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Long-Term Follow-Up of a Community-Based Treatment Program for Adolescent Sex Offenders

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Abstract

The effectiveness of adolescent sex offender treatment has received relatively little study when compared to the treatment outcome literature with adult sex offenders. Examined even less are the factors associated with treatment success in sexually abusive adolescents. The present study examined recidivism data on 89 youth convicted of a sexual offense between September 1985 and June 1998. The treatment group consisted of 41 youth who participated in at least 10 months of treatment in the Thunder Bay Adolescent Sex Offender Program (TBASOP). Included in the comparison group were 23 treatment non-completers (less than 10 months of TBASOP) and 25 adolescent sex offenders who did not receive sex offender specific treatment (assessment only group). After an average follow-up period of 7 years, recidivism rates based on subsequent criminal convictions were significantly higher for the treatment non-completers than the treatment completers on measures of nonsexual and serious recidivism. Furthermore, while not significant, the treatment completion group sexually re-offended at a lower rate (2.4%) than the treatment non-completers (17.4%) and the assessment only group (4%). These results suggest that adolescent sex offenders commit relatively few sexual re-offenses compared to non-sexual re-offenses but that sex offender specific treatment may be more beneficial in reducing sexual, nonsexual, and serious recidivism.

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Long-Term Follow-Up of a Community-Based Treatment Program for Adolescent Sex Offenders

In recent years, the treatment of adolescent sex offenders has been receiving increased attention. This shift is primarily due to society's acknowledgement of the seriousness of the problem and rejection of the commonly held belief that adolescent sexual offending is a product of normal sexual curiosity (Becker, 1990; Charles & McDonald, 1996). The most common method of examining treatment efficacy is by focusing on recidivism rates (Camp & Thyer, 1993). However, as there has been very few outcome studies completed (Schmidt & Heinz, 1999), little is known regarding the success of treatment in reducing adolescent sexual recidivism or what factors are related to treatment success (Rasmussen, 1999; Worling & Curwen, 2000). This study examined long-term recidivism rates of adolescent sexual offenders following completion of the Thunder Bay community-based treatment program. The paper will begin with a brief review of the literature on adolescent sex offenders, followed by a more focused look at re-offending patterns following treatment and predictors of recidivism.

Definition

An adolescent sex offender is defined as a youth who commits any sexual act with a person of any age, against the victim's will, without consent, or in an aggressive or threatening manner (Ryan, Lane, Davis, & Isaac, 1987). In a literature review, Barbaree, Hudson, and Seto (1993) found that adolescents are responsible for approximately 20% of all rapes and between 30% and 50% of all

child molestations. When adolescents are not held criminally responsible for their offending behavior, they pose a greater risk of continuing these offensive patterns into adulthood. Abel, Becker, Cummingham-Rathner, Rouleau, Kaplan, and Reich (1984) claimed that the average adolescent sex offender may, without treatment, go on to commit 380 sex crimes throughout his lifetime. Moreover, Becker and Abel (1985) found that approximately 50% of adult sex offenders report that their sexual offending began in adolescence.

Characteristics of Adolescent Sexual Offenders

Heavily investigated in the literature is the question of what, if anything, distinguishes the adolescent sex offender from other adolescents (Davis & Leitenberg, 1987). Clinical descriptions have commonly focused on a wide range of explanatory variables including: (1) generalized delinquency, (2) psychological or psychiatric disturbance, (3) social competence, (4) family dysfunction, (5) offender as victim, (6) sexual knowledge/experience, (7) intellectual/neurological deficits, and (8) sex-offender-specific variables, such as deviant sexual arousal patterns and the use of cognitive distortions to justify the offence (Davis & Leitenberg, 1987; Murphy, Haynes, & Page, 1992; Knight & Prentky, 1993). Additional characteristics that have been hypothesized to play a central role by other authors include academic or behavioral problems, substance abuse, confusion about sexual identity, lack of empathy, powerlessness, and poor impulse control (Aljazireh, 1993; Gilbert-Evans & Redditt, 1994; Lakey, 1995). Despite the many possible factors, it must be noted that many of these characteristics have also been associated with nonsexual offenders and

nonoffenders with no clear pattern emerging that consistently distinguishes the adolescent sexual offender from other youths.

Perhaps the most consistent characteristic associated with adolescent sexual offenders is generalized delinquency (Davis & Leitenberg, 1987; Becker, 1990; Murphy et al., 1992; Worling & Curwen, 2000). For example, Kahn and Chambers (1991) reported that more than 50% of their sample of adolescent sex offenders (N = 221) had a previous nonsexual criminal history. In comparison, only 5% had previously been convicted of a sex crime. Furthermore, 44.8% of the adolescents were convicted of nonsexual offenses following treatment. Similarly, using structured psychiatric interviews, Kavoussi, Kaplan, and Becker (1988) found that 81% of their sample of 58 outpatient adolescent sex offenders had some type of psychiatric disturbance, most commonly conduct disorder (48%). Other diagnoses included substance abuse (18%), adjustment disorder (6%), attention deficit disorder (6%), and social phobia (2%). In another study, Carpender, Peed, and Eastman (1995) examined the personality characteristics of adolescents who sexually offended against children verses those who offended against peers. Using the Millon Clinical Multiaxial Inventory, results suggested that adolescents who sexually offend against children have more characteristics of dependent, avoidant, and schizoid personality disorders. In addition, Herkov, Gynther, Thomas, and Myers (1996) found that the MMPI differentiated adolescent psychiatric inpatients from adolescent sexual offenders, with the latter reporting significantly more psychopathology.

Other studies have failed to show such psychiatric problems in adolescent sexual offenders. For example, Lewis, Shanok, and Pincus (1981) found no

differences between sexually assaultive adolescents and other violent juvenile offenders on measures of psychotic symptoms, depression, neurological disturbances, and learning disabilities. Hastings, Anderson, and Hemphill (1997) compared adolescent sexual offenders, conduct disordered youth, and control adolescents on measures of coping, stress, problem behavior, and cognitive distortions. Results showed that the sexual offenders and conduct-disordered youth were more similar to each other than to control adolescents. Similarly, Kempton and Forehand (1992) and Oliver, Hall, and Neuhaus (1993) found that the adolescent sex offenders studied had fewer behavioral and emotional difficulties and less deviant personality and background characteristics than other adolescent delinquents. In summary, research is mixed as to the prevalence of psychological/psychiatric impairment among sexual offenders. It appears that adolescent sexual offenders display a variety of psychological disturbances ranging from mildly to severely disturbed (Aljazireh, 1993; Davis & Leitenberg, 1987; Gilbert-Evans & Redditt, 1994; Lakey, 1995; Murphy et al. 1992). However, it is clear that no one type of pathology can accurately identify this population.

In recent years, social incompetence has become one of the most commonly cited characteristics of sexually assaultive adolescents. For example, Blaske, Borduin, Henggeler, and Mann (1989) compared adolescent sex offenders to non-sexually assaultive offenders on measures of individual, family, and social functioning. Compared to non-sexual violent offenders, the adolescent sexual offenders were more likely to have neurotic relationships with their mothers,

characterised by high levels of anxiety and interpersonal discomfort, and had lower levels of emotional bonding with peers. Based on clinical judgement, Fehrenback, Smith, Monastersky, and Deisher (1986) found that 65% of the sexually assaultive adolescents in their study were socially isolated. Although such isolation may depend on the type of offense, research does support the notion of social incompetence within the adolescent sex offender population (Aljazireh, 1993; Blaske et al., 1989; Davis & Leitenberg, 1987; Graves, Openshaw, & Adams, 1992). As a possible explanation, Becker and Abel (1985) suggested that adolescent sexual offenders might become isolated from their peers because they are unassertive and fear rejection.

Family dysfunction has also been identified as a commonality in adolescent sex offenders. Studies often suggest that unstable family backgrounds and a history of witnessing family violence or suffering physical abuse or neglect at the hands of a parental figure plays a contributing role in the life histories of adolescent sex offenders (Aljazireh, 1993; Becker, 1988; Davis & Leitenberg, 1987; Fehrenbach et al., 1986; Kahn & Chambers, 1991; Smith & Monastersky, 1986). In a similar vein, researchers have also studied the occurrence of childhood sexual abuse in the history of sex offenders. For example, Kahn and Chambers (1991) found that 42% of their sample of adolescent sex offenders had been sexually victimized in childhood. Similarly, Rubinstein, Yeager, Goodstein, and Lewis (1993) found that 41% of the adolescent sexual offenders in their study had experienced childhood sexual abuse. Curiously, 75% of the sexually abused adolescents were victimized by females rather than males. In another study,

Worling (1995a &1995b) reported that 45% of the adolescent sex offenders studied were victims of childhood sexual abuse. Interestingly, Worling (1995a & 1995b) also found that 75% of adolescent sex offenders with a male child victim had been sexually abused themselves, whereas only 25% of sex offenders who abused female children, peers, or adults had been sexually abused. However, it must be noted that although many researchers have identified a link between adolescent sexual offending and prior childhood abuse, other researchers have also found the same relationship in adolescent nonsexual offenders (Benoit & Kennedy, 1992). Furthermore, research has failed to explain why some victims of abuse become abusers and others do not. Therefore, although research has demonstrated a strong association between sexual offending behavior and prior history of abuse, this association is far from clear and direct.

Other research has focused on sexual knowledge, or experience, as being associated with sexual offending (Kaplan, Becker, & Tenke, 1991). In their review, Davis and Leitenberg (1987) suggested that adolescent sexual offenders have more sexual experience prior to their first offense than do their non-offending peers. Rubinstein et al. (1993) found that the sexually assaultive adolescents studied had sexual intercourse at a significantly earlier age than the comparison group (11.9 vs. 13.6 years of age). Researchers have also suggested that lack of sexual knowledge, inadequate heterosexual skills, and inhibited sexual feelings are a commonality among adolescent sex offenders (Murphy et al., 1992). Additionally, much research has pointed to deviant sexual arousal patterns (e.g.,

sexual arousal to children) as playing a role in sexually offending behaviors (Davis & Leitenberg, 1987; Weinrott, Riggan, & Frothingham, 1997).

As with adult offenders, intellectual and neurological deficits have been examined in sexually assaultive adolescents. Davis and Leitenberg (1987) indicated that school problems are common in this group, although it is less clear whether these problems are a result of intellectual impairment, learning disabilities, or conduct issues. Generally, the research on intellectual/neurological deficits in adolescent sex offenders is mixed. Lewis et al. (1981) found abnormal EEGs or grand mal seizures in 23% of their sample of violent adolescent sex offenders. This sample also scored in the Low Average range on intellectual ability with definite impairments in reading and math performance. However, other researchers have failed to replicate such findings through extensive neuropsychological and psychoeducational assessments (Tarter, Hegedus, Alderman, & Katz-Garris, 1983).

Attempts to examine adolescent sex offenders have often resulted in a description of adolescent sex offender subtypes based on their offending patterns (Lakey, 1995; Saunders, Awad, & White, 1986). O'Brian and Bera (1986) perhaps provide the best description of adolescent sexual offender typologies, identifying seven distinct subtypes. These types include: the Naive Experimenter; the Undersocialized Child Exploiter; the Pseudo-Socialized Child Exploiter; the Sexual Aggressive; the Sexually Compulsive; the Disturbed Impulsive; and the Group-Influenced. These subtypes differ on characteristics such as social skills, use of force, frequency of offence, psychological disturbances, externalizing behaviors, and family background. Some clinicians have applied such

typologies to their clients in order to select an appropriate treatment plan (Perry & Orchard, 1992). However, researchers have yet to adequately use such a classification in examining differences related to treatment response.

