the prevailing attitudes of an employee's actual workplace.

## Background

A precursor to much of the research on COs is a well-known study that was conducted by Zimbardo and his collaborators in 1973.<sup>4</sup> Zimbardo created a mock prison at Stanford University and randomly assigned male students to "prisoner" or "guard" roles for an extended period of time. The results were unexpected and dramatic. Animosity between the two groups became so intense that the experiment was terminated early. Among "prisoners", Zimbardo observed misconduct, depression and helplessness while among "guards" he noted stress, dissatisfaction and contempt for inmates.

A vast amount of research has since been undertaken to assess COs' correctional attitudes and thus far the evidence is mixed. While COs generally hold more negative views than other correctional workers (for example, parole officers, chaplains, health staff and managers), studies suggest that many COs empathize with offenders and prefer rehabilitation to punishment. Regrettably, predicting these attitudes has proven to be fairly difficult.

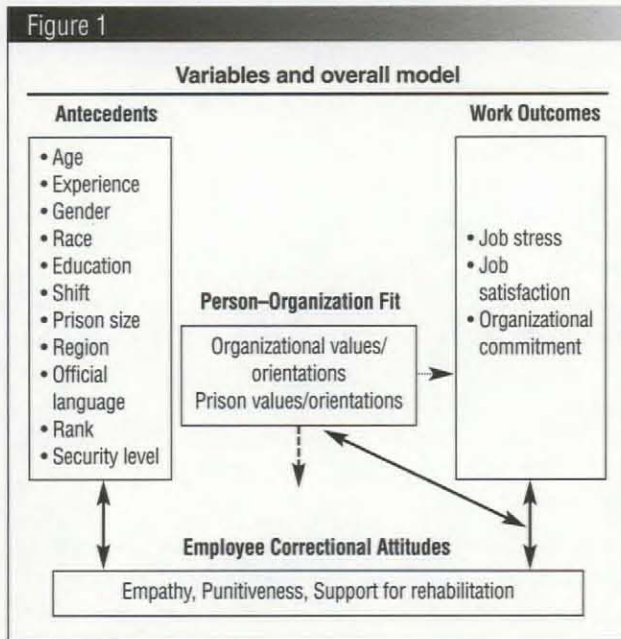
More recently, researchers have shifted their attention to job stress, job satisfaction, and organizational commitment among correctional staff. High stress levels and poor health outcomes have often been observed among COs. Members of this occupational group have also reported lower job satisfaction and organizational commitment relative to other prison workers. As it stands, researchers have still not fully explained these findings. The current study hypothesized that the influence of attitudes on overall adjustment might have been overlooked.

Person-organization fit theory provides a useful framework to explore this type of question. Basically, "Fit" it is said to exist when there is congruence between organization and employee values and attitudes.

## The current study

The current study examined four issues. First, it measured the correctional attitudes (for example, empathy, punitiveness and support for rehabilitation) and work adjustment (such as, job stress, job satisfaction and organizational commitment) of COs and other workers at CSC. Second, it used multiple regression to predict attitudes and work adjustment. Third, the study explored the extent to which attitudes were related to work adjustment. Finally, using person-organization fit theory, the study examined whether institutional and organizational characteristics moderated the influence of attitudes on work adjustment. Figure 1 lists the variables used in the study and depicts possible inter-relationships. As can be seen, a number of variables were expected to predict the study's three attitudes of interest. These

attitudes were in turn expected to predict work adjustment; however, this relationship would be mediated by organizational and workplace influences as shown by the central box in figure 1.



## Methodology

### Subjects

Subjects were participants in the Correctional Service of Canada's 1996 *All Staff Survey*.<sup>5</sup> A random sample of the total staff population was selected so as to generate a 95% confidence level and a 5% margin of error for each CSC work site and for each occupational group. As a result, 7,157 names were selected to participate; from which 4,961 questionnaires were completed (a 69% response rate). A total of 1,376 correctional officers responded to the survey representing 28% of the entire sample.

### Instrument

While most questions in this study were designed by a steering committee of CSC employees and union representatives, items relating to the main independent and dependent variables of interest were drawn from existing and previously validated measures, such as the Empathy Subscale, the Punitiveness Subscale, the Support for rehabilitation Subscale, the Job Stress Subscale, the Job Satisfaction Subscale, and the Organizational Commitment Subscale.<sup>6</sup>

### Procedure

Questionnaires for this study were distributed to every Canadian Federal prison and administered by an external consulting firm to randomly selected participants. Institutional managers were instructed

to give staff the necessary time required to complete the anonymous survey during their shift. After completion, respondents sealed their questionnaires in envelopes provided by the consulting firm.

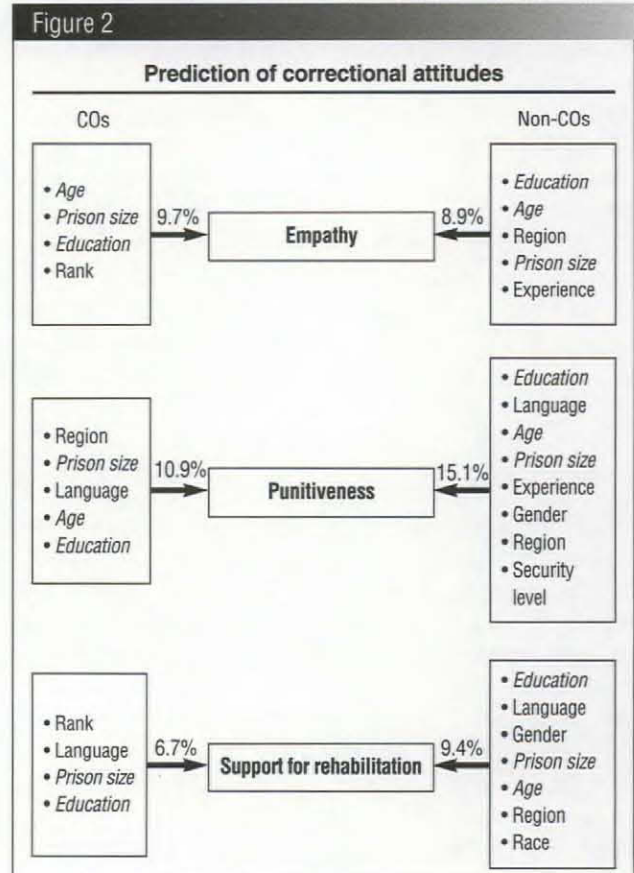
## Results

### Attitudes

Compared to workers in other occupational groups, significantly fewer COs were found to be empathic  $\chi^2(1, N = 3,679) = 202.26, p < .001$  or supportive of rehabilitation  $\chi^2(1, N = 3,765) = 141.07, p < .001$ . As well, a significantly greater number were classified as punitive  $\chi^2(1, N = 3,773) = 169.90, p < .001$ . COs were also compared separately with other occupational groups on the three attitudinal measures of interest. Among the 10 types of prison workers studied, COs held the lowest empathy ( $F(11, 3,667) = 52.50, p < .001$ ) and support for rehabilitation scores ( $F(11, 3,761) = 44.42, p < .001$ ). With the exception of the Technical/Institutional Services group (who scored higher than CO IIs), they also held the most punitive attitudes ( $F(11, 3,753) = 39.74, p < .001$ ).

### Predicting attitudes

The large boxes in figure 2 identify the strongest predictors of correctional attitudes for COs and non-COs, that is, variables that remained significant



in the multiple regression analyses.<sup>7</sup> While regression equations were statistically significant, the smaller boxes show that the level of explained variance for each equation was relatively modest ranging from 6.7% to 15.1%. Both demographic (for example, age, education) and workplace variables (such as, prison size, security level) were important determinants of correctional attitudes. Specifically, higher education levels, older workers, smaller prisons, and lower security levels were associated with more positive attitudes.

### Work adjustment

COs were compared with non-COs on three measures of work adjustment. Again using the subscale mean as the cutoff, it was found that a significantly greater proportion of COs were dissatisfied with their work  $\chi^2(1, N = 3,791) = 169.97, p < .001$  and less committed to the organization  $\chi^2(1, N = 3,728) = 242.08, p < .001$ . However, they were not more likely to report high levels of job stress  $\chi^2(1, N = 3,756) = 2.35, p = .125$ .

COs were not significantly different from other types of workers in terms of overall job stress. Instead, it was the Case Management Officer (parole officer) group who reported the highest stress levels. Still, COs scored significantly lower on measures of job satisfaction and organizational commitment. On the other hand, managers in the prison system provided a contrast to these findings. They were significantly more committed to the Correctional Service of Canada and generally more satisfied with their job.

### Predicting work adjustment

Multiple stepwise regression analyses predicting job stress, job satisfaction, and organizational commitment were conducted with the same independent variables that were used to predict attitudes towards inmates. However, to explore the contribution of attitudes on work adjustment, empathy, punitiveness, and support for rehabilitation were included as additional predictors. To examine the influence of the correctional environment itself on work outcomes, the prison's overall level of empathy, punitiveness, and support for rehabilitation were also entered into the equation.

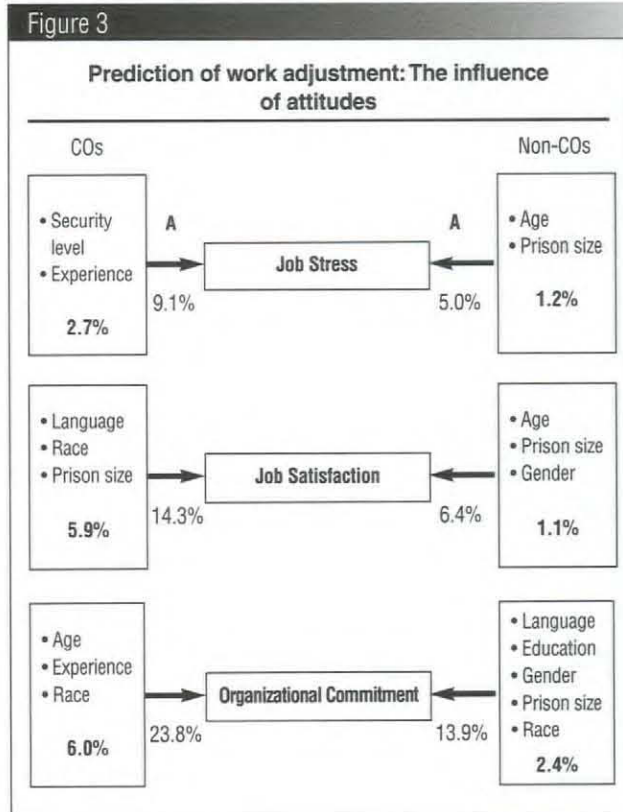
Attitudes towards inmates significantly predicted measures of work adjustment. In fact, these variables were the strongest predictors of stress, satisfaction and commitment among COs and non-COs alike. Interestingly, punitiveness was the strongest determinant of job stress, whereas job satisfaction and organizational commitment were largely explained by an individual's support for rehabilitation.

The importance of attitudes on work adjustment was explored in a second fashion. Multiple stepwise regression analyses were again conducted to predict job stress, job satisfaction, and organizational commitment. This time, the three correctional attitudes of interest were entered separately as a block rather than simultaneously with other traditional predictors.

The capacity of correctional attitudes to predict the variance in work adjustment scores was striking, and far more important than traditional predictors (age, race, gender, education). Among COs, the explained variance in job stress improved from 2.7% to 9.1%. For job satisfaction, the explained variance increased to 14.3% from 5.9% and in terms of organizational commitment the explained variance rose a remarkable 23.8% from only 6.0% when attitude scores were not entered as a block. Similar, albeit smaller effects were found for non-COs. The key message from all of these analyses is that, regardless of an individual's duties, work adjustment seems largely driven by correctional attitudes (see Figure 3).

### Person-institution interactions

The previous sets of analyses showed that individual attitudes towards inmates were important predictors of job stress, job satisfaction, and organizational commitment. However, person-organization fit theory suggests that individual and organizational variables should interact and influence work outcomes in important ways.



Contrary to expectation, no significant interactions were found. The prison's overall level of empathy, punitiveness, and support for rehabilitation did not significantly increase or decrease an individual's adjustment on the job. For example, it mattered little where an empathic CO was employed. Based on the study's analyses, this individual should normally demonstrate lower job stress, higher job satisfaction, and more commitment to the organization. In short, individual attitudes appear to override the institution's collective attitudes, and the interactions of the two, in determining the overall adjustment of COs and non-COs.

## Discussion

Results demonstrated generally negative attitudes among COs. Only 26.2% were assessed as being empathic while only 26.6% could be said to hold non-punitive attitudes. Despite CSC's orientation in this regard, only about half of these participants (52.9%) supported offender rehabilitation.

These findings were disappointing. Researchers have long argued that COs are ideally placed to encourage positive behavioural change and improve the atmosphere of an otherwise impoverished social environment.<sup>8</sup> It is likely that current rehabilitative efforts are being compromised in prison. In a situation where most front-line staff disapproves or doubts the effectiveness of rehabilitation, it is difficult to imagine how offenders can benefit fully from the programs that are currently being offered to them. At the same time, current levels of empathy and punitiveness are likely impeding efforts to improve the social atmosphere of federal prisons.

On the other hand, the work duties of COs are primarily custodial and disciplinary. Cell searches, strip-searches, armed escorts, tower watches, counts, discipline, and general surveillance are core activities for COs and not particularly conducive to positive attitudes or affect. Continuing efforts to expand the role of COs to include reintegration activities could lead to improvements over time. The rise in academic credentials in this occupational group is encouraging especially given the strong link between education and positive attitudes.

In this study, education emerged as a strong predictor of empathy, punitiveness, and support for rehabilitation. This was somewhat surprising considering previous research in the area.<sup>9</sup> Also surprising was that, despite their more positive attitudes, highly educated individuals reported significantly lower job satisfaction. This may suggest that highly qualified individuals might be under-utilized and/or under-compensated by their employer. The organization may need to give special

attention to this group of employees. Despite having the training and correctional orientations most likely to effect positive change in offender behaviour, educated workers do not appear to be drawing much satisfaction from their duties. Given their dissatisfaction and lower commitment, CSC seems at risk of losing a valuable segment of their workforce.

The finding that large institutions predict negative attitudes seems timely given the current movement towards building larger prisons. If in fact an objective of the correctional system is to create an environment that is conducive to positive interactions with inmates and encouraging of rehabilitation, then increasing the size of prisons may not be the best course of action. Instead, prison officials should consider the finding that workers from treatment centers and women's prisons were significantly more positive than respondents from more traditional prisons. Not only are these institutions smaller in size, they also tend to be more focused on programs and effective staff-inmate interactions.

The hypothesis that positive attitudes towards inmates would be associated with better work adjustment was strongly confirmed. The strength of these relationships ranged between  $r = .13$  for empathy and job stress, to  $r = .40$  for support for rehabilitation and organizational commitment. While directionality and causality cannot be inferred here, it is clear that empathic, non-punitive, and pro-rehabilitation workers showed better outcomes than those who were not.

Given their attitudes towards inmates and the corporate value system in place at the Correctional Service of Canada, which conflict with these attitudes, COs were expected to demonstrate poorer work adjustment than employees from other occupational groups. With the exception of job stress, this prediction was supported. COs were significantly less satisfied with their work (64.6% vs. 83.3%) and significantly less committed to the CSC than non-COs (50.3% vs. 75.4%).

