

————— **Research Report** —————

**Altering Antisocial Attitudes among Federal Male  
Offenders on Release: A Preliminary Analysis of  
the Counter-Point Community Program**

Ce rapport est également disponible en français. This report is also available in French. Pour obtenir des exemplaires supplémentaires, veuillez vous adresser à la Direction de la recherche, Service correctionnel du Canada, 340, avenue Laurier ouest, Ottawa (Ontario) K1A 0P9. Should additional copies be required, they can be obtained from the Research Branch, Correctional Service of Canada, 340 Laurier Ave., West, Ottawa, Ontario, K1A 0P9.

**Altering Antisocial Attitudes among Federal Male Offenders on Release: A Preliminary  
Analysis of the Counter-Point Community Program**

Annie K. Yessine  
Research Branch

and

Daryl G. Kroner  
Pittsburgh Institution

**April 2004**

## **ACKNOWLEDGEMENTS**

This project represented a joint effort by the Reintegration Programs Division and the Research Branch of the Correctional Service of Canada. Its completion would not have been possible without the generous contribution of many individuals. First and foremost, the authors wish to thank Lynn Stewart and Franca Cortoni, whose supportive collaboration has secured all the necessary resources to bring the study to an end. Others within the Correctional Service of Canada have played an important role as well. Particular expressions of gratitude are extended to Phil Chitty and Toni Hemmati, who have competently and skilfully facilitated the data collection process. Finally, our appreciation is extended to Don Andrews of Carleton University for his assistance and comments throughout the realisation of the project.

## Executive Summary

This preliminary study examined the effectiveness of the Counter Point program. Counter-Point is a community-based program for released federal male offenders assessed as presenting a greater likelihood of reoffending. The goal of the program is to reduce reoffending by providing the participants with the skills necessary to develop more prosocial attitudes. To facilitate attitudinal and behavioural change and increase participants' personal responsibility and accountability, Counter-Point is based on a social learning perspective, and applies cognitive-behavioural principles and methods. For example, the program teaches self-monitoring, self-management, perspective-taking and generic problem-solving skills, and features interactive presentation and practice, sequential and structured learning, prosocial modeling, role play, rehearsal, and effective reinforcement and disapproval.

The investigation compared 332 Counter-Point participants to a comparison group of 332 offenders who did not participate in the program. Program participants and comparison offenders were matched on risk of offending and prior participation in other programs. The first goal of the study was to examine whether participation in Counter Point changed antisocial attitudes. The second goal was to determine whether participation in the program was associated with reductions in failure and/or reoffending. Outcome measures included suspensions, revocations, and new offences.

The first set of analyses examined whether participation in the Counter-Point program led to reductions in antisocial attitudes, neutralization, and negative criminal attributions. Findings showed that the program was successful in reducing antisocial attitudes among Counter Point participants. Further, and more importantly, these reductions were significantly associated with reductions in suspensions, revocations, and/or new offences.

Secondly, an average follow-up of 1.4 years revealed that 25% of offenders who completed the Counter-Point program were suspended, 14% were revoked, and 28% committed a new offence. In contrast, 37% of program non-completers were suspended, 35% were revoked, and 48% committed a new offence. For the comparison group, rates of suspension, revocation, and new offence were 37%, 26%, and 45%, respectively. In relative terms, offenders who completed the Counter-Point program had a 32% reduction in suspensions, a 46% reduction in revocations, and a 46% reduction in new offences.

To further compare the Counter Point and comparison groups on these outcome measures, Cox regression analyses were used. This advanced type of statistical analysis ensured that the program and the comparison groups were equated on risk, need for intervention, prior program participation, and time-at-risk in the community. Results showed that, compared to program non-completers and non-participants, offenders who completed Counter-Point program had significant reductions in all three outcomes measures. Statistically, controlling for criminogenic need, risk, and prior program participation, offenders who completed Counter-Point had a 24% reduction in the risk of having been suspended, a 38% reduction in the risk of having been revoked, and a 33% reduction in the risk of having committed a new offence, compared to offenders who failed to complete the intervention or were not exposed in any way to the program content.

Further analyses examined the outcome rates of offenders who started but did not finish the program. In comparison to offenders who either completed or did not participate in the program, program dropouts were 26% more likely to have been suspended, 83% more likely to have been revoked, and 39% more likely to have committed a new offence. These results are consistent with the literature, which regularly finds increased rates of failure in correctional program dropouts. An examination of programming dosage (the amount of programming required to achieve reduced risk) showed that all program sessions had to be completed to achieve lowered rates of suspensions, revocations, and new offences. Partial completion of the program did not result in reduced recidivism.

With regard to race, there was evidence to support that Counter-Point responded equally well to the needs of Aboriginal and non-Aboriginal offenders. Across the racial groups, significant reductions in suspensions, revocations, and new offences were found following program completion. In terms of absolute magnitude, the reductions in outcome rates obtained for program completers were slightly greater for Aboriginal offenders. Finally, results further showed that greater reductions were achieved for higher risk offenders who completed the program compared to lower risk offenders.

Overall, the present study highlights several important points. First, the results demonstrate that the Counter Point program shows promise for altering antisocial attitudes. Second, the results support the risk principle that more intensive intervention should be given to higher risk offenders. Third, the study shows that the program was equally effective in reducing recidivism for Aboriginal offenders. Finally, the poorer outcomes among program dropouts indicate the need for further research to better understand the factors that would improve these offenders' completion of programming. In sum, this preliminary study demonstrates that Counter-Point is an appropriate correctional program for offenders who require intervention for antisocial attitudes while on community supervision.

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS</b> .....	<b>i</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>ii</b>
<b>TABLE OF CONTENTS</b> .....	<b>iv</b>
<b>LIST OF TABLES</b> .....	<b>v</b>
<b>INTRODUCTION</b> .....	<b>1</b>
Purpose .....	3
<b>METHOD</b> .....	<b>4</b>
Participants .....	4
Measures.....	4
<i>Criminal Sentiments Scale - Modified (CSS-M; Shields and Simourd, 1991)</i> .....	4
<i>Pride in Delinquency Scale (PID; Shields and Whitehall, 1991)</i> .....	5
<i>Neutralization Measure - Modified (NM-M; Atkinson, 1998)</i> .....	6
<i>Measure of Criminal Attitudes and Associates (MCAA; Mills and Kroner, 1999)</i> .....	7
<i>Criminal Attribution Inventory (CRAI; Mills and Kroner, 2001)</i> .....	8
<i>Missing Values on Psychometric Tests</i> .....	9
<i>Offender Intake Assessment</i> .....	9
<i>Statistical Information on Recidivism-RI</i> .....	10
<i>Prior Program Participation</i> .....	10
<i>Outcome Measures</i> .....	11
<i>Time-at-Risk</i> .....	11
Procedure.....	11
<b>RESULTS</b> .....	<b>14</b>
Equivalency of the Counter Point and Comparison Groups .....	14
Characteristics of Counter-Point Non-Completers.....	17
The Impact of the Counter Point Program on Antisocial Attitudes .....	18
The Impact of the Counter-Point Program on Recidivism .....	21
<i>Survival Rates of All Counter-Point Participants</i> .....	22
<i>Survival Rates of Counter-Point Completers and Non-Completers</i> .....	23
<i>The Effect of Programming Dosage on Recidivism</i> .....	24
<i>The Impact of the Counter-Point Program on Recidivism across Risk Levels</i> .....	26
<i>The Impact of the Counter-Point Program on Recidivism across Races</i> .....	28
<b>DISCUSSION</b> .....	<b>31</b>
Limitations of Findings .....	32
Implications and Suggestions for Future Research .....	34
Conclusion.....	34
<b>REFERENCES</b> .....	<b>36</b>

## LIST OF TABLES

Table 1: Mean Differences on Age, Risk, Prior Program Participation, and Sentence Length for Program Participants and Comparison Offenders .....	15
Table 2: Racial Composition, Marital Status, and Criminal History for Program Participants and Comparison Offenders.....	15
Table 3: Criminogenic Need Ratings for Program Participants and Comparison Offenders.....	16
Table 4: Reasons for Program Non-Completion .....	17
Table 5: Simple Correlation Coefficients between Recidivism and Both Risk and Prior Program Participation.....	18
Table 6: Paired Sample t-test on the Measures.....	18
Table 7: Mean Recidivism Rates (%) within Program Participation Categories .....	22
Table 8: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Counter-Point Participants and Comparison Offenders, Controlling for Criminogenic Need.....	23
Table 9: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Counter-Point Completers and Non-Completers, Controlling for Criminogenic Need, Risk, and Prior Program Participation .....	24
Table 10: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Sub-groups of Counter-Point Participants, Controlling for Criminogenic Need, Risk and Prior Program Participation .....	25
Table 11: Mean Recidivism Rates (%) within Programming Dosage Categories.....	26
Table 12: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Low, Medium, and High Risk Counter-Point Completers and Non-Completers, Controlling for Criminogenic Need and Prior Program Participation.....	28
Table 13: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Caucasian, Aboriginal, and Other Racial Minority Counter-Point Completers and Non-Completers, Controlling for Criminogenic Need and Prior Program Participation.....	29

## INTRODUCTION

The efficient and effective management of individuals who come into contact with the criminal justice system is a concern for many people. Scholars from various disciplines attempt to understand, predict, and influence the occurrence of criminal behaviour. Amongst other things, this interest has resulted in an increasing body of research concerning the predictors of criminal conduct and the development of appropriate intervention programs, and as such contributed to a reduction in the social costs associated with crime and its processing.

Within the field of criminal psychology and criminology, a substantial emphasis is placed on the attitudes, or more specifically, the antisocial attitudes construct. In the literature, the construct of antisocial attitudes encompasses such things as criminally oriented norms, values and beliefs toward legal institutions and authority, identification with criminal others, rationalizations, justifications or tolerance for law violations, pride in the commission of criminal acts, as well as beliefs in luck, random chance and/or other externally attributable factors (Mylonas and Reckless, 1963; Gendreau, Grant, Leipziger and Collins, 1979; Shields and Simourd, 1991; Agnew, 1994; Shields and Whitehall, 1994; Simourd, 1996; Simourd, 1997; Simourd and Van de Ven, 1999; Mills, Kroner and Forth, 2002; Andrews and Bonta, 1994, 1998, 2003).

