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An investigation of factors that influence treatment responsiveness in incarcerated
higher-risk rapists

By

Ida Dickie BA (Hons), M.A.

A dissertation submitted to the
Faculty of Graduate Studies and Research
In partial fulfillment of the requirements for the
Degree of Doctor of Philosophy

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Abstract

This study examined the responsivity principle in a sample of 108 higher-risk rapists; specifically, offender characteristics considered to influence the likelihood that a higher-risk rapist will begin, continue, and complete a high-intensity sex offender treatment program. A range of offender characteristics were investigated including: age, psychopathy, hostility, interpersonal style, treatment readiness, motivation level to complete correctional treatment, stage of behavioural change, denial and deviant sexual arousal. Treatment outcome was defined as attrition from treatment, institutional adjustment, treatment gain and recidivism. Key findings suggest that age, psychopathy, treatment readiness, motivation level and stage of behavioural change influence attrition and institutional adjustment in higher-risk rapists. Contrary to expectation, denial, hostility and deviant arousal did not emerge as responsivity factors. Results also suggest that the relationship between attrition, institutional adjustment, treatment gain, and recidivism may not be linear. Therefore, it may be necessary to re-conceptualize the relationship between program completion, treatment gain, recidivism and risk reduction. Further, the study's findings imply that pre-treatment groups designed to increase treatment readiness and motivation may enhance treatment responsiveness in higher-risk rapists.

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I. INTRODUCTION

Given the widespread implementation of specialized sexual offender treatment programs in the United States (Knopp, Freeman-Longo, & Stevenson 1992), the United Kingdom (Grubin & Thornton, 1994), and Canada (Wormith & Hanson, 1992), an understanding of the principles that contribute to effective intervention with sexual offenders has become increasingly important. Research has demonstrated that effective treatment with offenders is based upon the risk, need, and responsivity principles (Andrews & Bonta, 1998, 2003).

The risk principle is defined as matching the offenders' risk level for recidivism with the appropriate treatment intensity level. Lower risk offenders require lower intensity treatment. Further, offenders represent varying risk levels for engaging in criminal behaviour. However, by successfully completing the appropriate intensity level of treatment, offenders can reduce their level of risk.

The need principle differentiates between two types of offender needs: criminogenic versus non-criminogenic. Criminogenic needs (antisocial attitudes and substance abuse) are factors that when changed influence recidivism whereas. In contrast, non-criminogenic needs (self-esteem, anxiety) are not associated with changes in recidivism. Accordingly in order for programs to be effective they must address criminogenic needs. Higher-risk offenders are more likely to have greater criminogenic needs than lower risk offenders.

The responsivity principle is defined as matching the treatment style to the various personality and cognitive-behavioural factors that impact an offender's responsiveness and motivation for treatment (Bonta, 1995). For example, a lower

functioning offender with an IQ less than 70 will require a different delivery style than an offender with IQ of 90. Research indicates that correctional treatment programs that adhere to these principles can reduce recidivism by up to 50% (Andrews et al., 1996; Andrews, Dowden, & Gendreau, 1999; Gendreau, 1996; Gendreau, Cullen, & Bonta, 1994).

A reasonable expectation is that the risk, need and responsivity principles also apply to sex offender treatment. However, the knowledge that has accumulated from the treatment of offenders in general has not yet been fully applied to the treatment of sex offenders (Hanson et al., 2002). Research has mainly focused on treatment outcome/efficacy studies concerned only with whether treated offenders recidivate less often than non-treated offenders. Many intermediate treatment outcome measures such as institutional adjustment, attrition, and treatment gain in terms of increased skills and knowledge are therefore not investigated. These intermediate measures may be considered indicators of eventual recidivism, however, this requires empirical support.

Given the diversity of treatment programs in terms of approach, setting, intensity, and type of sexual offenders treated, it has become increasingly apparent that research needs to focus on specific rather than global questions if the field is to adequately examine the effectiveness of sex offender treatment (Barbaree, 1997; Hanson, 1997; Miner, 1997). Useful questions include “What factors influence treatment response in different types of sex offenders who represent various risk levels?” and “Are there intermediate treatment targets that are important to consider?” (Marques, 1999). Research that examines specific questions about the risk, need, and responsivity principles and expands upon the definition of treatment outcome as applied to sex

offender treatment, is essential in moving towards a more informed answer regarding the differential effectiveness of sex offender treatment.

Recently, research examining treatment with sexual offenders has invested heavily in identifying risk predictors of sexual recidivism and criminogenic treatment targets (Hanson & Bussière, 1996; Hanson & Harris, 1998). However, much less attention has been given to illuminating factors that influence treatment response in sexual offenders. Therefore, there is a need to explore the responsivity principle and delineate the factors that influence responsivity for this segment of the offender population.

Currently, one of the most pressing issues within the criminal justice system is the presence of higher-risk sexual offenders who fail to respond favourably to existing treatments (Marshall & Williams, 2001). When compared to lower risk/need offenders, higher-risk/needs sexual offenders tend to be less motivated for treatment, more resistant or non-compliant while in treatment, have higher attrition rates, demonstrate fewer positive behavioural changes while in treatment, and demonstrate higher recidivism rates post-treatment (based on official re-conviction data) (Looman, Abracen, Serin, & Marquis, in press). This is particularly true for sexual offenders who are also psychopathic (Seto & Barbaree, 1999).

Until recently, these aforementioned characteristics were used as exclusionary criteria for sex offender treatment programs (Bonta, 2001; Marshall, Laws, & Barbaree, 1990). Thus, sex offenders who were in most need of treatment, according to the risk and need principles were being screened out.

The approach of excluding offenders who have these characteristics from treatment contradicts the risk, need and responsivity principle, which states that higher-risk offenders will have the greatest potential treatment response and require the most intensive services. This is an important caveat to keep in mind when reviewing the sex offender treatment efficacy literature.

The existing meta-analyses and narrative reviews of sex offender treatment efficacy do not clearly articulate the risk level of the offender or intensity level of the sex offender treatment program (Hanson et al., 2002). The conclusions are based on a global comment of whether sex offender treatment works and if risk is commented upon it is often not based on an actuarial assessment of risk¹. Therefore, past treatment outcome studies may not necessarily speak to the effectiveness of treatment with higher-risk sex offenders who exhibit characteristics that contribute to poor treatment response.

Given the impact that one sexual re-offence has on the victim and society, the importance of elucidating the factors that influence treatment responsivity in sex offenders who are at higher-risk to re-offend cannot be overemphasized. Identifying and understanding which particular offender characteristics influence treatment response may increase treatment effectiveness and its importance in the management of higher-risk sexual offenders.

To date, few studies have investigated the relationship between responsivity factors and treatment outcome in sex offenders (Polizzi, MacKenzie, & Hickman, 1999).

Actuarial risk assessment is considered to be superior to clinical judgement of risk (Quinsey, Rice & Harris, 1995). Actuarial measures are structured, quantitative and include items that are empirically predictive of risk in comparison to clinical judgement which unstructured and theoretical in nature.

The current study will address this dearth of research by examining how specific offender characteristics (age, psychopathy, hostility, deviant sexual arousal, treatment readiness, motivation, stage of change, and denial)² influence treatment outcome in a sample of rapists who participated in a high intensity sex offender treatment program (designed for higher-risk sex offenders who are difficult to treat). The study targeted rapists because as a group they tend to have the highest recidivism and attrition rates in comparison with other types of sexual offenders (Beyko, Wong, & Reid, 2001; Hanson & Bussière, 1998; Motiuk & Brown, 1993). Limiting the study to one particular type of sex offender, also allows for the accumulation of detailed information on specific aspects of treatment effectiveness for this type of offender. The following sections will discuss (a) an integrated theory of sexual assault, (b) the responsivity principle, (c) proposed responsivity factors, (d) the definition of treatment outcome in sex offender treatment literature, and (e) the relationship between specific responsivity factors and treatment outcome in higher-risk rapists.

An Integrated Theory of Sexual Assault

Although a concise and consistent explanation of sexual assault remains elusive, research has identified a set of factors that are of etiological significance and that maintain sexually assaultive behaviour (Marshall et al., 1990). This body of research has informed various aspects of the management of sex offenders including classification, risk prediction, assessment, and the identification of treatment targets. (Safer Society, 1992). This theoretical body of research can also provide the background from which to

²These responsivity factors were selected specifically because of archival retrospective design of the study and availability.

begin the exploration and identification of a set of responsivity factors that influence treatment response among sex offenders.

Theories of sexual assault could focus on one main contributing area such as biological, psychological or sociological. However, given the complexity and heterogeneity of sexually assaultive behaviour a more useful theory would be one that uses an integrative approach. Marshall and Barbaree (1990) argue that a precise theory of sexually assaultive behaviour can only be attained when various broad contributing areas are seen as functionally interdependent. Thus, biological influences cannot be fully appreciated without understanding their interdependence with psychological and sociological influences.

Marshall and Barbaree (1990) argue that the unifying thread that integrates the diverse set of factors that contribute to sexually assaultive behaviour in males is biological in nature. Human males have the responsibility of acquiring inhibitory control over a biologically endowed predisposition for self-interest that contributes to the tendency to fuse sex and aggression. These inhibitory controls are obtained from socialization processes and environmental conditions that are impacted by physiological and genetic influences. The notion of inhibitory controls and the processes that influence their development is not new and was taken from the early research that examined aggressive behaviour in animals (Baenninger, 1974; Karli, Vergnes, Eclander, & Penot, 1977; Moyer, 1976).

Moyer (1976) reported that environmental conditions and learning can exert powerful and controlling influences on behaviour and is directly related to biologically endowed predispositions. Similarly, Karli et al. (1977) provided evidence that inhibitory

controls are developed through socialization processes and that these controls are mediated through specific brain centres. Therefore, the factors that contribute to sexually assaultive behaviour can ultimately be understood as those that interfere with the development of inhibitory control and under certain conditions facilitate the fusion of sex and aggression.

Biological

In Marshall and Barbaree's (1990) integrated theory of sexual assault, biological influence refers to an individual's capacity for learning the necessary self-regulatory behavioural patterns that are required to separate aggressive behaviour from sexual behaviour. This task is not as easy as one would expect, given that aggression and sex are not readily differentiable responses, physiologically or subjectively.

Aggression and sex appear to be mediated by the same or similar neural substrates and networks (Adams, 1968; MacLean, 1962; Valzelli, 1981; Zillmann, 1989). Also, sex and aggression appear to be initiated by the same endocrines, namely the sex steroids, which play two major functions in both sexual and aggressive behaviour: activation and organization (Bronson & Desjardin, 1969; Lieveverse, Gooren, & Assies, 2000; Money, 1965). The effects of sex steroids appear to be most influential during puberty and the ensuing early years, when hormonal levels increase four fold within the first ten months of puberty and reach adult levels within two years (Marshall & Barbaree, 1990). It is during this time period that an individual learns how to express and channel his sexual, as well as aggressive tendencies. Therefore, puberty and early adolescence are crucial periods for the development of enduring sexual propensities.

However, sex offenders often do not come from family backgrounds that provide the opportunity to learn the proper skills of how to appropriately express feelings of sexual desire. Therefore, during puberty sex offenders may be more likely to have unsuccessful interactions with female partners. These unsuccessful interactions may lead to feelings of anxiety and masculine inadequacy, which can ultimately lead to feelings of anger towards those he perceives as rejecting of him (Marshall & Barbaree, 1990). Distorted thinking patterns coupled with feelings of hostility and inadequacy, can facilitate sexual offending (Knight & Prentky, 1993).

The pairing of distorted thoughts and feelings with masturbatory behaviour during puberty can further erode inhibitory controls over sexual and aggressive behaviour by the continuous pairing of orgasm with unhealthy sexual fantasy (Marshall & Barbaree, 1990). Given that sex can serve a variety of purposes other than physical gratification, it is possible that young males who are unsuccessful in expressing their sexual desires with appropriate partners, may develop unhealthy sexual fantasies in order to see themselves in successfully sexual ways (Marshall & Barbaree, 1990). This can have a profoundly negative impact on young males' developing sexuality. Indeed, Hays (1981) argues that it is the developmental and environmental factors during puberty that are the major determinants of sexual behaviours, while sex steroids play a facilitating or contributory role.

Childhood Experiences

The period surrounding pubescence and early adolescence is a critical period for the development of sexuality as well as social competence. A family that models a loving environment and encourages pro-social behaviour provides the possibility for the

development of strong, positive attachment bonds and ultimately the capacity for intimacy. In this kind of environment, a young male experiencing the hormonal changes of puberty should be able to make a successful transition to adulthood with both the social constraints against aggression as well as the skills necessary to develop effective relationships with peers. However, sex offenders are often raised in extremely dysfunctional families (Langevin et al., 1984; Schwartz, 1995) in which developmental and environmental influences are less than optimal for fostering a healthy expression and control of sexual or aggressive behaviours.

Parental alcoholism, inconsistent and harsh punishment, hostility, involvement with the law, disturbed sexual attitudes, and the absence of a model for a loving, caring and intimate relationships are all characteristics found in the family units of sex offenders (Marshall & Barbaree, 1990; Schwartz, 1995). Not surprisingly children from these backgrounds become insensitive adults who are concerned only with their own interests and needs and who learn to disregard the rights of others. Given these family dynamics, offenders often fail to develop loving attachments and intimacy skills and subsequently lack the appropriate controls over sexual as well as aggressive behaviour. Although the aforementioned family background factors are not unique to sex offenders (Andrews & Bonta, 2003), when coupled with the development of deviant sexual arousal these factors result in sex offenders being less likely to develop the appropriate controls over sexual and aggressive behaviours (Marshall & Barbaree, 1990).

Developmental and environmental conditions experienced by sexual offenders can contribute to a set of physiological (poor diet, lack of sleep, deviant arousal), psychological and emotional deficits (cognitive distortions, personality and mental

disorders, intimacy, interpersonal skills, problem solving, and empathy). These conditions can impede the attainment of the appropriate self-regulatory skills that are needed to control sexually aggressive behaviours (Marshall & Barbaree, 1990). While the influence of the family unit is critical during childhood for the development of inhibitory controls over sexual and aggressive behaviours, factors outside the family become progressively more important in further shaping the acquired inhibitory controls as young males move into puberty and adulthood.

Socio-Cultural Context

The societal structure in North America fosters violence and distorts human sexuality (Marshall & Barbaree, 1990). Women are routinely sexualized and objectified. The fusion of sexual and aggressive behaviours is common in our society. Therefore, when young males enter puberty they need guidance in discerning the continuous bombardment of unhealthy sexual messages. Unfortunately, the parents of sex offenders may not recognize and often embrace the cognitive distortions surrounding sexuality perpetuated by societal structures. As a result, they may model and reinforce cognitive distortions associated with sexual assault (e.g. women who dress in a provocative ways are inviting sexual attention) (Marshall & Barbaree, 1990).

In North America, Burt (1980) reported that men who endorsed rape myths were also supportive of interpersonal violence against women. Given that sex offenders have not been given the requisite knowledge, skills and environmental conditions to develop the appropriate controls over their sexual and aggressive behaviours, they may be more susceptible than other males to accepting sexist and violent messages. For example, the negative impact of pornography on sexual attitudes appears to be more detrimental to

males who grow up in environmental conditions that do not contribute to the development of inhibitory controls over sexual and aggressive behaviour (Marshall & Barbaree, 1990). Davis and Braucht (1973) reported that early exposure to pornography, between ages 6 to 10, predicted high rates of sexual deviance (particularly sexual assault) in later years.

Similarly, the patriarchal structure of our society reinforces attitudes supportive of male dominance. The acceptance of male dominance in Western societies is associated with negative attitudes towards women, acceptance of rape myths and either having raped or an admission by men that if they could rape a woman and not be detected they would (Burt, 1980; Malamuth, 1981). In general, the socio-cultural context in North America is based on a sexist, patriarchal structure that promotes attitudes and values that facilitate sexually aggressive behaviours

Summary

In summary, sexually assaultive behaviour results from the interaction between biological pre-dispositions and deleterious socio-cultural influences as well as the developmental and environmental conditions produced by negative early childhood experiences. The aforementioned interaction of factors contributes to the lack of inhibitory controls required to self-regulate sexual aggressive behaviours (Marshall & Barbaree, 1990).

This integrated theory of sexual assault would suggest that there are many possible combinations of physiological, psychological, emotional, behavioural and interpersonal, familial and societal factors that contribute to sexual assault. Sex offenders are, therefore, a heterogeneous group whose response to treatment will vary.

Quite possibly the factors contributing to sexually assaultive behaviour, such as deviant arousal and/or hostile interpersonal style, will also influence treatment response in different ways among various types of sex offenders. Based on the differential treatment outcome reported in the sexual offender treatment literature between child molesters and rapists, a reasonable hypothesis is that specific sets of responsivity factors may account for differential treatment outcome (Furby, Weinrott, & Blackshaw, 1989; Hanson & Bussière, 1998; Hanson, Cox, & Woszczyna 1991; Marshall & Barbaree, 1990; Marshall, Jones, Ward, Johnson, & Barbaree, 1991; Moore, Bergman, & Knox, 1999; Marques, Day, Nelson, & West, 1994; Pithers & Cummings, 1989).

Responsivity Principle

The responsivity principle refers to the importance of matching the treatment modality (i.e., the setting and the characteristics of the therapist) with offender characteristics (Andrews & Bonta, 1998, 2003). The responsivity principle encompasses factors that affect an offender's ability to begin, continue, and complete a particular treatment strategy (Andrews & Bonta, 2003; Miller & Rollnick, 1991; Serin & Kennedy, 1997; Van Voorhis, Cullen & Applegate, 1997). Consideration of responsivity factors in the planning and implementation of treatment increases the likelihood that an offender will complete treatment.

There are two aspects of the responsivity principle: general and specific responsivity (Andrews, 2001). General responsivity factors are those that are external to the offender and that interact with specific offender characteristics in a manner that affects treatment response (Andrews & Bonta, 1998; Bonta, 1995). The general responsivity principle emphasizes the importance of matching the treatment modality,

setting, and therapist characteristics to the demographic, cognitive and interpersonal characteristics of the offender in an effort to facilitate positive treatment outcome (Andrews & Bonta, 1998: 2003). For example, some therapists may have better skills with certain types of offenders or certain offenders may respond better to an institutionally-based treatment program rather than a community-based treatment program. Similarly, paying attention to the interaction between treatment modality (individual versus group delivery) and offender characteristics such as learning style or anxiety disorders may lead to improved treatment outcome in offenders.

Specific responsivity, the focus of the current study, refers to the fact that certain offender characteristics can influence how an offender progresses through treatment (Andrews, 2001; Bonta, 1995; Kennedy, 2000; Serin & Kennedy, 1997; Van Voorhis, Cullen, & Applegate, 1995). Although Bonta (1995) cautioned that the list of offender characteristics that may influence responsivity is still tentative, based on a review of the general treatment literature he identified the following characteristics: anxiety, self-esteem, depression, mental illness, age, gender, race/ethnicity, poor social skills, poor problem solving skills, concrete-oriented thinking and poor verbal skills. In their recent review of responsivity and associated constructs, Serin and Kennedy (1997) identified a number of offender characteristics that could potentially impact treatment response: motivation, personality characteristics (i.e., psychopathy, anxiety, depression, mental illness, self-esteem, poor social skills), cognitive intellectual deficits (i.e., low intelligence, concrete-oriented thinking, inadequate problem solving skills, poor verbal skills), and other demographic variables (i.e., age, gender, race, ethnicity).

Risk/need factors and responsivity factors are not necessarily mutually exclusive.

Many of the identified responsivity factors not only influence treatment response but also are predictive of treatment outcome. As mentioned previously, certain responsivity factors are predictive of treatment outcome, e.g. psychopathy, whereas other responsivity factors such as poor self-esteem and anxiety do not inform risk prediction (Andrews & Bonta, 2003).

The difference between a predictor of treatment outcome and a responsivity factor is that the latter influences an offender's ability to enter into, continue, and complete a particular treatment strategy whereas the former may not. For example, the number of prior sexual offences is a predictor of treatment outcome that is unrelated to responsivity. Psychopathy, however, (a) predicts future criminal behaviour, (b) represents a treatment target that if modified or managed can reduce criminal behaviour and (c) involves an interpersonal style that negatively impacts the offender's responsiveness to engage in the treatment process (Hare, 2003; Kennedy, 2001; Preston, 2001).

Similarly, certain risk/need factors may interact with each other thereby producing a set of responsivity issues that influence an offender's ability to enter into, continue, and complete a particular treatment strategy, e.g. deviant arousal, psychopathy and age. Accordingly, a sex offender treatment program for young, psychopathic sex offenders with deviant sexual arousal may need to be different than one for older, non-psychopathic, non-deviant offenders. For the purposes of this study, any offender characteristic that may influence treatment engagement will be considered a potential responsivity factor to investigate.

Summary

Although the responsivity principle has been identified as one of the principles required for effective treatment (Andrews & Bonta, 2003), a conceptual and empirical understanding of its application to sex offender populations requires investigation. Based on etiological factors associated with sexually aggressive behaviour (Marshall & Barbaree, 1990) and a review of factors hypothesised in the general correctional literature to be related to responsivity (Andrews, 1989; Bonta, 1995; Bonta, 2000; Serin, 1991; Serin & Kennedy, 1997) the current study will examine the following categories of responsivity factors in a sample of higher-risk rapists: 1) demographic- age, 2) interpersonal style- psychopathy, hostility, interpersonal style scale 3) treatment readiness- treatment readiness, motivation, stage of behavioural change, and denial, 4) clinical- deviant sexual arousal. Systematic study is required to determine their effect on sex offender treatment.

Given that the population being investigated in the current study is high-risk rapists, a review of the research that has examined different measures of treatment outcome in rapists follows.

Acceptable Measures of Treatment Outcome in the Sex Offender Literature

The main reason that sex offenders are referred to sex offender treatment is to reduce the risk or likelihood of engaging in future sexually assaultive behaviour. However, unlike other psychological treatments for highly repetitive problems such as substance abuse, where some relapse is expected and tolerated, the only acceptable outcome of a sexual offender treatment program is zero recidivism because of the serious damage caused by a single act of sexually aggressive behaviour (Hall, 1995). Although

detected recidivism is the most credible source of treatment outcome for sex offenders, it is an insensitive measure. Most sexual assaults are never reported to the police (Bonta & Hanson, 1995).

Therefore, a useful conceptualization of treatment outcome is in terms of ultimate treatment outcome (the reason or treatment goal: reduced sexual recidivism) versus more instrumental treatment outcomes (factors that function as instruments or vehicles for the attainment of ultimate outcomes) (Rosen & Proctor, 1981). For example, in order for there to be a treatment effect or treatment gain, sex offenders must first complete the treatment program. Program completion has been demonstrated to be predictive of recidivism (Strassberg, Whittaker & Dillinger, 2002). Thus, attrition is an important instrumental outcome measure of sex offender treatment. Further treatment gain in terms of knowledge or skills can also act as an instrumental measure of treatment outcome.

Sex offenders are often not released directly to the community upon completion of an institutional sex offender treatment program. Therefore, another instrumental treatment outcome measure may be improved institutional adjustment post-treatment. Offenders able to improve their institutional behaviour as a result of gains made during treatment may be able to generalize these gains to the community in terms of a reduction in recidivism. In summary, attrition, treatment gain, and institutional behaviour can all be considered intermediate measures of sex offender treatment efficacy.

Attrition

Attrition is an important measure of responsivity to sexual offender treatment because recidivism rates are low among sexual offenders, including higher-risk sexual offenders, who complete treatment (Hanson & Bussière, 1998; Looman, Abracen, &

Nicholiachuk, 2000; Miner & Dwyer, 1995; Marques et al., 1994; Nicholiachuk, Gordon, Gu, & Wong, 2000). The majority of studies that have examined the attrition rates in sexual offender treatment programs have not utilized comparable indices of risk or provided details regarding program intensity. Therefore, more global, rather than specific, conclusions have been drawn about responsivity factors that influence attrition. The current study contributes to the sex offender literature by providing specific information about attrition rates in higher-risk sexual offenders referred to a high intensity program.

In general, attrition rates in sexual offender treatment programs (for both child molesters and rapists) range from 20-58% in institutional settings (Geer, Becker, Gray, & Krauss, 2001; Marques 1999; Shaw et al., 1995; Terry & Mitchell, 2001) and 17-47% in community settings (Chaffin, 1992; Cooke, Fox, Weaver, & Rooth, 1991; Craissati & Beech, 2001). Rapists are known to have higher attrition rates than pedophiles, incest offenders and mixed types of sexual offenders (Mailloux & Serin, 2001). In a sample of 60 sexual offenders, of which 27 did not complete the program, among the non-completers 44.4% were rapists, 22.2% were pedophiles, 7.4 % were incest offenders and the remaining 25.9% were offenders with a mixture of sexual offences (MacKenzie et al., 2002).

Correlates of treatment attrition in sexual offenders include: (a) lower reading ability, (b) younger age, (c) marital status (single), (d) less education, (e) past sexual abuse history, (f) higher levels of minimization and denial, (g) impulsivity and low self control, (h) higher levels of hostility, (i) offender type (rapists having higher attrition rates), (j) lower social competence, (k) antisocial personality disorder, (l) less external

support to remain in treatment, (m) past psychiatric history, (n) lack of specific preference for male or female victims, (o) cognitive distortions, (p) previous history of sexual assault, (q) minor institutional misconducts, (r) low motivation, and (q) poor attitude towards treatment (Abel et al., 1989; Beyko et al., 2001; Craissati & McClurg, 1997; Craissati & Beech, 2001; Geer et al., 2001; Gully, Mitchell, Butter, & Harwood, 1990; Hersh, 2000; Marques et al., 1994; Miner & Dwyer, 1995; Shaw et al., 1995; Strassberg et al., 2002). The present study examined, age, hostility, psychopathy, denial and motivation as they relate to attrition.