It would certainly be unfair to pin lower work adjustment scores solely on poorer correctional attitudes. There are probably several other reasons why COs might feel less satisfied with their job and less committed to their employer than other workers. The fact that Case Management Officers reported higher levels of job stress despite having more positive correctional attitudes suggests that job functions, workload issues and professional development need to be considered in future research.

In a strict sense, correctional systems are mandated to administer court-imposed sentences in a way that optimizes public protection. Traditionally, public protection has been equated with punishment, strict

rule enforcement, rigid management structures, and an emphasis on certain physical infrastructures (for example, fences, towers, and weapons). Recognizing that most inmates return to the community, modern correctional systems have expressed a philosophical shift away from punishment and custody towards treatment and reintegration. This expanded interpretation of public protection is encouraging, especially in light of the accumulated evidence demonstrating the effectiveness of well-designed correctional programs.<sup>9</sup> What is more, empathic, non-punitive, and rehabilitative milieus hold the promise of a healthier correctional environment and perhaps a healthier work environment.

A well-articulated and publicized mission statement at the Correctional Service of Canada suggests that senior administrators have embraced this new corporate orientation; one that genuinely resembles a Human Services Model. Regrettably, adherence to these views decreases as one moves down the organization's hierarchical structure. Among COs, arguably the employees most responsible for creating and maintaining the prison atmosphere, correctional attitudes were predominantly negative. Under these conditions, person-organization fit theory predicts poor work adjustment such as increased job stress, decreased job satisfaction, and lower organizational commitment. The work adjustment data obtained from this large sample of prison employees strongly confirms the prediction.

It was thought that individual attitudes would interact with workplace attitudes to affect job stress, job satisfaction, and organizational commitment. For example, an empathic individual employed in a non-empathic milieu should demonstrate poorer work adjustment. Similarly, a person indifferent to rehabilitation should report decreased work adjustment in a prison where the prevailing sentiment was pro-treatment. These expectations were not supported. Instead, positive correctional attitudes were related to positive work outcomes

regardless of a prison's collective views or prevailing atmosphere. These findings suggest that compatibility with the employer's values is more important than compatibility with the actual work unit (i.e., Person-Workplace fit).

The Correctional Service of Canada's apparent tendency to promote individuals with the "best fit" provides additional support for the theory in question. The study found that unit managers held more positive attitudes than correctional officer II who in turn held more positive attitudes than correctional officer I. It appears that empathy, support for rehabilitation and non-puniteness significantly increases one's chances for promotion. Alternatively, it may be that promotion or the promotional process itself, changes attitudes by providing opportunities to appreciate the importance and value of empathy and treatment. Job competitions at the Correctional Service of Canada often test candidates' understanding of the mission statement, and its accompanying values/principles. Thus, the process of studying for job exams might in and of itself attenuate negative attitudes.

Therein lies an interesting opportunity for the organization to shape particular attitudes among their employees. A reward system that is based more fully on correctional orientations would build a workforce that is better equipped to reintegrate offenders and ultimately protect the public. Added benefits would likely also include enhanced work adjustment and improved prison conditions.

Staff recruitment represents another important venue for shaping the workforce. In addition to academic qualifications, recruiters at the CSC should also assess candidates' attitudes during the hiring process. As Bowen et al. (1991) argued, selecting people with compatible values instead of specific skill sets creates a more flexible workforce. In the present context, it may also create a safer and healthier environment for citizens both inside and outside of penitentiaries. ■

<sup>1</sup> Abstract of Larivière, M. (2001). *Antecedents and outcomes of correctional officer attitudes towards federal inmates: An exploration of person-organization fit*. Unpublished doctoral thesis. Ottawa, ON: Carleton University.

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<sup>4</sup> Jacobs, J. B., and Kraft, L. J. (1978). Integrating the keepers: A comparison of black and white prison guards in Illinois. *Social Problems*, 3, 304-318.

<sup>5</sup> Robinson, D., Porporino, F., and Simourd, L. (1997). The influence of educational attainment on the attitudes and job performance of Correctional Officers. *Crime and Delinquency*, 43(1), 60-77.

<sup>6</sup> Please see thesis for references.

<sup>7</sup> Equations for the multiple stepwise regression equations, excluded variables, correlation matrices, factor analyses and collinearity diagnostics are available from the author.

<sup>8</sup> Hepburn, J. R., and Knepper, P. E. (1993). Correctional Officers as human services workers: the effect on job satisfaction. *Justice Quarterly*, 10(2), 315-335. For other authors, see the thesis.

<sup>9</sup> Crouch, B. M., and Alpert, G. P. (1982). Sex and occupational socialization among prison guards: A longitudinal study. *Criminal Justice and Behavior*, 9(2), 159-176. For other authors, see the thesis.

<sup>10</sup> Gendreau, P., and Ross, R. (1987). Revivication of rehabilitation: Evidence from the 1980s. *Justice Quarterly*, 4, 349-408.

<sup>11</sup> Jurik, N. C., and Musheno, M. C. (1986). The internal crisis of corrections: Professionalization and the work environment. *Justice Quarterly*, 3(4), 457-480.

# The dynamic prediction of criminal recidivism: A three-wave prospective study

Doctoral Thesis, Queen's University<sup>1</sup>

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**T**his study examined the ability of dynamic risk assessment to predict adult criminal recidivism. A three-wave, prospective, research design involving 136 male offenders about to be released from federal institutions in the Ontario region was used. While static measures were assessed only once, prior to release, dynamic measures were assessed on three separate occasions: pre-release, 1 month post-release, and 3 months post-release. As predicted, the study found that the strongest time-dependent dynamic model outperformed the strongest static model in terms of predicting general revocation (81% vs. 85% predictive accuracy). However, the greatest predictive accuracy (89%) was achieved when both static and time-dependent dynamic measures were included.

**A**ssessing an offender's risk to recidivate upon release from prison is one of the most important functions of a correctional organization. Traditionally, assessment protocols have included two types of risk factors: static and dynamic. Static risk factors are constant and unchanging, thus not amenable to treatment (such as, criminal history). In contrast, dynamic risk factors can change, and consequently are amenable to treatment (such as, criminal attitudes, criminal associates, employment, substance abuse).

To date, a considerable body of research has accumulated demonstrating the ability of dynamic risk factors to predict adult criminal recidivism. However, the vast majority of these studies have relied exclusively on "single-wave" research designs that assess dynamic risk factors only once, for example, prior to release. The assessment results are then used to predict criminal recidivism. Dynamic risk prediction studies have rarely been multi-wave in nature, that is, they have rarely examined whether or not recidivism can be successfully predicted from the systematic assessment and re-assessment of dynamic information. Additionally, multi-wave studies that do exist can be characterized by various shortcomings including statistical limitations as well as an over-reliance on retrospective research designs, single-method assessment strategies [for example, the Level of Supervision-Inventory (LSI-R)],<sup>4</sup> small sample sizes, and provincial offender samples.<sup>5</sup>

Interestingly, despite the lack of research in this area, the systematic assessment and reassessment of dynamic risk has been unconditionally accepted as the desired mechanism for improving the manner in which offenders are supervised in the community. Similarly, contemporary treatment programs for sex offenders and more recently, violent offenders, are based largely on the theoretical premise that dynamic variables (such as, mood level, life stressors, high-risk situations) play a significant role in the recidivism process. However, empirical support for this position is weak, based entirely on a scattering of retrospective studies.<sup>6</sup> As a result, the main objective of the study was to advance the theoretical development and practical utility of the assessment and reassessment of dynamic variables. Specifically, it examined whether the assessment and reassessment of prospectively rated dynamic risk measured while an offender is under community supervision can aid parole officers in the day to day management of offenders under community supervision.

## Theoretical framework

The coping-relapse model of criminal recidivism provided the theoretical framework for the study. This theory seeks to explain the resumption or maintenance of criminal behaviour rather than its origins. The model posits that the recidivism process begins with a precipitating environmental trigger. This event can be highly variable ranging from chronic life stressors such as marital discord, job loss, or financial stress to relatively mundane daily hassles such as having to deal with crowded public transportation systems. Once the environmental trigger has occurred, the individual will invoke both a cognitive and emotional appraisal of the situation. Individuals who perceive the situation as threatening or problematic typically experience negative emotions (hostility, anger, fear), an elevated level of perceived global stress (such as, "I have no control over my life") and, lastly, some awareness regarding the severity of the environmental trigger(s). This in turn results in an attempt to deal with the situation, but given that most offenders are ineffective at coping with the original situation it will not be remedied. What follows is a worsening cycle of negative

emotions, maladaptive cognitions, and eventually the resumption of criminal conduct. The model further posits that whether or not an individual will initially experience an environmental trigger(s) or perceive a situation as threatening or problematic is mediated through two subsets of factors: individual influences and available response mechanisms.

Individual influences are relatively stable and include factors such as criminal history and enduring life traits (such as, temperament, emotional reactivity). These factors are indicative of an individual's propensity to react to and interpret situations in a maladaptive manner. One promising measure of this domain is Hare's Psychopathy Checklist-Revised (PCL-R). In contrast, available response mechanisms are more dynamic in nature, albeit not as labile as environmental triggers. They are best conceptualized as slow-changing behaviour patterns that may serve as treatment targets. The available response mechanism subset includes variables such as coping ability, substance abuse, criminal attitudes, criminal associates, social support, and motivation. Lastly, the theory proposes that the process is continuous and interactive such that each response generates a new sequence of events resulting in another precipitating situation, another appraisal, and eventually, another response (see Figure 1).

## Methodology

One hundred and thirty-six male offenders about to be released from minimum-, medium- or maximum-security federal institutions located in Ontario participated in the study. Offenders were selected to participate if they consented to take part; they were scheduled to be released on either parole or statutory release within 45 days of the initial pre-release

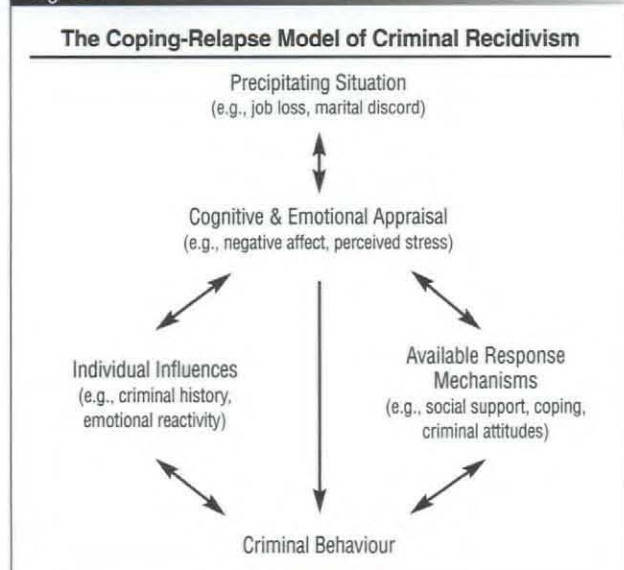
assessment; they understood English; they were neither actively psychotic nor eligible for deportation; and lastly, they would not reach warrant expiry for at least six months from the date of release. This final criterion was necessary to ensure that participants would be relatively easy to contact in the community once released, given that they would be required to report to a parole officer until they reached the end of their sentence.

The medium age of the sample was 33 years. On average, each offender was serving a four-year sentence for a variety of criminal offences including homicide, assault, sexual assault, robbery, drug offences, and property-related crimes. While 54.4% of the sample were released on parole, 45.6% were released on statutory release. Approximately two-thirds of the sample was Caucasian, while the remaining one-third was comprised of Black (15.4%), Asian (4.4%), Aboriginal (4.4%) or classified as Other (7.4%). Two-thirds of the sample was single at the time of release.

Each offender was initially assessed within 45 days of release. This assessment was subsequently followed by up to two additional assessments conducted after the offender was released to the community. The community assessment waves occurred at one and three-month post-release intervals, providing of course that the offender's release had not yet been revoked. Participation in the study was terminated once release had been revoked or the three-month data collection wave had been successfully completed. Unfortunately, community-based data were unavailable for approximately 20% of the participants who withdrew consent after release.

Currently, there is no single reliable and validated measure of the coping relapse model. As a result, a combination of pre-existing and newly developed static and dynamic measures were used to assess the various components of the model. Additionally, the study used a multi-method assessment process that involved interviews, file reviews, and self-report questionnaires. For example, a number of interview and file based measures such as the Problem Survey Checklist,<sup>7</sup> the Perceived Problem Index,<sup>8</sup> the Social Support Scheme,<sup>9</sup> the Coping Situations Questionnaire<sup>10</sup> and the Expected Value of Crime Questionnaire<sup>11</sup> were used to assess criminal associates, social support (number and quality of individual support systems), coping ability (ability to problem solve effectively), employment (positive attitudes towards employment, employment stability), marital stability, accommodations, financial management, leisure activities, health (physical & mental), parole supervision compliance, substance abuse, and expected value of crime. Similarly, a number of self-report questionnaires were used to assess

Figure 1



negative affect (angry, depressed), positive affect (happy, relaxed), perceived stress ("How often have you been able to control irritations in your life?"; "How often have you felt that you were on top of things?"), and criminal self-efficacy (for example, "If someone I knew wanted a score done, they would probably ask for my help").

## Results

Overall, 36.8% of the sample (50/136) was revoked during the follow-up period that ranged from 3 months to 19.2 months ( $M = 10.2$ ,  $SD = 3.9$ ). Approximately, one half of the revocations were for purely technical reasons (e.g., substance abuse violation, curfew violation) while the others were for new criminal charges and/or convictions.

The first phase of the analysis focused on determining whether or not the dynamic measures actually changed for individuals who were not revoked during the study period. The results indicated that these individuals demonstrated a steady decline in employment problems, marital support, financial problems, perceived global stress, perceived problem level, negative affect, criminal association, and substance abuse during the first three months of release. Similarly, successful releases not only demonstrated steady improvements in coping ability and social support but they were also able to generate a greater number of negative, crime-related consequences as the length of time in the community increased.

Unexpectedly, leisure-related problems actually increased during the first three months of release among the successes. At this stage it is difficult to explain this counter-intuitive result. However it is possible that it may simply be a measurement artifact. Prior to release, evidence for leisure problems was coded based on whether or not the offender expected to have leisure-related problems. In the community, evidence for leisure problems was based on whether or not the offender was actually experiencing difficulties in this area. More research is needed to further investigate this finding.

The successful cases also demonstrated an increased awareness regarding the positive consequences of crime (for example, make money) as the length of time in the community increased. This finding is somewhat counterintuitive given that one would expect that the positive consequences of crime would become less and less apparent as the amount of time an individual remains crime-free increases. However, alternatively, it is possible that individuals living a prosocial lifestyle, assumably working in a conventional job earning a conventional salary are acutely aware of the benefits of crime, namely fast and easy money accompanied by less responsibility.

This hypothesis is highly speculative in need of further validation. Lastly, it is important to note that the successful releases did not experience significant changes in accommodation problems, health problems, positive affect, criminal self-efficacy, or supervision compliance during the first three months of release.