Offense and Victim Characteristics

Davis and Leitenberg (1987) provide one of the first thorough reviews of the literature on the offending patterns perpetrated by adolescent sexual offenders. Overall, their results suggest that the most frequent type of sexual offense committed by an adolescent is fondling. In a large descriptive study, Fehrenbach et al. (1986) found that 23% of the 305 adolescent sex offenders studied were charged with rape, whereas 59% were charged with fondling. Wasserman and Kappel (1985) examined 161 adolescents who committed sex offenses, regardless of whether or not the adolescents were charged with the offense. Of the total sample, 59% of the offenses involved some form of penetration, and 31% involved intercourse. Ryan, Miyoshi, Metzner, Krugman, and Fryer (1996) studied a national sample (N = 1600) of sexually abusive adolescents. Of the total sample, 68% of the assaults involved oral-genital contact or penetration. Similarly, Kahn and Chambers (1991) found that the typical offense involved touching the genitalia (57%) and vaginal penetration (33%).

Research findings have also indicated that the type of offense often depends on the age of the victim and offender, intercourse being less likely if the victim is a young child and the use of force more likely if the adolescent is older (Davis & Leitenberg, 1987; Groth, 1977). Fehrenbach et al. (1986) found that 62% of the victims were under age 12 and 44% were 6 years of age or younger.

Similarly, Ryan et al. (1996) found that 63% of the victims were less than 9 years of age and the most frequently reported victim was 6 years old. In the study by Kahn and Chambers (1991), nearly all the victims were under 10 years old, with 35% of the victims being between 3 to 4 years of age. Groth (1977) found that when the victim was the same age or older, the offender often used a knife (31%) or blunt instrument (12%). In contrast, none of the sexual offenses against children involved the use of a weapon. Similarly, Wasserman and Kappel (1985) reported that the most frequent method of coercion was verbal threat (57%). However, it must be noted that the extent to which persuasion, threats, or coercion were used in the commission of the offense may be difficult to ascertain. Offenders often tell plausible stories suggesting that the victim had consented to the sexual activity or had provoked it (Saunders & Awad, 1988).

In their review, Davis and Leitenberg (1987) suggest that the majority of victims of adolescent sex offenders are female, with male victims most likely being victimized in early childhood. Fehrenbach et al. (1986) reported that 72% of the 305 adolescent sex offenders had only female victims, whereas 18% had only male victims and 10% had both male and female victims. Kahn and Chambers (1991) found that when the offenders were referred for offenses against one victim (73% of total sample), the victim was much more likely to be female (74%). However, offenders who reported three or more victims tended to choose male victims at a greater rate than less chronic offenders. In addition, research has shown that virtually all adolescent sex offenders are male, females accounting

for less than 5% of all cases (Camp & Thyer, 1993; Davis & Leitenberg, 1987; Kahn & Chambers, 1991).

Davis and Leitenberg (1987) suggest that most victims of adolescent sex offenders are known to the offender. In Groth's (1977) incarcerated sample, child victims were more likely to be known by the adolescent offender than if the victim was an adult. This trend is also found in non-incarcerated samples. For example, Wasserman and Kappel (1985) reported that 20% of victims were in the offender's immediate family, 51% were friends or acquaintances, and only 9% were unknown to the offender. Smith and Monastersky (1986) found that the victim was typically a relative (41.1%) or acquaintance (48.2%). Kahn and Chambers (1991) reported that most often the victim was a non-related child known to the offender (31%) or a blood-related child (28%). Similarly, Ryan et al. (1996) noted that 38.8% of the victims were blood-related to the young offender and lived in the same household.

Davis and Leitenberg's (1987) review suggested that sexual assaults committed by adolescents are more likely to take place inside the offender's or victim's home. For example, Wasserman and Kappel (1985) reported that 75% of the offenses occurred inside a home: 55% in the victim's home, 22% in the offender's home, and 19% in a home shared by both the victim and offender. Fehrenbach et al. (1986) noted that for male offenders, 40% of all rapes of very young children and 47% of cases of indecent liberties occurred while the offender was babysitting the victim. In contrast, female offenders were babysitting during 63% of the offenses they committed. Similarly, Smith and Monastersky (1986)

found that 40.2% of the 112 adolescents studied were babysitting at the time of the referral offense.

Recidivism with Adult Sex Offenders

The majority of research on sex offender recidivism is based on adult offenders. Moreover, most of the treatment programs for adolescent sex offenders are simply a downward extension of what works with adult offenders with some modifications made for developmental age. Therefore, it seems appropriate to briefly discuss treatment outcomes for adult sex offenders.

Overall, studies on adult sex offenders suggest that treatment is significantly more effective than no treatment. Hall (1995) performed a comprehensive meta-analysis of 12 studies examining the efficacy of sex offender treatment. Overall, the sample consisted of 1,313 sex offenders with a mean follow-up period of 6.85 years. Recidivism rates ranged from .19 for treated sex offenders to .27 for untreated sex offenders. However, treatment effect sizes were significantly greater for studies having follow-up periods of longer than five years. Interestingly, one of the two studies yielding the largest effect size was a study comparing recidivism rates for two groups of treated adolescent sex offenders (Borduin, Henggeler, Blaske, & Stein, 1990). This finding suggests that intervening during adolescence is promising in the prevention of future sexual offending.

More recently, Hanson and Bussiere (1998) preformed a meta-analysis of 61 data sets examining predictors of sexual recidivism (52 of these data sets consisted of adult sex offenders only). Given the average 4 to 5-year follow-up,

the recidivism rate was 13.4% for sexual offenses. The strongest predictors of sexual recidivism were characteristics related to deviant sexual preferences and criminal lifestyle. Sexual offenders were more likely to re-offend sexually if they selected male victims than a female relative. Marital status (single), age (young), and failing to complete treatment were also related to increased risk for recidivism. Other risk factors included selecting strangers as victims, early onset of sexual offending, and high scores on the MMPI masculinity-femininity scale. Of importance is the finding that past victimization was not a predictor of recidivism.

Recidivism with Adolescent Sex Offenders

There are a variety of ways to look at the effectiveness of treating adolescent sex offenders. These tools include the use of self-report measures, plethysmograph tests, or recidivism rates. By far, the most common approach involves utilizing recidivism rates, in which adolescents who have completed treatment are followed for a period of time to determine if they have re-offended (Camp & Thyer, 1993). It is often difficult to compare recidivism rates for adolescent sexual offenders across studies because the population from which the sample is drawn varies considerably. Studies can be divided into those examining treated versus untreated adolescent sexual offenders; however, there remains wide variation within these subsamples regarding such variables as the seriousness of the offender (e.g., first time offender vs. repeat offender), type of sexual offense (e.g., violent vs. nonviolent), treatment conditions (secure custody vs. community) and type of treatment (e.g., offense-specific vs. general counseling).

Although it is important to examine whether treatment is beneficial to adolescent sexual offenders, it is more important to identify the types of treatment and offender characteristics associated with the greatest likelihood of success.

In perhaps the first study to examine recidivism with adolescent sex offenders, Dorshay (1943) followed 256 adolescents over a six-year period. The sample was divided into two groups, adolescent sexual offenders with no known nonsexual criminal history (primary group, N = 108) and adolescent sexual offenders with a history of nonsexual offenses (secondary group, N = 148). The rate of sexual recidivism in this early study, as defined by at least one subsequent arrest, was very low (2 adolescents in the primary group and 13 adolescents in the secondary group re-offended). Furthermore, the rate of overall recidivism was also relatively low (6 adolescents in the primary group and 22 adolescents in the secondary group). Although it is likely that many of these adolescents received treatment for their sexual offenses, comparisons between the treated and untreated adolescents were not examined. Overall, the results of this study suggest that adolescent sex offenders, whether treated or untreated, are relatively low risk for re-offending.

In another study examining recidivism with non-treated adolescents, Rubinstein et al. (1993) completed an 8-year follow-up of sex offenders who had offended violently when they were adolescents (N = 19) and adolescents who were violent non-sexual offenders (N = 58). Both groups were incarcerated as adolescents. Although the groups used similar degrees of violence in their crimes, results showed that the adolescent sex offenders were significantly more likely to

continue offending violently in adulthood, both in a sexual and non-sexual manner, than the violent non-sexual offenders. Furthermore, those who suffered childhood sexual abuse, especially at the hands of a female, were far more likely to become repetitive adult sex offenders than those who had not suffered such abuse. Some caution, however, needs to be considered when interpreting these findings, as the sexual offender group was substantially smaller than the non-sexual offender group. Nonetheless, these findings do suggest that violent adolescent sex offenders who do not receive treatment for their offending are at great risk to continue offending into adulthood.

Although several researchers have examined recidivism rates for non-treated adolescents sex offenders, most research has focused on adolescents treated within residential or community settings. Adolescent sexual offenders in residential treatment facilities represent serious offenders because they have been remanded to custody because of their risk to society and the seriousness of their crimes. Therefore, studies that compare success of residentially-based and community-based sex offender treatments should be interpreted with caution. In one such study, Kahn and Chambers (1991) examined recidivism data over a 20-month follow-up period for 221 adolescent sex offenders who completed a community-based or institution-based treatment program. Treatment included eclectic and comprehensive approaches. Overall, sexual recidivism was found to be 7.5%; however, 44.8% of the adolescents re-offended non-sexually. Sexual offenders who blamed their victims and used verbal threats in the commission of their offences had somewhat elevated sexual recidivism rates. Both community-

based and institution-based treatments revealed similar efficacy. Therapists accurately identified youths at low risk for re-offending sexually but poorly predicted non-sexual re-offenses. Also, therapists over-predicted the level of risk for youth to commit sexual re-offenses. Estimates of recidivism in this study may be somewhat conservative, however, considering the relatively short follow-up period and that recidivism was solely based on new criminal convictions.

In a similar study, Schram, Milloy, and Rowe (1991) reported recidivism data on 197 adolescent sex offenders who participated in offence-specific treatment with a mean follow-up period of 6.8 years. The adolescents in this study were obtained from 10 sex offender treatment programs located in the state of Washington. Therefore, this study included adolescents who were treated with different treatment modalities in either community-based or residential programs. This study found sexual recidivism to be relatively low (10.2% for convictions and 12.2% for arrests). In addition, the authors found that offenders presented the most danger to public safety during the first year following treatment completion and that youths treated in institutionalized facilities were far more likely to re-offend than youths treated in community programs. Consistent with past research, offenders were far more likely to commit new non-sexual offences (47.7% for convictions and 50.8% for arrests) than sexual offenses. Non-recidivists were significantly more likely to be older youth who had not had prior contact with the justice system. Compared to recidivists, non-recidivists reported less school behavior problems, were less likely to be victims of sexual abuse, blame their victims, or display deviant sexual arousal patterns. Contrary to expectations,

however, the non-recidivists were significantly more likely than the recidivists to have social skill deficits.

