

Long-term Impact Evaluation of  
Specialized Sex Offender Probation Programs  
In Lake, DuPage and Winnebago Counties

Prepared for the  
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## **EXECUTIVE SUMMARY**

This Executive Summary reports on a study of the long-term impact of specialized sex offender probation programs in DuPage, Lake and Winnebago Counties. A previous study reported on the implementation and short-term impact of these three programs (Seng et al. 2000). The current study explores the impact of these programs comparing recidivism and treatment failure of sex offenders who participated in the specialized sex offender probation program (the grant sample) to recidivism and treatment failure of sex offenders on probation who were not part of the specialized program (the control sample). We obtained information about recidivism from Illinois State Police Rap Sheets supplemented with information from FBI criminal histories, violation of probation petitions, polygraph tests, and therapists' bi-monthly treatment reports. Recidivism was defined as new arrests or self-reports of new offenses after the time that they were arrested for the offense that placed them on probation. Sexual recidivism was defined as any new sex crime except arrests for failure to register as a sex offender were not included. Violent recidivism was defined as any new violent or sex crime. General recidivism was defined as a new crime of any type, including misdemeanors such as driving while intoxicated, but other traffic offenses were not included.

The specialized programs, especially Lake County, increased its field surveillance and visits to sex offenders' homes. This increased surveillance can have two opposing effects. First, increased surveillance may allow probation officers to detect a greater percentage of new crimes that sex offenders commit. For example, probation officers

may discover child pornography on a sex offender's home computer or may see a sex offender expose himself to a stranger during field surveillance. The higher detection hypothesis predicts that the specialized program will have a higher rate of sexual, violent, and general recidivism than the standard program. By contrast, the second way that increased surveillance may affect sex offenders is to deter them from committing additional crimes due to the fear of being caught and punishment. The deterrence hypothesis predicts that the specialized program will have a lower rate of sexual, violent, and general recidivism than the standard program. These two opposing effects can result in the specialized and standard probation programs having similar recidivism rates. Even if the two programs have identical recidivism rates, this finding does not mean that the specialized program had no impact because the higher detection effect can mask the deterrence effect. The evaluators, thus, are presented with a conundrum.

To overcome this conundrum, the evaluators used a deterrence conceptual framework to make predictions about which groups of sex offenders would be deterred or change from the intensive supervision of the specialized programs. Sex offenders can be deterred if they make a rational calculation of the cost (such as a new arrest) and benefits of committing a new crime before they commit the crime. We predicted that mentally ill sex offenders, psychopathic deviants, and sex offenders with sadistic or chronic aggression problems were not rational and thus should show higher rates of recidivism in the specialized program than in the standard program, which supports the higher detection hypothesis. We predicted that sex offenders interested in hands-off sexual offending often consider the cost and benefits of committing a sex crime before they commit the crime and should be deterred by the increased surveillance, which supports



the deterrence hypothesis. Sex offenders that have already served a term of probation also may be deterred by the increased supervision because they realize that the consequences will be more severe if they are caught committing another crime. Sex offenders that have served a prior probation sentence may realize the severe consequence if they commit additional crimes and those on specialized probation may perceive a higher likelihood of getting caught if they commit a new offense; thus, the specialized program should deter sex offenders that have served prior probation and produce lower sexual, violent, and general recidivism rates than the standard program.

Our findings from the implementation study were that each county had successfully implemented a specialized sex offender probation program but in ways unique to each county. Our findings from this long-term impact study mirror this diversity. In general we found that the specialized sex offender program in each county had a positive impact on recidivism for certain groups of sex offenders, and were able to detect higher rates of recidivism for groups of offenders that do not make decisions in a rational manner (e.g., mentally ill offenders). The counties differed in what groups of offenders were affected by the increased surveillance and other conditions of the specialized programs.

This Executive Summary presents a comparison of the standard and specialized sex offender program and major findings for each county. We then discuss the overall implications of the study in general and make final recommendations about risk assessment instruments for child molesters. Our analyses focused on examining recidivism and treatment performances within each county with specific attention to differences between the control and grant samples. An additional and important focus

was identifying groups of offenders in the total sample in each county who were at high risk of recidivism and treatment failure.