The next phase of the analysis focused on identifying factors that distinguished successful releases from failures. Specifically, the relationship between static measures and revocation (with or without an offence) was examined. Similarly, the relationship between changes in dynamic measures and revocation was also explored. Two primary statistical analyses were used to accomplish this objective, Cox Regression Survival Analysis and Receiver Operator Characteristic analysis (ROC). Survival analysis is a statistical technique that estimates the time taken to reach some event (such as, revocation) as well as the rate of occurrence of that event. Cox Regression Survival Analysis is unique in that it allows the researcher to compare a number of variables simultaneously in terms of their ability to predict how long it will take to reach some event (i.e., survival time). It can also readily incorporate information about how variables change over time into the analysis.

A series of individual Cox Regression Survival Analyses demonstrated that all three static measures, the Statistical Information on Recidivism Scale (SIR-R1), the Hare Psychopathy Checklist — Revised (PCL-R) and recent prison misconducts were significantly related to survival time ( $p < .05$ ). Similarly, for most of the dynamic measures that demonstrated significant change, this change was also significantly predictive of survival time ( $p < .05$ ). Individuals who demonstrated improvements in coping ability, social support, and the ability to recognize the negative and positive consequences of crime were significantly less likely to fail than individuals who did not demonstrate similar improvements. Similarly, individuals who evidenced a decline in employment problems, marital support, perceived global stress, perceived problem level, negative affect, and substance abuse were less likely to fail than individuals who did not demonstrate comparable changes. Interestingly, changes in financial matters, leisure activities, and criminal associates were not related to survival time.

Although the majority of the predictor variables were statistically significant, further analyses revealed that only the following variables were particularly robust predictors of survival time: SIR-R1, prison misconducts, employment problems, marital support, negative affect, perceived problem level, substance abuse, social support, and expected positive consequences of crime.

ROC analysis was used to assess how accurate these variables were at predicting revocation. Specifically, three separate models were compared:

- static measures: SIR-R1 and prison misconducts;
- time-dependent dynamic measures: employment problems, marital support, negative affect, perceived problem level, substance abuse, social support and expected positive consequences of crime; and
- static and dynamic measures combined.

Briefly, ROC is an unbiased statistical technique that assesses the ability of a prediction method or person to accurately forecast a particular outcome. The primary statistical index of interest generated from ROC analysis is the Area Under the Curve (AUC). AUC values can range from .50 to 1.00, with higher values representing higher degrees of predictive accuracy. A value of .50 for example, is equivalent to the predictive accuracy that would be associated with tossing a coin: 50% of the time you would be right and 50% of the time you would be wrong. Conversely, an AUC of 1.00 is associated with 100% predictive accuracy.<sup>12</sup> AUC values can also be interpreted as the probability of correctly selecting a recidivist when asked to do so from a pair of individuals: a recidivist and a non-recidivist.

As Table 1 illustrates, each model examined in the present study generated AUCs that exceeded an 80% accuracy rate. While the static model was able to generate an AUC of .81, the dynamic model performed better (AUC = .85), although the difference was not statistically significant. Additionally, given that the confidence intervals overlapped substantially, one could argue that the static and dynamic models performed equally well.<sup>13</sup> However, the performance of the combined static and dynamic model was notably (AUC = .89) better than the static model ( $p < .05$ ). Although once again the confidence intervals overlapped, however, the extent of the overlap was not as extreme as in the previous case.

Table 1

**Receiver Operator Characteristic (ROC) Predictive Accuracy Results: Area under the curve (AUC) and corresponding confidence intervals**

Prediction Model	Area under the curve (AUC)	95% Confidence Intervals
1. Static model	.81	.73 – .88
2. Dynamic model	.85	.77 – .91
3. Static & dynamic model	.89	.81 – .93

Note. Static model = Statistical Information on Recidivism Scale (SIR-R1) & prison misconducts.  
Dynamic model = employment problems, marital instability, negative affect, perceived problem level, substance abuse, social support, expected positive consequences of crime

### Conclusion

To date, state of the art assessment protocols typically generate predictive accuracy rates in the range of 70 to 80%. This study demonstrates that we can improve our current accuracy rates by incorporating information about how dynamic factors change over time. Additionally, the study also underscores the importance of dynamic factors generally targeted within conventional relapse prevention frameworks, variables (e.g., negative affect and perceived problem level) generally not found in standard risk/needs assessment protocols. Furthermore, the study highlights the benefit of not only knowing an offender's weaknesses but also his/her strengths (e.g., social support). Lastly, it is important to emphasize that while the accurate assessment of both static and dynamic factors is necessary to facilitate the safe reintegration of offenders it is not wholly sufficient. Risk assessment must also guide individualized treatment programs and risk management strategies in order to maximize its utility. ■

<sup>1</sup> Extract of Brown, S. *The dynamic prediction of criminal recidivism: A three-wave prospective study*. Doctoral Thesis. Kingston, ON: Queen's University.  
<sup>2</sup> 340 Laurier Avenue West, Ottawa, Ontario, K1A 0P9  
<sup>3</sup> Don Andrews, Carleton University, Ottawa, Ontario.  
<sup>4</sup> Andrews, D. A., and Bonta, J. (1995). *The Level of Service-Inventories (LSI-R)*. Toronto, ON: Multi-Health Systems, Inc.  
<sup>5</sup> For a detailed review of previous multi-wave outcome studies please see *The prediction of adult criminal recidivism: A three-wave prospective research design*. Unpublished doctoral dissertation. Kingston, ON: Queen's University.  
<sup>6</sup> Pithers, W. D., Kashima, K. M., Cumming, G. F., Beal, L. S., and Buell, M. M. (1988). Relapse prevention of sexual aggression. In R. A. Prentky, & V. L. Quinsey (Eds.), *Human sexual aggression: Current perspectives* (pp. 244-260). New York, NY: New York Academy of Science.  
<sup>7</sup> Brown, S. L., and Zamble, E. (1998). *Problem Survey Checklist*. Unpublished Test. Queen's University, Kingston, ON.

<sup>8</sup> Zamble, E. (1998). *Perceived Problem Index*. Unpublished Test. Queen's University, Kingston, ON.  
<sup>9</sup> Brown, S. L., and Zamble, E. (1998). *Social Support Scheme — Version 1*. Unpublished Test. Queen's University, Kingston, ON.  
<sup>10</sup> Zamble, E. (1989). *Coping Situation Questionnaire*. Unpublished Test. Queen's University, Kingston, ON.  
<sup>11</sup> Harris, A. R. (1975). Imprisonment and the expected value of criminal choice. *American Sociological Review*, 40, 71-87.  
<sup>12</sup> AUCs were derived from output generated during the survival analysis. For more information contact the author.  
<sup>13</sup> Confidence intervals represent the range of values that is likely to contain the statistical estimate of interest within a given probability level. For example, if the AUC is .81 and the corresponding 95% confidence interval is .73 – .88 this means that each time we replicated our study using a different sample selected from the same population, 95% of the time our obtained AUC value will range between .73 and .88.

# The utility of Interpersonal Circumplex Theory in research and treatment of sexual offenders

Doctoral Thesis, Queen's University<sup>1</sup>

Dana Anderson<sup>2</sup>

Advisor: W. L. Marshall

Committee Members: Fred Boland, and Lee Fabrigar

Much of the research on sexual offenders has focused on differences between sexual offenders and non-sexual offenders on a variety of psychological variables (such as, empathy, self-esteem, intimacy deficits, and loneliness). Clinicians and researchers have also noted differences between different types of sex offenders (for example, rapists and child molesters) on these variables. Some of these variables may be linked to problematic interpersonal styles of the offenders. The purpose of this study was to examine differences in interpersonal style between different types of sex offenders and non-sexual offenders using Interpersonal Circumplex Theory as the theoretical framework guiding the investigation.

## Interpersonal Circumplex Theory and relevance to sex offenders

Leary<sup>3</sup> summarized extensive work by himself and his colleagues on the Interpersonal Circle. This model depicts a method of classifying interpersonal behaviours in a circular structure where the orthogonal axes represent dimensions of control and affiliation. Each of these dimensions has as its anchors bipolar adjectives descriptive of the extremes of these concepts: the control dimension is characterized by dominance or submission, and the affiliative dimension is characterized by friendliness or hostility. These four interpersonal styles comprise the following quadrants of the Interpersonal Circle: hostile-dominant, hostile-submissive, friendly-dominant, and friendly-submissive.

A vector of the Interpersonal Circle is created by the angle from the origin, and this represents one's interpersonal style. The distance of that vector from the origin is representative of the extent to which that person exhibits that interpersonal style. Therefore, there are different levels along a continuum of interpersonal behaviour which are represented in the model. The more extreme the manifested behaviour, the more rigid the individual is said to be in his or her interpersonal style. Extreme rigidity is associated with severe interpersonal difficulties and psychopathology.<sup>4</sup> For example, an individual may display interpersonal behaviour that is mapped along the vector halfway between dominant and hostile; this behaviour would be classified as "mistrusting."

However, the second, more extreme, level of this behaviour is labelled "suspicious-resentful" and the most extreme level of this behaviour (and hence the level most associated with psychopathological disturbance) is "paranoid-vindictive".<sup>5</sup>

Some research conducted on the maladjusted interpersonal behaviours of sexual offenders suggests that the interpersonal circumplex model may provide a useful framework for integrating existing theories. Sexual offenders have been shown to be less inclined to exhibit empathy than nonoffenders,<sup>6</sup> and difficulties with empathy could be related to problematic interpersonal styles. Moreover, sexual offenders have demonstrated intimacy deficits and present as more lonely than non-offenders or non-violent offenders.<sup>7</sup> Again, these are interpersonal difficulties that can stem from maladaptive interpersonal styles. Because there have been differences in these constructs between different types of sexual offenders,<sup>8</sup> it follows that different types of sexual offenders would also exhibit different interpersonal styles.

## Methodology

The study assessed 148 offenders from a variety of penitentiaries representing all security levels in the Ontario region. They were broken down into the following offender groups based on criminal history: 39 rapists, 42 child molesters, 41 violent (non-sexual) offenders, and 26 general offenders (non-sexual, non-violent). Their average age was 37.42 years (SD = 10.98; range 20-69). Forty-six participants were serving an indefinite sentence (including 14 dangerous offenders). The average sentence length for the remaining 102 men serving definite sentences was 6.43 years. None of the sexual offenders had completed sex offender programming.

The assessment of interpersonal ratings was the Revised Interpersonal Adjectives Scale (IAS-R).<sup>9</sup> This measure is a 64-item, self-report measure of interpersonal traits. The inventory requires respondents to rate themselves according to the descriptive accuracy of each adjective on an 8-point scale, ranging from "Extremely inaccurate" to "Extremely accurate". The scale provides scores for

the participants on each of the following 8 categories of interpersonal style: Assured-Dominant, Gregarious-Extraverted, Warm-Agreeable, Unassuming-Ingenuous, Unassured-Submissive, Aloof-Introverted, Cold-Hearted, and Arrogant-Calculating. In addition, the scoring program for the IAS-R provides interpersonal profiles. For the purpose of the study, the mean responses to each item for each offender group were inputted to obtain the profile for that group of respondents.

## Results

An analysis of variance was computed comparing mean ratings on each octant (or each of 8 interpersonal categories) of the IAS-R for the sex offenders. The differences in mean ratings were statistically significant ( $p < .05$ ) for five of the categories. Rapists rated themselves, on average, significantly higher than child molesters on traits falling into the following categories: Assured-Dominant, Arrogant-Calculating, Cold-Hearted, and Aloof-Introverted; and they rated themselves significantly lower than child molesters on traits describing a Warm-Agreeable interpersonal style. When all offender groups were included in the analyses, significant differences emerged for the following categories: Arrogant-Calculating, Cold-Hearted, and Aloof-Introverted. The rapists had the highest mean scores of all offender groups for each of those three categories.

The interpersonal profiles were computed for each group. Each profile represents a characteristic configuration for that group. The Angular location indicates the interpersonal type category, and the vector length indicates the intensity with which the behaviours are manifested. It is worth noting that the variables, or interpersonal adjectives comprising the circumplex, are distributed continuously, and individuals falling within the same category may differ from each other. For example, the adjective "domineering" falls within the octant of "assured-dominant" but so does the adjective, "self-assured". So the variables within each category go along a continuum and the closer they are to the next category, the more closely associated they would be with those adjectives.

The average profile for the rapists indicates the type described as "cold-hearted". Individuals classified in this sector tend to deny being warm, kind, or sympathetic. In its most problematic form, individuals exhibiting this style have difficulty expressing affection toward others, getting along with others, and forgiving others. In contrast, the profile for the child molesters indicates the type described as "unassured-submissive". Individuals classified in this sector tend to be timid and submissive in social

transactions, lack confidence, and are low in self-esteem. As this style becomes more problematic, such individuals have difficulty making their needs known to others and difficulties with being assertive.

The average profile for the violent offenders indicates the type described as "cold-hearted" (described above), whereas the profile for the non-sexual, non-violent offenders indicates the type described as "warm-agreeable". Individuals in this sector tend to be nurturant, sympathetic, and caring in social transactions. In its problematic form, this interpersonal style is associated with trying too hard to please others, and being too trusting and permissive in dealing with others.

## Discussion

Overall, it has been demonstrated that the interpersonal style of rapists differs from that of child molesters, and the interpersonal style of rapists appears to be similar to that of other violent, non-sexual offenders. Those without offences against people (for example, the general offenders) were more likely to endorse adjectives indicative of a more adaptive interpersonal style. It is worth noting that in studies of personality disorders, the "warm-agreeable" octant was unrelated to any of the personality disorders of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). An interesting point is that the IAS-R is a self-report measure. Therefore, the offenders in this study described themselves this way. This suggests that they do seem to have a conception of their interpersonal style that coincides with a clinician's impression and with other research investigating some of the differences between child molesters and rapists.

Given how each group rates itself, it is important to consider the hypothesis of Interpersonal Circumplex Theory that different interpersonal styles elicit certain interpersonal behaviours in reaction and keep a pattern going. Ideally, to function effectively on an interpersonal level, an individual should have a repertoire of interpersonal behaviours from which he or she chooses to display the most appropriate behaviour for the given situation.<sup>10</sup> An individual who is fixed on a particular interpersonal style must first be able to modify the cluster of behaviours that define the style, so that the interpersonal style becomes less extreme, and then he or she can more easily move out toward another continuum of behaviour. Therefore, one goal of the therapist should be to coax the client's behaviour away from its usual extreme. That is, the therapist cannot be lured into displaying complementary behaviour to the client, which would reinforce the client's already troublesome style.

While some previous researchers and clinicians have suggested certain ideal characteristics of therapists for sex offender groups,<sup>11</sup> these findings suggest a need for flexibility in the interpersonal style of the therapists involved in sex offender treatment. In other words, to effectively deal with clients of various interpersonal styles, this theory suggests that a therapist should be able to exhibit interpersonal behaviour that ranges along both dimensions of control (such as, from dominant to submissive) and affiliation (for example, from hostile to friendly). Although it may sound like a strange, if not unethical, suggestion that a therapist display a style that could be considered hostile, the findings of differences in the maladaptive styles of child molesters and rapists

do suggest that certain interpersonal styles of therapists may be a better "fit" than others with different types of offenders if one goal is to help an offender to modify his behaviour, rather than being baited by his interpersonal style and inadvertently reinforcing it.