Other studies have also examined the success of residential treatment for adolescent sexual offenders. For example, Brannon and Troyer (1991) examined the effectiveness of a residential peer group-counseling program by comparing the post-release community adjustment of 53 adolescent sexual offenders and 57 adolescent non-sexual offenders treated within the same counseling groups. At the time of data collection, youths had been released into the community from a period of one month to two years. Although only one of the sexual offenders re-offended sexually, 32% re-offended non-sexually. Sixteen percent of the non-sexual offenders re-offended non-sexually. In a later study, Brannon and Troyer (1995) examined the long-term community readjustment of 36 adolescent sexual offenders released from the residential treatment program. Results showed that 17% of the adolescent sexual offenders entered the adult correctional system at follow-up. Most of the adolescents who subsequently re-offended were convicted on property crimes (67%), whereas only 16% were convicted for new sex crimes. However, a major limitation to these studies was that the authors defined recidivism as adult incarceration, which is likely to be an underestimate of actual recidivism rates. Despite this limitation, the study suggests that adolescent sexual offenders released from a residential treatment sexually re-offend at a relatively low rate.

In another study examining residential treatment success with serious adolescent sexual offenders, Bremer (1992) examined the long-term (up to 8.5

years post-treatment) recidivism rates for 193 offenders receiving treatment in a residential correctional program. The recidivism rate for youths based on the youths' sexual offense convictions was 6% whereas the rate based on the youths self-report measures of sexual offending behavior was notably higher (11%). All re-offenses were by youth who spent less than 15 months in treatment. From the self-report survey, the youths indicated two treatment areas that were most helpful in achieving success: learning the meaning of and how to have a relationship and learning how to identify or express feelings appropriately. This study also clearly identified a problem in recidivism research in that all re-offenses may not be detected.

Hagan, King, and Patros (1994) examined the re-offense behavior of 50 youth who committed serious sexual assaults against same-aged or older peers over a two-year post-treatment period. Recidivism was measured through criminal convictions and self-reports. Consistent with previous research, 10% of the adolescents were involved in a subsequent sexual offense, whereas 58% were involved in a new non-sexual offense. In a similar examination of recidivism with serious adolescent sexual offenders, Kahn and Lafond (1988) followed 350 incarcerated adolescents over a period of up to five years post-treatment. Treatment goals included breaking through the offenders denial, working on the offender's own personal history of sexual or physical victimization, building social skills, and changing dysfunctional values, attitudes, and deviant arousal patterns. Although the method for gathering recidivism data was not specified,

results showed that 9% of adolescents re-offended sexually and 8% re-offended non-sexually.

While the severity of adolescents' sexual crimes and the type of treatment varies, much of the research has focused on adolescent sexual offenders at community agencies. For example, Becker (1990) presented short-term follow-up data on 52 adolescent sex offenders in a community-based, cognitive behavioral treatment program. The treatment included satiation therapy, cognitive restructuring, covert sensitization, sex education, social skills training, values clarification, and relapse prevention in which youths learned their cycle of offending. At one-year follow-up, recidivism, self-report, and penile plethysmograph measures indicated that treatment was effective. On the basis of referrals and self-reports, only 5 adolescents had recommitted sexual offences. These results lend support to the effectiveness of cognitive-behavioral therapy with adolescent sex offending, although whether all components of the treatment were essential is less clear. Furthermore, it would be premature to conclude that treatment had a substantial effect on reducing recidivism as the study used a relatively short follow-up period.

Perhaps the best way to examine treatment success with adolescent sexual offenders is to follow treated adolescents over a long period of time. Hagan and Cho (1996) followed 100 treated adolescent sex offenders over a maximum follow-up period of 5 years in order to determine recidivism rates, as defined by at least one criminal conviction post-treatment. The recidivism rate of adolescents who sexually abused children was compared to the re-offending behavior of

adolescents who sexually abused same-age or older peers. Both groups received the same treatment, consisting of group therapy, sex education, behavioral assessment and management, and individual and family therapy. Results indicated no significant differences between groups regarding sexual or non-sexual recidivism. Consistent with past research, overall, adolescents sexually re-offended at a much lower rate (9%) than non-sexual re-offending (46%).

Borduin et al. (1990) compared treatment efficacy between 8 adolescent sex offenders treated with multisystemic therapy (MST) and 8 adolescents treated with individual therapy (IT). All 16 adolescents were randomly assigned to treatment conditions. Follow-up data, as defined as subsequent criminal charges, were collected for an average of three years following therapy. The MST group had recidivism rates of 12.5% for sexual offenses and 25% for non-sexual offenses. In contrast, the recidivism rates of the IT group were 75% for sexual offenses and 50% for non-sexual offenses. This study supports the effectiveness of MST treatment in reducing sexual recidivism in adolescent sex offenders, however, caution must be taken in interpreting these findings as the sample size in this study was small.

Although Borduin et al. (1990) were able to randomly assign their participants to treatment, this is often a difficult task in sex offender research. More commonly, adolescents are assigned to the treatment condition based on their level of risk or other considerations (e.g., treatment is not available, youth dropped out of treatment, etc.). For example, Lab et al. (1993) followed 155 adolescent sex offenders over a follow-up period of up to 3 years. Based on their

level of risk, adolescents were placed in one of two treatment conditions. Adolescents who were considered low to medium risk were assigned to the court-based Sexual Offender Treatment program (SOT), whereas high-risk youth were referred to traditional community agencies. Recidivism was based on at least one criminal conviction following treatment. Sexual recidivism was found in 2% of the SOT group and in 4% of the comparison group. Non-sexual recidivism was found in 22% of the SOT group and 13% of the comparison group. Curiously, in this study, low-medium risk adolescents treated within a sex offender specific treatment program were more likely to re-offend non-sexually (24%) than the high-risk adolescents in the community-based program (18%). While these results were not significant, they do suggest that a sex offender specific program may not be any more beneficial than a community-based program.

Although many researchers have reported recidivism rates for adolescents after treatment completion and others have compared success of various sex offender therapies, few researchers have looked at what offender and offense characteristics are associated with a risk for re-offending. In a recent study, Rasmussen (1999) examined factors related to recidivism in a sample of 170 first-time adolescent sexual offenders. Results demonstrated that 14% of the youths received a new conviction for a sexual offense and 54% received a new conviction for a non-sexual offense over a five-year observation period. In addition, more than half of these youths re-offended within two years of the observation period. Overall, the study suggests that first time adolescent sexual offenders are less likely to re-offend when treated within community-based

programs, as opposed to more restrictive settings. Regarding offense and perpetrator characteristics associated with recidivism, adolescents who had a greater number of female victims or who had a greater number of overall victims were at increased risk to re-offend sexually. Also, adolescents who had a history of child sexual abuse were more likely to re-offend sexually than youths without such a history. In addition, non-sexual recidivism was significantly associated with a history of prior non-sexual offenses, divorced or separated parents, failure to complete sexual offender treatment, and finally, abuse of older victims.

In a similar study, Smith and Monastersky (1986) examined the recidivism rates of 112 treated adolescent sex offenders as measured by their juvenile court records. The results indicated that 14.3% of the youths were found to re-offend sexually and 34.8 % non-sexually, after a mean follow-up period of 28.9 months. Youths that re-offended sexually differed substantially from those that re-offended non-sexually in that the latter were more defensive, more depressed, and more likely to deny any sexual deviance. In contrast to both groups of re-offenders, non-offenders were more likely to have been, at the time of referral, charged with a relatively serious sexual offense, often against a much younger child who is an acquaintance or relative of the offender. Interestingly, adolescents whose referral offenses were rape were less likely to be charged with a subsequent nonsexual or sexual offense compared to those who committed a less serious offense. Furthermore, adolescents who committed an offense against a younger child were less likely to re-offend than those who offended against older victims. In addition, those who committed offenses against a stranger were less

likely to re-offend non-sexually but more likely to re-offend in a sexual manner than those who offended against victims they knew. Results of this study also demonstrated that experienced clinicians poorly predicted sexual recidivism, in that they generally over-predicted dangerousness. Several reasons for the difficulty in accurately predicting re-offense were outlined. First, sexual re-offending generally appears to be a low rate event, and low rate events are by nature difficult to predict. Secondly, there is often limited access to the information necessary to accurately predict re-offending and clinicians may over-rely on nonessential information. Third, other difficulties stem from the role clinicians play in the adjudication process. A clinician with the responsibility of determining risk for re-offending is expected to take a conservative view. At the same time, the assignment of "high risk" to an offender is likely to lead to situations, such as heightened supervision or family therapy, serving to decrease the likelihood of re-offending. Finally, the accuracy of a prediction is limited by the reliability of the measures of behavior used to formulate the prediction.

Rather than examining predictors of recidivism, several studies have instead attempted to look at factors associated with treatment completion with adolescent sex offenders. For example, Hunter and Figueredo (1999) examined predictors of successful treatment completion with 204 adolescent sex offenders who were participating in a community-based sex offender treatment program. Results of the study demonstrated that youths who failed to complete treatment included those who commonly failed to comply with therapeutic requirements rather than those who engaged in sexual or non-sexual delinquency. The best

predictors of successfully completing treatment were the youth's attitudes of openness and accountability toward their offenses.

Most recidivism studies on adolescent sex offenders are based on a relatively short follow-up period and lack a non-treatment comparison group. Worling and Curwen (2000) is the first known Canadian study examining the success of a specialized treatment program for adolescent sex offenders which deals effectively with these two issues. These researchers used an average follow-up period of 6 years and included three non-treatment comparison groups (assessment only, treatment refusers, and treatment dropouts). The comparison groups were found to be similar on all variables that may influence recidivism and were therefore combined into one comparison group. The treatment group consisted of 58 adolescents who participated in treatment over an average period of two years. The comparison group included 90 adolescents, with up to 66% obtaining some form of treatment outside of the program. Statistically significant differences were found between treatment group and the comparison group on all measures of recidivism, including subsequent sexual, violent, property and other offenses. The sexual assault recidivism rate for the treatment group was 5% versus 18% for the comparison group. Overall, there was a 72% reduction in the risk for sexual assault for the adolescents who participated in the treatment program. However, it must be noted that a serious limitation to this study concerns the fact that the comparison group was likely to have been a higher risk group.

Over the past decade, several researchers have reviewed the available literature on recidivism with adolescent sex offenders (Camp & Thyer, 1993; Murphy et al., 1992). In one of the most widely cited reviews, Davis and Leitenberg (1987) found that the rate of recidivism for treated adolescents was generally less than 10%. In a later literature review, Pickett (1993) reported a recidivism rate of 30% to 70% for adolescent sex offenders who received no treatment, 10% for adolescents who participated in outpatient treatment, and 15% for treatment with more serious offenders. Also, most re-offenses tended to occur within the first year of treatment completion and recidivism was related to such variables as the seriousness of the crime, deviant sexual arousal, and cognitive distortions still present at the time of discharge. Generally, cognitive behavioral approaches were found to be the most successful and more comprehensive and lengthy treatments were related to more positive treatment outcomes.

Methodological Limitations

Treatment outcome research with sex offenders is plagued with many methodological problems. In recent years, researchers have focused on these limitations (Camp & Thyer, 1993; Hanson, 1997; Marshall & Pithers, 1994; Miner, 1997). One of the most serious weaknesses concerns the failure of researchers to use control groups and random assignment. By comparing a treatment group with a non-treatment control group, the effects of treatment are more easily identifiable. Also, random assignment to treatment allows for homogeneity between groups and therefore any change following treatment can be attributed to treatment. However, problems arise when using a control group

because denying treatment to those who want it and may benefit from it is often unethical. One solution is to use adolescents who are terminated or refuse treatment as a control group. However, this approach may have its own limitations as the control group may include more severely disturbed adolescents who are more likely to re-offend. Other studies examine adolescents who have been self-referred to treatment versus those who have been court mandated (Mazur & Michael, 1992). This design suffers from the obvious limitations of examining youth who are highly motivated for treatment and therefore more likely to complete treatment successfully.

