RECIDIVISM AMONG TREATED SEXUAL OFFENDERS AND A MATCHED
COMPARISON OF UNTREATED SEXUAL OFFENDERS

by

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A thesis submitted in conformity with the requirements
for the degree of Master of Arts
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Abstract

The present investigation examined a sample of 64 offenders treated at the Regional Treatment Centre (Ontario) Sex Offender Treatment Program (RTCSOTP) and a sample of 55 untreated sexual offenders from the Ontario region of Correctional Service of Canada. Groups were matched on age at index offence, Hare Psychopathy Checklist-Revised (PCL-R) score and type of sexual offender. The Rapid Risk Assessment of Sexual Offence Recidivism Scale was scored on all participants. Recidivism, based upon officially recorded charges and conviction data, was the primary dependent measure. Results indicated that both treated participants and control participants, including those with high PCL-R scores, evidenced low sexual recidivism rates. Based on a survival analysis using time to recidivism as the dependent variable, no differences were found between treated and untreated sexual offenders. The need to consider a wider range of treatment outcome measures and the benefits of using dynamic methods of risk assessment are highlighted.
Acknowledgements

I would like to thank my supervisor, Dr. Roy Gillis, for his support, suggestions and advice throughout this project. Thank you also to my second reader, Dr. Abby Goldstein, for her patience and insightful commentary. A thank you is also extended to Dr. Jeffrey Abracen, for allowing me access to the comprehensive dataset required to complete this project. His ideas and guidance along the way have made this project become a reality. I am grateful to Olesya Falenchuk for her assistance throughout the various stages of statistical analyses, for which I could not have done without. I would also like to thank Dr. Janice Picheca and Dr. Tania Stirpe for their constant support, encouragement and motivation throughout the entire process. Finally, I am grateful for the patience and unwavering support from my family and close friends.
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CHAPTER 1

Introduction

Sexual offences are disturbing forms of crime and consequently, the assessment, treatment and management of sexual offenders has become a focus of both the public and the Criminal Justice System (Marshall, Marshall, Serran & Fernandez, 2006). These crimes violate the self-worth and personal integrity of the victim (Marshall et al., 2006; Abracen, Mailloux, Serin, Cousineau, Malcolm & Looman, 2004). Sexual assault offenders may be friends, acquaintances or family members of the victim and the assault may take many different forms including, by way of violence, threats, coercion and pressure and manipulation (Marshall et al., 2006). Sexual assault is commonly defined as “actual, attempted, or threatened sexual contact with a person who is non-consenting or unable to give consent” (Boer, Hart, Kropp, & Webster, 1998, p. 9).

The Canadian Criminal Code classifies sexual assault into three levels according to the seriousness of the incident: Level 1 sexual assault involves the least amount of physical injury to the victim (S.271); Level 2 sexual assault involves sexual assault with a weapon, threats to use a weapon, or assault causing bodily harm (S.272); and Level 3 sexual assault represents the most serious of the three classifications and involves assault that wounds, disfigures or endangers the life of the victim (S.273) (Aggrawal, 2009).

The effects of sexual assault are often severe and have long term psychological and physical consequences on victims. Results from studies of individuals who have made reports of childhood sexual and physical abuse showed that victims, compared to non-victims, were more likely to be depressed and anxious (Taft, Resick, Watkins & Panuzio, 2009), to have lower self-worth and self-esteem (Kaufman, 2008), to abuse alcohol or drugs (Najdowski & Ullman, 2009), and to have difficulty sleeping (Najavits, Sonn, Walsh & Weiss, 2004). Several studies have
also found a link between childhood sexual and physical abuse and the development of post-traumatic stress disorder (PTSD) (Najavits et al., 2004; Najdowski & Ullman, 2009; Ullman & Long, 2009).

The figures on the prevalence of sexual victimization are cause for serious concern and warrant the attention of the Criminal Justice System, as well as correctional treatment providers. Sexual assault can victimize men, women and children. In 2004, the General Social Survey (GSS) was conducted by Statistics Canada and involved interviewing 24,000 people aged 15 and older living in the 10 provinces. Interviews were conducted over the telephone and those respondents identified as having been victims of a crime in the previous 12 months were asked to provide detailed information about the offence. This information included where and when the crime occurred, whether the incident was reported to police, and how the experience affected them. According to this survey, there were approximately 512,000 sexual offences formally documented through law enforcement in Canada (Statistics Canada, 2008). What is most frightening is that the large proportion (91%) of sexual assault was never reported to the authorities (Statistics Canada, 2008). According to the 2004 GSS on victimization (Statistics Canada, 2008), sexual assault was the least likely of violent crimes to be reported to the police. Specifically, less than one in ten incidents were reported to police, which was significantly lower than reports of other violent offences such as robbery (47%) and physical assault (40%) (Statistics Canada, 2008). Although sexual assault predominately affects women, underreporting among male victims of sexual assault is also large concern. In a study by Walker, Archer and Davies (2005), only five out of the 40 male rape victims in the study had contacted the police after the offence. And further, only one out of these five cases resulted in a criminal conviction (Walker et al., 2005).
Often underreporting is a result of the fear of unknown consequences and the stigma associated with being a victim of a sexual assault. Victims of sexual assault included in the GSS study stated the most common reason for not reporting a sexual assault was because they felt it was not important enough (58%) and/or because the assault had been dealt with in another way (54%). Victims also stated that they chose not to report the crime because they felt the incident was too personal to disclose (47%) and/or they did not want to get involved with police (41%). While many did not report the incident to police, victims often turned to other informal sources of support, such as friends (72%), family (41%), co-workers (33%), or doctors or nurses (13%) (Statistics Canada, 2008). Given the significant rates of under-reporting noted above, it is difficult to ascertain an accurate report of the rate at which sexual offending occurs. In order to provide greater insight, many meta-analytic studies have been conducted investigating the approximate rates of sexual offending.

*Frequency of Sexual Offending and Recidivism*

The frequency of sexual offending is difficult to narrow to an exact rate. Research has highlighted that sex offenders are a heterogeneous group of offenders who offend and recidivate at varying rates (Houston & Galloway, 2008); however, many types of sexual offenders have low rates of recidivism (Zinley, 2009). Hanson, Morton-Bourgon and Harris (2003) for example, summarized the sexual recidivism rate in a mixed group of sexual offenders by conducting a meta-analysis of 10 separate samples totaling 4,724 sexual offenders. This dataset is one of the largest aggregated samples available and included samples ranging in size from 191 to 1,138 offenders drawn from various jurisdictions in Canada, the United States and the UK, including California, Washington, Quebec, Ontario, Manitoba, Alberta, Her Majesty’s Prison Service (England & Whales), and the Correctional Services of Canada. The average follow-up period in
these studies was seven years. Hanson et al. (2003) reported the five-year recidivism rate for sexual recidivism was 14% (95% confidence interval of 13-15%), the 10-year recidivism rate was 20% (95% confidence interval of 19-21%), the 15 year rate was 24% (95% confidence interval of 22-26%) and the 20-year rate was 27% (95% confidence interval of 24-30%). In support of the Hanson et al. (2003) findings, a meta-analysis by Hanson and Morton-Bourgon (2005) indicated the non-sexual violent recidivism rate for sex offenders was 14.3%, and the sexual recidivism rate was 13.7%. This was found over an average follow-up of five and a half years. An earlier meta-analysis conducted by this team found a nonsexual, violent recidivism rate of 9.9 percent for child molesters particularly, and a rate of 22.1 percent for rapists (Hanson & Morton-Bourgon, 1998).

Although one may expect there to be little difference in the rates of recidivism for nonsexual and sexual offences, Langton and colleagues (2003) highlighted that in comparison to nonsexual offenders, sexual offenders had a lower overall re-offence rate within three years following release from prison [68% for nonsexual offenders, 43% for sexual offenders (Langton et al., 2003)]. Recidivism rates have also been shown to vary for different types of sexual offenders. Hanson and Bussière (1998) conducted a meta-analysis of 61 sexual offender recidivism studies and reported that nearly 19% of rapists compared to 13% of child molesters re-offended sexually. As well, only 10% of child molesters, compared to 22% of rapists, re-offended in a non-sexual violent manner. Hanson and Bussière (1998) also highlighted that previous sexual charges were a key predictor of sexual recidivism, especially for child molesters (Firestone et al., 1999; Proulx, Pellerin & McKibben, 1997). Among rapists, previous sexual charges against adult females were shown to be related to both sexual and violent recidivism.
Rapists also showed an earlier age of onset of offending and a higher frequency of property and violent crimes (Hanson & Bussière, 1998).

Serin, Mailloux and Malcolm (2001) reported similar results in their study, in that a greater percentage of rapists (61%) were reconvicted for any offence in comparison to child molesters (31%). They also found that rapists re-offended at a faster rate than child molesters ($M = 48$ months compared to $M = 68$ months respectively). Hanson (2002) also reported that the rate of sexual recidivism declined as rapists aged, whereas child molesters re-offended at a consistent rate into their forties.

Given the seriousness of sexual offending and the frequency at which it is believed to occur, numerous resources have been directed toward the rehabilitation and management of offenders of these crimes (Saleh, Grudzinskas, Bradford & Brodsky, 2009). Rehabilitative interventions, such as treatment programming, have been shown to be a more cost efficient method of providing treatment in comparison to punishment-oriented interventions, such as boot camp or imprisonment (Brown, 2005). Given the potential cost efficiency of such interventions, there has been a great deal of research focused on determining which treatments were most effective (Schmucker & Lösel, 2008; Abracen, Looman & Langton, 2008; Olver, Wong & Nicholaichuk, 2009). As well, most convicted sex offenders are released back to the community following their sentence and therefore, effective treatment is critical to the management of sexual offenders and the overall safety of our society. Although there is room for debate in the literature regarding the effectiveness of sex offender programming, there is growing evidence that cognitive-behavioural interventions are the most effective form of treatment for reducing rates of recidivism sex offenders (Moster, Wnuk & Jeglic, 2008).
Treating Sexual Offenders

Treatment for sexual offenders began to take shape in the 1950’s with programs that were largely focused on behavioural interventions and the modification of sexual interests (Saleh et al., 2009). It was not until the 1970’s that treatment programs began to focus on offering cognitive-behavioural programs that included modifications of cognitive distortions, social skills training and enhancement of empathy (Saleh et al., 2009). During this time, however, these treatment programs for sex offenders were under a great deal of scrutiny. Reports by Martinson (1974) and his colleagues (Lipton, Martinson & Wilks, 1975) provided summaries of 231 controlled studies on sex offender treatment. From these studies, Martinson (1974) and Lipton et al. (1975) concluded that there had not been “any appreciable effects of recidivism” (Martinson, 1974, p. 25). The findings from this report and others lead to the widespread notion that “nothing works” in correctional rehabilitation (Sechrest, White & Brown, 1979). Following this crisis, there was increasing pressure for more effective treatment programming. The focus subsequently began to shift toward relapse-prevention models and cognitive-behavioural strategies for treatment (Marshall et al., 2006).

The relapse-prevention (RP) model entered the sex offender literature largely in the 1980s (Craig, Browne & Beech, 2008; Saleh et al., 2009). This RP approach was originally developed for use with individuals with substance abuse disorders (Marlatt, 1985); however, was later combined with elements of cognitive-behavioural therapy (CBT) for use amongst sex offenders (Marshall et al., 2006). This model serves to help offenders to: a) identify a detailed analysis of their pattern of offending; b) identify a range of potentially high risk situations; and c) develop strategies for avoiding these high risk situations and for coping with unanticipated risks (Saleh et al., 2009; Zilney, 2009). With the combination of behavioural, cognitive, educational,
and skills training approaches, the client would subsequently be able to identify and then modify the steps in the behavioural chain that lead to re-offending (Craig et al., 2008; Laws & Ward, 2006; Marshall et al., 2006; Zilney, 2009). When applied in sex offender treatment programming, CBT/RP techniques target the cognitive distortions of the offender’s thoughts and feelings about the offence and/or about the victim, as well as any deviant sexual fantasies (Carlson & Garrett, 2008; Kirsch & Becker, 2006; Marshall & Laws, 2003). Since the implementation of such interventions, the debate within the literature has shifted from the once held perspective that “nothing works” in correctional rehabilitation to a “what works” perspective (Andrews & Bonta, 2006). This shift has encouraged researchers to investigate better research designs and methods of offering the most effective treatment.

*Classification of Offenders for Treatment*

Andrews and Bonta (1998, 2003, 2006) have suggested there are three important factors that can be useful for guiding effective treatment with sexual offenders. These are: the risk principle, the need principle and the responsivity principle. The risk principle states that treatment services should match the risk level of the offender. More precisely, higher-risk offenders should receive more intensive and extensive treatment services in order to produce a reduction in recidivism. Similarly, those offenders identified as lower-risk should receive minimal intervention. The need principle suggests that different offenders, in particular those that are classified as high-risk, have multiple needs that should be addressed in treatment. These needs include “criminogenic needs” which are dynamic risk factors associated with changes in the probability of recidivism (Andrews & Bonta, 2006). Dynamic risk factors, also known as dynamic predictors, are risk factors that are susceptible to change and subsequently influence criminal behaviour. These particular factors can be relatively stable over months and years.
(“stable dynamic factors”), or more likely to fluctuate on a regular basis (“acute dynamic factors”) (Andrews & Bonta, 2006). A meta-analysis of 95 recidivism studies (Hanson & Morton-Bourgon, 2004) identified dynamic risk factors that have received the strongest research support, such as sexual deviancy, antisocial orientation, attitudes and intimacy deficits. In particular, sexual recidivists tended to have higher levels of different sexual activity and sexual preoccupations. In contrast, non-sexual recidivists were less likely to have identifiable problems in these areas. These dynamic factors make for appropriate treatment targets (Andrews & Bonta, 2006).