In conclusion, Interpersonal Circumplex Theory provides an interesting theoretical framework for investigating the difficulties observed in many of our clients. Furthermore, the theory provides testable hypotheses to conduct such investigations that may not only provide empirical evidence for clinical impressions, but also to provoke us to consider a variety of methods of treating sex offenders. ■

- <sup>1</sup> Abstract from Anderson D. (2001). *The utility of Interpersonal Circumplex Theory in research and treatment of sexual offenders*. Doctoral Thesis. Kingston, ON: Queen's University.
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## Coming up in *FORUM on Corrections Research*

The May 2002 edition of *FORUM* will be dedicated to Health issues.

The September 2002 issue of *FORUM* will focus on Preventative Security.

# Classifying female offenders for effective intervention: Application of the case-based principles of risk and need

Doctoral Comprehensive Paper, Carleton University<sup>1</sup>

Kelley Blanchette<sup>2</sup>

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Committee Members: Peter Fried, Adelle Forth, Bob Hoge, and Connie Kristiansen

The research evidence is conclusive: many types of correctional intervention reduce criminal recidivism. While the "average" correctional treatment results in a 10% reduction in recidivism for treated groups, research has shown that interventions attending to the principles of risk and need yield a much greater average treatment effect, an impressive 30 percent reduction in recidivism for treated groups.<sup>3</sup> In brief, the risk principle stipulates that level of treatment should be matched to the level of risk of the offender, and intensive services should be provided to higher risk offenders, while lower risk offenders fare as well or better with minimal or no intervention. The need principle posits that correctional treatment should target those dynamic attributes of the offender that are related to criminal behaviour (such as criminogenic needs). These case-based principles for offender classification have been developed and are empirically supported by research on male offenders. The current review focuses on the applicability of risk and need principles to women offenders.

## Case-based classification

Although there has recently been increased attention to women offender issues, some argue that still "little is known about the program elements [for women] that promote successful outcomes such as economic and social independence, family reunification, and reduced involvement in the criminal justice system".<sup>4</sup> Perhaps because the overwhelming majority of criminal offenders are male, the services offered to women inmates have traditionally been based on models derived from their male counterparts. Accordingly, past research examining the adequacy of programming to meet the needs of women offenders suggested that treatment for women was either inappropriate or unavailable.

Studies of gender specific correctional interventions are essential because the law in Canada mandates distinctive programming for women offenders. For instance, Section 77 of the *Corrections and Conditional Release Act* (CCRA; 1992) directs that the federal corrections:

a) provide programs designed particularly to address the needs of female offenders; and

b) consult regularly about programs for female offenders with

- (i) appropriate women's groups, and
- (ii) other appropriate persons and groups with expertise on, and experience in working with, female offenders.

This is an arduous task for correctional administrators, as there is still no consensus on *who* are the "appropriate persons and groups with expertise on ... women offenders". Dowden and Andrews<sup>5</sup> have recently presented empirical support for the principles of risk and need in a meta-analysis on treatment for women offenders. Notwithstanding that, some feminist researchers<sup>6</sup> suggest that risk-based classification is inappropriate for women and that women have different treatment needs than men. In brief, this body of literature emphasizes the importance of contextualizing women's participation in crime by examining their "pathways" to criminal offending. In doing so, it is argued that women's *individual* needs can be assessed and treated in a holistic approach. While these authors present compelling philosophical arguments and some anecdotal evidence in support of their position, substantiating empirical data are lacking.

Whether women offenders are classified according to the principles of risk and need or evaluated in terms of their "pathways" to crime, there is consensus on one point: *assessment* is the cornerstone to effective correctional intervention. Offender classification serves several purposes, ranging from security placement, to treatment planning, release decision-making, and supervision standards. Individualized assessment is necessary to establish risk (to safely manage offender populations) and to match women offenders' needs to treatment resources.

## The risk principle

There are two aspects to the *risk principle*. The first asserts that criminal behaviour can be predicted; the second suggests that, to reduce recidivism, level of treatment should be matched to the risk level of the

offender. More specifically, intensive services should be provided to higher risk offenders, while lower risk offenders fare better with minimal or no intervention. As previously mentioned, research has provided strong empirical support for the risk principle.

Notwithstanding the research support, some feminist scholars dispute the applicability of the risk principle to women on several grounds. The most basic criticism is that the concept of risk is "gendered" and "racialized" and should therefore not be applied to minority groups. This argument is predicated on the notion that some factors that predict risk for men are invalid for women. It is further argued that the use of "gender neutral" classification measures results in over-classification of women. Accordingly, Bloom and Covington<sup>7</sup> maintain that "one of the gender dynamics found where sexism is prevalent is that when something is declared "genderless" or "gender-neutral", it is male". While it is clear that, relative to men, women are lower risk in terms of criminal offending, institutional security, reoffending and violent reoffending, there is no empirical evidence to support the over-classification argument. In fact, various studies applying a wide variety of risk assessment measures have shown that these tools consistently classify women at lower levels than their male counterparts.

A second argument regarding the applicability of the risk principle to women revolves around the concept of dynamic risk. Dynamic risk factors can be equated with criminogenic needs. They are a subset of an offender's risk level, and are dynamic characteristics of the offender that, when changed, are associated with changes in the probability of recidivism. While both static and dynamic risk factors are associated with recidivism, it is the dynamic factors that are amenable to treatment. Thus, the primary purpose of assessing dynamic factors is for treatment planning. However, while static factors such as age, race, and criminal history have shown to be strong predictors of recidivism, dynamic factors such as antisocial attitudes, criminal associates, and substance abuse show even stronger predictive accuracy.

Critics of the risk principle suggest that there is "confusion in the literature and in practice between needs and risk";<sup>8</sup> it is further argued that this results in women offenders having their needs re-defined as risk factors. One implication is that women's program needs are neglected because of the (alleged) focus on security and risk. Although critical of risk-based classification for women, some authors suggest that "a number of interconnected *risk* factors" should be considered in treatment for girls, including: family factors, school problems, associating with delinquent peers, and substance abuse.<sup>9</sup> Interestingly, those risk

factors identified by Bloom and Covington are amongst the most commonly cited criminogenic needs that should be prioritized for treatment.<sup>10</sup> Thus, there is consensus between mainstream psychology and the feminist researchers regarding which needs should be addressed in correctional treatment. Despite claims by critics that women's needs are left unmet, women offenders in Canada have access to a wide range of programming opportunities, and the fact that dynamic factors are linked to recidivism provides even greater incentive for correctional agencies to offer services to address those needs.

The final line of opposition to the risk principle comes from the fact that the supporting research is derived, almost without exception, from samples of male offenders. Narrative and meta-analytic reviews supporting the risk principle have either excluded women offender samples, or have failed to disaggregate the data by gender. One exception is a recent meta-analysis by Craig Dowden and Don Andrews.<sup>11</sup> To examine the validity of the risk and need principles for women offenders, the authors included treatment studies that met the following criteria:

- a) the samples were composed predominantly (at least 51%) or entirely of women offenders;
- b) the study included a follow-up period;
- c) the study compared offenders who had received some form of intervention to a control group who did not receive the primary intervention; and
- d) the study included a measure of recidivism (reconviction, rearrest, parole failures).

Dowden and Andrews tested the risk principle by coding studies as treating "high risk" or "low risk" women. Specifically, treatment groups were categorized as high risk if "the majority of those [participants] in the study had penetrated the justice system at the time of the study or had a previous criminal offence".<sup>12</sup> Alternatively, treatment groups comprised of individuals with no criminal history and/or of those who had been diverted from the justice system were coded as low risk.

Results revealed stronger treatment effects in programs targeting higher versus lower risk samples. Specifically, the data (45 effect sizes) generated a 19% reduction in recidivism for high risk groups, and no treatment effect for low risk groups. Moreover, when the authors narrowed the focus to include *exclusively* female treatment studies (24 effect sizes), this effect was even more pronounced, and a 24% reduction in recidivism was observed for the high risk group. The authors concluded that these data support the risk principle for effective intervention with women offenders.

While the study by Dowden and Andrews provides preliminary insight into the applicability of the risk principle for women, some important limitations to their research should be acknowledged. First, in comparison to the research on male offenders, there are relatively fewer studies on women offenders. Analyses by Dowden and Andrews included sixteen studies comprised of entirely female samples. As primary studies continue to accumulate, prospective meta-analytic research will garner larger samples to increase confidence in results.

The second limitation concerns the basic assertion of the risk principle that suggests matching level of service to level of risk of the offender. Dowden and Andrews' meta-analysis does not fully address this issue, as treatment "dosage"/intensity was not reported. Rather, the authors described reductions in recidivism for treated (versus untreated) groups. Moreover, there is a good possibility that "untreated" groups were lower risk at the outset.

Finally, the authors' method of partitioning treatment studies into "high" and "low" risk groups was questionable. Specifically, it can be argued that those with a current or past involvement in the criminal justice system (the high-risk groups) are much more likely to demonstrate reductions in recidivism than their low-risk counterparts because they have higher base rates of offending at the outset. While differential base rates at pretest is endemic to all meta-analytic research; it is particularly salient to the study by Dowden and Andrews because it appears that the "low-risk" groups were, in fact, non-offenders.

It is important to note, however, that classification of women offenders into "high" and "low" risk groups will continue to present more of a challenge than that for male offenders. Essentially this problem relates to the first tenet of the risk principle, which maintains that risk can be predicted. Although there is evidence that criminal history variables accurately predict reoffending for women, the incorporation of such static variables into mathematical prediction paradigms has been less reliable. In particular, most offender risk classification schemas, developed on samples of men, decline in predictive validity when applied to women.

### The need principle

The *need principle* distinguishes between criminogenic and non-criminogenic needs. Criminogenic needs are a subset of an offender's risk level; they are dynamic attributes of the offender that, when changed, are associated with changes in the probability of recidivism. Non-criminogenic needs are also changeable, but changes are not usually associated

with changes in recidivism. Fundamentally, the need principle asserts that in order to reduce recidivism, treatment services should target criminogenic needs.

Promising targets for intervention have been identified as: antisocial attitudes and feelings, antisocial associates, poor self-control, self-management, and/or problem-solving skills, substance abuse problems, lack of education and/or vocation, lack of familial ties or dysfunctional family relationships, and poor use of recreational/leisure time. The general acceptance of these dynamic factors as *criminogenic* is based on a considerable body of research. However, the need principle's applicability to women has been disputed in the correctional literature. Again, the skepticism derives primarily from the fact that the supporting research is based on samples of male offenders.

Regarding women offenders, it is not the need principle per se that has been subject to scrutiny. Rather, the debate is focused on the specific nature of *which* needs are "criminogenic" for this particular group. There is some empirical evidence to suggest that the criminogenic factors associated with male offenders are also relevant to women offenders but their level of importance and the nature of association may differ. Several authors have suggested that women offenders have additional criminogenic needs, though more research is required to confirm the relationship of these variables to recidivism. Dynamic factors that are commonly cited as women-specific criminogenic needs can be generally subsumed in the "personal/emotional" domain, and include low self-esteem, childhood and adulthood personal victimization, and self-injury/attempted suicide.

### Employment/Education

It is well established that offender populations have, on average, less education and fewer marketable skills than the general population. Almost half of inmates in federal facilities (46% of men, 48% of women) have less than grade 10 education; this is true for only 19% of adults in the general population in Canada. Employment problems are also prevalent in inmate populations, and they are more pronounced amongst women than men; about 80% of federally sentenced women are unemployed at the time of admission to a correctional facility. In comparison, only 10% of adults, both men and women, in the general population are unemployed. As such, treatment programs targeting education, vocation, and work programs are considered fundamental to correctional rehabilitation.

There are only a few studies examining the relationship between employment/education needs

and women offender recidivism. Results of these are inconsistent, with correlations between employment/education variables and recidivism ranging from  $-.22$  to  $+.43$ . As such, the results are still equivocal in regards to whether this domain is truly criminogenic for women; clearly more research is warranted.

### *Family*

The family is every individual's first avenue of socialization. Not surprisingly, it has been documented that criminal offenders are over represented amongst those with a history of significant familial disruption. About one third of women inmates are assessed as having considerable problems in this area. Some authors have suggested that family issues are important treatment targets for women offenders in particular. Empirical research has begun to offer some support for this contention, though there are also studies challenging it. Studies correlating marital/family problems to recidivism in women offenders have demonstrated associations ranging from  $-.10$  to  $+.51$ .

### *Associates*

The dynamic factor of antisocial associates is routinely hailed as among the most potent predictors of recidivism, and therefore is recommended as a priority treatment target. Approximately 20% of women inmates are assessed as having significant treatment needs in this area.

Although the majority of the evidence is based on samples of male offenders, research with women offenders has offered consistent results: antisocial/pro-criminal associates represents an important criminogenic need domain for women. Studies examining the association between antisocial associates and criminal recidivism for women have noted correlations between  $+.11$  and  $+.45$ .

### *Attitude*

Antisocial attitudes are also considered amongst the most valuable treatment targets to reduce recidivism in offender populations. Fortunately, ratings of "high need" in the attitude domain are relatively infrequent for women offenders. At the federal level, there is a marked difference in prevalence of antisocial attitudes between men and women (39% versus 7%).

Despite being recognized as one of the most promising treatment targets in correctional populations, there is relatively little research examining the relationship between antisocial attitudes and recidivism in women offenders. Results of prediction studies that provide correlational statistics, range from  $+.10$  to  $+.45$ .

### *Substance abuse*

The relationship between substance abuse and criminal activity is well documented: about two-thirds of offenders experience substance abuse problems to some extent, and about 40% of women offenders are rated as having significant substance abuse problems. Moreover, research shows that there is a consistent positive association between substance abuse and various forms of general and violent criminal activity. However, again, most of this research is based on samples of male offenders. Results of predictive investigations examining the relationship between substance abuse and recidivism for women offenders have demonstrated, for the most part, a significant positive relationship between various measures of substance abuse and recidivism. Correlations range between  $+.07$  and  $+.44$ , with the majority of studies indicating a significant positive association between women's substance abuse and recidivism.

### *Community functioning*

The assessment of an offender's "community functioning" is a composite of constructs that are used to evaluate his or her living situation outside of prison. Measures of community functioning include components such as leisure (such as, hobbies, community activities), accommodation, finance, support (for example, use of social services), deportment (such as, hygiene, self-presentation), and health. Less than 15% of women inmates are assessed as having significant problems in this area.

No published study has examined the association between the composite "community functioning" category and recidivism for women offenders. However, some have examined particular components of the domain in relation to women offender recidivism. Results of studies investigating the relation between community functioning and recidivism for women suggest that the predictive value of subcomponents varies considerably; correlations with new offences range from  $-.03$  (poor health) to  $+.41$  (financial problems).

### *Personal/emotional*

The personal/emotional domain of offender assessment represents an aggregate of needs that cover a broad range of personal attributes that could be targeted for correctional intervention. Need areas that are commonly assessed in this domain include: self-concept, cognitive problems impulsivity, problem solving, empathy), behavioural problems (hostility, assertion, neuroticism), mental ability, and mental health. About 38% of federal women offenders demonstrate considerable needs in this area.