In addition to the lack of adequate control or treatment groups, researchers have also failed to compare different types of treatment or to examine which components of treatment are associated with success. Furthermore, researchers have not yet examined treatment programs in terms of their impact on subtypes of adolescent sex offenders. Also, many researchers place a heavy reliance on recidivism as the only measure of treatment efficacy. Often recidivism rates depend solely on whether the offender was charged and convicted of an offense, and do not take into account cases where charges were not laid or were dropped. Other problems involve using verbal reports as the sole measure of recidivism. Mazur and Michael (1992) assessed 10 adolescent sex offenders 6-months after the completion of a 16-week sexual offender specific program. Recidivism data, gathered through parent and self-report questionnaires, indicated that 0% of the adolescents re-offended sexually. These results may have led researchers to conclude a lower base rate for sexual offending than may actually be the case.

Another common problem with sexual offender outcome studies involves a relatively brief follow-up period (i.e., 6 months to less than 3 years). Future research is necessary to examine recidivism over a much longer period of time and to determine when, following treatment, adolescents are most likely to re-offend. Other problems found in the literature on treatment outcome research with sex offenders include detailing the therapeutic intervention under investigation, measurement of the therapists' adherence to protocol, and factors operating between treatment completion and discharge (Marshall & Pithers, 1994).

The Current Study

The purpose of the current study was to review the long-term recidivism rates of adolescent sex offenders who progressed through the Thunder Bay Adolescent Sex Offender Program (TBASOP) and to determine factors associated with re-offending in this sample. Schmidt and Heinz (1999) completed a pilot study on the initial treatment effectiveness of this program on a small sample of 33 youths (average follow-up period of 28 months). This present study examined the recidivism rates of adolescent sex offenders who attended TBASOP between December 1990 - June 1998.

TBASOP is a multi-agency initiative sponsored jointly by Children's Mental Health, Child Protection Services, Probation, and the Community Support Team (a specific young offender treatment program). This community-based program has been in operation since December 1990 and provides intervention to phase I adolescent sex offenders who have been mandated into treatment. The treatment modality is primarily cognitive-behavioral in orientation but takes an

eclectic approach in simultaneous delivery of group, individual, and family therapy. A high priority is placed on supervising and supporting the offenders while involved in the treatment program. This is done on a 4-6 week basis through case conferences held with the youth, parents, and treatment providers in order to continually modify and adjust each youth's treatment plan. During these case conferences there is representation from probation, mental health, and child protection services. The dose of treatment a youth receives is somewhat variable, depending on the youth's specific needs. TBASOP is the only treatment service for phase I adolescent sex offenders in the city of Thunder Bay, a community of roughly 120,000 people.

Method

Participants

Treatment Completion Group. There were 41 adolescents in the Treatment Completion group (39 males and 2 females). This group included those adolescents who graduated from treatment or participated in at least 10 months of treatment. At the start of the treatment program adolescents ranged in age from 12 to 16 (M = 14.5, SD = 1.0) and participated in the program for an average period of 17 months. The follow-up period, defined as the length of time from the beginning of treatment to the present study (February 4th, 2000), ranged from 20 to 116 months (M = 66.6, SD = 27.4).

Treatment Non-Completion Group. Among the adolescents who began treatment at TBASOP, a number were suspended from treatment (n = 5), completed their probation (n = 3), moved (n = 8) or transferred to another

program (n = 6) prior to 10-months of treatment. Although these treatment dropouts could have been included in the treatment group, we felt that it was more accurate to classify them as part of the comparison group because they received relatively little treatment. The Treatment Non-Completers included 23 males whose ages ranged from 13 to 17 years (M = 14.9, SD = 1.1). These youth participated in the treatment program over an average period of 6 months and were followed-up for a period that ranged from 25 to 109 months (M = 70.4, SD = 24.0).

Assessment Only Group. There were 25 males in the Assessment Only group. At the time of assessment, their ages ranged from 12 to 18 years (M = 14.2, SD = 1.3). This group consisted of adolescents who committed a sexual offence and received only an assessment by the staff at the Lakehead Regional Family Center (LRFC). This group was not provided with sex offender specific treatment either because they were assessed prior to the development of TBASOP in December 1990 or because they represented youths from a district where there were no sex offender specific programs. However, whether these adolescents received other forms of treatment is unknown. The follow-up period for the Assessment Only group was much longer (M = 122.0, SD = 36.6) because most of these youth were assessed prior to 1990. Furthermore, because these youth did not enter TBASOP, demographic and offence specific information was not obtained. This limitation meant that the Assessment Only group could not be compared with the Treatment Completion group or the Treatment Non-Completion group on important demographic or offence characteristics. Therefore, I felt that it would be more accurate to

examine the Treatment Non-Completion group and the Assessment Only group separately rather than grouping them together into one larger comparison group.

Measures

Demographic Face Sheet. Three data sources were used in this research. The first source was the demographic face sheet on each youth entering the TBASOP (see Appendix A). This includes information on the youth such as demographic characteristics, family functioning, prior sexual and nonsexual offences, length of treatment, type of termination from the treatment program, previous mental health involvement, drug or substance abuse, history of childhood abuse, presence of denial, and characteristics of the offence. Characteristics of the offence include: the number of victims, age of victims, frequency of offending, victim's gender, victim's relationship with offender, level of coercion used, type of sexual offence, single versus multiple perpetrators, place of the offence, and drug or alcohol use during the offence.

The Youth Level of Service/Case Management Inventory. The second source of information used was the Youth Level of Service/Case Management Inventory (YLS/CMI) developed by Hoge and Andrews (1994) (Appendix B). This risk/need assessment tool had been completed on most youths ($N = 33$) who participated in TBASOP after 1994 when the risk/need form was implemented in the Young Offender System. This information was collected from Probation Services in Thunder Bay.

As discussed earlier, a major problem in the recidivism literature is the failure to use standardized risk measures for adolescent offending behavior. The

Level of Service Inventory (LSI; Andrews & Bonta, 1994) is a widely used standardized instrument for assessing risk and need levels in adult offenders. This instrument has been widely accepted in correctional systems as a means for making decisions about probation and parole. An adaptation of the LSI is the Youth Level of Service/ Case Management Inventory (YLS/CMI) developed by Hoge and Andrews (1994). This inventory assesses the young offenders level of risk and need before being placed back into society. This standardized assessment tool has been used across the province of Ontario with all adolescent offenders since 1994. The availability of this measure on a subset of adolescent sex offenders in this study provides a unique opportunity to assess the usefulness of this measure to predict recidivism with adolescent sexual offenders.

Youth Court Record. Through an order from a Youth Court Judge (Appendix C), the RCMP national registry of police data was accessed. Recidivism data was collected (as of February 4, 2000) for all 89 adolescent sexual offenders (87 males and 2 females) assessed at the Lakehead Regional Family Center between September 1985 and June 1998. The Youth Court Record contained information on each youth's Current Involvement with the legal system, Charges, Convictions, and Appearances before the court on criminal related matters.

Design and Procedure

The present study was prospective in design and used data obtained through ongoing assessments of adolescents referred by the court to LRFC for sex offender treatment. The information about young offenders used in the present

study was obtained through standard procedures used by the psychology, social work, and psychiatry mental health team at LRFC for adolescent sexual offender assessments. Information from the court and clinical case files were confidential and at no time was the principal investigator involved in these assessments (Appendix D, Oath of Confidentiality - LRFC). Informed consent to use legal and case records of the adolescent sexual offenders was obtained from the Lakehead Regional Family Centre Board of Directors (Appendix E) and the Ethics Advisory Committee of Lakehead University (Appendix F).

Recidivism was defined as at least one criminal conviction following the initial sexual offense; however, subsequent criminal charges were also assessed. Criminal convictions were categorized into the following groups: sexual offenses (any Canadian Criminal Code convictions of a sexual nature); nonsexual offenses (any non-sexual convictions involving persons, property, substance use, or other); and serious offenses (defined by Hoge, Andrews, and Leschied [1995] as murder, manslaughter, attempted murder, sexual or nonsexual assault, robbery, break and enter, theft over $1000, arson, and drug trafficking). The follow-up period ranged from a minimum of 20 months post initial contact/conviction to a maximum of 14 years and 5 months, with a mean follow-up interval of 7 years. Given that TBASOP is a community-based (i.e., nonresidential) treatment program, we used a post-initial contact follow-up period rather than post-treatment as offenders are "at risk" both during and after treatment.

Results

SPSS for Windows Version 7.5 (1996) was used to analyse the data obtained from the Demographic Face Sheet, Youth Level of Service/Case Management Inventory and the Youth Court Records. This statistical program was also used to screen the data for errors, examine assumptions underlying inferential analyses, and conduct predictive and survival analyses. Descriptive statistics were calculated to describe the sample and the legal and psychosocial variables examined in the present study. An alpha level of .05 was used to determine significance across all analyses unless otherwise indicated.

Group Comparisons

Before comparing recidivism rates, the Treatment Completers and Non-Completers were contrasted on a number of potentially confounding variables to ensure that the groups were not significantly different. The Assessment Only group was not included in these comparisons because demographic and offence specific information on this group was not available. The data related to the Treatment Completion and Treatment Non-Completion group comparisons are presented in Table 1 (demographic variables) and Table 2 (victim and offense specific variables). Also, data obtained on a subsample (n = 33) of the Treatment Completion and Treatment Non-Completion groups are displayed in Table 3 (risk/need variables) and Table 4 (youth and family special considerations). Chi-square analyses were used to compare groups on the demographic and offence specific variables. These groups showed significant differences on a number of variables that have been linked to sexual and nonsexual recidivism; therefore, it

was necessary to control for any pre-treatment group differences in subsequent analysis.

On the demographic variables, the Treatment Non-Completers were significantly more likely than the Treatment Completers to reside outside of Thunder Bay χ^2 (1, N = 62) = 19.41, p = .001, be in custody during treatment χ^2 (1, N = 64) = 21.56, p = .000, p = .001, live on a native reserve χ^2 (1, N = 63) = 10.63, p = .002, have prior mental health involvement χ^2 (1, N = 63) = 6.43, p = .011, use physical force in the commission of the offence χ^2 (1, N = 64) = 4.53, p = .033, engage in intercourse with their victims χ^2 (1, N = 64) = 6.44, p = .011, and use drugs or alcohol during the sexual offence χ^2 (1, N = 64) = 9.52, p = .002.

On the risk/need form variables, the Treatment Non-Completers group were significantly more likely that the treated adolescents to have prior or current offenses χ^2 (1, N = 33) = 9.04, p = .003, difficulty with family interactions χ^2 (1, N = 33) = 14.67, p = .001, disruptive schoolyard behavior χ^2 (1, N = 32) = 6.04, p = .014, delinquent peers χ^2 (1, N = 33) = 5.22, p = .022, inadequate guilt feelings χ^2 (1, N = 32) = 6.20, p = .013, antisocial attitudes χ^2 (1, N = 32) = 12.98, p = .001, poor problem solving skills χ^2 (1, N = 32) = 5.813, p = .016, an abusive father χ^2 (1, N = 32) = 9.26, p = .002, family trauma χ^2 (1, N = 32) = 5.91, p = .015, and a high risk for re-offending χ^2 (1, N = 33) = 8.69, p = .003.