### **The Lake County Program**

The essential differences between the standard and specialized programs in Lake County centered upon specialization, caseload and supervision standards. The Lake County probation department had established a sex offender unit in late 1995 with officers carrying a mixed caseload of regular and sex offender cases. Caseloads averaged approximately 120 cases per officer. The sex offender grant program provided two surveillance officers who were devoted full time to the community supervision and surveillance activities of sex offender cases assigned to probation staff in the sex offender unit. While unit staff continued to carry a mixed caseload, the two surveillance officers handled exclusively sex offender cases. Prior to the specialized sex offender program, the contact standard maintained for sex offenders in Lake County was the Administrative Office of the Illinois Courts (AOIC) standard for maximum supervision of two face-to-face contacts per month and one field visit every other month. The specialized program's contact standards were much more demanding, consisting of a required three field contacts per month in addition to two face-to-face office contacts per month. While the Lake County program experienced some difficulty in meeting its demanding contact standards, the program averaged approximately four face-to-face contacts per month, two above the AOIC standard, and more than doubled the AOIC field visit standard of one every other month to reach an average of 1.7 per month. In addition, the specialized program standardized a set of informal sanctions to apply to offenders for noncompliance

with probation conditions whereas the standard probation program left it up to the discretion of each probation officer. As a result, probation officers in the standard probation program were more likely to resort to the severe sanction of filing a violation of probation petition (VOP), and filed a significantly higher number of VOP petitions than did probation officers in the specialized program.

The standard probation and the specialized sex offender programs accepted any offender sentenced to probation and convicted of any misdemeanor or felony offense that was sexual in nature, even if the convicted offense was not a sex crime. The assignment of special conditions for sex offenders in both programs was an essentially informal but effective process under which sex offenders were required to meet a set of special conditions. The treatment under both programs was essentially similar. Participation in sex offender cognitive-behavioral group therapy was mandatory in most cases and there was a formal process of probation officer-treatment provider communication in place for both programs.

The research team coded information for 104 offenders in the grant sample and 104 offenders in the control sample. All cases that were sentenced between July 1997 and May 1999 were included in the grant sample. The research team selected control cases from generated lists of sex offenders on standard probation between 1994 and July of 1997. All coded information came from probation department case files, except information on criminal history, which was coded from rap sheets obtained from the Illinois State police. The Lake County grant and control samples were found to be similar on the vast majority of demographic, offense, and risk characteristics examined. However, the grant sample was more likely to have at least one prior arrest and one prior

conviction whereas the control sample showed somewhat lower socio-economic status and a previous history of mental health treatment combined with greater illicit drug use. The amount of time that sex offenders were evaluated for recidivism averaged 34.5 months in the grant sample and 57.6 months for the control sample.

### Rates of Recidivism

After controlling for opportunity and other predictors, the grant and control sample did not differ on rates for sexual recidivism, violent recidivism, or general recidivism. For the entire sample, the average sexual recidivism rate at the mean of the covariates was 4.1% at one year, 9.9% at two years, 16% at three years, 22.6% at 49 months, and 33.3% at five years. A review of 61 studies on sex offender recidivism found an average of 13.4% sexual recidivism within an average follow-up period of four to five years (Hanson & Bussiere, 1998). Though Lake County's rates are somewhat higher, it is important to keep in mind that the higher surveillance increases detect of crimes and that prior studies were less likely to contain exclusively hands-off sex offenders. Moreover, Lake County's rates appear favorable in comparison to a study that tracked sex offenders released from prison; within three years, about half of the offenders had been rearrested for a felony sex crime and 60% had been rearrested for a violent crime (Greenfeld, 1997). Lake County's violent recidivism rates at the mean of the covariates were 6.7% at one year, 15% at 25 months, 21.8% at three years, 31.9% at 49 months, and 39.3% at 62 months. The average rates of general recidivism at the mean of the covariates were 12.2% at one year, 25.8% at two years, 37.5% at three years, 51.1% at four years, and 69.3% at 62 months.