Few studies have reported the attrition rates of high intensity sexual offender treatment programs delivered within institutional settings. In a high intensity sexual offender treatment program (SOTP) of 8 months duration, which is located at the Regional Treatment Center in Ontario [RTC(O)], the attrition rate was 24.3% over six years based on 169 sex offenders who had been admitted to treatment since the spring of 1996 (Looman, 2002). Eight (4.7%) of these offenders voluntarily withdrew from treatment. The most common reason for withdrawing was failure of the offender to adjust to the RTC (O) environment. A further 24 offenders (14.2%) were discharged from the program for security reasons, such as fighting, threatening behaviour, or substance use. The remaining 9 offenders (5.3%) were discharged from the program for clinical reasons such as breaching confidentiality and engaging in behaviour that is disruptive to the group process.

Recently, MacKenzie et al. (2002) examined factors predictive of attrition in a random sample of 60 sexual offenders admitted to and discharged from the High Intensity SOTP delivered in a regional psychiatric facility. Based on a sample of 33

program completers and 27 program non-completers, denial of index offence and treatment targets, low motivation, and poor attitudes toward treatment were predictive of attrition. The authors further reported that differential attrition predictors for specific sexual offender types (incest, child molester, rapist or mixed) did not emerge. However, this non-significant finding could be related to the small sample size of the study.

There is some debate about whether attrition cases should be included in sexual offender treatment outcome studies. Some researchers argue that if a sexual offender did not complete a program, then the impact the program cannot be evaluated (Marshall, 1993). Others believe that sexual offenders who drop out of treatment need to be included so that treatment effects are not overestimated (Quinsey, Harris, Rice, & Lalumière, 1993). Regardless, there may be important differences between sexual offenders who drop out and those who do not in terms of specific responsivity factors. By examining these differences, it may be possible to further elucidate the responsivity principle in higher-risk sexual offenders.

Although various definitions of attrition have been advanced in research (Carriere, 2001), the current study defines attrition fairly broadly as voluntarily withdrawing from treatment or being involuntary discharged due to behavioural problems such as fighting, substance use or violation of group rules.

Institutional Adjustment

It is possible that sex offender treatment gains in terms of skills and knowledge may generalize to behaviours other than sexual. Institutional adjustment has been identified as an important aspect of correctional group treatment (Morgan & Flora, 2002; Slaikeu, 1973; Wintercrowd, Morgan & Ferrell, 2001; Zimpfer, 1992). In the current

study, a second measure of treatment outcome is institutional adjustment. Poor institutional adjustment was defined as problematic institutional behaviours that result in infractions that include but are not limited to fighting and possession of contraband.

Denkhaus, Usher-Liber, Nicholaichuk and Wong (1998) compared the rate and type of institutional offences of 158 sexual offenders that occurred over a 3-year period prior to and following treatment. Treatment was an eight-month high intensity sex offender program. These authors reported that, post treatment, sexual offenders were subsequently convicted of significantly fewer major and minor institutional charges including physical and verbal aggression.

Heil, Ahlmeyer and Harrison (2002) examined post-release arrest rates for three groups of sex offenders: 1598 convicted sexual offenders, 367 offenders whose crime involved a sexual element but their conviction was for a lesser offence and 64 incarcerated offenders who had committed sexual assault while institutionalized. They reported that offenders who engaged in institutional sexually assaultive behaviour represented a higher-risk for general and violent recidivism, relative to the other two groups of sex offenders examined. These results suggest that it is important to examine institutional adjustment in higher-risk sexual offenders.

Treatment Gain

In the current study, treatment gain is defined as the acquisition of skills and knowledge, and the ability to apply them; the amount of emotional commitment to the program; the appropriateness of their group behaviour; their level of participation; and the development of therapeutic alliance. The degree of treatment gain in higher-risk

rapists may reflect the degree to which certain responsivity factors were taken into consideration in the delivery of the treatment program (Serin & Kennedy, 1997).

Addressing certain responsivity factors prior to the commencement of a sexual offender treatment may enhance treatment gain. For example, denial interferes with an offender's motivation to engage in the therapeutic process as well as interferes with a positive attitude towards treatment (Malcolm, 2001). Thus, addressing denial in a preparatory group prior to admission to a high intensity sexual offender treatment program may increase the offender's subsequent treatment gain.

Currently, there is no research that has examined treatment gain in higher-risk rapists, as defined in the current study. MacKenzie et al. (2002) used similar aspects of treatment gain in a sample of 60 sexual offenders (i.e. attendance, homework completion, good motivation, positive attitude toward treatment, acceptance of treatment targets, and appropriate group behaviour) and found these were predictive of treatment completion. Sex offenders who were less likely to attend group, complete homework, demonstrated a lower level of motivation, and who displayed a negative attitude towards treatment were less likely to complete treatment. Although treatment completion is a separate variable from treatment gain, the degree of gain is dependent on treatment completion. Therefore, a similar set of variables may predict both treatment completion and treatment gain.

Recidivism

Recidivism was defined in this study as charges or conviction for any new offence of a non-violent, violent and/or sexual in nature. A recent meta-analysis indicate that recidivism rates of treated sexual offenders were lower than that of untreated sexual offenders (Hanson et al., 2002). Most of the studies included in the meta-analysis used

an aggregate approach to classifying risk level rather than a within-sample approach. As a result, a breakdown according to risk level and the intensity level of the treatment program are not reported. Therefore, it is not possible to comment on the recidivism rates for higher-risk sex offenders.

Few studies have examined the recidivism rates of higher-risk sexual offenders upon their completion of high intensity sexual offender treatment programs, which adhere to the currently accepted standards for such programs. Recently, Looman et al. (2000) examined the efficacy of the high intensity sex offender treatment program at the Regional Treatment Center in Ontario (RTCSOTP). They followed 178 higher-risk sex offenders, half of who received treatment and half of whom did not. The untreated comparison subjects were matched on three variables: 1) age at index offence, 2) date of index offence, and 3) prior criminal history. Looman et al. (2000) reported that over a 10 year period, 23.6% of the treated group was convicted of a new sexual offence as compared with 51.7% of the comparison sample. This represents a relative reduction of sexual recidivism of 54%.

Similarly, Nicholaichuk, Gordon, Gu and Wong (2000) conducted a study at the Regional Treatment Centre in Saskatchewan using the same methodology as described in the Looman et al. (2000) study. They followed a group of 296 treated sexual offenders and a comparison group of 283 untreated sexual offenders for an average of 6 years. A strong treatment effect was reported with a sexual recidivism rate of 14.5% for the treated group as compared to 33.2% for the untreated group. This represents a relative reduction of sexual recidivism of 56%.

Given the few studies that have examined recidivism rates in higher-risk sex offenders, a brief review of the meta-analytic studies that have examined sex offender treatment efficacy across risk levels may be useful. Meta-analytic procedures combine the results of several studies to evaluate treatment efficacy. This procedure has been argued to be more powerful than examining the results of individual studies (Lund, 2000).

Hall (1995) performed a meta-analysis on 12 studies ($N=1,313$) that were published since the Furby et al. (1989) review, and which included some form of comparison group. A small, but robust overall effect size was found for treatment versus comparison groups ($r = .12$). The overall recidivism rate for treated offenders was 19% versus 27% for untreated sexual offenders. However, the validity of this meta-analysis has been criticized because the strongest treatment effect came from the comparisons between studies of treatment completers and dropouts and when these comparisons were removed from the analysis the treatment effect was no longer significant (Hall, 1995; Harris, Rice, & Quinsey, 1998).

Alexander (1999) summarized the recidivism rates of separate groups of untreated and treated sex offenders based on 79 treatment outcome studies encompassing 10,988 subjects. She reported a recidivism rate of 20.1% for treated rapists and 23.7% for untreated rapists. This study has also been severely criticized. In most cases the treated and untreated groups came from different studies, which made it difficult to attribute any differences to the actual treatment program. Other problems included differences in follow-up periods, offender samples, and recidivism criteria across studies. Therefore,

critics argue that this study contains too much method variance across studies to allow for any clear conclusions to be drawn.

Gallagher, Wilson, Hirschfield, Coggeshall and MacKenzie (1999) published a more comprehensive and technically sophisticated meta-analysis. These authors identified 22 studies, containing 25 effect sizes, which met their criteria for inclusion. Studies eligible for their meta-analysis were completed after 1970 and reported on a non-treatment or a non-sexual offender specific treatment comparison group. Of the 25 effect sizes, treatment was favoured over the comparison group in 20, with the average effect size being $d=0.43$, a medium effect. The comparison groups' recidivated, on average, 15% of the time, while the cognitive-behavioural, behavioural, and pharmacological treatment groups' recidivism rate ranged from 5-7%. The mean effect size for the 10 cognitive-behavioural approaches employing relapse prevention was $d = 0.43$. Chemical castration also resulted in positive effect sizes, but overall was non-significant. Strictly behavioural approaches resulted in strong treatment effects, with effect sizes ranging from $d = .45$ to $d = .61$. Based on their review, Gallagher et al. (1999) concluded "the likelihood of future offending can be reduced through sex offender treatment" (pp.27).

The most recent and most ambitious meta-analysis published is that of Hanson et al. (2002) which is based on the Collaborative Outcome Data Project. The Association for the Treatment of Sexual Abusers (ATSA) sponsored the project in an effort to clear up the ambiguity surrounding the efficacy of sexual offender treatment.

Hanson et al. (2002) identified 43 studies available up to May of 2000, with a median sample size of 155 and a median follow-up period of 43 months. There was a total of 5,078 treated sexual offenders and 4,376 untreated sexual offenders in the final

sample. Hanson et al. (2002) reported an unweighted average recidivism rate for the treated groups to be 12.3%, as compared with 16.8% for the untreated offenders. The odds ratio of 0.81 indicated a significant treatment effect. Offenders who dropped out of treatment re-offended at a higher rate than those who completed treatment, there was no difference in recidivism for offenders who had refused treatment. When only studies that used current treatment methods and random or incidental assignment ($n=15$) were included in the analysis, an odds ratio of 0.60 was found. This corresponded to a recidivism rate of 9.9% of the treated subjects and 17.4% for the untreated subjects. Similar effects were found for institutional versus community-based treatments.

Although the aforementioned literature examining sex offender treatment outcome in terms of recidivism suggests that there is an overall positive treatment effect, many of the studies have been criticized for methodological weaknesses, making it difficult to draw firm conclusions about sex offender treatment efficacy. There are many difficulties associated with conducting treatment outcome research in the sex offender field. The following section will discuss some of the limitations of the sex offender treatment efficacy literature.

Limitations of Sex Offender Treatment Outcome Research

The typical recidivism study is generally conducted in the following way. A sample of sex offenders, who have received treatment either in an institutional or community setting, is followed-up for a period of time after treatment completion. Recidivism can be defined in terms of reconviction for sexual offences, or any type of re-offending based on official charges and/or convictions. Recidivism rates for the group of sexual offenders who received treatment is compared to a group of sex offenders who did

not receive treatment and who were also released. The comparison sample is not always matched on variables related to recidivism such as age and prior offending.

Limitations of the aforementioned outcome study design include threats to internal and external validity, poor or non-matched comparison groups, inadequate length of follow-up periods, poor description of treatment programs, dubious treatment selection criteria, inconsistent definitions of what constitutes recidivism and lack of consideration of the low base rate of sexual recidivism (Barbaree, 1997; Craig, Browne, & Stringer, 2003; Hanson, 1997; Miner, 1997).

The most optimal design for evaluating the efficacy of sex offender treatment involves randomly assigning sex offenders to a treated and non-treated group. However, due to ethical concerns of not offering sex offenders treatment, problems associated with differential drop-out rate and the expense and time involved in conducting such studies (see Marques et al., 1991), outcome studies involving non-equivalent groups and single-program follow-up studies will continue to be the design of choice for sex offender treatment outcome research (Miner, 1997). However, there are useful questions that can be answered using single program studies. For example, “How does the treatment program work with specific types of sex offenders?” and “What factors interfere with the successful attainment of treatment goals?” In addition, the internal validity of the design can be enhanced by carefully selecting appropriate hypotheses to be examined. Offender variables that may influence post-treatment behaviour, such as IQ, age, and/or risk level should be identified and controlled whenever a comparison or control is not available.

One of the more serious problems with sex offender outcome research is the low base rate of sexual recidivism. Without an adequate sample size, the study will be

insensitive to detecting any treatment changes. The only way of detecting a strong treatment effect is if the recidivism rate is virtually zero (Barbaree, 1997). Therefore with the low base rates and small sample sizes, statistically significant treatment effects are not usually expected in single group studies.

There are several ways of addressing the base rate problem: increasing the sample size in single group studies, increasing the follow-up time and/or including multiple measures of recidivism (e.g. sexual, violent and general). However, the most widely used technique is that of meta-analysis. Meta-analysis aggregates the data from smaller studies.

The confidence in the results of meta-analysis depends on the quality of the individual studies included, and given some of the already identified shortcomings associated with treatment outcome research, this can be problematic. Also, the rules established for the selection of those studies to be included in the meta-analysis vary. Subjectivity is further complicated by the lack of information in the published study regarding important aspects such as how treatment was delivered, assignment of comparison groups or length of follow-up. Another problem with meta-analysis is that it takes a substantial period of time to accumulate the number of studies needed to carry out a meta-analysis. As a result, the conclusions drawn from meta-analysis are always somewhat dated.

Although Quinsey et al. (1993) believe that ultimately the question about treatment efficacy will be answered using meta-analysis, they argue that there is an insufficient amount of well-controlled studies to justify meta-analytic reviews. As well, meta-analyses are best suited for addressing broad questions such as does treatment

work? Does it work better for rapists or child molesters? In terms of addressing issues of treatment responsivity associated with a particular intensity level of sex offender treatment, meta-analysis is less than suitable. Studies of within-treatment changes may serve more useful in identifying potential responsivity factors that influence treatment response in sex offenders.

II. Responsivity Factors

Demographic Responsivity Factors

Age

It is widely accepted that rapists tend to be younger than child molesters (Hanson, 2002). Given the impediment that being younger can pose to treatment engagement, age may be an important responsivity factor in higher-risk rapists. Younger offenders are assumed to be more impulsive, lack insight, lack the ego strength to separate from antisocial peers and are less likely to have the ability to ascertain the consequences of their behaviour (Hanson, 2002). Given these characteristics, they are less likely to recognize and appreciate the benefits of changing their problematic behaviours. Being younger has been associated with higher rates of attrition in sex offender treatment (Strassberg et al., 2002).

It is possible that an assessment of the need for change and interactions with peers may be required to determine the best treatment delivery strategies. Therefore, age in conjunction with other responsivity factors such as, interpersonal style and treatment readiness may increase the precision of responsivity assessments in sex offenders.

Age and Treatment Outcome

Age and Attrition

In the general sexual offender literature, results are equivocal with respect to ability of demographic variables such as age and marital status to predict attrition (for a review see Carriere, 2001). Strassberg et al. (2002) reported that in a sample of 488 sex offenders participating in a court-ordered residential treatment program, age, marital status, and level of education were predictive of treatment completion. In fact, a three-

factor model including age, marital status, and non-sexual juvenile criminal history successfully predicted treatment outcome for 67% of the sexual offenders.

On the other hand, Shaw et al. (1995) reported that, in a sample of 114 sex offenders during an 18-month in-patient treatment program, being married was predictive of treatment completion, but age was not. Non-completers were defined as offenders who did not complete all treatment modules, were removed from program for inappropriate behaviour, or were discharged because of poor prognosis.

Similarly, Geer et al. (2001) also reported that, in a sample of 179 sex offenders (95 of whom completed the program), age was not predictive of attrition. Treatment completers were defined, in their study, as those sex offenders who attended all the sessions and completed post-tests. Treatment non-completers were defined as those who were terminated from treatment for the following reasons: voluntary withdrawal, lack of attendance or participation, parole, and institutional misconduct.

Gully et al. (1990) reported that in a sample of 31 sex offenders in a comprehensive community residential treatment program, age, ethnicity and marital status did not differentiate between treatment successes and failures. Offenders in the failure group showed minimal progress, failed to comply with group rules, or else they committed new offences.

The risk levels or type of the sex offender was not reported in the aforementioned studies. Given the lack of consensus in the general sexual offender literature, further investigation is necessary to examine whether age is predictive of attrition among higher-risk rapists.

Age and Institutional Adjustment and Treatment Gain

Research has examined the relationship between age and security re-classification in sex and non-sex offenders using an instrument consisting of factors expected to be related to institutional adjustment (Blanchette, 2002). However, this research is not specific to rapists nor treatment outcome in terms of institutional adjustment and treatment gain. Therefore, research examining the relationship between demographic responsivity factors and institutional adjustment or treatment gain, in higher-risk rapists, does not exist.

Age and Recidivism

The association between age and general recidivism is well established (Hanson, 2001). Young people commit most crimes, and recidivism rates gradually decrease with age. However, less is known about the relationship between age and sexual crime. Existing research suggests that sexual recidivism rates are higher among young, single rapists than older, married rapists, or child molesters (Barbaree, Seto, & Maric, 1996; Hanson & Bussière, 1998; Hanson, 2001).

A recent investigation of the relationship between age and sexual recidivism using a combined sample of 4673 sex offenders across different studies demonstrated that sexual recidivism decreases with the age of the offender's release (Hanson, 2002). Hanson (2002) also confirmed differential recidivism rates according to sexual offender types. The highest risk age period for rapists was reported to be between the years of 18 to 24. However, with extra-familial child molesters, the highest risk age period was between the years of 25-35 and there was relatively little decline in recidivism until after the age of 50.

Thornton and Doren (2002) re-analyzed Hanson's (2001) results controlling for risk level. They reported that there was a gradual decline in recidivism as age increases, for offenders who are low to moderate risk. Offenders over 60 have the lowest recidivism rates regardless of risk level. However, in higher-risk sexual offenders, the gradual decline in recidivism as age increased did not appear to be present. In fact, in higher-risk sexual offenders the trend was for sexual recidivism to increase with age until the age of 60. Therefore, in terms of recidivism, the research findings suggest that age does not mediate the expected treatment response of reduction in recidivism in higher-risk sexual offenders unless they are over the age of 60.

Summary

In the current study, age was examined as a responsivity factor because problems of impulsivity and self-regulation associated with youth were expected to influence treatment outcome in higher-risk rapists. Although the relationship between age and treatment outcome in higher-risk sex offenders is gaining more clarity, further research is required. Preliminary results suggest that in higher-risk sexual offenders the relationship between age and treatment outcome may be different than that found in lower-risk sexual offenders (Thornton & Doren, 2002). Age, then, in association with other responsivity factors, may increase the accuracy of assessing treatment responsivity in higher-risk rapists.

Interpersonal Responsivity Factors

Psychopathy

A widely held belief is that psychopathic offenders are extremely difficult to treat and possibly untreatable (Salekin, 2002). This belief has serious implications for the

treatment of higher-risk rapists offenders because the prevalence of psychopathy appears to be higher among convicted rapists (Brown & Forth, 1996; Looman, 2002; Prentky & Knight, 1991; Serin, Malcolm, Khanna, & Barbaree, 1994). Porter et al. (2000) examined 329 incarcerated sexual offenders on the PCL-R using the recommended diagnostic cut-off score of 30. They reported higher rates of psychopathy among rapists and mixed sex offender types (rapists/child molesters) than among child molesters.

Psychopathy is a serious personality disorder that manifests itself early in life and in most cases persists throughout the individual's life span. It is associated with a constellation of affective, interpersonal and behavioural characteristics such as an inability to experience guilt or remorse, callous disregard for the feelings and rights of others, pathological lying, as well as a chronic, socially deviant lifestyle (Cleckley, 1981; Hare, 1991; 2003). Psychopathic individuals are typically described as grandiose, impulsive, deceitful, selfish, irresponsible, and have a difficult time learning from past mistakes. Psychopathy would therefore be expected to negatively influence engagement in a treatment program in which offenders are asked to take responsibility for their behaviours, be open and honest, experience empathy and remorse for their victims, and internalize skills to change problematic behaviours. Therefore, psychopathy is related to higher attrition rates, poorer institutional adjustment, lower treatment gain, and higher recidivism rates (Hare, 2003). In spite of this negative influence on treatment response does not necessarily mean that psychopaths are untreatable.

Recently, Salekin (2002) reviewed 42 treatment studies on psychopathy and concluded that there is very little scientific basis for the belief that psychopathy is untreatable. He identified three main problems in the literature examining treatment

outcome in psychopaths: 1) considerable disagreement as to the defining characteristics of psychopathy 2) the etiology of psychopathy is not well understood and 3) a shortage of empirical investigations of treatment outcome and few follow-up studies. These problems obviously interfere with the development of appropriate treatment approaches for psychopaths.

However, Losel (1998) and Losel and Egg (1997) summarized the literature examining treatment approaches with psychopaths. Based on this review, the most effective treatment for rapists with psychopathic characteristics appears to be a high intensity (referring to frequency of treatment contacts and length of time in treatment) cognitive behavioural program delivered over a period of 12 months, in a very structured, distinct institutional setting (separate from the main prison population) that promotes a pro-social institutional climate and regime. Non-psychopathic rapists, notwithstanding other responsivity issues, do not require such an intensive and structured treatment approach. Given the aforementioned discussion of psychopathy it is reasonable to conclude that psychopathy could be an important responsivity factor to examine in the treatment of higher-risk rapists.

In the forensic field, the preferred assessment instrument of psychopathy has been the Psychopathy Checklist-Revised (PCL-R: Hare, 2003; Harpur, Hare, & Hakstian, 1989; Kosson, Smith, & Newman, 1990; Salekin, Rogers, & Sewell, 1996). The PCL-R is a 20-item measure in which each item is scored between zero and two. A score of 30 and above is the diagnostic cut-off for psychopathy (Hare, 1998), however, psychopathy scores of either 25 and above have been used for research purposes (Quinsey, Harris, Rice, & Cormier, 1998).

Psychopathy and Treatment Outcome

Psychopathy and Attrition

Research that has explored the relationship between psychopathy, attrition and treatment gain in higher-risk rapists is limited. Mulloy, Smiley, Dwada and Hart (1996) examined the influence of psychopathy on treatment in a sample of 68 offenders (37 violent offenders and 31 sex offenders: 28 rapists and 11 pedophiles) who had completed an 8-month high-intensity treatment program that was designed for sexual or violent offenders. Psychopathy was assessed using the PCL-R using the diagnostic classification criteria of a total score of 30 or greater. Improvement due to treatment was rated by treatment staff based on a three-point scale (1= good, 2= fair and 3 = poor) at the time the offender was discharged from the program. Indicators of treatment performance behaviours included: 1) willingness to examine issues, 2) ability to grasp concepts, 3) implementing treatment concepts in one's life, 4) ability to confront appropriately, and 5) an understanding of empathy concepts. These variables were based on clinical information about behaviour displayed in treatment groups.

The results indicated that psychopaths were less likely to complete the program as compared to non-psychopaths, with completion rates of 68% versus 96%, respectively. Psychopaths consistently performed worse on treatment performance variables. However, when program completion was controlled for, this finding was no longer significant. Treatment completion then could act as a mediating variable, whereby psychopaths who complete treatment may indeed experience treatment gain. Although the difference in treatment gain between psychopaths and non-psychopaths was no longer significant after controlling for treatment completion, the direction of the relationship

remained the same. Higher PCL-R scores were always associated with poorer performance and less improvement due to treatment efforts. These results should be considered preliminary given the small sample size of the study (Mulloy et al., 1996). However, based on the Mulloy et al. (1996) study, further investigation of the relationship between psychopathy, attrition, and treatment gain, in higher-risk rapists is warranted.

Psychopathy and Institutional Adjustment

Psychopaths pose a serious management problem within institutional settings (Coid, 1998; Losel, 1998). There is a small but increasing literature on the relationship between institutional misconducts and psychopathy. A higher level of psychopathy is predictive of poorer institutional behaviour (Hare & McPherson, 1984; Hare, MacPherson & Forth, 1988; Kroner & Mills, 2001; Hobson et al, 2000; Wong, 1984;).

Recently, Hare, Clark, Grann and Thornton (2000) examined institutional misconduct in 652 male offenders in prisons in England. They reported the PCL-R score was significantly correlated with total number of prison misconducts ($r = .31$), assaults on staff ($r = .24$), assaults on inmates, ($r = .15$), and property damage ($r = .18$). Even when other factors such as sentence length, number of previous convictions, age, and offence type had been taken into account, the PCL-R total score was the best predictor of assaultive institutional misconducts.

Similarly, Hildebrand, de Ruiter and Nijman (2002) investigated institutional misconducts in a sample of 92 Dutch male forensic psychiatric patients and reported that the PCL-R total score correlated significantly with total number of misconducts ($r = .44$), verbal abuse ($r = .33$), verbal threats ($r = .45$), violation of hospital rules ($r = .39$), and

number of seclusions for violent behaviour ($r = .42$). Kroner and Mills (2001) reported that in a sample of 97 male offenders the PCL-R total score was significantly correlated with minor infractions ($r = .39$), but not with major institutional misconducts ($r = .14$).

Hobson et al. (2000) developed a checklist to measure behaviours associated with poor adjustment to a prison-based therapeutic community. They administered the PCL-R to 104 offenders in an English prison. Results indicated that negative institutional behaviours correlated significantly with the PCL-R total score at three month and six month periods, $r = .44$ and $r = .38$ respectively.

Recently, Buffington-Vollum, Edens, Johnson and Johnson (2002) reported that in a sample of 55 sex offenders, whose risk level was unknown, the PCL-R total score was significantly correlated with major disciplinary infractions for verbal aggression/defiance ($r = .40$), non-aggressive infractions ($r = .37$), but not with physically assaultive infractions ($r = .23$).

Based on the literature to date, a strong relationship appears to exist between psychopathy and institutional misconducts in general offender populations. The impact of psychopathy on the institutional adjustment of higher-risk rapists requires further examination.