Research has repeatedly validated the positive relationship between the antisocial attitudes construct and criminal behaviour (Glueck and Glueck, 1950; Blumenthal, 1973; Andrews and Kandel, 1979; Andrews and Wormith, 1984; Reicher and Emler, 1985; Roy and Wormith, 1985; Hoge, Andrews and Leschied, 1994). Furthermore, not only is antisocial attitudes identified as one of the most important criminogenic risk factors (Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990), but the concept also represents a core component of many of the most influential theories of criminal behaviour<sup>1</sup>. Practically however, despite the fact that the necessity to target antisocial attitudes was acknowledged (Mylonas and Reckless, 1963; Andrews and Wormith, 1984; Wormith, 1984; Simourd, 1996; Simourd and Van de Ven, 1999; Simourd and Olver, 2002), the field was slow to integrate the concept into the development of

---

<sup>1</sup> See for example, the traditional Freudian and other variations of Psychodynamic perspectives, Sutherland's Differential theory (1939), the General Personality and Social Psychological Approach (Andrews and Bonta, 1994), and a variety of class-based sociological perspectives such as Conflict/Marxist and Labeling perspectives, the Anomie/Strain theory (Merton, 1938), and Subcultural perspectives (Cohen, 1955; Cloward and Ohlin, 1960).

appropriate intervention programs for offenders. Many factors, including the lack of suitable psychometric instruments (Shields and Whitehall, 1994; Simourd and Van de Ven, 1999), the lack of agreement over the factors that need to be assessed (Simourd, 1997) as well as the underlying socio-political debate over the different ways in which the criminal justice system should deal with issues surrounding the processing of criminal individuals, could account for this discrepancy. With the recent commitment to, and adoption of, a "What Works" approach on the part of various correctional agencies however, an improved inventory of rehabilitative services was expected to become available to offenders.

Amongst other responses to this evident need in the area of correctional programming, in 1995, the John Howard Society of Ottawa-Carleton developed the Counter-Point program (Graham and Van Diemen, 1999). Consistent with the existing literature on the delivery of effective correctional services, Counter-Point is offered in community settings to male offenders who are at a moderate to high risk of reoffending. Offenders selected for the program have moderate to high needs on the attitudes and associates domains as identified upon admission by the Offender Intake Assessment and Correctional Planning (OIA; Motiuk, 1997) and as evidenced by past and/or current behavioural tendencies.

The primary goal of the Counter-Point program is to reduce reoffending by providing the participants with the skills necessary to identify, challenge, and enhance their willingness to alter antisocial attitudes, and develop more prosocial attitudes. Additional objectives include promoting access to prosocial people and activities, identifying high-risk situations, and developing the necessary resources to prevent future criminal activity. To do so, offenders participate in 25 sessions, which are divided into 3 processes: the intake process, the intervention process and the closure process. Utilizing motivational interviewing techniques, the intake process consists of 3 individual sessions that entail orientation, assessment, and goal setting. The intervention process contains 6 modules that are introduced sequentially over 20 two-hour group sessions, which can be delivered from 1 to 3 times a week. The modules are: Setting the context for change (2 sessions); Identifying support for change (2 sessions); Identifying pro-criminal attitudes, values and beliefs (7 sessions); Altering pro-criminal sentiments (3 sessions); Pro-social problem-solving (2 sessions); and Maintaining Change (4 sessions). Finally, the closure process is comprised of 2 individual sessions, which are used to review the progress report, and together with a Parole Officer (PO), the relapse prevention plan of each participant.

To facilitate attitudinal and behavioural change and increase participants' personal responsibility and accountability, Counter-Point is based on a social learning perspective, and applies cognitive-behavioural principles and methods. For example, the program teaches self-monitoring, self-management, perspective-taking and generic problem-solving skills, and features interactive presentation and practice, sequential and structured learning, prosocial modeling, role play, rehearsal, and effective reinforcement and disapproval. Program integrity is maintained through ongoing process evaluations, and standardized manuals. Furthermore, program entry and participation guidelines are clearly outlined, and Program Delivery Officers (PDOs) have experienced working with correctional clients, have access to clinical support and guidance, and receive training in the principles of effective interventions and standards of professional conduct.

### **Purpose**

The present investigation consisted of a preliminary evaluation of the Counter-Point program. Specifically, this research aimed at examining the effectiveness of the intervention in altering its intermediate targets of change, and subsequently reducing rates of recidivism. It was expected that post-program reductions in antisocial attitudes were going to be observed, and that positive treatment-related change on this specific construct was going to be linked with reduced rates of recidivism. In addition, it was hypothesized that rates of recidivism for Counter-Point participants were going to be lower than for offenders who were not exposed to the program content.

## METHOD

### Participants

The present study was conducted on federal male offenders under community supervision in the five administrative regions operated by the Correctional Service of Canada. A total of 332 Counter-Point program participants and 332 comparison offenders were included in the study. The mean age of Counter-Point participants and offenders in the comparison group was 35.0 (SD=9.3) and 35.6 (SD=10.0) years, respectively. The length of sentence for the treatment and comparison groups averaged, respectively, 4.9 (SD=4.1) and 5.3 (SD=3.8) years. Further group comparisons are detailed in the Results section of the report.

### Measures

Prior to participating in the program, Counter-Point participants were administered a battery of psychometric tests. These tests included the Criminal Sentiments Scale - Modified (CSS-M; Shields & Simourd, 1991), the Pride in Delinquency Scale (PID; Shields and Whitehall, 1991), the Neutralization Measure - Modified (NM-M; Atkinson, 1998), the Measure of Criminal Attitudes and Associates (MCAA; Mills and Kroner, 1999), and the Criminal Attribution Inventory (CRAI; Mills and Kroner, 2001). The order of administration of tests was the same for all participants. Upon completion of the program, the tests were readministered. The interval between pre- and post-testing varied, but for the most part lasted between 2 and 3 months.

#### *Criminal Sentiments Scale - Modified (CSS-M; Shields and Simourd, 1991)*

The Criminal Sentiments Scale - Modified is a modified version of the original Criminal Sentiments Scale (CSS) (Gendreau, Grant, Leipziger, and Collins, 1979). It is a 41-item self-report questionnaire consisting of three dimensions, traditionally used to measure the antisocial attitudes construct. The first sub-scale, Attitudes towards the Law, Courts, Police (ALCP, 25 items), evaluates respect for the law and the criminal justice system. The second sub-scale, Tolerance for Law Violations (TLV, 10 items), explores rationalizations for criminal behaviour, and the third sub-scale, Identification with Criminal Others (ICO, 6 items), assesses participants' opinions of law violators. Respondents are asked to answer, for each of the items, whether they

agree, disagree, or are undecided. Each endorsement of an antisocial statement (or rejection of a prosocial one) yields 2 points, whereas each rejection of an antisocial statement (or acceptance of a prosocial one) yields 0 point. Undecided responses are scored as 1. Therefore, higher scores on each of the sub-scales are indicative of antisocial attitudes.

A number of studies established the validity and reliability of the CSS and CSS-M among adult (Andrews and Wormith, 1984; Andrews, Wormith, and Kiessling, 1985; Roy and Wormith, 1985; Simourd, 1997) and juvenile offenders (Shields and Simourd, 1991; Simourd and Van de Ven, 1999). Mills and Kroner (1997) however found the CSS to be unrelated to reconvictions and parole violations among a sample of violent offenders. Furthermore, a component analysis of the original version of the instrument among a sample of violent and sexual offenders did not find the factors to be associated with recidivism (Kroner and Mills, 1998). In spite of these findings, a recent study exploring the underlying dimensions of the antisocial attitudes construct demonstrated the CSS-M factors (i. e., two from the LCP, and one each from the TLV and ICO sub-scales) to be linked to criminal conduct outcome criteria (Simourd and Olver, 2002). The reliability of the scale was maintained in the present study. Not surprisingly, higher coefficient alpha results were obtained on the sub-scales comprised of a greater number of items. Pre- and post-internal consistency results were  $\alpha = .88$  and  $\alpha = .89$  on the ALCP sub-scale,  $\alpha = .75$  and  $\alpha = .76$  on the TLV sub-scale, and  $\alpha = .49$  and  $\alpha = .57$  on the ICO sub-scale.

### ***Pride in Delinquency Scale (PID; Shields and Whitehall, 1991)***

The Pride in Delinquency Scale is a brief 10-item self-report instrument developed as an extension to the CSS. The measure was designed to assess the degree of comfort that respondents would experience if they were to engage in 10 different criminal activities. Responses are rated on a Likert-type scale ranging from -10 to +10. Negative numbers indicate shame while positive numbers reflect pride in the commission of the act. A score of 0 indicates an undecided response. Scores are summed up and added to a constant of 100 to ensure a positive total. Higher scores therefore reflect increasing antisocial attitudes.

Research among young (Shields and Whitehall, 1991) and adult offenders (Simourd, 1997) indicated that the Pride in Delinquency scale possessed acceptable psychometric properties, and was a reliable and valid measure of antisocial attitudes. Simourd and Van de Ven (1999) further demonstrated that the PDI was significantly related to criminal behaviour and

could predict recidivism, mostly among non-violent offenders. In the current study, the internal consistency of the scale was high. At pre- and post-test respectively, Cronbach's coefficient alphas were  $\alpha = .89$  and  $\alpha = .90$ .

### ***Neutralization Measure - Modified (NM-M; Atkinson, 1998)***

The Neutralization Measure - Modified assesses the extent to which offenders use neutralization or justifications for their criminal behaviours. This neutralization scale is based on Atkinson's Neutralization Measure (Atkinson, 1998), which in turn was derived from Shield's Neutralization Scale (Shields and Whitehall, 1994). Respondents are asked to read 5 crime scenarios and assign the sentence that they think the offender in the scenario deserves. They are then asked to assign a sentence to this same offender under 8 different conditions (i. e., 7 neutralizing statements and one designed as a validity check) under which the crime could have been committed.