### Specialized Probation And Higher Detection Effect

Mentally ill sex offenders had much higher sexual recidivism rates in the specialized program than in the standard program, suggesting that the specialized program was able to detect crimes that typically would not be reported or detected in the standard probation program. Similarly, psychopathic deviant sex offenders or offenders with sadistic personalities also had higher sexual recidivism rates in the specialized program than in the standard program. Mentally ill offenders, psychopathic deviants, and sadistic offenders are unlikely to consider the costs and benefits of offending, and thus are likely to continue with their offending behaviors, irrespective of the intensive community-based supervision. The higher surveillance of the specialized program is a better alternative than standard probation because it is able to catch a higher number of these high-risk offenders when they commit new offenses. Moreover, the specialized program should consider increasing the surveillance of these groups and the courts should consider either placing these offenders in a mental health hospital for a period of time or giving these offenders a jail sentence in addition to their probation sentence. If these offenders cannot be deterred or changed through higher surveillance and jail time, prison seems the only remaining alternative.

### Specialized Probation and Deterrent Effect

Sex offenders that were interested in hands-off offenses (e.g., exhibitionism, voyeurism), even if they also were interested in hands-on sex offending, were less likely to be arrested for a new sex offense in the specialized program than in the standard probation program. In the standard program, sex offenders with an interest in hands off

sexual offending had a higher rate of sexual recidivism than did exclusively hands-on sex offenders, suggesting that hands-off sex offending is a risk factor associated with sexual recidivism. However, the specialized program was able to deter this high-risk group, and in this program sex offenders with an interest in hands off sexual offending had a lower rate of sexual recidivism than did the exclusively hands-on sex offenders. Sex offenders with an interest in hands off sexual offending also had lower rates of violent and general recidivism in the specialized program than in the standard program. These findings suggest that the specialized sex offender probation program with its higher surveillance and other restrictions contributed to deterring hands-off sex offenders from committing additional sex crimes and exclusively hands-off sex offenders from committing any type of crime.

#### Predictors of Sexual Recidivism

Consistent with the literature, objective sexual preference was the strongest predictor of sexual recidivism. Offenders with a sexual preference for children had about an 85% chance of sexual recidivism if they had victimized strangers or acquaintances and only a 29% chance if they had victimized family members. When sexual preference for children was unknown or nonexistent, at least one prior arrest for a misdemeanor crime was the strongest predictor. In addition, single or divorced men with access to children or who completely denied the offense had a moderately high chance of committing a new sex crime. Hands-off offending, mental illness, psychopathic deviancy, and sadistic personality also are high-risk predictors of sexual recidivism.

### Predictors of Violent Recidivism

Marital status was the strongest predictor of violent recidivism with single or divorced offenders more likely to commit new offenses. This finding is consistent with the literature. The seven variable CTA model revealed three groups in the highest risk category and one group in the moderately high-risk category. Single or divorced sex offenders were at the highest risk of violent recidivism if: (1) they committed prior property crimes and forced the sexual offense; or (2) they committed prior property crimes and began criminal offending before the age of 18. Single or divorced offenders also were at a moderately high risk if they had been committing sexual offenses for four or more months and were at a low risk if they had been committing sexual offenses for three months or less. Married or separated sex offenders were generally at low risk of general recidivism. Married or separated sex offenders are placed in the high-risk category if they have at least one prior arrest and conviction.

### Predictors of General Recidivism

Offenders were at high risk of general recidivism if they began criminal offending: (1) before the age of 28 and used alcohol; or (2) at the age of 28 or later, had a substance abuse problem, and victimized a family member. Our findings suggest that risk assessment instruments for general recidivism of sex offenders should score five characteristics as high risk factors: (1) age younger than 28 at time of first criminal offending; (2) substance abuse; (3) alcohol use; (4) single marital status; and (5) charged with a misdemeanor crime. Offenders with three of these five characteristics should be

considered high-risk. In addition, offenders should be considered high risk if they are in one of the two clusters described above.