Similar to the variety of constructs assessed under the auspice of "community functioning", the research indicates varying levels of support for the "personal/emotional" domain as a recidivism predictor for offender populations, dependent on the specific need(s) assessed. As with other need areas, there is limited research examining the predictive accuracy of variables within the "personal/emotional" composite using women offender samples. Relevant studies on the impact of treatment-related change for women are even scarcer. It is therefore, at the present time, impossible to draw conclusions regarding the viability of the "personal/emotional" domain as a criminogenic need for women offenders.

## Conclusions

It is noted that this review has perhaps produced more questions than solutions. In brief, the research suggests that the case-based principles of risk and need contribute to the provision of effective services

for women. There are several caveats, however. With respect to risk classification, the research has fallen somewhat short of identifying an empirically validated classification measure that could be applied to both federal and provincial women offenders. More importantly, there is no measure that has been developed specifically for women offenders.

The need principle's applicability to women offenders was supported in the current review. While there is some preliminary evidence that women and men have similar criminogenic needs (e.g., substance abuse, antisocial attitudes, antisocial associates), there is also a good possibility that women have additional criminogenic needs that cluster in the personal/emotional domain (such as self-harming behaviour or self-esteem problems). Thus, in discussing effective assessment for women offenders, it is necessary to consider elements common to evaluations of men, as well as deviations from, and supplements to the standard male model. ■

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<sup>2</sup> 340 Laurier Ave West, Ottawa, Ontario, K1A 0P9.

<sup>3</sup> Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., and Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.

<sup>4</sup> Koons, B. A., Burrow, J. D., Morash, M., and Bynum, T. (1997). Expert and offender perceptions of program elements linked to successful outcomes for incarcerated women. *Crime and Delinquency*, 43(4), 512-532.

<sup>5</sup> Dowden, C., and Andrews, D. A. (1999). What works for female offenders: A meta-analytic review. *Crime and Delinquency*, 45, 438-452.

<sup>6</sup> See the Comprehensive paper for complete list of references.

<sup>7</sup> Bloom B., and Covington, S. (2000). *Gendered Justice: Programming for Women in Correctional Settings*. Paper presented at the Annual Meeting of the American Society of Criminology, San Francisco, CA. (p. 2).

<sup>8</sup> Bloom & Covington, 2000, p. 5.

<sup>9</sup> Bloom & Covington, p. 9.

<sup>10</sup> Andrews & Bonta, 1998.

<sup>11</sup> Dowden & Andrews, 1999.

<sup>12</sup> Dowden & Andrews, 1999, p. 441.

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# Impact of incarceration on the mothering role

Master Thesis, University of Ottawa<sup>1</sup>

Julie J. Fournier<sup>2</sup>

Advisors: Colette Parent, and Sylvie Frigon

Committee Members: Fernando Acosta, Line Beaudesne, and Maria J. Los

**W**omen serving sentences in the federal correctional system pose a particular challenge for the Correctional Service of Canada (CSC). In 1990, a Task Force on Federally Sentenced Women examined the situation of women offenders in an attempt to design a women-centered approach to address the particular needs of women offenders.

**T**his provided the base for ongoing and additional work to be done to better serve this population's specific needs. Other reviews conducted in the early 1990's revealed that approximately two-thirds of this population are mothers, most of who are heading single-parent families. This raises important questions for CSC and for the community regarding the welfare and best interests of these children during the mother's incarceration.

Perhaps a more significant aspect to be considered is the image of a mother serving time. In Canada, federally sentenced men far outnumber federally sentenced women. Women committing crimes are often seen as being "more criminal" than men since the act of committing crime goes against our social views of a woman. This is exacerbated when we consider a mother committing crimes, especially crimes of a violent nature. There exist social values and a certain prestige associated with the status of being a mother. It is this subjective social image of a mother as being a nurturer and a caregiver that makes it easy for the community to question the criminalized woman's capabilities of raising her children, hence, shaping the citizens of tomorrow.

The objective of this qualitative study was to gain a better understanding of the Canadian federally sentenced mothers' experiences while in custody and upon their return to the community, as well as to uncover any changes to their own perceptions of themselves as a "mother" in the social sense.

## Methodology and profile of participants

In-depth one-on-one interviews were conducted with mothers released back to the community. Questions were non-directive in order to allow the participants to recollect their experiences with little restrictions. This technique allowed for a wealth of information to be collected in order to enhance our

awareness of the experiences of mothers who serve Canadian federal sentences. Participants' comments were then compared and analyzed in order to draw similarities and divergences in experiences.

The selection criteria for participation required that the women had custody of children, under the age of 18, prior to serving a federal sentence and that they had been returned to the community for a minimum period of 90 days.

The final sample included eight women residing in Quebec, Ontario and Alberta. Participants had between one and five children whose ages ranged between 2 and 24 years at the time of sentencing, and one woman being pregnant. Crimes for which participants had been convicted included importing illegal drugs, possession of illegal drugs with the intent to traffic, involuntary manslaughter and first-degree murder with sentences ranging from two years to life.

## Anticipating custody

All participants reported that the most emotionally distressing time was the period following their arrest and prior to sentencing. This period was marked by a state of uncertainty, powerlessness and a dawning recognition that they would not be the only ones to suffer the consequences of their actions, but that their children would also be greatly affected.

Making alternate care arrangements in the event of incarceration became a dreaded but necessary task. Family members were the ones most commonly relied upon. Finding an alternate caregiver financially capable of caring for the children was but one component of the decision. The mothers were well aware that the fate of the mother-child relationship would be entirely dependent on the alternate caregiver and therefore, it became necessary to choose a person whose support could be counted on. Unfortunately, this was not always possible. For example, two women reported being aware of family members' plans to permanently remove custody of the children once the mother was sent to the institution. In three other cases, fathers who had not been previously involved in the lives of the children suddenly appeared, wanting temporary custody of the children.

The common trend that characterized this period is the fear of the unknown. Interestingly, no participant reported ever worrying about her own future. All concerns were in relation to the consequences for their innocent children.

### Managing the relationship from inside

All participants in the study maintained contact with their children during the period of incarceration. Three methods were available to them and each had specific rewards and pitfalls.

The most rewarding and yet, disconcerting method of contact available was the visit. Although all mothers expressed having desperately wanted to see their children, they were equally concerned about the possible repercussions of the children being brought inside a penitentiary. The distance between the institution and the location of the children, the quality of the mother's relationship with the caregivers and the reactions of the children during the first visit were all factors determining the frequency of visits. Overall, visits were the preferred method of maintaining contact with the children despite the fact that they were seen as a double-edged sword combining the sheer joy of seeing their children and sadness and guilt associated with having children pay the price along with the mother.

Through the period of incarceration, mothers coped by working on themselves. Many revealed that being in isolation from their family and friends forced them to confront their problems and concentrate on their weaknesses. Interestingly, many women reported finding the isolation unbearable at first given that they were accustomed to living in relation to others. The introspection inherent to the setting and the programs made them evaluate themselves, their actions and their future.

### Resuming the "mothering" role

All participants resided in a halfway house after leaving the institution. Although it was a welcomed change for them, the women began worrying about financial, housing and childcare issues. Having been on their own for so long, they reported beginning to wonder if they were still capable of taking care of their children.

Three participants expressed relatively few troubles resuming their lives with their children. Incidentally, they were the ones with the most solid family support. Others have reported never having known that it would be this difficult. The prominent feelings were incompetence and not belonging. This was exacerbated for the women who ended up living with the alternate caregivers and noticing that their children were turning to the caregivers rather than to them.

Discipline was another problematic issue. There was a loss of parental authority for all participants to the study. In fact, not only was it difficult for the mothers to bring themselves to discipline the children they had missed but, the children themselves often did not consider the mother as being worthy of reprimanding them for a wrongdoing. At the time of the interview, most mothers reported that the situation had improved following some in-depth discussions and in some cases, some counseling.

### Perceptions of motherhood

When asked how they perceived themselves after having lived through a federal sentence, six out of eight participants revealed that they considered themselves to be "good mothers". Although they quickly acknowledged that their perceptions fluctuated through their experience, they now believed that they fully understood what it took to be a good mother to their children.

All mentioned that the isolation allowed them to rectify the problems that were barriers between them and their children. In some cases, this meant reducing or ceasing their drug use. For others, it simply meant that they were now able to recognize what was important and how to be more attentive.

### Conclusion

Mothers who have custody of minor children and who face a federal sentence are confronted with the reality that the consequences of their actions are borne by both themselves and their children. Guilt is overwhelming but many careful plans need to be made to ensure that their children will be cared for adequately in the interim.

Incarceration generally results in a removal of responsibilities by providing a strict routine whereby the individual has very little control. The federal centres for women have managed to reinstate some degree of control. Much work is being done in terms of the mother-infant relationship by allowing qualifying mothers to temporarily keep their infants in the centres. However, more thought needs to be given to ways of enhancing the quality of the relationships between mothers and their children both during the sentence and upon return to the community. Although it can be difficult and time-consuming to implement changes within penitentiaries, perhaps there are ways for the community to get involved in helping families through such situations. ■

<sup>1</sup> Abstract of Fournier, J. J. (2000) *L'expérience des mères justiciables : Leurs perceptions de leur rôle de mère lors de l'incarcération et du retour en communauté*. Master's Thesis, University of Ottawa.

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# An examination of release decisions for sexual offenders: Do biases exist?

Master Thesis, Carleton University<sup>1</sup>

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Committee Members: William Petrusic, Ralph Serin, Tulio Caputo, and Joanna Pozullo

**R**esearch has demonstrated that sex offences are rated as very serious crimes<sup>3</sup> and that sex offenders are judged to be very dangerous<sup>4</sup> as compared to other offenders and offences, including serious violent offences. Furthermore, certain victim, perpetrator and offence variables have been found to be related to attitudes towards sexual offenders,<sup>5</sup> and to the severity of decisions made in the criminal justice system.<sup>6</sup> This study examines the differences between sexual and (non-sexual) violent offenders on release decisions and recidivism following release. The study group of sexual offenders is compared to a group of violent offenders on first release type, and three types of recidivism.

## Background

**R**esearchers have concluded that sex offenders are targets of a disproportionate number of statutes for extra supervision and specialized sentencing.<sup>7</sup> These include sex offender notification laws, specialized sentencing for sexual offenders, and specialized release practices. In Canada, Dangerous Offender legislation allows for the imposition of an indeterminate sentence to offenders considered dangerous. Although the criteria for a Dangerous Offender designation is the commission of a "serious personal injury offence" (such as sexual assault, manslaughter, aggravated assault), a large percentage of dangerous offender (approximately 92%)<sup>8</sup> have committed a sexual offence. More recently, Canadian legislation has allowed for the imposition of a "Long Term Supervision Order" to sexual offenders who are judged to be in need of longer term supervision following release than normally provided. In addition, the application of detention legislation in Canada has tended to target sex offenders for extended time in custody.

In the Canadian federal correctional system, there are generally three options for release from prison: discretionary releases such as parole or day parole, statutory release, or release after the statutory release date following a period of detention. For discretionary releases, institutional parole officers recommend parole or day parole and a final decision is made by the National Parole Board (NPB). In general, offenders are eligible for full parole after they have served

one-third of their sentence, and for day parole, six months prior to full parole eligibility. In the case of statutory release, offenders are automatically released after they have served two-thirds of their sentence, unless the offender is referred for detention. In certain circumstances, offenders may be detained for a period of time after the statutory release date to the end of their sentence if they meet the criteria set out in the *Corrections and Conditional Release Act* (CCRA).<sup>9</sup> Offenders may be detained if (1) they have committed a violent or sexual offence as set out in Schedule I of the Act, that has caused serious harm to the victim(s) or they have committed a serious drug offence (Schedule II), and (2) they have been deemed likely to reoffend with a serious violent, sexual or drug offence before the completion of their sentence. In addition, in special circumstances, offenders may be detained if they are not currently serving a sentence for a serious violent, sexual or drug offence, but if they have been deemed likely to commit an offence causing the death of, or serious harm to another person or a serious drug offence prior to the expiration of the sentence.

Institutional parole officers decide which offenders to refer to the NPB for a detention hearing following a review of the offender's criminal history and institutional behaviour. All offenders who have committed a violent or serious drug offence have their cases reviewed for detention prior to their normal release date. Once a referral has been made, the NPB must decide to detain or release the offender at the statutory release date. If the NPB decides to detain the offender, the Board must review the case every twelve months to determine if the offender can be safely released.

For serious violent offences (Schedule I), serious harm is determined by the existence of a number of factors, as set out in the *Case Management Manual*.<sup>10</sup> However, recent amendments to the detention provisions of the CCRA<sup>11</sup> state that serious harm does not need to be proven where the offence is a sexual offence involving a child victim. The factors defining serious harm include: extent of injury of the victim; the nature of the offence and the circumstances surrounding it, such as use of brutality, excessive

force, viciousness, or deviant sexual behaviour; the use of weapons to harm or threaten; prolonged or repeated abuse or terror; any particular vulnerability of the victim, such as being very young, aged, infirm, helpless, or handicapped. In addition, sexual offences are considered to be more likely to cause severe psychological damage than non-sexual offences.

Research suggests that a large percentage of detained offenders are sexual offenders.<sup>12</sup> However, these offenders are rated as lower risk and recidivate at an equivalent or lower rate than other offenders.<sup>13</sup> Therefore, it appears that sexual offenders are being detained more often than would be expected given their risk to reoffend.

### Current study

The current study compares the release type and rate of recidivism of sexual and non-sexual violent offenders serving federal sentences in 1991.

### Study group: Sexual offenders

Using the Sex Offender Census<sup>14</sup> conducted in 1991, a study group was selected who met the following criteria: men; were serving a sentence for a sexual offence or a sexually-related offence at the time of the census; were serving a determinate; had reached their statutory release date by January 1, 1999 and had a release date prior to March 30, 2000. This group consisted of 1,417 offenders.

### Comparison group: Violent offenders

The comparison group was identified from a pool of offenders in custody on March 31, 1991. Among this pool of offenders, subjects meeting the following criteria were included in the comparison group: men; were serving a sentence in 1991 for a non-sexual violent offence (excluding homicide and robbery); were serving a determinate sentence; were not contained in the sex offender census; had reached their statutory release date by January 1, 1999 and had a release date prior to March 30, 2000. This group contained 1,777 offenders.

### Outcome measures

Two sets of outcome measures were used in this study; *release* and *recidivism*. Release decision is the operationalization of correctional decision-making in the study, and is defined as the first release type granted to offenders after March 1991. The release decision variable has three levels: discretionary release (day parole or full parole), statutory release, and warrant expiry / end of sentence (detention).

Recidivism was measured several ways in this study depending on the analysis used: presence or absence,

first recidivism date, time to recidivism, and number and type of new offences. Three types of recidivism were examined: sexual recidivism, violent non-sexual recidivism and violent recidivism. These types of recidivism are defined below:

*Sexual recidivism*: includes offences classified as sexual offences in the criminal code such as sexual assault (all levels), sexual interference, indecent assault, incest, sexual exploitation, invite sexual touching, etc.

*Violent non-sexual recidivism*: includes all non-sexual violent offences such as assault (all levels), cause bodily harm, overcome resistance, attempt murder, and related person-based offences. In addition to these offences, all homicide (first degree murder, second degree murder, and manslaughter) offences are included. Robbery is not included.