To improve on the validity and reliability of the measure, scores are computed in two ways (Atkinson, 1998). First, items that cause any reduction at all in sentence are assigned a score of 1 (i. e., indicating the presence of neutralization) and those that stay the same or increase are scored as 0 (i. e., indicating the absence of neutralization). Second, each sentence is expressed as a proportion of the original sentence assigned ranging from 0 to 1. A score of 1 reflects no use of neutralization, and the closer to 0 the score is, the higher is the amount of neutralization used. The first method therefore assesses the frequency (i. e., the number of items neutralized out of the total), whereas the second method evaluates the overall magnitude (i. e., the amount by which the sentence is reduced), of neutralization. Higher scores on the method of computing the scale that assesses the frequency of neutralization, but lower scores on the magnitude component, are indicative of an increasing use of neutralization.

Although evidence for the psychometric properties of the original and revised measures of neutralization is limited, Shields and Whitehall (1994) demonstrated that the instrument was reliable, valid, and sensitive to differences between delinquents and nondelinquents. Research among adult offenders (Atkinson, 1998) further established the superior psychometric properties of the revised version (i. e., Neutralization Measure - Modified) of Shields and Whitehall's (1991) Neutralization Scale, which also computes the total scale score using the magnitude

method. In this study, both the frequency and magnitude approaches of computing the scale showed high reliability. Pre/post coefficient alpha results ranged from  $\alpha = .88$  to  $\alpha = .92$ .

### ***Measure of Criminal Attitudes and Associates (MCAA; Mills and Kroner, 1999)***

The Measure of Criminal Attitudes and Associates is comprised of two major components (i. e., Part A and Part B), each utilizing distinct scoring procedures. To provide a quantifiable measure of criminal associates (i. e., the Criminal Friend Index), Part A asks each respondent to identify the four adults they spend the most free time with, how much time they spend with them, and whether or not these individuals have some characteristics exemplifying criminal lifestyles. The calculation of the index is performed by adding the number of “Yes” responses to the characteristics for each of the friends identified, multiplying that value by the value associated with the time spent (i. e., 1 = less than 25%, 2 = 25%-50%, 3 = 50%-75%, and 4 = 75%-100%), and subsequently adding the values for the four friends together. Overall scores for the Criminal Friend Index (CFI) therefore range from 0 to 64, with higher scores reflecting an increased involvement with criminal associates.

In contrast, Part B is a 46-item assessment of attitudes consisting of four sub-scales. The first sub-scale, Violence (12 items), measures tolerance toward, and attitudes supportive of, violence. The second sub-scale, Entitlement (12 items), evaluates attitudes focusing on a right to take whatever is believed to be deserved. Finally, the third sub-scale, Antisocial Intent (12 items), reflects beliefs concerning probable prospective commissions of antisocial acts, while the fourth sub-scale, Associates (10 items), provides an indication of attitudes favourable to having antisocial friends. Participants respond to a dichotomous choice of agree/disagree. Each endorsement of an antisocial statement (or rejection of a prosocial one) receives 1 point, whereas each rejection of an antisocial statement (or acceptance of a prosocial one) yields 0 point. For each sub-scale, scores are added up so that higher scores are reflective of increasing antisocial attitudes.

Recent studies conducted among both Canadian federal offenders (Mills, Kroner, and Forth, 2002) and university students (Mills and Kroner, 1999) demonstrated that the MCAA possessed acceptable reliability as well as convergent, discriminant and criterion validity. These results were consistent with previous research (Mills, 2000), which suggested that the measure was a valid and reliable instrument of antisocial attitudes. In this study, internal consistency

analyses provided further evidence for the reliability of the MCAA. Pre- and post-coefficient alpha results ranged from  $\alpha = .60$  on the Entitlement sub-scale to  $\alpha = .89$  on the total scale score for Part B.

### ***Criminal Attribution Inventory (CRAI; Mills and Kroner, 2001)***

The CRAI is a self-report measure that was developed to provide assessments of criminal blame. The instrument is comprised of six sub-scales, each composed of 10 items, developed under the internal/external framework of attribution of responsibility. The internal dimension includes the Psychopathology and Personality sub-scales, whereas the external blame domain is comprised of the Alcohol, Victim, and Societal sub-scales. The sixth sub-scale, Random, refers to crime occurring because of chance, thereby discounting the gravity of the acts. The Random sub-scale is idiosyncratic as it does not preclude the presence of internal or external factors.

In addition to the above sub-scales, the CRAI produces two indexes, each deriving two scores (Kroner & Mills, 2003). On the one hand, the Major Treatment Outcome Index (i. e., using post-assessment items only) together with the Major Treatment Gain Index (i. e., using pre/post raw gains) are used to predict new criminal charges. On the other hand, the Minor Treatment Outcome Index (i. e., using post-assessment items only) in conjunction with the Minor Treatment Gain Index (i. e., using pre/post raw gains) are used in the prediction of supervision rule violations. For each statement, respondents are asked to answer whether they agree or disagree. Each index/sub-scale contains both positively-keyed and negatively-keyed items. The scoring of the CRAI is accomplished by first reversing negatively-keyed items, and simply summing up the number of “agrees” (i. e., each worth 1 point) on the respective measures.

Research conducted among both offender and student samples showed that the different sub-scales comprising the CRAI generally had reasonable internal consistency and test-retest reliability (Mills and Kroner, 2001). When administered prior to, and upon completion of, treatment programs targeted at either sex or violent offenders, evidence of dynamic validity was also provided, but consistently only for the Victim and the Alcohol sub-scales (Mills and Kroner, 2001). In the present study, coefficient alpha results on the sub-scales at pre- and post-assessment ranged from  $\alpha = .50$  to  $\alpha = .72$ , suggesting acceptable internal reliability.

### ***Missing Values on Psychometric Tests***

Missing values were replaced with the median response from all participants for that missing item. However, with one exception, if a participant had more than 10% missing data on a sub-scale, his sub-scale was removed from the study. The one exception was the Identification with Criminal Others (ICO) sub-scale of the CSS-M. The ICO contains only 6 items. As a result, this sub-scale was excluded if it contained 3 or more missing items.

### ***Offender Intake Assessment***

The Offender Intake Assessment and Correctional Planning (OIA; Motiuk, 1997; Standard Operating Practice 700-04, Annex 700-04B) is a comprehensive and integrated evaluation of offenders that has been used by the Correctional Service of Canada since 1994. It examines a broad range of factors pertaining to offenders at their time of admission. As such, the OIA serves as the fundamental basis for determining offenders' institutional placement and correctional plan. One of the two components of the OIA, the Static Factors Assessment (SFA), provides comprehensive information pertaining to the criminal history record of each offender, including details on past and current criminal offences. The SFA also provides the level of intervention based on static factors (i. e., low, medium, or high) assigned to offenders at their time of admission. The second component of the OIA, the Dynamic Factors Identification and Analysis (DFIA), assesses a wide variety of contributing dynamic factors grouped into seven domains, with each domain consisting of multiple indicators. They include associates/social interaction (11 indicators), attitudes (24 indicators), community functioning (21 indicators), employment (35 indicators), marital/family (31 indicators), personal/emotional (46 indicators), and substance abuse (29 indicators). Following careful consideration of several sources of information, parole officers assess offenders using a 4-point scale ranging from "factor seen as an asset to community adjustment" to "considerable need for improvement". In the present study, this 4-point scale was dichotomized. More specifically, ratings of "factor seen as an asset to community adjustment" and "no need for improvement" were not considered problematic whereas ratings of "some need for improvement" and "significant need for improvement" were considered as a problem area for offenders.

### ***Statistical Information on Recidivism-R1***

The general recidivism instrument used by the Correctional Service of Canada (CSC) and the National Parole Board (NPB) is the Statistical Information on Recidivism-R1 (SIR-R1) Scale (Nafekh & Motiuk, 2002). This empirically derived risk assessment instrument is a revised version of the earliest General Statistical Index for Recidivism (Nuffield, 1982) that was originally developed based on a large sample of federally incarcerated offenders in Canada. Extensive criminal and demographic information was obtained on each offender, and analyzed in relation to recidivism. Variables that were found to best predict post-release rates of recidivism were selected to form the scale. These items, which are largely static in nature, produced a 15-item checklist with a range of scores from -27 (i. e., high risk) to +30 (i. e., low risk). In addition to raw risk scores, a grading system for quantifying offenders' risk level was devised. More precisely, offenders are allocated to a level of risk on a 5-point scale: "Very good" (i. e., least likely to recidivate) (+6 to +27), "Good" (+1 to +5), "Fair" (-4 to 0), "Poor" (-8 to -5), and "Very Poor" (i. e., most likely to recidivate) (-30 to -9). In addition to the original study (Nuffield, 1982), several subsequent research undertakings validated the predictive validity of the instrument and demonstrated the stability of the classification system (i. e., recidivism rates by risk level) over time (Hann and Harman, 1989; Wormith and Goldstone, 1984; Bonta, Harman, Hann and Cormier, 1996).

Offenders are administered the SIR-R1 Scale by parole officers upon admission to the federal correctional system. As CSC's policy does not mandate the application of the SIR-R1 to Aboriginal offenders (Standard Operating Practice 700-04), the risk level for the majority of Aboriginal offenders in the present study was determined using the results of the Static Factors Assessment (SFA) of the Offender Intake Assessment and Correctional Planning (OIA). Offenders for whom SIR-R1 scores were available were matched on risk level using their raw scores on the instrument.

### ***Prior Program Participation***

Previous research suggested that treatment is a cumulative process, and as such, that recidivism is reduced with each prior episode of treatment (Merrill, Alterman, Cacciola and Rutherford, 1999). Prior program participation was defined as the actual sum of the number of successful completion of any of the core programs offered by the Correctional Service of

Canada. These core programs include the Cognitive Skills program, the Anger and Other Emotions Management program, the Violence Prevention program, as well as any intensity of the Substance Abuse, Sex Offender, or Family Violence Prevention programs. To control for the potential impact of prior program completion on success upon release in the community, program participants and comparison offenders were matched on overall prior program participation.