### Probation Outcomes

The control and grant samples did not differ on the percentage of offenders who terminated probation satisfactorily, the percentage that were revoked or the percentage of offenders who absconded from probation. Offenders had a very high chance of satisfactory termination of probation (92.5% chance) if they had no prior arrests for misdemeanors and expressed great remorse for the offense. Offenders were most likely to be revoked if they were unemployed or part-time employed and used physical force to commit the sex crime. Moreover, data suggest that the Lake County Courts considered new arrests for sex crimes in making revocation decisions, but new arrests alone was not either a necessary nor sufficient reason to revoke an offender's probation.

### Compliance with Treatment

In the specialized sample, N-of-1 analysis of the bi-monthly treatment reports for twenty-six offenders revealed that 7 of the offenders had a significant improvement across time or a significant improvement relative to all sex offenders in the three counties. Overall, 13 of the 26 Lake County sex offenders in the specialized program were classified as responsive to treatment.

A significantly higher percentage of grant sex offenders compared to control sex offenders did not have a VOP filed for noncompliance with treatment. This finding may reflect the greater use of administrative sanctions on the part of specialized probation



officers rather than a greater compliance with treatment among sex offenders on specialized probation. Supporting the differential use of administrative sanctions, the control and grant sex offenders had similar rates of serious noncompliance with treatment, and control offenders, in part due to the larger number of closed cases, were significantly more likely to complete treatment satisfactorily. Across both samples, 33 of the 79 cases that had a VOP filed for noncompliance with treatment eventually completed treatment satisfactorily, which suggests that the sanction motivated some sex offenders to participate in treatment.

Having a VOP filed for treatment noncompliance was significantly related to sexual recidivism, after opportunity and other significant predictors were controlled. This finding suggests that treatment noncompliance is another risk predictor of sexual recidivism, and that the Lake County probation department may want to increase surveillance when a sex offender becomes noncompliant with treatment.

A CTA model showed strong performance in predicting serious noncompliance with treatment. There were two high-risk groups that blamed the victim or denied the offense: (1) those that victimized strangers or acquaintances; and (2) those that had a criminal lifestyle with two or more prior arrests for any crime. Sex offenders that blamed the victim or denied the offense were at a moderately high risk of treatment failure if they had mental illness, victimized boys, and were on public aid; this group of offenders was at a low risk if they were not on public aid. Sex offenders that accepted or minimized responsibility were at a high risk of serious noncompliance with treatment if they used illicit drugs and had a chronic history with impulsive behavior and were at a low risk if they did not use illicit drugs.

## **The DuPage County Program**

The essential difference between the control and grant cases in DuPage County centered on specialization, caseload, and contact standards. Prior to the grant program, DuPage County had a special unit for sex offender cases but probation officers in this unit serviced a mixed caseload of sex offender and regular probation cases. Caseloads averaged approximately 100 per officer. Under the grant program, instituted in 1997, two officers were designated to carry only sex offender cases and caseloads averaged 43 for each of these officers. Also, prior to the grant program, the contact standard maintained for sex offenders in DuPage County was the AOIC standard for maximum supervision. The grant program's contact standards were much more stringent based on a three-level supervision system that required four face-to-face contacts per month in level I, two of which were to be home or field visits. Contact standards in level II were reduced to three face-to-face contacts per month and level III consisted of the AOIC standard for maximum supervision. While the DuPage County program experienced considerable difficulty in meeting its field visit standards, overall face-to-face contacts averaged close to three per month, one visit above the AOIC standard for maximum supervision.

The control and grant cases did not differ in target population. Both served similar populations of sex offender cases that included any offender convicted of a misdemeanor or felony sex crime or any offender convicted of a non-sex crime that the judge specifically ordered into the specialized program (the latter was a rare event). Also, approved sex offender treatment providers plus requirements for an initial and maintenance polygraph have been a part of the program since 1995. Treatment providers

and program staff have maintained a regular bi-monthly meeting schedule since the inception of the sex offender team, a practice that was continued throughout the period of the grant program. Beginning in 1996, sex offender probationers were required to comply with 15 special conditions. The specialized program did more frequent polygraph testing and routinely required sex offenders to submit to urine analysis. In our examination of the specialized probation sample cases, polygraph examinations were given to 77.6% of the cases with 45.8% receiving two or more polygraph tests. In comparison, we only found two polygraph tests for the control sample. Additionally, a total of 721 drug tests were administered in the specialized probation sample.