The third component for effective treatment is the responsivity principle. This principle suggests that treatment programs should be offered in a style and a mode that is consistent with the ability of the offender participating in the program. The essence of this principle is that treatment should be offered in a manner that the offender can understand and to which he/she can easily relate. This will ideally promote the implementation of treatment strategies in real scenarios and individual situations (Andrews & Bonta, 2006). Andrews and Bonta (2006) further encourage that these principles accompany treatment interventions that have a cognitive-behavioural component. Within the literature, most rigorous research has highlighted that cognitive-behavioural treatments are the most promising for reducing recidivism among sexual offenders and correctional populations in general (Andrews & Bonta, 1998, 2003, 2006; Duwe & Goldman, 2009; Schmucker & Lösel, 2008; Wilson, Boufford & MacKenzie, 2005).

Efficacy of Sex Offender Treatment Programs in Reducing Recidivism

Some researchers (Abracen et al., 2008; Looman, Abracen & Nicholaichuk, 2000; Lösel & Schmucker, 2005; Marshall, 2006; Marshall, Marshall, Fernandez, Malcolm & Moulden, 2008) have investigated the effectiveness of contemporary approaches to sex offender treatment
and have reported a decrease in rates of recidivism when treatment is offered in conjunction with appropriate CBT techniques. One such program implementing CBT interventions is the Regional Treatment Centre Sex Offender Treatment Program (RTCSOTP) offered through the Correctional Services of Canada (CSC). Looman, Abracen and Nicholaichuk (2000) investigated the efficacy of the RTCSOTP by utilizing a matched sample of 89 sexual offenders treated at the RTC between 1976 and 1989 and a comparison sample of 89 untreated sexual offenders. The untreated comparison sample was selected from an archived database of more than 3,000 offenders in the Prairie region of CSC. An attempt was originally made to provide an exact match for the treated offender on three dimensions: age at index offense (within one year), date of index offense (within the same calendar year) and prior criminal history (number of convictions +/- 2). However, the authors were unable to obtain a match for 63 participants in the treatment group due to the “serious nature of the treated group’s offending history” (Looman et al., 2000, p. 285). The treated group was comprised of a variety of offender types including pedophiles, rapists and incest offenders. After an 8 year follow-up period, Looman et al. (2000) reported that only 24% of the treated group were reconvicted for a sexual offence in comparison to the 52% of untreated offenders. This result was significant and the authors concluded that these results “clearly indicated that the RTC program was effective in terms of reducing the risk of future recidivism” (p. 288). It is important to note that a considerable limitation of this study is that the comparison group was derived from different regions of CSC. Secondly, the results of the study also provided little insight into what aspect of the treatment components were more salient in producing treatment effects. Despite this, the findings support the positive role of the program in reducing sexual recidivism.
Cognitive-behavioural treatment has been identified to also be an influential factor for postponing the length of time before re-offence. Nicholaichuk, Gordon, Gu and Wong (2000) evaluated the efficacy of the Clearwater Sexual Offender Treatment Program, an in-patient based cognitive-behavioural treatment program offered through the Correctional Services of Canada. The sample included a mixed group of sexual offenders who volunteered for treatment (N=296) and a comparison sample of untreated sexual offenders (N=283). Again, the groups were matched based on age at index offence, date of offence and prior criminal history. The results revealed that the treated offenders were less likely to be reconvicted of a sexual offence compared to those untreated offenders (15% versus 33%, respectively). During the follow-up period of six years, 48% of offenders remained out of prison compared to 28.3% of untreated offenders. These results were further supported by a second study carried out by the same team of researchers (Olver, Wong & Nicholaichuk, 2009).

Olver et al. (2009) carried out an extension of the study discussed above and included more stringent methodological control. They included an additional 176 participants, making the total sample 472 treated sexual offenders from the Clearwater Sexual Offender Program and 282 untreated sexual offenders. The study also included an additional 4 years of follow-up and more powerful statistical analyses. A Cox regression survival analysis was conducted in order to control for three potentially confounding variables: age of release, length of follow-up time and history of sexual offending. The results highlighted that treated offenders recidivated sexually at a rate significantly less than the comparison group of untreated sex offenders. Olver et al. (2009) concluded that these findings suggested that treatment which adhered to cognitive-behavioural techniques may be influential in reducing long-term sexual recidivism for moderate- to-high risk groups of sex offenders. Taken together, the findings of Olver et al. (2009), Nicholaichuk et al.
(2000) and Looman et al. (2000), lend further support for cognitive-behavioural treatment interventions among sexual offender populations. Despite these positive outcomes, there is some evidence to refute the optimism for treatment.

The first study to challenge the popularity of the relapse prevention model was The Sex Offender Treatment and Evaluation Project (SOTEP), a state-funded investigation in California (Marques, Wiederanders, Day, Nelson & van Ommeren, 2005). This investigation followed a group of sex offender treatment completers, drop-outs and non-participants for ten consecutive years between 1985 and 1995. The study employed a randomized control group, often argued to be the most stringent experimental design for evaluating efficacy in treatment studies (Marques et al., 2005; Seto, 2005). The group of mixed sex offenders were randomly assigned to the relapse-prevention treatment program \(N=259\) or to the no-treatment condition \(N=225\). A third group consisting of sex offenders who qualified for treatment but refused was included \(N=220\). Preliminary findings in 1999 (Marques, 1999) demonstrated that there was no overall treatment effect during the 4-year follow-up. Specifically, the highest rate of offending was among treatment drop-outs at 17.7% for sexual offences and 17.7% for violent offences. The treatment group and the control group were found to have similar rates of recidivism (13% for sexual re-offences and 8.7% for violent re-offences for the treatment group; and 12.5% recidivism for sexual re-offences and 10.9% for violent recidivism for the comparison group). In a final report in 2005, Marques again published results similar to those preliminary results found in 1999, indicating that 22% of the treatment group compared to 20% of the nonparticipant group and 19% of the controls re-offended sexually. Thus, there were no significant differences found among the three groups in their rates of sexual or violent recidivism (Marques et al., 2005).
The above report is often cited as evidence that treatment may not be empirically supported based on the results and the use of a randomized controlled trial (RTC). However, Marshall and Marshall (2007) have suggested that the use of this design has serious inherent ethical, practical, methodological and treatment issues. In regard to the SOTEP specifically, Marshall and Marshall (2007) argued the SOTEP deliberately excluded offenders who would typically be participants in treatment in order to abide by the rules of RCT design. As well, in line with the characteristics of RCT, each participant received the same treatment program, for an equal number of sessions and over the same length of time. This is problematic because the sample consisted of low risk offenders (38.4%), medium risk offenders (39.0%) and high risk offenders (22.6%). Despite this range in risk levels, all offenders received the same treatment (Marshall & Marshall, 2007). This is contradictory to research which suggests treatment should align with the offender’s level of risk and criminogenic need (Andrews & Bonta, 2006). In accordance with the components for effective treatment suggested by Andrews and Bonta (2006), those offenders of high risk/need should be in higher intensity programs, and conversely, those low risk offenders should attend lower intensity programs. In contrast to the SOTEP, programs offered through Correctional Services of Canada, for example, require that sex offenders are first evaluated with regard to their level of risk and criminogenic need. Treatment programs are then designated based on this assessment. Programs designed for higher risk offenders include more hours of treatment and extend for a longer period of time (Mailloux et al., 2003). The SOTEP also failed to incorporate strategies for many of the treatment targets that are recognized today to promote effective treatment, including known dynamic risk factors such as: intimacy deficits, self-regulation problems, and affective issues (Marshall & Marshall, 2007).
The varying findings from studies investigating specific treatment programs largely contribute to the ongoing debate about sex offender treatment efficacy. Many of these differences result from discrepancies in methodology and variation within the actual treatment program being evaluated. Although close evaluation of specific programs are necessary for developing a better understanding of the aspects of correctional rehabilitation that can be useful, the results are often difficult to generalize. Furthermore, many of these evaluations examine outcome measures such as recidivism, rather than more detailed examinations of outcomes that may reflect various components of treatment. In order to accommodate for some of these limitations, meta-analytic procedures are used to examine a large collection of different studies on treatment outcome. Meta-analytic studies offer advantages over other traditional methods of research in that they include multiple studies which make the results more easily generalizable across samples and studies. They also provide a method for identifying the relative importance of various factors across studies because certain offender characteristics, influential treatment components or offense characteristics are more likely to continually re-appear across different studies (Fenner, 2008).

**Meta-Analyses of Sex Offender Treatment Outcome**

There have been some notable treatment effects found by meta-analytic studies that have largely contributed to the literature on sexual offender treatment (Fenner, 2008). Many have reported a lower than average rate of sexual recidivism in treated groups of sexual offenders when comparisons were made to a control group of untreated sexual offenders (Hall, 1995; Alexander, 1999; Gallagher et al., 2000; Hanson et al., 2002; Lösel & Schmucker, 2003). For example, Hall (1995) collected 92 published studies for meta-analytic consideration. Of the 92 published studies, many were eliminated due to methodological short-comings. Namely, 32 of
the studies were eliminated because they included fewer than 10 participants and 48 studies were eliminated because they did not contain a control or comparison group or did not report recidivism. The remaining sample included 12 well controlled studies of sex offender treatment. The majority of the 12 studies included in the meta-analysis involved men over the age of 17, with the exception of one study, which included adolescent offenders. The total sample size included was 1,313 participants. The study employed a Pearson product-moment correlation as an estimate of effect size for the 12 studies, using formulas provided by Rosenthal (1991). Results indicated a small overall effect size for treatment versus comparison conditions \( r = .12 \). The overall recidivism rate for treated sexual offenders was 19% versus 27% for untreated sexual offenders included in the studies. Further, Hall (1995) found that hormonal treatments and cognitive-behavioural treatments were the most effective in reducing recidivism. However, it is important to also note that the small number of studies used in this meta-analysis may have influenced the results of this study.

A similar meta-analytic study by Alexander (1999) integrated a much larger sample of studies (N=79) on psychosocial sex offender treatment. This meta-analysis included a total sample of 10,988 participants and did not include participants who dropped out or were terminated during the course of treatment. As well, studies with fewer than 10 participants (N = 36), studies involving physical castration (N = 2), and those studies which overlapped with those in other reports (N = 25) or had unclear outcome data (N = 48) were also excluded from the analysis. Recidivism was defined, wherever possible, as “the number of participants who were rearrested for a new sexual offense” (Alexander, 1999, p. 104). Analyses revealed that of the 10,988 participants, 13.0% of the treated participants included and 18.0% of the untreated participants re-offended. With regard to the rates of recidivism by type of treatment intervention,
results indicated that treated participants enrolled in relapse prevention programs had a recidivism rate of 7.2%. Participants who received group or behavioural treatment programs reoffended at a rate of 13.9%. Those who attended an “unspecified” treatment reoffended at a rate of 13.1%. Although this study supports treatment efficacy for sex offenders, some individual studies relied on insufficient recidivism data and differing definitions of recidivism, which may have skewed the overall results. As well, the study assumed that the relapse prevention models used in the studies were similar, despite not being standardized. This limits the extent to which one particular technique can be identified as effective.

A meta-analytic review by Hanson, Gordon, Harris, Marques, Quinsey and Seto (2002), examined the effectiveness of psychological treatment for sexual offenders by summarizing data from 43 studies (combined N = 9,454). In order to be included in the analysis, a study had to compare the recidivism rates (sexual or general) of a sample of treated sex offenders with a comparison group of untreated sex offenders. The recidivism criteria had to be the same for both groups and the follow-up period had to be relatively similar for both groups. The sample also had to have a minimum of five participants within each group. Furthermore, within the individual studies included, majority of participants received psychological-oriented treatment, such as group therapy, individual therapy or conditioning. There were a few studies, however, that also included participants who had received medical treatments. Of the 43 studies included in the analysis, 17 were offered in the community, 23 were offered in an institution and 3 were offered in both settings. Recidivism in eight studies was defined as re-arrest and as reconviction in 11 studies. The remaining 20 studies used definitions that included parole violations, re-admissions to institutions, or unofficial community reports. The average follow-up period ranged from 12 months to 16 years, with a median of 46 months for both the treatment and
comparison groups. The 43 studies examined had a total sample of 5,078 treated sexual offenders and 4,376 untreated sexual offenders. Across all the studies used in the sample, the sexual recidivism rate was lower for the treated groups (12.3%) in comparison to the control groups (16.8%, 38 studies, unweighted average). Furthermore, results revealed treatment programs that were cognitive-behavioural and/or systematic in nature were associated with reductions in both sexual recidivism (from 17.3% to 9.9%) and general recidivism (from 51% to 32%). Hanson et al. (2002) noted that these results were small, but “statistically reliable and large enough to be of practical significance” (p. 187).