*Violent recidivism*: includes both violent non-sexual and sexual recidivism (see above)

### Results

As can be seen in Table 1, sexual and violent offenders significantly differed on release type ( $\chi^2(2) = 282.87, p < 0.001$ ). Furthermore, the Cramer's Phi coefficient ( $\phi_c = 0.298$ ) indicates that the relationship between offender type and release type is a strong one. In general, violent (non-sexual) offenders were more likely to have a discretionary release or a statutory release while sexual offenders were more likely to be released at warrant expiry after a period of detention. Overall, approximately 30% of the sexual offenders were released at warrant expiry, compared to approximately 8% of the violent offenders, amounting to more than three times as many sexual offenders being released at warrant expiry than violent offenders.

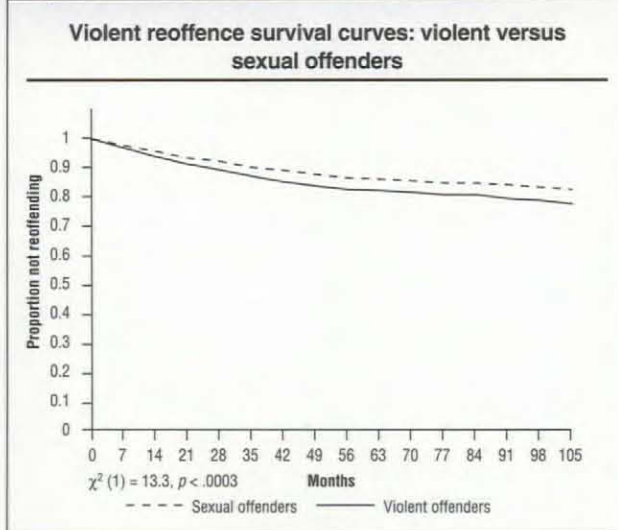
The two groups were then compared on overall violent recidivism in Figure 1. Violent offenders had a significantly higher rate of violent recidivism than

Table 1

Comparison between sexual and violent offenders on release type and percent of sentence served at release				
	Sexual Offenders % (n)	Violent Offenders % (n)	$\chi^2$	Cramer's Phi
Discretionary Release	18.9 (268)	30.0 (533)		
Statutory Release	50.7 (719)	62.2 (1,106)	282.87***	0.298
Warrant Expiry (detention)	30.3 (430)	7.8 (138)		
Number of Cases	1,417	1,777		

\*\*\*  $p < 0.001$

Figure 1



sexual offenders ( $\chi^2 (1) = 13.3, p < .0003$ ). Eight years after release, 79% of violent offenders had survived without committing a new violent offence, while 84% of sexual offenders had survived. The violent recidivism survival curve was quite different between the two groups, with the violent offenders having a steeper curve in the first four to five years. For the violent offenders, there was a 6% rate of recidivating in the first year after release after which the rate declined to 4.5% for the second year, and to between 2% and 3% for years three to five. In comparison, the sexual offenders had a 4% rate of reoffending with a violent offence in the first year, followed by a small decrease to between 2.5% and 3% for the next two years, then between 1% and 2% recidivating per year until the eighth and ninth year, when less than 1% recidivated per year. Therefore, overall, violent

offenders are more likely to reoffend with a violent offence within an extended follow-up period of nine years than were sex offenders, and were particularly more likely to reoffend within the first few years after release.

In addition, significant differences were observed between sexual and violent offenders on violent non-sexual recidivism ( $\chi^2 (1) = 81.88, p < .0001$ ), with approximately 10% fewer violent offenders surviving without committing a new violent non-sexual offence than sexual offenders. At 96 months (8 years), approximately 80% of the violent offenders compared to over 92% of the sexual offenders had not recidivated with a violent non-sexual offence. In terms of sexual reoffending, violent offenders were found to have significantly higher rate of surviving without a new sexual offence than sexual offenders ( $\chi^2 (1) = 108.1, p < .0001$ ). Eighty-nine percent of the sexual offenders compared to 98% of the violent offenders did not have a sexual reoffence 8 years after release.

## Discussion and conclusions

Sexual offenders were found to have more restrictive release types than violent (non-sexual) offenders, with approximately three times as many sexual offenders being released at the end of their sentence, after some period of time detention, as violent offenders. Although sexual offenders had higher rates of sexual reoffending, when considering both violent non-sexual and sexual reoffending (referred to as violent recidivism in this study), sexual offenders had lower rates of reoffending. This suggests that information unrelated to future risk of recidivism is being considered by the decision makers when making decisions about release. ■

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# The impact of traumatic events and post-traumatic stress disorder among correctional nurses

Master Thesis, University of Manitoba<sup>1</sup>

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Committee Members: Wayne D. Corneil,<sup>3</sup> and Brian Cox

**T**his study examined three key issues: Whether or not the Diagnostic and Statistical Manual of Mental Disorders (DSM) definition of the traumatic event (Criterion A) needs to be reconsidered; in particular whether or not the current emphasis on the physical threat component of the event is sufficient to explain the Post-traumatic Stress Disorder (PTSD) symptoms; the potentially unique responses of registered nurses and registered psychiatric nurses (N = 77) working in federal correctional institutions in the Prairie region (Manitoba, Saskatchewan, Alberta); and whether nurses working in correctional settings are at risk for developing PTSD symptomatology. The analyses offered strong support for the inclusion of emotional threat as a causal component of PTSD. Physical threat was found to be a weak predictive variable. Results also found that correctional nurses are frequently exposed to traumatic events and are at risk for developing PTSD symptoms. If the results of this study can be replicated, it would lend support to a redefinition of PTSD's Criterion A conceptualization in DSM-IV.

**W**ith the introduction of PTSD in the third edition of the DSM-III<sup>4</sup> scientific inquiry led to a new level of integration, which sought answers regarding the negative psychological sequel following trauma exposure. PTSD is defined as a debilitating, long-standing, and pervasive disorder, with risks of morbidity, chronicity, physical and psychiatric disturbances, and impairment in interpersonal and occupational functioning following exposure to trauma. This disorder is unique among the classification of disorders because all of the criteria must be present before making a diagnosis, compared to most other diagnoses, whereby no symptom overlap may occur between two cases despite the fact that they both meet the requirement for diagnoses.<sup>5</sup> PTSD's conceptualization includes three phenomenological/symptomatological constituents: Five re-experiencing symptoms, which are intermittent and phasic (for example, recurring intrusive recollections, flashbacks, recurrent distressing dreams), seven symptoms related to avoidance of stimuli combined with a dysphoric numbing to stimulation (such as, loss of interest in social activities or human contact, psychogenic amnesia, avoidance of situations reminiscent of the trauma), and pathognomonic automatic nervous

system arousal (for example, hypervigilance, startle response, sleep disturbances).<sup>6</sup>

Despite the extraordinary growth of the field of trauma studies, understanding of PTSD remains incomplete, in large part due to on-going debates about the salient features of the event. If the required definition of the traumatic event is not met, a PTSD diagnosis cannot be made. According to DSM-IV,<sup>7</sup> the traumatic event criterion includes two components. Criterion A1 stipulates "the person experienced, witnessed, or has been confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others" (p. 427). Criterion A2 states "the person's response involved intense fear, helplessness, or horror" (p. 428). Although both physical and emotional threats are implied in Criteria A, research has focused on the physical threat aspect of the traumatic event with a corresponding neglect for the provision of emotional threat.

There is an increasing awareness that professionals who are regularly exposed to work-related traumatic events are at risk of developing PTSD symptoms. This raises an important issue because if PTSD's classification is robust and the traumatic event is the important feature, which accounts for the development of PTSD symptoms, then, events that are not experienced directly as personal threats should have no clinical impact. Research suggests that emergency personnel are often discouraged from disclosing vulnerabilities to maintain an image of self-control. Given that an invincible approach is encouraged in terms of workplace ethos, these professionals are likely to guard against feeling vulnerable by utilizing varied coping defences, such as minimizing, denying, forgetting about the event, and suppression of affect to regulate the emotional intensity of the traumatic event. It follows, then, that when the traumatic event is perceived as upsetting and suppression of emotions is not possible, emotional states, such as anger and guilt may surface. Preliminary biological findings have important implications for understanding how the suppression of emotions following exposure to traumatic events affects health outcomes. The evidence appears strongest when considering

studies of cortisol levels, a hormone produced to allow the body to prepare for threatening events. Research indicates that individuals who use suppression as a means to cope with serious life events show significantly elevated basal cortisol levels compared to the low cortisol levels found in individuals with PTSD symptoms. This finding may indicate down regulation of cortisol systems in response to threatening events. Further studies in this area are warranted.

## Method

### Subjects

Seventy-seven nurses participated in this study. They included 50 registered nurses and 27 registered psychiatric nurses working in the 13 federal correctional institutions in the Prairie Region. The institutions ranged from minimum, medium, multilevel (minimum and medium), and maximum levels of security. The nurses either belonged to the Professional Institute of the Public Service or were contracted on a casual basis.

### Procedure

Following approval by the Human Ethical Review Committee (University of Manitoba), the employer (Correctional Service of Canada), and the Union (Professional Institute of Public Service), 177 correctional nurses were solicited to participate in this study. Participants were given an informed consent form, a demographic questionnaire, and a series of other questionnaires to complete. Dilman's<sup>8</sup> total design method (TDM) for mail surveys, was adhered to in this study. One week following the initial mailing, a postcard follow-up was sent to all recipients. Three weeks following the initial mailing, a second follow-up was mailed, and a third and final follow-up was mailed six weeks following the initial mailing. Seventy-seven (44%) of the nurses who were contacted responded.

### Measures

An exposure measure was developed for the purpose of this study. This measure consists of 15 items pertaining to traumatic event scenarios. Respondents were asked to indicate which of the events they experienced in the past year, how often they experienced each event, and how many months ago each event occurred. If the event occurred more than once they were asked to choose the most recent event. Respondents were also asked to rate on a 5 point Likert scale from 1 (not at all threatening) to 5 (very threatening) the physical and emotional threat related to the most recent event at the time the event occurred (then) and at present (now). Finally, respondents were directed to indicate which of the

reported events was perceived as the most distressing and why.

The Impact of Event Scale-Revised (IES-R),<sup>9</sup> a 22-item scale, taps into intrusion and avoidance. Respondents were instructed to rate on a 5-point Likert scale from 0 (not at all) to 4 (extremely) how affected they have been by each difficulty during the past month with respect to the most distressing event specified in the exposure measure.

The Brief Symptom Inventory (BSI)<sup>10</sup> includes 53 items. Respondents were instructed to rate how distressing each symptom is on a 5-point Likert scale from 0 (not at all) to 4 (extremely). There are nine scales: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. For each scale the score is derived by averaging the items on that scale. The Global Severity Index gives the over-all average.

The Stress, Stressor, Social Support, and Correctional Orientation Scales (SSSCO)<sup>11</sup> measures two job-related stressors (role problems, potential for physical danger), four types of social support (peer, supervisor, family, community), psychological work stress, and correctional orientation. In the present study, only a random subset of the original items was selected. Cullen et al. reported an internal consistency ranging from .66 to .84 (Cronbach's alpha) for the subscales.

## Results

Of the 177 questionnaires that were mailed out 77 (44%) were returned. Although the response rate was lower than Corneil and Kirwan's response rate among northern registered nurses (63%), it was higher than Powell's<sup>12</sup> among emergency and intensive care nurses (35%). The most frequently reported event was verbal abuse by an inmate (87.8%). Similarly, the most frequently reported distressing event was verbal abuse by an inmate (20.3%), which was associated with feelings of being devalued, reevaluation of life and death, and issues pertaining to fairness. The mean number of occurrences of the most distressing event was 3.34 (SD = 4.85, N = 53). Analyses of variance including means and standard deviations with threat (physical, emotional) and time (then, now) as within-subjects factors and also across the events are presented in Table 1. It was predicted that the frequency of occurrence of a traumatic event in the past year would be positively correlated with both physical and emotional threat. It was found that for the most distressing event, individuals reported more emotional than physical threat and the threat declined over time in a similar fashion for both physical and

emotional threat. Similar results were found when scores were averaged across events. Results shown in Table 1 indicate significant effects of threat,  $F(1.51) = 19.42, p < .001$ , and time,  $F(1.51) = 45.38, p < .001$ , and a non significant interaction effect. When scores were averaged across the events only those events for which a participant gave all four ratings were averaged. Results yielded significant effects of threat,  $F(1.63) = 18.57, p < .001$ , and time,  $F(1.63) = 76.46, p < .001$ , and a non-significant interaction effect. Thus, participants reported more emotional threat than physical threat and contrary to what was expected, previous occurrence of the event in the past year had neither a sensitization nor a toughening effect on subsequent perceptions of threat.

perceived physical threat and affective avoidance. Part correlations between physical threat and PTSD, when controlling for both emotional threat and affective avoidance were non significant, however, correlations between emotional threat and PTSD, when controlling for both physical threat and affective avoidance, were consistently positive and significant.

Additional analysis on the predictive power of work environment on PTSD symptoms was also conducted. Results showed that the number of events reported and work environment was significantly related to PTSD. Thus, both emotional threat and work environment contribute to the prediction of PTSD symptoms, with emotional threat being the strongest predictor. In contrast, the results showed that physical threat adds nothing to the prediction of PTSD symptoms.

Finally, the IES and BSI results of the present study were also compared to those of Corneil and Kirwan's among northern registered nurses. Results shown in Table 2 indicate that the two nursing groups were not significantly different on the IES total score nor on the two sub-scales. According to Horowitz, Wilner, and Alvarez's<sup>13</sup> cut point (IES total > 26), 36.8% of the correctional nurses showed a traumatic stress reaction, which is almost identical to the 36.4% found among northern registered nurses.

Table 1

Physical and Emotional Threat then and now for the Most Distressing Event and Averaged Across Events			
Most Distressing Event	Mean	SD	N
Physical threat then for most distressing event	2.88	1.60	56
Physical threat now for most distressing event	1.80	1.02	54
Emotional threat then for most distressing event	3.67	1.41	58
Emotional threat now for most distressing event	2.39	1.32	57
<b>Across Events</b>			
Physical threat then across events	2.39	0.97	64
Physical threat now across events	1.60	0.80	64
Emotional threat then across events	2.82	1.21	64
Emotional threat now across events	1.97	0.98	64

It was predicted that perceived physical threat of a traumatic event would be negatively correlated with affective avoidance when controlling for perceived emotional threat and that a similar pattern would present between emotional threat and affective avoidance when controlling for physical threat. Part correlations between physical threat and affective avoidance, when controlling for emotional threat were non significant, however, part correlations between emotional threat and affective avoidance, when controlling for physical threat were consistently significant.

It was predicted that perceived physical threat of a traumatic event would be positively correlated with PTSD symptoms, when controlling for both perceived emotional threat and affective avoidance and that emotional threat would also be positively related with PTSD, when controlling for both

Table 2

Scores on the Impact of Events Scale as a Function of Nursing Population					
Item	Correctional Nurses (N = 68) <sup>a</sup>		Northern Nurses <sup>b</sup> (N = 88)		p-value <sup>c</sup>
	M	SD	M	SD	
Intrusion	10.13	7.08	11.86	9.08	ns
Avoidance	8.00	6.82	9.99	8.76	ns
IES Total	18.13	13.07	21.90	17.06	ns

*a* = 68 of the 77 participants completed the IES-R  
*b* = Corneil, W. & Kirwan, S. (1994)  
*c* = Independent samples t-test

BSI scores of correctional nurses were compared to Derogatis and Spencer's non-patient norms and Corneil and Kirwan's sample of northern nurses. Scores of correctional nurses were generally similar to those of northern nurses but significantly higher than those of non-patient norms. The global severity index, however, was lower among correctional nurses compared to northern nurses, which may reflect the greater work and environmental challenges faced by northern nurses.