The research team selected control cases from lists of sex offenders on standard probation between January 1993 and June 1996. All coded information came from probation department case files, except criminal history was coded from rap sheets obtained from the Illinois State Police. The grant and control samples were found to be similar on the vast majority of demographic, offense, and risk characteristics examined. The grant sample, however, included a significantly greater percentage of sex offenders who are sexually aroused by children, who have committed prior sex crimes, who have more sexual paraphilia, who have a current mental health problem, and who are at higher risk of sexual recidivism based on the SAC-J. The amount of time that sex offenders were tracked averaged 32.8 months in the grant sample and 78.1 months in the control sample.

### Rates of Recidivism

After controlling for opportunity and other predictors, the standard probation program and the specialized sex offender program did not differ on sexual, violent, or general recidivism rates. The overall sexual recidivism rates at the mean of the covariates were 8% at one year, 1.9% at 25 months, 5.1% at three years, 11.1% at 49 months, and 21.4% at 62 months. The overall violent recidivism rates at the mean of the covariates were 2.1% at one year, 3.7% at 25 months, 8.2% at three years, 16.3% at 49 months, and 28.4% at 62 months. The overall general recidivism rates at the mean of the covariates were 15% at one year, 24.6% at two years, 33.4% at three years, 43.7% at 49 months, and 55.6% at 62 months.

### Specialized Probation And Higher Detection Effect

While recidivism rates did not differ, there was a difference between the two programs in terms of mental health status as a high-risk predictor of sexual recidivism. Mental health status was a high-risk predictor of sexual recidivism in the specialized sex offender program but was not a relevant predictor in the standard probation program, suggesting that the specialized program was more effective at detecting sexual recidivism by mentally ill offenders than was the standard probation program.

### Specialized Probation and Deterrent Effect

We also tested whether sex offenders interested in hands off sexual offending in the specialized program had a lower rate of sexual recidivism than sex offenders interested in hands-off sexual offending in the standard program, which would suggest a

deterrent effect. Hands-off sex offending refers to exhibitionism, voyeurism, public indecency, and other sex acts where the offender does not touch the victim. Findings indicate that hands-off offending was a significant high-risk predictor of sexual recidivism in both the standard probation and specialized probation programs, and the two programs did not differ. This suggests that the specialized sex offender program's more intensive supervision did not deter hands-off offenders from committing sex crimes.

There, however, was a difference in rates of general recidivism. Hands-off offenders in the specialized program were less likely to be arrested for new crimes of any type than were hands-off offenders in the standard program. An examination of the types of crimes that resulted in new arrests indicates that sex offenders interested in hands off sexual offending in the specialized sample focused primarily on sex crimes.

Furthermore, the specialized program group of hands-off sex offenders were significantly more likely than the standard program hands-off offenders to have two or more sexual paraphilia, a current mental health problem, and to have committed the sex offending over a longer period of time. These differences suggest that hands-off offenders in the specialized program may have been less calculating in their sexual offending and more driven by compulsive or impulsive behavior, and less likely to be deterred from sexual recidivism by knowledge of the specialized program's procedures. This pattern of findings indicates that the specialized program did not deter sex offenders interested in hands off sexual offending from committing recidivism in general. In addition, two key features of the DuPage County specialized program may have contributed to no deterrent effect: (a) announced field or home visits, and (b) probation officers infrequently going to the treatment site to check on attendance and/or observe group therapy sessions.