In 2005, Lösel and Schmucker conducted a meta-analysis of 69 sex offender treatment studies that were methodologically strong and included an evaluation of treatment. To be considered, the studies had to use recidivism as a measure of outcome and employ a control group design. Studies that allowed drop-outs as part of the inclusion in the control group were not considered for inclusion in the analysis. The analyses took into consideration the large difference in the sizes of the treatment groups (TG) and the control groups (CG) by calculating effect sizes. The findings showed the absolute difference in sexual recidivism between TG and CG was 6.4 percentage points, or a 37% reduction from the base rate of the CG. This finding was significant ($z = 4.96, p < 0.001$). Lösel and Schmucker (2005) also examined the effectiveness of various types of treatment, including physical treatments such as surgical castration and hormonal treatment, as well as psychosocial treatments. The physical treatments resulted in the highest effects compared to the psychosocial treatments; however, this was largely due to the inclusion of studies that included surgical castration procedures. Hormonal treatments also showed to have a higher effect than the psychosocial interventions. Of the psychosocial
treatments, cognitive-behavioural treatments and classic behaviour therapy had a significant impact on sexual recidivism compared to insight therapies and therapeutic communities.

In a more recent and comprehensive meta-analysis, Schmucker and Lösel (2008) updated their previous work (Lösel & Schmucker, 2005) and evaluated 80 independent comparisons of treated and untreated groups of sexual offenders, forming a large sample of 22,181 sexual offenders. The authors integrated different forms of re-offence, including sexual, violent and general offences. Recidivism was the outcome criterion and was broadly defined as including new convictions, incarcerations, arrests or charges, as well as lapse behaviour. Measures of personality and therapists’ ratings of treatment success were not considered sufficient outcomes for inclusion in the meta-analysis. The findings supported a positive treatment effect, and specifically, the results indicated a sexual recidivism rate of 11.1% for treated offenders and a 17.5% sexual recidivism rate for controls. Hormonal therapy, cognitive-behavioural therapy and behavioural techniques were found to have the most support. This study is one of the most recent and comprehensive meta-analysis on the effects of sexual offender treatment, as it includes a collection of international studies, unpublished trials, and almost one third of all the integrated studies have been published since 2000.

Although there have been more positive outcomes in evaluations of sex offender treatment programs over the last decade (Lösel & Schmucker, 2003), there are some groups of offenders who may be less amenable to treatment. In particular, offenders who are considered high risk with varied criminal histories and anti-social personality characteristics have been found to display higher rates of recidivism and respond poorly to treatment (Hare, 2003; Leygraf & Elsner, 2008). They also pose a significantly higher risk to the community and consequently,
there is considerable interest, largely in the forensic literature, about what strategies to use with these difficult types of offenders.

Description of Psychopathy

The most salient characteristics of the psychopathic offender are a propensity to take part in maladaptive, dangerous, impulsive and inappropriate, and often criminal, behaviour. They also have an inability to experience empathy, guilt or remorse to the same extent as the majority of the population (Fowles & Dindo, 2007). The concept of psychopathy has been a fascinating area of interest for the public, the media and also for researchers in the psychological field for decades (Andrews & Bonta, 2006). Descriptions of psychopathy started to receive more clinical attention with the release of Hervey Cleckley’s novel Mask of Sanity (1988). Cleckley’s description of the psychopath originally consisted of sixteen character traits that contributed to an individual’s perspective and behaviour. Among these characteristics were: manipulativeness, superficial charm, intelligence, absence of anxiety and lack of concern. Building on Cleckley’s work, Robert Hare developed a description of psychopathy that is now commonly accepted. In 1980, Hare developed the Psychopathy Checklist (PCL) in order to identify individuals who displayed atypically small electrophysiological responses to stressful challenges (Reimann, 2009). He later revised the instrument in 1991, renaming it the Psychopathy Checklist-Revised (PCL-R; Hare, 1991).

The PCL-R is a 20-item scale that describes the presence of psychopathic traits on the basis of absent (0), somewhat applies (1) or prevalent and pervasive (2). Factor analytic studies by Hare et al. (1990) have consistently shown that the PCL-R has a two-factor structure. Factor 1 describes personality traits such as interpersonal self-Centredness and emotional deficits, while Factor 2 describes antisocial and impulsive lifestyle. Salekin, Rogers and Sewell (1996)
performed a meta-analysis of 18 studies that investigated the relationship between the PCL/PCL-R and violent and nonviolent recidivism. Results from this study indicated that the PCL and PCL-R had moderate to strong effect sizes. These results support the hypothesis that the PCL-R is a good predictor of both general and violent recidivism. The PCL-R has also been associated with treatment non-compliance, institutional misconduct, and violent recidivism among correctional populations (Hare, 2003; Hemphill, Templeman, Wong & Hare, 1998; Leistico, Salekin, DeCoster & Rogers, 2008; Salekin et al., 1996). Anti-social conduct has also been associated with higher total PCL-R scores, Factor 1 and Factor 2 scores (Leistico et al., 2008). Results reported in a meta-analytic study by Hemphill et al. (1998), found a significant relationship between psychopathy and violence among different samples. Both Factor 1 and Factor 2 were similar in demonstrating predictive validity. In a second meta-analysis on the prediction of recidivism with the PCL-R, Factor 2 exceeded Factor 1 on the prediction of general recidivism, but was similar in predicting violent recidivism (Hemphill & Hare, 1998). For clinical purposes a cut-off score of ≥30 is typically followed. When defining psychopathy for research purposes, it is commonly accepted to use a cut-off score of ≥25 (Hare, 1991, 1996; Quinsey, Harris, Rice & Cormier, 1998).

_Treatment for Psychopathic Offenders_

Over the past two decades, there have been a number of influential studies which speak to the relatively poor treatment effects among offenders with psychopathic traits (Hare, Clark, Crann & Thorton, 2000; Harris, Rice & Cromier, 1991; Ogloff, Wong, Greenwood, 1990; Olver & Wong, 2006; Seto & Barbaree, 1999). Seto and Barbaree (1999) have often been cited as evidence of poor treatment effects for psychopaths (Leygraf & Elsner, 2008). In order to closely evaluate the role of psychopathy on treatment outcome and ratings of behaviour during
Seto and Barbaree (1999) conducted a retrospective study of a group-based relapse prevention program for sexual offenders imprisoned in Kingston, Ontario. The study compared the recidivism rates of 216 sexual offenders who had received institutional sex offender treatment programming. The total sample was divided into four possible combinations of dichotomous PCL-R ratings and ratings of treatment behaviour. Treatment ratings were assigned as “good” treatment behaviour or “poor” treatment behaviour, based on participation in group sessions, completion of homework, attainment of treatment targets, and global clinical ratings of motivation and change. With the exception of the last two, treatment staff assigned the ratings. The four groups were then separated as follows: high PCL-R scoring/good treatment behaviour; high PCL-R scoring/poor treatment behaviour; low PCL-R scoring/good treatment behaviour; and low PCL-R scoring/poor treatment behaviour.

Seto and Barbaree (1999) reported that the group classified as high PCL-R scoring and having “good” treatment behaviour ratings contained a higher percentage of offenders who had general re-offences and serious re-offences. Further analyses indicated that this result was significant for general recidivism, but not for serious recidivism. These results are interesting in that they are opposite to what the authors hypothesized. To address this concern Seto and Barbaree (1999) suggested that individuals who had higher psychopathy ratings were more likely to have “good” treatment behaviour ratings because they were better able to manipulate their way through treatment. In turn, these offenders received positive treatment ratings (Skeem et al., 2002). This study, however, was limited by a short follow-up period (2.7 years) and by the method of collection for outcome data. Specifically, the resources used by Seto and Barbaree (1999) to collect recidivism data were relatively weak in comparison to other alternative sources. In particular, the outcome data was collected using parole board reports and an electronic
database maintained by Correctional Services of Canada. Although this would have provided the necessary information, a stronger source of data collection would have been the use of the Canadian Police Information Centre (CPIC) records. This is a national police data base maintained by the Royal Canadian Mounted Police (RCMP) which details all criminal charges and convictions in Canada (Langton, Barbaree, Harkins & Peacock, 2006).

Barbaree (2005) conducted a follow-up study of this 1999 investigation, and accommodated for the previously noted limitations. Barbaree (2005) utilized methodology that was much more stringent in that it included an increased follow up period (2.7 years versus 5.2 years) and utilized the Canadian Police Information Centre (CPIC) records system for collecting recidivism data. The sample consisted of 212 sexual offenders assessed at the Warkworth Sexual Behaviour Clinic for whom information on psychopathy scores, treatment behaviour and recidivism were available. Similar to the 1999 study, offenders were separated into one of four groups, based on whether their PCL-R scores and treatment behaviour ratings fell above or below the median of that measure (median PCL-R score = 15, median treatment behaviour score= .70). Results indicated there were significant differences among the four groups with regard to the proportion of offenders who recidivated. Specifically, those offenders who scored higher on psychopathy were more likely to re-offend than offenders with low psychopathy scores. This result is consistent with Seto and Barbaree’s (1999) findings, and consistent with previous research that identified greater rates of re-offending among highly psychopathic offenders (Hare, 1996; Hare et al., 2000; Olver & Wong, 2006). In contrast to the 1999 study, which found the surprising result that high PCL-R sexual offenders with good behaviour ratings were more likely to re-offend, Barbaree (2005) found there were no differences between the
“good” treatment behaviour groups and the “poor” treatment behaviour groups with regard to rates of recidivism. Barbaree (2005) further added:

There is no evidence that offenders who are high in psychopathy and good in treatment behaviour reoffend at a greater rate than other offenders, beyond the well-known effect of psychopathy on recidivism. To reiterate, there is no support in these data for the notion that psychopaths who perform well in treatment should be considered at higher risk for re-offence compared with psychopaths who perform badly in treatment. Finally, there is no evidence in our data involving the follow-up of sex offenders treated in an institutional setting that psychological treatment caused psychopaths to reoffend at a higher rate (Barbaree, 2005, p. 1129).

As can be inferred from the variability among researchers, there is significant discrepancy in the outcome research for treatment of psychopathic offenders. Salekin (2002) has highlighted that there are three main problems with the current research on psychopathy, namely: “1) there is a lack of a uniform description of psychopathy; 2) the etiology of psychopathy is not well understood; and 3), there are not enough empirical studies on psychopathic individuals post-treatment to infer that it is an untreatable diagnosis” (p. 80). In order to address this third major limitation, Salekin (2002) conducted a meta-analysis of 42 treatment studies in order to assess the relationship between treatment and outcome. The study integrated existing research which examined the relation of psychopathy and treatment. This was unique in that “no previous review has summarized quantitatively such a comprehensive database for the psychopathy-treatment relation” (Salekin, 2002, p. 93). A computerized search was conducted of studies that examined the psychopathy-treatment relationship, which included articles that examined
treatment outcomes of psychopathy. The search did not incorporate other related disorders such
as Antisocial Personality Disorder and was limited to psychopathy. Among the 42 published
investigations, Salekin (2002) found that cognitive-behavioural therapies were the most
effective, with a success rate of 62%, based on 5 studies with a total of 246 psychopathic
individuals. The combination of eclectic therapies, insight therapy and psychotherapeutic
techniques, and cognitive-behavioural therapies were found to be the most effective, with a
success rate of 86%. Therapeutic communities were the least successful at 25%, based on 8
studies and 372 psychopathic individuals. Contrary to clinical belief that psychopaths may not
be amenable to treatment, the results of this study highlighted that cognitive-behavioural,
psychodynamic and eclectic interventions were shown to be effective by facilitating “notable
benefits including a reduction in psychopathic traits and characteristics (a decrease in lying, an
increase in remorse and empathy, improved relations with others) and a reduction in recidivism”
(Salekin, 2002, p. 105). The results further supported Salekin’s (2002) introductory statement
that there is “little scientific basis for the belief that psychopathy is an untreatable disorder” (p.
79).

In a more recent study, Porter, ten Brinke and Wilson (2009) investigated the influence of
psychopathy and sex offender subtype on criminal history, probability of conditional release, and
performance while on conditional release. Information on the 310 Canadian male sex offenders
included in the study was obtained from the offenders’ files. Offenders were classified as non-
sex offender, rapist, child molester or mixed rapist/child molester. The PCL-R (Hare, 1991) was
used to classify offender’s level of psychopathy. This study found that psychopathy was
associated with violent and non-violent re-offences, but not sexual re-offences. As well, a
significant interaction between psychopathy and offender subtype indicated that psychopathy
was associated with more sexual offences among child molesters. The results that psychopathy was not associated with sexual re-offences has also been supported by an earlier study by Langton et al. (2006). Langton et al. (2006) used a sample of 476 participants with a mean PCL-R score of 16 in order to evaluate the association of psychopathy with serious (sexual or violent re-offending) and sexual recidivism. Following completion of treatment, a significant correlation was found between psychopathy and serious recidivism, but not between psychopathy and sexual recidivism.

