Psychometric Properties of Four Risk Assessment Measures

With Male Adolescent Sexual Offenders

by

Kelly E. Morton, B. A. (Hons.)

A thesis submitted to the

Faculty of Graduate Studies and Research

in partial fulfillment of the requirements for the degree of

Master of Arts

Department of Psychology

Carleton University

Ottawa, Ontario

January, 2003

© 2003

National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-79677-9

Canada

The undersigned recommend to the
Faculty of Graduate Studies and Research
Acceptance of the thesis:

"Psychometric Properties of Four Risk Assessment Measures With Male
Adolescent Sexual Offenders
"

submitted by

Kelly Morton

in Partial fulfillment of the requirements for
the degree of Master of Arts

Chair

Thesis Supervisor

Carleton University
January, 2003

Abstract

The validation of risk assessment measures with adolescent sexual offenders has important implications for supervising, managing and treating these youth. Currently no validated risk measure for this population exists. This study, therefore, set out to evaluate a new risk measure designed to predict sexual recidivism in adolescent sexual offenders (the Estimate of Risk of Adolescent Sexual Offense Recidivism: ERASOR). This study also examined three other measures, two designed to predict risk in adult sexual offenders (The Rapid Risk Assessment of Sexual Offense Recidivism: RRASOR, and the Static-99) and one designed to predict general recidivism in adolescents (Youth Level of Service/Case Management Inventory). A sample of 96 adolescent sexual offenders from the SAFE-T program were assessed using all four risk measures. None of the measures significantly predicted sexual recidivism. Results, however, revealed the ERASOR and YLS/CMI showed some success in predicting other types of recidivism. Implications of these findings are discussed.

Acknowledgements

My sincerest thanks and gratitude go to my partner, Guy Bourgon, not only for his thoughtful feedback, careful editing and for being a sounding board for my ideas, but for his support, love and constant belief in me throughout this process. He also deserves special thanks for putting up with me during the writing of this thesis! AC

Special thanks are also due to James Worling for his encouragement, his positive attitude, for being available to go over data with me and for his belief in the project. I would also like to thank the staff at SAFE-T for allowing me access to the data, for the work they do, and the interest they showed in this project during my time there.

Thanks are also due to Luc and Tracey Bourgon for giving me a place to call home while I traveled away from mine to collect my data.

I would also like to thank my family and friends who showed interest and support during the formation and completion of this project, especially Gary and Marlene Morton, Suzanne Cooper, and Julie Lemieux.

Finally, I would like to thank my advisor, Bob Hoge, and my committee for their input and suggestions.

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
Table of Contents.....	iv
List of Tables.....	vi
List of Figures.....	ix
List of Appendices.....	xi
Introduction.....	1
Risk Factors.....	2
Risk Assessment.....	16
Adult Instruments.....	17
Adolescent Instruments.....	26
Theoretical Rationale for the Study.....	30
Purpose and Hypotheses.....	31
Method.....	34
Participants.....	35
Measures.....	35
Data collection.....	40
Results.....	43
Plan of analysis.....	43
Descriptive Statistics.....	43
Inter-rater reliability.....	45

Internal Consistency.....	46
Concurrent Validity.....	47
Relationship Among Scales.....	48
Predictive Accuracy.....	49
Post hoc Exploratory Analyses.....	65
Discussion.....	69
Limitations & Future Research.....	81
References.....	85

List of Tables

Table 1. Risk Factors for Adolescent Sexual Recidivism.....	97
Table 2. Available Risk Assessment Measures and Factors.....	99
Table 3. Family Characteristics.....	101
Table 4. Prior Offenses.....	102
Table 5. Abuse History.....	103
Table 6. Agency Involvement and Treatment History.....	104
Table 7. Referral Offense Characteristics.....	105
Table 8. RRASOR and Static-99 Inter-rater Reliability.....	107
Table 9. ERASOR Inter-rater Reliability.....	108
Table 10. YLS/CMI Inter-rater Reliability.....	109
Table 11. Correlations Between Scores on All Risk Measures.....	111
Table 12. Relationships Among Risk Instrument Scales.....	112
Table 13. Descriptive Statistics for the RRASOR for Any Recidivism.....	113
Table 14. Correlation and AUC Values for the Four Assessment Instruments with Any Recidivism.....	114
Table 15. Descriptive Statistics for the Static-99 for Any Recidivism.....	115
Table 16. Descriptive Statistics for the ERASOR for Any Recidivism.....	116
Table 17. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Any Recidivism.....	117
Table 18. Descriptive Statistics for the RRASOR for Sexual Recidivism.....	119
Table 19. Correlation and AUC Values for the Four Assessment Instruments with Sexual Recidivism.....	120

Table 20. Descriptive Statistics for the Static-99 for Sexual Recidivism.....	121
Table 21. Descriptive Statistics for the ERASOR for Sexual Recidivism.....	122
Table 22. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Sexual Recidivism.....	123
Table 23. Descriptive Statistics for the RRASOR for Violent Recidivism.....	125
Table 24. Correlation and AUC Values for the Four Assessment Instruments with Violent Recidivism.....	126
Table 25. Descriptive Statistics for the Static-99 for Violent Recidivism.....	127
Table 26. Descriptive Statistics for the ERASOR for Violent Recidivism.....	128
Table 27. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Violent Recidivism.....	129
Table 28. Descriptive Statistics for the RRASOR for Violent, Including Sexual, Recidivism.....	131
Table 29. Correlation and AUC Values for the Four Assessment Instruments with Violent, Including Sexual, Recidivism.....	132
Table 30. Descriptive Statistics for the Static-99 for Violent, Including Sexual, Recidivism.....	133
Table 31. Descriptive Statistics for the ERASOR for Violent, Including Sexual, Recidivism.....	134
Table 32. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Violent, Including Sexual, Recidivism.....	135
Table 33. Descriptive Statistics for the RRASOR for General Recidivism.....	137

Table 34. Correlation and AUC Values for the Four Assessment Instruments with General Recidivism.....	138
Table 35. Descriptive Statistics for the Static-99 for General Recidivism.....	139
Table 36. Descriptive Statistics for the ERASOR for General Recidivism.....	140
Table 37. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for General Recidivism.....	141
Table 38. Post hoc Exploratory Item Analysis for the ERASOR.....	143
Table 39. Post hoc Exploratory Item Analysis for the YLS/CMI.....	144

List of Figures

Figure 1. Kaplan-Meier Survival Curve Estimates for Any Recidivism for Static-99 Risk Ratings.....	145
Figure 2. Kaplan-Meier Survival Curve Estimates for Any Recidivism for ERASOR Risk Ratings.....	146
Figure 3. Kaplan-Meier Survival Curve Estimates for Any Recidivism for YLS/CMI Risk Ratings.....	147
Figure 4. Kaplan-Meier Survival Curve Estimates for Sexual Recidivism for Static-99 Risk Ratings.....	148
Figure 5. Kaplan-Meier Survival Curve Estimates for Sexual Recidivism for ERASOR Risk Ratings.....	149
Figure 6. Kaplan-Meier Survival Curve Estimates for Sexual Recidivism for YLS/CMI Risk Ratings.....	150
Figure 7. Kaplan-Meier Survival Curve Estimates for Violent Recidivism for Static-99 Risk Ratings.....	151
Figure 8. Kaplan-Meier Survival Curve Estimates for Violent Recidivism for ERASOR Risk Ratings.....	152
Figure 9. Kaplan-Meier Survival Curve Estimates for Violent Recidivism for YLS/CMI Risk Ratings.....	153
Figure 10. Kaplan-Meier Survival Curve Estimates for Violent, Including Sexual, Recidivism for Static-99 Risk Ratings.....	154
Figure 11. Kaplan-Meier Survival Curve Estimates for Violent, Including Sexual, Recidivism for ERASOR Risk Ratings.....	155

Figure 12. Kaplan-Meier Survival Curve Estimates for Violent, Including Sexual, Recidivism for YLS/CMI Risk Ratings.....	156
Figure 13. Kaplan-Meier Survival Curve Estimates for General Recidivism for Static-99 Risk Ratings.....	157
Figure 14. Kaplan-Meier Survival Curve Estimates for General Recidivism for ERASOR Risk Ratings.....	158
Figure 15. Kaplan-Meier Survival Curve Estimates for General Recidivism for YLS/CMI Risk Ratings.....	159
Figure 16. Kaplan-Meier Survival Curve Estimates for Sexual Recidivism for Revised ERASOR Risk Ratings.....	160
Figure 17. Kaplan-Meier Survival Curve Estimates for Sexual Recidivism for Revised YLS/CMI Risk Ratings.....	161

List of Appendices

Appendix A. Demographic Characteristics.....	162
Appendix B. RRASOR.....	166
Appendix C. Static-99.....	168
Appendix D. ERASOR.....	170
Appendix E. YLS/CMI.....	181
Appendix F. SAFE-T Consent Forms.....	185

Psychometric Properties of Four Risk Assessment Measures

With Male Adolescent Sexual Offenders

Kelly Morton

Sexual offending by adolescents is a serious social problem. Knowledge about the factors that increase an adolescent's likelihood to recidivate sexually is an important area of research. Not only does current research lack clear direction as to how to assess risk of sexual recidivism in adolescents; it also provides conflicting results with regard to some factors (e.g., history of abuse). Due to the lack of empirical research, valid risk assessment tools are virtually non-existent. In fact, professionals making risk predictions must either rely on research conducted with adult sexual offenders, or on theoretical assumptions about adolescent sexual offenders (Worling & Curwen, 2001).

The prediction of sexual recidivism presents unique problems to those working in the criminal justice field. Low base rates of detected sexual recidivism are often reported. This may be due to many factors. For example many sexual assaults are not reported to the police or sexual offenders will not openly admit to their offences. Additionally, it is possible that sexual recidivism does not happen as quickly or as frequently as general recidivism. Therefore follow-up periods may not be long enough (Hanson, 1997). Research has also indicated that sexual offenders are a heterogeneous group who have committed different types of offenses against different types of victims (e.g., against family members, strangers, children). It is possible that distinctions in those factors related to risk for different types of sex offenders may be masked by categorizing offenders into a homogenous group of 'sex offenders' (Bynum, 2001). Finally, there are cognitive, personality, and moral differences between adults and adolescents, thus posing

even greater challenges when dealing with an adolescent population. Some research suggests that most adolescents do not continue to commit sexual offences into adulthood (Milloy, 1998; Schram, Milloy, & Rowe, 1991), while other research suggests that many adult sexual offenders began offending as juveniles (Briggs & Hawkins, 1996; Knight & Prentky, 1993; Worling & Curwen, 2000). It is also possible that given that adolescents are still developing, so too are their preferences for the type of offense they commit, as well as the victims they choose (Worling & Curwen, 2000).

Some findings suggest that adolescent sexual offenders and adolescent general offenders do not differ very much with regard to their background characteristics. However, researchers are suggesting that the factors that influence risk for general and sexual recidivism do, indeed, differ (Langstrom & Grann, 2000). Similarly, the empirical evidence available for adult offenders suggests that those factors that are related to sexual recidivism are different from those factors that are related to general offending (Hanson & Bussiere, 1998).

A number of financial and emotional costs are related to adolescent sexual offending for victims, families and communities (Becker & Hunter, 1997; Benoit & Kennedy, 1992; Milloy, 1998; Ryan, 1998). Survivors of sexual assault are affected by both short and long-term difficulties as a result of their victimization. These difficulties are found within their ability to function on a day to day basis, their relationships, and their quality of life (Ryan, 1998).

Risk Factors for Adolescent Sexual Offending

Risk factors can either be static or dynamic in nature (Andrews & Bonta, 1998). Static risk factors are those that are historical and are not susceptible to change. For

example criminal history is a static risk factor (Andrews & Bonta, 1998; Bynum, 2001; Hanson, 2000). Dynamic risk factors are those that can be influenced and thus are susceptible to change. These factors can aid in treatment and supervision planning of offenders. Additionally, when dynamic factors change, so too does the offender's risk level (Andrews & Bonta, 1998; Bynum, 2001; Hanson, 2000). Attitudes are an example of dynamic factors. Hanson and Harris (1998) further subdivided dynamic factors into those that are stable and those that are acute. Stable factors are treatment targets that are susceptible to change over time (Bynum, 2001; Hanson & Harris, 1998). Holding attitudes tolerant of offending is a stable dynamic factor. Acute factors are those factors that serve as warning signs that an offender may recidivate. These factors change over a short period of time and likely precede the offense (Bynum, 2001; Hanson & Harris, 1998). Increasing one's substance use is an example of an acute dynamic risk factor (Hanson & Harris, 1998).

Given that there is a dearth of such studies with adolescent sexual offenders, the literature on adult sexual offenders is also drawn upon. For the purposes of this review, potential risk factors were divided into several categories. These categories are fantasies/interests, prior sexual offending, victim characteristics, social skills, psychological maladjustment, associates, family, treatment, history of abuse and psychopathy. Table 1 presents studies that evaluated a specific factor and its relationship to recidivism in adolescents are reviewed.

Fantasies/interests. The sexual fantasies of adolescent sexual offenders have been suggested to play a role in the maintenance of sexual offending (Abel & Blanchard, 1974; Daleiden, Kaufman, Hilliker & O'Neil, 1998), and may act as a rehearsal for the actual

offense (Becker & Hunter, 1997). However, sexual fantasies have also been shown to be prevalent in the general population and begin as early as eleven years old (Gold & Gold, 1991; Lehne, 1978). Leitenberg & Henning (1995) found that 95% of men and women had sexual fantasies. It is thought, however, that sexual offenders have sexually deviant interests and preferences for sexually deviant acts. It is believed that these deviant interests and preferences can be measured and altered in treatment (Barbaree, 1990; Hunter & Becker, 1994; Quinsey & Earls, 1990).

Social learning and cognitive-behavioural theory has suggested that deviant sexual arousal and interests are paired with a stimulus that is sexually arousing through a process similar to classical conditioning (Alford, Morin, Atkins & Schoen, 1987; McGuire, Carlisle, & Young, 1965). These pairings are then reinforced over time through action or masturbatory pairings of deviant fantasy and sexual arousal. However, little research has been conducted on the role that deviant fantasies play in the risk for sexual recidivism with adolescent sexual offenders (Hunter & Becker, 1994).

Daleiden, Kaufman, Hilliker and O'Neil (1998) conducted a retrospective study to compare the sexual fantasies of adolescent sexual offenders with non-sexual offenders and university males. The Sexual Fantasy Questionnaire (Kaufman, 1993) was used to determine the type and extent of the fantasies experienced by the voluntary participants. The adolescent sexual offenders were significantly more likely to report higher levels of paraphilic interests (i.e., exposing one's genitals, obscene phone calls) than the other two groups. Both incarcerated groups reported having fewer non-deviant fantasies than the university group, however, they did not report higher levels of deviant fantasies. The authors suggest that the suppression of non-deviant fantasies may be due to minimization

or lack of insight on the part of the incarcerated group (both sexual and non-sexual offenders). They also suggest that it may be that the suppression of non-deviant fantasies is what is contributing to sexual offending, as opposed to an elevation of deviant fantasies. However, the authors did not evaluate other aspects, such as having a history of abuse that may be related to the types of fantasies experienced. The authors did not check for a history of sexual offending in the non-sexual offender or university groups. Additionally, the authors did not relate deviant fantasies, or the suppression of such fantasies to sexual recidivism.

Deviant sexual arousal's relationship to sexual recidivism has been investigated (Gretton, McBride, Hare, O'Shaughnessy & Kumka, 2001; Kahn & Chambers, 1991; Shram, Milloy & Rowe, 1991). Schram et al. (1991) evaluated therapist-rated deviant sexual arousal and its relationship to risk to re-offend. They followed a sample of 197 treated male adolescent sexual offenders for an average of 6.8 years. They found that those adolescents who re-offended were more likely to display patterns of deviant sexual arousal as well as have a history of truancy and sexual offending, as well as cognitive distortion, when compared to non-recidivists. Kahn and Chambers (1991) found that those adolescents who had patterns of deviant sexual arousal, as rated by clinical opinion, were more likely to re-offend sexually than those who did not (12% vs. 6% respectively). However, this finding was not statistically significant. The offender blaming the victim for the sexual assault was found to be predictive of sexual recidivism. Denial of the offense was inversely related to sexual recidivism. Thus those offenders who denied the offense completely did not re-offend. Gretton et al. (2001) studied 220 treated adolescent sexual offenders and the relationship of psychopathy and deviant arousal to recidivism.

They found that, in combination with psychopathy ratings, “even a moderate number of psychopathic traits in combination with a marked degree of PPG (plethysmographic) deviant arousal was associated with the higher rate of general reoffending” (p. 445). This would suggest that sexual deviance is related, somehow, to criminal behaviour in adolescent sexual offenders.

As part of a treatment evaluation study, Worling and Curwen (2000) examined risk factors related to sexual and non-sexual recidivism. Data were collected for 148 adolescent sexual offenders who had been assessed at the Sexual Abuse: Family, Education and Treatment (SAFE-T) program from 1987 until 1995. Fifty-eight of the adolescents served as the treatment group (53 males and 5 females). Approximately, one third of those in the treatment group dropped out prior to completion of treatment, but had received at least 10 months of treatment. Ninety adolescents served as the comparison group (86 males and 4 females). The comparison group was divided into three separate groups, assessment only adolescents, treatment refusers and treatment dropouts. Analyses revealed that there were no significant differences with respect to the frequency of subsequent charges for sexual, violent nonsexual and nonviolent nonsexual offenses for any of the comparison groups. Therefore, the 3 comparison sub-groups were combined to form one comparison group.

Follow up was an average of 6.23 years, with a range of 2 to 10 years. Follow-up data were collected from the date of initial contact. SAFE-T is a community-based program and therefore the adolescents are at risk of re-offending during and after treatment. The average age of the offenders at follow-up was 21.5 years old. Recidivism data were collected in the form of criminal charges that were categorized into sexual

offenses, violent non-sexual offenses, and nonviolent non-sexual offenses. The charges were retrieved by way of Canadian Police Information Centre (CPIC) and therefore were national. The recidivism rate for sexual re-offending was 12.8%, whereas the rates for violent non-sexual and non-violent recidivism were 27.0% and 38.5%, respectively.

With regard to predictor variables, Worling and Curwen (2000) found that those offenders who reported more past or present sexual fantasies of children, more child-victim grooming behaviour and more intrusive sexual assault activities with children were more likely to be charged with a subsequent sexual offense. Sexual recidivists were also less likely to report recent non-sexual delinquent behaviour, which may suggest that sexual offending is their chosen outlet for antisocial behaviour. These were the only variables found to be predictive of sexual recidivism.

Research with adult sexual offenders found that sexual deviancy factors were a significant predictor of sexual recidivism. A meta-analysis found that having a sexual interest in children was the factor most strongly related to sexual recidivism. Having any deviant sexual preferences and an attraction to boys were also predictive of sexual recidivism. It is interesting to note that being aroused by rape was not related to sexual re-offending (Hanson & Bussiere, 1998).

Additionally, a retrospective study of 409 adult sexual offenders on community supervision found that recidivists were more likely to have attitudes supportive of sexual offending (Hanson & Harris, 1998). This study also found that sexual recidivists were more likely to hold sexual entitlement and victim-blaming attitudes. In fact, holding a sexual entitlement attitude was one of the three best *stable dynamic* factors evaluated in this study. The offender's sexual deviance score was found to be one of the three best

static predictors. Preoccupation with sex was one of the three best *acute dynamic* predictors of sexual recidivism. After controlling for the three best static predictors, sexual pre-occupation significantly predicted sexual recidivism (Hanson & Harris, 1998).

Prior sexual offending. Prior offending has demonstrated itself as a risk factor for future offending (Andrews & Bonta, 1998; Hanson & Bussiere, 1998); therefore, it is intuitive to believe that prior sexual offending on the part of adolescent sexual offenders would be a risk factor for subsequent sexual offending. Kahn and Chambers (1991) found that those adolescent sexual offenders who had previous convictions for sexual offenses were more likely to re-offend than those who did not (18% vs. 7% respectively). The use of verbal threats during the commission of the offense was also found to be a significant predictor of sexual recidivism.

Langstrom and Grann (2000) evaluated the risk factors associated with adolescent sexual offending. They followed 46 (44 male, 2 female) Swedish sexual offenders for an average of 5 years. The adolescents ranged in age from 15 to 20 years old, with the average offender being approximately 18 years old. Offenders were rapists (61%), child molesters (26%), and non-contact offenders (i.e., exhibitionists = 13%). All adolescents had received a forensic psychiatric evaluation, which assesses the offenders' need for psychiatric treatment. Forensic psychiatric evaluations contain information about the offense, verdict and sentence, as well as information from police reports, institutional records, health care, child and adolescent psychiatric facilities and social service records.

Information with regard to the adolescent sexual offender's history, clinical and crime characteristics and psychopathy were collected. Psychopathy was categorized using the Psychopathy Checklist-Revised (Hare, 1991) score that was obtained using file

information. Sexual recidivists were defined as offenders who were convicted of a subsequent offense that was sexual in nature within the follow-up period. General offenses were defined as any offense, including sexual, that the offender was convicted of during the follow-up period. The general recidivism rate was 65% (22% of which were violent), whereas the sexual recidivism rate was 20%.

Results indicated that, with regard to re-offending sexually, four factors significantly predicted recidivism (risk ratios significantly elevated from 1.0). Prior sexual offending behaviour, poor social skills, having a male victim and having two or more victims in the index offense were all found to be predictive of future sexual offending.

A meta-analysis of the risk factors associated with adult sexual recidivism found that a history of prior sexual offenses was related to sexual recidivism (Hanson & Bussiere, 1998). The authors also found that an early onset of sexual offending was predictive of later sexual recidivism. However, a prior violent or non-violent non-sexual offense history was not related to sexual recidivism. Additionally, having a history of diverse sexual crimes was also related to sexual recidivism (Hanson & Bussiere, 1998).

Victim characteristics. In their study of 221 treated adolescent sexual offenders (95.7% male), Kahn and Chambers (1991) found that those who offended against an unrelated child were more likely to recidivate sexually than those who offended against a peer. Langstrom and Grann (2000) found that one of the four significant predictors of sexual recidivism was having had a male victim. Results from their study also indicate that adolescent sexual offenders who had a stranger victim and offended on two or more

occasions were three times more likely to recidivate sexually. However, neither of these factors was significantly predicted recidivism.

Smith and Monastersky (1986) found that those adolescent sexual offenders whose index offense was against a peer were more likely to reoffend sexually than those who offended against a child (a difference of 4 years or more). However, they did find that those offenders whose index offense was against a stranger were more likely to recidivate sexually than those who offended against someone they knew. Results also indicated that those adolescents who offended against a male were more likely to re-offend sexually (Smith & Monastersky, 1986).

In contrast, the study conducted by Worling and Curwen (2000) did not find evidence for a relationship between victim characteristics and sexual recidivism. The authors found no relationship between sexual recidivism and victim preference factors, such as victim age, gender or relationship to the offender. The authors suggest that this may be because adolescents are still forming and refining their sexual interests and preferences. Therefore preferences may not be entrenched yet (Worling & Curwen, 2000).

With regard to adult sexual recidivism, Hanson and Bussiere (1998) found certain victim characteristics to be risk factors. Specifically, having a male child victim and/or a stranger victim were positively correlated with sexual recidivism. Having a female child victim and/or a related child victim were negatively correlated with sexual recidivism (Hanson & Bussiere, 1998). Thus, an adult sexual offender is more likely to recidivate if their victim was a stranger and/or a male child. However, if the adult perpetrated against a female child and/or a related child then he is less likely to recidivate sexually.

Social skills. Evidence suggests that adolescent sexual offenders have difficulty forming and maintaining close peer relationships and therefore tend to isolate themselves (Borduin, Henggeler, Blaske & Stein, 1990; Epps, 1997; Lane, 1997). A retrospective study of adult sexual offenders found that sexual recidivists were more likely than non-recidivists to have intimacy problems. The study also revealed that sexual recidivists were more likely to increase their social isolation just prior to recidivating (Hanson & Harris, 1998). Langstrom and Grann (2000) found that having poor social skills was also predictive of future sexual offending in adolescents. Clinical experiences with adolescent sexual offenders has led to the suggestion that dysfunctional peer or family relationships may contribute to an adolescent's risk of recidivating (Lane, 1997). However, Awad & Saunders (1989) suggested that those adolescents who sexually abuse children show social isolation whereas those adolescents who abuse peers were not socially isolated.

Psychological maladjustment. Research with adult sexual offenders has found that having anger problems and a personality disorder were related to sexual recidivism (Hanson & Bussiere, 1998). The meta-analysis also revealed that antisocial personality disorder is a small predictor of sexual recidivism. A retrospective study conducted by Hanson and Harris (1998) found that anger was one of the three best acute dynamic predictors of sexual recidivism in adults.

Associates. Research with regard to what role associates play in sexual recidivism is sparse. However, preliminary findings have indicated that having antisocial associates may be a risk factor for adult sexual re-offending. Hanson and Harris (1998) found that recidivists were more likely than non-recidivists to have more negative than positive influences in their lives. Results also indicate that having poor social influences is one of

the three best stable dynamic predictors of sexual recidivism in adult sexual offenders (Hanson & Harris, 1998). It should be noted here that currently there is a lack of research with regard to psychological maladjustment and friends and their relationship to sexual recidivism with adolescent sexual offenders.

Family. The role of the family has been suggested as one of the risk factors for adolescent sexual offenders. Research has demonstrated that family is an important aspect of an adolescent's life, and that family instability and high rates of disorganization, dysfunction and conflict characterize the lives of adolescent sexual offenders (Awad & Saunders, 1989; Epps, 1997; Lane, 1997; Ross & Loss, 1991; Smith & Israel, 1987). Blaske, Bourduin, Henggeler and Mann (1989) have also found that the families of adolescent sexual offenders display negative communication patterns and few positive communication patterns. Additionally, Ryan (1998) has suggested that a dysfunctional family is prominent in the histories of adolescent sexual offenders and puts an adolescent at higher risk for offending sexually (Hunter & Becker, 1994). A meta-analysis investigating the parental and demographic characteristics of adolescent sexual offenders found that the majority of these adolescents come from families that utilize pathological interaction patterns (Graves, Openshaw, Ascione & Erickson, 1996). Research with adult sexual offenders has suggested that a negative relationship with one's mother may be a risk factor for sexual recidivism (Hanson & Bussiere, 1998).

Treatment. In the evaluation of the treatment program at SAFE-T, Worling and Curwen (2000) found that adolescents who stayed in the program were less likely to recidivate than those who did not complete treatment or who did not take part in a treatment program at all. Marques, Day, Nelson and West (1994) have also suggested that

those adolescent and adult sexual offenders that do not complete treatment have the highest rates of recidivism. Research with adult sexual offenders has shown that the only clinical variable related to sexual recidivism was a failure to complete treatment. This would suggest that those offenders who have completed treatment are less likely to recidivate than those who have dropped out of treatment.

Lab, Shields and Shchondel (1993) found that completion of treatment was not related to recidivism in a sample of 46 offenders, 10 of whom dropped out of treatment. However, the authors caution that although the treatment was sex-specific, the program may have been targeting adolescents who may not have needed treatment. They also note that the assumptions made about knowing who to treat, and how, may in fact be premature. It should also be noted that only 1 of the 46 adolescents recidivated sexually (2.2%).

History of abuse. There is debate about whether or not a history of abuse is a risk factor for committing a sexual offense. Milloy (1998) has reported that the majority of sexual offenders have not been victims of sexual abuse. However, research has also found that a history of sexual or physical abuse is often reported in samples of sexual offenders (Hastings, Anderson & Hemphill, 1997; Hunter & Becker, 1994; Kahn & Chambers, 1991; Jonson-Reid & Way, 2001; Smith, 1988). Some studies have shown that adolescent sexual offenders who have experienced a history of sexual abuse tended to have higher levels of deviant sexual arousal (as measured by plethysmography) than adolescent sexual offenders who do not have a history of abuse (Becker, Hunter, Stein & Kaplan, 1989; Becker, Kaplan & Tenke, 1992). Jonson-Reid and Way (2001) suggest that maltreatment may be associated with delinquency in general but not with a specific type

of crime. Benoit and Kennedy (1992) state that a large number of adolescents who had a history of abuse did not commit the same type of crimes in their adolescence. The authors report that having a history of sexual victimization did not appear to be a sufficient factor, in and of itself, to become a victimizer.

Most studies that examine a history of abuse with adolescent sexual offenders, however, fail to obtain a comparison group of non-sexual offenders, or non-offenders and/or fail to relate the history of abuse to the adolescent's risk of re-offending sexually. The role that a history of abuse plays in some adolescents becoming sexual offenders, and others not becoming sexual offenders, has yet to be clearly defined (Hunter & Becker, 1994; Jonson-Reid & Way, 2001; Widom, 1995). Interestingly, a meta-analysis with adult sexual offenders has revealed that having been sexually abused as a child was not related to sexual recidivism. However, a small relationship to general offending was found (Hanson & Bussiere, 1998).

Worling and Curwen (2000) related a history of abuse to an offender's risk to recidivate. They conducted a study of 148 treated adolescent sexual offenders. No relationship was found between sexual recidivism and having a history of childhood sexual abuse. However, there was a relationship between having a history of childhood sexual abuse and non-sexual recidivism. Additionally, Lab, Shields, and Schondel (1993) found that past sexual victimization was unrelated to sexual recidivism in a sample of 155 treated adolescent sex offenders.

Psychopathy. Gretton, McBride, Hare, O'Shaughnessy and Kumka (2001) evaluated the relationship of psychopathy and sexual deviance with recidivism in adolescent sexual offenders. The sample consisted of 220 treated adolescent sexual

offenders between the ages of 12 and 18 who had either confessed to or been convicted of a sexual offense in Canada. The adolescents were followed up for an average of 4.6 years, with recidivism defined as any new violent, sexual or general charge or conviction based on CPIC data. Gretton et al. (2001) also utilized escapes from custody and breaches of probation as an outcome measure. File information was used to assess the offenders. Psychopathy was assessed using the Psychopathy Checklist: Youth Version (Forth, Kosson & Hare, in press). The authors divided the adolescents into three groups as defined by their PCL: YV score. Those scoring 30 and over were defined as high, if they scored from 18-29 they were moderate, and those scoring below 18 were defined as the low group. In addition to rating psychopathy, the authors also collected plethysmographic (PPG) in order to determine sexual deviance.

Gretton et al. (2001) found that ratings on the PCL: YV discriminated between the three groups, as evaluated by survival functions. Psychopathy ratings were also significantly related to general, sexual, and violent recidivism as well as escapes from custody and breaches of probation. When looking at PCL: YV scores, however, no significant relationship to sexual recidivism was detected. It should also be noted that when Cox regression analyses were run, with age at index offense and offense history as covariates, the PCL: YV scores did not contribute significantly to the prediction of sexual recidivism, but did contribute significantly to the prediction of general and violent recidivism.

Sexual deviance, as measured by PPG, was not significantly related to recidivism of any type, nor was it related to the PCL: YV. The researchers, however, were interested in the combination of psychopathy with sexual deviance. Thus, four groups were formed

using a median split for psychopathy scores and a deviance ratio of 1.2 (PPG).

Combining those with high psychopathy scores and high deviance scores, those with high psychopathy scores and low deviance, those with low psychopathy and high deviance and those with low psychopathy and low deviance formed the groups. The authors found that having a high psychopathy score combined with a high sexual deviance score differentiated from the other three groups with regard to general recidivism. With regard to violent recidivism the only significant difference that was found was between those with high PCL: YV/high deviance and those with low PCL: YV/low deviance. No significant group differences were found with regard to sexual recidivism. It is therefore suggested that psychopathy, as rated by the PCL: YV, may indeed be an important predictor with regard to re-offending, especially general reoffending, in adolescent sexual offenders.