Psychopathy and Treatment Gain

Several recent studies have explored the association between psychopathy and treatment behaviour. Seto and Barbaree (1999) reported that in a sample of 283 sexual offenders who required moderate intensity treatment, those who had higher level of psychopathy and demonstrated appropriate treatment behaviour were three times as likely to commit a new offence of any kind and more than five times as likely to commit a new

serious offence. The average follow-up period was 2.8 years. Judgements of treatment behaviour were based on homework quality, a global rating of motivation, and change achieved. The authors suggested that psychopaths who “appear” to have positive treatment behaviours are extremely manipulative of others during the treatment process and adept at playing the role of a client engaged in the treatment process.

In the Seto and Barbaree (1999) study a median split was used to assign offenders to psychopathic or non-psychopathic groups median PCL-R total score being 15. This represents a significant limitation of the study because the "high" psychopathy group did not meet diagnostic criteria for psychopathy (which is 30 out of a possible score of 40). Therefore it is not clear whether, in fact, individuals who would meet the diagnostic criteria for psychopathy as defined by the PCL-R are differentially responsive to treatment. Quinsey, Harris, Rice and Cormier, (1998) have argued that psychopathic individuals are qualitatively different than other groups of offenders (e.g., psychopathy represents a taxon). Accordingly, the findings of Seto and Barbaree (1999) may only be tangentially related to whether psychopathic sex offenders are responsive to treatment.

In a subsequent study using the same sample and methodology but involving a longer follow-up period (5 years), the authors observed that treatment behaviour was not related to outcome, but psychopathy still remained predictive of recidivism (Barbaree, Seto, & Langton, 2001). In this study, the high psychopathy group was based on a total PCL-R score of 25 or greater.

Recently, Looman, Abracen, Serin and Marquis (in press) examined the impact of treatment on a group of psychopathic and non-psychopathic higher-risk sexual offenders. The sample consisted of 129 higher-risk sexual offenders divided into two groups: low

psychopathy (PCL-R total score less than or equal to 25) and high psychopathy (PCL-R total score greater than 25). Treatment behavior was measured using theoretically meaningful dimensions: victim awareness, quality of their offence cycle, and relapse prevention plans. Ratings of good or poor were made along a three-point scale, developed specifically for the study.

Similar to Seto and Barbaree (1999), Looman et al. (in press) reported that psychopathic sexual offenders who demonstrated appropriate treatment behaviour had higher recidivism rates than did psychopathic sexual offenders who demonstrated poor treatment behaviour. In addition, psychopathic sexual offenders who demonstrated poorer treatment behaviour did not differ from non-psychopathic sexual offenders with respect to sexual and violent recidivism. This is discrepant from the extensive literature that indicates that psychopathy is a predictor of sexual recidivism (Harris, Rice & Cormier, 1991).

Looman et al., (in press) suggest that it is possible that there is something about psychopathic sexual offenders who are rated as doing poorly in treatment that is associated with better outcome. Perhaps given the general interpersonal styles of psychopathic sexual offenders, resistance is indicative of a genuine motivation to change problematic behaviors whereas non-resistance merely reflects “going through the motions and possibly trying to deceive treatment providers.” For example, Seto and Barbaree (1999) reported that only 3.6% of their high PCL-R/poor behaviour group was reconvicted of a serious offence whereas 20.4% of their high PCL-R/good treatment behaviour group were reconvicted of a serious offence.

Psychopathy and Recidivism

Research suggests that psychopathy is less related to sexual recidivism than it is to general and violent recidivism (Hare, 2003). However, the ability of the PCL-R to predict sexual recidivism is adequate, particularly when combined with deviant sexual arousal (Rice & Harris, 1997).

In a sample of 178 sex offenders released from a maximum security forensic psychiatric hospital and who were followed for six years, Quinsey et al. (1995) reported that the PCL-R significantly correlated with violent recidivism (.33) and with sexual recidivism (.23). Rice and Harris (1997) added another 110 sex offenders to the Quinsey et al. (1995) sample and increased the follow-up time to 10 years. They reported that psychopathy was significantly related to sexual recidivism, but the strongest effect was found when the PCL-R was combined with a measure of sexual deviance. Similarly, Hanson and Harris (2000) reported that in a sample of 190 recidivists (new sexual offence within first six months of release) and 162 non-recidivists, that the mean PCL-R scores were significantly higher for the recidivists (23.4) than for the non-psychopaths (16.7).

Conversely, Dempster (1998) reported that in a sample of 95 sex offenders released from federal correctional institutions, with follow-up period of five years, the PCL-R was not significantly correlated with sexual recidivism (.20). Barbaree, Seto, Langton et al. (2001) also reported that the PCL-R was not significantly correlated with sexual recidivism (.09) in a sample of 212 sexual offenders who completed a moderate intensity treatment program and were followed for 4.5 years.

Summary

In the general treatment literature, psychopathy has been associated with poor treatment response, higher attrition rates, failure on conditional release, and violent recidivism (Hobson, Shine, & Roberts, 2000; Hemphill, Hare, & Wong, 1998; Hart & Hare, 1997; Ogloff, Wong, & Greenwood, 1990; Rice, Harris, & Cormier, 1992; Salekin, Rogers, & Sewell, 1996; Serin, 1995). Psychopathy was expected to exert a similar influence in sex offenders.

The research suggests that there may be a subgroup of psychopathic higher-risk sexual offenders who are differentially responsive to treatment. Therefore, it is important to examine psychopathy and its interaction with other responsivity factors in an effort to develop effective treatment strategies with psychopathic sex offenders.

Hostility

Various theories and models have suggested that anger and hostility are salient features of psychopathology in sexual offenders (Hall & Hirschman; 1991; Marshall & Barbaree, 1990). Empirical results, however, are inconsistent for rapists (Hudson & Ward, 1997; Overholser & Beck, 1986; Seidman, Marshall, Hudson, & Robertson, 1994). Recently, however, Lee, Pattison, Jackson and Ward (2001) did find support for anger-hostility as a specific feature of psychopathology in rapists.

Scores on the Buss Durkee Hostility Scale (Buss & Durkee, 1957) have been found to be significantly higher for rapists than for non-sex offenders (Rada, Laws, & Kellner, 1976). Similarly, Rada, Laws, Kellner, Stivastava and Peake (1983) reported that BDHI scores were significantly higher for sex offenders who had used excessive physical force against their victims than for sex offenders who had not used physical

force in their offence. More recently, Pawlak (1996) examined factors associated with sexual aggression in rapists. She reported that general hostility as measured by the BDHI was one of the best predictors of recidivism in rapists.

Given the prevalence of hostility among rapists, its influence on treatment response in higher-risk rapists should be examined. A hostile interpersonal style impedes the development of therapeutic alliance, which is considered to be an important condition for successful treatment outcomes (Serin & Kennedy, 1997). Therefore, treatment strategies that attempt to decrease hostility in higher-risk rapists may improve the rapists' ability to proceed through the treatment process.

Hostility and Treatment Outcome

Hostility and Attrition, Institutional Adjustment, Treatment Gain and Recidivism

To date, research that has examined the relationship between hostility and treatment outcome in higher-risk rapists is extremely limited. Mackenzie et al. (2000) examined factors predictive of attrition in a random sample of 60 sexual offenders, including both child molesters and rapists admitted to and discharged from a sex offender treatment program delivered in a correctional forensic psychiatric facility. They reported that hostility and aggressiveness significantly predicted attrition in a high intensity sexual offender treatment program. Similarly, Hersh (2000) reported that in a sample of 385 sex offenders, offenders with high scores on measures of hostility were less likely to complete treatment. Hostile sex offenders were also somewhat more likely to re-offend, although their increased risk of recidivism was accounted for by their tendency to drop out of treatment. Research examining the relationship between hostility, institutional adjustment and treatment gain currently does not exist.

Summary

A hostile interpersonal style may impact on a sexual offender's response to sexual offender treatment in a group setting (Preston, 2001). Given the limited research that has examined the responsivity issues associated with hostility, further research is required to clarify the relationship between hostility and treatment outcome in higher-risk rapists.

Treatment Readiness and Related Responsivity Factors

Stages of Change

Treatment readiness is a construct that refers to an individual's willingness to engage in the treatment process. Some individuals see themselves as having very few problems that require therapeutic intervention and therefore have no desire to commit to behavioural change. When these individuals are selected for treatment, they feel that they are being coerced and are reluctant to put forth any effort into change. In contrast, other individuals may recognize their problem areas yet be hesitant to commit to change or, on the other hand, may be extremely committed to changing their problematic behaviours.

The construct of treatment readiness was originally examined in the field of addictions by Prochaska, Diclemente and Norcross (1992). They developed the Transtheoretical Model of Change that involves five stages of change: pre-contemplation, contemplation, preparation, action, and maintenance. This model has gained widespread popularity and has been applied to change efforts within and outside of formal treatment and in relation to a wide array of problem behaviours (Littell & Girvin, 2002).

An offender in the pre-contemplation stage does not consider the possibility of changing maladaptive behaviours, as he does not view them to be problematic. In the

contemplation stage, the offender considers treatment but perceives that he is being coerced into treatment to satisfy someone else's needs, (e.g. the public, parole officer). In the preparation stage the offender is developing an intention to change and is considering what change would be like. In essence, he is sitting on the fence. In contrast, offenders in the action stage have made a commitment to change and are engaged in the treatment process. The final stage of change is the maintenance stage in which the offender is working to sustain the changes that have been made in treatment and is actively working to prevent relapse.

Prochaska (1991) argues that a person's stage of change provides proscriptive as well as prescriptive information to guide decisions about treatment delivery. For example, if someone is in the pre-contemplation stage or the contemplation stage, action-oriented treatment approaches may not be effective. However, in the preparation or action stages of change these approaches will be more successful. Therefore, prior to beginning sex offender treatment, it may be important to assess the offender's readiness for change and to tailor therapeutic interventions accordingly.

Recently, Littell and Girvin (2002) provided a critique of the stages of change model. According to the Transtheoretical model, behavioural change occurs in a series of discrete stages (Prochaska & DiClemente, 1986, 1992). However, based on 87 studies on the stages of change model, research findings suggest that the proposed stages are not mutually exclusive and little evidence exists to support sequential movement through discrete stages. The authors concluded that, although a stage model may have intuitive appeal, a continuous model of readiness for change is more practical and may be more readily integrated with related concepts from other theories (Budd & Rollnick, 1996).

Recently, Freeman and Dolan (2001) have expanded the Transtheoretical Model of Change by introducing several stages that reflect the experiences of patients and therapists. As mentioned previously, the stages were conceptualized as a linear progression in which individuals would move discretely through each stage. However, Freeman and Dolan (2001) have recognized that rarely is the behavioural change process so simple and is more cyclical in nature (Freeman & Dolan, 2001). The revised stages of change include: (1) noncontemplation, (2) anticontemplation, (3) precontemplation, (4) contemplation, (5) action planning, (6) action, (7) prelapse, (8) lapse, (9) relapse, and (10) maintenance.

Limited research exists that examines treatment responsivity in higher-risk sexual offenders using the stages of change model. Kear- Colwell and Pollack (1997) examined different treatment techniques in a group of child molesters, (of unspecified risk level), and reported that in the pre-contemplation and contemplation stages of change, motivational interviewing techniques were more successful than confrontational techniques in moving the offenders from one stage to another.

Serin and Mallioux (in press) have identified some difficulties with applying the stages of change model to general offender populations. The transparency of University of Rhode Island Change Assessment Scale (URICA) items results in a high correlation with social desirability and may be insensitive to detecting change in offenders. As well, most institutional settings do not provide offenders with many opportunities to practice new skills. This may limit the ability of sex offenders to progress through the stages of behavioural change. Furthermore, the Transtheoretical model does not incorporate the correctional literature that has identified factors that contribute to or prevent criminal

behaviour. Nonetheless, exploring the factors that influence treatment response in higher-risk sex offenders using the Transtheoretical model has heuristic value.

Motivation

Sexual offenders are typically viewed as being unmotivated for treatment and uninterested in changing their deviant sexual behaviour, particularly as they frequently deny, minimize, rationalize or justify their actions (Abel et al., 1984; Garland & Dougher, 1991; Kear- Colwell & Pollack, 1997; Langevin & Lang, 1985; Salter, 1988). Lack of motivation can seriously impede proceeding through the treatment process. Often those offenders who are unmotivated to participate in treatment have higher attrition rates (Mackenzie et al., 2000).

A number of behaviours have been associated with sexual offenders' motivation to change sexually assaultive behaviour: (a) agreeing to participate in treatment (Marshall, 1993), (b) treatment behaviours such as the acceptance of problems, attendance, promptness, and level of participation (Jenkins-Hall, 1994), (c) treatment completion and treatment drop-out (Lee, Prouve, Lancaster & Jackson, 1996), (d) use of relapse prevention strategies (George & Marlatt, 1985; Hall & Jenkins- Hall, 1989), and (e) prior recidivism (Furby et al., 1989).

Recently, Tierney and McCabe (2002) summarized the personal, interpersonal, environmental, and temporal variables that are related to motivation for sexual offender treatment. They argue that motivation has been too narrowly focused in the literature and they suggest that a broader definition of motivation or treatment readiness needs to be advanced. Further empirical research using psychometrically sound measures of motivation is required to validate the relationship between motivation and treatment

outcome (Tierney & McCabe, 2002). Although still in the developmental stages, the Treatment Readiness, Responsivity, Gain Scale (TRRG) developed by Serin and Kennedy (1997) may advance a broader definition of motivation needed to understand its influence on treatment response in sexual offenders.

Treatment Readiness

Serin and Kennedy (1997) have developed a model of treatment readiness, responsivity, and gain (TRRG), that defines treatment readiness/motivation as the probability that a person enters into, continues and adheres to a specific treatment strategy (Serin & Kennedy, 1997). This represents an important definitional shift. Treatment readiness or motivation has been traditionally defined as a dichotomous personality trait, either present or absent. However, the TRRG model conceptualizes treatment readiness or motivation as a process that reflects a continuum of change to include intentions and competency rather than being a trait-specific personality characteristic. Viewing treatment readiness or motivation as a dynamic construct creates an opportunity to address the factors that are related to an offender's desire to change.

The TRRG model posits that an unwillingness to participate in treatment is a reflection of a range of internal and external factors, some of which may not be directly related to the desire to change one's behaviour (e.g., low self-efficacy, fear of reprisals within a prison setting if one is identified as a sexual offender). In addition, the motives to participate in sexual offender treatment are sometimes unclear, particularly in situations where incentives are offered for treatment participation (Marshall, Eccles, & Barbaree, 1993). Many sexual offenders attend treatment, not because they view their behaviour as ego dysyonic but because of the consequences if they do not (e.g. failure to

cascade down in institutional security level, denial of private family visit or parole, unescorted temporary absences or fence clearances). Thus, an understanding of the full range of factors that are influencing a sex offender's level of motivation or treatment readiness is important.

Conversely, it may also be presumptuous to assume that motivation will necessarily result in a change in sexually assaultive behaviour. While motivation is often seen as a necessary condition for treatment participation, treatment completion, and behavioural change, it is not a sufficient condition for change (Marlatt, 1989). For example, Stewart and Milson (1995) reported that the level of motivation³ was not related to conditional release outcomes in high-risk offenders. The conditional release suspension rate for high-risk offenders who were rated by parole officers as being highly motivated to complete correctional treatment target areas was not significantly different from that of high-risk offenders with a low motivation (36.2% versus 35.4%). Similarly, Shaw, Herkov, and Greer (1995) reported that of 144 sexual offenders who were accepted into a treatment program based on a willingness to participate, only 16 completed with a good prognosis. Thirty-two were excluded during the evaluation phase and 66 were discharged during treatment with a poor prognosis. These findings underscore the importance of considering both intent and skills in defining motivation and readiness. These results also suggest that it may be necessary to address other responsivity factors such as interpersonal style, within core treatment programs, in an effort to increase the likelihood that a sexual offender will engage in and complete

2 Motivation was assessed using a three point rating scale: low: rejects need for change and not willing to complete programming; moderate: will not participate in assessments but will complete treatment; 3: self motivated and actively addressing problem areas.

treatment. Therefore, when examining motivation as a responsivity factor in higher-risk rapists, it should be conceptualized as constantly fluctuating and interacting with other responsivity factors that also influence treatment response.

Based on a review of concepts related to responsivity such as amenability, motivation, compliance, treatment response, and treatment gain, Serin and Kennedy (1997) developed a protocol for the assessment of treatment responsivity in offender populations. They have conceptualized treatment responsivity as consisting of multiple factors that research suggests can influence an offender's treatability (e.g. treatment readiness and motivation) as well as treatment effectiveness (e.g. treatment gain and treatment generalization). The Treatment Readiness, Responsivity or Interpersonal Style and Gain Scale has the potential to be a theoretically based measure of treatment readiness, treatment responsivity, and treatment gain.

The TRRG scale consists of three subscales called the Treatment Readiness, Treatment Responsivity (interpersonal style) and Treatment Gain scale. Recently, a shorter version has been developed: the TRRG: SV. The preliminary psychometrics of these scales as discussed in the method section, indicates that the TRRG: SV has been used, to a limited extent, to examine responsivity in sexual offender populations. Preliminary results suggest that treatment readiness and interpersonal style are negatively correlated with psychopathy and are not significantly correlated with denial (Serin, Malcolm, & Mailloux, 1998). Refer to Figure 1⁴ for the TRRG model of responsivity.

⁴ Figure reproduced with permission of authors

Figure Caption

Figure 1: Model of Treatment Responsivity

In the current study, the TRRG: SV provides an initial approach to examining potential factors that are clinically and theoretically related to treatment responsivity in higher-risk rapists. The validation of items that influence treatment readiness in higher-risk rapists lends itself to the development of pre-treatment interventions that could enhance the ability of higher-risk rapists to obtain treatment goals.

Treatment Readiness Factors and Treatment Outcome

Treatment Readiness Responsivity Factors and Attrition, Institutional Adjustment, Treatment Gain and Recidivism

Although treatment readiness, motivation, and stage of behavioural change are extremely important when considering the modification of problematic behaviors, they have received scant empirical investigation in the sexual offender treatment literature. In a sample of 60 randomly selected high-risk federal sexual offenders significant differences existed between program completers and non-completers on behavioral variables such as motivation or effort, attendance, and homework completion (Mackenzie et al., 2000). Terry and Mitchell (2001) examined, in a sample of 31 sex offenders, whether or not motivation to participate in the program had an impact on the reduction of cognitive distortions. Seven distortions were analyzed in pre-treatment and post-treatment assessments and the treatment was considered effective for offenders who eliminated more than half of the distortions by the end of the program. They reported comparable success rates in reducing their distortions for adult-victim sex offenders regardless of level of motivation. Motivation was related to reductions in cognitive distortions in offenders with child victims, although the reasons for this are unclear.

Denial

It is generally believed that in order for sex offender treatment to be successful offenders must have some recognition of their problematic behaviours. Denial, minimization and justification have been, at times, used as rationales for discharging rapists from the sex offender treatment programs (Marshall, 1994).

O'Donohue and Letourneau (1993) present two rationales to support excluding sex offenders, who are in denial, from treatment. First, denial is incompatible with the basic tenets of a therapeutic relationship since denial implies a rejection of the premise of therapy, in this case that the sex offender has a problem with sexually assaultive behaviour, and would like to correct his behaviour. Denial can result in a lack of compliance, poor motivation, time-consuming digressions (e.g. complaints about attorneys), and hostility toward the therapist and other group members. Second, denial of sexual offending does not allow information to emerge, which has been regarded as essential for successful therapy with sexual offenders. Denial is also believed to interfere with a rapist's ability to accept responsibility for his offences, develop empathy, and target other criminogenic needs during the treatment program.

However, Marshall (1994) argues that denial should be treated as another treatment target prior to or within the treatment program, depending on the severity of the denial. For example, cognitive distortions associated with denial, minimization, and justification have also been associated with sexual offenders' motivation to change sexually assaultive behaviour (Kennedy & Grubin, 1992; Marshall & Eccles, 1991). Cognitive distortions supporting absolute denial are reflective of a low level of motivation or treatment readiness and can be targeted in pre-treatment sessions.

Cognitive distortions associated with partial denial and minimization can be targeted during the treatment program. Denial may negatively influence treatment outcome in higher-risk rapists more so than in lower risk rapists where a certain amount of denial may act as a protective factor of an already existing pro-social identity. In higher-risk rapists, denial may serve to reinforce already existing pervasive anti-social thinking and lifestyle patterns. Further research to examine denial as a responsivity factor in higher-risk rapists is warranted.

Denial and Treatment Outcome

Denial and Attrition

The relationship between denial and attrition from high intensity sex offender treatment programs has not been adequately explored. The literature suggests that denial may be predictive of attrition in child molesters. Malcolm (2001) reported that denial was significantly related to treatment readiness in a sample of child molesters, using the Denial and Minimization checklist (DMCL; Barbaree, 1991). Accordingly, sexual offenders who admitted to their sexual offence were more motivated to participate in treatment.

Craissati and Beech (2001) reported that moderate levels of denial, as measured by the Multiphasic Sexuality Inventory (MSI, Nichols & Molinder, 1984), predicted treatment completion in child molesters. Similarly, Birgisson (1996) reported, based on self-report, that neither complete denial nor complete acceptance was related to dropout.

In a sample of 179 sex offenders who participated in a prison based sex offender program, Geer et al. (2001) reported that sexual offenders who engaged in less denial, as measured by the MSI, were more likely to complete treatment. Similarly, in a sample of

60 randomly selected federal sexual offenders, MacKenzie, et al. (2000) reported that denial of index offence, measured using a subscale of the Violence Risk Scale: Sex Offender Version (Gordon, Nicholiachuk, Olver & Wong, 2000), significantly differentiated treatment completers from dropouts.

Denial may therefore, be an important responsivity factor in sex offender treatment. The current study further examined the relationship between denial and treatment outcome in higher-risk rapists.

Denial, Institutional Adjustment and Treatment Gain

There is currently no research examining the relationship between denial and institutional adjustment or treatment gain, in higher-risk rapists. However, partial admission of the offence is required for the completion of many aspects of current sexual offender treatment programs. Thus, differences in treatment gain and institutional behaviour may be found to exist between higher-risk rapists who are in denial and those who are not.

Denial and Recidivism

Hanson and Bussière (1998) recently conducted a meta-analysis that examined numerous risk factors associated with sexual recidivism. They reported no significant relationship between denial and sexual recidivism. This empirical finding directly contradicts the clinical judgment of many professionals who deliver sexual offender treatment.

Based on an overview of the empirical literature, Lund (2000) argues that a plausible conclusion is that an adequate empirical test of the relationship between denial and recidivism has yet to be advanced. Previous research that has examined the

relationship between denial and sexual recidivism has serious methodological problems, such as heterogeneity in the definitions of denial, treatment settings, and differential inclusion and exclusion of deniers in many of the studies.

The presence and degree of denial is considered a significant factor in the treatability of sexual offenders (Barbaree, 1991). Marshall and Barbaree (1990) reported that sexual offenders who were in denial, or refused treatment, recidivated at slightly higher rates than untreated admitters. Also, denial has been reported to be higher among rapists than among child molesters (Nugent & Kroner, 1996). Therefore, the relationship between denial and recidivism in higher-risk rapists needs to be clarified.

Summary

Although there has been a considerable literature discussing the constructs of treatment readiness (i.e. motivation and denial) as they apply to sex offenders (Tierney & Macabe, 2002), little empirical research has examined the relationship between treatment readiness constructs and treatment outcome in higher-risk sex offenders. The current study helps clarify the relationship between treatment readiness and various measures of treatment outcome in higher-risk rapists.

Clinical Responsivity Factors

Deviant Sexual Arousal

Attempts to differentiate the sexual arousal patterns of rapists from non-rapists have produced inconclusive results. Recently, Marshall and Fernandez (2000) reviewed the literature examining phallometric assessment and concluded that the sexual preferences of rapists cannot be defined unequivocally.

However, it is possible that deviant arousal may be more predictive of treatment outcome in higher-risk rapists. Thornton (1998) reported that only high-risk rapists displayed deviant arousal. He reported that low and moderate risk rapists demonstrated a preference for normative sexual activity. The influence that deviant arousal may have on treatment response in higher-risk rapists should, therefore, be examined. For example, the presence of deviant arousal may make it more difficult to change sexually distorted thinking, experience empathy for victims, and desist from engaging in sexually assaultive behaviour.

In Canadian forensic settings, deviant sexual arousal is typically measured by physiological arousal using phallometric assessment. Phallometric testing is a procedure that identifies sexual preferences in adult males by measuring penile erection responses to stimuli depicting various sexual behaviours with different partners (Marshall & Fernandez, 2000). Phallometric assessments play an important role in determining treatment intensity level, in evaluating treatment outcome, and in predicting risk of re-offence.

Harris (1996) states that phallometric assessment provides four very useful functions in the treatment of sex offenders. First, it is widely used to assess offender preferences for deviant sexual behaviour. Second, phallometric assessment results can assist a therapist in confronting a sex offender about his denial of deviant sexual interests. Third, the assessment supports the use of behaviour modification techniques used to assist sex offenders in modifying their deviant sexual arousal. Finally, the sex offender can use phallometric assessment as a self-monitoring tool to gauge how well they have

been able to gain control over their deviant sexual arousal. Notwithstanding such benefits, there is considerable controversy associated with the use of phallometric testing.

After a review of the literature, Marshall and Fernandez (2000) concluded that the evidence regarding the reliability and criterion validity of phallometric testing is dubious at best. Although the evidence is supportive of the predictive validity of phallometric testing, many procedural problems effects its utility. The use of different stimuli, small subject samples, lack of detail in participant descriptions, and a restricted range of settings are problematic. For an excellent review of the difficulties associated with phallometric testing, see Marshall and Fernandez (2000).

Nonetheless, it is the preferred measure of deviant sexual arousal in forensic settings, and is the measure of deviant arousal used in the current study.