The varied results from the abovementioned studies suggest that it is still too early to draw conclusions about the degree to which psychopathic offenders can be treated. Many of the studies investigating the treatment of psychopathy are confounded by methodological limitations, such as the use of small sample sizes, no comparison groups, or lack of statistically significant findings (Doren & Yates, 2008). Among this subset of sex offenders, psychopathic traits appear to play a role in deviant behaviour; however, at this point in time, it is unclear which of these traits is responsible for predicting future sexual recidivism (Saleh et al., 2009). Within the research, there is some suggestion that sexual recidivism may be positively affected following completion of treatment; however, further studies with stronger methodological control will first need to be conducted.

Currently in the forensic literature, there are legitimate concerns regarding the efficacy of treatment for sexual offenders, particularly those of a high risk nature. Many meta-analytic procedures have been developed in attempt provide answers to these concerns. Although these procedures are typically more effective than examining the results of individual studies (Marshall et al., 2006), many are still limited by their inclusion of studies with small sample sizes and a lack of a comparison group. Furthermore, some studies have relied on drop-outs as
comparison groups, which are problematic because such groups have higher rates of recidivism (Langton, Barbaree, Harkins & Peacock, 2006). There is also a lack of research investigating the role of a well recognized, inpatient-based treatment program on the rates of recidivism among psychopathic offenders, as per the criteria of the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991). Currently in the literature, there is ongoing debate regarding how psychopathic sex offenders, and different classifications of sex offenders in general, respond to treatment. The purpose of the present study is to extend the current literature and address some of the limitations of previous studies by evaluating the Regional Treatment Centre Sex Offender Treatment Program (RTCSOTP), a recognized cognitive-behavioural treatment program, while utilizing a tightly controlled methodology

The Present Study

The present study was designed to evaluate the effectiveness of the Regional Treatment Centre Sex Offender Treatment Program (RTCSOTP), using the most stringent methodological control possible given the available data. More specifically, the research was designed to evaluate the impact of the RTCSOTP on official reports of new sexual, violent, and/or general reconvictions and/or charges among a group of mixed sex offenders and a sub-group of mixed sex offenders meeting the criteria for psychopathy, as defined by the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991). In order to maintain methodological control in such a study, treated offenders should ideally be compared to a control group of untreated offenders. In accordance with this standard, the present study included a matched comparison sample of mixed offenders who had not received any institutional or community sex offender treatment. Similarly, the examination of the sub-groups of psychopathic offenders also included an untreated, control sub-group. The study also sought to investigate the efficacy of the RTCSOTP
with regard to new sexual, violent and/or general convictions and/or charges for three different classifications of offenders: rapist offenders, intra-familial offenders, and extra-familial offenders.

Based upon the findings of previous research, the following hypotheses were made:

1. The RTCSOTP treated group of mixed sex offenders would have a fewer number of new sexual, violent and general convictions than the untreated group of sex offenders.

2. The RTCSOTP treated group of mixed sex offenders would have a fewer number of new sexual, violent and general charges than the untreated condition.

3. The sub-group of mixed sex offenders meeting or exceeding a cut off score of 25 on the Hare Psychopathy Checklist-Revised (PCL-R) and treated at the RTCSOTP would have a fewer number of new sexual and/or violent convictions than the control sub-group of mixed offenders scoring at or above 25 on the PCL-R.

4. Among the entire sample of mixed sexual offenders, the three different classifications of sex offenders would have significantly different rates of recidivism based on new sexual, violent and general convictions. Specifically, intra-familial offenders would have a fewer number of sexual and violent re-convictions than extra-familial and rapist offenders. Rapist offenders would have the highest rate of sexual and violent recidivism based on the number of new sexual, violent and general convictions.

5. The previous number of sexual convictions on an offender’s official RCMP record would be a predictive factor for new sexual conviction(s) following release. Similarly, the previous number of violent convictions on an offender’s official RCMP record would be a predictive factor for new violent conviction(s) following release.
Description of the Regional Treatment Centre Sex Offender Treatment Program

The present research was designed to assess the impact of the Regional Treatment Centre Sex Offender Treatment Program (RTCSOTP) on official reports of sexual, violent and/or general recidivism among a mixed group of sexual offenders following their release from incarceration. This mixed group of offenders also included a sub-group of sexual offenders meeting the criteria for psychopathy, as defined by the Hare Psychopathy Checklist-Revised (Hare, 1991). This allowed the present research to investigate the role of the treatment program in reducing recidivism rates among a particularly high-risk group of offenders characterized by high PCL-R scores.

The Regional Treatment Centre located is in Kingston, Ontario as part of the Ontario region of Correctional Services of Canada. It is an inpatient-based, psychiatric treatment facility located on the grounds of the Kingston Penitentiary, a maximum-security facility. Established in 1973 by Marshall and Williams, the RTC is the oldest continuously run sexual offender treatment program offered by CSC (Looman et al., 2000). The previous modality of treatment intervention was largely behavioural in nature and consisted of sexual education and training designed to increase heterosexual skills, assertiveness, and anger management. Other therapeutic techniques such as biofeedback procedures, aversion therapy, and covert sensitization were also used to address deviant arousal. Similarly, confrontation, role playing and supportive psychotherapy were also commonly used practices within the program. In 1986, techniques started to shift toward an increased focus on empathy enhancement. Then in 1989, the relapse prevention model was introduced to the formal treatment manual (Looman et al., 2000).
Currently, the RTCSOTP follows a contemporary cognitive-behavioural relapse prevention model of treatment. There are three components of treatment, including group treatment, individual therapy and milieu therapy. The milieu therapy component takes place with a nursing staff member who spends a minimum of two hours a day with an offender discussing issues associated with offending or reviewing treatment goals. Participants are also assigned a psychologist and a nurse with whom they discuss various aspects including developing a list of problem areas, strategizing procedures for reducing potential re-offence, why the offence occurred and risk taking. The group component includes group work and homework assignments. Those offenders who present as high risk also take part in individual therapy. The program is seven months in length, and if necessary, those offenders with special needs may also participate in an additional 3-5 month program. The RTCSOTP includes five main components of treatment, including disclosure of the offence, victim awareness, relapse prevention, social skills and human sexuality. Self-esteem, anxiety, deviant arousal, impulsivity and anger control are other areas that are discussed with staff members (Brown, 2005).

The admission criteria for participation in the RTCSOTP are relatively minimal. It is designed for high-risk offenders. However, the program will accept offenders of moderate risk, offenders with low ability in reading and writing, and those with manageable medical conditions. The program also accepts those offenders who deny their offences. Admissions are made based on rank in order of eligibility for statutory release for those serving finite sentences. For those serving life sentences or undetermined sentences, admission is ranked by parole eligibility or sentence commencement dates (Brown, 2005).
CHAPTER 2

Study Design and Methodology

Participants

A sample of 142 adult male sexual offenders was originally considered for the present study. The treated group was selected from a pre-existing database of all sexual offenders who had completed the RTCSOTP between 1993 and 1998, and for whom PCL-R data and a match in the Millhaven Assessment Unit (MAU; CSC, Ontario) dataset were available. Seventy-one participants assessed at the Millhaven Assessment Unit (MAU; CSC, Ontario) and for whom PCL-R data were available, comprised the untreated, control group. The groups were identically matched with regard to type of offender classification (intra-familial, extra-familial, or rapist), age at time of index offence (+/- 6 years), and PCL-R score (+/- 3 points). These groups had previously been established by researchers at Correctional Services of Canada for a previous study which was abandoned. Upon beginning the current study, the present researcher conducted a further investigation into the treatment histories of all participants included in each group. This resulted in the primary investigator removing seven participants from the treated group due to missing dates of release from incarceration or missing dates of treatment completion. Within the untreated, control group, an additional 16 offenders were removed after a thorough investigation of each offender’s treatment history which indicated that these offenders had received some form of institutional or community sex offender treatment. This search was conducted by the primary investigator through file review and personal contact with treatment providers. It was decided to not remove the corresponding matched offender from the treatment group and to leave the remaining groups unequal. This conclusion was justified by the small sample size that remained. Despite these alterations to the original sample, further analyses
revealed that the treatment and control group were still matched in regard to the original
matching criteria. The final sample included 55 adult male sex offenders within the untreated
control group and 64 adult male sex offenders within the treated group, resulting in a final
sample of 119 participants.

In order to also evaluate the role of psychopathy on recidivism following completion of
the RTCSOTP, two sub-samples of adult male sexual offenders meeting the criteria for
psychopathy, as defined by the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991), were
included. These sub-groups were derived from the final sample of participants and included
offenders who had a score $\geq 25$ on the PCL-R. For research purposes, this score has been
regarded as an acceptable cut-off score for labelling an offender as psychopathic (Quinsey et al.,
1998). The treated sub-sample included 17 participants and the control sub-sample included 14
participants.

An offender was eligible for inclusion in the present study if the following criteria were met:

1) Case management file was available;
2) Documents in the case management file were written in the English language;
3) Scores on Hare’s Psychopathy Checklist-Revised (PCL-R) were available;
4) Scores on the Rapid Risk Assessment of Sexual Offence Recidivism Scale
   (RRASOR, Hanson, 1997) were available. This measure has been shown to be an
   excellent predictor of sexual offence recidivism (Barbaree, Seto, Langton & Peacock,
   2001).

For the treated sex offender group, potential participant must have had at least one charge
or conviction on his criminal record of an offense involving a sexual assault. Potential
participants must have been treated at the Regional Treatment Centre and completed the Sexual
Offender Treatment Program at some point between the years 1993 and 1998. The potential participant must not have dropped-out of the program. For the untreated sex offender group, potential participants must have had at least one charge or conviction on his criminal record of an offense involving a sexual assault. Potential participant must not have had any form of institutional and/or community sex offender treatment. This includes both individually focused sex offender treatment, as well as group sex offender treatment programs. For the high PCL-R, treated sex offender sub-group, potential participant must have had at least one charge or conviction on his criminal record of an offense involving a sexual assault. Potential participants must have been treated at the Regional Treatment Centre and completed the Sexual Offender Treatment Program at some point between the years 1993 and 1998. The potential participant must not have dropped-out of the program. The potential participant must have a score of 25 or greater on the Hare Psychopathy Checklist Revised (PCL-R; Hare, 1991). For the high PCL-R, untreated sex offender sub-group, potential participants must have had at least one charge or conviction on his criminal record of an offense involving a sexual assault. Potential participants must not have had any form of institutional and/or community sex offender treatment. This includes both individually focused sex offender treatment, as well as group sex offender treatment programs. The potential participant must have a score of 25 or above on the Hare Psychopathy Checklist Revised (PCL-R).

Participants for whom a match could be made were eligible for the study. The matching criteria were outlined as follows:

a. age of index offence (+/- 6 years)

b. total PCL-R score (+/- 3)
c. and, type of sexual offence (rapist, intra-familial offender, extra-familial offender)

It should be emphasized that the RTCSOTP treated sample, by definition, was selected on the basis of being a high need group and represent a much higher need population when compared to the control group. It is, therefore, reasonable to assume that although matched on various domains, the treated group represented a slightly higher risk with more criminogenic needs.

Offender Typology

The literature highlights that it is important to decipher between the types of offenders included in research studies when investigating recidivism as a dependent measure. The research in the area suggested that rapists and child molesters, including intra-familial offenders and extra-familial offenders, reoffend at different rates (Kingston, Firestone, Wexler & Bradford, 2008; Quinsey et al., 2005). Therefore, treated and control participants in the present study were also compared with reference to sexual offence category. Participants were coded, based on sexual offending histories, as rapists, intra-familial offenders, and extra-familial offenders. Among the treated participants, 28 offenders were classified as rapists, 17 offenders were classified as intra-familial, and 18 offenders were classified as extra-familial offenders. The corresponding rates for the untreated group were 24 rapists, 15 intra-familial offenders, and 16 extra-familial offenders.

Intra-familial offenders. Studer and Aylwin (2006) explain that intra-familial offenders are “incest offenders who limit their sexually abusive behaviour to family members [and] are seen as being most representative of the regressed pedophile. Most of these men have partners to whom they presumably have some sexual access (and success), but in response to life stress,
marital discord, or other similar condition, opt to act out sexually toward their own children” (p.1). For the purposes of this study, an offender was classified as an intra-familial offender if he had previous sexual assaults against a relative or family member.

**Extra-familial offenders.** In discussing extra-familial offenders, Studer and Aylwin (2006) explain that “extra-familial molesters are most representative of fixated offenders, men who are likely to invest a significant amount of energy facilitating sexual activity with children, and have little sexual interest in adults” (p. 1). For the purposes of this study an offender was classified as an extra-familial offender if he had previous sexual assaults against children who are not of familial relation.