In Langstrom and Grann's (2000) of 46 adolescent sex offenders, they evaluated psychopathy using the adult version (PCL-R: Hare, 1991). Using file reviews to code the PCL-R, the researchers did not find support for the predictive ability of the PCL-R with regard to sexual recidivism. The PCL-R, however, was a significant predictor of general recidivism in their sample.

Risk Assessment

Risk prediction is an important aspect of corrections, with general and sex offenders alike, as it assists in making decisions about risk to re-offend, sentencing, classification, treatment and parole recommendations and conditions of community or secure supervision (Barbaree et al., 2001; Epps, 1997; Graham, Richardson & Bhate, 1997; Hunter & Lexier, 1998; Ross & Loss, 1991; Will, 1999; Worling & Curwen,

2001). However, risk prediction becomes especially important for sexual offenders because of the introduction of commitment statutes for sexual offenders. The likelihood of future sexual offending is one of the four criteria set out in the sexual offender commitment statutes (Hanson, 1998). Juveniles may be subject to these statutes and may be required to register as a sexual offender (Berliner, 1998; Milloy, 1998). Risk assessments also aid in decisions about if and when information about the sexual offender should be released to the public (Hunter & Lexier, 1998; Milloy, 1998). Thus being able to predict future behaviour influences commitment decisions, which in turn influence the offender and community as well.

While there are several risk assessment measures for adults, fewer exist for adolescents. Several of the risk assessment measures designed for adult sexual offenders will be discussed, as these measures provide important guidelines for assessing juveniles. Additionally, checklists used to evaluate sexual recidivism with adolescents and the emerging risk instruments designed for adolescents will be discussed. Table 2 highlights some of the available risk assessment measures for adults and adolescents.

Adult Risk Assessment Instruments

Although the prediction of general offending is well established, risk assessment instruments used to predict general and violent recidivism have not been shown to be successful at predicting sexual recidivism among sexual offenders (Bonta & Hanson, 1995; Rice & Harris, 1997). Sex specific risk assessment for adult male sexual offenders has only been advancing in recent years (Barbaree, Seto, Langton, & Peacock, 2001; Hanson, 1998; Hanson & Harris, 2001). Although new instruments have become available many have little or no prospective empirical evidence to support their predictive

ability (Barbaree et al., 2001). Several risk assessment instruments that are available for adult sexual offenders (i.e. the RRASOR, the Static-99, the MnSOST, the SONAR, the VRAG and the SORAG) will be discussed.

Rapid Risk Assessment of Sexual Offense Recidivism. The Rapid Risk Assessment of Sexual Offense Recidivism (RRASOR; Hanson, 1997) was designed to be a screening tool for sexual offense recidivism. The RRASOR was developed using predictors selected from the Hanson and Bussiere (1996) meta-analysis. It is believed that the meta-analysis provided evidence that the factors used to predict sexual re-offending were different from those used to predict general recidivism. Therefore a sexual specific recidivism assessment tool was needed. The predictors that were chosen had to have a correlation of at least .10 with sexual offense recidivism and be easily scored using commonly available information. If several factors were thought to correlate with each other then the factor with the largest correlation was chosen.

Four variables were chosen: prior sexual offenses, age, any related victims, and any male victims. A prior sexual offense was defined as the number of sexual offenses that the offender had on record prior to incurring the index offense. Age was defined as being young, which was younger than 25 years of age. Relationship to the victim was defined as being intra-familial or extra-familial. Related victims include spouses and other family members (i.e., children, stepchildren, nieces, in-laws, etc.) as well as whether the offender has taken on a parental role to the victim. Finally, having a male victim, was having ever offended sexually against a male, either child or adult (Hanson, 1997).

A validation sample from England and Wales (Her Majesty's Prison Service) was used to test the RRASOR. It was believed that having a validation sample from another country would increase generalizability. Hanson (1997) found a correlation of .25 with sexual recidivism and a ROC area of .67. Across all 8 samples, the correlations ranged from .19 to .30, with an average correlation of .27 for the four items chosen for the scale. The ROC areas ranged from .62 to .74, with a moderately predictive ROC area of .71, across all samples (Hanson, 1997).

Minnesota Sex Offender Screening Tool-Revised. The Minnesota Sex Offender Screening Tool-Revised (MnSOST-R; Epperson, Kaul & Hesselton, 1998) is a sex offender assessment instrument that includes historical and institutional information. It was developed to predict sexual recidivism among rapists and extra-familial child molesters. The MnSOST-R is made up of 16 items that tap into sexual and non-sexual criminal history, the victim's age and relationship to the offender, substance abuse, unstable employment, age and treatment history (Epperson, Kaul & Hesselton, 1998). These items are the number of sexual and sex-related convictions, length of sexual offending history, offender under supervision at time of any sexual offense, any sexual offense committed in a public place, force or threat of force used in any sexual offense, any sexual offense within a single incident that involved multiple acts perpetrated on a single victim, number of different age groups victimized across all sexual offenses, victim aged 13 to 15 years and offender 5 or more years older, victim a stranger in any sexual offense, adolescent antisocial behaviour, substantial drug or alcohol abuse in year prior to arrest and employment history (Barbaree, Seto, Langton & Peacock, 2001). Institutional items include discipline history while incarcerated, involvement in treatment

for substance use, involvement in sexual offender treatment and age at time of release (Barbaree et al., 2001). The fact that the scale looks at treatment participation while incarcerated makes this instrument unique. Scores on the MnSOST-R range from -14 to 30 (Barbaree et al., 2001)

Epperson et al. (1998) found a ROC area of .77 with the development sample (274 sexual offenders) after a six-year follow-up. When cross-validated on a new sample, with recidivists defined as those who had recidivated sexually and non-recidivists defined as those who had recidivated non-sexually or not at all, they found a ROC area of .73 with a six year follow-up ($n=220$ sexual offenders). When the sample was further divided into recidivists being defined as those who had recidivated sexually and non-recidivists defined as those who had not recidivated at all, they attained an ROC area of .78 (Epperson, Kaul, Huot, Hesselton, Alexander, & Goldman, 2000).

Within a sample of 215 treated sexual offenders released for approximately 4.5 years, Barbaree et al. (2001) found ROC areas of .65, .58 and .65 for any, serious (non-sexual violent and sexual), and sexual offending, respectively. ROC areas for serious and sexual recidivism, however, were not statistically significant.

Static-99. The Static-99 was created by Hanson and Thornton (1999; also see Hanson & Thornton, 2000) in order to increase the predictive accuracy of their two individual scales: the RRASOR & Thornton's Structured Anchored Clinical Judgement (Thornton's SACJ-Min; Grubin, 1998). Many of the items from both instruments were similar; therefore they combined the items and came up with a new scale containing 10 factors. These factors were: prior sexual offenses, four or more sentencing dates, current non-sexual violence, prior non-sexual violence, non contact sexual offenses, unrelated

victims, stranger victims, male victims, age (being young) and never having been married. Scores on the Static-99 range from 0 to 12 points (Hanson & Thornton, 1999). Four of the samples used to validate the RRASOR were used to validate the Static-99, three from Canada (Institut Philippe Pinel, Millbrook and the Oakridge samples) as well as a sample from Her Majesty's Prison in England and Wales.

The RRASOR, Thornton's SACJ-Min and the newly developed Static-99 were compared with regard to predictive accuracy. Hanson and Thornton (1999, 2000) found that the Static-99 was more accurate at predicting sexual and violent recidivism, than the other two measures (Static-99 sexual $r = .33$, ROC area $= .71$; violent $r = .32$, ROC area $= .69$). The RRASOR and Thornton's SACJ-Min predicted sexual ($r = .28$, ROC area $= .68$ and $r = .23$, ROC area $= .67$, respectively) and violent recidivism ($r = .22$, ROC area $= .64$ and $r = .22$, ROC area $= .64$, respectively) at equal rates (Hanson & Thornton, 1999).

Using survival analysis, it was found that the relationship of the Static-99 scores to sexual recidivism suggest that it can differentiate between low, medium-low, medium-high and high risk offenders. As scores on the Static-99 increase so does the recidivism rate for sexual and violent recidivism over a 5, 10 and 15 year period. The average rate of sexual recidivism found over a 5-year period was 18%, over 10 years the average sexual offense recidivism rate was 22%, and 26% for a follow-up period of 15 years.

Within a sample of 215 treated sexual offenders released for approximately 4.5 years, Barbaree et al. (2001) found ROC areas of .71, .70 and .70 for any, serious (non-sexual violent and sexual), and sexual offending, respectively. All ROC areas met statistical significance (Barbaree et al., 2001). ROC areas for sexual recidivism ranging from .73, with a sample of treated sexual offenders, to .76 with a sample of 1400 Swedish

sexual offenders have also been reported (Beech, Beckett & Fisher, 2000; Sjostedt & Langstrom, 2000; both cited in Barbaree et al., 2001).

Sex Offender Need Assessment Rating. The Sex Offender Need Assessment Rating (SONAR; Hanson & Harris, 2000, 2001) arose from the findings of the Hanson and Harris (1998) study on stable and acute dynamic factors. The SONAR is the first scale developed to evaluate and identify dynamic risk factors for sexual offenders. The social cognitive theory, as it has been applied to general criminal behavior and sexual offending, was used to guide the formation of this scale. Social cognitive theory dictates that recidivists are more likely to hold deviant schemata, or habitual patterns of thought and action that assist in facilitating their offending. It is believed that an offender will rely on this schema, or pattern of behaviours. It is therefore more likely that an offender will implement these patterns if they are well rehearsed, viewed as socially acceptable, and are consistent with the offenders' attitudes, values and beliefs (Hanson & Harris, 2000; see Andrews & Bonta, 1998 for a full discussion of social cognition theory).

The SONAR (Hanson & Harris, 2000) evaluates stable and acute dynamic risk factors of sexual recidivism. Stable dynamic factors that are assessed are intimacy deficits, negative social influences, attitudes tolerant of sexual offending, sexual self-regulation and general self-regulation. This measure is the first of its kind, in that it evaluates social influences and their effects on sexual recidivism. Acute dynamic factors include substance use, negative mood (depression, anxiety), anger/hostility, and opportunities for victim access. The risk factors chosen all have roots within empirical literature. Scores on the SONAR range from -4 to 14.

When tested on the same sample used to derive the factors for the SONAR (Hanson & Harris, 1998), significant differences were found between recidivists and non-recidivists. Recidivists were found to have significantly higher total SONAR scores than non-recidivists. Additionally, recidivists had significantly higher scores on each factor of the SONAR. With regard to ability to distinguish between the two groups, the SONAR showed moderately high ability ($r = .43$, ROC area = .74). The strongest effects were found for problems with general self-regulation, which suggests that low self-control may play a central role in the violation of conditional release (Hanson & Harris, 2000).

Generalizability of the results is difficult and problematic because the same sample used to develop the scale was used to validate it. Another issue with this instrument is that significant correlations were found with static measures. For example, the SONAR total score significantly correlated with age, IQ, the Static-99 and the V-RAG (Violence Risk Appraisal Guide: Harris, Rice, & Quinsey, 1993). It may be that the factors that the SONAR is measuring are simply proxies for more enduring and/or static factors. However, when age, IQ, the Static-99 score and the V-RAG score were statistically controlled for, it was found that the SONAR was, nevertheless, able to distinguish between recidivists and non-recidivists. Additionally, there is no way to translate scores obtained from the SONAR into expected recidivism probabilities. However, the SONAR can be used to adjust and improve upon actuarial scores, as suggested by Hanson (1998). As well, the SONAR is able to identify those factors that may be targeted in treatment, or at the very least, those factors that are dynamic in nature and thus susceptible to change.

Violence Risk Appraisal Guide. The Violence Risk Appraisal Guide (VRAG; Harris, Rice, & Quinsey, 1993) was designed to predict violent (including sexual) recidivism in violent offenders. The VRAG was developed using a sample of 618 adult male offenders. The sample was made up of mostly institutionalized, mentally disordered offenders. Using a variety of factors that were linked to violent recidivism, as well as factors thought to be clinically related, G. T. Harris et al. (1993) employed multiple regression techniques to choose the best predictors of violent recidivism. The VRAG is, therefore, made up of the twelve best predictors found in their study, including the PCL-R (Hare, 1991) score, and DSM III (American Psychiatric Association, 1980) diagnoses of schizophrenia and personality disorders (see Table 2 for a list of the items). These items are weighted using the system described by Nuffield (1982) and scores on the VRAG can range from -26 to +38. The offender's PCL-R score is the most heavily weighted among the items contained in the VRAG. The inclusion of PCL-R scores, as well as DSM III diagnoses makes the VRAG difficult to score unless this information is readily available, or the assessor is trained in these areas.

The predictive accuracy of the VRAG has been evaluated, and has shown success, with adult sexual offenders. Barbaree et al. (2001) evaluated the VRAG along with five other risk assessment measures with 215 adult sex offenders who were assessed at a prison-based sex offender treatment program. The sample of sex offenders was followed up for an average of 4.5 years. The VRAG was found to significantly predict sexual and violent recidivism ($ROC = .61$ & $.69$ respectively). Additionally, meta-analytic findings have also lent support to the use of the VRAG with sexual offenders. Hanson, Morton and Harris (in press) reported a moderate effect size ($d = .64$) for the VRAG's predictive

accuracy with five different studies including 1000 sexual offenders. A d of between .50 and .80 is considered moderate (Cohen, 1998).

Sex Offender Risk Appraisal Guide. The Sex Offender Risk Appraisal Guide (SORAG; Quinsey, Harris, Rice & Cormier, 1998) was developed to predict violent (including sexual) recidivism among adult sexual offenders. The SORAG is adapted from the VRAG and contains ten overlapping items, plus four new items (see Table 2 for list of items). The PCL-R and the DSM III diagnoses are included in the SORAG, and sexual deviancy as measured by phallometrics was added. The fourteen items chosen for the SORAG were selected in much the same way as those chosen for the VRAG, using stepwise multivariate techniques. The samples used to create the SORAG, however, were adult sex offenders. Again, similar to the VRAG, the items on the SORAG are weighted using the method described by Nuffield (1982). Scores on the SORAG range from -27 to +51.

Although the inclusion of PCL-R scores, DSM III diagnoses and the added addition of phallometric data makes the SORAG difficult to score unless this information is readily available, or the assessor is trained in these areas, success with the SORAG has been reported. Barbaree et al. (2001) reported that the SORAG significantly predicted sexual and violent (including sexual) recidivism in their sample of 215 adult male sexual offenders ($ROC = .70$ & $.73$, respectively). Additionally, meta-analytic findings from five studies, including 1104 sex offenders, found the SORAG to be a moderate predictor ($d = .68$) of sexual recidivism (Hanson, Morton & Harris, in press). It should be noted, however, that there was an outlier study that significantly effected the variability of the

results. When this study was removed, the SORAG decreased in value ($d = .60$), however, was still within the moderate range suggested by Cohen (1998).

Adolescent Risk Measures

There is great need for a risk assessment measure for adolescent sexual offending that is empirically based and validated (Becker & Hunter, 1997; Langstrom & Grann, 2000; Milloy, 1998). Several assessment tools are available to assess an adolescent's sexual interests or history (i.e. Adolescent Sexual Interest Card-sort, Sexual Fantasy Questionnaire, and Sexual History Form). Currently, however, there does not exist an empirically validated risk measure for adolescent sexual offenders (Epps, 1997; Hunter & Lexier, 1998; Worling & Curwen, 2001).

Clinicians have largely relied on checklists to determine an adolescent's risk of sexual recidivism. These checklists contain risk factors that were deemed to be related to risk based on clinical observation and experience (Worling & Curwen, 2001; Hunter & Lexier, 1998). Will (1999), in his discussion of assessment issues with adolescent sexual offenders, suggests that a comprehensive evaluation of the offender and his life should be done. Will suggests that many factors may contribute to the offender's risk and since the discovery of which factors are related to risk is still in the developmental stages, one must assess a wide range of factors. Will also suggests that developmental, family, sexual history, and motivation to change are some of the factors that should be investigated when assessing an adolescent sexual offender.

Ross and Loss (1991) suggested that risk evaluations should include such factors as victim selection characteristics, family functioning and emotional environment, social relationships and criminal history. Gray and Pithers (1993) and Lane (1997) also suggest

that it is important to assess the adolescent's peer relationships, family functioning, as well as aggression/anger and the youth's sexual fantasies. Furthermore, Graham, Richardson, and Bhate (1997) and Richardson and Graham (1997) suggest that family, peer relationships, anger, coping skills, deviant sexual arousal, sexual fantasies and attitudes should be included in a checklist designed to assess an adolescent's risk to offend sexually.

Thus, assessments of risk for adolescent sexual offending have been largely based on clinical judgement, with little or no empirical basis. However, Smith and Monastersky (1986) reported that when clinical judgement was used to predict an adolescent sexual offender's risk to re-offend sexually, the number of accurate case predictions was not reliably higher than chance. In fact, they found that the majority of prediction errors made were false positive, thus the clinicians in their study were over-predicting recidivism.

Recently, there has been interest in developing actuarial instruments to measure an adolescent's risk to sexually recidivate. Two groups of researchers have set out to fill the void, and have developed two different measures designed to assess risk for sexual recidivism in adolescent sexual offenders. Prentky, Harris, Frizzell, and Righthand (2000) developed the Juvenile Sex Offender Assessment Protocol (the J-SOAP) and Worling and Curwen (2001) have developed the Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR). The J-SOAP is a 23-item risk measure that is made up of variables rationally derived from the literature. These items make up four scales (Sexual Drive/Sexual Preoccupation, Impulsive, Antisocial Behaviour, Clinical/Treatment and Community Adjustment). A sample of 96 adolescents was used to evaluate the psychometric properties of the J-SOAP. Inter-rater reliability was reported using Pearson

r. Correlations between .59 and .91 were found for the 23-items. Internal consistency, using Cronbach's alpha was found to be between .68 and .85 for the four scales.

Validation of the predictive accuracy of the measure has not yet been possible, as the total recidivism rate in this sample was 11%, with only three adolescents committing another sexual offense.

Additionally, Worling and Curwen (2001) have developed an empirically guided clinical judgement measure designed to predict sexual recidivism among adolescent sexual offenders. The ERASOR is a 25-item scale that was designed to fill the void that exists with regard to risk assessment measures for adolescent sexual recidivism. An empirically-guided risk assessment tool, such as the ERASOR, is an instrument that is made up of a list of empirically validated risk factors. Recidivism estimates are then derived from the offender's rankings on the factors, as well as the available base rate for similar offenders. One of the major problems with this approach is that there is no way to translate the score the offender receives into recidivism probabilities, and thus the final judgement of risk remains with the clinician. Someone who has few or no factors is considered low risk, and someone who has most or all of the factors is considered high risk, however, there is no way to determine the risk of an offender with 'some' factors (Hanson, 1998). Additionally, one must consider what types of risk factors are present, and which are not. For example, if an offender openly admitted he was going to recidivate, yet had very few risk factors, he should be considered high risk. Despite these disadvantages, the empirically guided assessment provides evaluators with a list of risk factors that are related to recidivism, and thus risk prediction is not based solely on clinical judgement (Worling & Curwen, 2001). The measure has gained popularity with

clinicians that service adolescent sexual offenders, however, has yet to be empirically validated. The ERASOR was evaluated in this study.

The Youth Level of Service/Case Management Inventory (YLS/CMI: Hoge & Andrews, 2002) was also evaluated in this study. The YLS/CMI was created from, and is a youth version of the Level of Service Inventory – Revised (Andrews & Bonta, 1995), which is a well studied and psychometrically sound instrument for predicting recidivism in adult offenders. The YLS/CMI was designed to assist those working in the criminal justice field to better assess a youth's risk and need factors, and thus aid in forming case planning and management decisions. The YLS/CMI measures a youth's risk and need factors and summarizes them into an overall score that can be then translated into a risk category. The items contained in the YLS/CMI are those that have been shown in research to be the strongest predictors of crime committed by youth (Hoge & Andrews, 2002).

Although no current research exists evaluating the YLS/CMI with a sample of adolescent sexual offenders, the measure has shown success with regard to predicting recidivism in a sample of adolescent offenders. Jung and Rawana (1999) evaluated the 42-item YLS/CMI using 250 young offenders. The YLS/CMI was scored using direct interviews with the offender and his/her family as well as other available reports. Using a follow-up period of six months, 76% of the young offenders received a subsequent conviction. Jung and Rawana (1999) found the YLS/CMI and all of its scales to significantly be related to recidivism.

Theoretical Rationale for the Study

The theoretical rationale for this study was based on the General Personality and Social Psychology Model of Criminal Behaviour (Andrews & Bonta, 1998). This model takes into account social learning, cognitive behavioural and social cognition theories, and believes that criminal behaviour is a function of a variety of risk factors that interact with and influence each other. The 'Big Four' risk factors associated with criminal behaviour are a person's history, attitudes, personality and associates. These factors may also be influenced by one's family, school or leisure activities. The theory states that when attempting to predict or influence criminal behaviour, those criminogenic risk factors that are associated with such behaviour (i.e., the Big Four) should be taken into account.

Risk prediction is important, as knowing level of risk is important for classification purposes, as well as for service delivery, as interventions can be aimed to target those factors that may decrease an offender's likelihood of future criminal behaviour. Thus, when attempting to alter one's risk for criminal behaviour, practitioners should take the principles of effective intervention into account.

There are four principles of effective intervention: risk, need, responsivity and professional discretion (Andrews & Bonta, 1998). The risk principle states that an offender's level of risk should be matched to treatment intensity. High-risk cases should receive intensive levels of service, whereas low-risk cases should receive minimal levels of service. The need principle dictates that interventions target the individual's criminogenic needs. These needs, when altered, will likely influence an offender's risk level (i.e., antisocial attitudes). The responsivity principle states that interventions should

reflect the characteristics and learning style of the offender. When the style of teaching matches an offender's learning style, it is more likely that there will be a change in the targeted needs. Finally, the principle of professional discretion states that once the principles of risk, need and responsivity are taken into account, the final decision regarding risk is left up to the professional working with the offender. Decisions, therefore, can be made using additional information the professional may have that is not taken into account by the other three principles.

Both the ERASOR and the YLS/CMI contain a variety of risk and need factors that overlap with the Big Four correlates of crime. Both measures, therefore, provide criminal justice professions with a risk category for the offender (thus tailoring classification and treatment to risk level; risk principle), as well as a list of criminogenic needs that are potential treatment targets (need principle). Each measure also contains a professional override, to be used when the assessor is aware of factors that are not contained in the measures (professional discretion). This study was interested in whether or not these measures could predict recidivism in adolescent sexual offenders. The validation of risk assessment instruments for use with adolescent sex offenders has important implications both for risk prediction and service delivery.

Purpose of the Study

Currently, a validated measure to assess risk in adolescent sexual offenders does not exist. This study evaluated two popular adult measures, the RRASOR and the Static-99, and their ability to predict recidivism in adolescent sexual offenders. These adult measures were chosen, as they are easy to score instruments that are made up of items that are easily gleaned from file information. The Estimate of Risk of Adolescent Sexual

Offense Recidivism (ERASOR: Worling & Curwen, 2001) is a clinically guided risk assessment measure for adolescent sexual offenders. The ERASOR identifies and assesses factors that the literature suggests are related to sexual and non-sexual recidivism (i.e., antisocial interpersonal orientation, ever sexually assaulted a child or stranger). The list of factors assessed with the ERASOR is not exhaustive and thus further research may prove new factors to be important, and others to be unrelated to risk. Currently there is no information with regard to the predictive accuracy of the ERASOR. Thus, this study evaluated the ERASOR's ability to predict recidivism in adolescent sexual offenders.

Given that adolescent sexual offenders also commit other types of crime (Rubinstein, Yeager, Goodstein, & Lewis, 1993, Worling & Curwen, 2000) a measure of general delinquency was also evaluated in this study. The Youth Level of Service/Case Management Inventory (YLS/CMI: Hoge & Andrews, 1994) is an established measure that assesses risk for re-offense for general young offenders. Its predictive validity with adolescent sexual offenders has yet to be established.

The purpose of this retrospective study was to evaluate the psychometric properties of the RRASOR, Static-99, ERASOR and the YLS/CMI with adolescent sexual offenders. The reliability and validity of the measures was evaluated through inter-rater reliability, internal consistency and concurrent validity.

Concurrent validity was evaluated by examining the association between the results of the three standardized assessment measures with each other, as well as with the ERASOR, which is not yet a standardized measure. Additionally, the relationship among the scales was evaluated to determine if those scales that theoretically should be related,

are in fact related (i.e., psychosocial functioning scale of the ERASOR with personality/behaviour scale of the YLS/CMI).

The study investigated each measure's ability to predict different types of re-offending (i.e., any, sexual, violent, and general) within a sample of adolescent sexual offenders, using retrospective data. The predictive validity of the two adult and two adolescent measures was evaluated using their total scores, scales and ratings where applicable.

Hypotheses

Several hypotheses were made based on past research, as well as the intent of each measure.

1. Given that, currently, there is no research with regard to the RRASOR or Static-99 with adolescent sexual offenders, no specific hypotheses were made.
2. The ERASOR was designed to predict sexual recidivism in adolescent sexual offenders; thus it is hypothesized that the ERASOR would predict sexual recidivism in this sample.
3. The YLS/CMI was designed to predict recidivism in adolescent offenders, and has shown some success in this regard, thus it was hypothesized that the YLS/CMI would predict any and general recidivism in this sample.

Method

Overview

All data were archival and coded from files kept by the Thistletown Regional Centre, of which the Sexual Abuse: Family Education and Treatment (SAFE-T) program is a part. The SAFE-T program is a specialized community based program that provides assessment that is specific to sexual abuse. Additionally, SAFE-T offers treatment, consultation and long term support to child victims of incest and their families (including the adult incest offender); children with sexual behaviour problems and their families; and adolescent sexual offenders and their families. SAFE-T is situated in the Greater Toronto Area. A number of background variables were coded from the intake assessment and available file information up to intake (see Appendix A for the coding form used). The information that was gathered included offender characteristics (i.e., history of offending, treatment history), family characteristics (current living arrangements, family composition), and referral offense characteristics (i.e., type of sexual offense, gender of victim). Analyses were conducted to determine the inter-rater reliability, internal consistency, and concurrent and predictive validity of two risk assessment instruments designed to predict recidivism in adolescents, as well as two risk assessment instruments designed to predict sexual recidivism in adult sexual offenders. The two adolescent measures were the Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR) and the Youth Level of Service/Case Management Inventory (YLS/CMI). The two adult instruments were the Rapid Risk Assessment of Sexual Offense Recidivism (RRASOR) and the Static-99.

Participants

Subjects were 96 male adolescents who received an intake assessment at the SAFE-T program between August 1988 and July 1996 after committing a sexual offense. Referral offenses were committed between June 1987 and June 1995. Seventy-seven files contained enough information to code all four measures. Of the 19 subjects who were excluded from the study, the clinical records department was unable to locate six files, and one file did not contain a SAFE-T assessment. Additionally, the researcher was unable to link one subject to CPIC data.

Subjects were an average of 15.22 years old ($SD = 1.47$), with a range of 12 to 18 years old, at the time of assessment. The majority of the sample was referred to SAFE-T by probation (54.4%), followed by a closed custody facility, the Children's Aid Society and another treatment facility. One adolescent was referred by his lawyer and another two adolescents were referred by multiple sources. Of the 25 adolescents for whom there was substance use information, forty-four percent were using substances, 16% alcohol, 4% drugs, and 24% both alcohol and drugs.

The majority of the adolescents were living with their family at the time of their referral offense and at the time of assessment. Twenty-six adolescents had families that were intact (both biological parents still together), whereas twelve were wards of the crown. When substance abuse was reported in the family, fathers were the most common of the adolescent's family members to be abusing substances. Additionally, when criminal behaviour was reported in the family, fathers were the most common perpetrators of such behaviour. Family characteristics are displayed in Table 3.

Measures

Risk assessment instruments

Rapid Risk Assessment of Sexual Offense Recidivism. The RRASOR (Hanson, 1997) is a four-item scale that was developed as a screening tool for sexual offense recidivism in adult male sexual offenders. The RRASOR was developed using results from the Hanson and Bussiere (1996) meta-analysis on factors related to sexual recidivism. The four items are prior sexual offenses, which is scored on an increasing scale from 0 to 3, age at release, any male victims, and any unrelated victims, all scored on a dichotomous (0-1) scale. Scores on the RRASOR range from 0 to 6 (see Appendix B). Barbaree, Seto, Langton and Peacock (2001) report high inter-rater reliability for the RRASOR total score ($r = .94$). The researchers also provide support for the measure's concurrent validity. The RRASOR was significantly correlated with the Static-99, the VRAG, the SORAG, The MnSOST-R and the Multifactorial Assessment of Sex Offender Risk for Recidivism (MASORR). Hanson (1997) reported a ROC area of .67 and a correlation of .25 for the RRASOR with the adult validation sample.

Static-99. The Static-99 (Hanson & Thornton, 1999, 2000) was also developed as a tool to assess risk in adult male sexual offenders (see Appendix C). The Static-99 is comprised of 10 items chosen from the RRASOR and Thornton's Structured Anchored Clinical Judgement (Thornton's SACJ-Min: Grubin, 1998). The four RRASOR items are included in the Static-99, and scoring is the same. The other 6 items include prior sentencing dates, any convictions for non-contact sexual offenses, index non-sexual violence, prior non-sexual violence, any stranger victims, and being single. All items, with the exception of prior sex offenses, are scored on a dichotomous (0-1) scale. Total scores range from 0 to 12. Scores on the Static-99 are translated into risk categories with

those scoring 0 or 1 categorized as low risk, those scoring 2 or 3 categorized as medium-low risk, those scoring 4 or 5 categorized as medium-high risk and those scoring 6 and over categorized as high risk. Using the Pearson correlation coefficient, Barbaree et al. (2001) found support for the inter-rater reliability of the Static-99 total score ($r = .90$). Additionally support was found for the measure's concurrent validity as it was significantly correlated with five different risk assessment measures that are used to assess risk in sex offenders (RRASOR, VRAG, SORAG, MnSOST-R & MASORR).

The Estimate of Risk of Adolescent Sexual Offense Recidivism. The ERASOR (Worling & Curwen, 2001: Appendix D) is an empirically guided risk measure that was designed to assess an adolescent sexual offender's risk of sexually recidivating. The measure provides evaluators with a list of factors that are empirically linked to recidivism.

The ERASOR was designed specifically to evaluate a 12-18 year old adolescent sexual offender's risk to re-offend sexually. Both research on adolescent and adult sexual offenders and clinical experience were used to create the list of risk factors found within the ERASOR. Twenty-five items are evaluated, and together they comprise 5 scales: Sexual Interests, Attitudes, and Behaviours; Historical Sexual Assaults; Psychosocial Functioning; Family/Environmental Functioning; and Treatment. Although there is no mathematical scoring guide for the ERASOR, for purposes of this study each item was scored on a 0-2 scale, with 0 indicating not present, 1 indicating possibly or partially present and 2 indicating presence of the item.