Deviant Sexual Arousal and Treatment Outcome

Deviant Sexual Arousal and Attrition

Deviant sexual arousal is indicative of the need for higher intensity programming (Looman, 2002). If an offender exhibits high levels of deviant arousal, or sexual pre-occupation in conjunction with high levels of psychopathy, it is often determined that he is a higher-risk offender and requires high intensity treatment. However, only one study was available that examined the relationship between deviant arousal and attrition in higher-risk sex offenders. Mackenzie et al. (2000) reported no significant difference between program completers and program non-completers in terms of sexual deviance in a sample of 60 sex offenders who completed a high intensity treatment program. Sexual deviance was defined using dynamic risk factors from the Violent Risk Scale: Sex Offender Version (Gordon et al., 2000), of which deviant arousal is a factor.

Deviant Sexual Arousal, Institutional Adjustment and Treatment Gain

To date, research does not exist that has examined how deviant arousal influences treatment gain and institutional adjustment in higher-risk sex offenders. In general, the sex offender treatment outcome literature has focused on the relationship between deviant arousal and recidivism.

Deviant Sexual Arousal and Recidivism

Haynes, Yates, and Nicholaichuk (1998) examined the relationship between deviant arousal, as measured by phallometric assessment, and risk for sexual recidivism, in 345 sex offenders who were involved in a high intensity sex offender program. They reported that significant differences did not exist in rates of recidivism between sex offenders who exhibited deviant sexual arousal and those who did not.

Deviant arousal may influence recidivism when it is combined with other responsivity factors such as psychopathy. Serin, Mallioux and Malcolm (2001) reported that, in a sample of 68 sex offenders followed for seven years after release from prison, significantly higher rates of recidivism rates were reported for psychopathic sexual offenders who exhibit deviant sexual arousal as compared to non-psychopathic sex offenders who did not exhibit deviant arousal. In this study, the 33 rapists demonstrated the highest levels of psychopathy. Serin et al., (2001) did not differentiate between sexual and non-sexual re-offending.

Firestone et al. (2000) also examined the relationship between deviant sexual arousal and psychopathy (based on phallometric assessment and the Psychopathy Checklist-Revised). The study involved 156 incest offenders, 260 extra-familial child molesters, and 123 rapists. A significant relationship was reported between psychopathy and deviant arousal among child molesters but not among rapists. However, rapists tend

to be quite heterogeneous in their characteristics and it is possible that deviant arousal may only be important in higher-risk rapists (Thornton, 2002).

Hildebrand, Ruitter and Vogel (2002) combined PCL-R scores (using a 26 cut score) with a sexual deviance score from the Sexual Violence Risk –20 (SVR-20; Boer, Hart, Kropp, & Webster, 1997). Sexual deviance was defined as a relatively stable pattern of deviant sexual arousal. In a sample of 94 rapists the combination of the PCL-R and deviant arousal was strongly predictive of sexual recidivism.

Summary

The research to date indicates that deviant arousal may interact with other responsivity factors to influence treatment outcome in sex offenders. Given that deviant sexual arousal is associated with a greater treatment need and has been associated with higher recidivism rates, further research examining deviant sexual arousal as a responsivity factor in higher-risk rapists is warranted.

Conclusion

The preceding review clearly shows that only a preliminary understanding of the responsivity principle as applied to the treatment of higher-risk rapists currently exists. Limited research has identified and empirically validated potential factors that could influence treatment response in higher-risk rapists. As well, there has only been an initial examination of the relationship between potential responsivity factors and various sex offender treatment outcome measures.

Age, psychopathy, hostility, interpersonal style, treatment readiness, motivation, stage of behavioural change, denial and deviant arousal have been identified in the

literature as factors that influence treatment responsivity. Further research to elucidate their precise role and function in the treatment of higher-risk rapists is warranted.

III. PRESENT STUDY

Purpose

Although research exists to inform the application of the risk and need principle to the treatment of higher-risk sex offenders (Andrews & Bonta, 1998; 2003), less attention has been given to the responsivity principle. Given the serious problem of sexual assault in our society, a certain urgency exists in identifying factors that influence treatment response in rapists because they tend to have higher recidivism rates than other types of sexual offenders (Hanson & Bussière, 1998). However, limited research exists that has identified and examined the relationship between factors that influence treatment outcome in higher-risk rapists.

The purpose of this study was to review the literature to identify potential responsivity factors and examine their relationship with measures of treatment outcome in higher-risk rapists who have completed a high intensity sex offender treatment program. The responsivity factors that were examined included: 1) demographic- age; 2) interpersonal- psychopathy, hostility and interpersonal style; 3) treatment readiness- treatment readiness, motivation, stage of change, and denial; 4) clinical- deviant arousal.

Historically, sex offender treatment outcome has been largely defined in terms of recidivism. Given the insensitivity of recidivism as a measure of treatment outcome, the benefits of sex offender treatment should be measured in ways other than recidivism (Barbaree, 1997). Thus, this study expanded upon the definition of treatment outcome in the sex offender treatment literature by defining treatment outcome as attrition, institutional adjustment, treatment gain as well as recidivism.

Responsivity factors were not expected to influence treatment response in isolation of each other. Instead, they were expected to interact with each other that would lead to recommendations about how to improve treatment effectiveness. As mentioned previously, strategies used to deliver treatment to younger psychopathic rapists with deviant arousal should be different from those used to deliver treatment to non-psychopathic rapists who are in denial. Refer to Figure 2 for a model of the current study.

Hypotheses

Hypothesis 1: Demographic Responsivity Factor

Based on the research that indicates that age influences the ability of an individual to respond to treatment (Strassberg et al., 2002), younger rapists were expected to have higher attrition rates, greater institutional adjustment problems, and higher recidivism rates than older rapists.

Hypothesis 2: Interpersonal Responsivity Factors

Based on the research that indicates that psychopathy interferes significantly with treatment response (Looman et al., in press; Seto & Barbaree, 1999), psychopathic rapists were expected to have higher attrition rates, and demonstrate poorer institutional adjustment and less treatment gain than non-psychopathic rapists.

Figure Caption

Figure 2: Responsivity Factor Model

Hypothesis 2.1 As well, to further clarify Seto and Barbaree findings (1999), psychopathic rapists with higher levels of treatment gain were expected to have higher recidivism rates than psychopathic rapists with lower levels of treatment gain.

Hypothesis 2.2: Based on the research that suggests that hostility may interfere with the ability of sex offenders to participate in treatment (Preston, 2001), rapists who scored higher on the BDHI were expected to have higher rates of attrition, poorer institutional adjustment, less treatment gain, and higher rates of recidivism.

Hypothesis 2.3: Given that an interpersonal style associated with psychopathic and hostile characteristics is expected to influence treatment responsivity, it is expected that rapists who score lower on the Interpersonal Style subscale of the TRRG: SV will have higher rates of attrition, poorer institutional adjustment, less treatment gain and higher rates of recidivism.

Hypothesis 3: Treatment Readiness Responsivity Factors

Research indicates that having an understanding of factors that influence treatment readiness and related constructs can significantly improve treatment response (Serin & Kennedy, 1997). Therefore, rapists who demonstrated higher levels of treatment readiness, were expected to have lower rates of attrition, better institutional adjustment, higher levels of treatment gain, and lower rates of recidivism than rapists who demonstrated lower levels of treatment readiness.

Hypothesis 3.1: In relation to the other responsivity factors, younger psychopathic rapists were expected to demonstrate lower levels of treatment readiness than older non-psychopathic rapists.

Hypothesis 3.2: Rapists who are in higher stages of behavioral change were expected to have lower rates of attrition, better institutional adjustment, higher levels of treatment gain, and lower rates of recidivism than rapists who were in lower stages of behavioral change.

Hypothesis 3.3: Rapists who had higher motivation levels were expected to have lower rates of attrition, better institutional adjustment, higher levels of treatment gain, and lower rates of recidivism than rapists who displayed lower motivation levels.

Hypothesis 3.4: Conversely, rapists who demonstrated higher levels of denial would have higher rates of attrition and recidivism, and demonstrate lower levels of treatment gain, than rapists who were not in denial or who demonstrated lower levels of denial.

Hypothesis 4: Clinical Responsivity Factors

It was expected that rapists who displayed higher levels of deviant arousal would have lower levels of treatment gain and higher rates of recidivism than those with lower level of deviant arousal.

Hypothesis 4.1: Psychopathic rapists who exhibited deviant sexual arousal were expected to have higher rates of recidivism than those who did not.

IV. METHODOLOGY

Participants

This study involved all the male rapists'⁵ (adult victims over 16) who were admitted to the Regional Treatment Center RTC (O) between October 1996-July 2002, in order to participate in a high intensity sexual offender treatment program (RTCSOTP). The sample size was ($n = 108$). The subjects were determined to be in need of high intensity sexual offender treatment based on a specialized sexual offender assessment completed after sentencing and upon entry into a federal penitentiary at the Millhaven Assessment Unit or at the RTC (O).

The RTCSOTP has been described in detail elsewhere (Abracen & Looman, in press), however a brief description follows. The RTCSOTP is a cognitive behavioural program designed for the higher-risk sex offender. Higher-risk is determined by clinical and actuarial measures of risk (i.e., PCL-R, Static 99, SORAG) as well as need assessment instruments (LSI-R, OIA)⁶. Sex offenders admitted for treatment at RTC(O) will generally be high-risk/high needs, moderate-high-risk/high needs or moderate risk/high needs.

The treatment delivery setting is a psychiatric hospital that is distinct from the mainstream prison setting. The RTCSOTP is based upon 5 group sessions weekly consisting of 10 clients: 3 treatment groups delivered by psychologists and 2 social skills groups delivered by nurses. In addition, each client participates in 1-2 individual psychological sessions per week. The program consists of modules that target

⁵Of the 108 rapists, 10 also had victims between the ages of 12 –15 that were on file.

⁶ PCL-R- Psychopathy Checklist Revised, SORAG-Sexual Offender Risk Appraisal Guide, LSI-R- Level of Supervision Inventory, OIA- Offender Intake Assessment

disclosure/acceptance of responsibility, offence cycle, victim empathy, and relapse prevention techniques. Reduction of deviant arousal is also addressed throughout the program in a laboratory setting using arousal re-conditioning techniques. All rapists who completed treatment ($n = 69$) were exposed to the same program.

The mean age at time of admission to treatment for the total sample was 37.55, with a range of 25-66. There were no significant differences between completers and non-completers in terms of age at time of admission, prior number of sex offender treatment programs or sexual convictions. The mean age for the completers was 38.74 and for the non-completers was 35.44. Half the sample ($n=54$) was released to the community post-treatment. The mean follow-up time was 3.27 years, (range: 3 months-6 years). Table 1 summarizes the demographic and prior sexual offence characteristics of the participants.

Table 1

Participant Demographic and Prior Sexual Offence Characteristics

	Total Sample			Completers			Non-Completers			
Variable	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Age at admission to treatment	108	37.55	9.17	69	38.74	9.23	39	35.44	8.79	ns
Age at Release	54	35.05	8.16	29	33.29	6.96	25	36.56	8.91	ns
Prior Sexual Convictions	102	2.67	.10	35	2.54	.65	67	2.73	.04	ns
Ethnicity										
Caucasian		73%			51%			84%		
Aboriginal		16%			31%			7%		
Black		9%			9%			9%		
Other		2%			9%			0%		

Note. ns = not significant

Participants were grouped according to the various responsivity factors examined. The following rules were used to classify participants into particular groups: 1) a median split was used to classify participants as young or old (≤ 37 was considered younger and > 37 was considered older; 2) participants were classified as psychopaths if they had a total score of 27 or higher on the PCL-R and non-psychopathic if their total score was 26 or below; 3) participants were classified as having demonstrated deviant arousal if the deviancy index was greater than 1.1 (consistent with set phallometric assessment standards); 4) a median split was used to classify a hostile interpersonal style as measured by the BDHI (≤ 26 was considered-non-hostile and > 26 was considered hostile); 5) dividing the treatment readiness total score in thirds, participants were classified as demonstrating low levels of treatment readiness if they scored 8 or below, moderate treatment readiness if they scored between 9-15 and high treatment readiness if they score 16 or above on the treatment readiness subscale of the TRRG:SV; 6) dividing the interpersonal style total score in thirds participants were classified as having many negative interpersonal characteristics if they scored 8 or below, several negative interpersonal characteristics if they scored between 9-15 and few negative interpersonal characteristics or a positive interpersonal style if they score 16 or above on the treatment responsivity (interpersonal style) subscale of the TRRG:SV; 7) dividing the treatment gain total score in thirds participants were classified as demonstrating low levels of treatment gain if they scored 8 or below, moderate treatment gain if they scored between 9-15 and high treatment gain if they score 16 or above on the treatment gain subscale of the TRRG:SV, and 8) a composite denial score was calculated by summing the rape lie scale and the justification index subscales of the MSI.

Measures

Information pertaining to the following measures was available pre treatment and post treatment. Refer to Table 2 for a summary of the specific measures used to examine particular responsivity factors.

Treatment Files

The treatment files kept at the RTC (O) are extremely comprehensive and provide information regarding criminal, psychosocial as well as psychiatric and treatment history. Each file contains a pre-treatment assessment report, which provides a baseline level of risk for an offender, the criminogenic needs that must be targeted during treatment, as well as any responsivity issues that may influence the offender's learning and engagement in treatment. Each treatment file also includes an interim and post-treatment assessment report that evaluates the offender's progress during treatment.

Individuals who author the treatment reports have graduate training in psychology. Those therapists who did not have extensive experience with forensic populations were closely supervised either by the program director (who was on site) or a senior clinician. As a further quality control measure, all psychology reports are read by another clinician and rated on a series of criteria (scored as present or absent). Where reports were found to be missing relevant information, the author was asked to make the appropriate changes prior to submitting the report.

Table 2

Measures of Responsivity Factors

Measures	Demographic	Interpersonal	Treatment Readiness	Clinical
Treatment Files	X			
TRRG: SV		X	X	
MSI Subscales				X
Stage of Change Scale			X	
Motivation Index			X	
BDHI		X		
PCL-R		X		
Phallometrics				X

Note: TRRG:SV = Treatment Readiness, Responsivity and Gain Scale: Short Version; MSI = Multi-Phasic Sex Inventory, BDHI = Buss Durkee Hostility Inventory, PCL-R = Psychopathy Checklist- Revised

The demographic responsivity factor, age, was coded from birth date information documented on the RTC (O) files. The RTC treatment files were also used to code the Treatment Readiness, Responsivity and Gain scale (Serin & Kennedy, 1997), described below as well as the treatment outcome measure of attrition. When an offender is discharged from the program, a note is placed on the RTC (O) file as to the date of discharge and reason why.

Risk level was also coded from pre-treatment risk assessment reports on file. The offender's risk for sexual re-offending is re-evaluated and recommendations for future treatment and community supervision are made.

Treatment Readiness, Responsivity and Gain Scale: Short Version (TRRG: SV: Serin, Kennedy & Mailloux, 2002)

The TRRG: SV (see Appendix A) was designed to systematically assess an offender's readiness, interpersonal characteristics influencing treatment responsivity and subsequent treatment gain. It is still in the developmental stages and has not been widely used for research purposes. Thus, limited reliability and validity data exist for this measure. However, it is based on a strong theoretical background (see Serin & Kennedy, 1997 for scale development) and given the lack of treatment readiness/motivation responsivity measures available it was included in the current study. The TRRG: SV scale conceptualizes responsivity as a broader construct that encompasses factors that influence treatment readiness and responsivity as well as items reflective of treatment gain. The original TRRG scale consisted of 38 items (Serin & Kennedy, 1997). However, the TRRG:SV includes 24 items. The reduction decreased the overall internal consistency from .90 to .82, which is still considered within a good reliability range. The TRRG:SV scale consists of three separate subscales: treatment readiness, treatment

responsivity (interpersonal style) and treatment gain. In a sample of 265 male offenders the internal consistency of the treatment readiness and responsivity subscales was .83, .82 respectively (Serin, et al., 2002). Currently, reliability and validity estimates for the treatment gain scale do not exist.

The TRRG: SV scale was designed to be completed by staff prior to treatment and completed post treatment by the therapist delivering treatment. It is recommended that the questions provided in the TRRG: SV manual be incorporated into existing interview-based assessments, (e.g. pre-treatment risk assessments). Each item in the three subscales is rated 0-3. Behavioural anchors and descriptions are provided to assist in scoring. Higher scores on the Treatment Readiness, Responsivity (interpersonal style) and Gain subscales reflect greater readiness for treatment, absence of interpersonal characteristics that interfere with responsivity to treatment and greater knowledge, skills and performance reflective of treatment gain, respectively. Change scores are calculated for the Treatment Readiness and Treatment Responsivity (interpersonal style) Subscales.

For this study, the TRRG: SV was completed pre and post treatment retrospectively by the author based on the pre and post treatment reports located in the RTC(O) treatment files using the behavioural anchors and descriptions as guides to what file information was required to rate each scale item. Attempts were made to be blind to the other responsivity factors while completing the TRRG: SV, however, the treatment reports did comment on some of the responsivity factors examined in the study, possibly contributing to some bias. Inter-rater reliability of the TRRG: SV was completed for 10% of the sample.

Buss-Durkee Hostility-Guilt Inventory (Buss-Durkee Hostility Inventory (BDHI: Buss & Durkee, 1957)

The BDHI is a self-report scale that contains 75 true/false items, measuring seven constructs reflective of general hostility, with higher scores indicative of greater levels of hostility (see Appendix B). The BDHI consists of seven assault subscales: Assault, Indirect Hostility, Irritability, Negativism, Verbal Aggression, Resentment, Suspicion, and an additional construct of guilt. The guilt subscale is not included in the total hostility score. Factor analyses of the subscales of the BDHI revealed two factors: an emotional hostility component (resentment and suspicion) and a physical hostility component (assault, indirect hostility, irritability, and verbal hostility) (Buss & Durkee, 1957).

A total score of 38 and greater is considered to reflect high levels of hostility. Biaggio, Supplee, and Curtis (1981) reported significant test-retest reliability coefficients of .64 to .82 for the subscales of this inventory. In a sample of 64 male sex offenders coefficient alphas of .55 to .76 were obtained for the subscales (Lee et al., 2001).

Although the BDHI was not designed for use in sex offender populations, validity data are available for this group. Firestone, Bradford and McCoy (1999) reported that in incest offenders, higher levels of hostility as measured by the BDHI was predictive of recidivism. Similarly, Quinsey, Malcolm and Khanna (1998) reported that the BDHI total score was one of the best predictors of recidivism in a sample of sex offenders. As well, BDHI scores for violent rapists were reported to be higher than those for non-offending controls (Rada, Laws, & Kellner, 1976).

Psychopathy Checklist-Revised (PCL-R: Hare, 1991; 2003)

The PCL-R is a 20-item measure where each item is scored between 0 and 2. The cutoff score for a diagnosis of psychopathy is 30 (Hare, 1991). Refer to Appendix C for a list of the PCL-R items. However, scores of 25 and above have been used for research purposes (Quinsey et al., 1998). The items in the PCL-R have been classified into two general factors (Hare 1991). Factor 1 involves many of the prototypical personality features that have been associated with psychopathy including egocentricity, manipulateness, callousness, and lack of remorse. Factor 2 is associated with an unstable and antisocial lifestyle. The PCL-R was developed primarily with data from male offenders and forensic patients. However, the psychometric properties of the PCL-R are now well established in a variety of other offender and patient populations, including females, substance abusers, and sex offenders (e.g., Brown & Forth, 1997; Cooke, Forth, & Hare, 1998; Hare 1998b; Hare, 2003; Harris, Rice, & Quinsey, 1998; Porter et al., 2000).

The PCL-R has been demonstrated to be a valid predictor of both general and violent recidivism in a number of studies (Barbaree, Seto, & Langton, 2001; Hare, 1998; Hemphill et al., 1998; Quinsey, et al., 1998). Inter-rater reliability coefficients range from .74 to .97 (Hare, 2003; Hare et al., 2000). The PCL-R has demonstrated excellent internal consistency with Cronbach alpha coefficients ranging from .81 to .89 (Hare, 1991; 2003). Mean inter-rater reliability coefficients range from .86 to .94. Test-retest reliability was reported to be .92 (Schroeder, Schroder, & Hare, 1983).

Phallometric Assessment

The phallometric assessment battery employed at the RTCSOTP includes the Quinsey Female Sexual Violence Assessment (QFSVA; Quinsey, Chaplin & Varney, 1981). The QFSVA consists of 14 audio taped stimuli up to two minutes in duration all recorded in the same male voice: 4 each of consensual, sexual assault, and non-sexual violence, and two neutral interactions. There are two consenting stimuli in which the woman is the initiator; two consenting stimuli in which the man is the initiator; two rape stimuli with a sexual motivation; two rape stimuli with an anger motivation; two non-sexual, anger motivated, physical assaults; two non-sexual, physical assaults with a robbery motivation; and two neutral (e.g. non-sexual, non-violent) interactions between a man and a woman.

Subjects place a mercury strain gage around their penis that records changes in penile circumference. All voltage readings are converted to percent full erection and then converted to z scores. Deviance indexes were calculated by dividing the average response to the deviant stimuli and the average response to the appropriate stimuli. Deviancy indexes less than .8 indicate appropriate arousal, values between .8 – 1.1 indicate non-discriminate arousal and values greater than 1.1 indicate deviant arousal.

Internal consistency coefficients range from .52 to .85 for the stimulus sets included in QFSVA protocol (Fernandez, 2002). Lalumière and Quinsey (1994) conducted a meta-analysis of 12 well controlled studies that attempted to differentiate between rapist and non-rapist in terms of their penile response to deviant and on-deviant stimuli. They concluded that rapists do respond differently than non-rapists and accurate classification into rapists and non-rapist groups is possible. Hanson et al., 1996 reported

that deviant arousal as measured by phallometric assessment was one of the strongest predictors of recidivism for child molesters. For a review of the reliability and validity of phallometric testing refer to Marshall and Fernandez (2000). These authors conclude that phallometric assessment contributes to but may be of limited value in predicting recidivism.

Multi-Phasic Sexual Inventory (MSI: Nichols & Molinder, 1984)

The MSI is a 300- item true/false self-report paper/pencil questionnaire designed to assess a range of sexual characteristics in identified sex offenders, including child molesters, rapists, exhibitionists and there paraphiliacs. (see Appendix D). The subscales assess aspects associated with sexual attitudes, sexual behaviour history, sexual knowledge, sexual dysfunction, and denial/defensiveness

The MSI has demonstrated internal reliability with cronbach alpha's ranging from .71 to .80 (Nichols & Molinder, 1984). Kailichman, Henderson, Shealy and Dwyer (1992) investigated the psychometric properties of the Multiphasic Sex Inventory in 5 samples of sex offenders. Alpha coefficients ranged from .50 to .90, indicating moderate to high reliability for the MSI scales. Test-retest coefficient range from. 42 to .89 (Nichols & Molinder, 1984; Simkins et al., 1989).

In the current study, the following scales were used to collect information on denial and deviant sexual arousal:

Rape: Sexual Deviancy Subscale: This scale consist of 28 items (21 true, 7 false) that measure levels of sexual fantasy and sexual activity. In a sample of 144 rapists, Kalichman et al. (1992) reported a mean inter-item correlation of .22 and an alpha coefficient of .87.

Justifications: This scale consists of 25 items (all true) and is designed to measure the various rationalizations that sex offenders use to explain their offences. Simkins et al., (1989) reported the 3-month stability of the scale to be $r = .78$. He also reported that the scale was weakly correlated with recidivism. In a sample of 144 rapists, Kalichman et al. (1992) reported a mean inter-item correlation of .22 and an alpha coefficient of .82.

Rape Lie Scale: This scale consists of 13 items (1 true and 12 false) and is designed to measure the degree of denial and minimization in rapists. Gillis (1991) reported high internal consistency for this scale, KR-20 of .87.

Geer et al. (2001) reported that the denial and justifications, as measured by the MSI, was predictive of treatment completion in a sample of 179 sex offenders.

Kalichman et al. (1992) reviewed the psychometric properties of the MSI and concluded that the scale provides information that is independent of that provided by other personality and psychopathology tests and has been found to be related to physiological indices of arousal. However, further research is needed to evaluate the instruments reliability and reliability.

Stages of Change Scale

A scale incorporating Prochaska and DiClemente's (1992) 5 stages of change was created for the study. Behavioural anchors were provided that were reflective of behaviours demonstrated by higher-risk sex offenders in the various stages. Each stage was scored on a 4 point scale but for analysis stages were collapsed into a variable coded 1-4, (1= pre-contemplation, 2 = contemplation, 3 = preparation and 4 = action). The inter-rater reliability was completed for 10% of the sample, refer to the results section. See Appendix E for a description of the scale.

Offender Management System (OMS: Correctional Service of Canada)

The offender management system is a computerized database of information that includes all case management, security and psychological reports generated on the offender while in federal custody. Information available includes areas related and not limited to: psychosocial, criminal, psychological, security, institutional adjustment as well as treatment efforts. The OMS system was used to code the outcome measure of institutional adjustment before and after treatment as well as recidivism through the use of CPIC records.

In addition, an index of motivation to participate in correctional treatment programs (rating assigned by case management officer) is available in the offender correctional plan, a case management document located on OMS. The Correctional Service of Canada has developed a three point scale that ranges from 0-3 that requires parole officers to assess the motivation level of offender to complete recommended treatment (Townson, 1994). A motivation rating of low means the offender strongly rejects the need for change or is unwilling to participate in recommended programs. Moderate means the offender may not fully accept that he has problematic behaviours but will participate in recommended programs, while high means the offender is self-motivated and wants to actively address problem areas. This variable was also coded from OMS.

Outcome Measures

Attrition

Attrition was defined in the study as both a dichotomous variable (completion or non-completion) and a continuous variable as measured by time (months) spent in

treatment. There was some variation in the time spent in treatment among the completers due to operational factors (institution shut downs, staff sickness, etc.) that interfere with treatment delivery. Based on file review, sex offenders who started the high intensity program but who failed to complete the program were identified as well as the reason for their program non-completion. Non-completers are those rapists who voluntarily withdrew or were involuntarily discharged from the program prior to the program ending. Completers are rapists that attended all the treatment sessions.