**Rapists.** The classification of a rapist in the present study is based on the same definition as that used by Oliver, Beech, Fisher and Beckett (2007) in their investigation of various sex offender treatment programs. The term rapist is “applied to individuals who have committed a penetrative sexual assault (vaginal or anal) against a victim of at least 16 years of age, as well as men who have been convicted of a serious sexual assault that would have resulted in penetration had they not been disturbed or fought off by the victim. Therefore, this definition is wider than the legal definition of rape.” (p. 301)

**Background Variables**

**Age.** As has been previously discussed in the literature, an offender’s age at the time of the index offence is a strong predictor of future recidivism (Quinsey, Harris, Rice & Cormier, 2005). Therefore, it is highly relevant that the offenders in each group were matched on this variable. The total sample consisted of 119 participants with an average age of 31.06 years ($SD = 8.35$) at the time of index offence. Specifically, the treatment group had an average age of
31.23 years ($SD = 8.21$) at the time of the index offence, and the untreated group had an average age of 30.89 years ($SD = 8.49$) at the time of the index offence.

**Score on the Hare Psychopathy Checklist-Revised (PCL-R).** Those offenders meeting the criteria for psychopathy, as defined by the PCL-R, have been found to have a higher rate of sexual and violent recidivism and poorer treatment ratings, in comparison to non-psychopathic offenders (Quinsey et al., 2006). The present study sought to investigate the effect of treatment on this subgroup of offenders. PCL-R scores for each subject within the treated and untreated group were matched. The mean PCL-R score for the RTC treated group was 18.01 and the PCL-R score of the control group was 18.75. From these two groups, two smaller, subgroups of high PCL-R ($\geq 25$) scoring offenders were formed. The mean PCL-R score for the RTC treated, psychopathic group was 27.7 and the mean PCL-R score for the control group was 28.0.

**Criminal History.** Criminal history information on each of the offenders used in the present study was previously collected and reported by CSC staff prior to the present researcher beginning this study. The present researcher was granted access to this information upon beginning the data collection for this study. Criminal histories were based on the number of previous sexual, violent and/or general convictions an offender had prior to the index offence based on the Royal Canadian Mounted Police (RCMP) Finger Print Service (FPS) records. These historical offences were classified based on the Cormier-Lang System for Quantifying Criminal History (Quinsey et al., 1998), which will be explained in greater detail further on in this section.

**Score on the Rapid Risk Assessment for Sex Offender Recidivism (RRASOR).** The Rapid Risk Assessment for Sex Offender Recidivism (Hanson, 1997) is a risk assessment measure that is typically administered to offenders during an initial intake assessment upon entering the
Federal system. Therefore, information pertaining to an offender’s score on this measure had previously been collected by trained CSC psychologists. The information was made available to the present researcher upon beginning this study. The RRASOR will also be explained in greater detail later in this section.

**Procedure**

**Consent**

Informed consent was obtained by completion of a consent form prior to engaging in treatment or receiving an initial assessment upon entry into the federal system. Although the participants were selected from a pre-existing database, each participant signed a consent form prior to engaging in treatment or assessment. This form also requested permission to allow file documentation to be used for research purposes. The consent form included the following information:

1) Participation is voluntary and participants are free to withdraw from treatment and/or assessment at any time, and that any collected information up to that point will only be used with the participant’s consent;

2) Participants can refuse to answer any question at any time;

3) Strict confidentiality will be enforced;

4) The information provided may be discussed with other members of the participant’s case management team;

5) The provided information may be used for research purposes;

6) If publications and presentations are made in the future based on the research completed using any information, the participant’s identity will remain strictly confidential and no identifying information will be included.
Confidentiality

Strict confidentiality was enforced with all the information collected. The labelling system used to identify offenders in the CSC involves following a numerical code known as Finger Print Service (FPS) numbers. These FPS numbers were used to collect data from the computerized Ontario Management System (OMS) database. OMS is a computerized database system which contains all offender records in Canada, including the Royal Canadian Mounted Police (RCMP) Finger Print Service (FPS) records. This database was password protected, and required a certain security level clearance granted by CSC in order to be accessed. Once data collection had been completed, all identifying information, including FPS numbers, was removed. Following completion of data collection, all hardcopy information, including offender files, were housed in a locked filing cabinet, separate from raw data.

Independent Variables

Treatment condition. The primary purpose of the present study was to investigate the effect of the RTCSOTP on rates of sexual, violent and general recidivism following release from incarceration. Therefore, the primary independent variable of interest was the treatment condition. Offenders who completed the RTCSOTP received a code of 1, and the offenders from the MAU who did not participate in any form of community and/or institutional sex offender programming received a code of 0.

PCL-R Score. Offender’s scores on the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991) were collected by trained CSC psychologists upon entry into the Federal system. This data was made available to the researcher through file documentation and the OMS database. These resources were made available to the researcher during a period of employment with CSC at the time of the present study. Within the subgroups of psychopathic offenders, those
offenders with a PCL-R score $\geq 25$ received a code of 1 to represent meeting the criteria for psychopathy, and those who had a PCL-R score $\leq 24$ received a code of 0, representing the absence of psychopathy.

Dependent Variables

The treated and untreated groups were examined with regard to the following variables: 1) sexual recidivism, based on the number of sexual re-convictions following release; 2) violent recidivism, based on the number of violent re-convictions following release; 3) general recidivism, based on the number of general re-convictions following release; and 4) psychopathy. The number of new sexual, violent and general charges were also collected and compared between the two groups. Although the dependent variable of main interest was new sexual and/or violent convictions, the number of new charges were also collected in order to ensure the most inclusive rates of recidivism were included in the investigation. Charges were included in attempt to accommodate for the low base rate at which sexual offenders re-offend. The treated and untreated groups were also separated into subgroups of high PCL-R scoring offenders and examined in regard to the same recidivism variables described above (sexual, violent, and general). Again, as a secondary investigative analysis, the number of new sexual, violent and/or general charges was also collected.

An analysis into whether the three different classifications of offenders included in this study (extra-familial, intra-familial and rapist) differed in respect to the number of new sexual, violent and/or general convictions was also assessed. And finally, a fourth investigation was conducted in order to assess whether the number of previous sexual and/or violent convictions on an offender’s official RCMP record influenced the likelihood that the offender would re-offend sexually and/or violently in the future. This investigation included the entire sample and did not
separate the offenders by treatment category. The purpose of this analysis was to further assess whether a history of previous offences is a predictive factor for future reconvicting.

Information needed to assess the dependent variables of sexual, violent and general recidivism was collected via case management file review, the OMS database, and the Canadian Police Information Program (CPIC) database. This system of reporting offers advantages in jurisdictions where recidivism data is not easily available on a national basis. Recidivism data was classified as a sexual, violent or general re-offence based on the Cormier-Lang System for Quantifying Criminal History (Quinsey et al., 1998). This system is an adaptation of an earlier scale by Akman and Normandeau (1967), and can be used to qualitatively classify an offender’s offence into violent and nonviolent offences, or to quantify an offender’s history of criminal offences, or a particular subgroup of offences, by assigning a certain score for the type of offence. This scale must be used in conjunction with official police records to determine accuracy of an offender’s criminal history. For the purposes of the present study, the Cormier-Lang System for Quantifying Criminal History (Quinsey et al., 1998) was used to qualitatively assign an offender’s previous offences into three different categories: violent offences, nonviolent (or general) offences, and sexual offences.

Risk Assessment Measures

Psychopathy Checklist-Revised (PCL-R). Psychopathic traits of offenders were assessed using the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991). This instrument is based on 20 items designed to assess the interpersonal, affective and behavioural characteristics of psychopathy in male criminal populations. Information that is required to score the PCL-R is based on file review and semi-structured interviews, and is focused on various aspects of life history, such as employment, education, and relationships. Items are then rated based on 3 levels
of scoring: 0 = not present; 1 = somewhat present; and 2 = completely present. Each item is subsequently scored and added to produce a score out of 40 possible points. For clinical purposes, a cut off score ≥30 is used to identify psychopathy (Hare, 1991, 1996). For research purposes, a score ≥25 has been identified as an acceptable cut-off score for identifying an offender as possessing psychopathic traits (Hare et al., 1990). The PCL-R has been shown to consist of two factors that are moderately correlated (r = .50, Hare et al., 1990).

The PCL-R has been shown to be a reliable and valid measure of psychopathy in the male criminal population (Hare, 1991; Hare, 2003). Brown (1994) evaluated the inter-rater reliability for the PCL-R assessments made by the staff at the Millhaven Assessment Unit (MAU; Canadian federal prison). With a sample of 17 rapists, single and averaged intraclass correlation coefficients (ICC’S) revealed a high inter-rater reliability for PCL-R Total scores (single ICC = .91, averaged ICC = .94), Factor 1 scores (single ICC = .87, averaged ICC = .93), and Factor 2 scores (single ICC = .82, averaged ICC = .92).

Risk Assessment Measures: RRASOR. The Rapid Risk Assessment for Sex Offence Recidivism (RRASOR; Hanson, 1997) was used to assess offender’s level of risk. The RRASOR is a brief, four-item screening instrument designed to predict sexual recidivism among adult sexual offenders. The scale is composed of four items: number of prior charges or convictions for sexual offences, age on release from prison or anticipated opportunity to reoffend in the community, any male victims (coded as yes or no) and any unrelated victims (coded as yes or no). The total scores can range from 0 to 6. To score the RRASOR, information is obtained by file review (Langton et al., 2007). For the purposes of the present study the RRASOR had previously been scored on all offenders in the sample by trained CSC psychologists.
Data Collection

Data collection consisted of two separate phases. The first phase of data collection had been previously conducted by CSC staff when the groups were originally being developed. It involved collecting particular background information on all of the participants included in the study. These background variables were then used as matching criteria for the treated and control groups. The collection of recidivism data was completed by the primary investigator between July 2007 and November 2007. The data collected included the following: 1) the offender’s date of release from incarceration; 2) the offender’s date of treatment completion; 3) new sexual, violent and general convictions obtained following release from incarceration; and, 4) new sexual, violent and general charges obtained following release from incarceration. The offender’s date of birth, date of release, and date of treatment completion were collected using OMS. It was necessary to collect information pertaining to the offender’s date of release from incarceration and/or treatment in order to account for the time at risk within the community. Any new sexual, violent and general convictions or charges that occurred following this date of release were coded based on the Cormier-Lang System for Quantifying Criminal History (Quinsey et al., 1998). The number of convictions and/or charges in each category was then added and a total number of sexual, violent and/or general convictions and/or charges were recorded for each offender. Participants who did not re-offend following release were awarded a score of 0. Participants who did recidivate were given the corresponding numerical score for the number of re-offences in each category (sexual, violent or general). For example, if a subject had two new sexual convictions following release, he was awarded a numerical score of 2 under the category of new sexual convictions. This was done in order to determine not only if the offender was re-offending, but how often re-offences were occurring.
Lastly, sexual, violent and general convictions were re-coded into dichotomous categories (‘no/yes’), where a score of 0 represented no recidivism and a score of 1 represented presence of recidivism. Following completion of data collection, statistical analyses were conducted in order to determine if treatment had an effect on recidivism rates. The statistical techniques employed will be discussed in further detail in the following section.

**Planned Statistical Analyses**

Analyses were conducted in various phases. The first set of analyses involved evaluating the entire sample by matching criteria (age at index offence, PCL-R score, and offender classification) in order to ensure the groups were well matched after having removed numerous offenders from the originally identical groups. Secondly, an investigation for the entire sample was conducted to establish if the treatment condition had an effect on recidivism rates, based on the number of new sexual, violent and/or general convictions and charges. A third set of analyses examined whether treatment had an effect on the number of new sexual, violent and general convictions among the sub-groups of high PCL-R scoring offenders. Further analyses utilizing the entire sample were conducted to evaluate whether the classification of the offender influenced the rate of new sexual, violent and/or general convictions. It has been highlighted in the forensic literature that incest offenders typically recidivate at the lowest rates, while rapists generally recidivate at much higher rates than both incest offenders and extra-familial offenders (see Studer & Aylwin, 2006, and Yates & Doren, 2008). Therefore, it was important to determine if the classification of the offenders in the sample had any influence on the outcome measure of recidivism. And finally, an investigation to evaluate if previous sexual and/or violent convictions were a predictive factor for future sexual and/or violent recidivism was also
completed. The statistical techniques used to evaluate such inquires will be explained in the following sections.

*Evaluating Group Differences*

In order to determine whether the treated and untreated conditions were comparably matched, a two samples independent *t*-test procedure was utilized. As the groups were no longer identically matched, it was important to ensure that there were no significant differences between them.

*Evaluation of Treatment Effect on Rates of Recidivism*

In determining if treatment had an effect on recidivism, basic frequencies were first conducted to capture a simple overview of the number of offenders who reoffended sexually, violently, and/or generally within each condition and how many new offences were committed. Following this, Mann-Whitney *U* tests were also conducted to determine if completing the RTCSOTP was associated with the number of new sexual, violent and general charges and convictions. For both the entire sample and the sub-sample of psychopathic offenders, the Mann-Whitney *U* test was utilized because the assumption of normality was violated for the dependent variables and the distribution of scores was highly positively skewed. Therefore, a non-parametric Mann-Whitney *U* test was utilized to explore whether the two groups were different on each of the dependent variables (new sexual, violent and general convictions; new sexual, violent and general charges). Furthermore, this procedure was chosen over a Multivariate Analysis of Variance (MANOVA) because of the likelihood of co-linearity between general convictions and sexual/violent convictions. Meaning, if an offender has violent and/or sexual convictions it is highly probable that he also has general convictions. This could have
potentially led to incorrect conclusions about the relationship between the independent and dependent variables.