Recidivism Data

Chi-square tests were used to examine recidivism rates for the Treatment and Comparison groups. The results are displayed in Table 5 and Figure 1. Group comparisons of sexual recidivism were not significant but approached

significance χ^2 (2, N = 89) = 5.66, p = .059. However, the three groups were significantly different on measures of nonsexual recidivism χ^2 (2, N = 89) = 6.14, p = .046 and serious recidivism χ^2 (2, N = 89) = 10.62, p = .005. In order to determine which groups contributed to the differences, a pairwise chi-square analysis was conducted. Compared to the Treatment Completion group, the Treatment Non-Completion group was significantly more likely to re-offend non-sexually χ^2 (1, N = 64) = 6.10, p = .014 and seriously χ^2 (1, N = 64) = 10.67, p = .001. The Treatment Non-Completers were also more likely to be involved in person related offenses χ^2 (1, N = 64) = 4.93, p = .026 and other nonsexual offenses χ^2 (1, N = 64) = 5.04, p = .025. Interestingly, comparisons between the Assessment Only group and the Treatment Completion or Non-Completion groups failed to find significant differences on any measures of criminal recidivism. In addition, no group differences were found on measures of subsequent criminal charges or on current involvement with the legal system.

Given that both the date of initial assessment and date of subsequent criminal convictions were known, recidivism rates were also compared using Kaplan-Meier estimates of the survival functions. Tests for differences between survival functions are reported as χ^2 values based on the Log Rank statistic. When controlling for time at risk, once again, significant differences were found between the Treatment Completion and Treatment Non-Completion group on measures of non-sexual χ^2 (1, N = 64) = 5.22, p = .022 and serious recidivism χ^2 (1, N = 64) = 9.66, p = .002. No further significant results emerged from these analyses.

Kruskal-Wallis nonparametric tests were used to examine the continuous data on recidivism. These variables included follow-up time, number of appearances before the court on criminal related matters, number of criminal convictions following the initial offense and the length of time for sexual, nonsexual and serious re-offending. Regarding these measures of recidivism, similar differences were found between the Treatment Completion and Treatment Non-Completion groups. The Treatment Non-Completers were significantly more likely than the Treatment Completers to have had a greater number of appearances before the court H (1, $\underline{N}$ = 64) = 6.21, $\underline{p}$ = .013 and criminal convictions H (1, $\underline{N}$ = 64) = 6.63, $\underline{p}$ = .01 following the initial offence. In addition, the Assessment Only group was significantly different than both the Treatment Completion and Non-Completion Groups regarding follow-up time H (2, $\underline{N}$ = 89) = 31.80, $\underline{p}$ = .001. The Assessment Only group was followed for an average period of 122 months, whereas the Treatment Completers and Non-Completers were followed for an average period of 67 and 70 months respectively. Despite the longer follow-up time for the Assessment Only group, no significant differences were found between the Assessment Only group and the Treatment Completion or Treatment Non-Completion groups on the number of criminal convictions, charges, and appearances before the court. Furthermore, no significant differences were found between the groups regarding their average time for re-offending. For non-sexual recidivism, the Assessment Only group re-offended after an average period of 40 months, 36 months for the Treatment Completers, and 33 months for The Treatment Non-Completers. Serious recidivism followed a similar pattern with the Assessment Only and Treatment Non-Completion groups re-offending after a mean period of 33 months and the Treatment group re-offending after an average 42 month

period. Sexual recidivism was difficult to compare since only one adolescent in the Treatment (82 months) and Assessment Only (20 months) group re-offended. However, the Treatment Non-Completion group sexually re-offended after an average period of 45 months. Overall, the majority of adolescents who re-offended seriously, non-sexually, or sexually, did so between 2 ½ to 3 ½ years post-initial contact.

Predictors of Recidivism

A direct logistic regression was used to predict factors associated with recidivism in the Treatment Completion and Treatment Non-Completion groups combined. Seven demographic and offense specific variables were examined: youth resides on a reserve, prior offenses, secure custody during treatment, history of abuse, lone versus multiple assailant, use of force during the commission of the offense, and intercourse with the victim. These variables were chosen because they contributed to the group differences and correlated significantly with measures of recidivism. Table 6 displays the predictive value of each of these individual factors on sexual, nonsexual, and serious recidivism. All of the variables were independently able to predict serious recidivism and all but two variables (secure custody and intercourse with victim) were able to significantly predict non-sexual recidivism. However, only one variable (youth from reserve) was a significant predictor of sexual recidivism.

A stepwise logistic regression was used to construct a model based on offender and offense characteristics best predictive of recidivism in the combined group of Treatment Completers and Non-Completers. For nonsexual recidivism, two variables were extracted for the best fit of the model (prior offenses and use

of force χ^2 [2, N = 62] = 25.82, p = .001). These variables correctly classified 77% of the adolescents. Three variables were extracted for serious recidivism (youth from reserve, lone versus multiple assailant and history of abuse χ^2 [4, N = 62] = 30.95, p = .001). This model correctly classified 85% of the adolescents. Finally, one variable (youth from reserve χ^2 [1, N = 62] = 7.56, p = .006) was extracted for prediction of sexual recidivism. This variable alone correctly classified 94% of the adolescents.

A direct logistic regression was also used to examine the extent to which the risk/need form variables were predictive of recidivism. The variables included the 8 categories on the risk/need form and the summary and overall risk levels. Each variable was first examined independently (see Table 7). Offense, peer, substance, leisure, and behavior risk levels were found to significantly predict both non-sexual and serious recidivism. In addition, the attitudes risk level was found to predict non-sexual recidivism only. Regarding the overall predictive value of the youth risk/need form, while many variables were uniquely able to predict re-offending behavior, the overall risk/need score was not a significant predictor of any type of recidivism. However the risk/need summary score was found to be predictive of non-sexual recidivism χ^2 (2, N = 33) = 16.02, p = .001 and serious offense recidivism χ^2 (2, N = 33) = 9.98, p = .007, correctly classifying 79% and 83% of the adolescents respectively.

In addition to the direct logistic regression, a stepwise logistic regression was used to construct a model based on the risk/need form variables best predictive of recidivism. One variable was extracted for nonsexual recidivism

(summary risk/need level χ^2 [2, $\underline{N}$ = 33] = 16.02, $\underline{p}$ = .001). This variable correctly classified 79% of the adolescents. One variable was also extracted for serious recidivism (substance Abuse risk/need level χ^2 [2, $\underline{N}$ = 33] = 18.07, $\underline{p}$ = .001). Interestingly, this variable correctly classified 91% of the adolescents. Due to small sample size, no variables could be extracted for prediction of sexual recidivism.

Discussion

The purpose of the present study was to examine long-term recidivism rates of adolescents who progressed through a sexual offender specific treatment program compared to adolescents who completed less than 10-months of the program and to those who did not receive offense-specific treatment. Furthermore, this study aimed to identify the factors associated with recidivism, such as demographic characteristics, offense specific variables, and measures of risk, in these adolescents.

Offender, Offense and Victim Characteristics

Consistent with previous research (Aljazireh, 1993; Becker, 1988; Davis & Leitenberg, 1987; Fehrenbach et al. 1986; Ryan et al. 1996; Worling, 1995), out of the 64 adolescents who began treatment at TBASOP, many had a variety of problems such as prior non-sexual or sexual offenses (36%), prior mental health involvement (59%), and a history of abuse in childhood (72%). In addition, the sexual offenses that brought these adolescents in to treatment were likely to involve female victims (89%) who were an acquaintance (42%) or family member (36%) of the offender. Furthermore, the offense was likely to involve genital

fondling (59%), a lone perpetrator (86%), and take place in the victim or offender's home (66%). Interestingly, physical force was not used in the commission of many of the offenses (61%). As well, most adolescents did not threaten their victims verbally (86%) or use drugs/alcohol during the offense (87%).

Of the 33 adolescents who were evaluated with the risk/need form, about half scored moderate on the overall risk level (45%). Furthermore, many of the youth presented with underachievement (84%), poor problem-solving skills (50%), low self-esteem (44%), and poor social skills (41%). Another interesting finding was that many of the adolescents came from a family experiencing marital conflict (50%) and financial problems (56%). Of major significance was the finding that half of the adolescents in the Treatment Non-Completion group had disclosed of an abusive father (50%) and a history of family trauma (38%). These results are consistent with previous research that identified characteristics of the adolescent sexual offender such as poor problem solving skills, low self-esteem, social incompetence, and various family problems (Aljazireh, 1993; Davis & Leitenberg, 1987; Fehrenbach et al. 1986; Worling & Curwen, 2000). Overall, these results suggest that adolescent sexual offenders have a variety of individual, social, and family problems in addition to their sexual offending behaviors.

Recidivism Rates and Predictors

Based on the measures of recidivism utilized in this study, it was found that adolescents who participated in at least 10 months of treatment at TBASOP had fewer sexual, nonsexual, and serious re-offenses than both the Assessment

Only group and the Treatment Non-Completers after a long-term follow-up period. However, significant differences were only found between the Treatment Completers and the Non-Completers on measures of Non-sexual and Serious Re-offenses. Of the Treatment Completion group, 29.3% committed new non-sexual offenses and 17.1% committed new serious offenses, whereas of the Treatment Non-Completers, 60.9% and 56.5% committed new non-sexual and serious offenses respectively. Although the Assessment Only group was not significantly different from the Treatment Completion group or Treatment Non-Completion group, this group did in fact commit a greater number of new non-sexual (44.0%) and serious (36.0%) re-offenses than the Treatment Completers. Group comparisons of sexual recidivism failed to identify significant results, however a similar trend was evident with fewer Treatment Completers (2.4%) than Treatment Non-Completers (17.4%) and Controls (4.0%) committing new sexual offenses. Overall, these results are consistent with previous research which has suggested that adolescent sexual offenders commit relatively few sexual offenses following treatment but commit a greater number of subsequent non-sexual and serious offenses (Brannon & Troyer, 1995; Bremer, 1992; Kahn & Chambers, 1991; Rubinstein et al., 1993; Schram et al., 1991; Smith & Monastersky, 1986; Worling & Curwen, 2000).

This current study also examined when, following the initial sexual offense, adolescents are more likely to re-offend. Results demonstrated that the adolescents re-offended, on average, three years after their initial conviction. Since treated adolescents participated in an average of 18 months of treatment,

this finding is consistent with previous research which has suggested that adolescent sexual offenders are at greatest risk for re-offending during the first year following treatment completion (Bremer, 1992; Pickett, 1993; Rasmussen, 1999; Schram et al., 1991; Worling & Curwen, 2000).

The results of this study also point to several predictors of sexual, nonsexual, and serious recidivism. The variance in sexual recidivism could only be significantly predicted from the variable identifying youth from a native reserve. This was a unique variable to this study and therefore it is important to note that the results of this study may not generalize to other populations of adolescent sex offenders. Adolescents from a native reserve who entered the community during treatment and then returned to the reserve were more likely to commit a sexual offense following treatment. In the same manner, this variable also predicted the variance found in nonsexual and serious re-offenses. This finding can be explained by comparing the adolescents from the reserve to those who were not on a reserve. The reserve youth were likely to be held in secure custody during treatment and therefore consisted of youth with a greater number of prior offenses and more serious offenses in general. These youth were also more likely to have experienced abuse themselves and to have been involved with mental health services previous to the onset of treatment. Clearly, this was a more serious group compared to the remaining adolescents and they were therefore at greater risk for re-offending. Furthermore, the adolescents from the reserves came into Thunder Bay only for the duration of treatment and then returned to their previous environments. Therefore the treatment was likely to have less of an

impact on these youth because it was completed outside of the context of their daily life and community. These youth were then placed back into their communities and no longer had the support and services they required. This may have lead to a greater number of relapses within this population.