Institutional Adjustment

Institutional adjustment was defined in the study as number of institutional misconducts and was measured pre and post treatment. The total number of misconducts was calculated pre and post treatment. The time period used for pre-treatment institutional adjustment was the time between date of admission the federal custody and being admitted to the treatment program. The time frame used for post-treatment institutional adjustment was the time between treatment completion and release or the date that data collection stopped, May 2003. Information pertaining to the frequency and type of institutional incidents that occurred pre-treatment, and post treatment was gathered from the OMS system. Misconduct categories include possession of contraband, theft, assault, disciplinary problems, sexual assault and so forth.

Treatment Gain

Treatment gain was coded using the 4 point rating Treatment Gain subscale in TRRG: SV. Information needed to complete the TRRG scale was obtained from the final treatment reports available in the RTC (O) files.

Recidivism

Recidivism was measured using official convictions and charges for general, sexual as well as violent offences. Violent offences that were sexual in nature were also coded as sexual recidivism. Given the base rate problem in conducting outcome research with sexual offenders, Quinsey et al., (1998) have argued that this is a reasonable to include violent recidivism as an outcome measure with reference to sexual offender treatment. Two variables were used to examine recidivism: a dichotomous variable (recidivist/non-recidivist) and a continuous variable, time to recidivism which was defined as the time between the rapists release to the community and when any type of re-offence occurred.

Procedures

All participants in the study signed informed consent forms that stated that information pertaining to their psychometric, cognitive; phallometric and treatment progress could be used for research purposes. See Appendix F for a copy of the consent form.

This study involved several stages of data gathering. First, all rapists who were admitted to the RTC(O) treatment program between 1996-2002 were identified. The second stage of data collection involved coding retrospectively, based on the comprehensive pre and post treatment reports available in the RTC (O) treatment files, the TRRG: SV and the Stages of Change measure. The author attempted to be blind to the other variables involved in the study when coding the TRRG: SV.

Subsequently, for the identified subjects, archival data was gathered pertaining to specific responsivity measures examined in the study: hostility (BDHI), deviant sexual

arousal (phallometrics, MSI), and denial (MSI). As part of a pre-treatment assessment battery the same Behavioural Science Technician administered all of the aforementioned measures to subjects during 1996-2002.

Archival data relating to the PCL-R and age was also available but it was incomplete. The third stage of data collection involved gathering missing PCL-R information by retrieving total, factor and item scores as well as date of birth from the RTC (O) treatment files.

The last stage of data collection involved gathering information available from the OMS, to code the index of motivation variable as well as the treatment outcome variables attrition, institutional adjustment, and recidivism.

V. RESULTS

The results are organized according to each of the four sets of hypotheses examined. However, descriptive, correlational, and reliability and validity data will be presented first.

Characteristics of Data

SPSS(Version 11) was utilized for all data analyses. Prior to analyses, all data was examined for accuracy of data entry, missing values, the presence of univariate outliers, normality and linearity and the fit between their distributions and the assumptions of univariate analysis. This involved the examination of frequencies, histograms, values of skewness, kurtosis, and correlations. The institutional adjustment variable was converted into a rate variable by dividing the total number of institutional misconducts pre and post by the amount of time (months) that the rapists had to engage in institutional misconducts pre and post treatment. The institutional adjustment rate variable was positively skewed and as a result, was transformed using the square root function. All analyses examining institutional adjustment used the transformed variable.

Descriptive and Correlational Data

Over a 7-year period, in which 108 rapists were admitted to the RTC (O) sex offender program, the attrition rate was 36%. Thirty-nine rapists did not complete the program. Post treatment data was, therefore, available for 69 participants. The most common reason for discharge was inappropriate behaviour, ($n=18$, 46.2%), followed by voluntary withdrawal, ($n=10$, 25.6%). Table 3 summarizes reasons for program non-completion.

Table 3

Reason for Program Non-Completion

Reason	<i>n</i>	% of Non-Completers
Inappropriate Behaviour	18	46.2%
Breaking Group Rules	2	5.1%
Violent Behaviour	7	17.9%
Released	2	5.2%
Withdrew	10	25.6%
Total	39	100

There was a significant difference between rapists who completed treatment and those who did not in terms of risk level (defined as rating of 1-5). Non-completers were more likely to be classified as high risk/high needs ($M = 1.54$, $SD = .88$) in comparison to completers ($M = 2.29$, $SD = .94$) who were more likely to be classified as moderate to high risk/high needs or moderate risk/high needs $t(106) = -4.073$, $p < .001$.

Of the 108 rapists included in the study, 54 were released with an average follow-up time of 3.27 years ($SD = 20.56$). Twenty-six rapists recidivated representing an overall recidivism rate of 48%. The base rate for sexual recidivism was 11%, 20% for violent recidivism and 17% for non-violent recidivism. There was no significant difference between program completers and non-completers in terms of overall recidivism, [$\chi^2(1) = .27$]. Recidivists were equally as likely to have completed or been discharged from treatment as were non-recidivists.

Table 4 presents the correlations between the responsivity measures. Given the number of correlations completed a Bonferonni correction was applied ($p < .004$). Higher levels of treatment readiness were associated with a more positive interpersonal style, higher stage of change and higher levels of motivation and vice versa.

Table 4

Correlation Between Responsivity Factors

	1	2	3	4	5	6	7	8	9	10
1. Age at Admission	1.00									
2. PCL-R	-.15	1.00								
3. PCL-R Factor 1	-.01	.77***	1.00							
4. PCL-R Factor 2	-.24**	.80***	.30**	1.00						
5. Hostility	-.16	.04	-.05	.20*	1.00					
6. Emotional Hostility	-.18	.11	.11	.20	.53***	1.00				
7. Physical Hostility	-.13	.11	-.03	.25**	.95***	.37**	1.00			
8 Interpersonal Style	.14	-.38**	-.41***	-.22*	-.00	-.33**	.05	1.00		
9 Treatment Readiness	.04	-.04	-.16	.10	.00	-.31**	.07	.74***	1.00	
10. Stages of Change	.10	-.04	-.25**	.10	.12	-.22	.19	.48***	.54***	1.00

Table 4 continued

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
11. Motivation Index	.17	-.24**	-.22*	-.18	.07	.11	.07	-.52***	.42***	.48***	1.00			
12. Denial	-.13	-.07	-.12	.06	.06	.19	-.00	-.11	-.19*	-.17	-.13	1.00		
13. MSI Sexual Deviance Scale	.08	-.07	.05	-.17	-.19	.30**	.07	.19*	.19*	.27*	.21*	-.21*	1.00	
14. PPG Rape/Consent Index	-.01	-.11	-.08	-.12	.05	.14	.10	.09	.15	.11	.06	.03	-.12	1.00

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; Bonferroni Correction Family wise, $p < .004$; PCL-R = Psychopathy Checklist Revised, MSI = Multiphasic Sexual Inventory; PPG = Phallometric Assessment

Table 5 presents the correlations between the responsivity measures and the various treatment outcomes examined in the study. Again, given the number of correlations completed a Bonferonni correction was applied ($p < .004$). Age and psychopathy was associated with institutional adjustment. Interpersonal style was associated with time in treatment, institutional adjustment and treatment gain. Treatment Readiness was related to time spent in treatment and treatment gain. Stage of change was associated with time spent in treatment. Motivation level was associated with time spent in treatment and institutional adjustment.

Investigation of Reliability of Measures

Although there are other types of reliability estimates coefficient alpha was used as it is a very common measure of scale reliability. Overall, the scales included in the study, in which item scores were available, demonstrated acceptable reliability.

Cronbach's alpha ranged from .76 - .78. For the scales that have been used less frequently with sex offender populations, the Stage of Change Scale and the TRRG:SV, inter-rater reliability was calculated for 10 % of the sample. Inter-rater reliability was poor particularly in regards to pre-treatment ratings using the TRRG:SV and the Stage of Change scale. They improved on the post treatment ratings. This could have been due to the fact that the post-treatment reports used to score the TRRG:SV and the Stages of Change were more comprehensive. My ratings were generally lower than the other two raters.

Table 5

Correlations Between Responsivity Factors and Treatment Outcome

Responsivity Measures	Time in treatment (n = 108)	Institutional Adjustment (n=108)	Treatment Gain (n= 69)	Time to Recidivism (n= 26)
Age at admission of treatment	.19*	-.38***	.14	-.07
PCL-R Total Score	-.11	.33***	-.12	.12
PCL-R Factor 1	-.23**	.24***	-.07	.03
PCL-R Factor 2	.04	.33***	-.11	.18
Hostility Total Score	.17	.16	-.04	-.34
Emotional Hostility	.16	.27*	-.34**	.44
Physical Hostility	.15	.15	.00	-.33
Pre-Treatment Interpersonal Style Total Score	.46***	-.33***	.51***	-.19
Pre-Treatment Readiness Total Score	.45***	-.15	.68***	-.20
Stages of Change	.50***	-.13	.20	-.02
Motivation Index	.46***	-.36***	.24*	.47**
Denial	-.06	.21*	-.16	.04
Deviant Arousal : Rape/Consent Index	-.05	.03	.19	-.04
MSI Sexual Deviance subscale	.05	-.02	.19	.24

Note: * $p < .05$, ** $p < .01$ *** $p < .001$; Bonferonni Correction Family wise, $p < .004$. PCL-R= Psychopathy Checklist, MSI= Multiphasic Sex Inventory; n's vary from 25-108 for the responsivity measures

This could have been related to potential bias given the PI was privy to the a priori hypotheses. The poor inter-rater reliability suggests that responsivity measures may be more reliably completed using an interview, rather than retrospectively based on file information. Refer to Table 6 for the means and standard deviations, and the respective internal consistencies and intra-class coefficients.

Specific Hypotheses

Demographic Responsivity Factor: Age

Hypothesis set 1: Younger rapists were expected to have higher attrition rates, more institutional adjustment problems and higher recidivism rates than older rapists.

These hypotheses were tested using a chi square analysis and a series of independent samples t-tests. With respect to attrition, 45% of younger rapists did not complete treatment in comparison to 28% of older rapists, which was not a significant difference ($\chi^2 (1) = 3.83$). Further investigation also revealed that a significant difference did not exist between young and old rapists in terms of total time spent in treatment ($M = 4.63$ months versus $M = 5.61$ months).

However, in terms of institutional adjustment, younger rapists did have a significantly higher rate of institutional misconducts before and after treatment as well as in total than did older rapists, $t(106) = 4.58, p < .001$, $t(106) = 2.22, p < .05$, $t(106) = 3.84, p < .001$, respectively.

Younger rapists did not differ significantly from older rapists in terms of time to recidivism. Refer to Table 7 for a comparison of means and standard deviations between young and old rapists across outcome measures.

Table 6

Means, Standard Deviations and Reliability Statistics for Studies Measures

Measures	<i>N</i>	<i>M</i>	<i>SD</i>	α	ICC	
					Single	Average
Age	108	37.55	9.17			
PCL-R	108	25.58	6.29	.78		
BDHI						
Pre	99	27.60	12.92			
Post	59	26.97	13.17			
Treatment Readiness						
Pre	108	12.62	5.50	.76	.09	.17
Post	69	17.08	4.80	.90	.38	.55
Interpersonal Style						
Pre	108	11.44	4.53	.77	-.17	-.41
Post	69	16.26	4.06	.85	.60	.75
Treatment Gain	69	14.72	4.81	.76	.60	.75
Stage of Change						
Pre	108	1.62	.56		.02	.05
Post	69	1.89	.54		.38	.56
Motivation						
Pre	108	2.08	.67			
Post	69	2.16	.58			
Denial						
Pre	96	12.40	3.38			
Post	62	11.80	3.24			
MSI Sexual Deviancy						
Pre	98	6.31	5.14			
Post	62	6.63	4.50			
Rape/Consent Index						
Pre	99	1.07	1.17			
Post	43	.99	.44			

Note: PCL-R= Psychopathy Checklist; BDHI= Buss Durkee Hostility Inventory; MSI= Multi-Phasic Inventory

Table 7

Comparison Between Younger and Older Rapists Across Outcome Measures

Outcome Measure	Young			Old			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Attrition							
Time Spent in Treatment (months)	51	4.63	2.53	57	5.61	2.22	ns
Institutional Adjustment							
Pre	51	.35	.21	57	.20	.15	4.75***
Post	51	.32	.35	57	.20	.26	2.21*
Total	51	.53	.33	57	.32	.26	3.84***
Treatment Gain	28	13.50	4.29	41	15.56	5.01	ns
Recidivism							
Time to Recidivism (months)	17	23.46	16.23	9	16.90	13.55	ns

Note: * $p < .05$, *** $p < .001$

Interpersonal Responsivity Factors: Psychopathy, Hostility and Interpersonal Style
Psychopathy

Hypothesis set 2: Psychopathic rapists were expected to have higher attrition rates, poorer institutional adjustment, less treatment gain and higher recidivism rates than non-psychopathic rapists.

Hypothesis 2.1: Psychopathic rapists with higher levels of treatment gain were expected to have higher recidivism rates than psychopathic rapists with lower levels of treatment gain.

These hypotheses were tested using a chi square analysis and a series of independent samples t-tests. With respect to attrition, psychopathic rapists were significantly less likely to be in the completer group than were non-psychopathic rapists [$\chi^2(1) = 4.34, p < .05$]. Forty-seven percent of psychopathic rapists did not complete treatment in comparison to 28% of non-psychopathic rapists. The most common reason for psychopaths being discharged from treatment was inappropriate behaviour. The individuals who made the decision to discharge were not blind to the individual's PCL-R total score. Treatment providers, however, must be aware of the level of psychopathy a sex offender exhibits because psychopathy is treated as a responsivity issue in the delivery of treatment.

Table 8 indicates that there was no significant difference between psychopathic rapists ($M = 4.69$ months) and non-psychopathic rapists ($M = 5.45$ months) in terms of time spent in treatment. However, a 2X2 factorial between subjects ANOVA indicated that the interaction between psychopathy and age was significant $F(1, 107) = 6.57, p < .01$. Bonferroni post hoc comparisons indicated that older non-psychopathic rapists remained in treatment on average, longer than older or younger psychopaths as well as

Table 8

Comparison Between Psychopathic and Non-Psychopathic Rapists Across Outcome Measures

Outcome Measure	Psychopathic			Non-Psychopathic			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Attrition							
Time Spent in Treatment (months)	44	4.69	2.58	64	5.45	2.25	ns
Institutional Adjustment							
Pre	44	.34	.17	64	.23	.21	2.83**
Post	44	.36	.32	64	.19	.28	2.89**
Total	44	.54	.29	64	.34	.31	3.33***
Treatment Gain	23	13.57	3.76	46	15.30	5.19	ns
Recidivism							
Time to Recidivism (months)	9	25.35	21.30	17	29.49	12.18	ns

Note: ** $p < .01$, *** $p < .001$

younger non-psychopaths. Refer to Table 9 for the means and standards deviations of total time spent in treatment for psychopaths across age groups.

Significant differences were also found between psychopaths and non-psychopathic rapists in terms of institutional adjustment. Psychopathic rapists did have a significantly higher rate of institutional misconducts before and after treatment as well as in total than did non-psychopathic rapists, $t(106) = 2.83, p < .01$, $t(106) = 2.89, p < .01$, $t(106) = 3.32, p < .001$, respectively.

The hypotheses that psychopathic rapists would display significantly lower treatment gain scores and have higher rates of recidivism were not supported. Due to small number of recidivists ($n=26$), of whom only 9 were psychopathic, the hypothesis designed to explore the relationship between psychopathy, treatment gain and recidivism could not be examined. A comparison between psychopathic and non-psychopathic rapists across outcome measures is presented in Table 8.

Hostility

Hypothesis 2.2: Hostile rapists were expected to have higher attrition rates, poorer institutional adjustment, less treatment gain and higher recidivism rates than non-hostile rapists.

These hypotheses were tested using a chi square analysis and a series of independent samples t-test. With respect to attrition, there was no significant association between hostility and whether a rapist completed or did not complete [$\chi^2(1) = .65$]. Similarly, there were no significant differences in terms of total time spent in treatment, institutional adjustment, treatment gain and recidivism between hostile and non-hostile rapists.

Table 9

Means and Standard Deviations for Time Spent in Treatment for Psychopathic and Non-Psychopathic Rapists Across Age Groups

Variable	Time in Treatment		
	<i>n</i>	<i>M</i>	<i>SD</i>
Young Psychopath	27	4.91	2.59
Old Psychopath	17	4.36	2.61
Young Non-Psychopath	24	4.32	2.47
Old Non-Psychopath	40	6.14	1.83

Refer to Table 10 for a comparison of the means and standard deviations for hostile and non-hostile rapists across outcome measures.

Interpersonal Style

Hypothesis 2.3: Rapists with lower scores on the interpersonal style scale, indicating a negative interpersonal style were expected to have higher attrition rates, poorer institutional adjustment, less treatment gain and higher recidivism rates than rapists with a positive interpersonal style.

These hypotheses were tested using an independent samples t-tests and ANOVA's. A significant difference existed between interpersonal style and completion of treatment. Rapists who completed treatment had higher scores on the interpersonal style scale ($M = 12.88$, $SD = 4.32$) than rapists who did not complete treatment ($M = 8.87$, $SD = 3.72$), $t(106) = -3.97$, $p < .001$. Similarly, an ANOVA revealed that rapists with lower pre-treatment scores on the interpersonal style scale, indicative of a negative interpersonal style, spent significantly less time in treatment than did rapists with higher pre-treatment scores, indicative of a more positive interpersonal style, $F(2, 105) = 9.24$, $p < .001$, $\eta^2 = .15$. Post hoc analyses indicated that the differences were specifically between rapists with higher scores on the interpersonal style scale and rapists with lower scores. Rapists with higher scores on the interpersonal style spent more time in treatment than did rapists with lower scores.

Table 10

Comparison Between Hostile and Non-Hostile Rapists Across Outcome Measures

Outcome Measure	Hostile			Non-Hostile			<i>t</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Attrition							
Time Spent in Treatment (months)	41	5.92	2.07	58	5.04	2.32	ns
Institutional Adjustment							
Pre	41	.29	.18	58	.25	.22	ns
Post	41	.28	.33	41	.23	.29	ns
Total	41	.45	.31	41	.39	.31	ns
Treatment Gain	30	14.90	4.06	38	14.57	5.44	ns
Recidivism							
Time to Recidivism (months)	10	17.09	15.79	13	23.40	11.70	ns

Note: ** $p < .05$, *** $p < .001$

In terms of institutional adjustment, rapists with a pre-treatment negative interpersonal style did have a significantly higher rate of institutional misconducts before, $F(2, 105) = 7.21, p < .001, \eta^2 = .12$ and after treatment, $F(2, 105) = 5.00, p < .01, \eta^2 = .08$, as well as in total than did rapists with more pre-treatment positive interpersonal style, $F(2, 105) = 8.01, p < .001, \eta^2 = .13$. Post hoc analyses indicated that the differences were specifically between rapists with higher scores on the interpersonal style scale and rapists with moderate and lower scores. Rapists with higher scores on interpersonal style scale had better institutional adjustment than rapists with moderate and lower scores on the interpersonal style scale.

Significant differences also existed between pre-treatment ratings of interpersonal style and treatment gain. Rapists with a negative interpersonal style had lower levels of treatment gain than did rapists with a positive interpersonal style, $F(2, 66) = 8.68, p < .001, \eta^2 = .21$. Post hoc analyses indicated that the differences were specifically between rapists with higher scores on the interpersonal style scale and rapists with moderate and lower scores. Rapists with higher scores on interpersonal style scale had higher levels of treatment gain than rapists with moderate and lower scores on the interpersonal style scale.

There were no significant differences between rapists with a negative interpersonal style and those with a more positive interpersonal style in terms of time to recidivism. Refer to Table 11 for a comparison of means and standard deviations for levels of interpersonal style across outcome measures.

Table 11

Comparison Between Interpersonal Style Across Outcome Measures

Outcome Measure	Interpersonal Style									
	High					Moderate				
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>
Attrition										
Time Spent in Treatment (months)	19	6.85 _b	.97	64	5.12 _{ab}	2.29	25	3.90 _a	2.75	9.24***
Institutional Adjustment										
Pre	19	.12 _b	.11	64	.29 _a	.19	25	.34 _a	.21	7.21***
Post	19	.14 _b	.22	64	.24 _a	.30	25	.41 _a	.34	5.00**
Total	19	.22 _b	.21	64	.42 _a	.31	25	.58 _a	.32	8.01***
Treatment Gain	18	17.77 _b	4.74	41	14.34 _a	4.04	10	10.80 _a	4.80	8.68***
Recidivism										
Time to Recidivism (months)	1	31.63		19	19.38	5.11	6	21.36	15.46	ns

Note: ** $p < .05$, *** $p < .001$; Means sharing like superscripts are not significantly different at the $p < .05$ 'level (Tukey-HSD multiple range tests)

Treatment Readiness Responsivity Factors: Treatment Readiness, Stage of Change, Motivation and Denial

Treatment Readiness

Hypothesis set 3: Rapists who display higher levels of treatment readiness will have lower rates of attrition, less institutional adjustment problems, higher levels of treatment gain and lower rates of recidivism than rapists who display lower levels of treatment readiness.

These hypotheses were tested using an independent samples t-test and ANOVA's.

Rapists who completed treatment had higher pre-treatment readiness scores ($M = 14.10$, $SD = 5.05$) than rapists who did not complete treatment ($M = 10.00$, $SD = 5.32$), $t(106) = -3.97$, $p < .001$. An ANOVA revealed that rapists who had higher treatment readiness total scores spent more time in treatment than rapist with lower scores, $F(2,105) = 13.11$, $p < .001$, $\eta^2 = .20$. Post hoc analyses indicated that differences in time spent in treatment existed specifically between rapists with higher, moderate and lower scores on the treatment readiness scale. The higher the treatment readiness score, the more time spent in treatment. The hypothesis, however, that stated that higher levels of treatment readiness would be related to better institutional adjustment was not supported.

However, as predicted significant differences existed between levels of treatment readiness and treatment gain. Rapists with higher pre-treatment readiness had higher levels of treatment gain than rapists with lower levels of pre-treatment readiness, $F(2,66) = 25.58$, $p < .001$, $\eta^2 = .44$. Post hoc analyses indicated that the differences in treatment gain existed specifically between rapists with higher, moderate and lower scores on the treatment readiness scale. The higher the treatment readiness score, the higher treatment gain score.

The hypothesis that rapists with higher levels of the treatment readiness would have significantly lower rates of recidivism was not supported. Specifically, mean time to recidivism did not vary as a function of treatment readiness. Refer to Table 12 for a comparison of means and standard deviations for levels of treatment readiness across outcome measures.

Hypotheses 3.1: Younger psychopathic rapists were expected to display lower levels of treatment readiness than older non-psychopathic rapists.

This hypothesis was examined using an ANOVA Younger psychopathic rapists ($M=12.37$, $SD = 4.25$) were not significantly different from older non-psychopathic rapists ($M=14.55$, $SD = 5.46$) in terms of treatment readiness.

Stage of Change

Hypothesis 3.2: Rapists who are in a higher stage of change will have lower rates of attrition, less institutional adjustment problems, higher levels of treatment gain and lower rates of recidivism.

These hypotheses were tested using an independent samples t-test and ANOVA's. Rapists who completed treatment ($M=1.80$, $SD = .53$) were in a higher stage of change pre-treatment than rapists who did not complete treatment ($M= 1.33$, $SD = .48$), $t(106) = -4.52$, $p < .001$. An ANOVA revealed that rapists who were in a higher stage of change spent more time in treatment than rapist with lower scores, $F(2,105) = 18.48$, $p < .001$, $\eta^2 = .26$. Post hoc analyses indicated that differences in time spent in treatment existed specifically between rapists who were in the preparation stage of change and rapists who were in the pre-contemplation and contemplation stages of change. There were no significant differences between rapists who were in a higher stage of change and those in a lower stage of change in terms of institutional adjustment, treatment gain and time to

Table 12

Comparison Between Treatment Readiness Across Outcome Measures

Outcome Measure	Treatment Readiness									
	High			Moderate			Low			F
	n	M	SD	n	M	SD	n	M	SD	
Attrition										
Time Spent in Treatment (months)	33	6.33 _b	1.47	56	5.13 _a	2.45	19	3.12 _c	2.34	13.11***
Institutional Adjustment										
Pre	33	.21	.21	56	.30	.20	19	.27	.19	ns
Post	33	.25	.26	56	.26	.29	19	.25	.33	ns
Total	33	.45	.35	56	.44	.30	19	.44	.30	ns
Treatment Gain	27	17.70 _b	4.47	36	13.89 _a	4.05	6	6.33 _c	4.80	25.58***
Recidivism										
Time to Recidivism (months)	5	10.61	12.58	16	24.01	15.91	5	24.36	15.46	ns

Note: *** $p < .001$; Means sharing like superscripts are not significantly different at the $p < .05$ 'level (Tukey-HSD multiple range tests)

recidivism. Refer to Table 13 for a comparison of means and standard deviations for levels of Stage of Change across outcome measures.

Motivation

Hypothesis 3.3: Rapists who display higher levels of motivation will have lower rates of attrition, less institutional adjustment problems, higher levels of treatment gain and lower rates of recidivism.

These hypotheses were tested using an independent samples t-test and ANOVA's.

A significant difference existed between motivation style and completion of treatment.

Rapists who completed treatment ($M = 1.51$, $SD = .64$) had higher motivation levels than rapists who did not complete treatment ($M = 2.14$, $SD = .57$), $t(106) = -5.25$, $p < .001$. Similarly, an ANOVA revealed that rapists with higher motivation levels pre-treatment, spent significantly more time in treatment than did rapists with lower pre-treatment motivation levels $F(2, 105) = 22.28$, $p < .001$, $\eta^2 = .30$. Post hoc analyses indicated that differences in time spent in treatment existed specifically between rapists with higher and moderate levels of motivation and rapists with lower levels of motivation. Rapists with higher and moderate levels of motivation spent more time in treatment than rapists with a lower motivation levels.