Bivariate analyses were also conducted to examine the relationship between treatment condition and the dependent variables. Chi-square tests were used to determine whether completion of the RTCSOTP had any effect on the proportion of new sexual, violent and general charges and convictions acquired following release. This test was conducted a second time for the sub-groups of offenders scoring 25 or above on the PCL-R. New sexual, violent and general convictions were the dependent variables of interest.

*Exploration of Offender Typologies on Rates of Recidivism*

In order to evaluate whether an offender’s classification as an intra-familial offender, an extra-familial offender or a rapist offender influenced the rate of new sexual, violent and/or general convictions, a $K$ Independent-samples test, specifically the Kruskal-Wallis test, was conducted. The Kruskal-Wallis test evaluates “whether the population medians on a dependent variable are the same across all levels of a factor” (Green & Salkind, 2005, p. 383). In this case, the Kruskal-Wallis test assessed whether intra-familial offenders, extra-familial offenders and rapists had significantly different rates of recidivism.

*Examination of the Influence of Previous Convictions on the likelihood of Recidivism*

Lastly, a logistic regression analysis was conducted in order to assess whether previous sexual and violent convictions predicted the likelihood of future sexual and/or violent recidivism. A logistic regression is the appropriate statistic for measuring this procedure is concerned “with describing the relationship between a response variable and one or more explanatory variables” (Homser & Lemeshow, 2000, p. 1). This is distinguishable from a linear regression because the outcome variables of interest in this case are dichotomous (Homser & Lemeshow, 2000). In
order to perform this procedure, sexual and violent recidivism were re-coded into dichotomous variables (0 = no violent recidivism; 1 = violent recidivism; 0 = no sexual recidivism; 1 = sexual recidivism).
CHAPTER 3

Results

Examination of Group Differences

The present investigation included a sample of 119 sexual offenders who either participated in the RTCSOTP ($N = 64$), or who served as the control group of untreated control group ($N = 55$). Groups were matched on age at time of index offence ($\pm 6$ years), PCL-R score ($\pm 3$ points), and offender typology (intra-familial offender, extra-familial offender, and rapist). The RRASOR was also scored on all participants in the study. Several two-samples independent t-tests were conducted in order to ensure that there were no significant differences between the treated group and the control group with respect to these matching criteria.

The mean age of the entire sample was 31.06 years ($SD = 8.35$). The grouping variable was treatment with two levels of treated versus controls and the dependent variable (matched variable) was age at the time of index offence ($M=31.23$, $SD=8.211$; $M=30.89$, $SD=8.48$, respectively). The test was non-significant $t(117) = -.224$, $p = .823$. The mean PCL-R score for the sample was 18.4 ($S = 7.91$). The grouping variable was treatment with two levels of RTC versus MAU untreated and the dependent variable was average score on the PCL-R ($M=18.10$, $SD=7.58$; $M=18.75$, $SD=8.24$, for the treatment and matched control groups, respectively). The test was non-significant $t(117) = .444$, $p = .658$.

The mean number of previous sexual convictions amongst the sample as a whole was 2.72 ($SD = 2.27$). A two-samples independent t-test was employed to test the two groups with respect to the number of previous sexual convictions on RCMP records. The grouping variable was treatment with two levels of RTC versus MAU untreated and the dependent variable was number of previous sexual convictions recorded on official RCMP records ($M=2.94$ $SD=2.44$, $M=2.47$, $SD=2.67$).
The test was non-significant \( t(116) = .469 \). The mean RRASOR score among the entire sample was 1.20 (\( SD = .910 \)). The grouping variable was treatment with two levels of RTC treated versus MAU untreated and the dependent variable (matched variable) was score on the RRASOR (\( M=1.40, SD=.910; M=1.00, SD=.894, \) respectively). Again, the test was non-significant \( t(1) = .227 \). The mean follow-up period with reference to sexual recidivism for the full sample was 10.3 years, and was 9.4 years for the treated group and 11.2 years for comparison participants \( t(1, 106.90) = 3.28, p = .001 \).

**Hypothesis 1: Examining the Treatment Effects on Rates of New Sexual, Violent and General Convictions**

In line with the literature investigating sex offender treatment, it was hypothesized that those offenders treated at the RTCSOTP would have a fewer number of new sexual, violent and general convictions than the control group. A Mann-Whitney \( U \) test was performed to test this hypothesis. The grouping variable was two levels of treated versus control, and the dependent variables were new sexual offence convictions (Mean rank of 58.77 versus 60.13 for RTC and MAU respectively), new violent offence convictions (Mean rank of 58.9 versus 60.02 for RTC and MAU respectively), and new general offence convictions (Mean rank of 60.45 versus 58.67 for RTC and MAU respectively). The tests were non-significant, \( z = -.412, p = .68 \) for new sexual convictions, \( z = -.242, p = .809 \) for new violent convictions, and \( z = -.339, p = .73 \) for new general convictions. Chi-square analyses were performed to test the hypothesis that the treated group would have a smaller proportion of offences with respect new sexual, violent and general convictions. The result of this test for sexual re-convictions was non-significant, \( \chi^2(1, N= 119) = .353, p = .552 \). Similarly, the results of this test for violent re-convictions, \( \chi^2(1, N= 119) = .166, p = .683 \), and general re-convictions \( \chi^2(1, N = 119) = .00, p = .99 \), were also both non-
significant. These results are interpreted to mean that there were no significant differences between the treatment group and the control group with regard to treatment status. Table 1 presents the proportion of offenders by treatment condition that had new sexual, violent and general convictions.

Table 1

<table>
<thead>
<tr>
<th>Type of Offence</th>
<th>Treated Condition (n = 64)</th>
<th>Control Condition (n = 55)</th>
<th>$\chi^2(1)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Conviction(s)</td>
<td>12.5</td>
<td>9.1</td>
<td>.353</td>
</tr>
<tr>
<td>Violent Convictions(s)</td>
<td>25.0</td>
<td>21.8</td>
<td>.166</td>
</tr>
<tr>
<td>General Conviction(s)</td>
<td>32.8</td>
<td>32.7</td>
<td>.000</td>
</tr>
</tbody>
</table>

*New sexual, violent and general convictions were categorized as 0 = “no new conviction” and 1 = “new conviction(s)*

In order to account for the varying lengths of time at risk, a survival analysis was performed to evaluate sexual and violent recidivism following release from incarceration. This analysis addresses the problem that not all offenders have been in the community for an equal length of time. A survival analysis accounts for the different lengths of follow-up by taking into account offenders from each group who commit new crimes. It also accounts for the length of time between release and a new conviction. Finally, it allows for an inclusion of all offenders who were followed until they re-offended or until the follow-up was stopped (Prentky, Lee, Knight & Cerce, 1997). In the present study the method of conducting a survival analysis was using a Life Tables Analysis. This table is essentially an enhanced frequency distribution
table. The distribution of survival times is distributed among different set intervals. In the case of this study, the intervals were set as two years for a total of 12 years. This cut-off of 12 years was used because it allowed for the follow-up period for both groups to be included in the analysis. The average follow-up time was 9.4 years for the treated group and 11.2 years for the untreated group. For each interval (every two years), the analysis computes the number and proportion of participants that entered the community at the respective interval. It also computes the number and proportion of participants that failed in a respective interval (re-offended), and the number of cases that were censored in the respective interval (did not re-offend). Based on this, the life table gives a good indication of the distribution of failures (re-offences) over the period of follow-up years (StatSoft, Inc., 2008). Life table data is typically presented as a survival plot. This graph presents the percentage of survival on the vertical axis ranging from 100% at the top of the axis to 0% at the bottom of the axis. This means that at the beginning of the study, no participant had re-offended yet. The horizontal axis represents the time, in years, of follow-up. When the differences between the groups being studied are significant, the lines on the graph will diverge on the parts of the graph that reflect the period of follow-up (Riegelman, 2005).

In the case of the present study, the result of the analysis was non-significant for sexual recidivism, Wilcoxon (Gehan) $\chi^2(1) = .457, p = .499$ and for violent recidivism, Wilcoxon (Gehan) $\chi^2(1) = .681, p = .409$. It can therefore be interpreted that the rate of sexual and violent re-offence during the follow-up period is similar between the treated and control groups. The survival analysis graph for sexual recidivism is presented in Figure 1. The survival analysis graph for violent recidivism is presented in Figure 2.
Figure 1. Survival Analysis (Sexual Recidivism) Based on Treatment Condition
Figure 2. Survival Analysis (Violent Recidivism) Based on Treatment Condition
Hypothesis 2: Examining the Treatment Effects on Rates of New Sexual, Violent and General Charges

Similar to hypothesis one, it was speculated that those offenders treated at the RTCSOTP would have a fewer number of new sexual, violent and/or general charges than the control group. A Mann-Whitney U test was performed and the grouping variable was two levels of treated versus control and the dependent variables were new sexual offence charges (Mean rank of 58.12 versus 61.08 for RTC and MAU, respectively), new violent offence charges (Mean rank of 59.44 and 59.56 for RTC and MAU, respectively), and general offence charges (Mean rank of 58.92 and 60.01 for RTC and MAU, respectively). The tests were non-significant, \( z = -.836, p = .403 \) for new sexual charges, \( z = -.033, p = .974 \) for new violent convictions, and \( z = -.235, p = .814 \) for new general charges. A chi-square analysis performed to evaluate whether the treated group had a significantly lower proportion of new sexual charges was found to be non-significant \( \chi^2(1, N= 119) = .350, p = .554 \). Results were non-significant for new violent charges \( \chi^2(1, N = 119) = .045, p = .831 \), and for new general charges \( \chi^2(1, N = 119) = .166, p = .683 \). Table 2 presents the proportion of offenders by treatment condition that had new sexual, violent and general charges.

Table 2.

Prevalence (%) of Offenders with New Sexual, Violent, and/or General Convictions

<table>
<thead>
<tr>
<th>Type of Offence</th>
<th>Treated Condition (n = 64)</th>
<th>Control Condition (n = 55)</th>
<th>( \chi^2(1) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Charge(s)</td>
<td>10.9</td>
<td>14.5</td>
<td>.350</td>
</tr>
<tr>
<td>Violent Charge(s)</td>
<td>14.1</td>
<td>12.7</td>
<td>.831</td>
</tr>
<tr>
<td>General Charge(s)</td>
<td>25.0</td>
<td>21.8</td>
<td>.166</td>
</tr>
</tbody>
</table>

*New sexual, violent and general convictions were categorized as 0 = “no new conviction” and 1 = “new charge(s)”
Hypothesis 3: Examining the Treatment Effects on Rates of New Sexual, Violent and General Convictions for Psychopathic Offenders

The current study sought to investigate the effect of treatment on offenders who meet the criteria for psychopathy, based on a cut-off score of 25 or above on the PCL-R. Despite the ongoing debate in the literature, it was hypothesized that given the intensive nature of the RTCSOTP and the implementation of a cognitive-behavioural and relapse prevention model, treated psychopathic offenders would have a fewer new sexual and/or violent convictions compared to the control group. Three Mann-Whitney U tests were performed. The grouping variable was treatment with two levels of high PCL-R treated group versus high PCL-R control group and the dependent variables were new sexual offence convictions (Mean rank of 16.07 versus 15.94 for RTC and MAU, respectively) and new violent offence convictions (Mean rank of 15.05 versus 16.79 for RTC and MAU, respectively). The tests were non-significant, $z = -.093$, $p = .926$ for new sexual convictions, and, $z = -.581$, $p = .561$ for new violent convictions. A Chi-Square test was performed to evaluate whether the proportion of new sexual offence convictions among high PCL-R scoring offenders differed due to treatment. The results of the test were non-significant, $\chi^2(1, N = 31) = .020$, $p = .887$. Again, the Chi-Square test was performed to evaluate whether the proportion of new sexual and/or new violent offence convictions differed as a result of treatment. The test was non-significant $\chi^2(1, N = 31) = .313$, $p = .576$.

Hypothesis 4: Examining the Effect of Sex Offender Typology on Recidivism

Evidence has suggested that different types of sexual offenders re-offend at different rates (Kingston et al., 2008). In the present study, the total sample consisted of a mixed group of sexual offenders, specifically including intra-familial offenders, extra-familial offenders, and rapists. There is the possibility that the results of the present study were influenced by the
typology of the offender and not necessarily the treatment condition. Therefore, it was believed to be important to investigate whether these offender typologies differed in regard to the rate of new sexual, violent and general convictions. It was hypothesized that among the entire sample of sexual offenders, the three different classifications of sex offenders would have significantly different rates of recidivism based on new sexual, violent and general convictions. Specifically, intra-familial offenders would have a fewer number of sexual and violent reconvictions than extra-familial and rapist offenders. It was predicted that rapist offenders would have the highest rate of sexual and violent recidivism based on the number of new sexual, violent and general convictions.