### ***Outcome Measures***

In this study, outcomes measures consisted of the presence of any suspension, revocation, and/or new offence (i. e., 1 = failure; 0 = success). As opposed to new offences, suspensions could occur prior to violations or due to noncompliance with conditions of release, or if the offender was judged unmanageable or at risk to reoffend. The decision to suspend an offender could be made by the supervising Parole Officer, the community manager, or the National Parole Board. As a result of a suspension, the offender was usually arrested and placed in a local jail for an interview and further assessment. After reviewing the case, a decision to cancel the suspension and release the offender back into the community, or revoke the offender's release was made.

### ***Time-at-Risk***

For the purpose of the present investigation, time-at-risk in the community was defined as the number of days an offender was in the community. Time-at-risk began at the program start date for Counter-Point participants, and at release for offenders selected for the comparison group. In the current study, days the offender spent in federal and/or provincial custody due to a suspension, an arrest, or a hold prior to a court appearance were not counted in the time-at-risk period. A revocation or the commission of a new offence automatically terminated the calculation of time-at-risk. The overall time-at-risk, identical for both the Counter Point program participants and the comparison group, was 1.4 years ( $\underline{M}$  [days] = 513; range = 453 to 581).

### **Procedure**

The present investigation compared male federal offenders who participated in the Counter-Point program with a matched comparison group of untreated offenders. The initial sample consisted of all offenders who attended the Counter-Point program between January 1<sup>st</sup>,

2000 and March 31<sup>st</sup>, 2002, and whose pre- or pre- and post-assessment battery of self-report tests were received at the National Headquarters (NHQ) of the Correctional Service of Canada by June 30<sup>th</sup>, 2003.

For offenders who participated in Counter-Point twice, only the most recent participation was recorded (i. e., all earlier attempts or records of unsuccessful participation in the program were deleted from the present study). Furthermore, offenders who were officially enrolled in Counter-Point and completed the pre-assessment battery of self-report tests, but failed to participate in any session of the program were excluded from the treatment group in this study. These offenders however represented potential candidates for the comparison group. Offenders whose personal identifying information was missing on the questionnaires (e. g., no Finger Print Serial (FPS) number, no name) were also deleted because of the impossibility to obtain additional information on those participants due to the lack of identifying information. Additional offenders were dropped for reasons such as death, deportation, or pardon, or due to the unavailability of complete recidivism data. The resulting program group therefore totalled 339 offenders. This sample represented approximately 35% of the total number of offenders who were recorded as having participated in the Counter-Point program between January 1<sup>st</sup>, 2000 and March 31<sup>st</sup>, 2002 in the Offender Management System (OMS).

Offenders in the program group were matched to a sample of federal offenders released in the community between January 1<sup>st</sup>, 2000 and March 31<sup>st</sup>, 2002. The list of potential candidates was pulled from OMS on August 8<sup>th</sup>, 2003, and consisted of offenders who met the selection criteria for Counter-Point, but never enrolled in the program. Reasons for non-participation varied, but often involved scheduling issues such as conflict with other programs or employment, warrant expiry date occurring before expected program completion, lack of program availability at the specific site, as well as population management reasons (e. g., presence of incompatibles, cancellation of assessments). Offenders were matched on two variables: prior treatment and risk. Using these procedures, 332 comparison offenders were suitably identified to form the comparison group.

The data used in this study therefore consisted of results on the pre/post assessment battery of self-report tests as well as post-release outcome. Recidivism data were collected from two sources, namely the Royal Canadian Mounted Police (i. e., CPIC records), which is a national database of criminal arrests and convictions, and the Offender Management System

(OMS), which provides additional information on release dates, types of release, and dates of, as well as rationale for, suspensions and revocations. Information relating to the successful/unsuccessful program completion for each offender was also examined to ensure that all potential comparison group offenders did not received exposure to the Counter-Point program at any point in time. Demographic data, including Statistical Information on Recidivism-R1 (SIR-R1; Nuffield, 1982) scores, Offender Intake Assessment (OIA) ratings, and information on prior treatment was extracted from OMS on July 20<sup>th</sup>, 2003. Most of the OMS post-release outcome data was collected from the offender Documentary Log (i. e., Assessment for Decision Reports) and the Sentence Management records between August 12<sup>th</sup> and December 19<sup>th</sup>, 2003.

## RESULTS

### Equivalency of the Counter Point and Comparison Groups

An initial sample of 339 Counter Point program participants was identified. However, as a result of the matching procedures, and to evaluate the treatment and comparison groups on recidivism data using an equal number of offenders in both groups, seven offenders, randomly selected, were dropped from the treatment group. The remaining analyses were therefore conducted on a sample totaling 664 offenders. The first series of analyses involved comparing the two groups to determine whether offenders selected for Counter-Point differed in some way from the matched offenders who did not participate in the program. Independent sample t-tests were performed to compare the program and comparison groups on age, prior program participation, sentence length, and risk level. In addition, Chi Square analyses were conducted to compare offenders on racial composition, marital status, criminogenic need ratings, and criminal history. Findings are reported in Tables 1, 2 and 3.

As expected, given strict adherence to the established matching criteria, the two groups of offenders did not significantly differ on risk ( $t_{obs} = .10, ns$ ) and prior program participation ( $t_{obs} = 1.33, ns$ ). Counter-Point participants and matched offenders were also similar in terms of age ( $t_{obs} = -.77, ns$ ). Furthermore, although almost twice as many Counter-Point participants were serving a life sentence (15 offenders in the program group, compared to 8 offenders in the comparison group), the overall difference between the two groups with regard to sentenced time in custody was not significant ( $t_{obs} = -1.22, ns$ ). Analyses conducted on the racial composition and marital status of offenders also failed to reveal statistically significant differences. For race and marital status respectively, obtained Chi-square statistics were  $\chi^2(1, N = 664) = 4.99, ns$  and  $\chi^2(1, N = 664) = 3.43, ns$ . The two groups of offenders were also compared on the presence/absence of a previous conviction in the juvenile criminal justice system. Results indicated that 44.8% ( $n = 279$ ) of offenders comprised in the program group and 42.9% ( $n = 231$ ) of those included in the comparison group had previously received a conviction as a youth. This between-group difference failed to reach statistical significance,  $\chi^2(1, N = 510) = 1.94, ns$ .

**Table 1: Mean Differences on Age, Risk, Prior Program Participation, and Sentence Length for Program Participants and Comparison Offenders**

	Mean (SD)		<i>t</i> <sup>b</sup>
	Counter-Point	Comparison	
Risk (SIR-R1) <sup>a</sup>	-1.35 (9.15)	-1.43 (9.26)	.10
Prior Program (# previous programs)	1.70 (1.39)	1.57 (1.23)	1.33

<sup>a</sup> Some cases missing due to unavailability of data.

<sup>b</sup> All analyses yielded non-significant results.

**Table 2: Racial Composition, Marital Status, and Criminal History for Program Participants and Comparison Offenders**

	% Counter-Point	% Comparison	$\chi^2$ <sup>b</sup>
Racial Composition			4.99
Caucasian	74.4	68.7	
Aboriginal	11.7	12.4	
Black	8.1	12.3	
Asian	3.9	4.2	
Arab	0.3	0.9	
Hispanic	0.6	0.6	
Other	0.9	0.6	
Marital Status			3.43
Common Law	35.5	32.8	
Single	47.6	46.4	
Married	10.2	11.7	
Divorced	3.3	5.1	
Separated	3.0	3.9	
Widowed	0.3	0	
Previous Youth Conviction <sup>a</sup>	44.8	42.9	1.94

<sup>a</sup> Some cases missing due to unavailability of data.

<sup>b</sup> All analyses yielded non-significant results.

**Table 3: Criminogenic Need Ratings for Program Participants and Comparison Offenders**

	% Counter-Point (n = 319)	% Comparison (n = 332)	$\chi^2$
OIA Domains			
Associates/Social Interaction	60.2	73.2	12.41**
Attitudes	49.5	63.6	13.03**
Community Functioning	33.9	50.6	18.68**
Employment	48.0	60.5	10.38**
Marital/Family	31.7	49.4	21.20**
Personal/Emotional	68.0	83.7	22.04**
Substance Abuse	53.9	68.1	13.72**

Note. Some cases missing due to unavailability of data.

\*\*  $p < .01$ .

As noted in Table 3, offenders in the two groups were not similar in terms of criminogenic need. When compared to the comparison group, offenders who participated in the Counter-Point program exhibited a significantly lower level of need in all seven domains assessed at intake ( $p < .01$ ). For example, only 49.5% of the Counter-Point participants, but 63.6% of the comparison offenders demonstrated problematic attitudes. Furthermore, only 60.2% of the treated offenders, but 73.2% of the non-participants had problematic associates.

For the purpose of this study, a variable representing the overall criminogenic need ratings of offenders was created. This was accomplished by simply summing up, for each offender, the number of OIA domains identified as problem areas. As anticipated, an independent sample t-test demonstrated that Counter-Point participants showed significantly less difficulty in criminogenic areas than their matched counterparts ( $t_{obs} = -6.57, p < .01$ ). The mean number of domains identified as problematic was 3.45 for the program group, and 4.49 for the comparison group. Correlational analyses conducted between post-release outcome measures and this overall criminogenic need variable further showed that the criminogenic need assessment was predictive of recidivism. For rates of suspensions, revocations, and new offences respectively, simple correlation coefficients were  $r = .30$  ( $p < .01$ ),  $r = .27$  ( $p < .01$ ),  $r = .26$  ( $p <$

.01), suggesting a relatively strong and positive relationship between the variables. As a result, criminogenic need was entered in subsequent analyses to control its effect.