As expected, rapists with a higher motivation level did have a significantly lower rate of institutional misconducts before, $F(2, 105) = 10.65$, $p < .001$, $\eta^2 = .17$ and after treatment, $F(2, 105) = 3.98$, $p < .05$, $\eta^2 = .07$, as well as in total, $F(2, 105) = 8.47$, $p < .001$, $\eta^2 = .14$. Post hoc analyses indicated that differences in institutional adjustment existed specifically between rapists with higher, moderate and lower scores on the treatment readiness scale. The higher the rapist's motivation level the lower the number

Table 13

Comparison Between Stage of Change Levels Across Outcome Measures

Outcome Measure	Stage of Change									
	Pre-Contemplation			Contemplation			Preparation			F
	n	M	SD	n	M	SD	n	M	SD	
Attrition										
Time Spent in Treatment (months)	44	3.70 ^b	2.63	60	6.06 ^a	1.65	4	7.36 ^a	.47	18.48***
Institutional Adjustment										
Pre	44	.31	.24	60	.24	.15	4	.12	.11	ns
Post	44	.27	.29	60	.26	.33	4	.10	.22	ns
Total	44	.46	.33	60	.41	.30	4	.21	.19	ns
Treatment Gain	18	13.11	5.56	47	15.19	3.88	4	16.50	9.75	ns
Recidivism										
Time to Recidivism (months)	14	20.20	16.08	11	22.84	15.26				ns

Note: *** $p < .001$, Means sharing like superscripts are not significantly different at the $p < .05$ 'level (Tukey-HSD multiple range tests).

of institutional misconduct's he had before and after treatment. There were no significant differences between rapists with higher motivation levels and rapists with lower motivation levels in terms of treatment gain and time to recidivism. Refer to Table 14 for a comparison of means and standard deviations for levels of motivation across outcome measures.

Denial

Hypothesis 3.4: Rapists who display higher levels of denial will have will have higher rates of attrition, higher institutional adjustment problems, lower levels of treatment gain and higher rates of recidivism.

This set of hypotheses could not be examined, as there was not enough variability in the sample to divide the rapists in to a high or low group. The average denial score was 12.40 ($SD = 3.38$) indicative of a high level of denial in the sample.

Clinical Responsivity Factor: Deviant Arousal

Deviant Arousal

Hypothesis set 4: Rapists who display higher levels of deviant sexual arousal will have lower levels of treatment gain and higher rates of recidivism.

These hypotheses were examined using an ANOVA. Rapists with deviant arousal or possible deviant sexual arousal did not differ significantly from rapists who did not display any deviant arousal in terms of treatment gain or time to recidivism. Refer to Table 15 for a comparison of means and standard deviations between rapists with and without deviant arousal across outcome measures.

Hypothesis 4.1: Psychopathic rapists who display deviant sexual arousal will have higher recidivism rates than psychopathic rapists without deviant arousal.

This hypothesis could not be examined due to the small cell size. Only 9 rapists who were released were psychopathic of which 6 displayed deviant or possibly deviant arousal..

Table 14

Comparison Between Motivation Levels Across Outcome Measures

Outcome Measure	Motivation									
	High			Moderate			Low			F
	n	M	SD	n	M	SD	n	M	SD	
Attrition										
Time Spent in Treatment (months)	20	5.97 _b	2.44	59	5.93 _b	1.77	29	2.98 _a	2.24	22.28***
Institutional Adjustment										
Pre	20	.14 _b	.14	59	.26 _a	.15	29	.38 _c	.26	10.65***
Post	20	.09 _b	.18	59	.28 _a	.33	29	.33 _c	.30	3.98*
Total	20	.20 _b	.20	59	.43 _a	.30	29	.55 _a	.32	8.47***
Treatment Gain	20	17.06	5.17	59	13.96	4.63	29	14.00	3.60	ns
Recidivism										
Time to Recidivism (months)	3	32.93	23.10	11	25.97	14.91	11	13.60	10.70	ns

Note: * $p < .05$, ** $p < .001$, Means sharing like superscripts are not significantly different at the $p < .05$ 'level (Tukey-HSD multiple range tests).

Table 15

Comparison Between Deviant Arousal Across Outcome Measures

Outcome Measure	Deviant Arousal			No Deviant Arousal			Possible Deviant Arousal			<i>F</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	
Attrition	48	5.69	2.04	27	5.49	2.32	9	5.03	2.45	ns
Time Spent in Treatment										
Institutional Adjustment										
Pre	48	.24	.19	27	.25	.14	24	.33	.25	ns
Post	48	.22	.25	27	.20	.26	24	.33	.38	ns
Total	48	.22	.25	27	.36	.24	24	.51	.40	ns
Treatment Gain	37	13.67	4.80	17	15.94	5.51	15	15.93	3.45	ns
Recidivism										
Time to Recidivism	10	23.80	15.14	3	29.85	6.27	9	4.02	3.99	ns

Responsivity Factors and Predicting Outcome Measures

According to Tabachnick and Fidell (1996), independent variables should be at least moderately correlated with the dependant variables for inclusion in multiple regression. Therefore, responsivity factors were only entered into the following multiple regression analyses if they were correlated with the outcome measure being predicted (see Table 5).

Attrition

To determine which responsivity factors were predictive of time spent in treatment a standard stepwise multiple regression was performed between months spent in treatment (continuous) as the dependant variable and age at admission to treatment, psychopathy, interpersonal style, treatment readiness, stage of change, motivation index and deviant sexual arousal. Stage of change, motivation and interpersonal style significantly predicted time spent in treatment, $F(3, 104) = 20.98, p < .001$. Table 16 displays the regression coefficients, standard error, and significance level for the set of predictors. Stage of change accounted for r^2 change = .26 of the variance, motivation accounted for r^2 change = .09 of the variance and interpersonal style accounted for r^2 change = .03 of the variance.

Institutional Adjustment

To determine which responsivity factors were predictive of the rate of total misconducts a standard stepwise multiple regression was performed between a transformed total number of institutional misconducts variable (continuous) and age at admission to treatment, psychopathy, interpersonal style, treatment readiness, motivation

Table 16

Summary of Stepwise Multiple Regression Analysis for Variables Predicting Attrition

Variables	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Stage of Change	1.52	.37	.35	.001
Motivation	-.82	.33	-.23	.01
Interpersonal Style	.11	.05	.21	.05

Note: $R^2 = .37$ and Adjusted $R^2 = .36$.

and denial. Motivation and age upon admission to treatment significantly predicted total number of institutional misconducts, $F(2, 93) = 14.00, p < .001$. Table 17 displays the regression coefficients, standard error, and significance level for the set of predictors. Motivation accounted for r^2 change = .14 and age at admission accounted for r^2 change = .08 of the variance.

Treatment Gain

Although treatment readiness and interpersonal style were correlated with treatment gain, because all measures were part of the same scale it was determined that it was not feasible to conduct multiple regression because of the inter-correlation between measures.

Recidivism

To determine which responsivity factors were predictive of recidivism a standard stepwise multiple regression was performed between time to recidivism (continuous) as the dependant variable and motivation. Motivation significantly predicted time to recidivism, $F(1, 23) = 6.48, p < .01$. Table 18 displays the regression coefficients, standard error, and significance level for the set of predictors.

Of interest was whether rapist who completed treatment recidivated at a quicker rate than those who did not complete treatment. A cox regression survival analysis was performed and there was no significant difference between rapists who completed treatment and those who did not $\chi^2(1) = .05, p < .82$. Refer to Figure 3 for a comparison of the survival rate between completers and non-completers.

Table 17

Summary of Stepwise Multiple Regression Analysis for Variables Predicting Institutional Adjustment

Variables	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Motivation	.15	.04	.33	.001
Age at Admission	.13	.03	-.30	.001

Note: $R^2 = .23$ and Adjusted $R^2 = .26$.

Table 18

Summary of Stepwise Multiple Regression Analysis for Variables Predicting Recidivism

Variables	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Motivation	10.15	4.12	.46	.01

Note: $R^2 = .22$ and Adjusted $R^2 = .18$.

Figure Caption

Figure 3: Survival rates between completers and non-completers

Relationship Between Outcome Measures

A relationship was hypothesized to exist between the outcome variables attrition, institutional adjustment, treatment gain and recidivism. Time spent in treatment was significantly related to the rate of total institutional misconducts. Whether a rapist recidivated or not was significantly related to time spent in treatment and total number of institutional misconducts. Contrary to what was expected, no other significant relationships emerged. Refer to Table 19 for the correlations between outcome measures.

Table 19

Correlations Between Outcome Measures

	1	2	3	4	5
1. Time in treatment	1.00				
2. Institutional Adjustment	-.30***	1.00			
3. Treatment Gain	.23	-.22	1.00		
4. Time to Recidivism	-.03	-.16	-.34	1.00	
5. Recidivate or Not	.27**	-.23**	.15	—	1.00

Note: ** $p < .01$, *** $p < .001$.

VI. DISCUSSION

Research examining the effectiveness of sex offender treatment has shifted its focus somewhat from the overall “question of does treatment work”, to identifying what works and for whom (Marques, 1999). The question of determining those factors that influence higher-risk sex offenders’, specifically rapists’, responsivity to treatment is important for several reasons. First, research needs to inform broad policy decisions regarding resource allocation and cost effectiveness in the treatment and management of sex offenders. Second, examining higher-risk rapists and their amenability to intensive programming should inform questions related to attrition and recidivism in this unique group of sex offenders.

Research has identified that effective treatment interventions with offender populations are based on the risk, need, and responsivity principles. However, in spite of the connection among these principles, research has focused almost exclusively on identifying risk factors and treatment targets for sex offenders (Hanson & Bussière, 1996). Although factors that are of etiological significance and that maintain sexually assaultive behaviour (Marshall et al., 1990) have been incorporated into risk prediction instruments and used as treatment targets, this body of research has not been applied to the identification of responsivity factors that influence treatment response among sex offenders.

The current study provides an initial exploration of potential responsivity factors in a sample of higher-risk rapists. Importantly, the treatment program utilized in this study has high integrity. It is a nationally accredited, high intensity program, which uses the state-of-the-art treatment methods. Therefore, conclusions drawn from the current

study should be fairly generalizable to other higher-risk rapists completing high intensity sex offender treatment.

The narrow focus of the study provides information that allows for more differentiated treatment interventions to be developed. For instance, global conclusions that are often discussed in the sex offender treatment literature may not equally apply to all sex offenders, given their heterogeneity (Prentky & Knight, 1991). It is possible that even within a group of rapists, differential patterns of responsivity factors exist for specific types of rapists. Indeed, research has demonstrated that the role of psychopathy, deviant arousal and personality profiles may vary among particular types of rapists (Lussier, Proulx & McKibben, 2001; Knight, 1999). Understanding the influence of specific responsivity factors in the treatment of particular types of offenders should contribute to a clearer answer to the question “is sex offender treatment effective?”

The aim of this study was to examine the influence of responsivity factors on treatment outcomes in higher-risk rapists. Responsivity factors were defined as those factors that affect an offender's ability to begin, continue, and complete a particular treatment program (Andrews & Bonta, 2003; Miller & Rollnick, 1991; Serin & Kennedy, 1997; Van Voorhis, 1997). This study examined the following responsivity factors: age, psychopathy, hostility, interpersonal style, treatment readiness, stage of behavioural change, motivation, denial and deviant arousal. Although not an exhaustive list, these factors represent a comprehensive group of contemporary indices of responsivity.

These responsivity factors were expected to influence measures of treatment outcome in addition to recidivism. Specifically, attrition, institutional adjustment, and treatment gain were investigated to provide a range of treatment outcome measures. A

relationship among these various outcome measures was expected to exist. Following a brief discussion of the study's sample, the results will be discussed in terms of the hypotheses examined.

Sample Characteristics

Consistent with past research, a high degree of psychopathy and deviant arousal was present in the current sample of higher-risk rapists (Brown & Forth, 1997; Firestone et al., 2000; Forth & Kroner, 1995; Porter et al., 2000). Similarly, the attrition rate reported in the study is comparable to other high intensity sex offender treatment programs where the attrition rates for rapists range from 30- 56% (Beyko, 2000; Looman, 2002; Mackenzie et al., 2000). The most common reason for non-completion was inappropriate behaviour. This finding is also consistent with past research (Beyko, 2000).

Hypothesis 1: Demographic Responsivity Factor

In the present study, age was examined, as a potential responsivity factor because characteristics associated with younger offenders were hypothesized to influence treatment response. Contrary to expectations, age by itself was not related to attrition or treatment gain. Given that the cutoff for being classified younger was less than 37 years old, this may account for the findings. It is possible that the impulsivity and lack of insight into one's behaviour is a more of a problem at younger ages. Hanson (2002) has recently reported that rapists between the ages of 18-24 are at the highest risk to re-offend.

Of interest was whether other responsivity factors in combination with age influenced treatment completion. In the current study, there appeared to be a relationship

between age and psychopathy in terms of time spent in treatment. Older non-psychopathic rapists spent more time in treatment than did younger non-psychopathic and psychopathic as well as older psychopathic rapists.

Consistent with expectations, age was associated with a higher rate of institutional misconducts. Younger rapists had poorer institutional adjustment than did older rapists. It was hypothesized that improved institutional adjustment could be used as a proxy measure for recidivism in the community and could be viewed as evidence for the generalization of treatment gain. The results of the study suggest that in younger higher-risk rapists, institutional behaviour may be a measure of responsivity to treatment. Given that certain institutional misconducts may lead to expulsion from treatment in younger rapists it may be necessary to target institutional behaviour during the delivery of treatment specifically with younger rapists than with older rapists. Although institutional adjustment was not associated with treatment gain or recidivism in the current study, possibly because of the small sample of recidivists, future research should examine this relationship in younger higher-risk rapists.

Overall, the aforementioned results suggest that age in conjunction with psychopathy may be important in the treatment of higher-risk rapists. These results suggest that it may be necessary to design specific treatment strategies aimed at increasing the likelihood that younger psychopathic rapists will remain in treatment. For example, dynamic treatment sessions, possibly of shorter duration and extended over a longer period of time, with a clear focus on assisting the younger psychopathic rapists on how to manage his institutional behaviour as well as understand the benefits of treatment may prove useful with younger psychopathic rapists. Additional research is required to

clarify the role of age in terms of treatment gain and recidivism in higher-risk rapists due to the lack of significant findings reported in this study.

Hypothesis 2: Interpersonal Responsivity Factors

The developmental and environmental conditions by sexual offenders contribute to the development of unhealthy interpersonal styles and personality disorders (Marshall & Barbaree, 1990). Accordingly, psychopathy and hostility were examined as responsivity factors in the treatment of higher-risk rapists because the interpersonal style associated with each factor has been associated with poorer treatment outcome (Buffington et al., 2002; Hanson & Harris, 2000; Pawlak, 1996; Seto & Barbaree, 1999). Interpersonal and behavioural characteristics such as the inability to experience guilt or remorse, a callous disregard for the feelings and rights of others, pathological lying, a chronic, socially deviant lifestyle (Cleckley, 1976; Hare, 1991) as well as overt hostility towards others were expected to interfere with a rapists' ability to participate effectively in the treatment process.

Hostility was not related to any outcome measure examined in the study. It is possible that hostility is more influential in lower-risk rapists than in higher-risk rapists. However, consistent with past research, psychopathy was related to treatment completion in higher-risk sex offenders (Mulloy et al., 1996). Psychopaths were less likely to complete treatment. The most common reason psychopaths were discharged from treatment was inappropriate behaviour in-group and in the living unit (e.g. violation of group rules and aggressive behaviours). Also consistent with past research, psychopathic rapists had poorer institutional adjustment than did the non-psychopathic rapists (Buffington-Vollum et al., 2002).

These results suggest that in an effort to increase treatment completion in psychopathic higher-risk rapists, institutional misbehaviour may need to be a specific treatment target during treatment delivery. Further, dealing with psychopathic behaviour requires staff that are appropriately trained. Notably, Losel (1998) recommends that staff working with psychopathic offenders need to be well selected based on characteristics such as low anxiety, ability to be assertive and confident. Also, utilizing pre-treatment sessions designed to assist psychopaths in recognizing that changing their sexually assaultive behaviours is in their self-interest may assist in treatment completion.

The interpersonal style scale measures a negative interpersonal style that can be considered a combination of psychopathic and hostile personality characteristics. Lower scores are reflective of possessing negative interpersonal traits. Rapists who exhibited negative interpersonal traits were less likely to complete treatment and had poorer institutional adjustment than rapists with a more positive interpersonal style. Therefore, targeting these interpersonal characteristics may facilitate treatment completion.

Similarly, modifying treatment targets to accommodate these interpersonal characteristics may increase treatment efficacy. For example, victim empathy is not a realistic treatment target for psychopathic rapists who are callous. Instead, improving delay in gratification in order to increase impulse control or to shift the rewards and costs of sexually assaultive behaviours to improve problem solving may be better treatment targets for psychopathic rapists (Losel, 1998).

Contrary to what was hypothesized, psychopaths did not differ from non-psychopaths in terms of treatment gain. However, given the recent development of the treatment gain subscale it is possible that scale items cannot distinguish between

psychopathic role-playing and genuine treatment gain. Psychopaths are quite capable of “performing” in a treatment program, particularly if there is an instrumental gain such as reduced security involved. Therefore, although psychopaths apparently can demonstrate in a group setting that they can apply the skills gained through treatment, this ability may not reflect a sufficient level of internalization and commitment to using the skills outside of the group setting. It may be necessary to define treatment gain in different terms for psychopaths, such as in terms of behavioural performance in the institution, and in the community following treatment completion.

Alternatively, competency based measures could augment clinical ratings of treatment gain. Rather than use self-report approaches such as, post treatment psychometric testing, it is important to assess skill acquisition in psychopathic rapists. Research indicates that competency based measures are less related to social desirability than self report, have face validity, and are related to ratings of group performance and participation (Serin & Mailloux, in press).

The current study’s findings suggest that psychopathy and interpersonal style can be considered responsivity factors in the treatment of higher-risk rapists that are related to attrition, and institutional adjustment.

Hypothesis 3: Treatment Readiness Responsivity Factors

The early developmental and environmental conditions of sex offenders contribute to psychological and emotional deficits (cognitive distortions, inadequate problem solving skills, lack of empathy) that would interfere with a sex offender’s readiness to engage in the behavioural change process (Marshall & Barbaree, 1990). Treatment readiness was examined as a responsivity factor in high intensity sex offender

treatment because it was expected that rapists who were motivated to participate in treatment and who recognized the importance of modifying their sexually assaultive behaviours would be more likely to complete and benefit from treatment than those who were less motivated (Prochaska, 1991; Prochaska & Diclemente, 1992; Serin & Kennedy, 1997).

Consistent with the current study's hypotheses, higher levels of treatment readiness, motivation level to complete correctional treatment and being in a higher stage of behavioural change were related to treatment completion and better institutional adjustment. These findings are consistent with past research that reported that non-completion of treatment occurred most frequently in offenders who were in the pre-contemplation stage, (i.e. little awareness of potential problems and little interest in changing). As well, these results are consistent with past research that has identified behaviours associated with offender motivation and program variables for sex offender treatment (Jenkins-Hall, 1994; Lee et al., 1996; Marshall, 1993).

However, contrary to what was expected, denial as measured by the subscale of the MSI (composite of Rape Lie and Justifications subscales) was not significantly associated with any of the treatment outcome measures. This contradicts previous research that has reported that denial was predictive of attrition in higher-risk rapists (Beyko, 2000; Mackenzie et al., 2000). One explanation is that in a sample of higher-risk rapists in which a high level of denial exists, a measure that distinguishes between various types of denial is required to accurately identify the influence of denial on treatment response. The MSI does not delineate types of denial.

Unfortunately, due to the small sample size, the relationship between the construct of treatment readiness and recidivism could not be adequately examined. However, total number of institutional misconducts were related to whether a rapist recidivated or not.

These results suggest that treatment readiness and related constructs included in the study, with the exception of denial, can be considered responsivity factors in the treatment of higher-risk rapists. Therefore, decreases in attrition, improvements in institutional adjustment and increases in treatment gain may be achieved through pre-treatment programs designed to enhance treatment readiness, and motivation, as well as assist offenders in moving from the pre-contemplation stage of treatment to the contemplation stage of treatment. The pre-treatment groups can target those areas reflective of treatment readiness and influencing treatment responsivity (interpersonal characteristics) as measured by the TRRG: SV. Further research is required to determine whether an increase in treatment readiness is related to a reduction in recidivism.

Hypothesis 4: Clinical Responsivity Factors

Sex offenders often come from backgrounds in which many opportunities to learn how to appropriately express and manage sexual desire are not present. As a result, the development of deviant sexual arousal is possible (Marshall & Barbaree, 1990). Deviant arousal was examined as a responsivity factor in that rapists with higher levels of deviant arousal were expected to have more trouble modifying their sexually assaultive behaviours than rapists with lower levels of deviant sexual arousal. Consequently, they should display lower levels of treatment gain. However, consistent with the results reported by Mackenzie et al. (2000), there was no significant difference in levels of

deviant arousal between rapists who completed a high intensity treatment program and those who did not. It may be possible that deviant arousal is a responsivity factor across treatment intensity levels and not necessarily within a high intensity treatment program.

Due to the small sample of recidivists, the contribution of psychopathy and deviant arousal in predicting recidivism could not be examined. Further, the current results suggest that deviant arousal does not influence the ability of higher-risk rapists to enter into, continue or complete treatment. It is possible that deviant arousal may be more important in the treatment of child molesters because deviant arousal has been reported to be related to recidivism more often in child molesters than in rapists (Hanson & Bussière, 1998).

Summary

Responsivity Factors and Treatment Outcome

In the present study age, psychopathy, interpersonal style, hostility, treatment readiness, motivation and stage of behavioural change as well as deviant arousal were expected to influence the ability of higher-risk rapists to enter, continue and complete treatment. In the present study, psychopathy, interpersonal style, treatment readiness, motivation level and stage of behavioural change were related to treatment completion. Age, psychopathy, interpersonal style, and motivation level was related to institutional adjustment. Also, poor institutional adjustment was related to being discharged from treatment. These results are similar to findings by Mackenzie et al. (2000) and Beyko (2000). Hostility, denial, and deviant arousal were not related to treatment outcomes.

Those factors related to treatment completion were not significantly related to treatment gain scores or change scores. In the current study, treatment gain was also

unrelated to institutional adjustment and recidivism. The results suggest that further research examining treatment gain is needed. In particular, improving the definition of treatment gain and developing more sensitive measures is important.

Unfortunately, the relationship between responsivity and recidivism could not be adequately investigated in the present study due to a small sample size. Further research is required to clarify the relationship between the responsivity factors examined in the current study and recidivism, particularly, to determine whether differences exist in rates of recidivism between psychopathic rapists who perform better in treatment than psychopathic rapists who do not.

Limitations

The design of the current study is archival and retrospective in nature. As a result, some of the measures included in the study were already determined and may have been inadequate to detect differences in such a high-risk sample. For example, the lack of findings with denial and hostility could be related to the insensitivity of the measures selected. Further, the inter-rater reliability for the Treatment Readiness, Responsivity, Gain and the Stages of Change scale was poor. This raises questions as to whether the constructs being measured have been adequately defined. Definitely, the study could have been improved upon if the treatment readiness variables had been measured using a prospective design in which an interview with the rapist was employed. Such a design would have enhanced reliability of the treatment readiness, interpersonal and treatment gain ratings.

The current study findings are only generalizable to rapists requiring high intensity sex offender treatment in a federal penitentiary setting. However, consistent

with recommendations to examine treatment efficacy in specific groups of sex offenders, this study provides detailed information about treatment responsivity for higher risk rapists.

Although an exhaustive sample of rapists was used in the present study, given the low base-rate of sexual recidivism, the sample size was too small to investigate the influence of the responsivity factors on recidivism. As well, a longer follow-up period would improve the ability to examine recidivism.

Another limitation of the current study is that the same rater made the pre and post ratings of treatment readiness and interpersonal style. Future research should use different raters for pre and post ratings to improve the accuracy of the judgment of change.

Conclusions/Implications

The current study's findings have implications in terms of treatment strategies, treatment outcome, risk assessment, and program evaluation in sex offender populations, particularly higher-risk rapists.

Sex Offender Treatment Strategies

The results of the present study suggest that by attending to factors which influence attrition and institutional adjustment in the planning and delivery of high intensity treatment to rapists, treatment efficacy may be enhanced. For example, pre-treatment sessions designed to assist younger offenders in identifying the benefits of participating in treatment and similarly assisting psychopaths to identify how treatment can benefit them may increase the chances of program completion in these groups of rapists.

Prochaska (1991) argues that a person's stage of change provides proscriptive as well as prescriptive information to guide decisions about treatment delivery. In the present study the overwhelming majority of rapists were in the pre-contemplation and contemplation stage of treatment. As in other cases of resistant clients, it is important to engage the rapist in the treatment process (Preston, 2001). Continuous repetition of how treatment will benefit their lives and that change is possible is required. Accordingly, pre-treatment or "primer" groups should facilitate treatment engagement.

Pre-treatment sessions that increase motivation and treatment readiness will increase the likelihood that higher-risk rapists will enter into, continue, and complete treatment. Thus, it is recommended that an assessment of responsivity factors be completed prior to a higher-risk rapist being admitted to a high intensity treatment program. The use of pre-treatment sessions can contribute to the effective management of treatment resources, enhance treatment efficacy and ultimately provide better protection to society. The results of the current study suggest that age, psychopathy, treatment readiness, interpersonal style, and motivation should be included into any assessment of treatment responsivity. Potentially, assessments of responsivity could be further used to make decisions about how best to use the limited treatment resources available for higher-risk sex offenders.

Treatment Outcome

A widely held view is that instrumental/intermediate measures of treatment outcome will be related to the ultimate outcome of recidivism. For instance, increased treatment motivation and readiness is expected to decrease refusal and dropout rates, the latter being related to increased recidivism (Hanson & Bussière, 1998). Improved

treatment compliance should increase the likelihood of program completion and enhance program participation. Accordingly, this should lead to improved treatment gain.