Sex offenders that had served prior periods of probation benefited from the specialized program; these offenders had a significantly lower rate of violent recidivism in the specialized program than in the standard program. Moreover, serving a prior period of probation was a high-risk predictor of violent recidivism in the standard program, but did not predict violent recidivism in the specialized program. These findings suggest that sex offenders that had served prior periods of probation were deterred from committing violent crimes through their knowledge that they would have to submit to polygraph testing, were under increased supervision, and the fact that such arrests were more likely to result in a more severe sentence.

#### Predictors of Sexual Recidivism

It should be noted that DuPage County's treatment evaluations did not contain information about psychopathic deviancy and 65% of the control and 33% of the grant samples did not have information about objective sexual preference; thus, these characteristics could not be tested, but still should be considered important risk indicators of sexual recidivism. We suggest that DuPage County implement a policy requiring all treatment evaluations to contain an objective sexual preference test and an objective personality test that measures psychopathic deviancy.

Findings from classification tree analyses (CTA) indicate that mental health status and a preference for hands-off offending were two key predictors of sexual recidivism. Mentally ill offenders interested in hands-off offending and with some college education had about a 75% chance of sexual recidivism excluding failure to register offenses.

Another important observation is that none of the formalized risk assessment instruments were significant and stable predictors of sexual recidivism. Moreover only one risk assessment instrument, the Static-99, was a significant predictor, but did not remain stable in the leave-one-out (LOO) analysis. Our CTA model showed substantial improvement in overall classification accuracy and in sensitivity at predicting those who committed sexual recidivism compared to the Static-99 classification.

Another implication of the importance of mental health status is that clinicians and probation officers should consider sex offenders that have been diagnosed with bipolar depression, thought disorders, adjustment disorders, or personality disorders as having a higher risk of recidivism. Future studies should further test the importance of mental health status. Whereas sex offenders can more easily fool treatment evaluators about their sexual preferences or psychopathic deviancy (especially when objective tests are not performed), they have more difficulty hiding other mental health problems. In our samples, many sex offenders with an objective sexual preference for children also had other mental health problems.

### Predictors of Violent Recidivism

In predicting violent recidivism (which included violent and sexual offenses), one risk assessment instrument, the SAC-J, was significant and generalizable and improved classification accuracy 22.4% over what could be explained by chance. However, our CTA model showed an improvement of classification accuracy of 36.5% over chance using only two predictors, mental illness and hands-off offending whereas the SAC-J uses 11 predictors. In the CTA model, mentally ill offenders with an interest in hands-off

offending had a moderately high chance of committing new sex or violent crime.

Offenders with no known mental illness but also with an interest in hands-off offending had a medium risk of committing new sex or violent crime. Offenders with no interest in hands-off offending had a low chance of committing new sex or violent crime.

### Predictors of General Recidivism

Marital status combined with other factors was a key predictor in predicting general recidivism. Married or widowed sex offenders were at very high risk of general recidivism if they denied the offense and were 37.5 years of age or younger and at moderate risk of general recidivism if they used drugs before committing the offense that placed them on probation. There were two groups of unmarried offenders that were at very high risk of general recidivism: (1) offenders with at least one prior conviction; and (2) offenders in the specialized program without prior convictions but who were placed on probation for a misdemeanor crime.

### Probation Outcomes

A significantly higher percentage of specialized program offenders compared to standard program offenders terminated probation unsatisfactorily. The two programs did not differ on rates of revocation or absconding. Offenders who used drugs before committing the offense that placed them on probation were at very high risk of unsatisfactory termination if they also had one prior arrest for a violent crime. They were at moderate risk of unsatisfactory termination if they had no prior arrests for a violent crime, but at least one prior arrest for a property crime. There were no very high-risk



groups of offenders who did not use drugs. Offenders who used drugs before committing their offense or needed drug treatment were also at a high risk of being revoked. Thus, drug use is a key variable in probation outcome.