The variance found in non-sexual and serious recidivism was also significantly predicted from demographic and offense specific variables including prior offenses, history of abuse, use of force during the offense, and lone versus multiple perpetrators. Adolescents who re-offended non-sexually and/or seriously had a history of previous offenses, were abused themselves as children, used force during the commission of their sexual offense, and were more likely to have offended with multiple perpetrators. In addition, serious recidivism alone was further associated with youth being in secure custody during treatment and having intercourse with their victim. These results are also consistent with other studies examining predictors of recidivism with adolescent sexual offenders. For example, Rasmussen (1999) found that adolescents who had prior non-sexual offenses or who had failed to complete treatment were more likely to re-offend non-sexually. Similarly, Worling and Curwen (2000) pointed to a history of previous offenses as a predictor of non-sexual recidivism. In addition, the researchers also found that a history of sexual abuse, antisocial personality, low self-esteem, and a negative family atmosphere were associated with re-offense status. Other researchers have yielded similar findings (Kahn & Chambers, 1991; Rubinstein et al., 1993; Schram et al., 1991; Smith and Monastersky, 1986).

Of the risk/need form variables, several factors were predictive of non-sexual and serious recidivism. Unfortunately, sexual recidivism could not be significantly predicted by any individual risk/need variable. However, the variance in nonsexual and serious recidivism was significantly predicted from most of the risk/need variables. The variables with the strongest predictive value included prior offense risk, peer relations risk, substance abuse risk, leisure/recreation risk and the summary risk score. Adolescents who scored the highest on these risk levels were significantly more likely to re-offend. Both the summary and overall risk/need levels were not predictive of sexual recidivism, classifying the sexual re-offending youth as moderate. However, other categories of recidivism were better predicted. Although the overall risk level classified a greater number of youth as high risk for re-offending non-sexually and seriously, the summary risk level was able to more accurately predict which adolescents would re-offend. Also, the overall risk level was more likely than the summary score to classify re-offending adolescents as low risk. Of particular interest is the finding that the overall risk level (i.e., actuarial plus clinical judgement) was not predictive of any type of recidivism while the summary risk level (i.e., actuarial approach only) was significantly predictive. The results of this study suggest that clinical judgement may in fact decrease the predictive value of the Youth Level of Service/Case Management Inventory for assessing risk for re-offending, non-sexually or seriously, with adolescent sex offenders. This result is consistent with other research examining the utility of risk prediction, based on clinical judgement, with adolescent sexual offenders (Kahn & Chambers, 1991; Smith &

Monastersky, 1986). Based on this current study, the summary risk level may be the best predictor of recidivism with adolescent sexual offenders. Whether or not this finding holds for other adolescent offenders is unknown. However, these results must be taken with caution as the sample size was small (n = 33), with only 2 adolescents re-offending sexually, 12 non-sexually, and 7 seriously.

Limitations of the Current Study

As with past research on adolescent sexual offenders, this study suffered from several limitations. One of the main limitations of this study involved the pre-treatment group differences between three groups examined. First of all, although recidivism rates between Treatment Completers and Non-Completers were significant, it would be premature to conclude that the treatment had a substantial effect on reducing recidivism because the Treatment Completion and Treatment Non-Completion groups were significantly different on a number of potentially confounding variables. Generally, the Treatment Non-Completion group was more likely to have a greater number of prior offenses, previous mental health involvement, committed a sexual offense with multiple perpetrators, been living either outside of Thunder bay, on a native reserve, or in secure custody during treatment, engage in more violent forms of sexual offending such as intercourse and use drugs or alcohol during the commission of their offense. In addition, the Treatment Non-Completion group also scored higher on all categories of risk measured by the Youth Level of Service/Case Management Inventory. Of particular significance were the elevated scores of the Treatment Non-Completers on parenting risk levels, prior/current risk levels, and the

summary and overall risk score. These differences suggest that the Treatment Non-Completion group consisted of more serious offenders and therefore posed a greater risk for re-offending.

These pre-treatment differences meant that any group differences in recidivism could not be solely attributable to the effects of treatment. One solution could have been to include the Treatment Non-Completers as part of the Treatment group, since the former group did receive at least two months of treatment. The resulting group may then have been more representative of adolescents seen in a community treatment program. However, it was decided that it would be more accurate to examine both groups separately as the two are clearly distinct subsamples. This decision was also consistent with the research design of previous studies (e.g., Worling & Curwen, 2000). Although this choice contributed to difficulties with interpretation, it also demonstrated re-offending patterns for adolescents who responded differently to a community based treatment program.

A second limitation to this study was that the Assessment Only group was followed-up for a significantly longer period of time than both Treatment Completion and Non-Completion groups. This meant that the Assessment Only group was at risk longer and therefore had more opportunity to re-offend. Since TBASOP is a court mandated treatment, all youths who committed a sexual offense were referred to the program. Therefore, obtaining a control group of adolescent sexual offenders before TBASOP was implemented was the only

alternative. Regardless of the obvious limitation, results showed that adolescents did not differ in their time for re-offending following their initial offense.

Another limitation regarding the Assessment Only group was that demographic and offense specific data were not obtained on this group and therefore group comparisons could not be made. Furthermore, there were no data regarding whether this group received other forms of treatment following their initial sexual offense. Although it is likely that many of the control youth did receive some form of treatment, without this important data it would be premature to conclude that treatment had an effect on reducing recidivism for the treated adolescents. Despite these obvious limitations, there is no reason to assume that the groups were different in any way. Both groups came from the same population of youth in Thunder Bay and surrounding areas, both committed sexual offenses, and were referred to and assessed by the staff at the Lakehead Regional Family Center. The only obvious difference between both groups was that the Assessment Only group did not receive sex offender specific treatment because it was not available at that time. In fact, although the control group likely participated in nonspecific sex offender treatment, results showed that this group demonstrated higher (although not significant) recidivism rates than that of the Treatment Completion group on all offense categories, particularly on serious re-offenses. Contrary to previous research (Brannon & Troyer, 1991; Brannon & Troyer, 1995; Lab et al. 1993), this finding suggests that treatment may have had an effect on reducing recidivism and furthermore, sex offender specific treatment may be more successful than other nonspecific treatments.

This study may also suffer from problems regarding how recidivism was measured. Past researchers have measured recidivism using several different methods – self-reports (Bremer, 1992), criminal charges (Worling & Curwen, 2000), criminal convictions (Hagan & Cho, 1996), and incarceration (e.g., Brannon & Troyer, 1995). Worling and Curwen (2000) suggested that recidivism based on self-report measures is likely to underestimate the actual rate of re-offending. Similarly, using criminal charges as the sole measure of recidivism may have the problem of over-estimating the actual rates. Therefore, this study used subsequent criminal convictions as the sole measure of recidivism. While it is possible that using criminal convictions as the sole criteria may have resulted in fewer adolescents being identified as re-offenders than may actually be the case, we felt it would be favorable to maintain a slightly more conservative estimate.

A final limitation of the study concerned the small sample of sexual recidivists, which made statistical analysis and interpretation difficult. Although it seems that many adolescent sexual offenders subsequently commit nonsexual and serious offenses, very few commit sexual offenses. With only 6 sexually re-offending adolescents in this present study, it was impossible to accurately predict offender and victim characteristics associated with sexual recidivism. Most studies examining adolescent sexual re-offending also suffer from the same limitation (Bremer, 1992; Rasmussen, 1999; Worling & Curwen, 2000). This limitation may be improved by including a larger sample.

Treatment Implications

Based on the results of this study several treatment implications must be addressed. First of all, one-third of the adolescents entering TBASOP failed to complete at least 10-months of the program. These youth left for various reasons – suspension, moving, transferring to other programs, or their probation ending. Previous research has demonstrated that failure to complete treatment is predictive of non-sexual recidivism with adolescent sexual offenders (Rasmussen, 1999). This finding clearly holds true for the current study as well.

The main reason adolescents in this study were terminated from treatment was because their probation had ended. Despite the clinician's opinion of the youths' continued need for therapy, most adolescents chose to discontinue treatment. In light of this finding, one implication for treatment is that the treatment team should structure therapy to better fit with each youth's probation period. This may mean a greater number of individual sessions or a more intense focus on particular issues of importance for each adolescent. As a result, adolescents who have completed probation will be more prepared to enter the community.

The results of this study also suggest that adolescent sex offenders are more likely to commit new nonsexual offenses rather than sexual offenses. This finding points to the need for greater focus on general offending behavior in the treatment program. Also, a more intense focus on the youth's own history of abuse and family background may also prove helpful because this study suggested these variables are predictors of future recidivism. Another predictor of recidivism in this study involved youths from native reserves. Adolescents who

came into treatment and then returned to their native reserves were a more severely disturbed group of adolescents and re-offended at a greater rate. This suggests that therapy should also focus on issues specific to their native communities and also help the youth develop the relapse prevention skills necessary for their return home. Furthermore, it may also be of benefit to conduct follow-up sessions with these youth or provide additional recourses within the communities, since these services are not presently available. Given that many of the adolescent sexual offenders are native it may also be helpful for the treatment providers to structure the program so that it is more culturally sensitive to native youth and participate in further training in working with culturally-diverse populations. It is likely that strategies such as these may decrease the occurrence of re-offending behaviors.

Concluding Comments and Future Research

This current study was only the second known Canadian study examining long-term recidivism with adolescent sexual offenders and, as such, it must be noted that much research remains to be done. The available research suggests that a number of factors are involved in the etiology of sexual offending, but has not yet demonstrated why other adolescents with similar backgrounds and characteristics do not commit sexual offenses. This study has pointed out that factors such as prior criminal offenses, living environments, and offender abuse histories are strong contributors of re-offending patterns. However strong the link may be, these factors alone do not classify all adolescents who re-offend or all adolescents who do not. This study has also demonstrated that the control

adolescents did not re-offend significantly more than the treated adolescents on measures of sexual, nonsexual and serious offending, suggesting that being charged and convicted of a sexual offense may be enough on its own to deter many adolescents from re-offending sexually. However, it is also possible that many adolescents who commit a sexual offense, with or without treatment, do not become repeat offenders.

In conclusion, more research is clearly needed to understand the intricacies involved in sexual offending. Until then we can never truly understand the cycle of abuse or have the insight necessary to develop appropriate therapy. If we are ever to make sense of the literature on adolescent sexual offenders, it is essential that future research must place greater emphasis on the development of good research designs. This means comparing treated adolescents to untreated adolescents, including a large enough sample to conduct the appropriate analyses, using samples that are similar on variables associated with sexual offending, detailing the therapeutic intervention and research method undertaken, and, in the case of recidivism studies, using the best measure of recidivism and applying longer follow-up times. In addition, future research must not only focus on the factors associated with adolescent sexual offending and predictors of recidivism, but must also examine what aspects of therapy are important in reducing the risk of re-offending. In this way, sex offender treatments can be improved and, furthermore, these treatments will be based on research with adolescents rather than adults.