Overall, in the total sample, three rapists recidivated sexually (5%), five extra-familial offenders recidivated sexually (8.6%), and four intra-familial offenders recidivated sexually (6.6%). A Kruskal-Wallis test was conducted to evaluate differences among the three offender classifications (intra-familial, extra-familial, and rapist) on a median change in number of new sexual convictions. The test was non-significant $\chi^2(2, N = 118) = 2.20, p = .333$. This indicates there was no relationship between the offender’s classification and the rate of sexual recidivism. Differences among the three offender classifications on a median change in number of violent reconvictions were examined and the findings were non-significant $\chi^2(2, N = 118) = 1.91, p = .386$. Finally, the effect of offender’s classification on a median change in number of general reconvictions was examined and, again, the result was non-significant $\chi^2(2, N = 118) = 5.31, p = .071$. Interestingly, rapist offenders recidivated at a slightly lower rate than both the extra-familial and intra-familial offenders. This is contradictory to many reports which suggest that rapists tend to re-offend at greater rates than other sexual offenders (Studer & Aylwin, 2006; Yates & Doren, 2008).
Hypothesis 5: Examining the Influence of Previous Convictions on the likelihood of Recidivism

Given that previous criminal history has been highlighted in the literature to be a key factor in the prediction of future recidivism (Hanson & Bussière, 1998), it was hypothesized that the previous number of sexual convictions on an offender’s official RCMP record would be a predictive factor for new sexual conviction(s) following release. Similarly, it was also hypothesized that the previous number of violent convictions on an offender’s official RCMP record would be a predictive factor for new violent conviction(s) following release. In order to evaluate these hypotheses, a logistic regression analysis was employed. This analysis is a variant of a multiple regression and the procedure assess the relation between one criterion (dependent) variable and several (predictor) variables. Essentially, it allows the researcher to estimate the odds of an event occurring on the basis of the predictor variables (Nicol & Pexman, 1999). A test of full-model versus null was non-significant, $\chi^2(2, 119) = 5.186, p = .075$. Table 3 presents the logistic regression coefficients, Wald statistics, and odds ratio for each of the predictors.

Table 3.

Summary of Logistic Regression Analysis Predicting Future Sexual and/or Violent Recidivism (Convictions)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>Odds ratio</th>
<th>Wald Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Sexual Conviction(s)</td>
<td>-.239</td>
<td>.122</td>
<td>3.802</td>
<td>3.802</td>
</tr>
<tr>
<td>Previous Violent Conviction(s)</td>
<td>.058</td>
<td>.119</td>
<td>.239</td>
<td>1.060</td>
</tr>
</tbody>
</table>

The test evaluating whether the previous number of sexual convictions predicts the likelihood of future sexual and/or violent recidivism (based on convictions) was non-significant, $\chi^2(1, 119) =$
Similarly, there was no significant findings when the number of previous violent convictions were evaluated for predicting future sexual and/or violent convictions, $\chi^2(1, 119) = 1.060, p = .625$. These results indicate that the previous number of sexual convictions and the previous number of violent convictions do not predict the likelihood of future sexual and/or violent recidivism.
CHAPTER 4

Discussion

The purpose of the present study was to investigate the efficacy of the RTCSOTP using the most conservative strategy that could be adopted given the available data. The study aimed to also investigate the treatment efficacy for a particularly high risk sample of offenders who meet the criteria for psychopathy, as defined by the PCL-R (cut-off score ≥25). In addition, the study evaluated if treatment had a differential effect for three different types of sex offenders: rapists, intra-familial offenders, and extra-familial offenders. A risk assessment measure, the RRASOR, was incorporated into the data to account for between-group differences in level of recidivism risk. Data of official reports of new sexual, violent and/or general convictions and charges following release from incarceration were collected for both the treatment and control group.

Based on the findings from the present study, there was no significant difference between the group of sexual offenders who attended and completed the RTCSOTP and those offenders who did not receive sex offender treatment. Specific statistical analyses that evaluated the role of treatment on rates of sexual, violent and general recidivism provided no indication that treatment decreased the probability of recidivism. The differing length of time at risk in the community was also taken into consideration for both groups through survival analysis procedures. The results were non-significant, indicating that the treated group and the control group re-offended at similar rates over the extensive follow-up period. The combination of these results suggests that the treatment and control groups reoffended at similar rates despite participation in the program. It is noteworthy to highlight that in evaluating sexual recidivism, only a small percent of offenders in both groups re-offended
within the follow up period. Specifically, 12.5% of the RTCSOTP treatment group re-offended sexually, and only 9.1% of the control group re-offended sexually. It should be noted that Hanson, Morton and Harris (2003) have reported that the average rate of sexual offence recidivism over a ten-year period was 20%. The rates of both groups included in the present study represent a rate approximately half of that reported by Hanson et al. (2003). The discrepancy in these findings further accentuates the difficulty in ascertaining an accurate report of the frequency of sexual offending.

The present study also sought to investigate the effectiveness of the RTCSOTP with a sub-group of sex offenders meeting the criteria for psychopathy, as defined by the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991). Statistical analyses were conducted in order to assess whether this sub-group of psychopathic offenders were amenable to treatment. Based on the outcome measure of new sexual, violent or general recidivism, results indicated no significant differences between the treated offenders and control group. However, in both groups of high PCL-R scoring offenders, only one offender from each group re-offended with regard to new sexual convictions.

The finding that psychopathic offenders responded poorly to treatment was not particularly surprising given that the treatment did not prove to be particularly effective for sex offenders in general (psychopathic or non-psychopathic). Based on this, it cannot be assumed that it would be effective for psychopathic offenders. There is much literature supporting this lack of treatment success among psychopathic offenders that specifically addresses the interaction between psychopathy and sexual deviance on sexual and violent recidivism (Harris et al., 2003; Seto, 2005; Olver & Wong, 2006). Furthermore, it has been noted that sex offenders who also possess psychopathic traits are more likely to re-offend and
at a faster rate (Quinsey et al., 2005). There is also argument in the literature that treatment of psychopathic offenders ultimately increases the likelihood of recidivism, and that treatment is potentially counter-productive for this population (Harris et al., 1991). In support of this argument, some researchers (Hayes, Barnett, Sullivan & Nielssen, 2009; Seto & Barbaree, 1999) have postulated that psychopathic offenders use these personality traits to manipulate treatment providers and even learn strategies for re-offending. The results from the present study do not support the hypothesis put forth by Hayes et al. (2009), and do not indicate that those psychopathic offenders receiving treatment re-offend more often or at faster rates. Although the results of the present study do not necessarily support treatment efficacy, the treated psychopathy group and the untreated psychopathy group had similar rates of sexual recidivism. The results also further emphasize that this population is particularly difficult to treat and treatment effects are varied. Despite this, the present research contributes to this growing body of literature by adding a well-controlled study which compares treated psychopathic offenders with matched controls.

The present research also considered different classifications of offenders, including intra-familial, extra-familial and rapist offenders. It was surprising that the results indicated there were no significant differences in recidivism between the three classifications. This is unusual given that majority of the literature on sexual offenders highlights that incest offenders reoffend at significantly lower rates than extra-familial and rapist offenders (Studer & Aylwin, 2006; Yates & Doren, 2008). This is likely a result of the limited number of offenders included in each typology with the whole sample. Considering this result is unusual given the findings of previous research, it is possible that the effectiveness of the treatment program will have been confounded by offering it to a mixed a group of offenders.
Unexpected results were also found which suggested previous sexual and/or violent convictions did not influence the likelihood of recidivism. This is inconsistent with literature studying sexual offenders, as previous sexual convictions are typically accepted as a leading predictive factor for future recidivism (Hanson & Bussière, 1998). For example, Hanson and Bussière (1998) examined the predictors of sexual recidivism in a meta-analysis of studies on sex offender recidivism. The median sample size was 189, and the median follow-up period was 4 years. Hanson and Bussière’s (1998) results indicated that deviant sexual preferences and past criminal history were the strongest predictors of sexual recidivism. Other important predictors were prior sexual offense and early onset of sexual offending. These results are also in line with most areas of psychology in general, which emphasize that past behaviour is often the best predictor of future behaviour (Albarracin, Johnson & Zanna, 2005). The results of the current study may be a consequence of inherent limitations within the dataset.

The results from the current study initially suggest that the RTCSOTP was ineffective in treating sexual offenders, including those offenders with psychopathic personalities. This ultimately leads one to question the effectiveness of the RTCSOTP for reducing recidivism. However, these results may have been influenced by the inherent problem of a relatively low base rate of recidivism among sexual offenders. Base rate simply refers to the proportion of offenders in a given population who commit an additional offence after their release (Craig, Browne & Beech, 2008). A number of authors (Barbaree, 1997, Brown, 2005; Craig et al., 2008) have discussed the difficulties associated with finding statistical significance in treatment studies with sexual offenders because of this inherently low base rate. Recent evidence regarding sexual offence recidivism by Hanson (2005) supports this problem low base rate, showing that only 10-15% of sexual offenders recidivated over an average follow
up period of 5 years. Barbaree (1997) also explains that base rates can vary between sexual recidivism studies from 10%-40%. This problem can negatively influence the results of studies even if significant differences exist between treatment and comparison conditions.

Hanson (2000) has noted that it is very difficult to demonstrate statistical significance unless very large groups are utilized and the treatment group presents extremely low rates of recidivism. He further explains that a treatment program which reduced recidivism by 40% over a 5 year period would require a sample size of 200 per group to have even a 50% chance of finding a treatment effect. Therefore, given this argument, it is highly plausible that the small sample size included in the present study may have also limited the likelihood of finding statistical significance. Base rates have also been found to vary between types of offenders. Rapists, for example, have been found to have the highest base rate for convictions at 17.1%. Base rates for convictions among extra-familial offenders are slightly higher at 19.5%. Intra-familial offenders, on the other hand, have a much lower base rate of offending at 8.4%. Among intra-familial offenders, if the offender is between the ages of 18 and 24, the base rate increases to 30.7% (Hanson, 2002). Low base rates among sex offenders has become a well-known problem within the literature (Fenner, 2008) and likely contributed to the lack of significance in the present study. Despite this, Hanson (2000) argues that research with smaller sample sizes, or lacking statistical significance, can make an important contribution when pooled with other treatment studies. This particular study is one such study that has the methodological control to contribute greatly to the literature, despite the lack of significant difference between the two main groups.

Although every effort was made to control for differences between the treatment and control group on background variables, the RTCSOTP sample may have represented a group...
of offenders with higher treatment needs. As previously noted the RTCSOTP program is specifically designed for offenders with higher risk and/or need profiles. Looman (2003) examined 48 consecutive admissions to the RTCSOTP. Of these offenders, 37 (77.1%) met DSM criteria for a personality disorder. Fifteen of those 37 offenders (40.5%) were described in file information as having “severe” personality disorders. It has been recently noted by Langström, Sjostedt and Grann (2004) that the incidence of psychiatric disorders increases the probability of recidivism among sexual offenders. For example, these authors reported that a diagnosis of personality disorder increased the odds of sexual reconviction by a magnitude of 10 times and a diagnosis of alcohol abuse or dependence more than doubled the odds of a sexual reconviction.

There are important differences among sex offenders that require attention within treatment. Inclusion of different types of offenders may have influenced the treatment effects. Among the sex offender population, Marshall, Marshall, Serran and O’Brien (2008) have outlined that sexual offenders have been shown to have low self-esteem, maintain cognitive distortions about their offences, often experience shame and guilt, and generally lack empathy toward their victims. There are also specific characteristic differences between sex offender classifications with regard to interpersonal, behavioural and cognitive attributes (Perez, 2007). In particular, differences have been reported between rapist offenders and other sex offenders, such as child molesters (Hudson & Ward, 1997). Child molesters, for example, are more likely to have deviant sexual fantasies about children in particular; whereas, rapists have a wider range of deviant fantasies with adult victims. Rapists are also more likely to have pro-criminal, anti-social attitudes such as aggression, minimization of violence, and a greater sense of entitlement (Mills, Anderson & Kroner, 2004). There is also
evidence to suggest that there are different “schemas” in the underlying thought processes of different sexual offenders (Milner & Webster, 2004; Perez, 2007), as well as different motivational factors influencing different types of sex offenders. With regard to rapist offenders, for example, it has been argued that the underlying motivation stems from an overall negative and antisocial lifestyle. In comparison, intra-familial offenders have been argued to offend because of intimacy deficits and an immature level of sexual development (Perez, 2007). Unfortunately, the current study did not include a qualitative investigation component that could have evaluated the role of these varying personality, cognitive, and behavioural differences among the various classifications of offenders. Evaluating the effect of treatment on these mediating variables may have provided additional information regarding process-level treatment effects for the various groups of offenders treated in this program.

By employing a dependent measure of recidivism, there is a lack of information as to which aspects of the RTCSOTP are most effective. Therefore, it would be premature to judge the program, as a whole, as ineffective. In fact, there may be areas of particular strength or weakness that are influencing the outcome of this study that have not been identified because of the study’s design. Before the RTCSOTP is more thoroughly investigated, it is too soon to draw any conclusions about the overall effectiveness of the program.