The Sexual Interests, Attitudes and Behaviours scale contains four items: deviant sexual interests (younger children, violence or both), obsessive sexual

interests/preoccupation with sexual thoughts, attitudes supportive of sexual offending, and unwillingness to alter deviant sexual interests/attitudes. This scale has a range of 0 to 8. The Historical Sexual Assaults scale is made up of 9 items that tap into past sexual behaviour, and ranges from 0 to 18. These items are: ever sexually assaulted two or more victims, ever sexually assaulted same victim two or more time, prior adult sanctions for sexual assaults(s), threats of, or use of, violence/weapons during sexual offense, ever sexually assaulted a child, ever sexually assaulted a stranger, indiscriminate choice of victims, ever sexually assaulted a male victim (for male offenders only), and diverse sexual-assault behaviours. The Psychosocial Functioning scale includes items assessing antisocial interpersonal orientation, lack of intimate peer relationships/social isolation, negative peer associations and influences, interpersonal aggression, recent escalation in anger or negative affect, poor self-regulation of affect and behaviour (impulsivity). This scale ranges from 0 to 12. The Family/Environmental Functioning scale includes items assessing high stress family environment, problematic parent-offender relationship/parental rejection, parent(s) not supporting sexual-offense-specific assessment/treatment, and environment supporting opportunities to re-offend sexually. This scale has a range of 0 to 8. Finally, the Treatment scale is made up of two items and ranges from 0 to 4: no development or practice of realistic prevention plans/strategies, and incomplete sexual-offense-specific treatment. Case-specific factors can also be included when evaluating an adolescent sexual offender's risk of recidivism (i.e., the offender openly admitting that he will re-offend).

Some preliminary psychometric data is available for the ERASOR. Worling (2002) evaluated the inter-rater reliability of the measure using 103 adolescents. Twenty-

eight clinicians assessed the adolescents, with each adolescent assessed by two of the raters. Raters interviewed the adolescents in order to score the ERASOR. ICCs ranged from .55 to .96. Two items had ICCs below .60: recent escalation in anger or negative affect, and problematic parent-offender relationships. An ICC of .91 was reported for the overall risk rating. Bourgon (2002) also evaluated the psychometric properties of the ERASOR with 99 adolescents from 14 different treatment agencies. Support for the measure's internal consistency was found (Cronbach's $\alpha = .79$). Additionally, the ERASOR was significantly correlated to the YLS/CMI ($r = .63$), the RRASOR ($r = .44$) and the Static-99 ($r = .55$). Using a sample of 20 adolescents Bourgon (2002) found a significant test-retest correlation of .58 for the total ERASOR score, with a mean of 260 days between test periods. Correlations for the five ERASOR scales ranged from .74 (Psychosocial Functioning) to .30 (Family/Environmental Functioning).

Youth Level of Service/Case Management Inventory. The YLS/CMI (Hoge & Andrews, 2002; Appendix E) is a measure designed to assist professionals in the criminal justice system in assessing a young offender's risk for criminal behaviour and his level of criminogenic needs. This measure provides a tool for making decisions within the criminal justice system about the adolescent. The YLS/CMI contains 42 individual items that are scored on a dichotomous (0-1) scale and comprises 8 different scales. The scales assessed by the YLS/CMI are prior and current offenses/dispositions (range 0-5), family/parenting (range 0-6), education/employment (range 0-7), peer relations (range 0-4), substance abuse (range 0-5), leisure/recreation (range 0-3), personality/behaviour (range 0-7), and attitudes/orientation (range 0-5) (See Appendix E for the list of individual items).

Support has been provided for the psychometric properties of the YLS/CMI. Inter-rater agreement has been reported for a sample of 33 adolescents assessed by two raters (Poluchowicz, Jung, and Rawana, 2000, as cited in Hoge & Andrews, 2002). Total risk/need scores produced an intra-class correlation coefficient of .75. Additionally, ICCs ranging from .50 to .92 were found for the measure's scales. Lindsey (2000, as cited in Hoge & Andrews, 2002) has provided support for the YLS/CMI's construct validity. The YLS/CMI was significantly correlated with the Psychopathy Checklist (Hare, Forth, & Kosson, 1994) and the Behaviour Problem scale from the Brief Psychiatric Rating Scale for Children (Overall & Gorham, 1988). With follow-up periods ranging from one month to 3.5 years, the YLS/CMI significantly predicted re-offending rates (Costigan, 1999; Costigan & Rawana, 1999; Lindsey, 2000, as cited in Hoge & Andrews, 2002). Jung and Rawana (1999) also found that scores on the YLS/CMI significantly predicted any recidivism in juvenile offenders.

Data collection

Consent to use the file information for research purposes was received from the adolescents, and their parents where required, at the time of assessment (see Appendix F for consent forms). Prior to beginning data collection, ethical approval was sought and obtained from Carleton University and the SAFE-T Program. Prior to data collection both the principal investigator and one of the authors of the ERASOR coded several files. Scores were then compared and discussed to ensure that the principal investigator was correctly scoring the instruments. Inter-rater reliability was determined using a random sample of approximately 20% of the total sample from the present study. The second

rater was a male clinical psychologist with extensive experience with adolescent sexual offenders.

Two data sources were used to code data for this study: SAFE-T clinical files maintained by the Thistlethorn Regional Centre's Records Department and the Canadian Police Information Centre (CPIC) records, maintained by the Royal Canadian Mounted Police. The clinical files contain an intake assessment performed by one of the staff at SAFE-T. Information in these assessments is compiled from interviews with the adolescent, his family and probation officer (where appropriate), psychological test results, pre-disposition reports, and school reports where available. Information dating back one year from the intake assessment was used to code the YLS/CMI, whereas information dating back six months was used to code the ERASOR. Given that both the RRASOR and Static-99 are based on historical data, all information up to the assessment date was used to code these two measures. Where there was no indication of the presence of an item in the available file information, the item was scored as not present. Scoring of each of the measures followed the coding procedures outlined in their respective coding manuals, except for the RRASOR, in which case the coding manual for the Static-99 (Phenix, Hanson, & Thornton, 2000) was used for the overlapping items.

Recidivism data were gathered through the Canadian Police Information Center (CPIC) up to October 1997. CPIC data provides a complete list of charges and/or convictions for an offender; however, it does not provide the specifics of the offense (i.e., victim characteristics). The SAFE-T program is a community-based program and therefore the follow-up period began at the date of intake assessment. The follow-up period ranged from 15 months to 111 months, with an average of 68.1 months ($SD =$

22.0). Recidivism, for the purposes of this investigation, was defined as any new charges incurred during the follow-up period. New charges include those incurred for sexual, non-sexual violent (i.e., assault, robbery, forcible confinement), and non-violent (i.e., theft, break and enter, possession of a weapon, breach of probation, trafficking narcotics) crimes. Researchers at SAFE-T had previously collected the CPIC data, after obtaining a judge's consent as required by law. The principal investigator was blind to recidivism status until after all other coding was complete.

Results

Plan of analyses

After presenting descriptive statistics describing the characteristics of the sample, results will focus on inter-rater reliability, internal consistency, concurrent validity and finally the predictive accuracy of the four risk assessment measures.

Descriptive statistics

Historical characteristics of the participants are presented in tables 4 through 7. Means and standard deviations are reported for continuous variables whereas percentages are reported for dichotomous variables. Due to missing file information, these results are based on sample sizes ranging from 9 to 82.

Prior offenses. Table 4 illustrates descriptive characteristics of the offenders' prior offenses. The adolescents committed a similar number of prior sexual and non-sexual offenses; however, the range of sexual offenses was much larger.

Abuse history. Table 5 presents information on the histories of sexual and physical abuse reported by the adolescents. Sexual abuse was defined as any unwanted sexual contact that the youth had experienced in the past, or was presently experiencing. Almost half the sample reported being sexually abused, with the majority of the sexual abuse being committed by a perpetrator that was not part of the family. Physical abuse was defined as any type of physical assault that was experienced by the youth, including punishment that exceeded spanking with one hand on the child's bottom (i.e., spanking the child with a belt). Over half the sample indicated a history of physical abuse. The majority of the time, the perpetrator was a member of the adolescent's family.

Agency involvement and treatment history. Table 6 presents the adolescents history of involvement in community agencies and treatment. The majority of the adolescent's had prior agency involvement. The Children's Aid Society (CAS) was the agency most often cited as being involved with the youth, or his family. Approximately one of four adolescents had had any form of treatment at all (i.e., for behavioural problems other than sexual), with only one in ten having previously been in sexual specific treatment. Regardless of the type of treatment the adolescent had been involved in, less than a quarter of those in treatment completed it.

Referral offense. Table 7 details the type of offense that resulted in the adolescent being referred to SAFE-T for an assessment (here after referred to as the referral offense). At the time of their referral offense, the adolescents were a mean of 14 years old ($SD = 1.4$). The majority of the offenders targeted extra-familial, younger and female victims. Only one offender targeted both intra- *and* extra-familial victims, multiple age groups *and* both male and female victims. One offender targeted both intra- and extra-familial victims *and* both male and female victims. Two offenders targeted both intra- *and* extra-familial victims *and* multiple age groups.

The majority of the adolescents committed hands-on offenses (any offense that involved direct physical contact with the victim). Almost half the sample did not use violence during the commission of their offense, although one in four of the adolescents pushed or shoved their victims. A small percentage of the adolescents used or threatened to use a weapon. Interestingly, 17 adolescents had an accomplice to their referral offense. Only 2 adolescents were known to have used substances when committing their offense, one was using drugs, the other using both drugs and alcohol. There was a wide

range with regard to the frequency and duration of offending against the same victim.

Approximately 61% of the sample received some type of disposition for their referral offense, whereas almost 20% were never charged or had the charges dropped.

Inter-rater reliability

Inter-rater reliability was examined for 23.4% ($n = 18$) of the sample for which there was complete data ($N = 77$). Inter-rater reliability was analyzed by calculating the percentage agreement between the raters on each item, and employing a single measure two-way random effect model (absolute agreement) intra-class correlation coefficient for interval data (Shrout & Fleiss, 1979) and kappas for dichotomous variables (see Tables 8-10). According to Banerjee, Capozzoli, McSweeney and Sinha (1999), a kappa above .75 indicates excellent agreement beyond chance, kappas between .40 and .75 indicate fair to good agreement, and kappas below .40 indicate poor agreement beyond chance.

RRASOR. For the RRASOR items, inter-rater reliability was found to be perfect, with 100% agreement for each item and the total score (see Table 8).

Static-99. The Static-99 had perfect inter-rater reliability for eight of the ten scale items. Raters disagreed on two items, prior sex offenses and index non-sexual violence. The ICC for the total Static-99 score was significant. Raters agreed the majority of the time on the total score (see Table 8).

ERASOR. Percent agreement on the ERASOR ranged from 22.2% to 100% (see Table 9). Eight items on the ERASOR had agreement below seventy-five percent: deviant sexual interests, attitudes supportive of sexual offending, unwillingness to alter deviant sexual interests/attitudes, antisocial interpersonal orientation, lack of intimate peer relationships/social isolation, interpersonal aggression, high-stress family

environment, and an environment supporting opportunities to re-offend sexually. When disagreements were found, they were regarding whether the item was present or partially present, or between whether the item was partially present or not present. No disagreements were found with regard to whether the item was present vs. not present. Three variables were found to have non-significant intra-class correlation coefficients: unwillingness to alter deviant sexual interests/attitudes, interpersonal aggression and recent escalation in anger or negative affect (see Table 9).

– *YLS/CMI*. Percent agreement on the YLS/CMI ranged from 22.2% to 100% (see Table 10). Seven items had agreement below seventy-five percent. The seven items are: inconsistent parenting, no/few positive acquaintances, physically aggressive, short attention span, inadequate guilt feelings, anti-social/pro-criminal attitudes, and not seeking help. Since the individual items are dichotomous, the disagreements that were found were with regard to whether the item was present or absent. Eight of the YLS/CMI items had kappas below .40: difficulty controlling behaviour, inconsistent parenting, delinquent friends, inflated self-esteem, short attention span, poor frustration tolerance, inadequate guilt feelings, and not seeking help. All scales had significant intra-class correlations.

Internal consistency

The internal consistency of the two adolescent scales was evaluated using Cronbach's alpha, which provides the average correlation of the items with the scale. Internal consistency for the RRASOR and Static-99 was not evaluated as they both measure a range of different concepts and therefore, would not be internally consistent.

For example, the RRASOR is three items (prior offenses, unrelated victim and male victim); all of these measure different concepts.

Cronbach's alpha for the overall ERASOR score was .74. None of the items, when deleted, increased alpha. Internal consistency of each scale was also examined. The Sexual Interests, Attitudes and Behaviours scale had an alpha of .60, the Historical Sexual Assaults scale had an alpha of .58, the Psychosocial Functioning scale had an alpha of .65, and the Family/Environmental Functioning scale had an alpha of .52. Internal consistency was not run for the Treatment scale, as the majority of the adolescents had not completed sexual specific treatment, nor did they have relapse prevention plans, therefore there was little variability within the Treatment scale. Within each scale, none of the items, when deleted increased the alpha level.

Cronbach's alpha for the overall YLS/CMI score was .86. The alpha level did not increase with the removal of any of the items. Internal consistency of each scale was also examined. The Prior and Current Offenses/Dispositions scale had an alpha of .61, the Family Circumstances/Parenting scale had an alpha of .61, the Education/Employment scale had an alpha of .59, the Peer Relations scale had an alpha of .59, the Substance Abuse scale had an alpha of .58, the Leisure/Recreation scale had an alpha of .67, the Personality/Behaviour scale had an alpha of .64, and the Attitudes/Orientation scale had an alpha of .56. Within each scale none of the items, when deleted, increased alpha.

Concurrent validity

The correlations between the four risk instruments and scales are presented in Table 11. The correlations reported are for scores rather than risk categories. The RRASOR and the Static-99 were significantly correlated. The RRASOR was also

significantly correlated with the ERASOR. The RRASOR and the YLS/CMI were not significantly correlated. The Static-99 was significantly correlated with both the ERASOR and the YLS/CMI. Additionally, the ERASOR and the YLS/CMI were significantly correlated.

Relationship among the Scales

The relationship among the scales was examined. Within the ERASOR, the Deviant Attitudes scale was significantly correlated with the Historical Sexual Assaults scale and the Psychosocial Functioning scale. The Historical Sexual Assaults scale was also significantly correlated with the Psychosocial Functioning scale.

Within the YLS/CMI prior and current offenses/dispositions scale was significantly correlated with all the scales, except the substance abuse scale. The family/parenting scale was significantly related to all the scales. The education/employment scale was significantly related to all the scales, except the substance abuse scale. The peer relations scale was significantly correlated with all of the scales. The substance abuse scale was significantly correlated with family/parenting scale, the peer relation's scale and the personality/behavior scale. With the exception of the above-mentioned significant correlations, the personality/behaviour and the attitudes/orientation scale were significantly correlated.

Across the two measures (ERASOR & YLS/CMI) the Deviant Attitudes scale was significantly correlated to the education/employment scale, the peer relations scale, the personality/behaviour scale and the attitudes/orientation scale. The Historical Sexual Assaults scale was significantly correlated with the family/parenting scale, the peer relations scale, the substance abuse scale, and the personality/behaviour scale. The

Psychosocial Functioning scale was significantly correlated with all of the YLS/CMI scales. The Family/Environmental Functioning scale was significantly correlated with all the YLS/CMI scales except three: prior/current offenses, substance abuse, and personality/behaviour. Finally, the Treatment scale was not significantly correlated with any of the YLS/CMI scales.

Predictive accuracy

Each of the four risk assessment measures' predictive accuracy was examined by analyzing their relationship to recidivism, specifically, five different measures of recidivism: any, sexual, violent, violent plus sexual and general. Any recidivism was defined as a criminal charge for any type of re-offense. Sexual recidivism was defined as any charge for a sexual offense as defined by the Canadian Criminal Code. Violent recidivism was defined as any charge for a non-sexual violent crime (i.e., assault, robbery, forcible confinement, uttering threats). Violent, including sexual recidivism combined the violent and sexual recidivistic groups. Finally, general recidivism was defined as any charge for a non-violent, non-sexual offense (i.e., theft, break and enter, possession of a weapon, drug trafficking, DUI). It was deemed important to evaluate different types of recidivism as past research has shown that adolescent sex offenders as well as adult sex offenders commit different types of re-offenses (Rubinstein, Yeager, Goodstein, & Lewis, 1993; Hanson & Bussiere, 1998).

For each type of recidivism, the predictive accuracy of each of the four risk assessment instruments was examined in the following manner. First, descriptive statistics for the recidivists and non-recidivists on each item, scale, and total score are presented. For dichotomous items, the percent of recidivists and non-recidivists who

scored positively for each item is presented. For continuous items, means and standard deviations are presented. Means, standard deviations and percentages are presented here for descriptive purposes only; no statistical tests were conducted on the tests' individual items.

Second, each instrument's relationship to recidivism was evaluated with correlations, ROC curves, and survival analyses. Correlations are presented for comparison purposes with studies that have not included other analyses (i.e., ROC analyses), and because of the ease with which they are understood. It is noted, however, that correlational analyses are influenced by very low or very high base rates. Caution is thus warranted when there is a low base rate, as is typically the case with sexual recidivism.

Relative Operating Characteristic (ROC) Curves are presented as they are relatively unaffected by base rates and selection ratios, and are therefore the appropriate statistic for data with low base rates (Mossman, 1994; Rice & Harris, 1995). ROC curves plot the sensitivity (true positive probability) of a prediction as a function of specificity (false positive probability) (Swets, Dawes & Monahan, 2000). The ROC statistic can be thought of as the Area Under the Curve (AUC) with .5 indicated chance prediction and 1.0 indicating perfect prediction. In essence the AUC value is the probability that a randomly selected recidivist will have a higher score than a randomly selected non-recidivist. Typically, when considering an ROC as an effect size, an AUC of .60 is considered marginal, an AUC from .61 to .79 moderate, and an AUC of .80 and above is considered a large improvement over chance (Hildebrand, de Ruiter, & de Vogel, 2002).

Kaplan-Meier survival curves estimates are presented as the cumulative survival function represents the proportion of cases that have not re-offended as a function of time since assessment. The log rank statistic tests the differences between the survival curves among the groups (in this case risk levels). The log rank statistic is a chi-square statistic and thus reported as such. Finally, a stepwise logistic regression was performed in order to determine which scales were the strongest predictors of recidivism.

Any Recidivism

RRASOR

A total of eighty adolescents had valid RRASOR scores. Forty-one (51.3%) of the 80 adolescents recidivated. Table 13 presents the descriptive statistics for recidivists and non-recidivists for the total score and each item. The average score for prior sexual offenses was .12 ($SD = .46$), ranging from 0 to 3. The RRASOR scores were positively skewed ($skew = 1.27$, $SE = .27$), indicating a larger proportion of lower scores among the sample.

RRASOR scores were not significantly correlated with any recidivism and the area under the curve (AUC) was just above chance level (see Table 14). Survival curves were not performed for the RRASOR scores, as they do not translate into risk categories.

Static-99

A total of eighty adolescents had valid Static-99 scores. Forty-one (51.3%) of the 80 adolescents recidivated. Table 15 displays the descriptive statistics for recidivists and non-recidivists for the total score and each item. All adolescents scored positively on two of the Static-99 factors: young and single. A greater percentage of recidivists had been convicted of prior non-sexual violence than non-recidivists. Approximately 10% more

recidivists targeted a stranger victim. The Static-99 scores were positively skewed ($skew = 1.12$, $SE = .27$), indicating a larger proportion of lower scores among the sample.

Given that all adolescents scored at least 2 on the Static-99, risk categories were modified. A score of 0 to 4 was defined as low risk, 5-6 as moderate risk, and 7 and over as high risk. The majority of the sample was rated as low risk followed by moderate risk and then high risk (see Table 15). Approximately 48% of the low risk offenders recidivated, 64.3% of those classified as moderate risk recidivated, and two of the four adolescents rated high-risk recidivated. The Static-99 total score and ratings were not significantly correlated to recidivism and the AUCs were just above chance level (see Table 14). The survival curve estimates, plotted in Figure 1, revealed no significant differences in the failure rates of the risk groups for any recidivism ($\chi^2(2, N = 80) = .48$, $p = .78$).

ERASOR

A total of seventy-eight adolescents had valid ERASOR scores. Forty-one (52.6%) of the 78 adolescents recidivated. Table 16 presents descriptive statistics for recidivists and non-recidivists for the total score, scales and each item. The ERASOR scores were normally distributed, as indicated by a skewness of zero ($SE = .27$). Recidivists had a higher mean score on items evaluating ever sexually assaulting a child, indiscriminant choice of victims, male victims, negative peer associations and influences, interpersonal aggression, and impulsivity. Non-recidivists had a higher mean on the item evaluating diverse sexual assault behaviours.

Ratings on the ERASOR ranged from 1 to 3, with 3 indicating high risk. ERASOR ratings are not based on a score, but rather on the assessor's judgment of risk

based on the factors that are present. The average ERASOR rating was 2.13 ($SD = .74$). Recidivists had a higher mean rating score than non-recidivists did (see Table 16).

The ERASOR total score, scales and risk rating were not significantly correlated and the AUCs were just above chance level for any recidivism (see Table 14). The survival curve estimates, plotted in Figure 2, revealed no significant differences in the failure rates of the risk groups for any recidivism ($\chi^2(2, N = 78) = 1.28, p = .53$). When all five of the ERASOR scales were put into a stepwise logistic regression, none of the scales met the criteria for inclusion (a probability of .05 for entry and .10 for exclusion).

YLS/CMI

A total of seventy-seven adolescents had valid YLS/CMI scores. Forty (51.9%) of the 77 adolescents recidivated. Table 17 presents the descriptive statistics for recidivists and non-recidivists for the total score, scales and each item. Scores on the YLS/CMI were normally distributed ($skew = .10, SE = .27$).

A larger percentage of recidivists were observed on items evaluating three or more current convictions, difficulty controlling the adolescent's behaviour, poor parental relationships, low achievement, truancy, delinquent friends, no/few positive acquaintances, limited organized activities, short attention span, verbal aggression, poor frustration tolerance, anti-social attitudes, and not seeking help. A larger percentage of non-recidivists were observed on items evaluating detention prior to their assessment, three or more prior convictions, inconsistent parenting, and inadequate guilt feelings.

Ratings on the YLS/CMI ranged from 1 to 3, with 3 indicating high risk.

YLS/CMI ratings are based on the total score, with a low rating for those who scored between 0 and 8, a moderate rating for those who scored between 9 and 22, and a high

rating for those who scored between 23 and 34. Recidivism base rates increased as the risk rating increased (see Table 17). The YLS/CMI total score, scales and rating were not significantly correlated with any recidivism. The AUC for the YLS/CMI total score, scales and rating were not significant (see Table 14).

The survival curve estimates, plotted in Figure 3, revealed no significant differences in the failure rates of the risk groups for any recidivism ($\chi^2(2, N = 77) = 1.39$, $p = .50$). The high-risk adolescents appear to all have recidivated, however, only one adolescent from that category was available for follow-up up to 95 months, at which time he recidivated. Therefore, it appears as though all the high-risk adolescents recidivated, when this is not in fact the case. When all eight of the YLS/CMI scales were put into a stepwise logistic regression, none of the scales met the criteria for inclusion (a probability of .05 for entry and .10 for exclusion).

Sexual Recidivism

RRASOR

A total of eighty adolescents had valid RRASOR scores. Thirteen (16.3%) of the 80 adolescents recidivated sexually. Table 18 displays the descriptive statistics for recidivists and non-recidivists for the total score and each item. Non-recidivists had higher average prior sexual offense scores than did the recidivists.

RRASOR scores were not significantly correlated with sexual recidivism and the AUC was just above chance level (see Table 19). Survival curves were not performed for the RRASOR scores.

Static-99

A total of eighty adolescents had valid Static-99 scores. Thirteen (16.3%) of the 80 adolescents recidivated sexually. Table 20 displays the descriptive statistics for recidivists and non-recidivists for the total score and each item. Non-recidivists had higher average prior sexual offense scores than did the recidivists and a higher proportion of recidivists had been convicted of prior non-sexual violence.

Using the modified rating, 14.1% of the low risk offenders recidivated, 28.6% of the moderate risk offenders recidivated, and none of the high-risk offenders recidivated. Static-99 total scores and risk ratings were not significantly correlated to sexual recidivism and the AUCs were not significant (see Table 19). The survival curve estimates, plotted in Figure 4, revealed no significant differences in the failure rates of the risk groups for sexual recidivism ($\chi^2(2, N = 80) = 1.48, p = .48$).

ERASOR

A total of seventy-eight adolescents had valid ERASOR scores. Thirteen (16.7%) of the 78 adolescents recidivated sexually. Table 21 presents descriptive statistics for recidivists and non-recidivists for the ERASOR total score, scales and each item. Sexual recidivists had a higher mean on items evaluating deviant sexual interests, antisocial interpersonal orientation, and impulsivity. Non-recidivists had a higher mean the item evaluating threats of, or use of, violence/weapons during sexual offense. Given that all adolescents were scored at assessment, having no prevention plans and incomplete sexual-offense-specific treatment mean scores were similar for recidivists and non-recidivists.

Almost 6% of those rated low risk recidivated, 23.5% of those rated moderate recidivated, and only 14.8% of those rated high-risk recidivated. Neither the ERASOR total score, scales nor the risk ratings were significantly related to sexual recidivism. Additionally, none of the AUCs were significant (see Table 19 & 20). The survival curve estimates, plotted in Figure 5, revealed no significant differences in the failure rates of the risk groups for sexual recidivism ($\chi^2(2, N = 78) = 2.62, p = .27$). When all five ERASOR scales were put into a stepwise logistic regression, none of the scales met the criteria for inclusion (a probability of .05 for entry and .10 for exclusion).

YLS/CMI

A total of seventy-seven adolescents had valid YLS/CMI scores. Thirteen (16.9%) of the 77 adolescents recidivated sexually. Table 22 presents the descriptive statistics for recidivists and non-recidivists for the total score, scales and each item.

A larger percentage of recidivists were observed on items evaluating three or more current convictions, difficulty controlling adolescent's behaviour, inappropriate discipline, poor parental relationships, disruptive behaviour on school property, truancy, delinquent acquaintances, no/few positive acquaintances, limited organized activities, could make better use of time, inadequate guilt feelings, anti-social attitudes, defying authority, actively rejecting help, and callousness. A larger percentage of non-recidivists were observed on items evaluating prior probation, disruptive classroom behaviour, low achievement and chronic drug/alcohol abuse.

Almost 10% of those rated low risk recidivated, 20.8% of those rated moderate recidivated and only 12.5% of those rated high-risk recidivated. Neither the total YLS/CMI score, scales nor risk rating were significantly correlated with sexual

recidivism, however, the attitudes/orientation scale did approach significance ($r = .22, p = .051$). None of the AUCs were significant (see Table 19).

The survival curve estimates, plotted in Figure 6, revealed no significant differences in the failure rates of the risk groups for sexual recidivism ($\chi^2 (2, N = 77) = 1.52, p = .47$). When all eight of the YLS/CMI scales were put into a stepwise logistic regression, none of the scales met the criteria for inclusion (a probability of .05 for entry and .10 for exclusion).

Violent Recidivism

RRASOR

A total of eighty adolescents had valid RRASOR scores. Twenty (25%) of the 80 adolescents recidivated violently. Table 23 presents descriptive statistics for the recidivists and non-recidivists for the total score and each item. The RRASOR scores were not significantly correlated with violent recidivism and the AUC was below chance level (see Table 24). Survival curves were not performed for the RRASOR scores.

Static-99

A total of eighty adolescents had valid Static-99 scores. Twenty (25%) of the 80 adolescents recidivated violently. Table 25 displays descriptive statistics for the recidivists and non-recidivists for the total score, risk rating and each item. A higher proportion of recidivists than non-recidivists had a conviction for prior non-sexual violence.

Using the modified rating 21.9% of the low risk category recidivated and 42.9% of the moderate risk category recidivated. None of the adolescents in the high-risk category recidivated ($n = 2$). Static-99 total scores and ratings were not significantly

correlated to violent recidivism and the AUCs were not significant (see Table 24). The survival curve estimates, plotted in Figure 7, revealed no significant differences in the failure rates of the risk groups for violent recidivism ($\chi^2(2, N = 80) = 2.79, p = .25$).

ERASOR

A total of seventy-eight adolescents had valid ERASOR scores. Twenty (25.6%) of the 78 adolescents recidivated violently. Table 26 presents descriptive statistics for the recidivists and non-recidivists for the total score, scales and each item. Recidivists had a higher mean score on items evaluating having sexually assaulted a stranger, anti-social interpersonal orientation, negative peer associations and influences and interpersonal aggression. Non-recidivists had a higher mean score on the item evaluating having sexually assaulted the same victim two or more times.

Almost 12% of those rated low risk recidivated, 32.4% of those rated moderate recidivated and 25.9% of those rated high-risk recidivated. The ERASOR total score and risk rating were not significantly correlated with violent recidivism and the AUCs were also non-significant (see Table 24). The survival curve estimates, plotted in Figure 8, revealed no significant differences in the failure rates of the risk groups for violent recidivism ($\chi^2(2, N = 78) = 3.07, p = .22$).

The Psychosocial Functioning scale was the only scale that correlated with violent recidivism. The AUC for the Psychosocial Functioning scale was also significant (see Table 24). When all five ERASOR scales were put into a stepwise logistic regression, Psychosocial Functioning was the only scale found to be a significant predictor of violent recidivism ($B = .27, Wald = 7.5, p < .01$).

YLS/CMI

A total of seventy-seven adolescents had valid YLS/CMI scores. Twenty (26%) of the 77 adolescents recidivated violently. Table 27 presents the descriptive statistics for the recidivists and non-recidivists for the total score, scales and each item.

A larger percentage of recidivists were observed on items evaluating the following: prior detention, three or more current convictions, difficulty controlling behaviour, inappropriate discipline, poor mother-child relationship, disruptive behaviour in the school yard, low achievement, problems with peer, truancy, delinquent acquaintances, no/few positive acquaintances or friends, chronic alcohol problem, limited organized activities, could make better use of time, physical aggression, temper tantrums, short attention span, poor frustration tolerance, verbal aggression, anti-social attitudes, not seeking help, defying authority, and callous. A larger percentage of non-recidivists were observed on the item evaluating prior probation.

Fourteen percent of those rated low risk recidivated, 27% of those rated moderate recidivated and 50% of those rated high-risk recidivated. Correlations and ROC curves are presented in Table 24. The YLS/CMI total score was significantly correlated with violent recidivism and the AUC was significant. Although the correlation between the YLS/CMI rating and violent recidivism was not significant, it did approach significance ($r = .22, p = .055$). The AUC for the overall risk rating was not significant. The survival curve estimates, plotted in Figure 9, revealed no significant differences in the failure rates of the risk groups for violent recidivism ($\chi^2 (2, N = 77) = 4.46, p = .11$).

Three of the scales were significantly correlated with violent recidivism: the education/employment scale, the peer relations scale, and the attitudes/orientation scale;

the same three scales produced significant AUCs. When all eight YLS/CMI scales were put into a stepwise logistic regression, the peer relations scale was the only scale found to be a significant predictor of recidivism ($B = .54$, $Wald = 5.0$, $p < .05$).

Violent, Including Sexual, Recidivism.

RRASOR

A total of eighty adolescents had valid RRASOR scores. Twenty-six (32.5%) of the 80 adolescents recidivated in a sexual or violent manner. Table 28 displays the descriptive statistics for recidivists and non-recidivists for the total score and each item.

The RRASOR scores were not significantly correlated with violent, including sexual recidivism, and in fact, the correlation was in a negative direction. The AUC was below chance level (see Table 29). Survival curves were not performed for the RRASOR scores.

Static-99

A total of eighty adolescents had valid Static-99 scores. Twenty-six (32.5%) of the 80 adolescents recidivated sexually or violently. Table 30 displays the descriptive statistics for recidivists and non-recidivists for the total score, scales and each item. A higher proportion of recidivists than non-recidivists had a conviction for prior non-sexual violence.

Using the modified rating 28.1% of the low risk category recidivated and 57.1% of the moderate risk category recidivated. None of the adolescents in the high-risk category recidivated ($n = 2$). Static-99 total scores and ratings were not significantly correlated with violent, including sexual, recidivism and the AUCs were not significant (see Table 29). The survival curve estimates, plotted in Figure 10, revealed no significant

differences in the failure rates of the risk groups for violent, including sexual, recidivism ($\chi^2(2, N = 80) = 3.77, p = .15$).