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Appendix A

Demographic Face Sheet

ID#:

ADOLESCENT SEXUAL OFFENDER PROGRAM EVALUATION

NAME: _____ DATE OF BIRTH: _____
AGE: _____ GENDER: Male _____ Female _____

PROBATION OFFICER: _____
INDIVIDUAL THERAPIST: _____
C.S.T. WORKER: _____
TRANSFERRED IN FROM ANOTHER ASOP PROGRAM: Yes ___ No ___
DATE OF START OF PROGRAM: _____
DATE OF END OF PROGRAM: _____
Months in Program: _____

RESIDENCE: Thunder Bay _____ Northwest Ont. _____
Other _____ Where: _____

LIVING ARRANGEMENTS: 2 parents (biological) ___ single parent ___
(at time of offense) foster care ___ relatives ___
2 parents (stepfamily) ___

WHITE: _____
NATIVE (STATUS): _____
NATIVE (RESERVE): _____
OTHER: _____

PRIOR OFFENSES: Sexual _____ Non-sexual _____
None _____
OF PRIOR SEXUAL OFFENSES: _____ # OF PRIOR NON-SEXUAL OFFENSES: _____

PREVIOUS MENTAL HEALTH INVOLVEMENT:
Outpatient (individual/family) ___
Residential ___
C.A.S. Involvement ___
Other ___
None ___

PREVIOUS DRUG & ALCOHOL Tx:
Outpatient ___
Residential ___
Both ___
None ___

HISTORY OF PERSONAL ABUSE:
Physical ___ Family Violence ___
Sexual ___ Emotional ___
None ___

NEW DISCLOSURE OF PERSONAL ABUSE DURING TREATMENT:
Physical ___ Emotional ___
Sexual ___ None ___
Family Violence ___

A.S.O.PROGRAM
Full ___
Modified ___

TERMINATION FROM A.S.O.P.:
Suspended ___
Graduated Early ___
Probation Ended ___
Moved ___
Transferred to another ASO Program ___
Appealed conviction (did not attend program) ___

TOTAL DENIAL WHEN ENTERING PROGRAM: Yes ___ No ___
TOTAL DENIAL WHEN LEAVING PROGRAM: Yes ___ No ___

CHARACTERISTICS OF OFFENSE(S) AT TIME OF ACCEPTANCE INTO A.S.O.P.

NUMBER OF VICTIMS:	1	2	3	4	5+
AGE OF VICTIM(S):					
FREQUENCY OF OFFENCES PER VICTIM:					
GENDER OF VICTIM: male					
female					
VICTIM'S RELATIONSHIP TO OFFENDER: family member					
relative					
acquaintance					
babysitter					
unknown					
Level of coercion used: weapon					
physical force					
verbal threat					
no force					
Type of offence: genital fondling					
digital penetration					
intercourse					
oral-genital contact					
no physical contact					
other					
Single vs multiple offenders: lone assailant					
multiple offenders					
Place of offense: victim's home					
offender's home					
other home					
school					
outdoors					
other					
Drug & alcohol use at time of offense: none					
drugs					
alcohol					
both					

Appendix B

Youth level of Service / Case Management Inventory

THE YOUTH LEVEL OF SERVICE/CASE MANAGEMENT INVENTORY
ROBERT D. HOGE & D. A. ANDREWS, CARLETON UNIVERSITY
[Alternate Title: Ministry Risk/Need Assessment Form]

Name	Date of Birth

Part I - Assessment of Risk and Needs

1. Prior and Current Offenses/Dispositions

a. Three or more prior convictions ☐
b. Two or more failures to comply ☐
c. Prior probation ☐
d. Prior detention ☐
e. Three or more current convictions ☐

Total ____

Risk Level:
Low (0) ☐
Moderate (1-2) ☐
High (3-5) ☐

Comments (include mitigating and aggravating factors)

Source(s) of information

2. Family Circumstances/Parenting

a. Inadequate supervision ☐
b. Difficulty in controlling behavior ☐
c. Inappropriate discipline ☐
d. Inconsistent parenting ☐
e. Poor relations/father-child ☐
f. Poor relations/mother-child ☐

Total ____

Strength ☐

Risk Level:
Low (0-2) ☐
Moderate (3-4) ☐
High (5-6) ☐

Comments

Source(s) of information

3. Education/Employment

a. Disruptive classroom behavior ☐
b. Disruptive behavior on school property ☐
c. Low achievement ☐
d. Problems with peers ☐
e. Problems with teachers ☐
f. Truancy ☐
g. Unemployed/not seeking employment ☐

Total ____

Strength ☐

Risk Level:
Low (0) ☐
Moderate (1-3) ☐
High (4-7) ☐

Comments

Source(s) of information

THE YOUTH LEVEL OF SERVICE/CASE MANAGEMENT INVENTORY
ROBERT D. HOGE & D. A. ANDREWS, CARLETON UNIVERSITY
[ALTERNATE TITLE: MINISTRY RISK/NEED FORM]

Part I - Assessment of Risk and Needs (Continued)

4. Peer Relations

a. Some delinquent aquaintances ☐
b. Some delinquent friends ☐
c. No or few positive aquaintances ☐
d. Nor or few positive friends ☐

Total ____

Strength ☐

Risk Level:
Low (0) ☐
Moderate (2-3) ☐
High (4) ☐

Comments

Source(s) of information

---

5. Substance Abuse

a. Occassional drug use ☐
b. Chronic drug use ☐
c. Chronic alcohol use ☐
d. Substance abuse interfers with life ☐
e. Substance use linked to offense(s) ☐

Total ____

Strength ☐

Risk Level:
Low (0) ☐
Moderate (1-2) ☐
High (3-5) ☐

Comments

Source(s) of information

---

6. Leisure/Recreation

a. Limited organized activities ☐
b. Could make better use of time ☐
c. No personal interests ☐

Total ____

Strength ☐

Risk Level:
Low (0) ☐
Moderate (1) ☐
High (2-3) ☐

Comments

Source(s) of information

THE YOUTH LEVEL OF SERVICE/CASE MANAGEMENT INVENTORY
ROBERT D. HOGE & D. A. ANDREWS, CARLETON UNIVERSITY
[ALTERNATE TITLE: MINISTRY RISK/NEED FORM]

Part I - Assessment of Risk and Needs (Continued)

7. Personality/Behavior

a. Inflated self-esteem ☐
b. Physically aggressive ☐
c. Tantrums ☐
d. Short a[illegible] span ☐
e. Poor fr[illegible]on tolerance ☐
f. Inadequate guilt feelings ☐
g. Verbally aggressive, impudent ☐

Total ____

Strength ☐

Risk Level:
Low (0) ☐
Moderate (1-4) ☐
High (5-7) ☐

Source(s) of information _____

8. Attitudes/Orientation

a. Antisocial/procriminal attitudes ☐
b. Not seeking help ☐
c. Actively rejecting help ☐
d. Defies Authority ☐
e. Callous, little concern for others ☐

Total ____

Strength ☐

Risk Level:
Low (0) ☐
Moderate (1-3) ☐
High (4-5) ☐

Source(s) of information _____

Part II - Summary of Risk/Need Factors (from pages 1 to 3)

	Prior and Current Offenses	Family	Education	Peers	Substance Abuse	Leisure and Recreation	Personality and Behavior	Attitudes and Orientation	Overall Total of Scores
Scores									
Low									
Moderate									
High									

Overall Total

☐ **Low (0-8)** ☐ **High (23-34)**

☐ **Moderate (9-22)** ☐ **Very High (35-42)**

THE YOUTH LEVEL OF SERVICE/CASE MANAGEMENT INVENTORY
ROBERT D. HOGE & D. A. ANDREWS, CARLETON UNIVERSITY
[ALTERNATE TITLE: MINISTRY RISK/NEED FORM]

Part III - Assessment of Other Needs/Special Considerations

1. **Family/Parents**

- ☐ Chronic History of Offenses
- ☐ Emotional Distress/Psychiatric
- ☐ Drug-Alcohol Abuse
- ☐ Marital Conflict
- ☐ Financial/Accomodation Problems
- ☐ Uncooperative Parents
- ☐ Cultural/Ethnic Issues
- ☐ Abusive Father
- ☐ Abusive Mother
- ☐ Significant Family Trauma (Specify)_____
- ☐ Other _____

Comments

2. **Youth**

- ☐ Health Problems
- ☐ Physical Disability
- ☐ Low Intelligence/Developmental Delay
- ☐ Learning Disability
- ☐ Underachievement
- ☐ Problem Solving Skills
- ☐ Victim of Physical/Sexual Abuse
- ☐ Victim of Neglect
- ☐ Shy/Withdrawn
- ☐ Peers Outside Age Range
- ☐ Depressed
- ☐ Low Self Esteem
- ☐ Inappropriate Sexual Activity
- ☐ Racist/Sexist Attitudes
- ☐ Poor Social Skills
- ☐ Engages in Denial
- ☐ Suicide Attempts
- ☐ Diagnosis of Psychosis
- ☐ Third Party Threat
- ☐ History of Sexual/Physical Assault
- ☐ History of Assault on Authority Figures
- ☐ History of Weapon Use
- ☐ History of Fire Setting
- ☐ History of Escapes
- ☐ Protection Issues
- ☐ Adverse Living Conditions
- ☐ Other _____

Comments (Note any special responsivity considerations including the need for culturally specific services)

Part IV - Your Assessment of Juvenile's General Risk/Need Level

- ☐ **Low**
- ☐ **Moderate**
- ☐ **High**
- ☐ **Very High**

Reasons: _____

THE YOUTH LEVEL OF SERVICE/CASE MANAGEMENT INVENTORY
ROBERT D. HOGE & D. A. ANDREWS, CARLETON UNIVERSITY
[ALTERNATE TITLE: MINISTRY RISK/NEED FORM]

Part V - Contact Level

Comments (Note placement considerations and court expectations, if applicable)

Administrative/Paper ☐

Minimum Supervision ☐

Medium Supervision ☐

Maximum Supervision

Probation Officer's Signature/Date	Supervisor's Signature/Date

Part VI - Case Management Plan

Goal One	Means of Achievement

Goal Two	Means of Achievement

Goal Three	Means of Achievement

Goal Four	Means of Achievement

Appendix C

Letter of Support from Youth Court Judge

HIS HONOUR JUDGE G. R. KUNNAS
ONTARIO COURT OF JUSTICE
PROVINCIAL DIVISION

L'HONORABLE JUGE G. R. KUNNAS
COUR DE JUSTICE DE L'ONTARIO
DIVISION PROVINCIALE

COURT HOUSE
1805 EAST ARTHUR STREET, FIRST FLOOR
THUNDER BAY, ONTARIO P7E 2R6

Friday, November 19, 1999

Inspector Gessie Clement
Canadian Criminal Records Information Services
Box 885
Ottawa, ON K1G 3M8

Dear Inspector Clement:

Re: Thunder Bay Adolescent Sex Offender Program

I am writing to request your support of a treatment outcome study that will be completed by Dr. Fred Schmidt of the Thunder Bay Adolescent Sex Offender Program. This study will involve obtaining the criminal records of each sexually offending youth who has been assessed through the Clinical Court Services team at the Lakehead Regional Family Centre here in Thunder Bay, Ontario, Canada. Along with my request for the release of these criminal records for research purposes under Section 44(1.k) of the Young Offenders Act, Dr. Schmidt has included an additional description of this proposed study for your review. I have reminded Dr. Schmidt of the confidentiality requirements embodied in the Young Offenders Act and the fact that the study is for research purposes only.

Sincerely,

The Honourable Mr. Justice G.R. Kunnas

GRK/LRFC01

c.c. LRFC, Dr. Schmidt
File Copy

Appendix D

Lakehead Regional Family Center Oath of Confidentiality

LAKEHEAD REGIONAL family centre

OATH OF CONFIDENTIALITY

I, Holly Cooper *, recognize that during the performance of my duties with Lakehead Regional Family Centre, I will come into possession or have knowledge of information relating to the Centre's operation or the clients it serves.*

I recognize that the policy of the Centre is that such information will be held in the strictest confidence during my employment &/or placement and at any future date.