### **Characteristics of Counter-Point Non-Completers**

In this study, 26.8% of offenders who enrolled in Counter-Point actually failed to complete the program. A breakdown of the various reasons for program non-completion is available in Table 4. Although some offenders (i. e., 14.6%) withdrew from program for different reasons without any penalty, 25.8% terminated the program early due to a suspension, and 16.9% due to the commission of a new offence.

**Table 4: Reasons for Program Non-Completion (N = 89)**

	<b>% Non-Completers</b>
Withdrawal without Penalty	14.6
Suspension	25.8
New Offence	16.9
Unescorted Temporary Absence	22.5
Warrant Expiry Date	3.4
Inappropriate Behaviour	12.4
Other	4.5

Using the Bonferroni approach for post-hoc comparisons, between-group analyses conducted on several demographic, static and dynamic characteristics further revealed that, although similar to the other two groups of offenders in age, racial composition and sentence length, offenders in the drop-out group were at a significantly higher risk of reoffending ( $p < .01$ ) than program completers. The mean SIR-R1 risk level was -4.32 for the program non-completers, -0.30 for the program completers, and -1.43 for the matched offenders. In other words, the drop-out group actually contained a greater proportion of high risk individuals than the group of offenders who completed the program. In addition, program non-completers were significantly more likely than both program completers and comparison offenders to have successfully been involved in prior interventions ( $p < .01$ ). The mean number of previous

correctional programs completed was 2.08 for members of the drop-out group, but only 1.57 for both offenders who completed, and those who did not participate in Counter-Point. Supplementary analyses further indicated that both risk and prior program participation were significantly correlated to at least one outcome variable (see Table 5). The potentially confounding effect of risk and prior program participation on the survival rates of program completers, non-completers, and non-participants was taken into account in subsequent analyses.

**Table 5: Simple Correlation Coefficients between Recidivism and Both Risk and Prior Program Participation**

	Suspensions	Revocations	New Offences
Risk (SIR-R1) <sup>a</sup>	-.14**	-.05	-.27**
Prior Program Participation	.09*	.07	-.02

<sup>a</sup>Some cases missing due to unavailability of data.

\*  $p < .05$ . \*\*  $p < .01$ .

### **The Impact of the Counter Point Program on Antisocial Attitudes**

Due to the failure to complete the Counter Point program or to missing values on the psychometric instruments, complete pairs of tests were only available for approximately two-third of the Counter-Point participants. The exact N for each test is indicated in Table 6.

As a first step, paired sample t-tests were used to determine whether the measures exhibited dynamic validity. Dynamic validity relates to the ability of a psychometric instrument to measure change. As presented in Table 6, most measures exhibited statistically significant change ( $p < .01$ ) at post- versus pre-program. Changes that failed to reach statistical significance were still in the expected direction. These results indicated that the Counter-Point program was effective at reducing the endorsement of antisocial attitudes as well as the use of rationalization, neutralization, and/or unproductive or damaging criminal attributions.

More important than dynamic validity however is the presence of predictive dynamic criterion validity. Predictive dynamic criterion validity refers to the ability of the change scores observed on an instrument to predict rates of recidivism. To examine predictive dynamic criterion validity, both raw and residual gains were used. Raw gains

**Table 6: Paired Sample t-test on the Measures**

Measure	Mean (SD)		<i>t</i>
	Pre	Post	
Pride in Delinquency Scale (n = 223)	53.20 (38.58)	46.02 (37.16)	2.94*
Criminal Sentiments Scale -Modified			
ALCP (n = 204)	13.29 (8.74)	10.72 (8.37)	5.79*
TLV (n = 218)	4.41 (3.75)	2.99 (3.30)	6.23*
ICO (n = 219)	3.39 (2.08)	2.86 (2.13)	3.48*
Total (n = 200)	21.00 (13.03)	16.56 (12.47)	6.50*
Neutralization Measure - Modified (n = 217)			
Frequency	2.56 (3.86)	2.72 (4.66)	-.53
Magnitude	-31.78 (3.89)	-32.67 (3.49)	3.41*
Measure of Criminal Attitudes and Associates			
Criminal Friend Index (n = 199)	5.64 (6.81)	5.63 (7.00)	.02
Violence (n = 221)	2.51 (2.81)	1.80 (2.23)	4.59*
Entitlement (n = 221)	4.32 (2.27)	3.94 (2.11)	2.85*
Antisocial Intent (n = 221)	3.05 (2.83)	2.31 (2.54)	5.13*
Associates (n = 221)	5.95 (2.46)	5.84 (2.35)	0.83
Part B Total (n = 221)	15.83 (8.09)	13.89 (6.90)	5.12*
Criminal Attribution Inventory (n = 224)			
Psychopathology	3.61 (2.21)	3.41 (2.24)	1.38
Personal	-5.67 (2.34)	-5.93 (2.28)	1.70
Victim	3.19 (2.47)	2.54 (2.27)	4.71*
Alcohol	3.90 (2.73)	3.15 (2.71)	4.71*
Societal	3.46 (2.58)	2.63 (2.33)	4.83*
Random	3.97 (1.97)	3.38 (2.01)	4.35*

*Note.* The magnitude method of computing the NM-M as well as the Personal sub-scale of the CRAI were reverse keyed for ease of comparison.

\*  $p < .01$ .

consisted of the simple differences between the post-assessment scores and the pre-assessment scores. Residual gains represented change scores taking into account the initial value or level of endorsement of the concept being examined, which potentially influenced the amount of change that actually occurred. In other words, as opposed to raw gains, residual gains control for pre-assessment scores, which is particularly relevant when conducting data analyses within the context of a longitudinal research. Using linear regression techniques, residual gains were calculated by regressing post-assessment scores on pre-assessment scores, and saving the expected values for the post-assessment scores. Residual gains then simply represented the differences between the actual post-assessment scores and the expected post-assessment scores.

Estimates of predictive dynamic criterion validity were subsequently obtained using a mixture of linear and logistic regression analysis techniques. Specifically, using logistic regression analyses, measures of recidivism were sequentially regressed on each change score (i. e., raw and/or residual), and the predicted values of the outcome (i. e., recidivism) variables were saved. Next, using a bivariate linear regression routine, values for the magnitude of the relationship were calculated using the observed (i. e., actual) value of the outcome (i. e., recidivism) variable as the independent variable and the predicted value of the outcome (i. e., recidivism) variable as the dependent variable. The sign (i. e., positive or negative) of the *R* statistic (i. e., estimate of predictive dynamic criterion validity) was directly obtained from computing the Pearson linear correlation coefficient between recidivism, and raw or residual change scores.

Results showed that reductions in rates of recidivism were associated with raw and/or residual change scores for only three psychometric instruments. Specifically, using residual gains as predictor measures, decreases on the Attitudes towards the Law, Courts, Police sub-scale of the CSS-M and on the Pride in Delinquency Scale significantly predicted rates of suspensions ( $r = .16, p < .05$ ) and both suspensions ( $r = .19, p < .01$ ) and revocations ( $r = .19, p < .01$ ) respectively. An increase on the Societal sub-scale of the CRAI was associated with a reduction in the likelihood to commit a new offence ( $r = -.14, p < .05$ ). In terms of raw gains, only the PID ( $r = .15, p < .05$ ) and the ALCP ( $r = .14, p < .05$ ) correlated significantly with rates of suspensions. According to these results, reductions in the propensity to blame crime on society and its values, in the endorsement of negative attitudes towards the law, courts, and police, and

in the amount of pride related to engaging in various forms of illegal or antisocial activity were related to decreases in rates of failure and reoffending.

To examine the relationship between the CRAI Major Treatment Indexes and rates of new offences, and the CRAI Minor Treatment Indexes and rates of suspensions and revocations, additional estimates of predictive dynamic criterion validity were computed. All correlations reached statistically significant levels. With regard to rates of new offences, correlations were  $r = .31$  ( $p < .01$ ) and  $r = .17$  ( $p < .05$ ) for the Major Treatment Outcome Index and the Major Treatment Gain Index, respectively. For the Minor Treatment Outcome Index, correlations were  $r = .21$  ( $p < .01$ ) and  $r = .28$  ( $p < .01$ ) for rates of suspensions and revocations, respectively. Correlations between the Minor Treatment Gain Index and rates of suspensions and revocations were respectively,  $r = .14$  ( $p < .05$ ) and  $r = .19$  ( $p < .01$ ).

### **The Impact of the Counter-Point Program on Recidivism**

To determine the impact of the Counter-Point program on rates of recidivism, a series of Cox regression analyses were conducted. First, the survival rates of all Counter-Point participants, including drop-outs, were compared to those of the comparison offenders. Second, the program participants were divided into program completers and non-completers. Subsequent Cox regression analyses examined the survival rates of the completers, non-completers, and comparison offenders. In order to shed some light on the issue of programming dosage, offenders were then divided into sub-groups based on the number of sessions completed in the program, ranging from 0 session (i. e., comparison group) to 25 sessions (i. e., program completers). The third series of Cox regression analyses compared the survival rates of each of these sub-groups. Finally, supplementary Cox regression analyses were conducted to determine the potentially differential impact of the Counter-Point program on offenders with various risk levels and racial backgrounds.

All Cox regression analyses used a deviation contrast, allowing to compare each category of the predictor variable (e.g., program participation vs. non-participation) against its overall average effect. In addition to control for time-at-risk, Cox regression procedures allow the evaluation of the independent effect of a predictor variable on the dependent variable, while controlling for other variables. For instance, in this study, Cox regression analyses revealed

whether participation in the Counter-Point program had an effect on rates of recidivism independent of the pre-existing difference in criminogenic need.

Exponents of the Cox regression models are sometimes called risk ratios, which can be interpreted as odds ratios. For continuous variables, risk ratios represent the relative change in the dependent variable for each unit increase in the independent variable. For categorical variables, risk ratios less than 1 indicate a reduced likelihood, while risk ratios greater than 1 indicate an increased likelihood, for the occurrence of the criterion variable. In the present investigation for example, a risk ratio less than 1 would indicate a positive impact of Counter-Point participation on recidivism (e. g., Counter-Point participants showed reduced rates of recidivism compared to comparison offenders). On the other hand, a risk ratio greater than 1 would indicate a negative impact of Counter-Point participation on reduced recidivism (e. g., rates of survival for Counter-Point participants were lower than those obtained for comparison offenders). For each risk ratio, the confidence interval informs on the statistical significance of the ratio. When the range of the 95% confidence interval does not specifically contain the value 1.00, the risk ratio is statistically significant.