ERASOR

A total of seventy-eight adolescents had valid ERASOR scores. Twenty-six (33.3%) of the 78 adolescents recidivated violently or sexually. Table 31 presents the descriptive statistics for recidivists and non-recidivists for the total score, scales and each item. Recidivists had a higher mean on items evaluating anti-social interpersonal orientation, negative peer associations and influences, interpersonal aggression and impulsivity.

Recidivism rates increased as risk rating increased, with 11.7% of those rated low risk recidivating, 38.2% of those rated moderate recidivating and 40.7% of those rated high-risk recidivating. ERASOR total scores were significantly correlated with violent, including, sexual recidivism. The AUC for the ERASOR was also significant (see Table 29). The ERASOR rating and violent, including sexual, recidivism were not significantly correlated and the AUC was non-significant. The survival curve estimates, plotted in Figure 11, revealed no significant differences in the failure rates of the risk groups for violent, including sexual, recidivism ($\chi^2(2, N = 78) = 4.74, p = .09$).

The Psychosocial Functioning scale was the only scale that correlated with violent, including sexual, recidivism. The AUC for the Psychosocial Functioning scale was also significant (see Table 29). When all five ERASOR scales were put into a stepwise logistic regression, Psychosocial Functioning was the only scale found to be a significant predictor of recidivism ($B = .20, Wald = 5.73, p < .05$).

YLS/CMI

A total of seventy-seven adolescents had valid YLS/CMI scores. Twenty-six (33.8%) of the 77 adolescents recidivated violently or sexually. Table 32 displays the descriptive statistics for recidivists and non-recidivists for the total score, scales and each item. A larger percentage of recidivists were observed on items evaluating the following: three or more prior convictions, three or more current convictions, difficulty controlling behaviour, inappropriate discipline, poor mother-child relationship, disruptive behaviour in the school yard, low achievement, problems with peer and teachers, truancy, delinquent acquaintances, no/few positive acquaintances or friends, chronic alcohol problem, limited organized activities, could make better use of time, physical aggression, temper tantrums, short attention span, poor frustration tolerance, inadequate guilt feelings, verbal aggression, antisocial attitudes, not seeking help, defiant of authority and callousness.

Nineteen percent of those rated low risk recidivated, 35.4% of those rated moderate recidivated, and 62.5% of those rated high-risk recidivated. Thus, recidivism rates increased with risk rating. YLS/CMI total score and rating were significantly correlated with violent, including sexual, recidivism however, the AUC was only significant for the total score (see Table 29). The survival curve estimates, plotted in Figure 12, revealed no significant differences in the failure rates of the risk groups for violent, including sexual, recidivism ($\chi^2(2, N = 77) = 5.36, p = .07$).

Five of the YLS/CMI scales were significantly correlated with violent, including sexual, recidivism: prior/current offenses, family/parenting, peer relations, attitudes/orientation, and personality/behaviour. Only four of the scales produced

significant AUCs: family, peer relations, personality/behaviour, and attitudes/orientation (see Table 29). When all eight YLS/CMI scales were put into a stepwise logistic regression, the attitudes/orientation scale was the only scale found to be a significant predictor of recidivism ($B = .51$, $Wald = 5.99$, $p < .05$).

General Recidivism

RRASOR

A total of eighty adolescents had valid RRASOR scores. Thirty-six (45%) of the 80 adolescents were general recidivists. Table 33 displays the descriptive statistics for recidivists and non-recidivists for the total score and each item. A larger proportion of recidivists had unrelated victims.

The RRASOR scores were not significantly correlated with general recidivism and the AUC was just above chance level (see Table 34). Survival curves were not performed for the RRASOR scores.

Static-99

A total of eighty adolescents had valid Static-99 scores. Thirty-six (45%) of the 80 adolescents recidivated non-violently. Table 35 displays the descriptive statistics for recidivists and non-recidivists for the total score and each item. A higher proportion of recidivists than non-recidivists had a conviction for prior non-sexual violence.

Using the modified rating, the majority of the adolescents were rated low risk, followed by moderate and then high risk. Approximately 42% of the low risk category recidivated, 57.1% of the moderate risk category recidivated and 50% of the adolescents in the high-risk category recidivated ($n = 2$). Static-99 scores were not significantly correlated with general recidivism, however, the relationship did approach significance (r

= 21, $p = .057$). The AUC, however, was significant. Static-99 ratings were not significantly correlated with general recidivism and the AUC was not significant (see Table 34). The survival curve estimates, plotted in Figure 13, revealed no significant differences in the failure rates of the risk groups for general recidivism ($\chi^2(2, N = 80) = .55, p = .76$).

ERASOR

A total of seventy-eight adolescents had valid ERASOR scores. Thirty-six (46.2%) of the 78 adolescents recidivated non-violently. Table 36 displays the descriptive statistics for recidivists and non-recidivists for the total score, scales and each item. Recidivists had a higher mean score on items evaluating negative peer associations and influences, interpersonal aggression and impulsivity.

Approximately 41% of those rated low risk recidivated, 44.1% of those rated moderate recidivated and 51.8% of those rated high-risk recidivated. ERASOR total scores and ratings were not significantly correlated with general recidivism and the AUCs were not significant (see Table 34). The survival curve estimates, plotted in Figure 14, revealed no significant differences in the failure rates of the risk groups for general recidivism ($\chi^2(2, N = 78) = .37, p = .83$).

The Psychosocial Functioning scale was the only scale that significantly correlated with general recidivism and the AUC was also significant (see Table 34). When all five scales were put into a stepwise logistic regression, Psychosocial Functioning was the only scale found to be a significant predictor of general recidivism ($B = .15, Wald = 3.86, p < .05$).

YLS/CMI

A total of seventy-seven adolescents had valid YLS/CMI scores. Thirty-five (45.4%) of the 77 adolescents recidivated non-violently. Table 37 presents descriptive statistics for recidivists and non-recidivists for the total score, scales and each item. A larger percentage of recidivists were observed on items evaluating the following: three or more prior convictions, prior detention, three or more current convictions, difficulty controlling behaviour, truancy, some delinquent acquaintances and friends, no/few positive acquaintances or friends, limited organized activities, physical aggression, short attention span, inadequate guilt feelings, verbal aggression, antisocial attitudes and not seeking help.

Almost 43% percent of those rated low risk recidivated, 43.8% of those rated moderate recidivated and 62.5% of those rated high-risk recidivated. The YLS/CMI total score, scales and rating were not significantly correlated with general recidivism and the AUCs were not significant (see Table 34). The survival curve estimates, plotted in Figure 15, revealed no significant differences in the failure rates of the risk groups for general recidivism ($\chi^2(2, N = 77) = .80, p = .67$). When all eight of the YLS/CMI scales were put into a stepwise logistic regression, none of the scales met the criteria for inclusion (a probability of .05 for entry and .10 for exclusion).

Post Hoc Exploratory Analyses

Given that the primary purpose of this study was to determine the RRASOR, Static-99, ERASOR and YLS/CMI's ability to predict sexual recidivism within a sample of adolescent sexual offenders, post hoc exploratory analyses were conducted to determine whether the four measures could be improved upon, thus, improving their

predictive accuracy. This was accomplished by determining which items on each scale were discriminating sexual recidivists. The following criteria were set and each item was examined to see if it met the criteria. An item was identified as discriminating sexual recidivists when the percentage of recidivists rated positively for that item was a minimum of a 25% increase over the base rate of sexual recidivism for the entire sample. Due to the differing number of subjects for each risk instrument the minimum (25% increase) recidivism rate varied slightly. Another criteria for identifying discriminating items was that there was a minimum of 8 adolescents (approximately 10% of the sample) who needed to be rated as present on the particular item.

With regard to the RRASOR and the Static-99, the minimum base rate required for recidivists scoring positively on an item was 20.4%. None of the RRASOR or Static-99 items met these criteria.

With regard to the ERASOR, the minimum base rate required for recidivists scoring positively on an item was 20.8%. Nine ERASOR items met both criteria. They are as follows: deviant sexual interests, sexual preoccupation, unwillingness to alter sexual attitudes, ever targeting a child victim, anti-social orientation, impulsivity, problematic parent-offender relationship, parents unsupportive of offense-specific treatment and an environment supporting opportunities to re-offend. Table 38 presents the number and percent of recidivists who scored positively (a score of 2) on each of these items. A new dichotomous scale was formed using these 9 items. Those who were rated as present on any of the above items were given a score of 1. Those who scored partially present or absent were given a score of 0. Therefore, the new scale had a range of 0 to 9. The new revised ERASOR scale had a mean score of 3.54 ($SD = 2.06$). The

revised scale was significantly correlated with sexual recidivism ($r = .32, p < .01$), and the ROC was also significant ($AUC = .74, p < .01$, 95% confidence interval of .58 to .90). Scores on the revised scale were then arbitrarily divided into risk categories with scores of 0 to 2 indicating low risk, scores from 3-5 indicating moderate risk and scores from 6 to 9 indicating high risk. Kaplan-Meier survival curve estimates are presented in Figure 16. Comparisons of the survival curves revealed significant differences in the failure rate for sexual recidivism, $\chi^2(2, N = 78) = 9.41, p < .01$.

With regard to the YLS/CMI, the minimum base rate required for recidivists scoring positively on an item was 21.1%. Sixteen YLS/CMI items met both criteria. They are as follows: prior detention, three or more current convictions, difficulty controlling behaviour, inappropriate discipline, poor father-child relations, disruptive behaviour on school property, truancy, unemployment, no/few positive acquaintances, limited organized activities, could make better use of time, inflated self-esteem, inadequate guilt feelings, antisocial attitudes, defies authority and callous. Table 39 presents the number and percent of recidivists who scored positively on each of these items. A new dichotomous scale was formed using these 16 items. Those who were rated as present on any of the above items were given a score of 1. Those who scored absent were given a score of 0. Therefore, the new scale had a range of 0 to 16. The new revised YLS/CMI scale had a mean score of 5.70 ($SD = 3.21$). The revised scale was significantly correlated with sexual recidivism ($r = .34, p < .01$), and the ROC was also significant ($AUC = .72, p < .05$, 95% confidence interval of .54 to .91). Scores on the revised scale were then arbitrarily divided into risk categories with scores of 0 to 5 indicating low risk, scores from 6 to 10 indicating moderate risk and scores from 11 to 16 indicating high risk.

Kaplan-Meier survival curve estimates are presented in Figure 17. Comparisons of the survival curves revealed significant differences in the failure rate for sexual recidivism, $\chi^2(2, N = 77) = 7.23, p < .05$.

Discussion

The purpose of this study was to examine the utility of four risk assessment measures (RRASOR, Static-99, ERASOR and YLS/CMI) for use with adolescent sexual offenders through the evaluation of their psychometric properties. Of particular interest in this study was whether or not these four instruments could predict recidivism in a sample of adolescent sex offenders.

It is important to note two limitations of this study at the outset. First, the results of this study are limited by a small sample size. Such a small sample, in addition to restricted sample variability and its influence on statistical relationships, limits the generalizability of the findings. Second, the scoring of the risk measures took place at intake, therefore any information received after the initial assessment, as well as any gains attained by treatment were not accounted for. This is especially relevant when considering the ERASOR and the YLS/CMI include items evaluating both static and dynamic factors. Dynamic variables, by definition, are variables that change. Changes within these variables would most certainly influence an individual's score, and theoretically, their risk to re-offend. Although the RRASOR and the Static-99 do not assess dynamic factors, the scores on these scales may have been affected by additional information gained after the initial intake assessment.

RRASOR

The RRASOR is a four-item instrument designed to assess risk among adult sexual offenders, however, only three of these items contain variability with adolescents. All the items are historical in nature. It is not surprising, therefore, that inter-rater reliability for the RRASOR was excellent, indicating that the RRASOR is an easily and

reliably scored instrument. The RRASOR evaluates sexual deviancy by assessing three constructs, sexual offending history, victim preference and victim pool. RRASOR scores were significantly correlated with other indices considered to measure sexual deviancy, the Static-99 and the ERASOR. Additionally, the RRASOR was related to another measure of historical sexual behaviour (Historical Sexual Assault Scale).

The RRASOR was designed to predict sexual recidivism risk with adult sex offenders. Meta-analytic findings from 17 studies ($N = 5004$) revealed the RRASOR to be a moderate predictor of sexual recidivism in adults ($d = .66$: Hanson, Morton, & Harris, in press). A d of between .50 and .80 is considered moderate (Cohen, 1998). As the RRASOR was designed for adult sex offenders, and there is no published material applying the RRASOR to an adolescent population, no specific hypotheses were made.

The results of the present investigation failed to find any relationship between the RRASOR and recidivism of any kind, sexual, violent or otherwise. There are several possible reasons why the RRASOR failed to demonstrate any predictive accuracy. First, the RRASOR, in this sample of adolescents, suffered from a restricted range. Over half the sample (57.3%) had a score of 2, and 23.6% of the sample had a score of 3 on the RRASOR. With over 80% of the sample scoring 2 or 3, the RRASOR essentially becomes a two-point scale. The data, therefore, contains little variability, and thus it is difficult for the instrument to discriminate low-risk from high-risk adolescents.

Second, given that the present sample was comprised of adolescents aged 12 – 18 years old, it is unlikely that many of the adolescents had enough ‘history’ to accumulate prior charges or convictions for sexual offenses. In fact, with regard to their referral

offense, 20% of the present sample had the charges dropped or were not charged. The charges were unknown, or pending in an additional 19% of the sample.

Finally, it may simply be that important predictive factors for adult sex offenders are not applicable to adolescents, that adolescent sex offenders are somehow different from their adult counterparts (Harris, Phenix, Hanson, & Thornton, 2003). In fact, Worling and Curwen (2000) suggest that it is also possible that adolescents may not have established a clear idea of what their sexual preferences are, and thus having a male victim or an unrelated victim, may not be related to sexual deviance within adolescents. None of the RRASOR items were shown to distinguish between recidivists (sexual) and non-recidivists in the post hoc exploratory analyses lending some support to this position. Further research is needed to elucidate the development of sexual deviance (e.g., victim preferences, preferred sexual activity) and its role in predicting sexual recidivism with adolescents.

Static-99

The Static-99 is a ten-item instrument designed to predict sexual or violent recidivism among adult sex offenders who have been charged or convicted of a sexual offense (Harris, Phenix, Hanson, & Thornton, 2003). Like the RRASOR, all items are historical in nature. Thus, it is not surprising that the inter-rater reliability was excellent. Only two disagreements were noted within the Static-99; one being whether one subject scored a zero or one on prior sexual offenses, and the other being whether another subject was or was not convicted of a non-sexual violent offense.

The Static-99 was developed from the RRASOR and Thornton's Structured Anchored Clinical Judgement (Grubin, 1998) and the instrument attempts to tap two

constructs, sexual deviance and criminality. Results indicated that the Static-99 was related to other static indicators of deviant sexual behaviour (i.e., the RRASOR and the Historical Sexual Assault scale of the ERASOR). In addition, the results indicated that the Static-99 had a moderate relationship to the Prior/Current Offense Scale of the YLS/CMI, a static measure of criminal behaviour as well as the overall YLS/CMI score, a measure of general criminal behaviour risk.

The Static-99 was designed for use with adult sex offenders and has shown success in the prediction of recidivism within this population. Meta-analytic findings from 15 sex offender studies ($N = 4202$) found the Static-99 to have moderately high predictive accuracy ($d = .76$), with regard to sexual re-offending (Hanson, Morton, & Harris, in press). In one study with a sample of 49 juvenile sex offenders, the Static-99 was significantly related to sexual recidivism ($r = .41$) over a four-year period (Poole, Liedecke, & Marbibi, 2000). It should be noted that Poole et al. (2000) assessed these juveniles between the ages of 18 and 19, just prior to their release from a secure facility and that they also noted that several of the Static-99 items were not significantly related to sexual recidivism.

Given the lack of research with adolescents, no specific hypotheses were made with regard to how it would perform in this population. Although the Static-99 did demonstrate predictive accuracy for general recidivism with the ROC curve, the Pearson correlation was not significant. Thus, any predictive accuracy of the Static-99 to general recidivism should be viewed with caution. More importantly, the results of the present investigation did not find the Static-99 to have significant predictive accuracy for sexual

or violent recidivism with adolescent sexual offenders. The Static-99, like the RRASOR, suffers similar limitations with this population.

One, the Static-99 scores demonstrated a restricted range. The majority of the sample (86.43%) scored a three (41.99%), four (29.63%), or five (14.81%), essentially reducing the Static-99 to a three-point scale. With little variability in the scores it is hard to distinguish between who is low and who is high risk. Even with the modified cutoff scores used to form risk ratings, only two subjects were characterized as high risk.

There are also the issues of historical (i.e., prior sex offenses) and deviance (i.e., sexual preferences) factors, noted with the RRASOR, that may not be relevant to youths in this sample's age range (mean = 15.22 yrs.). In fact, the Static-99 users' manual (Harris, Phenix, Hanson, & Thornton, 2003) does not recommend its use with adolescent sex offenders. Only when an offense is clearly adult in nature (i.e., rape of stranger female by a 17-year old), would they suggest the *possible* use of the Static-99. The post-hoc exploratory analysis supports not utilizing the Static-99 with adolescent sex offenders as none of the Static-99 items were shown to distinguish between recidivists (sexual) and non-recidivists.

Nonetheless, it would seem worthwhile for research to explore the Static-99's relationship to recidivism in samples of adolescents with varying ages. Poole et al. (2000) found support for the utility of the Static-99 with 18 and 19 year olds who committed a sexual offense as a juvenile, thus begging the question, at what age do the factors of the Static-99 begin to be related to sexual and/or violent re-offending. It may be that the relationship is not mediated by age per se but rather by the development of sexual preferences and/or the offender's psychological/psychosocial development.

ERASOR

Based on reviews of relevant literature and clinical experience, the ERASOR was developed to predict sexual recidivism in adolescent sex offenders. The ERASOR contains 25 static and dynamic variables. It is intended for professionals working with adolescent sexual offenders and their families (Worling & Curwen, 2001). In the present study the instrument was scored based on file reviews, which may have contributed to the mixed findings. With regard to the static variables, inter-rater reliability was excellent. Difficulties sometimes arose, however, when coding some of the dynamic variables. These difficulties arose mainly from having to make clinical judgements from a six-month time frame with file information that generally spanned several months. In addition, with the exception of six variables (attitudes supportive of sexual offending, unwillingness to alter deviant sexual interests/attitudes, lack of intimate peer relationships, interpersonal aggression, recent escalation in anger/negative affect, and parents unsupportive of sex-offense specific treatment/assessment), the ICCs were within the same range as those based on clinical interviews as reported by Worling (2002). It is also worth noting that the inter-rater disagreements were whether or not an item was present or partially present, or whether or not an item was partially present or absent. No disagreements, therefore, were made with regard to whether or not an item was 'present' or 'absent'. Nonetheless, the reliability of the overall score and scales were adequate as seen by significant ICCs.

The overall internal consistency of the ERASOR was found to be good (.74). The ERASOR scales attempted to tap into several different constructs (i.e., sexual deviance, sexual behaviour, antisociality, family). These scales appear to be measuring what they

were intended to measure as seen in the results of the relationships to similar, validated scales (RRASOR, Static-99, YLS/CMI; see Tables 11 & 12). In fact, these results are similar to those reported by Bourgon (2002).

The ERASOR was the only scale studied in this analysis that was specifically designed to predict sexual recidivism for adolescents. It was, therefore hypothesized that the ERASOR would significantly predict sexual recidivism. The results did not provide support to the ERASOR's ability to predict sexual recidivism.

There are a couple of reasons why the ERASOR may not have predicted sexual recidivism in study. The first possible reason is that the ERASOR was designed based on a review of the relevant literature in the area of adult and adolescent sexual offending. What is clear by the looking at the available research is that it is mostly based on studies evaluating adult sex offenders. Small sample sizes and low recidivism rates, among other limitations have generally plagued the limited number of studies evaluating risk factors for adolescent sexual offenders. Therefore, it is important to note that although the ERASOR was attempting to tap into a variety of possible risk factors for adolescent sex offenders, some of the twenty-five factors may, indeed, not be predictive with adolescents.

Another possible reason, as stated by the test authors, is that risk assessments should be updated often and they recommend that the results remain meaningful for a maximum of two years (Worling & Curwen, 2001). It is important to recognize the extent of change that occurs during this developmental period. The follow up time in this study ranged from 15 to 111 months, with an average of 68 months. Given that sexual recidivism base rates are generally low and a five-year follow up is suggested (Meyer &

Romero, 1980), the inherent difficulties in assessing risk in this population becomes evident. Future research should evaluate all possible information on the offender in order to ascertain a more accurate measure of risk, thus accounting for any changes in the time period following intake. These changes are usually a result of treatment and additional information typically gained during that process.

Another possibility for not finding support for the ERASOR predicting sexual recidivism is that there are no set guidelines with how to assign a risk rating for the instrument. Clinical judgement must be made based on knowledge of the factors that effect, and clinical experience with, adolescent sexual offending. The principal investigator of this research, though versed in the empirical literature on risk predictors for adolescent sexual offenders, has no clinical training or experience. Consequently, the ratings made in this study with regard to the ERASOR, likely do not represent the judgement of professionals with extensive clinical experience.

Although this study could not lend support to the ERASOR's ability to predict sexual recidivism, it was found to predict other types of recidivism. The ERASOR was found to significantly predict violent, including sexual recidivism. Additionally the Psychosocial Functioning scale significantly predicted violent, violent, including sexual and general recidivism. In the present sample, the ERASOR appears to be picking up the antisocial attitudes of these youth, especially when related to interpersonal violence. This is not surprising, given that it was interpersonal violence that brought these youth into contact with the SAFE-T program, and in some cases, the law. Thus, it may be that the factors on the ERASOR that evaluate a propensity toward interpersonal aggression and

criminality (i.e., interpersonal aggression, antisocial orientation) are important predictors of future interpersonal aggression.

It is also important to note again that these adolescents were an average age of 15 years old. Adolescents are changing people, who have not yet chosen their preferred outlet for their defiance and antisocial attitudes. It is possible that, adolescents are simply acting out in an interpersonally aggressive (violent, plus sexual) manner. It may be that later, when they have reached adulthood, these young people will develop a “typical” behavioural outlet for displaying their antisocial characteristics, be it violence, sexual, or both, or in fact, they may desist. Additionally, it is possible that the ERASOR Psychosocial Functioning scale showed ability to predict a wider variety of recidivism than the individual YLS/CMI scales (violent, violent, including sexual, and general vs. violent and violent, including sexual) because it appears to be a more global assessment of antisocial traits (i.e., antisocial orientation, negative peers), whereas the YLS/CMI attempts to measure each of the various components of antisociality in order to assess and direct interventions to address these need areas (i.e., attitudes scale, peer relations scale).

In the exploratory post hoc analyses, nine ERASOR items were found to distinguish between sexual recidivists and non-recidivists. Four of these items were related to sexual deviancy, two to antisociality and three to family issues. Interestingly, the majority of the items that distinguished between the two groups with regard to the ERASOR were sexual deviancy items, in spite of two of these items showing weakness in terms of inter-rater reliability. This underscores the importance of evaluating sexual deviancy when dealing with adolescent sexual offenders. Additionally, antisociality and family factors were prominent in distinguishing the two groups. When these nine

ERASOR items were used to calculate a revised scale, it achieved a moderate degree of predictive accuracy with regard to sexual recidivism ($r = .32$, $AUC = .74$).

Given that this is the first study seeking to validate the ERASOR's ability to predict sexual recidivism, along with the study limitations, these results do not provide a definitive answer to the utility of the ERASOR as an adequate measure with adolescent sexual offenders. Rather, the results of this study should be used to further improve upon our understanding of adolescent risk for sexual re-offending as well as in the development of quality assessment instruments.

YLS/CMI

The YLS/CMI is a 42-item measure that contains both static and dynamic variables. The instrument is designed to assess risk for criminal recidivism and aid in case management with adolescent offenders. The YLS/CMI had significant inter-rater agreement for each of its scales, with ICCs ranging from .54 to .88, which is similar to those found by Poluchowicz, Jung and Rawana (2000). The total score intra-class correlation coefficient was found to be significant (.85), and is above that found by Poluchowicz, Jung and Rawana (2000). Eight items showed agreement below 75%, and kappas below .40. Banerjee, Capozzoli, McSweeney and Sinha (1999) indicate that a kappa below .40 is poor agreement beyond chance. There are several possible reasons for this. As with the ERASOR, it may be that these items are simply factors that are hard to evaluate based on file information. With the YLS/CMI being scored on a dichotomous scale, it is possible that the information contained in the files was ambiguous enough to cause one rater to determine that an item was present, while the other did not.

The YLS/CMI was found to have high internal consistency (.86). The internal consistency of the scales was also found to be satisfactory (.56 to .67). The YLS/CMI was found to be significantly correlated with other measures designed to assess criminality, the Static-99 and ERASOR. It is also important to note that the YLS/CMI was not correlated with the RRASOR, which is a measure of sexual deviancy.

The YLS/CMI is a measure designed to predict recidivism in young offenders, thus it was hypothesized that the YLS/CMI would predict two types of recidivism: any and general. The results did not support the YLS/CMI's ability to predict general or any recidivism with a sample of adolescent sex offenders. There are several reasons why this hypothesis was not supported. First is the possibility that adolescent sexual offenders, like their adult counterparts, are in some way different from general adolescent offenders. This would suggest that prediction of recidivism within this unique sample of offenders should be tailored to their characteristics. Additionally, as stated at the outset, several of the offenders took part in treatment at the SAFE-T program, as well as elsewhere, and the fact that this was not taken into account likely effected the results.

Nevertheless, the YLS/CMI did have success with regard to the prediction of violent and violent, including sexual, recidivism in the present sample. More specifically, the YLS/CMI total score, as well as the education/employment scale, the peer relations scale and the attitudes/orientation scale were found to significantly predict violent recidivism. The total YLS/CMI score, risk rating, family/parenting scale, peer relations scale, attitudes/orientation scale, personality/behaviour scale and the prior offenses scale were found to significantly predict violent, including sexual, recidivism. Two of these

scales should be viewed with caution, the risk rating and the priors scale, as the correlation coefficient found significance, yet the ROC did not.

When all scales were placed into a stepwise logistic regression, only the attitudes/orientation scale significantly predicted violent, including sexual, recidivism. In the present sample, it appears that antisocial attitudes are the critical predictive factor of interpersonal violence. This is congruent with the findings of the ERASOR, in that general antisociality was predictive of interpersonal aggression.

It is also important to note that the post hoc exploratory analysis found 13 of the 16 items that distinguished sexual recidivists from non-recidivists were items that tapped into antisociality. This provides further evidence of antisociality being a critical factor to sexual re-offending, similar to what has been found in adult sex offenders (Hanson & Bussiere, 1998). Additionally, it is important to note that the other three items were family items, once again, underscoring the importance of an adolescent's family in terms of their development of attitudes and beliefs and risk to re-offend. In fact, when the sixteen items were used to calculate a revised scale, that scale achieved a moderate degree of predictive accuracy with regard to sexual recidivism ($r = .34$, $ROC = .72$).

Although the results of the present study did not support the predictive accuracy of the ERASOR for sexual recidivism or the YLS/CMI for any or general recidivism, both instruments were related to interpersonally aggressive re-offending. Clearly, further research needs to be done with this population to elucidate which risk factors are truly unique in predicting sexual recidivism. The post hoc analyses suggest three important factors. One is sexual deviance, as measured by the four ERASOR items. Clearly this factor is specific to sexual offending. The results also suggest that antisociality and

family play a significant role. Both of these factors likely play a role in predicting interpersonal aggression, be it sexual or nonsexual violence. As such, assessing risk with adolescent sex offenders should evaluate at a minimum, all three of these factors.

Limitations and Future Research

As noted at the beginning of this section, there are several limitations to this study and any results from this study should be interpreted with this in mind. This study had a relatively small sample size, with relatively little variability within the subjects. These issues impact on the generalizability of the findings, and suggest that future research would benefit from increasing the sample size.

Another limitation was that all measures were scored with information available at intake. SAFE-T is a community-based program that conducts assessments and provides treatment and it is not surprising that a majority of these adolescents would have participated in treatment at SAFE-T, a program that was found to significantly reduce recidivism (Worling & Curwen, 2000). It is likely that the ERASOR and YLS/CMI scores, which incorporate dynamic factors, would have been different had they been scored following treatment. It is suggested, therefore, that future research with samples similar to the one used in the present study (i.e. adolescents from an agency that provides treatment) could evaluate an adolescent's risk once they have completed a treatment program. This will ensure that the data reflects the characteristics of the adolescent at last contact.

Another study limitation is that file information was used to code the risk assessment measures. The RRASOR and Static-99 are measures that are easily and reliably scored using file information. However, the ERASOR and YLS/CMI measure a

variety of dynamic factors that may not be easily ascertained from file information. Clinical files are intended to assist the clinician in understanding the client and provide direction and monitor progress in treatment. The information included in these files is dependent on what the clinician conducting the interview asked or deemed important to ask. Often times, what a clinician asks is not only a function of their experience but also of what the research suggests is important. It is important to note then that the assessments reviewed for this study were conducted between 1988 and 1996. Little was known about sex offenders in general at this time, and in fact, the often-cited landmark meta-analysis highlighting important risk factors for adults was not released until 1998 (Hanson & Bussiere, 1998). Therefore, it is safe to assume that clinicians may not have been gathering the same information in 1988 as in 1996. The situation makes it difficult to score measures developed after 1996, such as the ERASOR, from reviewing these files. Clearly it would benefit the field if future research could gather information from direct client assessment or at least, from assessments that are more recent and thus tap into factors that are now deemed important with regard to risk prediction.

It is also worth noting here that the principal investigator scored all the measures and that may have had an influence on the relationships found between the scales. Clearly replication would strengthen such findings. Future research could use different raters for each measure in order to address this threat to the concurrent validity.

Another limitation that is often cited in this type of research is that the source for recidivism data is 'official' (Greenberg, Firestone, Bradford, & Broom, 2000, Prentky, Lee, Knight & Cerce, 1997). This study attempted to account for the under-representation of re-offending by evaluating future charges against the adolescent as the source of

recidivism data, but it is likely that it is still an underestimate of the actual rate of re-offending. At the minimum, because of the nature of sexual offenses, it is often hard to obtain a sexual offense conviction; therefore the offender may be charged with another type of crime (i.e., violent offense) in order to secure a conviction (Greenberg, Firestone, Bradford, & Broom, 2000). Given this possibility, as well as the knowledge that adolescent sex offenders commit other types of crime (as evidenced by the higher rate of general re-offending in comparison to other types of re-offending in this study) it is important to evaluate other types of recidivism. The evaluation of five different measures of recidivism is considered one of this study's strengths.

Finally, it is important to note that this study was retrospective. Although the principal investigator was blind to recidivism outcome until after all the data was coded, a research investigation that is prospective is preferred, and thus suggested with regard to future research.

Summary

The small sample size, low sexual recidivism rate obtained from official data, and other limitations make the results of this study tenuous and further highlights the need for future study in this area. At this time, there is no empirical support for using the RRASOR, Static-99, ERASOR or YLS/CMI for the prediction of sexual recidivism in adolescent sexual offenders in their present forms. Nevertheless, the results of the present study indicate that the ERASOR and YLS/CMI appear useful in the prediction of interpersonally aggressive type behaviours (violent, including sexual, recidivism), and that the YLS/CMI appears useful in the prediction of violent recidivism with samples of adolescent sexual offenders. Finally, post hoc evidence indicated that several sexual,

antisocial and family items were able to distinguish sexual recidivists from non-recidivists. These findings, however, need to be considered within the limitations of the present study.