I agree that I will keep confidential all information that I acquire as a result of my employment &/or placement with the Centre, EXCEPT WHERE SUCH DISCLOSURE IS CONSISTENT WITH STATED AGENCY POLICY AND PROCEDURES.

Dated at L.R.F.C.

this 4th day of Nov, 1997.

Signature of Employee

Signature of Supervisor

POLICIES\CONFIDEN.POL
Revised 07 February 1995.

Appendix E

Ethical Approval Letter from Lakehead Regional Family Centre

LAKEHEAD
REGIONAL
family centre

February 22, 2000

Ms. Holly Cooper
c/o Lakehead Regional Family Centre
283 Lisgar Street
Thunder Bay, Ontario
P7B 6G6

Dear Holly:

I have reviewed your request to complete a research project entitled ***"Long Term Follow-up of a Community Based Treatment Program for Adolescent Sex Offenders."***

In reviewing the proposal, it complies with all the ethical requirements and policies established by the agency for the protection of human subjects with the following stipulations:

i. That you sign an oath of confidentiality with Lakehead Regional Family Centre;

ii. That no identifying information of clinical files of clients be released as a result of your review of closed records;

iii. That approval has been received from Lakehead University's Research & Ethics Committee.

In conducting your research, you are required to report to the agency any significant change in the procedures described in your research proposal before putting such change into effect. At the completion of your research, please forward a statement indicating that the study was conducted as described in the approved proposal.

Best wishes on the research studies. If you have any questions, please contact me.

Sincerely,

Bastian De Peuter
Director, Programs & Services

cc: Dr. Fred Schmidt
Ethics file

H:\WPDOCS\FILES\ETHICS\COOPER.wpd

Appendix F

Ethical Approval from Lakehead University

LAKEHEAD UNIVERSITY
955 Oliver Road, Thunder Bay, Ontario, Canada P7B 5E1

14 February 2000

Ms. Holly Cooper
Department of Psychology
Lakehead University
THUNDER BAY, ONTARIO
P7B 5E1

Dear Ms. Cooper:

Based on the recommendation of the Research Ethics Board, I am pleased to grant ethical approval to your research project entitled: LONG-TERM FOLLOW-UP OF A COMMUNITY-BASED PROGRAM FOR ADOLESCENT SEX OFFENDERS.

Best wishes for a successful research project.

Sincerely,

Dr. Richard Maundrell
Acting Chair, Research Ethics Board

/lw

cc: Dr. F. Schmidt, Supervisor

Footnotes

Life Tables analyses were also conducted on the recidivism data. The Life Tables procedure for comparing recidivism rates is similar to the Kaplan-Meier procedure used in this research. Results of these further analyses demonstrated no significant differences between using the Kaplan-Meier or Life Tables approach.

Table 1

Number (and percent) of Offender Characteristics for Treatment Completion and Treatment Non-Completion Groups

Offender Characteristics	Treatment Completion (n = 41) n (%)	Treatment Non-Completion (n = 23) n (%)
Male	39 (95.1)	25 (100)
Reside in Thunder Bay**	36 (87.8)	7 (33.3)
Live with Parent(s)	24 (58.5)	10 (43.5)
Secure Custody**	2 (4.9)	13 (56.5)
Live on Reserve**	2 (4.9)	8 (36.4)
Prior Offense**	9 (22.0)	14 (63.6)
Prior Mental Health Involvement*	20 (48.8)	18 (81.8)
Prior Drug/Alcohol Treatment	2 (4.9)	4 (18.2)
History of Abuse	29 (70.7)	17 (73.9)
Suspended From Program	6 (15.4)	5 (22.7)
Graduated Early**	12 (30.8)	0 (0.0)
Probation Ended**	18 (46.2)	3 (13.6)
Moved/Transferred**	3 (7.7)	14 (63.7)
Denial	1 (2.5)	0 (0.0)

Note. *$p < .05$. **$p < .01$.

Table 2

Number (and Percent) of Victim and Offense Characteristics for Treatment Completion and Treatment Non-Completion Groups

Victim & Offense Characteristics	Treatment Completion (n = 41) n (%)	Treatment Non-Completion (n = 23) n (%)
Female Victim	35 (85.4)	22 (95.7)
Male Victim	9 (21.9)	3 (13.0)
Family Member/Relative	14 (34.1)	9 (39.1)
Acquaintance	15 (36.6)	12 (52.2)
Other Relationship	14 (34.1)	6 (26.1)
Physical Force*	12 (29.3)	13 (56.5)
Verbal Threat	5 (12.2)	4 (17.4)
Genital Fondling	28 (68.3)	10 (43.5)
Intercourse*	6 (14.6)	10 (43.5)
Oral-Genital Contact	10 (24.4)	3 (13.0)
Lone Offender	38 (92.7)	17 (77.3)
Home of Victim/Offender	27 (65.9)	15 (65.2)
Outdoors	8 (19.5)	9 (39.1)
Drugs/Alcohol Involved**	1 (2.4)	7 (30.4)

Note. *$p < .05$. **$p < .01$.

Table 3

Number (and Percent) of Offender Risk/Need Form Characteristics for a Subsample of the Treatment Completion and Non-Completion Groups

Risk/Need Variable	Treatment Completion (n = 24) n (%)	Treatment Non-Completion (n = 9) n (%)
Prior/Current Convictions**		
High	3 (12.5)	5 (55.6)
Moderate	5 (20.8)	3 (33.3)
Low	16 (66.7)	1 (11.1)
Parenting**		
High	0 (0.0)	5 (55.6)
Moderate	6 (25.0)	3 (33.3)
Low	18 (75.0)	1 (11.1)
Education		
High	6 (25.0)	5 (55.5)
Moderate	14 (58.3)	3 (33.3)
Low	4 (16.7)	1 (11.1)
Peer Relations		
High	1 (4.2)	2 (22.2)
Moderate	5 (20.8)	4 (44.4)
Low	18 (75.0)	3 (33.3)
Substance Abuse		
High	1 (4.2)	1 (11.1)
Moderate	3 (12.5)	3 (33.3)
Low	20 (83.3)	5 (55.6)

Table 3 continued...

Leisure/Recreation		
High	7 (29.2)	6 (66.7)
Moderate	5 (20.8)	1 (11.1)
Low	12 (50.0)	2 (22.2)
Personality/Behavior		
High	4 (16.7)	4 (44.4)
Moderate	44 (45.8)	4 (44.4)
Low	9 (37.5)	1 (11.1)
Attitudes/Orientation		
High	2 (8.3)	1 (11.1)
Moderate	8 (33.3)	5 (55.6)
Low	14 (58.3)	3 (33.3)
Summary Level*		
High	2 (8.3)	3 (33.3)
Moderate	9 (37.5)	6 (66.7)
Low	13 (54.2)	0 (0.0)
Overall Risk*		
Very High	0 (0.0)	1 (11.1)
High	3 (12.5)	4 (44.4)
Moderate	11 (45.8)	4 (44.4)
Low	10 (41.7)	0 (0.0)

Note. *$p < .05$. **$p < .01$.

Table 4

Number (and Percent) of Risk/Need Form Youth and Family Special Considerations for a Subsample of the Treatment Completion and Non-Completion Groups

Risk/Need Variable	Treatment Completion (n = 24) n (%)	Treatment Non-Completion (n = 8) n (%)
Youth Special Considerations		
Learning Disability	11 (45.8)	1 (12.5)
Underachievement	19 (79.2)	8 (100)
Problem Solving Skills*	9 (37.5)	7 (87.5)
Low Self-Esteem	9 (37.5)	5 (62.5)
Poor Social Skills	8 (33.3)	5 (62.5)
Racist/Sexist Attitudes	2 (8.3)	3 (37.5)
Protection Issues*	3 (12.5)	3 (37.5)
Family Special Considerations		
Emotional Distress	8 (33.3)	2 (25.0)
Drug/Alcohol Abuse	5 (20.8)	3 (37.5)
Marital Conflict	11 (45.8)	5 (62.5)
Financial Problems	14 (58.3)	4 (50.0)
Uncooperative Parents	5 (20.8)	3 (37.5)
Abusive Father**	1 (4.2)	4 (50.0)
Significant Family Trauma*	1 (4.2)	3 (37.5)

Note. *p < .05. **p < .01.

Table 5

Number (and Percent) of Offenders in Treatment and Comparison Groups With Subsequent Criminal Convictions by Category of Offense

Offense Type	Treatment Completion (n = 41) n (%)	Treatment Non-Completion (n = 23) n (%)	Assessment Only (n = 25) n (%)
Sexual	1 (2.4)	4 (17.4)	1 (4.0)
Nonsexual*	12 (29.3)	14 (60.9)	11 (44.0)
Serious**	7 (17.1)	13 (56.5)	9 (36.0)
Person Offense*	6 (14.6)	9 (39.1)	6 (24.0)
Property Offense	9 (22.0)	9 (39.1)	10 (40.0)
Substance Offense	2 (4.9)	2 (8.7)	4 (16.0)
Other Offense*	10 (24.4)	12 (52.2)	9 (36.0)
Current Legal Involvement	11 (26.8)	5 (21.7)	9 (36.0)

Note. *p < .05. **p < .01.

Table 6

Relationship Between Demographic and Offence Specific Variables and Sexual, Nonsexual, and Serious Recidivism

Demographic/ Offense Variables		Sexual Recidivism		Nonsexual Recidivism		Serious Recidivism	
	n	χ^2	p	χ^2	p	χ^2	p
From Reserve	63	5.68	.017	8.12	.004	12.98	.001
Prior Offenses	63	1.24	.267	18.20	.001	11.83	.001
Secure Custody	64	3.37	.066	3.01	.083	4.22	.040
History of Abuse	64	0.19	.664	10.22	.001	9.40	.002
Multiple Assailant	63	1.12	.570	9.68	.008	14.02	.001
Physical Force	64	0.97	.325	6.41	.011	8.17	.004
Intercourse	64	3.02	.082	2.13	.144	5.90	.015

Table 7

Relationship Between Risk/Need Variables and Sexual, Nonsexual, and Serious Recidivism

Risk/Need Variable		Sexual Recidivism		Nonsexual Recidivism		Serious Recidivism	
	n	χ^2	p	χ^2	p	χ^2	p
Offense Risk	33	3.03	.220	12.39	.002	6.41	.041
Parenting Risk	33	2.25	.325	4.61	.100	5.05	.080
Education Risk	33	2.77	.250	2.50	.286	2.37	.306
Peer Relations Risk	33	5.56	.062	14.58	.001	11.36	.003
Sub. Abuse Risk	33	1.29	.526	12.83	.002	18.07	.001
Leisure/Rec. Risk	33	3.93	.140	6.82	.033	10.75	.005
Behavior Risk	33	3.31	.191	5.99	.050	6.12	.047
Attitude Risk	33	0.43	.806	7.39	.025	5.36	.069
Summary Risk	33	3.31	.191	16.02	.001	9.98	.007
Overall Risk	33	3.31	.346	2.39	.496	1.83	.609

Figure Caption

Figure 1. Bar Graph comparisons of the Treatment and Comparison Groups on Measures of Sexual, Non-Sexual and Serious Recidivism.

Recidivism Rates (%) for Treatment and Comparison Groups