For descriptive purposes, the actual mean rates of suspension, revocation, and new offense for the Counter Point program completers, non-completers, and non-participants are shown in Table 7.

**Table 7: Recidivism Rates (%) within Program Participation Categories**

	<b>Suspensions</b>	<b>Revocations</b>	<b>New Offences</b>
Program Participation (n = 332)	28	20	33
Completion (n = 243)	25	14	28
Non-Completion (n = 89)	37	35	48
Program Non-participation (n = 332)	37	26	45

***Survival Rates of All Counter-Point Participants***

The risk ratios and confidence intervals obtained at each step of the regression models for the entire group of participants who started Counter-Point in this study are reported in Table 8. As can be seen, after controlling for differences in criminogenic need, when all offenders who participated in the program, including those offenders who prematurely dropped-out of the

program, are included in the analysis, there was no impact on rates of recidivism. As expected, when criminogenic need alone was examined, higher scores on criminogenic need were associated with an increased risk to recidivate. To be more precise, a one-point increase on the overall criminogenic need ratings variable decreased the survival rates for suspensions, revocations, and new offences by 38%, 43% and 27%, respectively.

**Table 8: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Counter-Point Participants and Comparison Offenders, Controlling for Criminogenic Need (N = 651)**

Variable Entered	Risk Ratio (95% Confidence Interval)		
	Suspensions	Revocations	New Offences
Criminogenic Need	1.38* (1.28 – 1.48)	1.43* (1.30 – 1.57)	1.27* (1.19 – 1.35)
Program Participation	0.93 (0.81 – 1.07)	0.96 (0.81 – 1.13)	0.81 (0.81 – 1.05)

\*  $p < .01$ .

***Survival Rates of Counter-Point Completers and Non-Completers***

To examine differences in survival rates between program completers and non-completers, supplementary Cox regression analyses were conducted. The analyses specifically examined the relationship between program completion and reduced rates of recidivism. In addition to adjust for criminogenic need, the models were designed to control for differences among program completers (n = 230), non-completers (n = 89), and non-participants (n = 332) in risk and prior program participation.

As seen in Table 9, after controlling for differences in criminogenic need, risk, and prior program participation, completion of the Counter-Point program predicted longer survival in the community. This effect was observed regardless of how recidivism was defined. Specifically, compared to program non-completion and non-participation, completion of the Counter-Point program was associated with a 24% reduction in the risk of having been suspended ( $p < .05$ ), a 38% reduction in the risk of having been revoked ( $p < .01$ ), and a 33% reduction in the risk of having committed a new offence ( $p < .01$ ) following release. In contrast, it appeared that

program non-completion was significantly related to failure in the community. Offenders who participated in Counter-Point, but failed to complete, were 26% more likely of having been suspended (*ns*), 83% more likely of having been revoked ( $p < .01$ ), and 39% more likely of having committed a new offence in the community ( $p < .01$ ), than offenders who either completed the program or never participated in the program.

**Table 9: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Counter-Point Completers and Non-Completers, Controlling for Criminogenic Need, Risk, and Prior Program Participation (N = 589)**

Variable Entered	Risk Ratio (95% Confidence Interval)		
	Suspensions	Revocations	New Offences
Criminogenic Need	1.32** (1.21 – 1.44)	1.40* (1.26 – 1.56)	1.15** (1.06 – 1.24)
Risk (SIR-R1)	0.98* (0.96 – 1.00)	1.00 (0.98 – 1.02)	0.95** (0.94 – 0.97)
Prior Program	1.02 (0.91 – 1.15)	1.05 (0.92 – 1.18)	0.87* (0.77 – 0.97)
Program Participation			
Completion	0.76* (0.60 – 0.96)	0.62** (0.47 – 0.82)	0.67** (0.53 – 0.83)
Non-Completion	1.26 (0.94 – 1.68)	1.83** (1.36 – 2.46)	1.39** (1.09 – 1.77)

\*  $p < .05$ . \*\*  $p < .01$ .

### ***The Effect of Programming Dosage on Recidivism***

In order to provide guidelines as to the actual amount of program exposure that is considered necessary or optimal to effect positive behavioural change and reduced recidivism, additional Cox regression analyses were performed. From inspection of the program content, sub-groups were created based on the number of sessions completed in Counter-Point. Five categories were created: offenders having completed 0 session (i. e., comparison offenders) ( $n = 302$ ); 5 sessions or less ( $n = 21$ ); 6 to 14 sessions ( $n = 44$ ); 15 to 23 sessions ( $n = 12$ ); and at least 24 sessions ( $n = 210$ ). The results of the Cox regression analyses are shown in Table 10.

**Table 10: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Sub-groups of Counter-Point Participants, Controlling for Criminogenic Need, Risk and Prior Program Participation (N = 589)**

Variable Entered	Risk Ratio (95% Confidence Interval)		
	Suspensions	Revocations	New Offences
Criminogenic Need	1.33** (1.21 – 1.45)	1.42** (1.28 – 1.58)	1.15** (1.06 – 1.24)
Risk	0.98* (0.96 – 1.00)	1.01 (0.98 – 1.03)	0.95** (0.94 – 0.97)
Prior Program	1.02 (0.91 – 1.15)	1.05 (0.92 – 1.19)	0.87* (0.77 – 0.98)
Program Participation			
1 to 5 sessions	1.68 (0.86 – 3.28)	2.92** (1.56 – 5.45)	1.78* (1.06 – 3.00)
6 to 14 sessions	1.46 (0.87 – 2.46)	1.50 (0.91 – 2.48)	1.43 (0.93 – 2.19)
15 to 23 sessions	0.49 (0.16 – 1.50)	0.63 (0.25 – 1.61)	0.58 (0.23 – 1.46)
24 to 25 sessions	0.78 (0.52 – 1.17)	0.51** (0.34 – 0.76)	0.65* (0.46 – 0.92)

\* $p < .05$ . \*\* $p < .01$ .

Regardless of how recidivism was defined, exposure to between 6 and 23 sessions did not significantly influence the overall average rates of survival. However, excluding the results obtained on rates of suspensions, which failed to reach statistical significance, early drop-out (i. e., prior to the sixth session) predicted shorter survival in the community, whereas participation in 24 or more Counter-Point sessions was associated with longer survival in the community. Specifically, the estimated risk of having received a revocation or committed a new offence was 2.92 and 1.78 times greater for offenders who attended between 1 and 5 Counter-Point sessions, compared to offenders who either were not exposed to the program content or participated in at least 6 sessions. In contrast, completion of at least all of the group sessions in Counter-Point was related to a 49% and 35% reduction in the risk of having been revoked or held accountable for a new offence, respectively.

Table 11 reports the actual percentages in rates of recidivism that correspond to the obtained risk ratios in the preceding analyses. As seen in the table, results clearly depict the increased rates of revocations and new offences for the early drop-outs, and the decreased rates of recidivism for the program completers. For instance, compared to the overall average base rate for new offences of 37%, only 26% of the offenders who participated in at least all of the group sessions in the Counter-Point program committed a new offence following release. On the other hand, 57% of offenders who dropped-out of the program before the sixth session were held accountable for a new offence in the community.

**Table 11: Mean Recidivism Rates (%) within Programming Dosage Categories**

	Suspensions	Revocations	New Offences
Programming Dosage			
0 session (n = 302)	35	24	42
1 to 5 sessions (n = 21)	33	38	57
6 to 14 sessions (n = 44)	34	34	50
15 to 23 sessions (n = 12)	17	25	25
At least 24 sessions (n = 210)	25	15	26
<b>Total (n = 589)</b>	<b>31</b>	<b>22</b>	<b>37</b>

***The Impact of the Counter-Point Program on Recidivism across Risk Levels***

According to the risk principle (Andrews & Bonta, 2003; Andrews, Bonta, & Hoge, 1990), the effectiveness of correctional programming depends on the risk level of the clientele it is serving. Preferably, higher risk offenders should be provided a more intensive allocation of resources and correctional programming, whereas lower risk cases should be provided minimal levels of supervision and service. To examine whether the Counter-Point program had a more beneficial impact on higher risk offenders, separate Cox regression analyses were conducted on the low, medium, and high risk offenders.

For the purpose of the present investigation, the low risk group was composed of the categories “Very Good” and “Good”, the medium risk group of the category “Fair”, and the high risk group of the categories “Poor” and “Very Poor” of the SIR-R1 scores. Offenders for whom

SIR-R1 scores were unavailable were classified into the different risk groups using scores obtained on the overall OIA criminogenic need domains previously created. In this study, scores of 1 or 2 represented low risk offenders, scores of 3, 4 or 5 medium risk offenders, and scores of 6 or 7 high risk offenders.

The results of the Cox regression analyses are reported in Table 12. As expected, greater reductions in rates of recidivism were observed for the high risk program completers, compared to the groups comprised of medium and/or low risk cases. In other words, completion of the Counter-Point program mostly benefited higher risk offenders. Program completion among offenders assessed as high risk was associated with significant reductions in the risk of having been suspended (28%,  $p < .05$ ), revoked (45%,  $p < .01$ ), and held accountable for a new offence (42%,  $p < .01$ ) following release. When compared to both non-participants and non-completers, risk reductions in rates of recidivism for the medium and low risk program completers failed to consistently reach statistical significance.