## Discussion

The present study offers support for the predictive role of emotional threat on the development of PTSD symptoms. It may be that the extent to which traumatic events take on emotional meaning account

for nurses' adaptive and maladaptive responses to traumatic events. At this point, future study exploring the meaning attributed to traumatic events may produce the information required for coming to a decision on this matter. ■

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# Predictors of work stress among correctional officers

Master thesis, Carleton University<sup>1</sup>

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Committee Members: Mary Gick, Charles Gordon, Adelle Forth, and Lise Paquette

As early as the 1960s, researchers and practitioners identified stress as a prominent cause of physical and psychological problems in workers across a variety of occupational categories. It was not until the late 1970s that more attention was devoted to the human service sector. At about the same time, a greater number of studies were focusing on stress experienced by individuals employed in the correctional work environment, in particular, the correctional officer. As some researchers have noted, this focus of attention helped trigger a new research agenda where "...the prison guard was now a worthy, if not fashionable, object of study."<sup>3</sup>

Over the past two decades, studies on the causes of stress among correctional officers have proliferated. Table 1 provides a summary of the empirically supported sources of stress for correctional officers to date. The findings are generally defined within five categories, with the specific causes of stress listed for each. The research indicates that the sources of stress are broad and suggests that stress can be explained quite differently from one individual to the next.

Of the various factors listed in Table 1, dangerousness (for example, threats to personal security) has demonstrated the most research support as a significant stressor for correctional officers. Another area that has gained more recent attention involves what has been described in Table 1 as internal organizational factors. For instance, issues such as career progression,

communication, and decision-making have also shown to be significant causes of stress for correctional officers.

Although it is unequivocal that correctional officers experience stress at work, there have been shortcomings noted in the research literature. For one, the majority of knowledge in this area is based on research that has been conducted on relatively small samples drawn from one or a few worksites. Additionally, most studies examine a limited number of factors and report more descriptive than correlational or predictive results. As well, the limited range of factors and analyses has at times produced inconsistent findings.

## Present Study

In order to address some of the limitations in the research on correctional officer stress, this study examined the influence of 27 separate factors on self-reported work stress among correctional officers. One of the specific strengths of the current study was that almost all of the various factors identified in Table 1 could be tested as possible predictors of stress. Other advantages included having a large sample of correctional officers ( $n = 1,358$ ) across many institutions (46 Federal correctional institutions) as well as the inclusion of a larger number of internal organizational factors.

The data for this study was drawn from a database that was collected through a 1996 survey of Correctional Service of Canada (CSC) staff. The questionnaire included 18 sections and 43 composite scales and was administered to a random selection of CSC staff stratified by work site and occupational groupings. An external consulting firm managed administration of the questionnaires, which were completed voluntarily and anonymously.<sup>4</sup>

In total, 7,157 CSC staff were randomly selected to participate in the survey, and 4,961 completed a questionnaire. This represents a response rate of 69%. Of these, 2,815 correctional officers were randomly selected and 1,358 completed questionnaires. Accordingly, the response rate was 48% — slightly higher than reported for other large, national surveys of correctional officers.

## Results

The average length of time correctional officers had been working for CSC was 12.5 years while the length

Table 1

### Causes of Stress for Correctional Officers — Findings from the Research Literature

External organizational factors	Internal Organizational factors
<ul style="list-style-type: none"><li>• Public's view of correctional officers</li><li>• Level of pay</li></ul>	<ul style="list-style-type: none"><li>• Understaffing</li><li>• Overtime</li><li>• Management support</li><li>• Career progression</li><li>• Communication and decision-making</li><li>• Role conflict and ambiguity</li></ul>
Work environment	Attitudes toward correctional work
<ul style="list-style-type: none"><li>• Dangerousness</li><li>• Inmate interactions</li><li>• Boredom</li><li>• Problems with co-workers</li></ul>	<ul style="list-style-type: none"><li>• Correctional Orientation</li><li>• Job Satisfaction</li></ul>
Demographic factors	
<ul style="list-style-type: none"><li>• Gender</li><li>• Education</li><li>• Correctional experience</li></ul>	

of time working at their present institution was 8.5 years. The smallest percentage of correctional officers (11.3%) were employed in minimum-security institutions, 52.8% in medium-security institutions, and 35.9% in maximum-security institutions. The average age was about 40, most were men (79.1%), and slightly less than half (46.1%) had a college or university degree.

Table 2 shows the scales examined in the study as possible predictors of job stress. These, in addition to the demographic variables of age, gender, education, and years employed were included in the overall analyses. Regression analysis was used to determine the relationship of these variables to job stress. A major benefit of this approach is that all 27 factors could be considered simultaneously in the analysis. It also provided the opportunity to "test" all the factors at the same time to determine which ones were the best predictors of job stress, as shown in Table 3.

Of the 27 factors entered into the regression analysis, a total of 9 were found to be statistically significant predictors of job stress. Table 3 rates the relative importance of each factor (for example, the variance accounted for in the prediction of job stress). Consistent with earlier research, the measure of perceptions of personal security or "dangerousness" was found to be the most important factor in determining sources of job stress. Staff empowerment (such as, changing things at work sites, ability to accomplish work objectives, etc.), a factor identified earlier as receiving more recent attention in the research literature, was also found to be a significant predictor of job stress. Other factors such as the impact of shift work, employment security, and understanding of work procedures were less important yet still significant, followed by career management, gender, years employed, and security level.

Although it is clear that dangerousness is one of the primary causes of job stress, this may be explained by the fact that many of the respondents worked in either medium (52.8%) or maximum (35.9%) security

Table 2

**Scales Examined as Possible Predictors of Job Stress**

External organizational factors	Internal organizational factors
<ul style="list-style-type: none"> <li>• Greater accountability to the public</li> <li>• Public image</li> </ul>	<ul style="list-style-type: none"> <li>• Employment competition process</li> <li>• Organizational communication</li> <li>• Staff empowerment</li> <li>• Quality of supervision</li> <li>• Staff recognition</li> <li>• Fair treatment of employees</li> <li>• Performance appraisal</li> <li>• Career management</li> <li>• Policy orientation</li> <li>• Support for personal job development</li> <li>• Satisfaction with physical environment</li> <li>• Employment security</li> </ul>
Work environment	
<ul style="list-style-type: none"> <li>• Perceptions of personal security</li> <li>• Understanding of work procedures</li> <li>• Impact of shiftwork</li> </ul>	
Attitudes toward correctional work	
<ul style="list-style-type: none"> <li>• Commitment to CSC</li> <li>• Support for CSC objectives</li> <li>• Rehabilitation</li> <li>• Empathy toward offenders</li> <li>• Punitiveness</li> </ul>	

Table 3

**Factors Predictive of Job Stress by Security Level**

Relative Importance	Factor	Variance*
1	Perceptions of Personal Security	0.24
2	Staff Empowerment	0.05
3	Impact of Shiftwork	0.02
4	Employment Security	0.01
5	Understanding of Work Procedures	0.01
6	Career Management	< 0.01
7	Gender	< 0.01
8	Years Working for CSC	< 0.01
9	Security Level	< 0.01

\* Variance refers to the amount of "explaining power" of each factor. It is usually expressed in terms of "variance accounted for" and represents the percentage of job stress explained by each factor. The total variance accounted for by all the factors entered into the regression analysis can range from 0.0 to 1.0, or 0% to 100%.

institutions. Since higher security institutions normally house more dangerous and violent offenders, this may increase the perceptions of dangerousness among correctional officers compared to less secure institutions. Accordingly, it is not surprising that dangerousness is one of the key sources of stress identified by correctional officers.

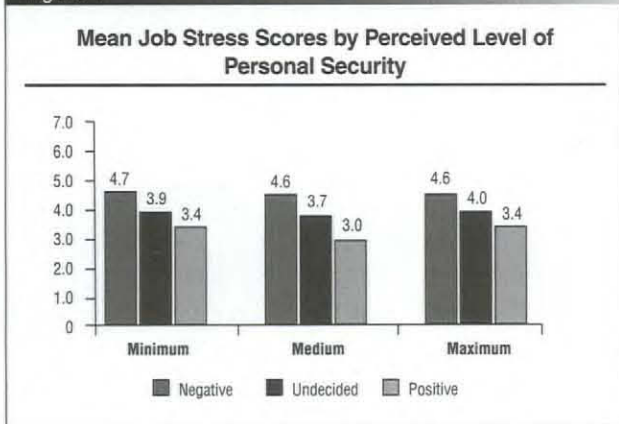
In order to explore the idea that perceived dangerousness may play less of a role in explaining job stress for lower security institutions, more detailed analyses were conducted on correctional officers employed in minimum, medium, and maximum security institutions. To facilitate the analyses, scores on the perceptions of personal security scale were divided into three levels: negative, undecided, and positive. For each perceived level of personal security, mean job stress scores were calculated. Figure 1 shows the results for each security level.

The trends in Figure 1 were the same across the three security levels — mean job stress scores were higher for correctional officers with negative perceptions of personal security (feel they are at high risk of being assaulted) compared to those with more neutral or positive personal security perceptions (feel they are at low risk of being assaulted). These findings suggest that perceptions of dangerousness plays a significant role in job stress, regardless of the security level of the institution.

Given these findings, it may very well be the case that the causes of job stress are similar for correctional officers across the three security levels. To address this hypothesis and examine the influence of all 27 factors on job stress by security level, the regression analyses were repeated on correctional officers employed in minimum-, medium-, and maximum-security institutions. Table 4 shows the results.

The findings from the regression analyses were consistent in terms of the most important factor —

Figure 1



perceptions of personal security were the best predictor of job stress within each security level. Consistent with the results reported earlier, internal organizational factors were identified as the next greatest source of job stress — staff empowerment for correctional officers in minimum- and medium-security institutions and career management for those in maximum-security institutions.

## Discussion

This study provided an opportunity to further investigate the predictors of job stress in correctional officers. Results showed that perceptions of personal security or dangerousness were the best predictor of job stress for the overall sample. This finding is consistent with earlier research that has demonstrated dangerousness as one of the most important determinants of stress among correctional officers.

It was interesting to find that perceptions of personal security were also the best predictor of job stress within each institutional security level. In lower security institutions it was expected that factors other than dangerousness would be more important in explaining job stress. However, the results suggest that perceptions of personal security appears to be just as stress

provoking in a minimum-security environment as working in a more secure and controlled environment. Even though inmates in minimum-security institutions report the lowest likelihood of staff being assaulted,<sup>5</sup> the results are consistent with those found by researchers<sup>6</sup> who have argued that feelings of danger may derive less from actual assaults and more from the realization that officers face the constant and often unpredictable possibility of victimization.

The study also highlighted the growing importance of internal organizational factors as additional predictors of job stress. The findings suggest that such organizational aspects of correctional work play a major role in influencing on-the-job stress. As found with more recent studies, higher levels of stress were reported for correctional officers who felt they were not "empowered" enough to perform their role effectively. The same holds true for those who report impediments in their career progression.

The results are encouraging for correctional decision-makers since the factors identified as major contributors to stress are alterable and amenable to change in management practices. Future research should explore how these factors can be addressed to reduce stress at work, thereby contributing to a more positive work experience for correctional officers. ■

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2 340 Laurier Avenue West, Ottawa, Ontario K1A 0P9

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4 A complete description of the methodology and a copy of the survey questionnaire can be obtained from the author.

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Table 4

Factors Predictive of Job Stress by Security Level

Relative Importance	Minimum-Security			Medium-Security			Maximum-Security		
	Factor	Var.		Factor	Var.		Factor	Var.	
1	Perceptions of personal security	0.22		Perceptions of Personal Security	0.27		Perceptions of Personal Security	0.21	
2	Staff empowerment	0.09		Staff Empowerment	0.05		Career Management	0.07	
3	Employment security	0.04		Employment Security	0.02		Impact of Shift work	0.03	
4	Age	0.03		Understanding of Work Procedures	0.01		Employment Security	0.02	
5	Understanding of work procedures	0.03		Performance Appraisal	< 0.01		Empathy Toward Offenders	0.02	
6	Support for personal job development	0.03		Impact of Shift work	< 0.01		Staff Recognition	0.01	
7	Impact of shift work	0.03					Staff Empowerment	0.01	
8	Public image of CSC	0.02							

# Evaluation of the Living Without Family Violence program

Honours thesis, Carleton University<sup>1</sup>

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Co-Advisor: Lynn Stewart<sup>3</sup>

**T**his study evaluated the Living Without Family Violence program offered to offenders by the Correctional Service of Canada (CSC). Participants (N = 121) completed pre- and post-treatment measures. Research has indicated that short educational programs can significantly alter attitudes justifying the use of intimate violence. Results indicated that significant attitude shifts were made following treatment. Offenders self-reported feeling less anger and reported more pro-feminist attitudes at post-treatment.

**D**uring the last two decades there have been a number of initiatives implemented to protect women from intimate abuse. These have included temporary protection such as battered women's homes to a more long-range plan of providing treatment to abusive men in the hope that they will learn not to be abusive. Many male batterer treatment programs have been implemented in Canada since the late 1970s.<sup>4</sup> Living Without Family Violence is one such program offered to federally sentenced offenders. The present study will examine participants' attitudes toward women prior to program commencement (pre-treatment) and again following completion of the program (post-treatment).

Estimates of intimate partner violence vary greatly, however a recent study in Canada found that 8% of women who were married or living in a common-law relationship during the previous five-year period experienced some type of violence committed by their partner.<sup>5</sup> Men serving sentences in Canadian federal institutions reported significant levels of abuse in intimate relationships. A survey that examined federal offenders at intake indicated that 40% were found to have some file evidence of abuse perpetrated against a partner.<sup>6</sup> Violence in intimate relationships has a damaging and costly impact on the victim, her children and the community. As such, offenders who have been identified as having a history of intimate abuse, or who are thought to be at risk for abusing their intimate partners in the future, should be referred to a program to address this risk.

## The Living Without Family Violence program

Living Without Family Violence<sup>7</sup> (LWV) is a ten-session awareness program delivered to offenders in CSC.

The program targets offenders who have perpetrated intimate abuse or who were found to be at risk for future commission of this form of abuse.

LWV uses a feminist theoretical model to guide treatment. Models of treatment mirror the framework that clinicians see as the causal factors of this type of violence. The feminist model views cultural norms that support and maintain violence against women as a causal agent. This theory explains that the structure of patriarchal societies encourages the adoption of men's sense of entitlement to exert power and control over their families. Therefore, the objective of treatment is to encourage more pro-feminist thinking and debunk any patriarchal sense of entitlement to control, intimidate or abuse their intimate partners.

The goal of LWV is to teach offenders that violence and domination are not acceptable in intimate relationships. The program attempts to make the offenders aware of these issues and change their attitudes supporting the use of violence. By altering attitudes supportive of abuse, it is assumed that the subsequent abusive behaviour will be reduced. The program focuses on areas such as defining family violence and healthy relationships, power and control issues, developing alternatives to abusive control and role expectations.