*Strengths and Limitations of the Research*

There were several limitations of the current study which may have influenced the results. First, there were inherent limitations in the sample of untreated sexual offenders used in this study. The untreated comparison group was constructed from information collected from file documentation. Although all measures were taken to ensure the untreated control
group did not receive any form of community or institutional sex offender programming, it is likely that many of them completed various other forms of CSC treatment programming. Completion of treatment programs while under the jurisdiction of CSC is relevant information, as all core CSC programs follow a cognitive-behavioural model of treatment and typically address criminogenic targets. Furthermore, research indicates that participation in CSC core programs is related to treatment gains and reductions in recidivism (Millson, Weekes & Lightfoot, 1995). Thus, despite not completing sex offender treatment, the comparison group was likely not entirely untreated, and may have benefited from other aspects of treatment programming, ultimately reducing the likelihood for recidivism.

Likewise, the participants from the treatment sample also completed other CSC programming outside of the RTCSOTP. Thus, it cannot be certain that the rates of recidivism among this group are entirely a result of participation in the RTCSOTP.

Prior to beginning data collection, the present author used all file information available, including archived information from Correctional Services of Canada National Headquarters, and established telephone contact with staff within the participating institutions, to ensure that all members had not received sex offender treatment. Unfortunately, data regarding the reasons for failure to participate in treatment was unavailable. It was ensured, however, that none of the participants were drop-outs, as drop-outs have been shown to have a significantly higher rate of recidivism (Marshall et al., 2008). Although each participant was not personally interviewed about their treatment history, all measures were taken to establish an untreated control group.

The sample size in the current study was small, and the rates of recidivism for both groups were low. These limitations are not uncommon within this area of research; however,
it likely influenced the outcome of the results. The sample size of the sub-group of psychopathic offenders was also particularly small, which likely resulted in low statistical power to identify any significant differences between the groups. Similarly, because of the extremely small sample size, a survival analysis could not be performed for high psychopathy scorers to accommodate for differing lengths of time at risk. This is problematic because the analyses for the subsample of psychopaths did not account for whether members of both groups had equal amounts of time at risk in the community. This information would have been useful as it would have added to the methodological control of the study and would have provided practical information about how long the effects of treatment are sustained.

Also, although there was a substantial follow-up period (mean follow-up period of 10.3 years), within this period there was no inclusion of evaluations completed by supervisors in the community (e.g. parole officer, personal support worker). As well, there was no investigation with regard to the offender’s social support, employment, income, or living conditions within the community. These are important factors to consider following release from incarceration, as they have been shown to also influence the rate of recidivism (Hepburn & Griffin, 2004).

Despite these limitations, the current study makes a large contribution to the relevant literature and to the field of correctional treatment. The current study attempted to overcome many of the methodological limitations typically associated with research in this area. Namely, the study included a control group of untreated sex offenders and matched this group with a group of sex offenders treated at an inpatient-based, cognitive-behavioural treatment program. As well, the study incorporated information on each offender’s score on
the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991). In the current investigation, the participants were matched on PCL-R score (+/- 3), age of index offence (+/- 6 years), and type of offender (rapists, intra-familial, extra-familial offenders). There are a number of advantages to this methodology. First, participants were not only matched on a measure that has clearly been shown to be a state of the art predictor of recidivism, but also on a measure of personality. Second, given the high-risk nature of participants attending the RTCSOTP, this methodology would allow for the comparison of a group of treatment participants meeting the diagnostic criteria for psychopathy and matched untreated participants. Third, the present investigation also took into account offenders’ scores on the RRASOR, an actuarial measure of potential risk, in order to account for differing levels of risk between the two groups. As well, the study employed an extensive follow up time for sexual recidivism of 9.4 years for the RTCSOTP treated group and 11.2 years for the control group. Survival analyses for the entire sample were also conducted in order to account for the differing lengths of time at risk. To this author’s knowledge, there are currently few studies in the literature that employ such a stringent methodology, while also incorporating a measure of psychopathy.

The outcome measure employed in the current study adds to the study’s methodological control. A dependent measure of both new sexual and new violent convictions and charges was used in the definition of recidivism. The inclusion of violent charges and convictions has been shown to capture significantly more sexual re-offences than just using sexual recidivism alone (Quinsey et al., 2005). A study by Rice, Harris, Lang and Cromier (2005) suggests that using violent recidivism is “at least as accurate a measure of offenses that are truly sexually violent as is sexual recidivism that can be ascertained as clearly sexual from
police rap sheets alone” (as cited in Quinsey et al., 2005, p. 141). This means, only using sexual charges or convictions as a dependent measure may actually miss most of the serious offences (e.g. sexual murders), whereas incorporating violent offences into the dependent measure does not (Quinsey et al., 2005).

**Implications for Future Research and Treatment**

The duration and length of treatment has also been suggested to have an important and influential role in the effectiveness of programming. Even more specifically, it has been identified to be an important consideration when allocating sex offenders to various treatment programs (Mailloux, Abracen, Serin, Abbott, Cousineau, Malcolm & Looman, 2003; Marshall & Yates, 2005). Moderate and high-risk clients, as identified by their scores on actuarial risk measures and based on their criminal histories, typically present with significant treatment needs. Therefore, it can be argued that these offenders would require more intensive treatment programming than lower-risk offenders. As intra-familial offenders have been identified to have markedly different criminogenic needs and risk levels than rapist offenders, they may benefit from being placed in different treatment programs. In this particular study, the RTCSOTP was offered to a mixed group of offenders of intra-familial, extra-familial and rapist offenders, who could potentially have different criminogenic needs. Therefore, it is difficult to ensure the program was, in fact, targeting these varying treatment needs. In the future, it would be beneficial to focus on the appropriate duration and intensity of programming required for the different classifications of offenders. This would not only increase the likelihood of program effectiveness, but also be cost and time efficient. Similarly, the duration and intensity of programming for those offenders with psychopathic characteristics also requires greater attention. It is possible that
those psychopathic offenders participating in the RTCSOTP could have benefited from more intensive programming. Presently in the literature, there is ongoing debate surrounding the duration and intensity of treatment for high risk versus low risk offenders (Andrews & Bonta, 2006). Andrews and Bonta (2006) for example, argue that treatment is most effective for high risk offenders and, consequently, more research in this area should be focused on this population. In addition, given the previously discussed difficulties with treating this unique population, any strategies that can potentially improve or influence treatment success should be thoroughly investigated.

Psychopathic offenders are a particularly difficult group to treat, largely due to their complicated personality traits and varied criminal histories. Many researchers (e.g. Hayes, 2008; Olver & Wong, 2006; Quinsey et al., 2005) argue that those offenders who commit sexual crimes and possess psychopathic personality traits are the most likely to recidivate. However, in the current study, those psychopathic offenders who re-offended sexually did not recidivate any more often than those psychopathic offenders who did not receive treatment. Therefore, the anti-social personality traits that are characteristic of this population can potentially make for appropriate treatment targets in both programming and supervision. Future development of treatment strategies for this population could potentially benefit from an increased focus on the influential personality traits that increase the likelihood of re-offence.

Intra-familial, extra-familial and rapist offenders have been represented in the literature as possessing different dynamic risk factors. Although the basis of the RTCSOTP is to address the dynamic risk factors of offenders, a more thorough, qualitative investigation into how these different dynamic risk factors are approached would have provided greater insight
as to how treatment was influencing each of these predictive risk factors. More research investigating this would also indicate which factors are particularly useful in the prediction among different classifications of offenders and this information could be subsequently integrated into treatment to develop more effective treatment targets.

The present study could have potentially provided more information regarding the effectiveness of the RTCSOTP had it included an analysis of the various process-level components that have been identified to influence treatment effectiveness. Within the literature on sexual offender treatment programming, a number of potential factors have been identified to have a significant effect on treatment effectiveness. Marshall (2005) suggests that the style and the skills of the therapist working with the sex offender may play an influential role in the program’s effectiveness. He further explains that therapist characteristics reflective of empathy and warmth were most influential in maximizing the benefits derived from the program. He also highlights that the provision of rewards for progress, as well as the degree of the therapist’s directiveness, may also contribute to increased treatment benefits. Together, the positive attributes of the therapist represented between 40% and 60% of the variance in a set of indices of treatment benefits. These conclusions have also supported by Beech and Hamilton-Giachritsis (2005) in their study regarding the climate of group therapy. These researchers (Beech & Hamilton-Giachritsis, 2005) examined the relationship between the therapeutic climate the effectiveness of CBT treatment for sexual offenders and found that the perception of group cohesiveness and the amount of encouragement for expression were influential factors in reducing pro-criminal feelings.
An evaluation into these aspects of treatment would have provided more insight into how effective the RTCSOTP is overall, rather than simply evaluating its effectiveness based on an outcome measure. Using an outcome measure of recidivism as the sole indicator of treatment effectiveness is risky and ridden with limitations. For example, the results based on this dependent measure are influenced by low base rates and small sample sizes, and do not provide any information into the quality of the program’s treatment plan or therapeutic style. Within research, this type of dependent measures makes it difficult to identify why the programs under investigation are either effective or ineffective.

Similarly, in the current study, a more in-depth investigation into the different dynamic risk factors for participants in both groups may have also contributed valuable information to the different criminogenic needs of the offenders used in this study. If this information had been investigated for the offenders used in this study, it would have provided more information about the offenders who did re-offend following treatment in contrast to those offenders who did not re-offend. As there were a number of offenders from the untreated comparison group that did not re-offend, despite not having received sex offender treatment, some information about these offenders would greatly contribute to future research with this population. Similarly, inclusion of the dynamic risk factors of the offenders who participated in the RTCSOTP may provide some insight into the various strengths and weaknesses of the program.

The current study did not include any evaluation of the role of supervision on the reduction of recidivism among sex offenders once they are released from incarceration. This is an important aspect of ongoing treatment success once in the community. Quinsey and his colleagues (2005) note there is very little empirical literature on the ability of either
supervision or community notification in reducing the risk of recidivism. As this study did not incorporate any consideration of community social support or parole supervision into evaluating the effectiveness of the program following release, it would be beneficial for future research to consider this avenue. Similarly, Campbell (2007) also highlight that current sex offender programming does not necessarily prepare an offender for the challenges of the outside world. The research on supervision for criminals, in general, highlights that supervision of moderate and high risk offenders, which include a rehabilitation component, can reduce the risk of future re-offence (Quinsey et al., 2005). However, there is little research that investigates the role of supervision on sexual offenders. Therefore, future research in the area of sex offender prevention programs would benefit from incorporating an aspect of community supervision.

The most practical need for future research in the area of sex offender programming is to ultimately identify interventions that will reduce the risk of future recidivism. This includes identifying methods of supervision, treatment strategies, and the formulation of new theories of etiology.

Concluding Remarks

The current study employed a methodology that is much stronger than those typically utilized in the literature. Much of the current literature is plagued with limitations inherent in their designs. Meta-analysis represents one popular method of evaluating sex offender treatment and recidivism, and although excellent work has been conducted by employing this strategy (Hanson et al., 2003; Lösel & Schmucker, 2005; Schmucker & Lösel, 2008), this method does not substitute for an improved methodological design. Furthermore, much of the research evaluating sex offender treatment programs fails to incorporate a comparison sample. Similarly,
there is also a lack of research which employs comparable treatment conditions while investigating cognitive-behavioural programming. The present study accounts for these limitations and also evaluates a sub-group of psychopathic sex offenders.

The results from the present study suggest that the RTCSOTP is not a particularly effective program. However, given the numerous limitations presented above and the difficulties associated with finding statistical significance, it is too early to make such conclusions about the program’s overall effectiveness. These results should be interpreted with caution and should take into consideration the previous research on the RTCSOTP which highlights its overall effectiveness in reducing recidivism among sexual offenders (Looman et al., 2000). These results should not be the basis for large-scale changes in the application of the program. Rather, they should be interpreted in combination with previous research on treatment programming and used to develop strategies for improving the overall effectiveness of the program. Furthermore, they should not be considered as proof that treatment programs for offenders are ineffective.

The study also incorporated a sub-group of sexual offenders meeting the cut-off criteria for psychopathy based on the PCL-R. Although the present study failed to find statistical difference between the two sub-groups of psychopathic offenders, the study contributes to the debate involving the treatability of this population of offenders. There are very few controlled studies on the treatment of psychopathy. Furthermore, according to the criteria established by Wong (2000), there have been no studies which have investigated the efficacy of a comprehensive inpatient based treatment program with reference to psychopathy, based on the PCL-R definition, using a matched untreated comparison group. As such, the results of the present investigation are of clear relevance to the treatment of psychopathy more generally. Wong and Hare (2005) have noted that “even modest reductions in the use of aggression and violence by psychopaths
would be of enormous benefit to society” (p.9). Although far from resolving the ongoing debate regarding whether treatment is effective with psychopathic offenders and sex offenders in general, the current study adds to the accumulating research in this area and provides a framework for future research to investigate the dynamics of treatment programming.
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