Subsequently, it is believed that treatment gain will generalize to other behaviours such as institutional adjustment and ultimately recidivism (Serin & Kennedy, 1997).

However, the present results suggest that the relationship between intermediate measures of treatment outcome in higher-risk sex offenders and recidivism may not be linear. In the current study, only institutional adjustment was related to attrition. Therefore, it may be necessary to re-conceptualize the relationship between program completion and recidivism from that of a continuum or linear model to a contextual decision model using tree-based rather than regression and main-effects analytic methods. This is further supported by the fact that specific responsivity factors were related to specific outcome measures.

Steadman et al. (2000) argue that main effects analyses do not reflect the contingent nature of the clinical assessment processes involved in risk prediction. Applying this line of reasoning to responsivity, it is possible that a classification tree approach could reflect an interactive and contingent model of responsivity that allows for combinations of responsivity factors that are related to different outcome measures. It may be necessary to re-conceptualize the commonly accepted linear relationship between instrumental measures of treatment outcome (attrition, institutional adjustment, treatment gain) and the ultimate treatment outcome measure of recidivism in sex offender treatment. Results suggest that there may be different responsivity factors that influence different treatment outcomes. Therefore, research is needed in which analytic techniques

other than regression are employed when examining the relationship between responsivity and treatment outcome.

Risk Assessment

The results also have implications for the uses of clinical ratings in making decisions about the influence treatment gain and program completion exert in reducing risk for recidivism. In the current study, program attrition and ratings of treatment gain ratings were not significantly related to recidivism, however, further investigations are required.

The study's results provide partial support for Serin and Kennedy's (1997) model of responsivity conceptualized in terms of factors that influence treatment readiness and compliance as well as factors related to treatment gain and generalization of treatment gain. However, there is a need to integrate this model into decisions about risk reduction (Serin, 1998).

Currently, it remains problematic to incorporate information based on changes in the level of responsivity (treatment readiness, interpersonal style) into decisions about risk reduction. Importantly, such changes need to be empirically related to reductions in recidivism. This study only provides partial information in that program completion is related to responsivity factors. Recently, there is evidence that treatment with psychopaths has yielded a reduction of psychopathic traits (decrease in lying, aggressive interpersonal style; Salekin, 2002). Whether such change warrants a reduction in risk remains an empirical question.

As well, the use of the aggregate approach (combining risk levels) to classify risk, as employed in most of the outcome studies (Hanson et al., 2002) has contributed to the

risk principle not being clearly articulated in the sex offender treatment literature. A contribution of the present study is that it examined rapists of a specific risk level, higher-risk.

Therefore, a pressing need exists for theoretical research linking recidivism risk with responsiveness to treatment. Considerable research is required before clinical decisions regarding change in factors that influence an offender's responsivity to treatment can be used to modify risk for sexual recidivism. Research that compares treatment programs that have incorporated responsivity factors in the planning and implementation of treatment, with programs that did not, may provide valuable information about the relationship between responsivity and risk reduction.

Program Evaluation

The inclusion of treatment outcome measures other than recidivism in the present study contributes to literature that discusses the importance of considering intermediate measures of treatment effectiveness (Serin, 2001). Examining additional outcome measures increases the reliability of evaluations of program effectiveness. The results of this study suggest that demographic, interpersonal and treatment readiness responsivity factors influence various measures of treatment outcome. Therefore, when evaluating the effectiveness and the integrity of high intensity sex offender treatment programs, it may prove useful to examine how particular sets of responsivity factors are accommodated in the design, implementation and delivery of treatment.

Conclusion

One of the most pressing issues within the criminal justice system is the presence of higher-risk sexual offenders who fail to respond favourably to existing treatments

(Marshall & Williams, 2001). To date however, much research has focused on the identification of risk factors and treatment targets, and far less on factors that influence responsivity to treatment. The elucidation of the responsivity principle, which includes the appropriate matching of offenders to treatment programs and therapists, as well as the identification of offender characteristics that mediate treatment effectiveness, is essential if the question of sex offender treatment effectiveness is to be answered efficiently.

The results of the current study suggest that age, psychopathy and treatment readiness are related to higher-risk rapists' ability to complete institutional sex offender treatment programs. However, additional research is required to clarify if denial, hostility and deviant arousal are responsivity factors in the treatment of higher-risk sex offenders.

In conclusion, it would seem preferable to treat factors that influence treatment responsivity in higher risk sex offenders as potential treatment targets rather than exclusionary criteria, as has occurred previously. It may be more useful to incorporate "primer" or pre-treatment sessions that target factors that when changed, may result in increasing treatment readiness and motivation. This increase may facilitate the offenders' movement along the continuum of behavioural change and ultimately yield a reduction in sexual recidivism. The TRRG: SV shows promise as a responsivity instrument within a multi-method assessment battery. It also provides examples of various responsivity factors that can be targeted, through the use of pre-treatment "primer" groups, to increase treatment readiness and responsivity, particularly among younger and psychopathic higher-risk rapists.

The assessment of responsivity factors should be considered an integral facet of risk management and risk reduction strategies in higher-risk rapists. Failure to address

responsivity factors during treatment implementation and delivery may undermine treatment gain and waste treatment resources, which ultimately decreases public safety (Kennedy, 2000).

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Appendix A

Treatment Readiness, Responsivity, Gain: Short Version (TRRG:SV)

TREATMENT READINESS: SHORT SCALE

1. Problem Recognition

This item assesses the offender's appraisal of their current situation. This is assessed in terms of their understanding and ownership of their problems. Those who accept full responsibility without rationalization would score a "3". Those who deny responsibility would score a "0".

Possible Questions:

- ☐ Did you hear a victim impact statement read in court? If so, how did that make you feel?
- ☐ How do you feel about yourself? Would you say you are satisfied or unsatisfied with who you are?

0	Views the problem is solely the result of others or circumstances (no ownership).
1	Views the problem as mainly the result of others or circumstances (marginal ownership).
2	Views self as a part of the problem (some ownership).
3	Views self as the major part of the problem (ownership).

2. Macro Treatment Benefits

This item is intended to tap into an offender's views regarding the overall benefits of participating in treatment. An offender who describes the long term benefits (e.g., lifestyle stability such as employment, relationships, no crime) *and* short term benefits (e.g., earlier release, fewer release conditions) of treatment would score a "3". Those who are unable to generate any benefits would score a "0".

Possible Questions:

- ☐ What do you think will happen if you do not participate in treatment? [or if you drop out]
- ☐ If you finish this treatment program, what types of benefits might you gain?

0	Sees no benefits of treatment.
1	Able to identify at least one long term <i>and</i> short term benefit of treatment.
2	Considers <i>limited</i> long term and short-term benefit of treatment.
3	Accurately considers long term <i>and</i> short term benefits of treatment.

3. Micro Treatment Benefits

This item addresses an offender's views about treatment. Those who describe treatment as beneficial to themselves *and* to others (e.g., family, friends, community) would score a "3". Those who cannot identify any benefits would score a "0".

Possible Questions:

- ☐ Why do you think someone would participate in a treatment program?
- ☐ What are your views about treatment in general? Do you think people benefit from it and how?

0	Not able to perceive benefits of treatment.
1	Perceives treatment as only beneficial for self.
2	Perceives treatment as beneficial for self <i>or</i> others.
3	Perceives treatment as beneficial for self <i>and</i> others.

4. Treatment Distress

This item is intended to address an offender's state of emotional distress regarding treatment. Offenders whose commitment to treatment is accompanied or prompted by emotional distress (notably anxiety or depression) warrant a score of "3", but only if they recognize the distress. Those who appear emotionally unconcerned and indifferent about the need for change score "0".

Possible Questions:

- ☐ How does the idea of participating in treatment make you feel? [If you are in treatment how did you feel before beginning treatment]
- ☐ What motivated you to consider participation in a treatment program? [looking for distress cues not cost/benefits]

0	Indifferent (absence of emotional distress) and sees no need for treatment.
1	Distressed, but does not motivate to consider change.
2	Distress motivates them to consider changing.
3	Evidence of emotional distress and wants to participate treatment.

5. Treatment Goals

Goal setting assesses the ability to identify and realistically create treatment goals. This item considers the knowledge and skills necessary for treatment gain. For example, someone with a lifelong history of substance abuse would score a “0” if their goal was abstinence without lapses following a 4 month program and a “3” if they are realistic about the new skills and knowledge necessary for treatment gain.

Possible Questions:

- ☐ If you were to participate in a treatment program what would you say were the issues you would need to address? How would you go about addressing these issues?
- ☐ How would you describe the treatment process? [try to get at whether they think that showing up for group will suffice or that more work is required than that]

0	Unable to set realistic treatment goals.
1	Unaware of skills <i>and</i> knowledge required for treatment gain.
2	Somewhat able to set realistic treatment goals.
3	Able to set realistic treatment goals.

6. Treatment Behaviours

This item assesses the offender’s motivation for treatment. Behavioural indication of good motivation should reflect, where applicable, timely attendance at interviews and/or groups; homework completion; compliance with prior treatment; and/or positive comments about treatment as a process not an outcome. More than one of these must apply to warrant a score of “3”.

Possible Questions:

- ☐ Have you participated in treatment before? If so, what is different this time?
- ☐ How did you find out about treatment? [i.e., what steps did he/she take in order to pursue treatment?]

0	Consistent behavioural indication of poor motivation.
1	Inconsistent indication of good motivation.
2	Somewhat inconsistent indication of good motivation.
3	Consistent behavioural indication of good motivation.

7. Behavioural Congruency

This item highlights the importance of an offender's verbal statements *and* their actions regarding treatment. If an offender has not previously participated in treatment then this item refers to behavioural consistency outside of treatment (e.g., meets caseworker, etc...). Offenders who state they are motivated towards treatment, but show incongruency by poor attendance (late or infrequent), failure to complete homework, and/or state low motivation to other staff or offenders, warrant a score of "0". Those who consistently follow through would score a "3".

Possible Questions:

- ☐ [If you have participated in treatment before] How would the counselor or other group members describe you with respect to your participation? Did you go to all the sessions?
- ☐ [If you have not participated in treatment] How would your caseworker describe you? Have you attended all planned meetings with him/her?

0	Verbal and behavioural expressions of motivation are inconsistent.
1	Often inconsistent between stated motivation and actions.
2	Somewhat inconsistent between stated motivation and actions.
3	Complete congruence between verbal and nonverbal expressions of good motivation.

8. Treatment Support

This item assesses the degree of support for change by others significant to the offender. Allow the offender to determine who is important to them (preferably family, friends, employer, or clergy) and then probe for degree of support from them. Those having no support would score a "0". Those reporting strong support would score "3".

Possible Questions:

- ☐ Who would you say is the most significant person (s) in your life?
- ☐ What kind of support do you want from this person (s)? Would you say they are providing this support for you? How do they demonstrate this support?
- ☐ Does this person (s) believe you can change?

0	Reports <i>no</i> external support for changing.
1	Reports <i>minimal</i> external support for changing.
2	Reports <i>moderate</i> external support for changing.
3	Reports <i>strong</i> external support for changing.

Treatment Readiness Score Sheet

Change		Pre	Post	
1. Problem Recognition	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +3
2. Macro Treatment Benefits	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +
3. Micro Treatment Benefits	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +3
4. Treatment Distress	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +3
5. Treatment Goals	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +3
6. Treatment Behaviours	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +3
7. Behavioral Congruency	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +3
8. Treatment Support	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>		-3 -2 -1 0 +1 +2 +3

TREATMENT RESPONSIVITY: SHORT SCALE

1. Callousness

This item describes offenders who have no concept of the injury they have caused others. Generally, they lack concern for others except when it can serve them. They present an air of ownership of others, with an expressed right to do as they please with impunity. Those who always put their own needs above those of others would score a "0". Those who are able to be other centered would score a "3".

Possible Questions:

- ☐ Can your family depend on you? Give an example of your dependability.
- ☐ You are in the desert and have one drink left...how would you feel about sharing it with your cellmate? With a friend? With a family member?

0	Uses people to meet own needs.
1	Indifferent about the needs of others.
2	Will consider the needs of family or close friends.
3	Takes others' needs into consideration.

2. Denial

This item measures the extent to which an offender rationalizes their criminal behaviour. Those scoring "0" deny their problems. These excuses can range from external reasons (e.g., drugs, alcohol, and social pressure) to internal concerns (e.g., bad childhood, past victimization, mental illness). Those offenders who fully recognize the extent of their problems and assume full responsibility would score a "3".

Possible Questions:

- ☐ What part do you think you played in the present offence?
- ☐ What would you say is your biggest problem (s)? Are you concerned at all about this problem? How do you plan to deal with this problem?
- ☐ What does the police report say about the offences? Do you agree with what was said in the report? Why/why not?

0	Denies he/she has a problem. "It's everyone else's fault".
1	Refuses to accept they have a problem.
2	Accepts they have a problem, with reservations.
3	Assumes responsibility.

3. Procrastination

This item measures an offender's ability to set and meet goals in general. Those showing lack of effort, inability to follow through on plans, and lacking goals would be scored a "0". Those who are very task oriented and make very specific goals would score a "3". Being resistant, unwilling to do homework, and generally making excuses for failing to meet obligations should also be considered.

Possible Questions:

- ☐ Would others describe you as reliable? Give an example.
- ☐ How would friends describe your ability to follow through on plans?
- ☐ What are your goals in life?
- ☐ Give an example of a goal you set and achieved.

0	Doesn't follow through on plans,
1	Rarely follows through on plans.
2	Occasionally follows through on plans.
3	Very task oriented.

4. Intimidation

This item considers the intensity and expression of anger in interpersonal situations. Often their emotional expression of anger is excessive for the situation showing both an inability to evaluate the situation and poor self-control. Those who use their overt expression of anger to control and manipulate others would score a "0". Those who acknowledge that anger is a normal emotion and appropriately expresses it would score a "3".

Possible Questions:

- ☐ Have you ever felt so angry with someone that you felt like hitting them? Did you?
- ☐ Have others described you as having a 'short fuse'?
- ☐ Has anyone ever called you a 'bully'? Why?
- ☐ What do you do when you really want your own way?

0	Uses anger to intimidate others to get his way.
1	Willing to let anger help them meet their goals.
2	Aware and concerned about negative impact of his anger on others.
3	Doesn't intimidate others.

5. Power and Control

This item is characterized by the degree to which the offender expresses entitlement when dealing with others. Their concept of fairness is solely egocentric, they respond poorly to criticism, and they must win at all costs. Offenders who score “3” would be described as respectful and fair, without a personal agenda. Those who view life as unfair and feel they own others would score a “0”.

Possible Questions:

- ☐ How do you feel about the sentence you were given? Do you think it was fair?
- ☐ Has life been fair to you or do you feel you got the short end of the stick?
- ☐ Would you rip someone off you did not know? Someone you knew?

0	When angered, controlled by views of entitlement and unfairness.
1	Feels life is unfair, so take what you can.
2	Feels life is unfair, look out for yourself.
3	Tries to be fair in resolving disputes.

6. Rigidity

This item considers an offender's ability to effectively problem solve. Those with the demonstrated ability to generate alternative solutions and be flexible would score “3”. Those who repeat ineffective solutions to problems and refuse to consider alternate solutions would score a “0”. This item should not be restricted to criminal behavior.

Possible Questions:

- ☐ Are there any concerns you have at the moment? How have you tried to deal with this problem? Are there any other ways of approaching this problem that you have yet to try?
- ☐ What kind of things have you tried in the past to stay out of crime? Are there any others things you have yet to try?

0	Rigid, sticks with a solution, even when it doesn't work.
1	Begins with an old solution, but can evaluate.
2	Considers new solution, but falls back on old ways.
3	Flexible, willing to try other things.

7. Victim Stance

This item describes offenders who are characterized by self-pity and present as being victims. Those offenders who appear unwilling to accept their culpability and look to others for support and to improve their situation would score a “0”. Those who don’t feel sorry for themselves and are able to learn from the consequences of their behaviours would score a “3”.

Possible Questions:

- ☐ How do you feel about your current situation?
- ☐ How can you improve your situation?
- ☐ What are you willing to do to make things better for you?

0	Wants others to fix it for them.
1	Just wants things to be better.
2	Willing to accept consequences of prior behaviour.
3	Accepts consequences and learns from them.

8. Procriminal Views

This item is intended to distinguish those offenders whose investment in crime is high from those who are essentially pro-social but whom have infrequently committed a crime. Those considered criminally-oriented (“0”) are reflected in their pride and self-righteousness in criminal thinking and values. This would be in contrast to those whose crime is situational and who lack criminal attitudes (“3”).

Possible Questions:

- ☐ Tell me what you think about what you did?
- ☐ How you think others would view your criminal behaviour?
- ☐ How would you compare yourself to others in here (e.g., cell mate) with respect to what you did? Would you say your crime is more or less worse and why?

0	Presents pride in criminal views.
1	Criminal views present, but mainly due to lifestyle.
2	Some pro-social views noted.
3	Presents mainly pro-social views.

Treatment Responsivity Score Sheet

	Pre	Post	Change
1. Callousness	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +
2. Denial	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +
3. Procrastination	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +3
4. Intimidation	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +3
5. Power and Control	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +3
6. Rigidity	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +3
7. Victim Stance	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +3
8. Procriminal Views	<input style="width: 40px; height: 25px;" type="text"/>	<input style="width: 40px; height: 25px;" type="text"/>	-3 -2 -1 0 +1 +2 +3

TREATMENT GAIN: SHORT SCALE

1. Evidence of Increased Skills From Program

This item considers the specific skills the treatment program is intended to impart to the offender. Again, A higher score indicates the offender can do more than simply repeat in group that which has been demonstrated in previous group sessions.

0. None
1. Rote repetition of skill(s)
2. Accommodates to reflect broader understanding
3. Shows/reports successful skill use in other situations

2. Disclosure in Program

Disclosure is intended to consider the extent to which the offender shares information. Since offenders sometimes differ with respect to their comfort and willingness to share in group versus individual sessions, both should be considered when scoring this item. The highest score is reserved for those offenders who freely discuss issues and who also share incriminating information, recognizing such disclosures reflects treatment engagement and gain.

0 Resistant (denies, refuses to participate, obstructionist)
1 Marginal (uncommunicative)
2 Satisfactory (opens up in group)
3 Full (candid, revealed <i>extra</i> information in group)

3. Application of Knowledge

This item considers the extent to which an offender is able to consider and apply knowledge from the program to his or her own situation, not just other group members. The highest scoring is reserved for those offenders who are able to apply the information in a reflective and systematic manner.

0. Poor (unable to apply)
1. Able to apply to others' situation
2. Able to apply to own situation and others'
3. Able to be reflective and problem-solve in many situations (insightful)

4. Application of Skills

This item considers the range of skills gained through group participation. These skills need not be restricted to role-play situations, however, this may be the most convenient for staff to consider.

0	Poor (unable to apply)
1	Can role play as confederate only
2	Can participate as self in role play
3	Applies role play skills to other situations

5. Depth of Emotional Understanding of Program Content

This item is intended to ensure the offender is emotionally connected to the program content and treatment change requirement. The offender who appears to be simply going through the motions and saying the right words without emotional connectedness would receive a score of '0'.

0	Poor (no emotional commitment to treatment)
1	Marginal (simply saying words)
2	Satisfactory (some emotional investment)
3	Very good (treatment is an emotional but rewarding challenge)

6. Appropriateness of Behaviour in Group

This item focuses on an offender's failure to abide by certain rules and ignores personal boundaries of staff and other group members when these have been brought to the individual's attention. For the purpose of scoring this item it is necessary to distinguish between those offenders whose inappropriateness is due to skill deficits or malicious intent. Again, those scoring highest would be effective role models by challenging peers whose behavior exceeds boundaries.

0	Poor (asked intrusive, personal questions of staff, verbally abusive)
1	Marginal (sarcastic remarks towards staff and offenders)
2	Satisfactory (no problems within group)
3	Very good (rebuts inappropriate behaviour of others)

7. Participation

This item is an overall estimate of an offender's participation over the duration of the program. It should consider group behavior, attendance, timeliness of homework completion, and quality of work done.

0	Poor (minimal effort; begrudgingly attended)
1	Marginal (did not actively participate in a positive manner)
2	Satisfactory (did what was required, but no more)
3	Very good (completed all assignments, active in group, asked for extra work)

8. Therapeutic Alliance

This item considers the relationship between the offender and program staff. Those offenders who score high will demonstrate an attachment to the therapist, regardless of the nature of challenges throughout the treatment program or the recommendations contained in the final report. What is to be avoided is simply rating offenders based on their response to their treatment report. Rather, this item attempts to determine if there was any kind of connection or engagement between the offender and therapist.

0	Poor (confrontational, resistant)
1	Marginal (perfunctory disclosure, still us versus them views)
2	Satisfactory (good disclosure, sense of cooperation with therapist)
3	Very Good (evidence of emotional attachment to therapist)

Treatment Gain Score Sheet

1.	Evidence of Increased skills From Program	☐
2.	Disclosure in Program	☐
3.	Application of Knowledge	☐
4.	Application of Skills	☐
5.	Depth of Emotional Understanding of Program Content	☐
6.	Appropriateness of Behavior in Group	☐
7.	Participation	☐
8.	Therapeutic Alliance	☐

TOTAL	☐
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Comments:

Appendix B

Buss Durkee Inventory (BDHI)

		TRUE	FALSE
1.	I seldom strike back, even if someone hits me first.	_____	_____
2.	I sometimes spread gossip about people I do not like.	_____	_____
3.	Unless somebody asks me in a nice way, I will not do what they want.	_____	_____
4.	I lose my temper easily but get over it quickly.	_____	_____
5.	I do not seem to get what is coming to me.	_____	_____
6.	I know that people tend to talk about me behind my back.	_____	_____
7.	When I disapprove of my friend's behaviour, I let them know it.	_____	_____
8.	The few times I have cheated; I have suffered unbearable feelings of remorse.	_____	_____
9.	Once in a while, I cannot control my urge to harm others.	_____	_____
10.	I never get mad enough to throw things.	_____	_____
11.	Sometimes people bother me just by being around.	_____	_____
12.	When someone makes a rule I do not like, I am tempted to break it.	_____	_____
13.	Other people always seem to get the breaks.	_____	_____
14.	I tend to be on my guard with people who are somewhat more friendly than I expected.	_____	_____
15.	I often find myself disagreeing with people.	_____	_____
16.	I sometimes have bad thoughts which make me feel ashamed of myself.	_____	_____
17.	I can think of no good reason for ever hitting anyone.	_____	_____
18.	When I am angry, I sometimes sulk.	_____	_____
19.	When someone is bossy, I do the opposite of what he asks.	_____	_____
20.	I am irritated a great deal more than people are aware of.	_____	_____
21.	I do not know any people that I downright hate.	_____	_____

		TRUE	FALSE
22.	There are a number of people who seem to dislike me very much.	_____	_____
23.	I can not help getting into arguments when people disagree with me.	_____	_____
24.	People who shirk on the job must feel very guilty.	_____	_____
25.	If somebody hits me first, I let him have it.	_____	_____
26.	When I am angry, I sometimes slam doors.	_____	_____
27.	I am always patient with others.	_____	_____
28.	Occasionally when I am mad at someone I will give him the "silent treatment".	_____	_____
29.	When I look back on what's happened to me, I can not help feeling mildly resentful.	_____	_____
30.	There are a number of people who seem to be jealous of me.	_____	_____
31.	I demand that people respect my rights.	_____	_____
32.	It depresses me that I did not do more for my parents.	_____	_____
33.	Whoever insults me or my family is asking for a fight.	_____	_____
34.	I never play practical jokes.	_____	_____
35.	It makes my blood boil to have somebody make fun of me.	_____	_____
36.	When people are bossy, I take my time just to show them.	_____	_____
37.	Almost every week I see someone I dislike.	_____	_____
38.	I sometimes have the feeling that others are laughing at me.	_____	_____
39.	Even when my anger is aroused, I do not use "strong language".	_____	_____
40.	I am concerned about being forgiven for my sins.	_____	_____
41.	People who continually pester you are asking for a punch in the nose.	_____	_____
42.	I sometimes pout when I do not get my way.	_____	_____

		TRUE	FALSE
43.	If somebody annoys me, I am apt to tell him what I think of him.	_____	_____
44.	I often feel like a powder keg ready to explode.	_____	_____
45.	Although I do not show it, I am sometimes eaten up with jealousy.	_____	_____
46.	My motto is "never trust strangers".	_____	_____
47.	When people yell at me, I yell back.	_____	_____
48.	I do many things that make me feel remorseful afterward.	_____	_____
49.	When I really lose my temper, I am capable of slapping someone.	_____	_____
50.	Since the age of ten, I have never had a temper tantrum.	_____	_____
51.	When I get mad, I say nasty things.	_____	_____
52.	I sometimes carry a chip on my shoulder.	_____	_____
53.	If I let people see the way I feel, I would be considered a hard person to get along with.	_____	_____
54.	I commonly wonder what hidden reason another person may have for doing something nice for me.	_____	_____
55.	I could not put someone in his place, even if he needed it.	_____	_____
56.	Failure gives me a feeling of remorse.	_____	_____
57.	I get into fights about as often as the next person.	_____	_____
58.	I can remember being so angry that I picked up the nearest thing and broke it.	_____	_____
59.	I often make threats I do not really mean to carry out.	_____	_____
60.	I can not help being a little rude to people I do not like.	_____	_____
61.	At times I feel I get a raw deal out of life.	_____	_____

		TRUE	FALSE
62.	I used to think that most people told the truth but now I know otherwise.	_____	_____
63.	I generally cover up my poor opinion of others.	_____	_____
64.	When I do wrong, my conscience punishes me severely.	_____	_____
65.	If I have to resort to physical violence to defend my rights, I will.	_____	_____
66.	If someone does not treat me right, I do not let it annoy me.	_____	_____
67.	I have no enemies who really wish to harm me.	_____	_____
68.	When arguing, I tend to raise my voice.	_____	_____
69.	I often feel that I have not lived the right kind of life.	_____	_____
70.	I have known people who pushed me so far that we came to blows.	_____	_____
71.	I do not let a lot of unimportant things irritate me.	_____	_____
72.	I seldom feel that people are trying to anger or insult me.	_____	_____
73.	Lately, I have been kind of grouchy.	_____	_____
74.	I would rather concede a point than get into an argument about it.	_____	_____
75.	I sometimes show my anger by banging on the table.	_____	_____

Appendix C

Psychopathy Checklist-Revised

Items

1. Glibness/Superficial Charm
2. Grandiose Sense of self Worth
3. Need for Stimulation/Proneness to Boredom
4. Pathological Lying
5. Conning and Manipulative
6. Lack of Remorse and Guilt
7. Shallow Affect
8. Callous/lack of Empathy
9. Parasitic Lifestyle
10. Poor Behavioural Controls
11. Promiscuous sexual Behaviour
12. Early Behavioural Problems
13. Lack of Realistic Long Term Goals
14. Impulsivity
15. Irresponsibility
16. Failure to Accept responsibility for Own Actions
17. Many Short Term Marital Relationships
18. Juvenile Delinquency
19. Revocation of Conditional Release
20. Criminal Versatility.