## Methodology

A sample of 121 offenders who completed the LWV program in either an institution or in the community were included in the evaluation. The mean age was 36.8 years. Participants varied in ethnic origin with 59% being Caucasian, 22% Aboriginal, 14% Black and the rest listed as other or unknown ethnic origins. No comparison or control group was used. To be accepted into the program offenders must either have committed partner abuse or be at risk for being violent in intimate relationships.

LWV was evaluated using four attitudinal and behavioural assessment instruments that were assigned at pre-treatment and again when the program was completed. The instruments were: Attitudes Toward Women Scale (ATWS),<sup>8</sup> Hostility Toward Women Scale (HTWS),<sup>9</sup> Multidimensional

Anger Inventory (MAI),<sup>10</sup> and a revised version of the Conflict Tactics Scale (CTS).<sup>11</sup>

## Material

### *Attitudes Toward Women: Short Form*

This questionnaire assessed the offenders' gender role expectations, and was in Likert format with answers on a four-point scale ranging from "agree strongly" to "disagree strongly". The questionnaire contained statements about the rights and roles of women in such areas as vocational, educational, intellectual activities, dating behaviour and etiquette, sexual behaviour, and marital relationships.

### *Hostility Toward Women Scale*

This scale assessed a respondent's self-reported feelings of hostility toward women, and consisted of 30 true/false questions. This scale does not have discriminant validity in regards to behaviour exclusively examining aggression/hostility toward women but rather predicts general hostility.

### *Multidimensional Anger Inventory*

This questionnaire was designed to simultaneously assess frequency, duration, magnitude, mode of expression, hostile outlook, and range of anger-eliciting situations. Overall, 38 questions addressed anger. The questions were answered with a four-point Likert scale ranging from "completely untrue" to "completely true". Responses produced a total score and five subscales scores, however, only the total anger score was used in this research.

### *Revised Version of Conflict Tactics Scale*

This questionnaire was used to examine the extent of self-reported physical abuse perpetrated by the offender in the previous 12 months. Examples of abuse items include "threatened to hit or throw something," and "pushed, grabbed or shoved".

## Results

For each of the four instruments in the assessment battery, the participants' total score was summed and

a two-tailed, paired-samples t-test was used to compare the pre-treatment and the post-treatment total scores. Results from a pre-treatment post-treatment comparison indicate significant differences in reported pro-feminist attitudes (ATWS). Significant differences were found in self-reported anger levels at post-treatment, as indicated by the MAI. Results from the HTWS and the CTS were not significant (refer to table 1).

## Discussion

The LWFV program was based on a feminist framework that views the abuse of women as the product of a patriarchal society which creates and maintains the domination of women. Treatment based on this premise introduces men to pro-feminist, egalitarian principles, and encourages them to reject patriarchy. By shifting offenders' attitudes to be more consistent with pro-feminist views, it is assumed that it will reduce the risk of them engaging in abusive behaviour. The results indicated that the program was successful in significantly changing attitudes. Program participants adopted more pro-feminist egalitarian views.

Treatment gains were also found in self-reported levels of anger, as reported by the MAI. One of the goals of the LWFV program was to increase participants' awareness of personal patterns such as pre-violence cues and how to express anger and control issues in constructive ways by developing alternatives to violence. A post-treatment reduction in reported anger suggested that the offenders learned ways to control their anger. One of the program sessions focussed on the time-out skills. Offenders are instructed that when they are in a dispute with their partners and get angry, to call a time-out, leave the situation, and discuss the problem once they have calmed down.

Results from the HTWS were not significant. The author of the instrument found the HTWS did not correlate exclusively with aggression against women, suggesting the scale is a general hostility measure rather than a measure of hostility toward women, as the name implies.

Table 1

Assessment Battery Pre-treatment/Post-Treatment Results

	<i>M</i>	<i>N</i>	<i>SD</i>	<i>t</i>	Significance (2-tailed)
ATWS pre-treatment results	81.36	121	8.38	-5.67	0.001
ATWS post-treatment results	85.09	121	9.06		
HTWS pre-treatment results	7.88	121	5.59	1.05	0.30 (ns)
HTWS post-treatment results	7.34	121	4.97		
MAI pre-treatment results	91.88	121	19.50	2.55	0.012
MAI post-treatment results	86.96	121	20.74		
CTS pre-treatment results	3.72	103	4.93	-0.13	0.90 (ns)
CTS post-treatment results	3.81	103	4.76		

The results from CTS were non-significant indicating that offenders reported the same levels of abuse at pre-treatment than they did at post-treatment. However results approached significance, with offenders increasing the reported amount of abuse at post-treatment. The program was delivered over a two-week period and many of the offenders were incarcerated at the time of treatment. These offenders would not have had the opportunity to have been abusive to their partners between pre-treatment and post-treatment. Therefore, this increase is thought to be the result of an increased awareness of abusive behaviours. Offenders were made aware of a range of abusive behaviours during treatment that they perhaps did not consider to have been abusive prior to treatment. At pre-treatment offenders may not have thought some of their behaviours were abusive but learned to recognise them as abusive through the course of treatment.

### Limitations and recommendations

This study examined only changes within the treatment group and did not have a control or comparison group. Without a control/comparison group in place, it is difficult to determine whether the attitude change of program participants is the direct result of participation in the program.

The assessment battery did not include a measure of attitudes specifically toward the abuse of women. Research has found that batterers held attitudes supportive of violence towards women but did not typically hold traditional anti-feminist attitudes towards women and gender roles.<sup>12</sup> The literature suggests that holding patriarchal values, in and of themselves, does not directly lead to violence. It is the man's willingness to reinforce his role as head of the household by his use of violence that leads to abuse of intimate partners.

The assessment battery used to evaluate the program did not contain an assessment of impression management or self deception. Offenders can "fake good" on self-reports measures. Given the measures used in the LWFV were all self-report measure without collateral information, a social desirability index would have been useful to assess various response biases.

The ultimate goal of the LWFV program is to change attitudes in the hope of reducing further intimate violence. A recidivism follow-up study would be able to determine if this goal was achieved. If this recidivism follow-up study were to occur, research would be able to indicate whether the attitudes changed by the program had any result on intimate violence recidivism.

When the LWFV program was developed in 1992, feminist theory was one of the most dominant theories driving treatment interventions for intimate violence. This awareness program was considered an appropriate intervention for low-risk offenders. However, research conducted since this time has found that using cognitive-behavioural based interventions would perhaps be more appropriate to target offenders thinking and behaviour patterns. Cognitive-behavioural programs designed to treat intimate abusers not only inform offenders on the issues of intimate partner violence but they also teach offenders skills to prevent them from falling back into antisocial behaviour patterns and teach them to recognise high-risk situations.

In conclusion, the program was successful in changing the attitudes the program sought to change. That is, there was a significant shift toward more pro-feminist attitudes. As well, the program participants reported feeling less anger at the time of program completion than they reported at pre-treatment. ■

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# Sexual victimization and sexual delinquency: Vampire or Pinocchio syndrome?

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**W**ere you molested when you were a child? This is the unavoidable question faced by all offenders who are accused or convicted of a sex crime. A retrospective analysis of sexual victimization among offenders showed that from 30% to 60% of them — with pedophiles predominant — said yes.<sup>2</sup> But what is the true story?

**S**exual offending is often explained as being the consequence of previous sexual victimization. This perception of “cause and effect” is supported by various writers who believe that the presence of unresolved sexual trauma (deviant sexual experience in early childhood) plays an important role in the development and persistence of deviant sexual behaviour.<sup>3</sup> Some even emphasize that sex crimes are often a reproduction of previously experienced sexual abuse.<sup>4</sup> They call this the “vampire” syndrome.<sup>5</sup> Other researchers question the assumption of a cycle of abuse — that is, the theory of the abused abuser.<sup>6</sup> Some even doubt the accuracy of the reported rate of sexual victimization among sex offenders, and talk about “pseudo-victimization” or “overvictimization”.<sup>7</sup> It would appear that some sex offenders falsely claim that they were victimized as a way of explaining or excusing their own sex crimes. We do not know how widespread this practice is, but an American study of sex offenders showed that after they were told that they would be subject to a polygraph test, the percentage of those claiming sexual victimization dropped from 67% to 29%.<sup>8</sup>

Most studies concerned with sexual victimization and sexual abuse are based solely on self-reporting, and their subjects are people caught in the criminal system. In this context, we are entitled to assume that some of the subjects may magnify and transform any traumatic experiences they may have had in order to adapt them to their present circumstances, and furthermore, that they may invent sexual victimization scenarios in order to reject responsibility for their own crimes. This is an aspect of the “Pinocchio” syndrome.

We recently conducted a study to see whether signs of early victimization could be found in the criminal behaviour of sex offenders who claimed to have been molested in the past.<sup>9</sup> A similar study had already been conducted but with a limited number of variables and subjects. A surprising fact in that previous study was that the majority of the subjects

reported having been sexually abused by a woman and that their victims were also female.<sup>10</sup> In our study, on the contrary, we did not find any link between the sex of the aggressor (victimization context) and that of the victim (offence context). In fact, 85.7% of the subjects reported having been abused by a man and 83.3% had abused women. Moreover, our results showed that the kind of link (immediate or extended family, known or unknown person outside the family) that the subjects had with their abusers (victimization context) did not influence the kind of link that the subjects, as abusers, would seek with their victims. Whether they were sexually abused by their fathers, by members of the extended family, or by a known or unknown person, it is not possible to predict that their victims will fall into the same category. We did find that subjects who had been abused while under 12 years of age were more likely to have abused a similarly prepubescent child. However, not all pedophiles were abused prior to puberty. In fact, our research sample showed that among the subjects who reported having been sexually abused only prior to puberty, only 57.1% molested prepubescent children. In addition, one third (36.5%) of rapists (abusers of women) also reported that they had been abused only before the age of 12. This shows that the age of sexual victimization is not a good predictor of pedophilia. Furthermore, the possibility still remains that some subjects may have falsely claimed sexual abuse to excuse or rationalize their crimes. It may be that sexual abusers who falsely claim to have been abused tend to say this occurred at an age similar to their victims’ simply to add credibility to their statements. We do find the highest rate of sexual victimization among child molesters.<sup>11</sup> Another interesting point is that there was significant correspondence between the number of abusers reported by our subjects and the number of their own victims. Those who reported having been abused by more than one person were those who had the greatest number of victims. This observation reinforces the theory of “overvictimization” or “pseudo-victimization”.

Several studies of sexual victimization show that there are significant differences between sex offenders who were themselves victimized and those who were not. Not only do those who were victimized

display greater sexual deviance than those who were not, but they also come from more troubled family situations.<sup>12</sup>

We conducted another study to see whether sex offenders who reported having been sexually abused in the past (almost 50% of our subjects) showed significant differences from those who reported no victimization.<sup>13</sup> We compared them on the basis of their personal history (behavioural problems, criminal record), their family history, and their sexual development. The results show that subjects who reported sexual victimization also reported victimization in several other areas of their lives. More of them had been exposed to unsuitable models (violence, substance abuse), exhibited behavioural problems before the age of 18 (introversion, social isolation), and committed sex offences (as juveniles and as adults). These subjects also had their first sexual experiences (masturbation, consensual contacts) earlier than the non-victimized, and considered themselves less competent in sexual matters. The results also show that sexual victimization is not the sole influence on personal and sexual development. Exposure to violence, sexual promiscuity or substance abuse during childhood are also important factors — perhaps even more important. The behavioural problems observed in victimized subjects had usually appeared even before they were sexually abused. We also found no significant difference between victimized and non-victimized subjects in an examination of sexual preferences (penile plethysmography). We may therefore ask whether the subject who reports sexual victimization

might not have become sex offenders even if they had not been molested in childhood. And indeed, this does appear to be true of nearly half (49.3%) the subjects in this study.

The results of these studies therefore lead us to question the importance that is placed on the role of sexual victimization in the development of sex-related criminality. Moreover, as previously mentioned, these studies are usually based only on self-reporting. It is therefore possible that some subjects invent sexual victimization scenarios (Pinocchio syndrome) or that they magnify or transform traumatic events in their lives to excuse or justify their crimes. Regardless of whether the sexual abuse did or did not occur, sexual victimization is not the only factor that may have a negative influence on a person's emotional, social and sexual development. The vampire syndrome does not explain the high percentage (about 50%) of individuals who reported that they had not been molested in childhood but who still committed sex crimes. Conversely, many people were molested in childhood or adolescence but never became molesters themselves. It is clear that several other factors may influence the display of deviant sexual behaviour — hence the need for carrying out further comparative studies. These should focus on sex offenders who did not report any sexual victimization and on non-offenders who were abused. It would then be possible to identify other factors — personal, environmental — related to the development and persistence of sex-related criminality. ■

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<sup>2</sup> Hanson, R. K., and Slater, S. (1988). Sexual victimization in the history of child sexual abusers: A review, *Annals of Sex Research*, 1, 485-499. See Romano, E., & De Luca, R. V. (1996). Characteristics of perpetrators with histories of sexual abuse, *International Journal of Offender Therapy and Comparative Criminology*, 40, 147-156. Also see Seghorn, T. K., Prentky, R. A., & Boucher, R. (1987). Childhood sexual abuse in the lives of sexually aggressive offenders, *Journal of the American Academy of Child and Adolescent Psychiatry*, 26, 262-267. Also see Tingle, D., Barnard, G. W., Robbins, L., Newman, G., & Hutchinson, D. (1986). Childhood and adolescent characteristics of pedophiles and rapists, *International Journal of Law and Psychiatry*, 9, 103-116.

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<sup>4</sup> Freeman-Longo, 1986.

<sup>5</sup> Worling, J. R. (1995). Sexual abuse histories of adolescent male sex offenders: Differences on the basis of the age and gender of their victims, *Journal of Abnormal Psychology*, 104(4), 610-613.

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<sup>7</sup> Hilton, N. Z. (1993). Childhood sexual victimization and lack of empathy in child molesters: Explanation or excuse? *International Journal of Offender Therapy and Comparative Criminology*, 37(4), 287-296.

<sup>8</sup> Hindman, J. Research disputes assumptions about child molesters, *NDAA Bulletin*, 7, 1988, 1-3.

<sup>9</sup> St-Yves, M., and Pellerin, B. (1999). Victimization sexuelle et scénario délictuel chez les délinquants sexuels, *Revue Internationale de criminologie et de police technique et scientifique*, 52(2), 179-189.

<sup>10</sup> Romano, E., and De Luca, R. V. "Exploring the relationship between childhood sexual abuse and adult sexual perpetration", *Journal of Family Violence*, 12(1), 1997, 85-98.

<sup>11</sup> Romano, E., and De Luca, R. V. (1996). Also see Hanson, & Slater, 1988 and Seghorn, Prentky, & Boucher, 1987, as well as, Tingle, Barnard, Robbins, Newman and Hutchinson, 1986.

<sup>12</sup> Langevin, Wright, and Handy, 1989.

<sup>13</sup> St-Yves, M., Pellerin, B., and Guay, J.-P. (1999). *Is sexual childhood abuse an etiologic factor in sexual aggressors?* Paper presented at the Annual ATSA Conference, Orlando, FL.