### Compliance With Treatment Orders

The research team examined the number of violation of probation (VOP) petitions filed for treatment noncompliance and used significant declines in treatment progress from the monthly treatment reports as well as premature termination of treatment to define serious noncompliance with treatment. Offenders on the specialized program compared to the standard program were more likely to have VOPs filed for noncompliance with treatment and to have serious noncompliance with treatment. Moreover, offenders in the standard program were significantly more likely to complete treatment satisfactorily than were offenders in the specialized program. It appears that these differences are not due to probation officers in the standard program allowing more chances to comply with the treatment order before filing a VOP. An almost identical proportion of the grant and control sample (approximately 45%) had at least one VOP filed, and were similar on the average number of months on probation until the first VOP was filed. Furthermore, the difference between the specialized and standard probation programs on successful completion remains after controlling for mental health status, marital status, using drugs before the crime, prior convictions and other significant predictors identified by ODA. Upon further analyses, treatment noncompliance is a predictor of sexual recidivism in the specialized program, but is not a predictor in the standard program. This finding suggests that in the specialized programs, sex offenders

that were noncompliant with treatment may have been scrutinized more closely (perhaps through a polygraph exam) and new sex crimes were discovered. Supporting this explanation, 26.9% (N = 7 out of 26) of the offenders with treatment noncompliance revealed during a polygraph exam that they had committed at least one new sex crime since being placed on probation whereas 9% (N = 5 out of 55) of sex offenders that were compliant with treatment indicated that they had committed a new sex crime. In addition, probation officers supervising cases in the specialized program may have used administrative sanctions to handle lack of participation in treatment, missed homework assignments, and unexcused absences, and waited until a sex crime was committed to file a VOP for violation of treatment orders. Thus, there are two possible explanations for this difference that sex offenders in the specialized program were more likely to be noncompliant.

Sex offenders with no known mental illness and no prior convictions had a very high chance of successful completion of treatment. Mentally ill sex offenders had a 60% chance of treatment failure if they used drugs before committing a sex crime and a 25% of treatment failure if they did not use drugs before committing a sex crime. Sex offenders that used drugs before the sex crime may have had more difficulty breaking their denial and may have attributed the sex crime to the use of drugs. Offenders with no known mental illness and with at least one prior conviction had a 68% chance of treatment failure and an even higher chance of treatment failure if they did not disclose a prior sex crime to the treatment provider or were not arrested for a prior sex crime. These findings indicate how the high risk predictors such as mental illness, prior convictions

and use of alcohol or drugs before the commission of the sex crime should be combined to provide the optimal prediction of treatment failure.

### **The Winnebago County Program**

Prior to the implementation of the specialized sex offender program, sex offenders in Winnebago County were supervised along with all other cases as part of regular probation and were part of the regular 202 cases per officer. Supervision standards for sex offender cases were the AOIC standard for maximum supervision cases of two face-to-face contacts per month and one field visit every other month. The specialized sex offender program, instituted in 1997, designated two senior probation officers to form a sex offender unit that would supervise sex offender cases only. Also, supervision standards were increased using a three-level supervision system that required four face-to-face contacts per month in level I, of which two were to be home or field visits. Contact standards in level II required three face-to-face contacts per month and level III, one face-to-face contact per month. In actuality, Winnebago averaged a total of 3 face-to-face contacts for Level I offenders, and a total of 2 face-to-face contacts for Level II offenders.

In addition to contact standards, the specialized sex offender probation program and regular probation differed on target population. All sex offenders convicted of either misdemeanor and felony sex offenses were included in the regular probation program. The specialized program was restricted primarily to felony offenses. Sex offenders in both the regular and specialized programs were required to meet a set of special conditions that typically restricted contact with the victim, with minors, and made sex

offender treatment mandatory. The treatment program under both programs was essentially similar except that it was more structured under the specialized sex offender program. Also, probation officer-treatment provider contacts were greatly increased under the sex offender program. The research team coded information for 105 offenders in the grant sample and 103 offenders in the control sample. All cases that were sentenced between July 1997 and February 2000 or were grand fathered into the grant program were included in the grant sample.

The research team selected control cases from lists of sex offenders on standard probation between June of 1989 and July of 1997. Cases were randomly selected through selecting every fourth case in an alphabetized list of offenders until the sample size was reached. All coded information came from probation department case files, except that criminal history was coded from rap sheets obtained from the Illinois State Police. The grant and control samples were essentially similar on demographic, offense and risk characteristics examined. The amount of time that offenders were tracked averaged 37.6 months for the grant sample and 83.8 months for the control sample.