Since this is the first study evaluating the RRASOR, Static-99, ERASOR, and YLS/CMI with a sample of adolescent sexual offenders, replication is extremely important. The area of prediction with adolescent sexual offenders is important and still in its infancy. Continued research is needed to identify the factors associated with sexual re-offending, as is the development of reliable and valid risk assessment instruments that can be used with this unique population.

References

- Abel, G. G., & Blanchard, E. B. (1974). The role of fantasy in the treatment of sexual deviation. *Archives of General Psychiatry*, 30, 467-475.
- Abel, G.G., Mittelman, M. S., & Becker, J. V. (1985). Sexual offenders: Results of assessment and recommendations for treatment. In H. H. Ben-Aron, S. I. Hucker, & C. D. Webster (Eds.), *Clinical criminology* (pp.191-205). Toronto, ON: MM Graphics.
- Alford, G. S., Morin, C., Atkins, M., & Schoen, L. (1987). Masturbatory extinction of deviant sexual arousal: A case study. *Behavior Therapy*, 18, 265-271.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders (3rd ed.)*. Washington, DC: Author.
- Awad, G. A., & Saunders, E. (1989). Adolescent child molesters: Clinical observations. *Child Psychiatry and Human Development*, 19, 195-206.
- Andrews, D. A. & Bonta, J. (1995). *Level of Service Inventory – Revised*. Toronto, Canada: Multi-Health Systems Inc.
- Andrews, D. A. & Bonta, J. (1998). *Psychology of criminal conduct*. Cincinnati, OH: Anderson Publishing Co.
- Banerjee, M., Capozzoli, M., McSweeney, L., & Sinha, D. (1999). Beyond kappa: A review of interrater agreement measures. *The Canadian Journal of Statistics*, 27 (1), 3-23.
- Barbaree, H. E. (1990). Stimulus control of sexual arousal: Its role in sexual assault. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 115-138). New York:

Plenum.

Barbaree, H. E., Hudson, S. M., & Seto, M. C. (1993). Sexual assault in society:

The role of the juvenile offender. In H. E. Barbaree, W. L. Marshall & S. M. Hudson (Eds.), *The juvenile sex offender* (pp. 1-24). New York: The Guilford Press.

Barbaree, H. E., Seto, M.C., Langton, C.M., & Peacock, E.J. (2001). Evaluating the predictive accuracy of six risk assessment instruments for adult sex offenders. *Criminal Justice and Behavior*, 28, 490-521.

Becker, J. V., & Hunter Jr., J. A. (1997). Understanding and treating child and adolescent sexual offenders. *Advances in Clinical Child Psychology*, 19, 177-197.

Becker, J. V., Hunter, J. A., Stein, R. M., & Kaplan, M. S. (1989). Factors associated with erection in adolescent sex offenders. *Journal of Psychopathology and Behavioral Assessment*, 2, 355-363.

Becker, J. V., Kaplan, M. S., & Tenke, C. E. (1992). The relationship of abuse history, denial and erectile response: Profiles of adolescent sexual perpetrators. *Behavior Therapy*, 23, 87-97.

Berliner, L. (1998). Juvenile sex offenders: Should they be treated differently? *Journal of Interpersonal Violence*, 13, 645-646.

Benoit, J. L., & Kennedy, W. A. (1992). . The abuse history of male adolescent sex offenders. *Journal of Interpersonal Violence*, 7, 543-548.

Blaske, D. M., Bourduin, C. M., Henggeler, S. W., & Mann, B. J. (1989). Individual, family, and peer characteristics of adolescent sexual offenders and assaultive offenders. *Developmental Psychology*, 25, 846-855.

- Bonta, J., & Hanson, R. K. (1995). *Violent recidivism of men released from prison*. Paper presented at the 103rd Annual Convention of the American Psychological Association, New York: NY.
- Borduin, C. M., Henggeler, S. W., Blaske, D. M., & Stein, R. J. (1990). Multisystemic treatment of adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 34, 105-113.
- Bourgon, G. A. (2002, October). *The ERASOR: Evaluating its psychometric properties*. Paper presented at the 21st Annual Research and Training Conference of the Association for the Treatment of Sexual Abusers, Montreal, Quebec.
- Briggs, F., & Hawkins, M. F. (1996). A comparison of the childhood experiences of convicted male child molesters and men who were sexually abused in childhood and claimed to be nonoffenders. *Child Abuse & Neglect*, 20, 221-233.
- Bynum, T. (2001). *Recidivism of sex offenders*. Silver Spring, MD: Center for Sex Offender Management.
- Cohen, J. (1998). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Daleiden, E. L., Kaufman, K. L., Hilliker, D. R., & O'Neil, J. N. (1998). The sexual histories and fantasies of youthful males: A comparison of sexual offending, nonsexual offending, and nonoffending groups. *Sexual Abuse: A Journal of Research and Treatment*, 10, 195-209.
- Epperson, D. L., Kaul, J. D., & Hesselton, D. (1998). *Final report on the development of the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R)*. Paper presented at the 17th Annual Conference of the Association for the Treatment of

- Sexual Abusers, Vancouver, Canada. Retrieved October 16, 2001, from <http://psych-server.iastate.edu/faculty/epperson/atsa2000/index.htm>
- Epperson, D. L., Kaul, J. D., Huot, S. J., Hesselton, D., Alexander, W. & Goldman, R. (2000). *Cross-validation of the Minnesota Sex Offender Screening Tool-Revised*. Paper presented at the 19th Annual Conference of the Association for the Treatment of Sexual Abusers, San Diego, California. Retrieved October 16, 2001, from <http://psych-server.iastate.edu/faculty/epperson/atsa2000/index.htm>
- Epps, K. J. (1997). Managing risk. In M. S. Hoghughi, S. R. Bhate, & F. Graham (Eds.), *Working with sexually abusive adolescents* (pp. 35-51). London: Sage Publications.
- Forth, A. E., Kosson, D. S., & Hare, R. D. (in press). *The Hare Psychopathy Checklist: Youth Version*. Toronto, Canada: Multi-Health Systems.
- Gold, S. R., & Gold, R.G. (1991). Gender differences in first sexual fantasies. *Journal of Sex Education and Therapy*, 17, 207-216.
- Graham, F., Richardson, G., & Bhate, S. (1997). Assessment. In M. Hoghughi, S. R. Bhate, & F. Graham (Eds.), *Working with sexually abusive adolescents* (pp. 162-176). London: Sage Publications.
- Graves, R. B., Openshaw, D. K., Ascione, F. R., & Ericksen, S. L. (1996). Demographic and parental characteristics of youthful sexual offenders. *International Journal of Offender Therapy and Comparative Criminology*, 40, 300-317.
- Gray, A. S., & Pithers, W. D. (1993). Relapse prevention with sexually aggressive adolescents and children: Expanding treatment and supervision. In H. E.

- Barbaree, W. L. Marshall, & S. M. Hudson (Eds.), *The juvenile sex offender* (pp. 289-319). New York: Guilford Press.
- Greenberg, D. M., Firestone, P., Bradford, J. M., & Broom, I. (2000). Infantophiles. In L. B. Schlesinger (Ed.), *Serial offenders: Current thought, recent findings* (pp. 229-246). NY: CRC Press.
- Gretton, H. M., McBride, M., Hare, R. D., O'Shaughnessy, R., & Kumka, G. (2001). Psychopathy and recidivism in adolescent sex offenders. *Criminal Justice and Behavior*, 28 (4), 427-449.
- Grubin, D. (1998). *Sex offending against children: Understanding the risk*. Police Research Series Paper 99. London: Home Office.
- Hagan, M. P., Gust-Brey, K. L., Cho, M. E., & Dow, E. (2001). Eight-year comparative analyses of adolescent rapists, adolescent child molesters, other adolescent delinquents, and the general population. *International Journal of Offender Therapy and Comparative Criminology*, 45, 314-324.
- Hanson, R. K. (1997). How to know what works with sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 9, 129-145.
- Hanson, R. K. (1997). *The development of a brief actuarial risk scale for sexual offense recidivism*. User report 1997-04. Ottawa: Solicitor General of Canada.
- Hanson, R. K. (1998). What do we know about sex offender risk assessment? *Psychology, Public Policy, and Law*, 4, 50-72.
- Hanson, R. K. (2000). *Risk assessment*. Beaverton, OR: Association for the Treatment of Sexual Abusers.
- Hanson, R. K., & Bussiere, M. T. (1996). *Predictors of sexual offender recidivism:*

- A meta-analysis*. User report 1996-04. Ottawa: Solicitor General of Canada.
- Hanson, R. K., & Bussiere, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348-362.
- Hanson, R. K., & Harris, A. (1998). *Dynamic predictors of sexual recidivism*. User report 1998-01. Ottawa: Solicitor General of Canada.
- Hanson, R. K., & Harris, A. (2000). *The Sex Offender Need Assessment Rating (SONAR): A method for measuring change in risk levels*. User report 2000-1. Ottawa: Solicitor General of Canada.
- Hanson, R. K., & Harris, A. J. R. (2001). A structured approach to evaluating change among sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 13, 105-122.
- Hanson, R. K., Morton, K. E., & Harris, A. J. R. (in press). Sexual offender recidivism risk: What we know and what we need to know. New York Academy of Science.
- Hanson, R. K., & Thornton, D. (1999). *Static 99: Improving actuarial risk assessment for sex offenders*. User report 1999-02. Ottawa: Solicitor General of Canada.
- Hanson, R. K., & Thornton, D. (2000). Improving risk assessments for sex offenders: A comparison of three actuarial scales. *Law and Human Behavior*, 24, 119-136.
- Hare, R. D. (1991). *The Hare Psychopathy Checklist – Revised*. Toronto, Canada: Multi-Health Systems.
- Hare, R., Forth, A., & Kosson, D. (1994). *The Psychopathy Checklist: Youth Version (Research Version)*. Toronto, ON: Multi-Health Systems Inc.
- Harris, A., Phenix, A., Hanson, R. K., & Thornton, D. (2003). *STATIC-99*

coding rules revised - 2003. Ottawa, Canada: Department of the Solicitor General Canada.

Harris, G. T., Rice, M. E., & Quinsey, V. L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior*, 20, 315-335.

Hastings, T., Anderson, S. J., & Hemphill, P. (1997). Comparisons of daily stress, coping, problem behavior, and cognitive distortions in adolescent sexual offenders and conduct-disordered youth. *Sexual Abuse: A Journal of Research and Treatment*, 9, 29-42.

Hildebrand, M., de Ruiter, C., & de Vogel, V. (submitted, 2002). Psychopathy and sexual deviance in treated rapists: Association with (sexual) recidivism. *Sexual Abuse: A Journal of Research and Treatment*.

Hoge, R. D. (2001). A case management instrument for use in juvenile justice systems. *Juvenile and Family Court Journal*, 52, 25-32.

Hoge, R. D. & Andrews, D. A. (2002). *Youth Level of Service/Case Management Inventory: User's manual*. Toronto, ON: Multi-Health Systems Inc.

Hoge, R. D. & Andrews, D. A. (1994). *The Youth Level of Service/Case Management Inventory and Manual*. Ottawa, Ontario: Department of Psychology, Carleton University.

Hunter, J. (1999). *Understanding juvenile sexual offending behavior: Emerging research, treatment approaches and management practices*. Silver Spring, MD: Center for Sex Offender Management.

Hunter Jr., J. A., & Becker, J. V. (1994). The role of deviant sexual arousal in juvenile

- sexual offending: Etiology, evaluation, and treatment. *Criminal Justice and Behavior*, 21, 132-149.
- Hunter, J. A. & Lexier, L. J. (1998). Ethical and legal issues in the assessment and treatment of juvenile sex offenders. *Child Maltreatment*, 3, 339-348.
- Jacobs, W. L., Kennedy, W. A., & Meyer, J. B. (1997). Juvenile delinquents: A between-group comparison study of sexual and nonsexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 9, 201-217.
- Jonson-Reid, M., & Way, I. (2001). Adolescent sexual offenders: Incidence of childhood maltreatment, serious emotional disturbance, and prior offenses. *American Journal of Orthopsychiatry*, 71, 120-130.
- Jung, S., & Rawana, E. P. (1999). Risk-need assessment of juvenile offenders. *Criminal Justice and Behaviour*, 26, 69-89.
- Kahn, T. J., & Chamber, H. J. (1991). Assessing reoffense risk with juvenile sexual offenders. *Child Welfare*, 70, 333-345.
- Kaufman, K. L. (1993). *Sexual Fantasy Questionnaire*. Columbus, OH: Children's Hospital.
- Knight, R. A., & Prentky, R. A. (1993). Exploring characteristics for classifying juvenile sex offenders. In H. E. Barbaree, W. L. Marshall, & S. M. Hudson (Eds.), *The juvenile sex offender* (pp.45-83). New York: Guilford Press.
- Lab, S. P., Shields, G., & Schondel, C. (1993). Research note: An evaluation of juvenile sexual offender treatment. *Crime & Delinquency*, 39, 543-553.
- Lane, S. (1997). Assessment of sexually abusive youth. In G. Ryan, & S. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (Revised

- edition) (pp. 219-263). San Francisco: Jossey-Bass Publishers.
- Langstrom, N., & Grann, M. (2000). Risk for criminal recidivism among young sex offenders. *Journal of Interpersonal Violence, 15*, 855-871.
- Lehne, G. K. (1978). Gay male fantasies and realities. *Journal of Social Issues, 34*, 28-37.
- Leitenberg, H., & Henning, K. (1995). Sexual fantasy. *Psychological Bulletin, 117*, 469-498.
- Longo, R.E. (1982). Sexual learning and experience among adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology, 26*, 235-240.
- Marques, J. K., Day, D. M., Nelson, C., & West, M. A. (1994). Effects of cognitive behavioral treatment on sex offender recidivism: Preliminary results of a longitudinal study. *Criminal Justice and Behavior, 21*, 28-54.
- McGuire, R. J., Carlisle, J.M., & Young, B.G. (1965). Sexual deviations as conditioned behavior: A hypothesis. *Behaviour Research and Therapy, 2*, 185-190.
- Meyer, L. C. & Romero, J. (1980). A ten-year follow-up of sex offender recidivism. Unpublished manuscript. Philadelphia, PA: Joseph J. Peters Institute.
- Milloy, C. D. (1998). Specialized treatment for juvenile sex offenders: A closer look. *Journal of Interpersonal Violence, 13*, 653-656.
- Mossman, D. (1994). Assessing predictions of violence: Being accurate about accuracy. *Journal of Consulting and Clinical Psychology, 62*, 783-792.
- Nuffield, J. (1982). *Parole decision making in Canada: Research towards decision guidelines*. Ottawa: Department of the Solicitor General Canada.

- Overall, J. E., & Gorham, D. R. (1988). The Brief Psychiatric Rating Scale (BPRS): Recent developments in ascertaining and scaling. *Psycho-pharmacological Bulletin*, 24, 97-99.
- Phenix, A., Hanson, R. K., & Thornton, D. (2000). *Coding rules for the Static-99*. Ottawa, ON: Department of the Solicitor General Canada.
- Poole, D., Liedecke, D., & Marbibi, M. (2000). *Risk assessment and recidivism in juvenile sexual offenders: A validation study of the Static-99*. TX: Texas Youth Commission.
- Prentky, R., Harris, B., Frizzell, K., & Righthand, S. (2000). An actuarial procedure for assessing risk with juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 12, 71-93.
- Prentky, R., Lee, A. F. S., Knight, R. A., & Cerce, D. (1997). Recidivism rates among child molesters and rapists: A methodological analysis. *Law and Human Behavior*, 21, 635-659.
- Quinsey, V. L., & Earls, C. M. (1990). The modification of sexual preferences. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp.279-293). New York: Plenum.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). *Violent offenders: Appraising and managing risk*. Washington, DC: American Psychological Association.
- Rice M. E. & Harris, G. T. (1995). Violent recidivism: Assessing predictive validity. *Journal of Consulting and Clinical Psychology*, 63, 737-748.
- Richardson, G., & Graham, F. (1997). Relapse prevention. In M. Hoghughi , S.R.

- Bhate, & F. Graham (Eds.), *Working with sexually abusive adolescents* (pp. 162-176). London: Sage Publications.
- Ross, J., & Loss, P. (1991). Assessment of the juvenile sex offender. In G. D. Ryan, & S. L. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (pp. 199-251). Lexington, MA: Lexington Books.
- Rubinstein, M., Yeager, C. A., Goodstein, C., & Lewis, D. O. (1993). Sexually assaultive male juveniles: A follow-up. *American Journal of Psychiatry*, 150 (2), 262-265.
- Ryan, G. (1998). What is so special about specialized treatment? *Journal of Interpersonal Violence*, 13, 647-652.
- Schram, D. D., Milloy, C. D., & Rowe, W. E. (1991). *Juvenile sex offenders: A follow-up study of reoffense behavior*. Olympia, WA: Washington Institute for Public Policy.
- Shrout, P. E. & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 86 (2), 240-428.
- Smith, W. (1988). Delinquency and abuse among juvenile sexual offenders. *Journal of Interpersonal Violence*, 3, 400-413.
- Smith, W. R., Monastersky, C. (1986). Assessing juvenile sexual offenders' risk for reoffending. *Criminal Justice and Behavior*, 13, 115-140.
- Swets, J. A., Dawes, R. M., & Monahan, J. (2000). Psychological science can improve diagnostic decisions. *Psychological Science in the Public Interest: A Journal of the American Psychological Society*, 1, 1-26.
- Widom, C. S. (1995). Victims of childhood sexual abuse: Later criminal consequences. *NIJ Research in Brief*. Retrieved January 15, 2002 from,

<http://www.ncjrs.org/txtfiles/abuse.txt>

- Will, D. (1999). Assessment issues. In M. Erooga, & H. Masson (Eds.), *Children and young people who sexually abuse others: Challenges and responses* (pp. 86-103). London: Routledge, Taylor & Francis Group.
- Worling, J. R. (2002, October). *Risk assessments with adolescents: Current research and practice*. Invited Address. 21st Annual Research and Training Conference of the Association for the Treatment of Sexual Abusers, Montreal, Quebec.
- Worling, J. R., & Curwen, T. (2000). Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction. *Child Abuse & Neglect*, 24, 965-982.
- Worling, J. R., & Curwen, T. (2001). *Estimate of Risk of Adolescent Sexual Offense Recidivism (ERASOR) Version 2.0*. Toronto, ON: SAFE-T Program, Thistletown Regional Centre.

Table 1. Risk Factors for Adolescent Sexual Recidivism

Author(s) & date of publication	Type of follow-up	Recidivism rate	Sexual recidivism risk factors	Non-sexual recidivism risk factors
Smith & Monastersky, 1986	-mean follow-up = 28.9 mths -N = 112	-sexual = 14.3% -non-sexual = 34.8%	-peer victim -stranger victim -male victim -less serious offense (as compared to rape)	-unable to identify personal strengths -less serious offense (as compared to rape)
Schram, Milloy & Rowe, 1991	-juvenile and adult arrests & convictions -mean follow-up = 6.8 yrs -N = 197	-sexual arrests = 12.2% -sexual convictions = 10.2% -non-sexual arrests = 50.8% -non-sexual convictions = 47.7%	-deviant sexual arousal -history of truancy -cognitive distortions -history of sex offending NOT related to sexual recidivism -level of coercion -blame for offense -offender's ability to express empathy for victim -remorse for offense	
Kahn & Chambers, 1991	-convictions -mean follow-up = 28.1 mths -N = 221	-any recidivism = 44.8% -sexual = 7.5% -violent = 6.6%	-deviant sexual arousal -victim blaming -denial (negative -unrelated child victim -use of verbal threats during offense	-school behaviour -truancy -history of sexual abuse and/or siblings with history of sexual abuse -at least one prior conviction for any offense,

Langstrom & Grann, 2000	<ul style="list-style-type: none"> -conviction -mean follow-up = 60.95 mths -<i>N</i> = 46 	<ul style="list-style-type: none"> -any = 65% -sexual = 20% -violent = 22% 	<ul style="list-style-type: none"> -prior sex offending -poor social skills -male victim -2+ victims -stranger victim -offended on 2+ occasions 	<ul style="list-style-type: none"> -conduct disorder signs prior to age 15 -violent conviction -3+ priors (any) -PCL score > 26 -use of death threats during index sexual offense 	<ul style="list-style-type: none"> -misdemeanor, and/or violent offense
Worling & Curwen, 2000	<ul style="list-style-type: none"> -charges -mean follow-up = 6.23 yrs 	<ul style="list-style-type: none"> -sexual = 12.8% -violent = 27.0% -nonviolent = 38.5% -any = 46.6% 	<ul style="list-style-type: none"> -past/present sex fantasies involving children -child-victim grooming behaviour -intrusive sex assault with children -no/incomplete sex offender specific treatment -history of sexual abuse NOT related 	<ul style="list-style-type: none"> -antisocial personality -history of delinquent and aggressive behaviour -criminal history -low self-esteem -economic problems -negative family env. -perceived parental rejection 	
Gretton et al., 2001	<ul style="list-style-type: none"> -charge/conviction -breaches/escapes -mean follow-up = 4.6 yrs. -<i>N</i> = 220 	<ul style="list-style-type: none"> -sex = 15% -violent = 30% -general = 51% 	<ul style="list-style-type: none"> -PCL: YV ratings 	<ul style="list-style-type: none"> -PCL: YV ratings -PCL: YV ratings + sexual deviancy 	

Table 2. Available Risk Assessment Measures and Factors

Measure	Factors
RRASOR (Hanson, 1997)	Prior sexual offenses, age (under 25), relationship to victim (related vs. unrelated), any male victims.
Mn-SOST-R (Epperson, Kaul, Hesselton, 1998)	Number of sexual and sex-related convictions, length of sexual offending history, offender under supervision at time of any sexual offense, any sexual offense committed in a public place, force or threat of force used in any sexual offense, any sexual offense within a single incident that involved multiple acts perpetrated on a single victim, number of different age groups victimized across all sexual offenses, victim aged 13 to 15 years and offender 5 or more years older, victim a stranger in any sexual offense, adolescent antisocial behaviour, substantial drug or alcohol abuse in year prior to arrest and employment history, discipline history while incarcerated, involvement in substance use treatment, involvement in sexual offender treatment, age at time of release.
Static-99 (Hanson & Thornton, 2000)	Prior sexual offenses, four or more sentencing dates, current non-sexual violence, prior non-sexual violence, non contact sexual offenses, unrelated victims, stranger victims, male victims, age (under 25), never married.
Sonar (Hanson & Harris, 2000)	<i>Stable Dynamic:</i> Intimacy deficits, negative social influences, attitudes tolerant of sexual offending, sexual self-regulation, general self-regulation <i>Acute Dynamic:</i> Substance use, negative mood (depression, anxiety), anger/hostility, opportunities for victim access.

ERASOR (Worling & Curwen, 2001)

Deviant sexual interest, obsessive sexual interests, attitudes supportive of sexual offending, unwillingness to alter deviant sexual interests/attitudes, ever sexually assaulted same victim 2 or more times, prior adult sanctions for sexual assaults, threats of or use of excessive violence/weapons, ever sexually assaulted a child, ever sexually assaulted a stranger, indiscriminate choice of victims, ever sexually assaulted a male victim, diverse sexual-assault behaviours, antisocial interpersonal orientation, lack of intimate peer relationships/social isolation, negative peer associations and influences, interpersonal aggression, recent escalation in anger or negative affect, poor self-regulation of affect and behaviour (impulsivity), high-stress family environment, problematic parent-offender relationships/parental rejection, parent(s) not supporting sexual-offense-specific assessment/treatment, environment supporting opportunities to reoffend sexually, no development or practice of realistic prevention plans/strategies, incomplete sexual-offense-specific treatment.

VRAG(Harris, Rice, & Quinsey, 1993)

Living with both biological parents until age 16, elementary school maladjustment, history of alcohol problems, marital status, nonviolent offense history, failure on prior conditional release, age at index offense, index victim injury, gender of index victim, DSM-III diagnosis of any personality disorder, DSM-III diagnosis of schizophrenia, PCL-R score.

SORAG (Quinsey, Harris, Rice & Cormier, 1998)

Living with both biological parents until age 16, elementary school maladjustment, history of alcohol problems, marital status, nonviolent offense history, violent offense history, sexual offense history, failure on prior conditional release, age at index offense, age and gender of index victim, DSM-III diagnosis of any personality disorder, DSM-III diagnosis of schizophrenia, PCL-R score, phallometrically diagnosed sexual deviance.

Table 3. Family Characteristics

Variable	Mean (SD)/%
Living arrangements at time of assessment ($n = 80$)	
With family	57.5%
Temporary placement	20.0%
Permanent separation	22.5%
Living arrangements at time of referral offense ($n = 80$)	
With family	76.3%
Temporary placement	8.8%
Permanent separation	15.0%
Family composition ($n = 79$)	
Intact (biological parents)	32.9%
Single parent	20.3%
Mixed (steps)	31.6%
Crown ward	15.2%
Number of residence changes ($n = 67$)	5.2 (6.2)
Parents who abuse substances ($n = 49$)	44.9%
Parental figure ($n = 22$)	
Mother	18.2%
Father	54.5%
Both	13.6%
Multiple	9.1%
Other significant family member	4.5%
Parental criminal history ($n = 36$)	22.2%
Parental figure ($n = 8$)	
Mother	25.0%
Father	62.5%
Stepfather	12.5%

Table 4. Prior Offenses

Variable	Mean (SD)/%	Range
Age at first offense ($n = 49$)	12.40 (2.00)	6 – 16
Number of prior sexual offenses ($n = 68$)	1.10 (3.70)	0 – 30
Number of previous victims ($n = 15$)	3.60 (7.40)	1 – 30
Longest number of months offending ($n = 13$)	4.90 (7.30)	1 – 24
Violence used ($n = 9$)	11.10%	
Number of prior non-sexual offenses ($n = 69$)	1.26 (1.60)	0 – 10
Longest number of months offending ($n = 18$)	13.10 (19.30)	1 – 72

Table 5. Abuse History

Variable	Mean (SD)/%	Range
Sexual Abuse History		
Ever sexually abused ($n = 78$)	44.9%	
Perpetrator of abuse ($n = 34$)		
Intra-familial	14.7%	
Extra-familial	64.7%	
Both	20.6%	
Age when abuse began ($n = 26$)	8.8 (3.2)	4 – 14
Age when abuse ended ($n = 24$)	10.5 (3.0)	4 – 15
Physical Abuse History		
Ever physically abused ($n = 82$)	59.8%	
Perpetrator of abuse ($n = 48$)		
Intra-familial	87.5%	
Extra-familial	6.3%	
Both	6.3%	
Age abuse began ($n = 9$)	4.2 (6.0)	0 – 14
Age abuse ended ($n = 7$)	9.1 (5.0)	3 – 15

Table 6. Agency Involvement and Treatment History

Variable	Mean (SD)/%	Range
Agency Involvement		
Prior agency involvement ($n = 70$)	58.6%	
Type of agency involvement ($n = 41$)		
CAS	43.9%	
Treatment facility	12.2%	
School	4.9%	
Multiple	39.0%	
Number of agency contacts ($n = 37$)	2.4 (1.8)	1 – 8
Number of months of agency involvement ($n = 27$)	58.3 (60.6)	1 – 198
Age at first involvement ($n = 37$)	7.6 (4.9)	.5 – 17
Treatment History		
Prior treatment for sexual offending ($n = 61$)	14.8%	
Treatment completed ($n = 9$)	11.1%	
Prior non-sex specific treatment ($n = 64$)	26.6%	
Treatment completed ($n = 17$)	23.5%	
Diagnosed psychiatric illness ($n = 50$)	10.0%	

Table 7. Referral Offense Characteristics

Variable	Mean (SD)/%	Range
Age at referral offense ($n = 74$)	14.0 (1.4)	11 – 17
Relationship to victim ($n = 82$)		
Intra-familial	26.8%	
Extra-familial	67.1%	
Both	3.5%	
Victim gender ($n = 82$)		
Male	15.9%	
Female	72.0%	
Both	12.2%	
Victim age ($n = 80$)		
Younger (difference of 4 years)	48.8%	
Peer	36.3%	
Older	7.5%	
Both	7.5%	
Number of victims ($n = 80$)	1.8 (1.3)	1 – 10
Type of offense ($N = 80$)		
Hands on (offender/victim contact)	90.0%	
Hands off (exhibitionism, etc.)	6.3%	
Both	3.8%	
Level of violence ($n = 73$)		
None	49.3%	
Verbal threats	13.7%	
Pushing/shoving	20.5%	
Physical harm	12.3%	
Threat of/use of weapon	4.1%	
Accomplices to referral offense ($n = 78$)	21.8%	
Use of substances during offense ($n = 44$)	4.5%	
Type of substances used ($n = 2$)		
Drugs	50.0%	
Drugs and alcohol	50.0%	
Longest period of offending with same victim in months ($n = 65$)	5.8 (8.0)	1 – 36

Longest frequency with same victim (number of times) ($n = 65$)	17.4 (48.5)	1 – 300
Disposition ($n = 79$)		
Probation	29.1%	
Open custody	1.3%	
Closed custody	7.6%	
Charges dropped	2.5%	
Not charged	17.7%	
Multiple	22.8%	
Unknown/charges pending	19.0%	
Length of disposition in months ($n = 40$)	20.3 (9.4)	6 – 38

Table 8. RRASOR and Static-99 Inter-rater Reliability

Variable	Base Rate ¹ Rater 1	Base Rate ¹ Rater 2	Percent Agreement	ICC ²	Kappa
RRASOR total			100%	1.00	
Prior sex offenses	16.6%	16.6%	100%	1.00	
Age ^{ab}	100%	100%	100%		
Any male victims	22.2%	22.2%	100%		1.00
Unrelated victims	77.7%	77.7%	100%		1.00
Static-99 total			88.8%	.97**	
Prior sex offenses	16.6%	11.1%	88.8%	.90**	
Prior sentencing ^a	0.0%	0.0%	100%		
Non-contact ^a	0.0%	0.0%	100%		
Index NS violence	5.5%	11.1%	94.4%		.64
Prior NS violence	11.1%	11.1%	100%		1.00
Unrelated victims	77.7%	77.7%	100%		1.00
Stranger victims	33.3%	33.3%	100%		1.00
Any male victims	22.2%	22.2%	100%		1.00
Young ^{ab}	100%	100%	100%		
Single ^{ab}	100%	100%	100%		

Note. N = 18

¹ = percent of cases with variable present² = single measure ICC (Shrout & Fleiss, 1979)^a = no variability within factor^b = base rate is 100% as all subjects were young and single

* p < .05, ** p < .01

Table 9. ERASOR Inter-rater Reliability

Variable	Base Rate ¹ Rater 1	Base Rate ¹ Rater 2	Percent Agreement	ICC ²
ERASOR total				.94**
Interests			44.4%	.69**
Deviant interests	27.8%	27.8%	72.2%	.97**
Obsession/sex	11.1%	16.7%	88.8%	.73**
Supportive attitudes	55.6%	27.8%	66.6%	.49**
Unwilling to alter	27.8%	5.6%	72.2%	.28
Historical			77.7%	.98**
2+ victims	33.3%	33.3%	100%	1.00
2+ times	38.9%	38.9%	100%	1.00
Prior sanctions	22.2%	22.2%	100%	1.00
Threats	55.6%	55.6%	100%	1.00
Child victim	50.0%	50.0%	100%	1.00
Stranger victim	33.3%	33.3%	100%	1.00
Indiscriminate	22.2%	22.2%	100%	1.00
Male victim	22.2%	22.2%	100%	1.00
Diverse behaviors	61.1%	61.1%	77.7%	.55**
Psychosocial Functioning			50.0%	.78**
Antisocial	16.7%	27.8%	66.6%	.64**
Lack of peers	72.2%	50.0%	66.6%	.53**
Negative peers	38.9%	44.4%	88.8%	.94**
Interpersonal aggression	27.8%	44.4%	50.0%	.32
Escalation in anger	5.6%	16.7%	77.7%	-.10
Impulsivity	33.3%	38.9%	77.7%	.88**
Family/Environment			22.2%	.74**
High stress family	16.7%	50.0%	61.1%	.59**
Parental rejection	55.6%	61.1%	77.7%	.78**
Parents unsupportive	33.3%	22.2%	77.7%	.46*
Opportunities/reoffend	27.8%	16.7%	66.6%	.55**
Treatment			100%	
No development/plans ^{ab}	100%	100%	100%	
Incomplete treatment ^{ab}	100%	100%	100%	
Clinical Rating				.68**