**Table 12: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Low, Medium, and High Risk Counter-Point Completers and Non-Completers, Controlling for Criminogenic Need and Prior Program Participation**

	Risk Ratio (95% Confidence Interval)		
	Suspensions	Revocations	New Offences
Program Exposure			
Low Risk (n = 251)			
Completion	0.71* (0.47 – 1.08)	0.92 (0.55 – 1.54)	0.69 (0.45 – 1.06)
Non-Completion	1.77 (1.07 – 2.92)	1.02 (0.53 – 1.96)	1.71* (1.02 – 2.86)
Medium Risk (n = 134)			
Completion	0.65 (0.42 – 1.01)	0.36** (0.20 – 0.66)	0.84 (0.55 – 1.29)
Non-Completion	1.35 (0.79 – 2.31)	2.48** (1.39 – 4.43)	1.02 (0.58 – 1.82)
High Risk (n = 264)			
Completion	0.72* (0.52 – 0.96)	0.55** (0.37 – 0.83)	0.58** (0.43 – 0.78)
Non-Completion	1.23 (0.86 – 1.76)	2.21** (1.52 – 3.23)	1.41* (1.06 – 1.87)

\*  $p < .05$ . \*\*  $p < .01$ .

### ***The Impact of the Counter-Point Program on Recidivism across Races***

In recent times, some concerns were raised regarding the adequacy of correctional interventions in being responsive to the specific needs of diverse clientele. In particular, it was mentioned that the effect of treatment likely differs across various racial sub-groups of offenders. In this study, although Aboriginal offenders were more likely than Caucasian and/or other racial minority offenders to have been suspended,  $\chi^2 (2, N=664) = 14.01 (p < .01)$ , and held responsible for a new offence,  $\chi^2 (2, 664) = 8.59 (p < .05)$  following release, the three groups of offenders were similarly likely to have prematurely dropped-out of the program,  $\chi^2 (2, N = 664) = 2.08 (ns)$ , and received a revocation,  $\chi^2 (2, N = 664) = 1.58 (ns)$  in the community. Table 13 presents the results obtained from performing Cox regression analyses on the survival rates of each group.

**Table 13: Cox Regression Analyses on Survival Rate for Suspensions, Revocations, and New Offences of Caucasian, Aboriginal, and Other Racial Minority Counter-Point Completers and Non-Completers, Controlling for Criminogenic Need and Prior Program Participation**

	Risk Ratio (95% Confidence Interval)		
	Suspensions	Revocations	New Offences
Program Exposure			
Caucasian (n = 475)			
Completion	0.84 (0.64 – 1.09)	0.65** (0.48 – 0.88)	0.68** (0.53 – 0.86)
Non-Completion	1.11 (0.80 – 1.55)	1.72** (1.24 – 2.39)	1.40* (1.08 – 1.82)
Aboriginal (n = 81)			
Completion	0.43** (0.23 – 0.81)	0.21* (0.05 – 0.80)	0.91 (0.52 – 1.58)
Non-Completion	2.14** (1.23 – 3.73)	2.53* (1.02 – 6.25)	0.91 (0.51 – 1.63)
Other (n = 108)			
Completion	0.36** (0.19 – 0.70)	0.40* (0.18 – 0.83)	0.58 (0.31 – 1.07)
Non-Completion	3.73** (1.78 – 7.85)	3.18** (1.51 – 6.70)	2.27* (1.15 – 4.50)

\*  $p < .05$ . \*\*  $p < .01$ .

Within the various racial groups, the general pattern of results regarding the impact of Counter-point on the estimated risk of recidivism was comparable. That is, for Caucasian, Aboriginal, and other racial minority offenders, while significant reductions in recidivism were revealed following program completion, increased rates of recidivism were observed for offenders who failed to complete the program. Across the groups, the reductions in rates of recidivism obtained for program completers were slightly better for Aboriginal and other racial minority offenders when compared to Caucasians. For instance, completion of the Counter-Point program among Caucasians was associated with a 16% (*ns*) reduction in the risk of having been

suspended and a 35% ( $p < .01$ ) reduction in the risk of having been revoked following release. For suspensions and revocations respectively, these risk reductions were 57% ( $p < .01$ ) and 79% ( $p < .05$ ) for Aboriginal offenders, and 64% ( $p < .01$ ) and 60% ( $p < .05$ ) for other racial minority groups.

## DISCUSSION

The present investigation consisted of a follow-up of the Counter-Point program that was developed with a specific focus on antisocial attitudes. In particular, this research examined the effectiveness of the Counter-Point program in altering antisocial attitudes, and subsequently reducing rates of reoffending.

Comparison of the pre and post test scores on a variety of psychometric instruments with those obtained from previous research suggests offenders in this study were equivalent to the general population of offenders in the extent in which they endorsed antisocial attitudes. On the majority of the measures, similar and/or slightly lower scores were obtained from this study sample relative to other studies of offenders (Simourd, 1997; Atkinson, 1998; Simourd and Van De Ven, 1999; Mills, 2000; Mills and Kroner, 2001; Mills, Kroner and Forth, 2002), especially violent offenders (Simourd and Olver, 2002) and juvenile offenders (Shields and Whitehall, 1994), as well university students (Mills and Kroner, 1999). This finding was particularly surprising given that the selection criteria for the Counter-Point program specifically targets offenders who endorse high levels of pro-criminal expressions such as negative attitudes about the criminal justice system, conventional institutions, authority figures and/or non-criminal others, and who make use of techniques of neutralization to rationalize or make acceptable their engagement in criminal activity.

More notable is the fact that this study provides support for the dynamic and predictive criterion validity of antisocial attitudes. Post-program reductions were observed on the majority of the psychometric measures, suggesting that a reduction in the endorsement of antisocial attitudes, neutralization, and/or unproductive or negative criminal attributions resulted from participation in the program. In addition, estimates of predictive validity for change scores on some measures of antisocial attitudes, controlling for the initial level of endorsement of the construct, generally equalled or exceeded those obtained from using simply pre- or post-program scores. These results suggest that the attitudinal dimensions reflected in the Attitudes towards the Law, Courts, and Police sub-scale of the CSS-M together with those tapped in the Pride in Delinquency Scale and in the Criminal Attribution Inventory have particular relevance in the prediction of criminal behaviour, and as such should be considered promising treatment targets, and profitable to the development of future risk assessment instruments. The associations between the reductions in antisocial attitudes and the reductions in rates of recidivism further

increase the level of confidence that the Counter-Point program is effective in reducing recidivism.

By and large, solid evidence was provided for the favourable impact of the program on reduced rates of suspension, revocation, and new offences. Even after controlling for pre-existing differences in criminogenic need, risk, and prior program participation, completion of the Counter-Point program increased successful reintegration in the community. The results indicated that, compared to all levels of program exposure, including non-participation, completion of the Counter-Point program was associated with a 24% reduction in the risk of having been suspended, a 38% reduction in the risk of having been revoked, and a 33% reduction in the risk of having committed a new offence in the community. As noted by Gendreau, Goggin and Smith (1999), “the meta-analyses of offender treatment indicate that a 15% to 30% reduction in recidivism is a reasonable objective under most conditions” (p. 183). Based on this information, Counter-Point therefore appears to be a promising and effective correctional intervention.

Not surprisingly, partial exposure to the program content (i. e., program non-completion) was not associated with reliable reductions in rates of recidivism. In fact, most would agree that offenders who dropout of programs are actually at higher risk of reoffending as “some of the client characteristics that put the offender at risk for not completing treatment are also likely to put him or her at risk for recidivism” (Wormith and Olver, 2002, p. 449). In this study, compared to both program completers and non-participants, program non-completers actually showed poorer correctional outcomes following release.

Consistent with the risk principle, the results further suggest that Counter-Point predominantly impacts on the likelihood of success of offenders initially assessed as higher risk to reoffend. Provided they remained in the program until the end, higher risk offenders in the present study appeared to profit the most from the intervention. In addition, the findings demonstrate that Counter-Point works equally well within various racial categories. Aboriginal and other racial minority program completers actually showed greater reductions in recidivism rates, compared to Caucasians.

### **Limitations of Findings**

Despite the inclusion of the drop-outs in the program group, the relatively large sample size, the extended follow-up period, and the attempt to control for many pre-existing differences

between the program and comparison groups, several limitations should be acknowledged. First, offenders were not randomly selected and assigned to groups. Statistically and methodologically, although an attempt was made to control for several potential confounding variables, a number of other, perhaps equally important variables (e. g., motivation level, institutional behaviour, educational level) could have differed prior to program or release, and subsequently impacted on the results obtained. Just as noteworthy in this study was the impossibility to control for selection biases. For example, completed pre/post test batteries were not always made available, thereby preventing the inclusion of additional program participants.

Another shortcoming of the present investigation entails the fact that it relied on rates of suspension, revocation, and new offences as the sole outcome measures of outcome. Some would argue that this might have underestimated the benefits of the intervention. For example, an equally important dimension of program effectiveness, which was neglected in the present study, involves the assessment of other indicators of improved prosocial behaviour or social adjustment (Latessa and Travis III, 1992; Henning and Frueh, 1996). These include the establishment of better interpersonal relationships and/or of prolonged involvement in employment and education. This study does not allow for conclusions to be reached regarding the impact of the Counter-Point program on such outcome variables, thereby restricting the range of encouraging implications that can be drawn.

Another important issue relates to the existing referral mechanism for the selection of offenders in the Counter-Point program. In addition to be unsuccessful in targeting offenders with a moderate to high level of antisocial attitudes, relative to the general CSC offender population, the majority of Counter-Point participants included in the present study were considered at a low to moderate risk of recidivism. This occurred despite the fact that this study, together with past research, clearly illustrate that correctional interventions are more profitable to high risk offenders, compared to medium and/or low risk cases.

Although within this sample, it was generally the higher risk offenders who tended to drop-out and subsequently engage in criminal or antisocial activity, by terminating their participation in the program so early, these offenders were evidently not sufficiently exposed to the program content to receive the full benefits of the intervention. Therefore, while support for the effectiveness of the Counter-Point program in reducing rates of recidivism is provided, these encouraging results simultaneously raise some concerns relating to treatment attrition and its

effect on rates of recidivism. This leads to a few important considerations for practitioners and researchers alike.