Appendix D

Multiphasic Sex Inventory (MSI)

This is a sexual inventory constructed to study the full range of sexual behavior. Answer each question as frankly as possible. If a statement is true, as applied to you, choose the number 1. If a statement is false, as applied to you, choose the 2. Answer all questions unless indicated otherwise. Try not to be bothered by the explicit nature of the questions, if you want to take a break notify the examiner.

Answer EVERY STATEMENT either true or false, even if you are not completely sure of your answer.

TRUE False Not Applicable

1-----2-----3

1. Occasionally I think of things too bad to talk to others about.
2. I have had desires to have sexual activity with a child.
3. The clitoris has a small shaft and head (glans) which is similar to the penis
4. I have been attracted to boys sexually.
5. I have occasionally had sex with an animal.
6. I seldom think about sex.
7. I can usually control my orgasm while masturbating but just as soon as I try to have sex with my partner I cannot control my orgasm.
8. I have used peeping to find the right set up and person to rape.
9. My problem is not sexual, it is that I really love children (answer only if you have had sexual contact with a child)
10. A woman urinates through her clitoris.
11. I am more interested in the excellent articles in "playboy" and magazines like that, more than I am in the centerfolds.
12. In some ways I was used by the person who reported me.
13. I have manipulated a child to get sexual pleasure.

14. I expose from a hiding place or from a long distance way (answer only if you have exposed yourself)
15. I have had one or more affairs while married.
16. During sexual intercourse, the penis can get caught in the vagina.
17. I have forced my sex partner to have sex when they did not want to.
18. I have never molested a boy.
19. It does not interest me to learn that a woman may not be wearing any panties.
20. I have a birth defect (a testicle which has not dropped, a urinary opening underneath my penis, spina bifida, undeveloped genitals. Etc.) Which causes sexual problems for me.
21. Males should have an orgasm regularly to keep the testicles from overfilling with semen.
22. I think about sex 80% of the time.
23. I have reached orgasm while molesting a child (answer only if you have had sexual contact with a child).
24. I have attempted rape or raped more than 10 times.
25. I have used leather, whips, handcuffs, sharp things etc. , in sexual encounters.
26. About the only way I can have an orgasm is when I masturbate.
- 27 . Oral sex disgusts me.
28. My wife is interested in sex much more often than I am.
29. My sexual offense occurred as a result of my wife's lack of understanding of me.
30. I have never had thoughts about fondling a child (children) in my family.
31. It turns me off when a female advertises her sexuality.
32. As an adult, I have never had sex with another adult.
33. Sometimes I am sexually attracted to children.
34. I have become sexually stimulated when someone urinates.

35. The glans of the clitoris are generally about the size of a pea.
36. I have not been interested in a child in a sexual way.
37. I have reached orgasm while secretly watching someone.
38. I feel so foolish about climaxing so fast that I avoid women.
39. The thought of a woman performing oral sex on me does not interest me.
40. A male with a circumcised penis has more sexual sensation than a male who is uncircumcised.
41. I have had to fight the impulse to touch a child sexually.
42. I have never taken a close look at a woman's sex organs (genitals).
43. I have never exposed myself from a car.
44. I have made sexually seductive remarks to strangers over the phone.
45. I am often hurt by the behavior of others.
46. I do not really notice if people are sexy or not.
47. I have never been accused of rape or attempted rape.
48. I have never been accused of a sex offense against a child.
49. Like females, many males get erect nipples when sexually stimulated.
50. I need sex or masturbation daily to reduce tension.
51. My wife is really not interested in sex.
52. I have lost sexual functioning as a result of an accident, wound or surgery involving my sexual or reproductive organs.
53. I have never used a weapon to scare a person into having sex.
54. I have never attempted to get a child who is a stranger to go off alone with me.
55. I have to use pornography to become sexually stimulated.
56. I get more excitement and thrill out of hurting a person than I do from the sex itself.

57. I get turned off with a woman who exposes part of her breasts or legs to men.
58. It is very sensitive deep inside the vagina and that part must be stimulated for a woman to have an orgasm.
59. My sexual offense occurred as a result of my wife's and my inability to communicate.
60. I was excited by having incest with my child (children) (answer only if you have had contact with your children)
61. As a child, most adults did not understand me.
62. I have become sexually excited over the thought of having sexual activity with a child.
63. I have been married more than twice.
64. It would interest me to learn that a female has felt pleasure from masturbating herself.
65. I have become sexually stimulated while feeling or smelling a woman's underwear.
66. I have been sexually attracted to little girls.
67. The clitoris is usually the most sensitive female sex organ.
68. I have never been married.
69. I get so sexually excited that I either climax just before I enter my sex partner or very soon after I get my penis in.
70. I have not been able to stop myself from looking at others in a sexual way.
71. I have never gone into a house or apartment to rape someone.
72. At times when I have held a child I have become sexually stimulated.
73. I feel like I am a victim as a result of the accusations that have been made against me.
74. Many people could interest me sexually.
75. I have masturbated while exposing.

76. I have never raped or attempted to rape a male.
77. Occasionally I go to a prostitute, peepshow or massage parlor.
78. I have never molested a girl.
79. Sometimes my erection is so painful I cannot perform sexually.
80. I am not interested in sex matters like most men seem to be.
81. It is not normal for males to have erections during sleep.
82. I have to fight the impulse to masturbate.
83. I have molested 5 or more children.
84. I have or have had a venereal disease.
85. I often worry about not being able to reach orgasm during the sex act.
86. I like to look at sexy pictures.
87. During sex I have enjoyed frightening my sex partner so they beg me to stop.
88. My sexual offense occurred because of stresses in my life.
89. I have never been married but I have lived with the person with whom i have had a sexual relationship.
90. I have never molested any of my own children.
91. I have fantasized about having sex play with a child.
92. I am so afraid a sex partner will think badly of me or will laugh at me that i avoid sexual contacts.
93. There have been times while exposing that I have had thoughts of what it would be like to rape someone.(answer only if you have exposed yourself)
94. It seems that everything I do and everywhere I go I am constantly thinking about sex.
95. My sexual offense occurred because the person asked for it.
96. It would peak my interest to learn that a child is curious about sex.

97. Women's genitals are less sensitive to physical stimulation than those of males.
98. Sometimes I have driven down the road with my penis out of my pants.
99. I am strictly heterosexual (only interested in female sex partners).
100. I have never picked up a person for the purpose of forcing them to have sex with me.
101. I am too easily sexually excited.
102. I know I have gotten a raw deal out of life.
103. I am satisfied with my sex life.
104. I have never gotten into trouble over my sexual behavior.
105. I am privately attracted to members of my own sex.
106. I have not indulged in sex activities which are unusual.
107. I'm worried about sexual things.
108. I enjoy flirting.
109. There are times that I laugh at a dirty joke.
110. I wish thoughts about sex did not bother me.
111. I have never been in love.
112. When a man is with an attractive woman, he has thoughts about sex.
113. I have private day dreams which I do not share with others.
114. I believe there is something wrong with my sex organs.
115. If I were artistic, I would like to draw children.
116. I get turned off when I see a female wearing her clothes so tight you can see everything.
117. Younger women have tighter vaginas than older women.
118. The more frightened a person has become, the more sexually excited I have become.

119. My sex offense would not have occurred if I had not had to take care of the child's personal hygiene.
120. Sometimes I have not been able to stop myself from fondling one or more of the children in my family.
121. The thought of overpowering someone sexually has been stimulating to me.
122. My penis is so small that I believe that I cannot satisfy a woman sexually.
123. I have become sexually stimulated over non-sexual body parts or items (feet, hair, shoes, etc.).
124. Since the age of 16 I have had sexual contact with both sexes.
125. My sex offense occurred because I was mistreated by a female(s).
126. I have never looked at pictures of children to stimulate myself sexually.
127. I know I am different than other people because sex is on my mind so much.
128. I can remember sneaking and peeping on females as a boy.
129. The thought of a woman fondling my penis does not interest me.
130. As an adult, I have tickled and wrestled with little girls.
131. The "tying off" of the testicle cords for sterilization is dangerous because it reduces sex interest and drive.
132. My sex offense would not have occurred if the child had not been curious and interested in sex.
133. I have attempted rape or raped at least one time.
134. I have suffered more hurt in my life than most people.
135. I have never been charged with indecent exposure.
136. The victim knew or was acquainted with me before the offense.
137. I like to look at sexually attractive women.
138. I have molested more than one child.

139. I have an illness (diabetes, arthritis, multiple sclerosis, liver or kidney disease, endocrine imbalance, etc.) Which effects my sexual functioning.
140. Sexual things interest me.
141. Unlike most men, women are capable of having multiple orgasms.
142. The thought of being spanked is sexually exciting to me.
143. X-rated movies would interest me, especially if I could view them in the privacy of my home.
144. I have never reached orgasm while exposing myself. (answer only if you have exposed yourself)
145. It interests me when a male's organs show through his clothes.
146. If I did not fantasize about sex I could not maintain my erection.
147. I would not go to a topless bar or show for any reason.
148. My sex offense would not have occurred if the victim had not been sexually "loose" (promiscuous).
149. Sometimes I get sexual pleasure out of hurting a person.
150. My jealousy for my partner is so great that it stops me from having an orgasm.
151. In my growing up, my parents did not show me love and affection.
152. There have been times when I have pressed my penis against strangers.
153. I do not let my sex partner see me in the nude.
154. I often drift into daydreams about sex.
155. There have been times when I have been afraid of what i might do sexually.
156. I have never used child pornography to stimulate myself sexually.
157. I have spent a lot of time in parks and places like that just looking at girls.
158. I am strictly homosexual (only interested in male sex partners)
159. One of the first signs of sexual excitement in the female is wetness of the vagina.

160. My sex offense occurred as a result of not getting sex education as a young person.
161. I have found it highly exciting to go cruising for someone to rape.
162. As an adult I have "horseplayed" and played "grab ass" with a boy or boys.
163. I have called up persons I did not know just to frighten them with dirty words and thoughts.
164. When I expose, sometimes I get an erection (answer only if you have exposed yourself).
165. Children today engage in more sexual behavior than when I was growing up.
166. My sex offense occurred because the person I was of assaulting led me on all the way.
167. I have touched a child's genitals in a sexual way.
168. I have found it pleasurable to force a person to have sex.
169. It feels good when I touch my sexual parts.
170. By stimulating the clitoris, many women are likely to have an orgasm.
171. I have gotten excited over the thought of tying someone up and having sex with them.
172. I have heart disease, high blood pressure or circulation problems which effect my sexuality.
173. I have exposed myself more than 100 times.
174. To have a sexual orgasm means the same as to have a climax.
175. My sex partner has hurt my feelings so often that I have had difficulty keeping my erection.
176. As an adult I have masturbated.
177. I think I am homosexual but am afraid to admit it.
178. During my earlier years I did not satisfy my curiosity about sex and believe that is why I committed my sexual offense.
179. Most of the time I cannot get an erection when I would like to have sex.

180. I have purposefully hurt someone during a sexual encounter.
181. It would interest me to learn that a woman would want to be raped.
182. My sexual involvement with a child would not have occurred if the child had not been overly affectionate (answer only if you have had sexual contact with a child).
183. I have secretly dressed in women's clothes.
184. I am sexually attractive.
185. I don't like to think about sex as much as i do.
186. The thought about raping someone has excited me.
187. If the penis is large enough, a woman will generally experience an orgasm.
188. Children have liked me and have wanted to be with me.
189. My sexual offense occurred as a result of physical problems, which have effected my sexuality.
190. I have never been accused of peeping.
191. I suspect my father forced himself sexually on my mother.
192. I have cruised for persons to rape.
193. I am obsessed with sex.
194. I have never made obscene phone calls.
195. It does not interest me to learn that a woman may not be wearing a bra.
196. I have never exposed myself to a child.
197. I feel younger when I am with youngsters.
198. The victim in my case did not tell the truth about what really happened.
199. I have never threatened a person to make them have sex with me.
200. A member of my family has been in trouble because of his or her sexual behavior.
201. I have tied someone up during a sexual encounter.

202. I would not be interested in seeing a film about people engaging in intercourse.
203. I have been charged with a sexual offense more than once.
204. A male is capable of having an orgasm before he reaches sexual maturity or adolescence.
205. The drugs or medicines I take make it difficult to either keep my erection or to have an orgasm.
206. I am often misunderstood by others.
207. I would not have had sex play with a child if she/he had not encouraged it (answer only if you have had with a child).
208. I am turned on when a woman tries to flirt with me.
209. There have been quite a few times that i have daydreamed about how pleasurable it would be to hurt somebody during a sexual encounter.
210. The penis becomes hard because the inner bone stiffens.
211. I have sometimes daydreamed about what it would be like to sexually attack someone.
212. I am not shy or bashful when it comes to sex.
213. Many times I have wished I were female.
214. I regularly have had several orgasms in one day.
215. I have gotten sexually excited when I have had thoughts about someone having a bowel movement.
216. I have often fantasized about raping someone.
217. People have commented on my love for children.
218. I have entered a female's bedroom just to look at her body close up.
219. I became interested in sex after high school age.
220. My sexual offence occurred as a result of my not having a satisfying sexual relationship.

- 221. I have had to fight the impulse to rape.
- 222. I have never shown a child sexy magazines or pictures of nude people.
- 223. I have daydreamed about sex so much that I have masturbated or had sex once a day or more.
- 224. I like sex play.
- 225. I have masturbated myself while making an obscene phone call (answer only if you have made an obscene call).
- 226. I have publicly exposed myself to an adult person (s).
- 227. Just before I raped, I became so excited that nothing else mattered (answer only if you have raped or attempted rape).
- 228. I like to see lots of bare skin.
- 229. I seem to prefer the company of children.
- 230. My sexual offense resulted from problems in my family.
- 231. As a child I was punished when I got caught in sexual activity.
- 232. I have been so excited while exposing that I have reached out and grabbed hold of a person (answer only if you have exposed yourself).
- 233. I have had an injury to my head or back that keeps me from having a full erection.
- 234. I have made sexual penetration of a child using an object, my tongue, my finger or my penis.
- 235. I feel so guilty and ashamed around my sex partner that I often lose my erection.
- 236. The clitoris is difficult to find because it is covered up by the vagina.
- 237. I would not be interested in seeing a person nude.
- 238. I have found it sexually exciting to play with death in a sexual encounter.
- 239. My sex offense would not have occurred if I had not tried to teach the child about sex (answer only if you have had sexual contact with a child).
- 240. Most of the time I am depressed and I do not care if I can even get an erection.

241. After I date a person, they often do not seem to want to go out with me again.
242. I feel like a female trapped in a male body.
243. I have masturbated to the thought of raping someone.
244. It would interest me to learn that a female would want me to expose to her.
245. I have stolen women's underclothes.
246. Most men I have been around are dirty minded.
247. During my adolescence I was secretly excited about sexual matters but i was embarrassed to talk about it to my friends.
248. I have had to fight the impulse to peep.
249. I have been told that I am preoccupied with sex.
250. Sometimes I have cruised parks, parking lots, or lonely streets looking for someone to have sex with.
251. I have had to fight the impulse to expose myself.
252. Sometimes I have hung around schools and playgrounds just to watch some of the children at play.
253. A woman urinates through the small opening between her anus and her vaginal opening.
254. The person who reported me was willing and interested in sexual contact with me and was not hurt by the experience.
255. There have been times when thoughts about sex have almost driven me crazy.
256. My sexual problem is not as serious as that of others.
257. I have never been accused of exposing myself.
258. I have not forced someone to have oral or anal sex when they did not want to.
259. I think I have never grown up emotionally.
260. My sexual offense occurred as a result of my being sexually abused as a child.

- 261. The thought of having sex with more than one partner at a time does not interest me in the slightest.
- 262. I would like to be tied up and made to have sex.
- 263. A child has performed oral sex on me.
- 264. I have been accused of purposely hurting someone in a sexual encounter.
- 265. I have never believed my sexual contact with a child was a crime because I did not have intercourse or penetration with her/him (answer only if you have had sexual contact with a child).
- 266. My sex offense occurred because the child I had sexual contact with appeared and acted much older than her/his actual age (answer only if you have had sexual contact with a child).
- 267. I have beaten a person during a sexual encounter.
- 268. I am very sad and blue and I am not interested in sex.
- 269. Sexy stories are interesting to me.
- 270. The clitoris is located at the top part of the genital region, just about where the "lips" begin.
- 271. It is possible for a male to have a sexual orgasm without an ejaculation of fluid.
- 272. My sexual offense resulted from my having too much alcohol or drugs.
- 273. Because I am afraid I might fail sexually with an adult, I avoid relationships with them.
- 274. I have attempted to have sex with a dead body.
- 275. I have fantasized about exposing myself.
- 276. An older male (relative, friend, acquaintance or stranger) touched me sexually when I was a child.
- 277. I have never taken pictures of a child (children) in the nude.
- 278. I got the idea to rape while burglarizing apartments or houses (answer only if you have raped or attempted rape).
- 279. I have to fight sexual impulses continually.

- 280. Quite often I feel like a child living in a grown up body.
- 281. I have liked to bathe children and then dry them off and help them get dressed.
- 282. I have often looked for someone to expose to.
- 283. My sex offense occurred because I thought the victim in my case needed sex.
- 284. I was curious about sex as a child.
- 285. A child has touched my penis in a sexual way.
- 286. I cannot seem to keep my mind away from thoughts about sex.
- 287. I like to see the look on their faces when I expose myself (answer only if you have exposed yourself).
- 288. I have performed oral sex on a child.
- 289. I could get sexually excited by being tied up.
- 290. I have become so mad that I have physically hurt a person for not letting me have sex.
- 291. I lose interest in a woman if her dress is too short.
- 292. My sex offense would not have occurred if I had not become interested in the child's sexual growth and development (answer only if you have had sexual contact with a child).
- 293. I do not believe I have had to overcome more in life than most people.
- 294. I have never placed my penis between a child's legs.
- 295. I think about the unattractive things about my sex partner so much that I cannot complete the sex act.
- 296. I have fantasized about killing someone during sex.
- 297. An older female (relative, friend, acquaintance or stranger) touched me sexually when I was a child.
- 298. I lose interest when I see an overly sexy female.
- 299. Even without any treatment I know that I can control my sexual behavior.

300. I need help because I am not able to control my sexual behavior.

Appendix E

Stages of Change

Stages of Change

Please rate each offender on a 1-4 point scale as to what stage of change the offender is in pre- treatment as well as post treatment in terms of modifying their sexually inappropriate behaviour. The stages of change are sequential so a 3 on pre-contemplation implies the offender is closer to contemplation than pre-contemplation.

Pre-contemplation- Offenders in this stage deny they have a problem, are resistant to change, are unaware of the negative consequences of their behaviour, believe the consequences of their behaviour are insignificant or having given up on the idea of change because they are demoralized. They are not thinking about changing within the next six months.

Offenders in this stage make statements like:

As far as I am concerned I do not need to be here.

I'm not the problem. It doesn't make much sense for me to be here.

1

2

3

4

Very much

closer to the next stage of
change but not quite there

Contemplation- Offenders recognize a few benefits of changing their behaviour. However, they continue to overestimate the costs of changing and are ambivalent about changing. They are aware of their problematic behaviours and are considering changing them. They will likely take steps to work towards behavioural change in the next six months. An offender who is in treatment but committed to the treatment process would be in this stage.

Offenders in this stage make statements like:

I think I need to try and change some things about my life.

I have some problems that I need to work on.

1

2

3

4

Very much

closer to the next stage of
change but not quite there

Preparation- Offenders in this stage have made a decision to address problematic behaviours. They have taken steps like agreeing to participate in treatment and are making an effort to change problematic behaviours but lapses are frequent.

Offenders in this stage make statements like:

I need to take treatment so that I can stay out of prison.
I go to treatment and see what I think about what they have to say.

1	2	3	4
Very much			closer to the next stage of change but not quite there

Action- Offenders in this stage are overtly engaged in changing problematic behaviours through treatment, acquiring new healthy behaviours. They have been able to maintain behavioural change consistently for a period of time. However, they have yet to demonstrate that they can generalize newly acquired behaviours within a variety of relevant situations that the original problematic behaviour occurred in.

Offenders in this stage make statements like:

I am trying to change the things that got me into trouble in the past.
I am really trying to learn from this treatment program.

1	2	3	4
Very much			closer to the next stage of change but not quite there

Maintenance- Offenders in the maintenance stage have been able to maintain behavioural change for at least six months and are actively using strategies learned in treatment to avoid relapse such as monitoring high risk thoughts and feelings and high risk situations. Problematic behaviours have not returned when the offender has been faced with a variety of high-risk situations.

Offenders in this stage make statements like:

It worries me that I may slip back into my old ways.

It is important for me to pay attention to my thoughts and feelings if I want to stay out of jail.

1

2

3

4

Very much

closer to the next stage of
change but not quite there

Ratings

Pre-treatment: _____

Post- treatment: _____

Appendix F

Informed Consent Form

SEX OFFENDER TREATMENT PROGRAMME
REGIONAL TREATMENT CENTRE (ONTARIO)

TREATMENT CONTRACT

I, _____ FPS# _____
of _____ Institution consent to participate in a 7 month sexual
offender treatment program at the Regional Treatment Centre (Ontario).

The treatment program has been explained to me. I understand that I will be admitted to the RTC(O) to take part in an treatment program consisting of both group and individual therapy. Treatment will address my assessed needs and may cover areas such as

- 1) Autobiography
- 2) Victim Awareness
- 3) Relapse prevention
- 4) Human Sexuality
- 5) Social Skills
- 6) Arousal Reconditioning
- 7) Psychopharmacology

As well, I understand that the completion of pre and post-treatment phallometric testing is considered an important part of the treatment process and will be required.

I understand that as part of the program requirements I will be asked to present my autobiography in group. This presentation will include information regarding my offense history. In cases where information regarding the autobiography contradicts or is significantly different than information contained on file the clinical team reserves the right to question such discrepancies.

I agree to cooperate fully in treatment, and understand that failure to participate in either individual or group sessions may lead to my discharge. I also agree to follow unit rules, which include abstaining from the use of drugs and alcohol, no verbally or physically threatening behaviour directed toward other inmate/patients or staff, and respecting the confidentiality of those involved in treatment. Violation of these rules may

be seen as grounds for dismissal from the program. I will be given a copy of the unit rules upon admission.

I understand that approximately mid-way through the program my progress will be reviewed in a formal case conference and I will be given feedback regarding my progress at this time. As well, I may expect feedback regarding my progress in treatment on a more informal basis throughout treatment.

While completion of treatment in no way guarantees an offense-free future, completion of properly designed treatment program has been shown to lead to reductions in both sexual and non-sexual re-offending in comparison to untreated groups.

I understand that one of the functions served by the RTC(O) is to provide training for students from various educational facilities in the area. As a result some of the people with whom I interact during the treatment program may be students here on placement.

LIMITED CONFIDENTIALITY

I understand that professional confidentiality will be maintained, but there are important limitations to that confidentiality. I understand that the information obtained in treatment will be summarized in a report and that anything I say may be quoted in that report. I also understand that the Treatment Team will consult with my Case Management Team during the treatment process. The Final Treatment Report will be placed on the Psychology, Treatment Centre, and Case Management files, as well as on the CSC nation-wide computer system (OMS). I also understand that a copy of the report is available to me. I understand that case management staff, the National Parole Board and anyone else with legal authority will have access to the report. For example, in the

event of a release, which the Warden considers to be a high-risk release, and in the case of detained offenders being released on Warrant Expiry, information contained in the report may be included in information released to community treatment facilities and the police.

I understand that the Treatment Team, as professional, may be obliged by law to report to the appropriate authorities any disclosures made by myself that reveal in sufficient detail any previously unreported offence.

I also understand that if there is concern that I might harm myself or someone else the treatment team is obliged to intervene even if confidentiality must be broken.

I understand that under the Ontario Child and Family Services Act a professional, must report child abuse to a Children's Aid Society. Therefore if I give specific information about child abuse that is not already known to Children's Aid, that information might need to be given to Children's Aid.

RESEARCH

I understand that the results of my participation in treatment and assessment may be used for research purposes. However, I have been assured that such results will not be made public in any way, which may identify me personally.

PROGRAM COMPLETION

Upon completion of the treatment program I will be returned to my parent institution. Institutional transfers will not be initiated from the RTC(O). Additionally, participation in the treatment program in no way guarantees favourable decisions for detention reviews, PFV's, transfers or conditional release.

Note: The program is not considered to be completed until the final reports are finished.

Thus, you may be required to stay at the RTC for a period of time after the completion of the groups.

I understand the above, and have had the opportunity to ask questions, and hereby agree to the treatment, which is being offered me.

I understand that I am free to withdraw from the treatment or participation in research at any time that I choose.

SIGNED:

DATED:

WITNESSED:

NAME OF WITNESS:

Distribution: RTC file
Psychology File