Note. N=18

¹ = % of cases with variable present² = single measure ICC (Shrout & Fleiss, 1979)^a = no variability within factor^b = base rate is 100% as all adolescents were rated at assessment, therefore none had completed treatment (unless completed elsewhere) and were unlikely to have developed plans to prevent relapse

* p < .05, ** p < .01

Table 10. YLS/CMI Inter-rater Reliability

Variable	Base Rate ¹ Rater 1	Base Rate ¹ Rater 2	Percent Agreement	ICC ²	Kappa
YLS/CMI total				.85**	
Total priors			88.8%	.54**	
Three+ priors ^a	0.0%	0.0%	100%		
Two+ failures ^a	0.0%	0.0%	100%		
Prior probation	16.6%	22.2%	94.4%		.82
Prior detention	11.1%	16.6%	94.4%		.74
Three+ current ^a	0.0%	11.1%	88.8%		
Total parenting			44.4%	.62**	
Inadequate supervision	22.2%	22.2%	83.3%		.68
Difficulty controlling	11.1%	16.6%	83.3%		.31
Inappropriate discipline	33.3%	22.2%	77.7%		.46
Inconsistent parenting	22.2%	5.5%	72.2%		-.10
Poor relations/father	44.4%	61.1%	83.3%		.68
Poor relations/mother	44.4%	44.4%	88.8%		.76
Total education			66.6%	.74**	
Disruptive-classroom	27.7%	11.1%	83.3%		.49
Disruptive-property	5.5%	5.5%	100%		1.00
Low achievement	27.7%	27.7%	88.8%		.43
Problems/peers	33.3%	44.4%	77.7%		.54
Problems/teachers ^a	5.5%	0.0%	94.4%		
Truancy	16.6%	16.6%	100%		1.00
Unemployment	16.6%	5.5%	88.8%		.46
Total peer			66.6%	.71**	
Delinquent acquaintances	50.0%	33.3%	83.3%		.67
Delinquent friends	16.6%	27.7%	77.7%		.37
No positive acquaintances	38.8%	33.3%	72.2%		.40

No positive friends	55.5%	50.0%	83.3%	.67
Total substance abuse			88.8%	.88**
Occasional drug use	16.6%	11.1%	94.4%	.77
Chronic drug use	5.5%	5.5%	100%	1.00
Chronic alcohol use ^a	0.0%	5.5%	94.4%	
Interferes with life ^a	0.0%	5.5%	94.4%	
Linked to offense ^a	0.0%	0.0%	100%	
Total leisure/recreation			66.6%	.64**
Limited organized activities	44.4%	44.4%	77.7%	.55
Better use of time	38.8%	38.8%	88.8%	.77
No personal interests	11.1%	22.2%	88.8%	.61
Total personality			22.2%	.71**
Inflated self-esteem	5.5%	5.5%	88.8%	-.06
Physically aggressive	44.4%	38.8%	72.2%	.43
Tantrums	5.5%	11.1%	94.4%	.64
Short attention span	33.3%	33.3%	66.6%	.25
Poor frustration tolerance	22.2%	11.1%	77.7%	.22
Inadequate guilt feelings	55.5%	22.2%	55.5%	.16
Verbally aggressive	38.8%	38.8%	88.8%	.78
Total attitudes			61.1%	.66**
Antisocial/pro-criminal attitudes	44.4%	38.8%	72.2%	.43
Not seeking help	55.5%	33.3%	66.6%	.36
Actively reject help	11.1%	16.6%	94.4%	.77
Defies authority	44.4%	38.8%	83.3%	.66
Callous ^a	0.0%	11.1%	88.8%	
Overall Clinical Rating				.54**

Note. N = 18

¹ = % of cases with variable present

² = single measure ICC (Shrout & Fleiss, 1979)

^a = at least one item with no variability

* p < .05, ** p < .01

Table 11. Correlations Between Scores on All Risk Measures

Risk Measure	RRASOR	Static-99	ERASOR	YLS/CMI
RRASOR				
Static-99	.75**			
ERASOR	.33**	.32**		
YLS/CMI	.09	.30**	.73**	

Note: N = 81 for the RRASOR and Static-99, N = 79 for the ERASOR, N = 78 for the YLS/CMI

** $p > .01$, two-tailed.

Table 12. Relationships Among Risk Instrument Scales

Scale	R	S	E1	E2	E3	E4	E5	Y1	Y2	Y3	Y4	Y5	Y6	Y7
R. RRASOR														
S. Static-99	.75**													
E1.Sexual Interests	.07	.12												
E2.Historical Assaults	.53**	.39**	.30**											
E3.Psychosocial Functioning	.23*	.30*	.45**	.47**										
E4.Family Functioning	-.06	.00	.02	.05	.21									
E5.Treatment	-.36**	-.29**	.12	-.05	.04	.05								
Y1.Prior Offenses	.13	.44**	.16	.14	.44**	.14	-.07							
Y2.Family/Parenting	.01	.13	.10	.32**	.50**	.65**	.06	.32**						
Y3.Education/Employment	.01	.25*	.26*	.18	.55**	.35**	-.08	.45**	.53**					
Y4.Peer Relations	.16	.31**	.31**	.30**	.74**	.38**	.04	.39**	.51**	.55**				
Y5.Substance Abuse	-.07	-.02	.14	.24*	.31**	.14	.01	.14	.32**	.17	.32**			
Y6.Leisure	.11	.14	.21	.14	.27*	.27*	.10	.23*	.27*	.31**	.29**	-.17		
Y7.Personality/Behaviour	.11	.16	.48**	.36*	.78**	.09	-.01	.44**	.40**	.52**	.51**	.24*	.22	
Y8.Attitudes/Orientation	.04	.20	.44**	.10	.38**	-.01	.22	.34**	.13	.30**	.29**	.02	.22	.39**

* $p < .05$, ** $p < .01$

Table 13. Descriptive Statistics for the RRASOR for Any Recidivism

Variable	Recidivists (<i>N</i> = 41) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 39) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
RRASOR	2.27 (.74)	2.21 (.70)	2.24 (.72)
Prior sex offenses	.10 (.37)	.15 (.54)	.12 (.46)
Age	100%	100%	100%
Any male	36.6%	28.2%	32.5%
Unrelated victims	80.5%	76.9%	78.8%

^a = number of cases with factor present

Table 14. Correlation and AUC Values for the Four Assessment Instruments with Any Recidivism

Assessment Instrument	r	AUC	95% CI
RRASOR (<i>N</i> = 80)	.04	.53	.40 - .66
Static-99 (<i>N</i> = 80)	.16	.61	.48 - .73
Static-99 Risk Rating	.09	.54	.42 - .67
ERASOR (<i>N</i> = 78)	.15	.58	.46 - .71
Sexual Interests Scale	.13	.57	.44 - .70
Historical Sexual Assault Scale	.04	.53	.40 - .66
Psychosocial Functioning Scale	.19	.62	.49 - .74
Family Functioning Scale	.01	.51	.38 - .64
Treatment Scale	.19	.54	.41 - .67
Overall Risk Rating	.10	.55	.42 - .68
YLS/CMI (<i>N</i> = 77)	.16	.58	.46 - .71
Prior Offenses	.10	.54	.41 - .67
Family	.11	.56	.44 - .69
Education/Employment	.07	.54	.41 - .67
Peer Relations	.11	.58	.45 - .70
Substance Abuse	.02	.54	.42 - .67
Leisure	.12	.57	.44 - .70
Personality	.14	.58	.45 - .71
Attitudes/Orientation	.18	.60	.48 - .73
Overall Risk Rating	.12	.56	.43 - .69

Note. Base rate for any recidivism is 51.9% with *N* = 77
 95% Confidence Interval provided for AUC values

Table 15. Descriptive Statistics for the Static-99 for Any Recidivism

Variable	Recidivists (<i>N</i> = 41) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 39) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
Static-99	3.88 (1.10)	3.54 (1.10)	3.71 (1.10)
Prior sex offenses	.10 (.37)	.15 (.54)	.12 (.46)
Prior sentencing	4.9%	0.0%	2.5%
Non-contact	2.4%	2.6%	2.5%
Index NS violence	9.8%	7.7%	8.8%
Prior NS violence	14.6%	2.6%	8.8%
Unrelated victims	80.5%	76.9%	78.8%
Stranger victims	29.3%	20.5%	25.0%
Any male	36.6%	28.2%	32.5%
Young	100%	100%	100%
Single	100%	100%	100%
Risk Rating			
Low	75.6%	84.6%	80.0%
Moderate	22.0%	12.8%	17.5%
High	2.4%	2.6%	2.5%

^a = number of cases with factor present

Table 16. Descriptive Statistics for the ERASOR for Any Recidivism

Variable	Recidivists (<i>N</i> = 41) Mean (SD)	Non-recidivist (<i>N</i> = 37) Mean (SD)	Total (<i>N</i> = 78) Mean (SD)
ERASOR total	25.46 (8.26)	23.08 (7.94)	24.33 (8.15)
Interests	3.15 (2.56)	2.54 (2.19)	2.86 (2.40)
Deviant interests	.83 (.97)	.49 (.84)	.67 (.92)
Obsession/sex	.44 (.81)	.32 (.75)	.38 (.78)
Supportive attitudes	1.12 (.95)	1.05 (.97)	1.09 (.96)
Unwilling to alter	.76 (.92)	.68 (.88)	.72 (.90)
Historical	7.83 (4.07)	7.49 (4.15)	7.67 (4.09)
2+ victims	1.27 (.98)	1.16 (.99)	1.22 (.98)
2+ times	1.02 (.99)	1.16 (.99)	1.09 (.98)
Prior sanctions	.44 (.81)	.49 (.84)	.46 (.82)
Threats	.66 (.94)	.97 (.99)	.81 (.95)
Child victim	1.37 (.94)	1.03 (1.01)	1.21 (.99)
Stranger victim	.59 (.92)	.43 (.83)	.51 (.88)
Indiscriminate	.66 (.94)	.43 (.83)	.55 (.89)
Male victim	.73 (.98)	.59 (.93)	.67 (.95)
Diverse behaviors	1.10 (.94)	1.22 (.98)	1.15 (.95)
Psychosocial Functioning	6.51 (3.10)	5.32 (2.97)	5.95 (3.08)
Antisocial	1.00 (.89)	.73 (.90)	.87 (.90)
Lack of peers	1.34 (.85)	1.59 (.72)	1.46 (.80)
Negative peers	1.32 (.93)	1.03 (.90)	1.18 (.92)
Interpersonal	1.29 (.90)	.89 (.94)	1.10 (.93)
Escalation in anger	.17 (.44)	.19 (.52)	.18 (.48)
Impulsivity	1.37 (.86)	.89 (.97)	1.15 (.94)
Family/Environment	4.00 (2.39)	3.97 (2.27)	3.99 (2.32)
High stress family	.98 (.82)	.89 (.94)	.94 (.87)
Parental rejection	1.22 (.94)	1.27 (.87)	1.24 (.90)
Parents unsupportive	.90 (.92)	.81 (.94)	.86 (.94)
Opportunity/reoffend	.90 (.92)	1.00 (.85)	.95 (.88)
Treatment	3.98 (.16)	3.76 (.80)	3.87 (.57)
No development/plans	2.00 (0.0)	1.89 (.39)	1.95 (.27)
Incomplete treatment	1.98 (.16)	1.86 (.42)	1.92 (.31)
Clinical Rating	2.20 (.71)	2.05 (.78)	2.13 (.74)
Low (%)	17.1%	27.0%	21.8%
Moderate (%)	46.3%	40.5%	43.6%
High (%)	34.6%	32.4%	34.6%

Note. *N*s range from 78 to 85.

Table 17. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Any Recidivism

Variable	Recidivists (<i>N</i> = 40) %/Mean (SD)	Non-recidivists (<i>N</i> = 37) %/Mean (SD)	Total (<i>N</i> = 77) %/Mean (SD)
YLS/CMI total	14.63 (7.07)	12.38 (6.73)	13.55 (6.96)
Total priors	.65 (1.05)	.46 (.73)	.56 (.91)
Three+ priors	7.5%	0.0%	3.9%
Two+ failures	0.0%	0.0%	0.0%
Prior probation	20.0%	24.3%	22.1%
Prior detention	15.0%	8.1%	11.7%
Three+ current	22.5%	13.5%	18.2%
Total parenting	2.88 (1.64)	2.49 (1.88)	2.69 (1.76)
Inadequate supervision	47.5%	40.5%	44.2%
Difficulty controlling	42.5%	21.6%	32.5%
Inappropriate discipline	47.5%	45.9%	46.8%
Inconsistent parenting	42.5%	51.4%	46.8%
Poor relations/father	57.5%	48.6%	53.2%
Poor relations/mother	50.0%	41.7%	46.1%
Total education	1.95 (1.65)	1.73 (1.57)	1.84 (1.61)
Disruptive-classroom	22.5%	29.7%	26.0%
Disruptive-school property	22.5%	21.6%	22.1%
Low achievement	37.5%	27.8%	32.9%
Problems with peers	50.0%	51.4%	50.6%
Problems with teachers	12.5%	16.2%	14.3%
Truancy	40.0%	16.2%	28.6%
Unemployment	10.0%	10.8%	10.4%
Total peer	2.23 (1.33)	1.95 (1.18)	2.09 (1.26)
Delinquent acquaintances	70.0%	62.2%	66.2%
Delinquent friends	35.0%	24.3%	29.9%
No positive acquaintances	50.0%	35.1%	42.9%
No positive friends	67.5%	75.7%	71.4%
Total substance abuse	.55 (.81)	.51 (1.04)	.53 (.93)
Occasional drug use	32.5%	27.0%	29.9%
Chronic drug use	2.5%	8.1%	5.2%
Chronic alcohol use	12.5%	8.1%	10.4%
Interferes with life	5.0%	5.4%	5.2%
Linked to offense	0.0%	2.7%	1.3%

Total leisure/recreation	1.40 (1.06)	1.14 (1.08)	1.27 (1.07)
Limited organized activities	72.5%	54.1%	63.6%
Better use of time	50.0%	43.2%	46.8%
No personal interests	17.5%	16.2%	16.9%
Total personality	3.20 (1.86)	2.70 (1.84)	2.96 (1.85)
Inflated self-esteem	10.0%	13.5%	11.7%
Physically aggressive	57.5%	40.5%	49.4%
Tantrums	32.5%	27.0%	29.9%
Short attention span	50.0%	35.1%	42.9%
Poor frustration tolerance	47.5%	37.8%	42.9%
Inadequate guilt feelings	62.5%	73.0%	67.5%
Verbally aggressive	62.5%	43.2%	53.2%
Total attitudes	1.83 (1.20)	1.38 (1.30)	1.61 (1.26)
Antisocial attitudes	62.5%	43.2%	53.2%
Not seeking help	52.5%	40.5%	46.8%
Actively reject help	10.0%	5.4%	7.8%
Defies authority	45.0%	40.5%	42.9%
Callous	12.5%	8.1%	10.4%
Overall Risk Rating	1.90 (.59)	1.76 (.60)	1.97 (.73)
Low	22.5%	32.4%	27.3%
Moderate	65.0%	59.5%	62.3%
High	12.5%	8.1%	10.4%

Note. *N*s range from 77 to 86.

Table 18. Descriptive Statistics for the RRASOR for Sexual Recidivism

Variable	Recidivists (<i>N</i> = 13) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 67) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
RRASOR	2.31 (.63)	2.22 (.73)	2.24 (.72)
Prior sex offenses	.08 (.28)	.13 (.49)	.12 (.46)
Age	100%	100%	100%
Any male	38.5%	31.3%	32.5%
Unrelated victims	84.6%	77.6%	78.8%

^a = number of cases with factor present

Table 19. Correlation and AUC Values for the Four Assessment Instruments with Sexual Recidivism

Assessment Instrument	r	AUC	95% CI
RRASOR (<i>N</i> = 80)	.04	.56	.38 - .73
Static-99 (<i>N</i> = 80)	.18	.66	.49 - .82
Static-99 Risk Rating	.08	.56	.38 - .74
ERASOR (<i>N</i> = 78)	.12	.59	.43 - .75
Sexual Interests Scale	.16	.63	.43 - .82
Historical Sexual Assault Scale	.03	.54	.38 - .71
Psychosocial Functioning Scale	.06	.55	.38 - .72
Family Functioning Scale	.08	.56	.37 - .75
Treatment Scale	.10	.54	.37 - .70
Overall Risk Rating	.06	.54	.38 - .69
YLS/CMI (<i>N</i> = 77)	.13	.60	.44 - .76
Prior Offenses	.07	.54	.37 - .72
Family	.14	.61	.45 - .78
Education/Employment	.02	.52	.35 - .69
Peer Relations	.11	.58	.42 - .74
Substance Abuse	-.18	.38	.24 - .53
Leisure	.21	.66	.51 - .82
Personality	.05	.54	.36 - .71
Attitudes/Orientation	.22	.66	.50 - .82
Overall Risk Rating	.07	.55	.39 - .71

Note. Base rate for sexual recidivism is 16.9% with *N* = 77

95% Confidence Interval provided for AUC values

Table 20. Descriptive Statistics for the Static-99 for Sexual Recidivism

Variable	Recidivists (<i>N</i> = 13) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 67) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
Static-99	4.15 (1.14)	3.63 (1.08)	3.71 (1.10)
Prior sex offenses	.08 (.28)	.13 (.49)	.12 (.46)
Prior sentencing	7.7%	1.5%	2.5%
Non-contact	7.7%	1.5%	2.5%
Index NS violence	15.4%	7.5%	8.8%
Prior NS violence	23.1%	6.0%	8.8%
Unrelated victims	84.6%	77.6%	78.8%
Stranger victims	30.8%	23.9%	25.0%
Any male	38.5%	31.3%	32.5%
Young	100%	100%	100%
Single	100%	100%	100%
Risk Rating			
Low	69.2%	82.1%	80.0%
Moderate	30.8%	14.9%	17.5%
High	0.0%	3.0%	2.5%

^a = number of cases with factor present

Table 21. Descriptive Statistics for the ERASOR for Sexual Recidivism

Variable	Recidivists (<i>N</i> = 13) Mean (SD)	Non-recidivist (<i>N</i> = 65) Mean (SD)	Total (<i>N</i> = 78) Mean (SD)
ERASOR total	26.46 (7.49)	23.91 (8.26)	24.33 (8.15)
Interests	3.69 (2.72)	2.69 (2.32)	2.86 (2.40)
Deviant interests	1.08 (1.04)	.58 (.88)	.67 (.92)
Obsession/sex	.69 (.95)	.32 (.73)	.38 (.78)
Supportive attitudes	1.00 (1.00)	1.11 (.95)	1.09 (.96)
Unwilling to alter	.92 (1.04)	.68 (.87)	.72 (.90)
Historical	8.00 (3.76)	7.60 (4.17)	7.67 (4.09)
2+ victims	1.38 (.96)	1.18 (.98)	1.22 (.98)
2+ times	1.15 (.99)	1.08 (.99)	1.09 (.98)
Prior sanctions	.46 (.78)	.46 (.83)	.46 (.82)
Threats	.54 (.88)	.86 (.97)	.81 (.95)
Child victim	1.54 (.88)	1.14 (1.00)	1.21 (.99)
Stranger victim	.62 (.96)	.49 (.87)	.51 (.88)
Indiscriminate	.46 (.88)	.57 (.90)	.55 (.89)
Male victim	.77 (1.01)	.65 (.94)	.67 (.95)
Diverse behaviors	1.08 (.86)	1.17 (.98)	1.15 (.95)
Psychosocial Functioning	6.38 (3.01)	5.86 (3.11)	5.95 (3.08)
Antisocial	1.23 (.93)	.80 (.89)	.87 (.90)
Lack of peers	1.23 (.93)	1.51 (.77)	1.46 (.80)
Negative peers	1.31 (.95)	1.15 (.92)	1.18 (.92)
Interpersonal	1.00 (1.00)	1.12 (.93)	1.10 (.93)
Escalation in anger	.15 (.38)	.18 (.50)	.18 (.48)
Impulsivity	1.46 (.88)	1.09 (.95)	1.15 (.94)
Family/Environment	4.38 (2.66)	3.91 (2.26)	3.99 (2.32)
High stress family	.85 (.90)	.95 (.87)	.94 (.87)
Parental rejection	1.38 (.96)	1.22 (.89)	1.24 (.90)
Parents unsupportive	1.08 (1.04)	.82 (.92)	.86 (.94)
Opportunity/reoffend	1.08 (.95)	.92 (.87)	.95 (.88)
Treatment	4.00 (.00)	3.85 (.62)	3.87 (.57)
No development/plans	2.00 (.00)	1.94 (.30)	1.95 (.27)
Incomplete treatment	2.00 (.00)	1.91 (.34)	1.92 (.31)
Clinical Rating	2.23 (.60)	2.11 (.77)	2.13 (.74)
Low (%)	7.7%	24.6%	21.8%
Moderate (%)	61.5%	40.0%	43.6%
High (%)	30.8%	35.4%	34.6%

Note. *N*s range from 78 to 85.

Table 22. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Sexual Recidivism

Variable	Recidivists (<i>N</i> = 13) %/Mean (SD)	Non-recidivists (<i>N</i> = 64) %/Mean (SD)	Total (<i>N</i> = 77) %/Mean (SD)
YLS/CMI total	15.54 (6.25)	13.14 (7.07)	13.55 (6.96)
Total priors	.69 (1.11)	.51 (.86)	.54 (.90)
Three+ priors	7.7%	3.1%	3.9%
Two+ failures	0.0%	0.0%	0.0%
Prior probation	15.4%	23.4%	22.1%
Prior detention	15.4%	10.9%	11.7%
Three+ current	30.8%	15.6%	18.2%
Total parenting	3.23 (1.59)	2.58 (1.78)	2.69 (1.76)
Inadequate supervision	46.2%	43.8%	44.2%
Difficulty controlling	61.5%	26.6%	32.5%
Inappropriate discipline	61.5%	43.8%	46.8%
Inconsistent parenting	30.8%	50.0%	46.8%
Poor relations/father	69.2%	50.0%	53.2%
Poor relations/mother	53.8%	44.4%	46.1%
Total education	1.92 (1.61)	1.83 (1.62)	1.84 (1.61)
Disruptive-classroom	15.4%	28.1%	26.0%
Disruptive-school property	30.8%	20.3%	22.1%
Low achievement	23.1%	34.9%	32.9%
Problems with peers	46.2%	51.6%	50.6%
Problems with teachers	15.4%	14.1%	14.3%
Truancy	46.2%	25.0%	28.6%
Unemployment	15.4%	9.4%	10.4%
Total peer	2.21 (1.25)	2.00 (1.30)	2.09 (1.26)
Delinquent acquaintances	76.9%	64.1%	66.2%
Delinquent friends	30.8%	29.7%	29.9%
No positive acquaintances	53.8%	40.6%	42.9%
No positive friends	76.9%	70.3%	71.4%
Total substance abuse	.21 (.43)	.67 (.98)	.53 (.93)
Occasional drug use	15.4%	32.8%	29.9%
Chronic drug use	0.0%	6.3%	5.2%
Chronic alcohol use	0.0%	12.5%	10.4%
Interferes with life	0.0%	6.3%	5.2%
Linked to offense	0.0%	1.6%	1.3%

Total leisure/recreation	1.60 (.99)	1.13 (1.05)	1.27 (1.07)
Limited organized activities	84.6%	59.4%	63.6%
Better use of time	76.9%	40.6%	46.8%
No personal interests	15.4%	17.2%	16.9%
Total personality	3.15 (1.91)	2.92 (1.85)	2.96 (1.85)
Inflated self-esteem	15.4%	10.9%	11.7%
Physically aggressive	46.2%	50.0%	49.4%
Tantrums	30.8%	29.7%	29.9%
Short attention span	46.2%	42.2%	42.9%
Poor frustration tolerance	46.2%	42.2%	42.9%
Inadequate guilt feelings	84.6%	64.1%	67.5%
Verbally aggressive	46.2%	54.7%	53.2%
Total attitudes	2.23 (1.30)	1.48 (1.22)	1.61 (1.26)
Antisocial attitudes	76.9%	48.4%	53.2%
Not seeking help	53.8%	45.3%	46.8%
Actively reject help	15.4%	6.3%	7.8%
Defies authority	53.8%	40.6%	42.9%
Callous	23.1%	7.8%	10.4%
Overall Risk Rating	2.23 (.80)	1.94 (.71)	1.97 (.73)
Low	15.4%	29.7%	27.3%
Moderate	76.9%	59.4%	62.3%
High	7.7%	10.9%	10.4%

Note. *Ns* range from 77 to 86.

Table 23. Descriptive Statistics for the RRASOR for Violent Recidivism

Variable	Recidivists (<i>N</i> = 20) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 60) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
RRASOR	2.15 (.59)	2.27 (.76)	2.24 (.72)
Prior sex offenses	.05 (.22)	.15 (.52)	.12 (.46)
Age	100%	100%	100%
Any male	35.0%	31.7%	32.5%
Unrelated victims	75.0%	80.0%	78.8%

^a = number of cases with factor present

Table 24. Correlation and AUC Values for the Four Assessment Instruments with Violent Recidivism

Assessment Instrument	r	AUC	95% CI
RRASOR (<i>N</i> = 80)	-.07	.48	.33 - .62
Static-99 (<i>N</i> = 80)	.10	.59	.44 - .73
Static-99 Risk Rating	.09	.56	.41 - .71
ERASOR (<i>N</i> = 78)	.15	.60	.46 - .74
Sexual Interests Scale	.01	.50	.35 - .65
Historical Sexual Assault Scale	-.02	.49	.34 - .64
Psychosocial Functioning Scale	.33**	.72**	.59 - .86
Family Functioning Scale	.07	.54	.39 - .70
Treatment Scale	.13	.54	.40 - .68
Overall Risk Rating	.10	.55	.42 - .69
YLS/CMI (<i>N</i> = 77)	.31**	.69*	.55 - .83
Prior Offenses	.12	.56	.41 - .71
Family	.19	.63	.48 - .77
Education/Employment	.24*	.65*	.52 - .79
Peer Relations	.26*	.68*	.54 - .82
Substance Abuse	.14	.59	.44 - .74
Leisure	.15	.60	.46 - .74
Personality	.22	.64	.49 - .79
Attitudes/Orientation	.26*	.66*	.54 - .79
Overall Risk Rating	.22	.62	.48 - .76

Note. Base rate for violent recidivism is 26.0% with *N* = 77

95% Confidence Interval provided for AUC values

* $p < .05$, ** $p < .01$

Table 25. Descriptive Statistics for the Static-99 for Violent Recidivism

Variable	Recidivists (<i>N</i> = 20) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 60) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
Static-99	3.90 (1.02)	3.65 (1.13)	3.71 (1.10)
Prior sex offenses	.05 (.22)	.15 (.52)	.12 (.46)
Prior sentencing	5.0%	1.5%	2.5%
Non-contact	5.0%	1.5%	2.5%
Index NS violence	10.0%	7.5%	8.8%
Prior NS violence	20.0%	6.0%	8.8%
Unrelated victims	75.0%	77.6%	78.8%
Stranger victims	35.0%	23.9%	25.0%
Any male	35.0%	31.3%	32.5%
Young	100%	100%	100%
Single	100%	100%	100%
Risk Rating			
Low	70.0%	83.3%	80.0%
Moderate	30.0%	13.3%	17.5%
High	0.0%	3.3%	2.5%

^a = number of cases with factor present

Table 26. Descriptive Statistics for the ERASOR for Violent Recidivism

Variable	Recidivists (<i>N</i> = 20) Mean (SD)	Non-recidivist (<i>N</i> = 58) Mean (SD)	Total (<i>N</i> = 78) Mean (SD)
ERASOR total	26.35 (7.62)	23.64 (8.27)	24.33 (8.15)
Interests	2.90 (2.53)	2.84 (2.38)	2.86 (2.40)
Deviant interests	.55 (.89)	.71 (.94)	.67 (.92)
Obsession/sex	.40 (.75)	.38 (.79)	.38 (.78)
Supportive attitudes	1.15 (.99)	1.07 (.95)	1.09 (.96)
Unwilling to alter	.80 (.89)	.69 (.90)	.72 (.90)
Historical	7.55 (4.25)	7.71 (4.07)	7.67 (4.09)
2+ victims	1.02 (1.01)	1.22 (.97)	1.22 (.98)
2+ times	.90 (1.02)	1.16 (.97)	1.09 (.98)
Prior sanctions	.50 (.89)	.45 (.80)	.46 (.82)
Threats	.85 (.99)	.79 (.95)	.81 (.95)
Child victim	1.20 (1.01)	1.21 (.99)	1.21 (.99)
Stranger victim	.70 (.98)	.45 (.84)	.51 (.88)
Indiscriminate	.45 (.83)	.59 (.92)	.55 (.89)
Male victim	.70 (.98)	.66 (.95)	.67 (.95)
Diverse behaviors	1.58 (.94)	1.19 (.96)	1.15 (.95)
Psychosocial Functioning	7.65 (2.92)	5.36 (2.93)	5.95 (3.08)
Antisocial	1.25 (.85)	.74 (.89)	.87 (.90)
Lack of peers	1.55 (.76)	1.43 (.82)	1.46 (.80)
Negative peers	1.65 (.75)	1.02 (.93)	1.18 (.92)
Interpersonal	1.35 (.93)	1.02 (.93)	1.10 (.93)
Escalation in anger	.30 (.57)	.14 (.44)	.18 (.48)
Impulsivity	1.55 (.76)	1.02 (.96)	1.15 (.94)
Family/Environment	4.25 (2.55)	3.90 (2.25)	3.99 (2.32)
High stress family	.95 (.83)	.93 (.90)	.94 (.87)
Parental rejection	1.30 (.92)	1.22 (.90)	1.24 (.90)
Parents unsupportive	.95 (1.00)	.83 (.92)	.86 (.94)
Opportunity/reoffend	1.05 (.89)	.91 (.88)	.95 (.88)
Treatment	4.00 (.00)	3.83 (.65)	3.87 (.57)
No development/plans	2.00 (.00)	1.93 (.30)	1.95 (.27)
Incomplete treatment	2.00 (.00)	1.90 (.36)	1.92 (.31)
Clinical Rating	2.25 (.64)	2.09 (.78)	2.13 (.74)
Low (%)	10.0%	25.9%	21.8%
Moderate (%)	55.0%	39.7%	43.6%
High (%)	35.0%	34.5%	34.6%

Note. *N*s range from 78 to 85.