### **Implications and Suggestions for Future Research**

Novel approaches to understand and subsequently minimize treatment attrition should be contemplated. To accomplish this objective, specific efforts should be directed towards examining the capacity of the Counter-Point program to accommodate basic responsivity concerns such as verbal intelligence, educational level, the existence of a mental or personality disorder, age, and language.

It also appears indispensable for future program research to ensure that differences between completers and non-completers be taken into consideration. For example, the potentially moderating or differential effects of offenders' motivational level or the reasons for discontinuing treatment should be investigated. Furthermore, a review of the literature clearly identified the need for future research initiatives to direct efforts towards the development of a theoretically sound and empirically valid understanding of responsivity issues. Research is very much needed on the interactive effects among different types of treatments and individuals.

An area of investigation that would be particularly interesting relates to whether the reductions observed in antisocial attitudes and neutralization actually translate into a corresponding increase in prosocial attitudes. In other words, it is conceivable that Counter-Point is successful at altering offenders' underlying antisocial attitudes, but does very little to transfer this knowledge into the learning of prosocial attitudes. This reduction by itself may not be sufficient to induce a noticeable change in behaviour for some individuals. Future research undertakings should therefore examine the potential moderating effect of prosocial attitudes on the relationship between antisocial attitudes and behavioural tendencies. An applied repercussion of these findings thus recommends the inclusion of a measure of prosocial attitudes in the pre/post self-report assessment battery of the Counter-Point program.

### **Conclusion**

Taken as a whole, the finding that completion of the Counter-Point program was associated with improved reintegration not only reaffirms the importance of the role of antisocial attitudes in criminal behaviour, but also provides support for the effectiveness of the rehabilitative intervention. In this study, Counter-Point was found to be an effective and

clinically appropriate intervention for higher risk offenders with an identified need on the attitude domain.

## REFERENCES

- Agnew, P. (1994). The techniques of neutralization and violence. *Criminology*, 32, 555-580.
- Andrews, D. A., & Bonta, J. (1994). *The Psychology of Criminal Conduct*. Cincinnati: Anderson Publisher Ltd.
- Andrews, D. A., & Bonta, J. (1998). *The Psychology of Criminal Conduct*, 2<sup>nd</sup> ed. Cincinnati: Anderson Publisher Ltd.
- Andrews, D. A., & Bonta, J. (2003). *The Psychology of Criminal Conduct*, 3<sup>rd</sup> ed. Cincinnati: Anderson Publisher Ltd.
- Andrews, D.A., Bonta, J., & Hoge, R.D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D. A., & Wormith, J. S. (1984). *Criminal Sentiments and Criminal Behaviour*. Programs Branch User Report. Ottawa, Ontario, Canada: Ministry of the Solicitor General of Canada.
- Andrews, D. A., Wormith, J. S., & Kiessling, J. J. (1985). *Self-reported Criminal Propensity and Criminal Behavior: Threats to the Validity of Assessments of Attitudes and Personality*. Programs Branch User Report. Ottawa, Ontario, Canada: Ministry of the Solicitor General of Canada.
- Andrews, D. A., Zinger, I., Hoge, R. D., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Andrews, K. H., & Kandel, D. B. (1979). Attitude and behavior: A specification of the contingent consistency hypothesis. *American Sociological Review*, 44, 298-310.
- Atkinson, J. L. (1998). *Neutralizations among Male and Female Fraud Offenders*. Unpublished doctoral dissertation, Queen's University, Ontario, Canada.
- Blumenthal, M. D. (1973). The belief systems of protesting college students. *Journal of Youth and Adolescence*, 2, 103-123.
- Bonta, J., Harman, W. G., Hann, R. G., & Cormier, R. B. (1996). The prediction of recidivism among federally sentenced offenders: A re-validation of the SIR Scale. *Canadian Journal of Criminology*, 38, 61-79.
- Cloward, R. A., & Ohlin, L. E. (1960). *Delinquents and Opportunity: A Theory of Delinquent Gangs*. New York: Free Press.
- Cohen, A. K. (1955). *Delinquent Boys: The Culture of the Gang*. Glencoe, IL: Free Press.

Gendreau, P., Grant, B. A., Leipziger, M., Collins, S. (1979). Norms and recidivism rates for the MMPI and selected experimental scales on a Canadian delinquent sample. *Canadian Journal of Behavioural Science*, 11, 21-31.

Glueck, S., & Glueck, E. T. (1950). *Unraveling Juvenile Delinquency*. Cambridge, MA: Harvard University Press.

Graham, I.-J., & Van Diemen, M. V. (1999). *Counter-Point: A Program for Attitude and Behaviour Change*. John Howard Society of Ottawa-Carleton and Correctional Service of Canada.

Hann, R. G., & Harman, W. G. (1989). *Release Risk Prediction: A Test of the Nuffield Scoring System: A Report on the Parole Decision Making and Release Risk Assessment Project*. Ottawa: Solicitor General of Canada.

Henning, K. R., & Frueh, B. C. (1996). Cognitive-behavioral treatment of incarcerated offenders: An evaluation of the Vermont Department of Corrections' Cognitive Self-Change Program. *Criminal Justice and Behavior*, 23, 523, 541.

Hoge, R. D., Andrews, D. A., & Leschied, A. W. (1994). Tests of three hypotheses regarding the predictors of delinquency. *Journal of Abnormal Child Psychology*, 22, 547-559.

Kroner, D. G., & Mills, J. F. (1998). The structure of antisocial attitudes among violent and sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 42, 246-257.

Kroner, D. G., & Mills, J. F. (2003). *Criminal Attribution Inventory (CRAI) Manual: User Guide*. Selby, Ontario, Canada.

Latessa, E. J., & Travis III, L. F. (1992). Residential community correctional programs. In J. M. Byrne, A.J. Lurigio, & J. Petersilia (Eds.), *Smart Sentencing: The Emergence of Intermediate Sanctions* (pp. 166-181). Newbury Park, California: Sage Publications.

Merrill, J., Alterman, A., Cacciola, J., & Rutherford, M. (1999). Prior treatment history and its impact on criminal recidivism. *Journal of Substance Abuse Treatment*, 17, 313-319.

Merton, R. K. (1938). Social structure and anomie. *American Sociological Review*, 3, 672-682.

Mills, J. (2000). *Criminal attitudes: Assessment and the relationship with psychopathy and response latency*. Unpublished doctoral dissertation, Carleton University, Ontario, Canada.

Mills, J. F., Kroner, D. G. (1997). The Criminal Sentiments Scale: Predictive validity in a sample of violent and sex offenders. *Journal of clinical Psychology*, 53, 399-404.

Mills, J. F., & Kroner, D. G. (1999). *Measures of Criminal Attitudes and Associates: User Guide*. Selby, Ontario, Canada.

Mills, J. F., & Kroner, D. G. (2001). *Criminal Attribution Inventory: User Guide*. Selby, Ontario, Canada.

Mills, J. F., Kroner, D. G., & Forth, A. E. (2002). Measures of criminal attitudes and associates (MCAA): Development, factor structure, reliability, and validity. *Assessment*, 9, 240-253.

Motiuk, L.L. (1997). Classification for correctional programming: The Offender Intake Assessment (OIA) process. *Forum on Corrections Research*, 9, 18-22.

Mylonas, A. D., & Reckless, W. C. (1963). Prisoners' attitudes toward law and legal institutions. *Journal of Criminal Law, Criminology, and Police Science*, 54, 479-484.

Nafekh, M., & Motiuk, L.L. (2002). *The Statistical Information on Recidivism - Revised 1 (SIR-R1) Scale: A Psychometric Evaluation*. Research Report No. R-126. Ottawa: Correctional Service of Canada.

Nuffield, J. (1982). *Parole decision-making in Canada*. Ottawa: Solicitor General of Canada.

Reicher, S., & Emler, N. (1985). Delinquent behaviour and attitudes to formal authority. *British Journal of Social Psychology*, 24, 161-168.

Roy, R. E., & Wormith, J. S. (1985). *The Effects of Incarceration: Measuring Criminal Sentiments*. Programs Branch User Report. Ottawa, Ontario, Canada: Ministry of the Solicitor General of Canada.

Shields, I. W., & Simourd, D. J. (1991). Predicting predatory behavior in a population of incarcerated young offenders. *Criminal Justice and Behavior*, 18, 180-194.

Shields, I. W., & Whitehall, G. C. (1991). *The Pride in Delinquency Scale*. Paper presented at the eastern Ontario correctional psychologists' winter conference, Burritts Rapids, Canada.

Shields, I. W., & Whitehall, G. C. (1994). Neutralization and delinquency among teenagers. *Criminal Justice and Behavior*, 21, 223-235.

Simourd, D. J. (1996). *Criminal Attitudes: The Silent Partner in Crime*. Paper presented at the annual convention of the Canadian Psychological Association, Saskatoon, Canada.

Simourd, D. J. (1997). The Criminal Sentiments Scale – Modified and Pride in Delinquency Scale: Psychometric properties and construct validity of two measure of criminal attitudes. *Criminal Justice and Behavior*, 24, 52-70.

Simourd, D. J., & Olver, M. E. (2002). The future of criminal attitudes research and practice. *Criminal Justice and Behavior*, 29, 427-446.

Simourd, D. J., & Van de Ven, J. (1999). Assessment of criminal attitudes: Criterion-related validity of the Criminal Sentiments Scale – Modified and Pride in Delinquency Scale. *Criminal Justice and Behavior*, 26, 90-106.

Sutherland, E. H. (1939). *Principles of Criminology*, 3<sup>rd</sup> ed. Philadelphia: Lippincott.

Wormith, J. S. (1984). Attitude and behavior change of correctional clientele: A three year follow-up. *Criminology*, 22, 595-618.

Wormith, J. S., & Goldstone, C. S. (1984). The clinical and statistical prediction of recidivism. *Criminal Justice and Behavior*, 11, 3-34.

Wormith, J. S., & Olver, M. E. (2002). Offender treatment attrition and its relationship with risk, responsivity, and recidivism. *Criminal Justice and Behavior*, 29, 447-471.