Table 27. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Violent Recidivism

Variable	Recidivists (<i>N</i> = 20) %/Mean (SD)	Non-recidivists (<i>N</i> = 57) %/Mean (SD)	Total (<i>N</i> = 77) %/Mean (SD)
YLS/CMI total	17.20 (6.73)	12.26 (6.62)	13.55 (6.96)
Total priors	.75 (1.12)	.47 (.81)	.54 (.90)
Three+ priors	10.0%	1.8%	3.9%
Two+ failures	0.0%	0.0%	0.0%
Prior probation	15.0%	24.6%	22.1%
Prior detention	20.0%	8.8%	11.7%
Three+ current	30.0%	14.0%	18.2%
Total parenting	3.25 (1.77)	2.49 (1.72)	2.69 (1.76)
Inadequate supervision	45.0%	43.9%	44.2%
Difficulty controlling	60.0%	22.8%	32.5%
Inappropriate discipline	55.0%	43.9%	46.8%
Inconsistent parenting	50.0%	45.6%	46.8%
Poor relations/father	55.0%	52.6%	53.2%
Poor relations/mother	60.0%	41.1%	46.1%
Total education	2.50 (1.70)	1.61 (1.52)	1.84 (1.61)
Disruptive-classroom	25.0%	26.3%	26.0%
Disruptive-school property	35.0%	17.5%	22.1%
Low achievement	45.0%	28.6%	32.9%
Problems with peers	60.0%	47.4%	50.6%
Problems with teachers	20.0%	12.3%	14.3%
Truancy	50.0%	21.1%	28.6%
Unemployment	15.0%	8.8%	10.4%
Total peer	2.65 (1.18)	1.83 (1.26)	2.09 (1.26)
Delinquent acquaintances	85.0%	59.6%	66.2%
Delinquent friends	35.0%	28.1%	29.9%
No positive acquaintances	60.0%	36.8%	42.9%
No positive friends	85.0%	66.7%	71.4%
Total substance abuse	.82 (.96)	.51 (.91)	.53 (.93)
Occasional drug use	35.0%	28.1%	29.9%
Chronic drug use	5.0%	5.3%	5.2%
Chronic alcohol use	25.0%	5.3%	10.4%
Interferes with life	10.0%	3.5%	5.2%
Linked to offense	0.0%	1.8%	1.3%

Total leisure/recreation	1.39 (1.08)	1.14 (1.05)	1.27 (1.07)
Limited organized activities	80.0%	57.9%	63.6%
Better use of time	55.0%	43.9%	46.8%
No personal interests	15.8%	20.0%	16.9%
Total personality	3.65 (1.95)	2.72 (1.77)	2.96 (1.85)
Inflated self-esteem	15.0%	10.5%	11.7%
Physically aggressive	60.0%	45.6%	49.4%
Tantrums	45.0%	24.6%	29.9%
Short attention span	60.0%	36.8%	42.9%
Poor frustration tolerance	50.0%	40.4%	42.9%
Inadequate guilt feelings	70.0%	66.7%	67.5%
Verbally aggressive	65.0%	49.1%	53.2%
Total attitudes	2.15 (1.14)	1.42 (1.25)	1.61 (1.26)
Antisocial attitudes	75.0%	45.6%	53.2%
Not seeking help	55.0%	43.9%	46.8%
Actively reject help	10.0%	7.0%	7.8%
Defies authority	55.0%	38.6%	42.9%
Callous	20.0%	7.0%	10.4%
Overall Risk Rating	2.35 (.67)	1.84 (.70)	1.97 (.73)
Low	15.0%	31.6%	27.3%
Moderate	65.0%	61.4%	62.3%
High	20.0	7.0%	10.4%

Note. *N*s range from 77 to 86.

Table 28. Descriptive Statistics for the RRASOR for Violent, Including Sexual, Recidivism

Variable	Recidivists (<i>N</i> = 26) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 54) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
RRASOR	2.19 (.63)	2.26 (.76)	2.24 (.72)
Prior sex offenses	.08 (.27)	.15 (.53)	.12 (.46)
Age	100%	100%	100%
Any male	34.6%	31.5%	32.5%
Unrelated victims	76.9%	79.6%	78.8%

^a = number of cases with factor present

Table 29. Correlation and AUC Values for the Four Assessment Instruments with Violent, Including Sexual, Recidivism

Assessment Instrument	r	AUC	95% CI
RRASOR (<i>N</i> = 80)	-.04	.50	.36 - .64
Static-99 (<i>N</i> = 80)	.16	.62	.48 - .76
Static-99 Risk Rating	.12	.57	.44 - .71
ERASOR (<i>N</i> = 78)	.25*	.65*	.53 - .78
Sexual Interests Scale	.17	.60	.46 - .74
Historical Sexual Assault Scale	.10	.58	.44 - .71
Psychosocial Functioning Scale	.28*	.67*	.55 - .80
Family Functioning Scale	.10	.56	.42 - .70
Treatment Scale	.16	.55	.42 - .68
Overall Risk Rating	.21	.61	.49 - .74
YLS/CMI (<i>N</i> = 77)	.33**	.69**	.56 - .82
Prior Offenses	.24*	.60	.47 - .74
Family	.24*	.65*	.52 - .78
Education/Employment	.21	.61	.48 - .75
Peer Relations	.21	.64*	.51 - .77
Substance Abuse	.01	.54	.40 - .67
Leisure	.16	.62	.49 - .75
Personality	.25*	.65*	.52 - .79
Attitudes/Orientation	.29*	.67*	.55 - .79
Overall Risk Rating	.25*	.63	.50 - .76

Note. Base rate for violent, including sexual, recidivism is 33.8% with *N* = 77

95% Confidence Interval provided for AUC values

* $p < .05$, ** $p < .01$

Table 30. Descriptive Statistics for the Static-99 for Violent, Including Sexual, Recidivism

Variable	Recidivists (<i>N</i> = 26) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 54) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
Static-99	3.96 (1.08)	3.59 (1.11)	3.71 (1.10)
Prior sex offenses	.08 (.27)	.15 (.53)	.12 (.46)
Prior sentencing	7.7%	0.0%	2.5%
Non-contact	3.8%	1.9%	2.5%
Index NS violence	11.5%	7.4%	8.8%
Prior NS violence	19.2%	3.7%	8.8%
Unrelated victims	76.9%	79.6%	78.8%
Stranger victims	34.6%	20.4%	25.0%
Any male	34.6%	31.5%	32.5%
Young	100%	100%	100%
Single	100%	100%	100%
Risk Rating			
Low	69.2%	85.2%	80.0%
Moderate	30.8%	11.1%	17.5%
High	0.0%	3.7%	2.5%

^a = number of cases with factor present

Table 31. Descriptive Statistics for the ERASOR for Violent, Including Sexual, Recidivism

Variable	Recidivists (<i>N</i> = 20) Mean (SD)	Non-recidivist (<i>N</i> = 58) Mean (SD)	Total (<i>N</i> = 78) Mean (SD)
ERASOR total	27.15 (7.56)	22.92 (8.14)	24.33 (8.15)
Interests	3.42 (2.61)	2.58 (2.26)	2.86 (2.40)
Deviant interests	.78 (.97)	.60 (.89)	.67 (.92)
Obsession/sex	.54 (.86)	.32 (.73)	.38 (.78)
Supportive attitudes	1.10 (.98)	1.05 (.96)	1.09 (.96)
Unwilling to alter	.92 (.93)	.62 (.87)	.72 (.90)
Historical	8.27 (4.07)	7.37 (4.10)	7.67 (4.09)
2+ victims	1.31 (.97)	1.20 (1.31)	1.22 (.98)
2+ times	1.04 (1.00)	1.16 (.98)	1.09 (.98)
Prior sanctions	.62 (.90)	.40 (.77)	.46 (.82)
Threats	.77 (.95)	.81 (.96)	.81 (.95)
Child victim	1.38 (.94)	1.09 (1.01)	1.21 (.99)
Stranger victim	.69 (.97)	.40 (.81)	.51 (.88)
Indiscriminate	.58 (.90)	.53 (.88)	.55 (.89)
Male victim	.69 (.97)	.62 (.93)	.67 (.95)
Diverse behaviors	1.19 (.90)	1.13 (.96)	1.15 (.95)
Psychosocial Functioning	7.15 (2.94)	5.35 (3.00)	5.95 (3.08)
Antisocial	1.19 (.90)	.71 (.87)	.87 (.90)
Lack of peers	1.41 (.82)	1.45 (.81)	1.46 (.80)
Negative peers	1.44 (.89)	1.09 (.91)	1.18 (.92)
Interpersonal	1.31 (.93)	1.00 (.92)	1.10 (.93)
Escalation in anger	.23 (.51)	.15 (.46)	.18 (.48)
Impulsivity	1.59 (.73)	.98 (.94)	1.15 (.94)
Family/Environment	4.31 (2.56)	3.83 (2.19)	3.99 (2.32)
High stress family	1.00 (.85)	.91 (.88)	.94 (.87)
Parental rejection	1.33 (.92)	1.19 (.90)	1.24 (.90)
Parents unsupportive	.96 (1.00)	.81 (.91)	.86 (.94)
Opportunity/reoffend	1.04 (.92)	.90 (.87)	.95 (.88)
Treatment	4.00 (.00)	3.81 (.69)	3.87 (.57)
No development/plans	2.00 (.00)	1.93 (.33)	1.95 (.27)
Incomplete treatment	2.00 (.00)	1.89 (.37)	1.92 (.31)
Clinical Rating	2.35 (.63)	2.02 (.78)	2.13 (.74)
Low (%)	7.7%	28.9%	21.8%
Moderate (%)	50.0%	40.4%	43.6%
High (%)	42.3%	30.8%	34.6%

Note. *N*s range from 78 to 85.

Table 32. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for Violent, Including Sexual, Recidivism

Variable	Recidivists (<i>N</i> = 26) %/Mean (SD)	Non-recidivists (<i>N</i> = 51) %/Mean (SD)	Total (<i>N</i> = 77) %/Mean (SD)
YLS/CMI total	16.73 (6.86)	11.92 (6.49)	13.55 (6.96)
Total priors	.85 (1.19)	.39 (.68)	.54 (.90)
Three+ priors	11.5%	0.0%	3.9%
Two+ failures	0.0%	0.0%	0.0%
Prior probation	19.2%	22.2%	22.1%
Prior detention	23.1%	5.6%	11.7%
Three+ current	30.8%	11.1%	18.2%
Total parenting	3.27 (1.69)	2.39 (1.73)	2.69 (1.76)
Inadequate supervision	50.0%	41.2%	44.2%
Difficulty controlling	59.3%	19.6%	32.5%
Inappropriate discipline	59.3%	42.3%	46.8%
Inconsistent parenting	46.2%	47.1%	46.8%
Poor relations/father	57.7%	50.9%	53.2%
Poor relations/mother	57.7%	39.2%	46.1%
Total education	2.31 (1.76)	1.61 (1.48)	1.84 (1.61)
Disruptive-classroom	23.1%	27.5%	26.0%
Disruptive-school property	30.8%	17.6%	22.1%
Low achievement	39.3%	25.9%	32.9%
Problems with peers	60.7%	49.1%	50.6%
Problems with teachers	22.2%	13.2%	14.3%
Truancy	50.0%	21.8%	28.6%
Unemployment	10.7%	11.1%	10.4%
Total peer	2.41 (1.28)	1.85 (1.26)	2.09 (1.26)
Delinquent acquaintances	75.9%	61.8%	66.2%
Delinquent friends	34.5%	28.3%	29.9%
No positive acquaintances	55.6%	34.6%	42.9%
No positive friends	77.8%	65.4%	71.4%
Total substance abuse	.61 (.79)	.58 (.99)	.53 (.93)
Occasional drug use	37.9%	34.5%	29.9%
Chronic drug use	0.0%	7.3%	5.2%
Chronic alcohol use	17.9%	7.3%	10.4%
Interferes with life	10.3%	5.5%	5.2%
Linked to offense	0.0%	1.8%	1.3%

Total leisure/recreation	1.45 (1.06)	1.09 (1.04)	1.27 (1.07)
Limited organized activities	75.9%	56.1%	63.6%
Better use of time	51.7%	38.6%	46.8%
No personal interests	17.2%	14.0%	16.9%
Total personality	3.62 (1.86)	2.63 (1.78)	2.96 (1.85)
Inflated self-esteem	15.4%	9.8%	11.7%
Physically aggressive	57.7%	46.3%	49.4%
Tantrums	42.9%	26.9%	29.9%
Short attention span	60.7%	38.9%	42.9%
Poor frustration tolerance	51.9%	39.6%	42.9%
Inadequate guilt feelings	78.6%	61.5%	67.5%
Verbally aggressive	61.5%	50.0%	53.2%
Total attitudes	2.12 (1.18)	1.35 (1.23)	1.61 (1.26)
Antisocial attitudes	73.1%	43.1%	53.2%
Not seeking help	53.8%	41.5%	46.8%
Actively reject help	11.5%	5.7%	7.8%
Defies authority	58.6%	39.3%	42.9%
Callous	19.2%	5.8%	10.4%
Overall Risk Rating	2.04 (.60)	1.73 (.57)	1.97 (.73)
Low	15.4%	33.3%	27.3%
Moderate	65.4%	60.8%	62.3%
High	19.2%	5.9%	10.4%

Note. *N*s range from 77 to 86.

Table 33. Descriptive Statistics for the RRASOR for General Recidivism

Variable	Recidivists (<i>N</i> = 36) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 44) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
RRASOR	2.31 (.71)	2.18 (.72)	2.24 (.72)
Prior sex offenses	.11 (.40)	.14 (.51)	.12 (.46)
Age	100%	100%	100%
Any male	33.3%	31.8%	32.5%
Unrelated victims	86.1%	72.7%	78.8%

^a = number of cases with factor present

Table 34. Correlation and AUC Values for the Four Assessment Instruments with General Recidivism

Assessment Instrument	r	AUC	95% CI
RRASOR (<i>N</i> = 80)	.09	.54	.41 - .67
Static-99 (<i>N</i> = 80)	.21	.64*	.52 - .76
Static-99 Risk Rating	.10	.54	.42 - .67
ERASOR (<i>N</i> = 78)	.10	.55	.42 - .68
Sexual Interests Scale	.08	.54	.41 - .67
Historical Sexual Assault Scale	.00	.50	.37 - .63
Psychosocial Functioning Scale	.23*	.64*	.51 - .76
Family Functioning Scale	-.08	.45	.32 - .58
Treatment Scale	.16	.54	.41 - .66
Overall Risk Rating	.08	.54	.42 - .67
YLS/CMI (<i>N</i> = 77)	.16	.58	.45 - .67
Prior Offenses	.19	.58	.46 - .71
Family	.06	.53	.40 - .66
Education/Employment	.09	.54	.41 - .67
Peer Relations	.15	.58	.45 - .71
Substance Abuse	.04	.54	.40 - .66
Leisure	.08	.58	.45 - .71
Personality	.12	.57	.44 - .70
Attitudes/Orientation	.16	.60	.47 - .72
Overall Risk Rating	.08	.54	.41 - .67

Note. Base rate for general recidivism is 45.4% with *N* = 77

95% Confidence Interval provided for AUC values

* $p < .05$, ** $p < .01$

Table 35. Descriptive Statistics for the Static-99 for General Recidivism

Variable	Recidivists (<i>N</i> = 36) Mean (SD)/% ^a	Non-recidivists (<i>N</i> = 44) Mean (SD)/% ^a	Total (<i>N</i> = 80) Mean (SD)/% ^a
Static-99	3.97 (1.06)	3.50 (1.11)	3.71 (1.10)
Prior sex offenses	.11 (.40)	.14 (.51)	.12 (.46)
Prior sentencing	5.6%	0.0%	2.5%
Non-contact	2.8%	2.3%	2.5%
Index NS violence	11.1%	6.8%	8.8%
Prior NS violence	16.7%	2.3%	8.8%
Unrelated victims	86.1%	72.7%	78.8%
Stranger victims	30.6%	20.5%	25.0%
Any male	33.3%	31.8%	32.5%
Young	100%	100%	100%
Single	100%	100%	100%
Risk Rating			
Low	75.0%	84.1%	80.0%
Moderate	22.2%	13.6%	17.5%
High	2.8%	2.3%	2.5%

^a = number of cases with factor present

Table 36. Descriptive Statistics for the ERASOR for General Recidivism

Variable	Recidivists (<i>N</i> = 36) Mean (SD)	Non-recidivist (<i>N</i> = 42) Mean (SD)	Total (<i>N</i> = 78) Mean (SD)
ERASOR total	25.17 (8.55)	23.62 (7.82)	24.33 (8.15)
Interests	3.06 (2.60)	2.69 (2.24)	2.86 (2.40)
Deviant interests	.78 (.96)	.56 (.88)	.67 (.92)
Obsession/sex	.39 (.77)	.40 (.79)	.38 (.78)
Supportive attitudes	1.10 (.96)	1.04 (.98)	1.09 (.96)
Unwilling to alter	.78 (.93)	.67 (.87)	.72 (.90)
Historical	7.67 (4.15)	7.67 (4.08)	7.67 (4.09)
2+ victims	1.28 (.97)	1.20 (.98)	1.22 (.98)
2+ times	.94 (.98)	1.27 (.96)	1.09 (.98)
Prior sanctions	.39 (.77)	.53 (.85)	.46 (.82)
Threats	.69 (.92)	.88 (.98)	.81 (.95)
Child victim	1.28 (.97)	1.11 (1.01)	1.21 (.99)
Stranger victim	.61 (.93)	.40 (.81)	.51 (.88)
Indiscriminate	.69 (.95)	.42 (.81)	.55 (.89)
Male victim	.67 (.96)	.62 (.94)	.67 (.95)
Diverse behaviors	1.11 (.95)	1.18 (.94)	1.15 (.95)
Psychosocial Functioning	6.69 (3.22)	4.17 (2.41)	5.95 (3.08)
Antisocial	1.03 (.88)	.74 (.91)	.87 (.90)
Lack of peers	1.33 (.87)	1.52 (.75)	1.46 (.80)
Negative peers	1.46 (.87)	1.00 (.90)	1.18 (.92)
Interpersonal	1.36 (.87)	.88 (.93)	1.10 (.93)
Escalation in anger	.17 (.45)	.19 (.51)	.18 (.48)
Impulsivity	1.38 (.85)	1.02 (.95)	1.15 (.94)
Family/Environment	3.78 (2.22)	4.17 (2.41)	3.99 (2.32)
High stress family	.95 (.81)	.83 (.92)	.94 (.87)
Parental rejection	1.16 (.95)	1.31 (.87)	1.24 (.90)
Parents unsupportive	.81 (.92)	.90 (.96)	.86 (.94)
Opportunity/reoffend	.86 (.90)	1.02 (.87)	.95 (.88)
Treatment	3.97 (.17)	3.79 (.75)	3.87 (.57)
No development/plans	2.00 (.00)	1.91 (.36)	1.95 (.27)
Incomplete treatment	1.97 (.17)	1.89 (.38)	1.92 (.31)
Clinical Rating	2.19 (.75)	2.07 (.75)	2.13 (.74)
Low (%)	19.4%	23.8%	21.8%
Moderate (%)	41.7%	45.2%	43.6%
High (%)	38.9%	31.0%	34.6%

Note. *N*s range from 78 to 85.

Table 37. Percent of Recidivists and Non-Recidivists with Item Present on the YLS/CMI for General Recidivism

Variable	Recidivists (<i>N</i> = 35) %/Mean (SD)	Non-recidivists (<i>N</i> = 42) %/Mean (SD)	Total (<i>N</i> = 77) %/Mean (SD)
YLS/CMI total	14.74 (7.46)	12.55 (6.42)	13.55 (6.96)
Total priors	.72 (1.09)	.39 (.69)	.54 (.90)
Three+ priors	8.3%	0.0%	3.9%
Two+ failures	0.0%	0.0%	0.0%
Prior probation	22.2%	20.5%	22.1%
Prior detention	16.7%	6.8%	11.7%
Three+ current	25.0%	11.4%	18.2%
Total parenting	2.80 (1.66)	2.60 (1.85)	2.69 (1.76)
Inadequate supervision	45.7%	42.9%	44.2%
Difficulty controlling	40.0%	27.9%	32.5%
Inappropriate discipline	48.6%	47.6%	46.8%
Inconsistent parenting	42.9%	50.0%	46.8%
Poor relations/father	54.1%	52.4%	53.2%
Poor relations/mother	50.0%	41.5%	46.1%
Total education	2.00 (1.71)	1.71 (1.52)	1.84 (1.61)
Disruptive-classroom	25.7%	26.2%	26.0%
Disruptive-school property	22.9%	21.4%	22.1%
Low achievement	35.1%	26.7%	32.9%
Problems with peers	50.0%	55.3%	50.6%
Problems with teachers	16.7%	15.9%	14.3%
Truancy	45.9%	19.6%	28.6%
Unemployment	8.1%	13.3%	10.4%
Total peer	2.26 (1.34)	1.86 (1.23)	2.09 (1.26)
Delinquent acquaintances	75.7%	59.6%	66.2%
Delinquent friends	37.8%	24.4%	29.9%
No positive acquaintances	48.6%	36.4%	42.9%
No positive friends	65.7%	72.7%	71.4%
Total substance abuse	.63 (.85)	.56 (.99)	.53 (.93)
Occasional drug use	38.5%	33.3%	29.9%
Chronic drug use	2.6%	6.7%	5.2%
Chronic alcohol use	13.2%	8.9%	10.4%
Interferes with life	10.3%	4.4%	5.2%
Linked to offense	0.0%	2.2%	1.3%

Total leisure/recreation	1.30 (1.04)	1.13 (1.07)	1.27 (1.07)
Limited organized activities	70.0%	56.5%	63.6%
Better use of time	45.0%	41.3%	46.8%
No personal interests	15.0%	15.2%	16.9%
Total personality	3.20 (1.92)	2.76 (1.79)	2.96 (1.85)
Inflated self-esteem	11.4%	11.9%	11.7%
Physically aggressive	61.1%	40.9%	49.4%
Tantrums	36.1%	29.5%	29.9%
Short attention span	52.8%	41.3%	42.9%
Poor frustration tolerance	41.7%	45.5%	42.9%
Inadequate guilt feelings	56.8%	76.7%	67.5%
Verbally aggressive	66.7%	42.9%	53.2%
Total attitudes	1.83 (1.20)	1.43 (1.29)	1.61 (1.26)
Antisocial attitudes	62.9%	45.2%	53.2%
Not seeking help	52.8%	39.5%	46.8%
Actively reject help	8.3%	7.0%	7.8%
Defies authority	58.6%	39.3%	42.9%
Callous	13.9%	7.1%	10.4%
Overall Risk Rating	2.11 (.76)	1.86 (.68)	1.97 (.73)
Low	25.7%	28.6%	27.3%
Moderate	60.0%	64.3%	62.3%
High	14.3%	7.1%	10.4%

Note. *Ns* range from 77 to 86.

Table 38. Post hoc Exploratory Item Analysis for the ERASOR

Item	Sexual recidivism rate for adolescents with item rated present	Sexual recidivism rate for adolescents with item rated not present
Deviant sexual interest	29.2%	11.1%
Obsession with sex	28.6%	14.1%
Unwilling to alter attitudes	26.1%	12.7%
Ever a child victim	21.3%	9.7%
Antisocial orientation	25.9%	11.8%
Impulsivity	22.0%	10.8%
Parental rejection	20.9%	11.4%
Parents unsupportive/treatment	24.1%	12.2%
Opportunities to re-offend	21.4%	14.0%

Table 39. Post hoc Exploratory Item Analysis for the YLS/CMI

Item	Sexual recidivism rate for adolescents with item rated present	Sexual recidivism rate for adolescents with item rated not present
Prior detention	22.2%	16.2%
3+ current convictions	28.6%	14.3%
Difficulty controlling behaviour	32.0%	9.6%
Inappropriate discipline	22.2%	12.2%
Poor father/child relationship	22.0%	11.1%
Disruptive on school property	23.5%	15.0%
Truancy	27.3%	12.7%
Unemployment/not seeking	25.0%	15.9%
No/few positive acquaintances	21.2%	13.6%
Limited organized activities	22.4%	7.1%
Could make better use of time	27.8%	7.3%
Inflated self-esteem	22.2%	16.2%
Inadequate guilt feelings	21.2%	8.0%
Antisocial attitudes	24.4%	8.3%
Defies authority	21.2%	13.6%
Callous	37.5%	14.5%

Figure 1. Kaplan-Meier survival curve estimates for any recidivism for Static-99 Risk Ratings.

Figure 2. Kaplan-Meier survival curve estimates for any recidivism for ERASOR Risk Ratings.

Survival Function for Any Recidivism

Figure 3. Kaplan-Meier survival curve estimates for any recidivism for YLS/CMI Risk Ratings

Figure 4. Kaplan-Meier survival curve estimates for sexual recidivism for Static-99 Risk Ratings

Figure 5. Kaplan-Meier survival curve estimates for sexual recidivism for the ERASOR Risk Ratings

Figure 6. Kaplan-Meier survival curve estimates for sexual recidivism for YLS/CMI Risk Ratings

Figure 7. Kaplan-Meier survival curve estimates for violent recidivism for Static-99 Risk Ratings.

Figure 8: Kaplan-Meier survival curve estimates for violent recidivism for ERASOR Risk Ratings.

Figure 9. Kaplan-Meier survival curve estimates for violent recidivism for YLS/CMI Risk Ratings

Figure 10. Kaplan-Meier survival curve estimates for violent, including sexual recidivism for Static-99 Risk Ratings

Figure 11. Kaplan-Meier survival curve estimates for violent, including sexual, recidivism for ERASOR Risk Ratings

Figure 12. Kaplan-Meier survival curve estimates for violent, including sexual, recidivism for YLS/CMI Risk Ratings

Figure 13. Kaplan-Meier survival curve estimates for general recidivism for Static-99 Risk Ratings

Survival Function for General Recidivism

Figure 14. Kaplan-Meier survival curve estimates for general recidivism for ERASOR Risk Ratings

Figure 15. Kaplan-Meier survival curve estimates for general recidivism for YLS/CMI Risk Ratings

Figure 16. Kaplan-Meier survival curve estimates for sexual recidivism for revised ERASOR Risk ratings

Figure 17. Kaplan-Meier survival curve estimates for sexual recidivism for revised YLS/CMI Risk Ratings

APPENDIX A

Demographic Characteristics

Demographic/Information Form

Subject Number	Date of birth	Referral Source
Age of offender at assessment		
Date of end of assessment at SAFE-T		
Age of offender at referral offense		
Date of referral offense		
Age at first offense (indicate: sex or nonsex)		
Date of first offense		
Use of substances 1=alcohol, 2=drugs, 3=both, 4=none, 5=unknown		
Offending History		
Number of previous sexual offenses		
Violence used? 1=yes, 2=no, 3=unknown		
Number of victims		
How many months sexually offending		
Number of previous non-sexual offenses		
How many months offending		
Treatment History		
Previous treatment for sexual offending 1=yes, 2=no, 3=unknown		
Treatment start date		
Treatment completed? 1=yes, 2=no, 3=unknown		
Treatment end date		
Previous treatment- any 1=yes, 2=no, 3=unknown		
Treatment start date		
Treatment completed? 1=yes, 2=no, 3=unknown		
Treatment end date		
Prior specialized assessment performed 1=yes, 2=no, 3=unknown		
Date of assessment		
Diagnosed psychiatric illness 1=yes, 2=no, 3=unknown		

Subject Number

Date of birth

Family Characteristics	
Current living arrangements 1=with family, 2=temporary placement, 3=permanent separation	
Living arrangements at time of index offense 1=with family, 2=temporary placement, 3=permenant separation	
Family composition 1=intact (biological, both parents), 2=single parent, 3=mixed (steps), 4=no involvement, 5=crown ward	
Number of residence changes	
Parents abuse substances 1=yes, 2=no, 3=unknown	
If so, which parent? 1=mother, 2=father, 3=both, 4=stepmother, 5=stepfather	
Parental criminal history? 1=yes, 2=no, 3=unknown	
If so, which parent 1=mother, 2=father, 3=both, 4=stepmother, 5=stepfather	
Sexual Abuse History (any unwanted sexual acts, including non-contact)	
Ever sexually abused 1=yes, 2=no, 3=unknown	
If yes, age when abuse began	
Age when abuse ended	
Abuse committed by 1=intrafamilial , 2=extrafamilial, 3=both	
Physical Abuse History	
Ever physically abused 1=yes, 2=no, 3=unknown	
Age when abuse began	
Age when abuse ended	
Abuse committed by 1=intrafamilial , 2=extrafamilial, 3=both	
Agency Involvement	
Previous agency involvement 1=yes, 2=no, 3=unknown	
If yes, number of previous involvement	
Number of months with agency involvement	
If yes, age of offender at first agency involvement	
Type of agency involved (i.e children's aid, etc.)	

Subject Number

Date of birth

Index Offense Characteristics	
Relation to Victim 1=intrafamilial, 2=extrafamilial, 3=both	
Hands ON/OFF 1=hands on, 2=hands off, 3=both	
Victim gender 1=male, 2=female, 3=both	
Victim age (indicate ages: V= V= O=) 1=younger (4+ years), 2=peer, 3=both	
Number of victims	
Level of violence 1=none, 2=verbal threats, 3=pushing/shoving 4=physical harm, 5=use of weapon	
Accomplices 1=yes, 2=no, 3=unknown	
Use of substances during offense 1=yes, 2=no, 3=unknown	
If yes, type of substance 1=alcohol, 2=drugs, 3=both	
Longest period of offending in months	
Longest frequency of offending with same victim	
Disposition 1=probation, 2=open custody, 3=closed custody 4=community service, 5=charges dropped 6=acquittal, 7=other, 8=multiple, 9=unknown/charges pending, 10=never charged	
30. Length of disposition in months	

APPENDIX B

RRASOR

RRASOR

Risk factor	Codes		Score
Prior sex offences	Charges	Convictions	
	None	None	0
	1-2	1	1
	3-5	2-3	2
	6+	4+	3
Age at release	25 or older		0
	Up to 24.99		1
Any male victims	No		0
	Yes		1
Any unrelated victims	No		0
	Yes		1
Total RRASOR score	Addition of scores		

APPENDIX C

STATIC-99

Static-99 Coding Form

Risk Factor	Codes		Score
	Charges	Convictions	
Prior Sex Offences (Same rules as in RRASOR)	None	None	0
	1-2	1	1
	3-5	2-3	2
	6 +	4+	3
Prior sentencing dates (excluding index)	3 or less		0
	4 or more		1
Any convictions for non- contact sex offences	No		0
	Yes		1
Index non-sexual violence	No		0
	Yes		1
Prior non-sexual violence	No		0
	Yes		1
Any Unrelated Victims	No		0
	Yes		1
Any Stranger Victims	No		0
	Yes		1
Any Male Victims	No		0
	Yes		1
Young	Aged 25 or older		0
	Aged 18 – 24.99		1
Single	Ever lived with lover for at least two years?		
	Yes		0
	No		1
Total Score	Add up scores from individual risk factors		

TRANSLATING STATIC-99 SCORE INTO RISK CATEGORIES

Score	Label for Risk Category
0,1	Low
2,3	Medium-Low
4,5	Medium-High
6 plus	High

APPENDIX D

ERASOR

Estimate of Risk of Adolescent Sexual Offense Recidivism (The "ERASOR"): Version 2.0

James R. Worling, Ph.D., & Tracey Curwen, M.A.
Sexual Abuse: Family Education & Treatment (SAFE-T) Program
2001

Name of adolescent _____ Age _____ Coding Form Page 1

Name of evaluator _____ Date Completed _____

Date of Previous Risk Assessment _____ or ☐ n/a ID Number _____

The guidelines contained in The *ERASOR* were developed by the authors in the course of their duties at the SAFE-T Program. Anyone choosing to use or adopt the risk assessment guidelines outlined herein does so on the sole basis of their responsibility to judge their suitability for their own specific purposes. The Ontario Ministry of Community & Social Services, its employees, agents, servants and the authors neither assume nor accept any responsibility or legal liability for any injury or damages whatsoever resulting from the use of The *ERASOR* and the guidelines outlined herein.

The Estimate of Risk of Adolescent Sexual Offense Recidivism (The *ERASOR*) is an empirically-guided approach to estimating the risk of a sexual reoffense for an adolescent, presently aged 12 to 18 years, who has previously committed a sexual assault. When using The *ERASOR*, it is essential to be familiar with the content of the *ERASOR* manual included with this coding form. It is also important to stress that evaluators should:

- Have expertise and training regarding the assessment of adolescents and their families and expertise and training regarding the assessment and management of sexual aggression.
- Assess multiple domains of functioning including sexual, intrapersonal, interpersonal, familial, and biological.
- Use multiple methods of data collection to form opinions including clinical interviews, psychological tests, behavioural observation, and reviews of previous case records and reports.
- Collect information from multiple sources such as the offender, the victim(s), the police, family, friends, and other professionals who are familiar with the offender and his/her family.
- Be cognizant of the validity of the information that they are using in forming risk predictions.
- Be familiar with the research related to the estimation of adolescent sexual recidivism.
- Recognize that risk assessments will become obsolete after the passage of time and/or following a change in any of the risk factors that were assessed.

Given that there is currently no empirical support for a specific algorithm for combining risk factors to predict adolescent sexual recidivism, judgement is necessary to determine the level of risk (i.e., "low", "moderate", or "high"). It is anticipated that there will be a general relationship between the number of high-risk factors and the rating of risk such that more high-risk indicators suggest higher risk. However, the final decision will be more dependent on the combination of risk factors rather than just the number. Furthermore, it is possible that the presence of a single risk factor—such as the adolescent's stated intentions to reoffend—could be indicative of high risk.

1. Deviant sexual interests (younger children, violence, or both).

☐ Present	<ul style="list-style-type: none"> At any time within the past 6 months, the adolescent has reported or demonstrated sexual arousal to thoughts/images of children under 12 years of age (and children who are at least 4 years younger than the adolescent), OR Sexual assaults—within the past year—against 2 or more children under 12 years of age (and children who are at least 4 years younger than the adolescent), OR At any time within the past 6 months, the adolescent has reported or demonstrated sexual arousal to sexual violence (excessive physical violence, threats of death or physical pain, use of weapons), OR Sexual assaults—within the past year—against 2 or more individuals that involved excessive physical violence, threats of death or pain, or use of weapons.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent <ul style="list-style-type: none"> has reported or demonstrated deviant sexual arousal to prepubescent children, sexual violence, or both, at any time within the past 6 months, OR Within the past year, has committed sexual assaults against 2 or more prepubescent children or sexual assaults against 2 or more individuals that involved excessive physical violence, threats of death or pain, or use of weapons.
☐ Not Present	<ul style="list-style-type: none"> Adolescent has reported AND demonstrated NO sexual arousal to thoughts and/or images of prepubescent children, sexual violence, or both during the past 6 months, OR Within the past year, the adolescent has NOT committed sexual assaults against 2 or more children, or sexual assaults against 2 or more individuals that involved excessive physical violence, threats of death or pain, or use of weapons.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

2. Obsessive sexual interests/Preoccupation with sexual thoughts.

☐ Present	At any time within the past 6 months, the adolescent has demonstrated obsessive sexual interests/preoccupation with sexual thoughts as evidenced by any of the following: <ul style="list-style-type: none"> Unusually frequent masturbation Unusually frequent sexual thoughts, comments, gestures, or behaviours Unusually frequent use of pornography (or other textual, pictorial, or auditory materials considered erotic by adolescent) Unusually frequent engagement in sexual fantasy Excessive use of sexual behaviours/fantasies to cope with negative affect (boredom, loneliness, frustration, sadness), anger, or problematic situations.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has been preoccupied with sexual thoughts, behaviours, fantasies, images, or gestures at any time within the past 6 months.
☐ Not Present	Adolescent has NOT demonstrated obsessive sexual interests or preoccupation with sexual thoughts, behaviours, fantasies, images, or gestures during the past 6 months.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

3. Attitudes supportive of sexual offending.

☐ Present	At any time within the past 6 months, the adolescent has endorsed ANY of the following attitudes: <ul style="list-style-type: none"> Sexual interactions with children under 12 years of age are not harmful to the child; are desired by the child; are often initiated by children; should be legalized; are just displays of affection; or are educational for the child, OR Forced sexual interactions with peers or adults are not harmful; are desired; are enjoyable; are initiated by the victim's style of dress or behaviour; or that disclosures of forced sexual interactions are usually fabricated.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has endorsed attitudes supportive of sexual offending at any time within the past 6 months.
☐ Not Present	Adolescent has NOT endorsed attitudes supportive of sexual offending during the past 6 months.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

4. Unwillingness to alter deviant sexual interests/attitudes.

☐ Present	At any time within the past 6 months, the adolescent has been unwilling to alter or "give up" the: <ul style="list-style-type: none"> Deviant sexual interests that were rated as "Present" or "Possibly or Partially Present" in #1 above OR Attitudes supportive of sexual offending that were rated as "Present" or "Possibly or Partially Present" in #3 above
☐ Possibly or Partially Present	Possible or partial evidence that, at any time within the past 6 months, the adolescent has been unwilling to alter the: <ul style="list-style-type: none"> Deviant sexual interests that were rated as "Present" or "Possibly or Partially Present" in #1 above OR Attitudes supportive of sexual offending that were rated as "Present" or "Possibly or Partially Present" in #3 above
☐ Not Present	<ul style="list-style-type: none"> During the past 6 months, the adolescent HAS been willing to alter deviant sexual interests (#1 above) or attitudes supportive of sexual offending (#3 above), OR Neither #1 nor #3 above were coded as "Present" or "Possibly or Partially Present"
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

5. Ever sexually assaulted 2 or more victims.

☐ Present	Adolescent has intentionally sexually assaulted 2 or more victims.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has intentionally sexually assaulted 2 or more victims.
☐ Not Present	Adolescent has intentionally sexually assaulted 1 victim.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

6. Ever sexually assaulted same victim 2 or more times.

☐ Present	Adolescent has sexually assaulted the same victim on 2 or more occasions.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has sexually assaulted the same victim on 2 or more occasions.
☐ Not Present	Adolescent has NEVER sexually assaulted the same victim on more than 1 occasion.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

7. Prior adult sanctions for sexual assault(s).

☐ Present	At any time PRIOR to the most recent sexual offense, the adolescent was cautioned, warned, disciplined, criminally charged, or otherwise sanctioned by an adult authority (e.g., police, parent, teacher) for a sexual assault.
Please specify ☐ Criminal charge ☐ Police warning ☐ Other adult sanction	
☐ Possibly or Partially Present	Possible or partial evidence that, at any time PRIOR to the most recent sexual offense, the adolescent was cautioned, warned, disciplined, criminally charged, or otherwise sanctioned by an adult authority (e.g., police, parent, teacher) for a sexual assault.
☐ Not Present	Adolescent was NEVER cautioned, warned, disciplined, criminally charged, or otherwise sanctioned by an adult authority (e.g., police, parent, teacher) for a sexual assault PRIOR to the most recent sexual offense.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

8. Threats of, or use of, excessive violence/weapons during sexual offense.

☐ Present	During the commission of any past sexual assault, the adolescent has ever: <ul style="list-style-type: none"> Used excessive physical restraint or aggression beyond that which would be necessary to gain victim "compliance", OR Used, or threatened to use, a weapon (regardless of whether a weapon was actually present), OR Used, or threatened to use, physical violence with the victim or with others important to the victim, such as family members
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has ever used excessive physical restraint or aggression; OR used, or threatened to use, a weapon; OR used, or threatened to use, physical violence against the victim or with others important to the victim, such as family members
☐ Not Present	Adolescent has NEVER used excessive physical restraint or aggression; NEVER used, or threatened to use, a weapon; NEVER used, or threatened to use, physical violence against the victim or with others important to the victim, such as family members
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

9. Ever sexually assaulted a child.

☐ Present	Adolescent has EVER intentionally sexually assaulted a child victim under 12 years of age and at least 4 years younger than the adolescent.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has ever intentionally sexually assaulted a child victim under 12 years of age and at least 4 years younger than the adolescent.
☐ Not Present	Adolescent has NEVER intentionally selected and sexually assaulted a child victim under 12 years and at least 4 years younger than the adolescent.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

10. Ever sexually assaulted a stranger.

☐ Present	Adolescent has EVER intentionally committed a sexual offense against a stranger. A victim is considered a stranger if she/he knew the adolescent for a period of less than 24 hours prior to the sexual offense.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has ever intentionally committed a sexual offense against a stranger.
☐ Not Present	Adolescent has NEVER committed a sexual offense against a stranger.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

11. Indiscriminate choice of victims.

☐ Present	Adolescent has ever intentionally sexually assaulted: <ul style="list-style-type: none"> • Both male and female victims OR • Both child (under 12 years of age and 4 years younger) and peer/adult victims OR • Both related and unrelated victims OR • Both familiar and stranger victims (stranger if victim knew the adolescent for less than 24 hours prior to sexual assault)
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has ever intentionally sexually assaulted both male and female victims OR both child and peer/adult victims OR both related and unrelated victims OR both familiar and stranger victims.
☐ Not Present	Adolescent has NEVER intentionally sexually assaulted both male and female victims OR both child and peer/adult victims OR both related and unrelated victims OR both familiar and stranger victims.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

12. Ever sexually assaulted a male victim (*Coded for male adolescents only*).

☐ Present	Male adolescent has EVER intentionally sexually assaulted a male victim.
☐ Possibly or Partially Present	Possible or partial evidence that the male adolescent has ever intentionally selected and sexually assaulted a male victim.
☐ Not Present	Male adolescent has NEVER intentionally selected and sexually assaulted a male victim.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

13. Diverse sexual-assault behaviours.

☐ Present	Adolescent has EVER attempted or engaged in several different contact and/or non-contact sexual-assault behaviours including (but not limited to) exhibitionism, voyeurism, obscene phone calling, stalking, assault with a weapon, frottage, bestiality, sexual touching, or oral, anal, or vaginal penetration.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has ever attempted or engaged in several different contact and/or non-contact sexual-assault behaviours including (but not limited to) exhibitionism, voyeurism, obscene phone calling, stalking, assault with a weapon, frottage, bestiality, sexual touching, or oral, anal, or vaginal penetration.
☐ Not Present	Adolescent has engaged in one form of sexual assault behaviour ONLY.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

14. Antisocial interpersonal orientation.

☐ Present	During the past 6 months, the adolescent has exhibited an antisocial interpersonal orientation as evidenced by the presence of 4 or more of the following: <ul style="list-style-type: none"> • Endorsement of antisocial or pro-criminal attitudes • Defiance of authority figures • Insensitive disrespect for the rights / feelings of others • Selfish / self-centered orientation • Difficulty accepting responsibility for most wrongdoings (not just sexual) • Lack of guilt or remorse for most wrongdoings (not just sexual) • Frequent lying and deception • Inflated sense of self-importance and self-worth • Emotionally unresponsive or emotions that appears "faked" • Frequent violations of rules and laws—in addition to sexual assaults(s)
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has exhibited an antisocial interpersonal orientation (just 2 or 3 of the above) during the past 6 months.
☐ Not Present	Adolescent has NOT exhibited an antisocial interpersonal orientation during the past 6 months.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

15. Lack of intimate peer relationships / Social isolation.

☐ Present	At any time within the past 6 months, the adolescent's social relationships have been characterized by: <ul style="list-style-type: none"> • No emotionally intimate peer relationships (peers are non-familial individuals who are within 3 years of age from the adolescent), OR • No close friendships OR reliance on a single peer-aged friend, OR • Social isolation from peers outside of the regular school day.
☐ Possibly or Partially Present	Possible or partial evidence that, at any time within the past 6 months, the adolescent has had no emotionally intimate peer relationships, relied on a single peer friendship, and/or was socially isolated from peers outside of the regular school day.
☐ Not Present	During the past 6 months, the adolescent HAS had emotionally intimate peer relationships, or 2 or more close friends, and/or has not been socially isolated from peers outside of the regular school day.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

16. Negative peer associations and influences.

☐ Present	On more than 1 occasion within the past 6 months, the adolescent has associated with peers who: <ul style="list-style-type: none"> • Often engage in antisocial / criminal activity, OR • Often use non-prescription drugs and/or alcohol, OR • The adolescent frequently engaged in antisocial / criminal behaviours to "fit in" or "belong" with a peer group
☐ Possibly or Partially Present	Possible or partial evidence that, on more than 1 occasion within the past 6 months, the adolescent has associated with peers who: <ul style="list-style-type: none"> • Often engage in antisocial / criminal activity, OR • Often use non-prescription drugs and/or alcohol, OR • The adolescent frequently engaged in antisocial / criminal behaviours to "fit in" or "belong" with a peer group
☐ Not Present	During the past 6 months, the adolescent has NOT associated with peers who often engage in antisocial / criminal activity or substance use / abuse behaviours on more than 1 occasion.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

17. Interpersonal aggression.

☐ Present	During the past 6 months, the adolescent has demonstrated a pattern of interpersonal aggression, characterized by a number of verbally or physically abusive behaviours directed towards people.
☐ Possibly or Partially Present	Possible or partial evidence that, during the past 6 months, the adolescent has demonstrated a pattern of interpersonal aggression, characterized by a number of verbally or physically abusive behaviours directed towards people.
☐ Not Present	During the past 6 months, the adolescent has NOT demonstrated a pattern of interpersonal aggression characterized by a number of verbally or physically abusive behaviours directed towards people.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

18. Recent escalation in anger or negative affect.

☐ Present (please note) ☐ Anger ☐ Negative affect	At any time within the past 6 months, the adolescent has demonstrated an escalation in: <ul style="list-style-type: none"> • Anger (e.g., tantrums, verbal or physical aggression, threats), OR • Negative affect such as depression, anxiety, loneliness, boredom, or frustration <p>NOTE: this factor represents ONLY an escalation, or heightening, of anger or negative affect—NOT merely the presence of anger or negative affect</p>
☐ Possibly or Partially Present	Possible or partial evidence that, at any time within the past 6 months, the adolescent has demonstrated an escalation in: <ul style="list-style-type: none"> • Anger (e.g., tantrums, verbal or physical aggression, threats), OR • Negative affect such as depression, anxiety, loneliness, boredom, or frustration
☐ Not Present	NO escalation in anger or negative affect during the past 6 months.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

19. Poor self-regulation of affect and behaviour (Impulsivity).

☐ Present	During the past 6 months, the adolescent has demonstrated very poor self-regulation of affect and behaviour. Impulsivity is demonstrated by 3 or more of the following: <ul style="list-style-type: none"> • Frequent difficulty delaying gratification • Frequent difficulty delaying responses ("blurting out answers") • Frequently interrupting others • Frequent failure to listen to instructions or directions • Frequently becoming bored easily with routine • Frequent grabbing or touching things/others without permission • Frequent failure to consider consequences before engaging in activities (particularly potentially dangerous or risky activities)
☐ Possibly or Partially Present	Possible or partial evidence that, during the past 6 months, the adolescent has demonstrated very poor self-regulation of affect and behaviour—is typically highly impulsive (2 or fewer of the above).
☐ Not Present	During the past 6 months, the adolescent has NOT demonstrated very poor self-regulation of affect and behaviour—is typically NOT impulsive.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

20. High-stress family environment.

☐ Present	At any time within the past 6 months, REGARDLESS of where the adolescent has been living, there has been an extreme level of stress within the family as evidenced by issues such as: <ul style="list-style-type: none"> • Marked marital discord • Death of a family member • Separation of a family member from family • Major illness of a family member • Significant family change in residence, employment, or income • Poverty • Criminal activity of family member other than adolescent • Sexual or physical victimization within the family (not including the adolescent's index sexual offense) • Highly conflictual family relationship(s) (OTHER THAN offender-parent relationship)
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent's family has experienced high levels of stress at any time within the past 6 months.
☐ Not Present	Adolescent's family has NOT experienced high levels of stress during the past 6 months.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

21. Problematic parent-offender relationships / Parental rejection.

☐ Present	At any time within the past 6 months, the adolescent has experienced an extremely problematic parent-child relationship as evidenced by: <ul style="list-style-type: none"> • Adolescent feeling rejected, unloved, or unwanted by a parent(s) • Parent's current use of harsh/punitive verbal or physical discipline • Very low level of parental involvement; particularly if the parent was once more involved in the adolescent's life • Significant parent-child conflict / disagreement
☐ Possibly or Partially Present	Possible or partial evidence that, at any time within the past 6 months, the adolescent has experienced an extremely problematic parent-child relationship or has felt rejected, unloved, or unwanted by a parent(s).
☐ Not Present	During the past 6 months, the adolescent has NOT experienced an extremely problematic parent-child relationship or has NOT felt rejected, unloved, or unwanted by a parent(s).
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

22. Parent(s) not supporting sexual-offense-specific assessment / treatment.

☐ Present	At any time within the past 6 months, the adolescent's parent(s) has not been supportive of sexual-offense-specific assessment/treatment for their child as evidenced by one or more of the following: <ul style="list-style-type: none"> • Parental refusal to participate in assessment/treatment • Parental refusal to allow child to participate in assessment/treatment • Parent(s) denies that their child committed the sexual assault despite evidence to the contrary • Parent(s) denies that there is ANY risk of sexual reoffense • Parent(s) attempts to undermine or minimize the adolescent's sexual-offense-specific assessment/treatment
☐ Possibly or Partially Present	Possible or partial evidence that, at any time within the past 6 months, the adolescent's parent(s) has not been supportive of sexual-offense-specific assessment/treatment for their child.
☐ Not Present	Adolescent's parent(s) HAS been supportive of sexual-offense-specific assessment/treatment for their child during the past 6 months.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

23. Environment supporting opportunities to reoffend sexually.

☐ Present	At the present time—or at any time within the NEXT 6 months—the adolescent is residing in, or often visiting, an environment that supports opportunities to reoffend sexually as evidenced by one or more of the following: <ul style="list-style-type: none"> • Unsupervised access to potential and/or past victims • Poor monitoring or control of adolescent's whereabouts • Adult denial of adolescent's risk to reoffend sexually • Lack of adult awareness of adolescent's high-risk factor(s) • Easy access to sexual media (pictorial, auditory, or textual) • Exposure to frequent sexual behaviours, gestures, or conversations • Supervising adults who blame the victim(s) for the adolescent's offense(s)
☐ Possibly or Partially Present	Possible or partial evidence that, at the present time—or at any time within the NEXT 6 months—the adolescent is residing in, or often visiting, an environment that supports opportunities to reoffend sexually.
☐ Not Present	BOTH presently AND during the NEXT 6 months, the adolescent will NOT be residing in, or often visiting, an environment that supports opportunities to reoffend sexually.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

24. No development or practice of realistic prevention plans/strategies.

☐ Present	<p>During the past 6 months:</p> <ul style="list-style-type: none"> The adolescent has not developed a realistic plan to cope with potentially high-risk factors for a sexual reoffense (such as deviant sexual arousal), OR The adolescent has not practiced realistic strategies to cope with potentially high-risk factors. <p>NOTE: "realistic" plans/strategies are those that would be considered sensible, practical, and socially acceptable.</p>
☐ Possibly or Partially Present	Possible or partial evidence that, during the past 6 months, the adolescent has not developed or practiced realistic strategies to cope with potentially high-risk factors for a sexual reoffense (such as deviant sexual arousal).
☐ Not Present	Adolescent HAS BOTH developed AND practiced at least some realistic plan(s) to cope with high-risk factors for a sexual reoffense during the past 6 months.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

25. Incomplete sexual-offense-specific treatment.

☐ Present	Adolescent has not yet completed a majority (i.e., 75% or more) of the sexual-offense-specific treatment goals that were recommended following assessment.
☐ Possibly or Partially Present	Possible or partial evidence that the adolescent has not yet completed a majority (i.e., 75% or more) of the sexual-offense-specific treatment goals that were recommended following assessment.
☐ Not Present	Adolescent HAS completed a majority (75% or more) of the sexual-offense-specific treatment goals that were recommended following assessment.
☐ Unknown	Insufficient information to support a decision regarding this risk factor.

26. Other factor : _____

☐ Present	
☐ Possibly or Partially Present	<div style="text-align: center;">/</div>

This is a SUMMARY sheet ONLY.

VALID ONLY IF ratings have been transferred from Coding Form attached.
Name of Adolescent and Date of Assessment are noted on Page 1

High Risk Factors for Sexual Reoffense	Present	Partially/Possibly Present	Not Present	Unknown
Sexual Interests, Attitudes, and Behaviours				
1. Deviant sexual interests (younger children, violence, or both)				
2. Obsessive sexual interests/Preoccupation with sexual thoughts				
3. Attitudes supportive of sexual offending				
4. Unwillingness to alter deviant sexual interests/attitudes				
Historical Sexual Assaults				
5. Ever sexually assaulted 2 or more victims				
6. Ever sexually assaulted same victim 2 or more times				
7. Prior adult sanctions for sexual assault(s)				
8. Threats of, or use of, violence/weapons during sexual offense				
9. Ever sexually assaulted a child				
10. Ever sexually assaulted a stranger				
11. Indiscriminate choice of victims				
12. Ever sexually assaulted a male victim (<i>male offenders only</i>)				
13. Diverse sexual-assault behaviours				
Psychosocial Functioning				
14. Antisocial interpersonal orientation				
15. Lack of intimate peer relationships / Social isolation				
16. Negative peer associations and influences				
17. Interpersonal aggression				
18. Recent escalation in anger or negative affect				
19. Poor self-regulation of affect and behaviour (Impulsivity)				
Family/Environmental Functioning				
20. High-stress family environment				
21. Problematic parent-offender relationships/Parental rejection				
22. Parent(s) not supporting sexual-offense-specific assessment/treatment				
23. Environment supporting opportunities to reoffend sexually				
Treatment				
24. No development or practice of realistic prevention plans/strategies				
25. Incomplete sexual-offense-specific treatment				
Other Factor				

Overall Risk Rating ☐ Low ☐ Moderate ☐ High

APPENDIX E

YLS/CMI

YLS/CMI

Factor	present	absent
Prior and current offenses/dispositions		
Three or more prior convictions		
Two or more failures to comply		
Prior probation		
Prior detention		
Three or more current convictions		
Total score		
Family circumstances/parenting		
Inadequate supervision		
Difficulty in controlling behaviour		
Inappropriate discipline		
Inconsistent parenting		
Poor relations/father-child		
Poor relations/mother-child		
Any strengths?		
Total score		
Education/employment		
Disruptive classroom behaviour		
Disruptive behaviour on the school property		
Low achievement		
Problems with peers		
Problems with teachers		
Truancy		
Unemployment/not seeking employment		
Any strengths?		
Total score		

Peer relations		
Some delinquent acquaintances		
Some delinquent friends		
No or few positive acquaintances		
No or few positive friends		
Any strengths?		
Total score		
Substance abuse		
Occasional drug use		
Chronic drug use		
Chronic alcohol use		
Substance abuse interferes with life		
Substance use linked to offense		
Any strengths?		
Total score		
Leisure/recreation		
Limited organized activities		
Could make better use of time		
No personal interests		
Any strengths?		
Total score		
Personality/behaviour		
Inflated self-esteem		
Physically aggressive		
Tantrums		
Short attention span		
Poor frustration tolerance		
Inadequate guilt feelings		
Verbally aggressive, impudent		
Any strengths?		
Total score		

Attitudes/orientation		
Antisocial/procriminal attitudes		
Not seeking help		
Actively rejecting help		
Defies authority		
Callous, little concern for others		
Any strengths?		
Total score		
Total prior and current		
Total family		
Total education		
Total peers		
Total substance abuse		
Total leisure		
Total personality		
Total attitudes		
Total YLS/CMI		

- ☐ Low 0-8
- ☐ Mod 9-22
- ☐ High 23-34
- ☐ Very high 35-42

APPENIDX F

SAFE-T Consent Forms

Ministry of
Community and
Social Services

Ministère des
Services sociaux
et communautaires

Psychological Assessment Consent Form

I, _____, currently residing at
(please print full name)

(please print current address)

agree to complete the psychological assessment at the SAFE-T Program. I understand that this assessment is being supervised by Dr. James Worling, C.Psych., the psychologist at the SAFE-T Program, and that the tests will be administered by a staff under his supervision.

I will be asked to complete a variety of questionnaires, and it will take approximately 4 or 5 hours in total—over 2 or 3 appointments—depending on the tests that I am asked to complete. Some of the questionnaires will be presented on the computer, and others will be paper-and-pencil. Given the nature of my involvement at SAFE-T, I understand that the questions will be focused on general issues such as my current thoughts, feelings, and behaviours, my family life, my attitudes, and my social relationships. I also realize that there will be questions regarding my sexual thoughts, sexual feelings, sexual behaviours, and sexual attitudes in addition to specific questions regarding my sexual-assault behaviours. I realize that some of the questions may remind me of upsetting past events, and that if I find any of the questions disturbing in any way, I can discontinue the assessment at any time or choose not to complete specific questions or questionnaires.

I am aware that the test results will assist my clinical team at SAFE-T to perform a more thorough assessment of my particular strengths and weaknesses. The information from the psychological assessment will add to the information that is collected from clinical interviews that I participate in. I understand that some of the information gained from the psychological tests could be collected through additional clinical interviews; however, I also understand that the psychological tests will provide my team with important information that cannot be acquired from clinical interviews.

I understand that I am free at any time during this assessment to withdraw this consent and to stop my participation in the psychological testing. Although this will mean that certain information about me will not be collected for my assessment, I understand that this decision will not affect my access to assessment and/or treatment resources at SAFE-T.

I am aware that I should ask the person giving me the tests if there are any words or phrases that I do not understand so that the information is as accurate as possible. I also

understand that if I experience any difficulties reading, test questions will be read aloud for me. I know that I am free to ask any questions about the psychological assessment process at any time.

I understand that my parent(s) and/or guardian(s) will also be asked to complete psychological tests regarding my thoughts, feelings, attitudes, and behaviours. I am aware that the information from these tests will be included in my overall assessment.

My responses to the tests will be summarized and will be used by my clinical team as part of my overall assessment. I understand that if any of my responses suggest that I may be at risk of harming myself or others, these results will be shared with my therapist at SAFE-T so that these issues can be discussed more fully in an interview with me. I also understand that the information that I provide will be kept confidential by the clinical team at SAFE-T with the following exceptions: (1) if I am at risk of harming myself; (2) if I am at risk of harming a specific person; (3) if I disclose (previously undisclosed) past offenses against identified individuals; (4) if I disclose previously undisclosed past abuse against me by an identified person; (5) if a court orders my records; (6) if I disclose sexual abuse by a regulated health professional. I understand that in each of these instances, SAFE-T will report the relevant information to the proper authorities.

I understand that I will be given feedback from this psychological assessment, and that I can ask Dr. Worling about any aspects of this assessment at any time. I am aware that my completed tests will be stored in a separate psychological assessment file at SAFE-T and that Dr. Worling is responsible for any access to these documents.

I am aware that SAFE-T conducts research in the area of sexual abuse, and that scores from my psychological tests may be used in studies of the causes and consequences of sexual abuse. I understand that, in this research, test scores are combined among many individuals, and that any identifying information about me will never appear in any research report. Rather, information presented will represent averages from groups of individuals, and I will remain anonymous in any report. This research will help SAFE-T and other programs in their work with offenders, victims, and family members. I also understand that, for research purposes only, my police records may be accessed in the future to determine whether treatment was successful in helping me to stop criminal activity.

I have read and understood the information presented in these 2 pages regarding psychological assessments at SAFE-T, and any questions that I had have been answered to my satisfaction. I hereby agree to proceed with the psychological assessment at SAFE-T.

(signature)

(today's date)

(witness)

AO 15

Ministry of
Community and
Social Services

Ministère des
Services sociaux
et communautaires

Psychological Assessment Consent Form

I, _____, currently residing at
(please print full name)

(please print current address)

understand that this assessment at the SAFE-T Program is being supervised by Dr. James Worling, C.Psych., the psychologist at the SAFE-T Program, and that the tests will be administered by a staff under his supervision.

I am aware that my child(ren) will be asked to complete a variety of questionnaires, and it will take approximately 4 or 5 hours in total—over 2 or 3 appointments—depending on the tests that my child(ren) is asked to complete. Some of the questionnaires will be presented on the computer, and others will be paper-and-pencil. Given the nature of my child(ren)'s involvement at SAFE-T, I understand that the questions will be focused on general issues such as his/her current thoughts, feelings, behaviours, family life, attitudes, and social relationships. I also realize that there will be questions regarding his/her sexual thoughts, sexual feelings, sexual behaviours, and sexual attitudes. I realize that some of the questions may remind my child(ren) of upsetting past events, and that if he/she finds any of the questions disturbing in any way, the assessment can be discontinued at any time.

I understand that SAFE-T's assessment is not focused solely on my child(ren); therefore, I agree to complete a variety of questionnaires regarding my thoughts, feelings, behaviours, and attitudes. I am also aware that I will be asked questions about my child(ren)'s thoughts, feelings, behaviours, and attitudes. I understand that this will take approximately 3 or 4 hours—over 1 or 2 appointments—depending on the tests required and the time I take to complete them.

I am aware that the test results will assist my clinical team at SAFE-T to perform a more thorough assessment of my family's particular strengths and weaknesses. The information from the psychological assessment will add to the information that is collected from clinical interviews. I understand that some of the information gained from the psychological tests could be collected through additional clinical interviews; however, I also understand that the psychological tests will provide my team with important information that cannot be acquired from clinical interviews.

I understand that I am free at any time during this assessment to withdraw this consent and to stop participation in the psychological testing. Although this will mean that certain information about me and/or my child(ren) will not be collected for the assessment, I understand that this decision will not affect our access to assessment and/or treatment resources at SAFE-T.

I am aware that I should ask the person giving me the tests if there are any words or phrases that I do not understand so that the information is as accurate as possible. I also understand that if I experience any difficulties reading, test questions will be read aloud for me. I know that I am free to ask any questions about the psychological assessment process at any time.

Responses to the tests will be summarized and will be used by the clinical team as part of the overall assessment. I understand that if any responses suggest that I may be at risk of harming myself or others, these results will be shared with the therapist at SAFE-T so that these issues can be discussed more fully in an interview. I also understand that the information that provided will be kept confidential by the clinical team at SAFE-T with the following exceptions: (1) if I am at risk of harming myself; (2) if I am at risk of harming a specific person; (3) if I disclose (previously undisclosed) past offenses against identified individuals; (4) if I disclose (previously undisclosed) past abuse against me and the identified person who abused me may be at risk of abusing other children under the age of 16; (5) if a court orders my records; (6) if I disclose sexual abuse by a regulated health professional. I understand that in each of these instances, SAFE-T will report the relevant information to the proper authorities. I am aware that these same limits of confidentiality apply to my child(ren) with the exception of (4) above: if my child(ren) discloses any past or current abuse, this must be reported to the proper authorities.

I understand that I will be given feedback from this psychological assessment, and that I can ask Dr. Worling about any aspects of this assessment at any time. I am aware that the completed tests will be stored in a separate psychological assessment file at SAFE-T and that Dr. Worling is responsible for any access to these documents.

I am aware that SAFE-T conducts research in the area of sexual abuse, and that scores from the psychological tests may be used in studies of the causes and consequences of sexual abuse. I understand that, in this research, test scores are combined among many individuals, and that any identifying information will never appear in any research report. Rather, information presented will represent averages from groups of individuals, and we will remain anonymous in any report. This research will help SAFE-T and other programs in their work with offenders, victims, and their family members. I also understand that, for research purposes only, my child(ren)'s police records may be accessed in the future to determine whether treatment was successful in helping to stop criminal activity.

I have read and understood the information presented in these 2 pages regarding psychological assessments at SAFE-T, and any questions that I had have been answered to my satisfaction. I hereby agree to proceed with the psychological assessment at SAFE-T.

(signature)

(today's date)

(name and birthdate of child assessed)

(name and birthdate of child assessed)

(name and birthdate of child assessed)

(witness)