### Rates of Recidivism

The standard and specialized probation programs did not differ on rates of sexual recidivism. The overall sexual recidivism rates at the mean of the covariates were .4% at one year, 4.4% at 28 months, 6.4% at 38 months, 7.2% at 53 months, and 8.6% at 76 months. However, the specialized probation had significantly lower rate of violent recidivism than did the standard program. The average violent recidivism rates at 36 months were 25% in the standard program compared with 4.94% in the specialized

program. The standard and specialized probation programs did not differ on rates of general recidivism. The overall general recidivism rates at the mean of the covariates were 9.7% at one year, 19.3% at two years, 21.9% at three years, 26.6% at four years and 32.7% at 62 months.

#### Specialized Probation And Higher Detection Effect

The Winnebago specialized probation program only conducted home visits between 9:00 a.m. and 5:00 p.m. during the weekdays, and averaged 1.3 home visits for Level I offenders and one home visit for Level II offenders per month. The program was not able to detect a higher rate of sexual offending in mentally ill sex offenders due in large part to how the home visits were structured.

#### Specialized Probation and Deterrent Effect

Winnebago's specialized program differed from the standard program in two key ways. First, the increased office contacts and other requirements provided more structure particularly for offenders with prior probation experience than was likely the case for standard probation. Secondly and of perhaps greater import was that probation officers in the specialized program had a particularly effective partnership with treatment providers that prevented sex offenders from playing professionals against each other, and probation officers attended joint meetings with treatment providers and offenders to discuss goals, requirements, and progress. This partnership and the increased office contact provided more structure and perhaps motivated offenders to participate in treatment and comply with the law.

The Winnebago program was particularly more effective than standard probation for certain groups that are traditionally considered at high risk of recidivism such as offenders who have served a prior period of probation and those with prior mental health or drug treatment. Offenders with a history of mental health or drug treatment had a lower rate of sexual recidivism in the specialized program than in the standard probation program. Sex offenders with a prior period of probation had significantly lower general and violent recidivism rates in the specialized program than in the standard program.

### Predictors of Recidivism

Because Winnebago treatment evaluations did not contain this information about objective sexual preference or psychopathic deviancy, and often did not contain information on mental illness, it was difficult to find a strong CTA model that predicted sexual recidivism. Our recommendation thus is to use formal risk assessment instruments and also consider offenders who victimize strangers or acquaintances and have an objective sexual interest in children as high risk for sexual recidivism. In addition, findings from CTA analyses suggest the following characteristics are high-risk predictors of sexual recidivism: prior incarceration, hands-off offending, offenders with chronic impulse control problems and prior convictions, and offenders on standard probation who have prior mental health or drug treatment.

The Static-99 risk instrument also was a significant and generalizable predictor of violent or sexual recidivism, explaining 18.1% of the classification error above chance classification. However, our CTA model for violent/sexual recidivism outperformed the STATIC-99 and explained 45.6% of the classification error above what could be

accounted for by chance. Offenders who are single and started criminal offending at a 18 years of age or younger are at very high risk of violent recidivism whereas single offenders who started criminal offending after the age of 18 had a low chance of violent or sexual recidivism. Offenders who have prior drug or mental health treatment and victimized strangers or acquaintances had a moderately high chance of sexual or violent recidivism. Offenders who had no prior drug or mental health treatment and were married, separated, or divorced had a low chance of violent or sexual recidivism.

Marital status, prior criminal history, length of time of sexual offending and educational level are all important characteristics to consider in assessing risk of general recidivism.

#### Probation Outcomes

The specialized sex offender probation program and the standard probation program did not differ on the percentages of offenders who completed probation satisfactorily, but they did differ on the predictors of unsatisfactory termination based on CTA analyses. Mental illness and prior arrests for misdemeanors interacted to predict unsatisfactory termination for the specialized program. Educational level and lack of remorse interacted to predict unsatisfactory termination for the standard program. The two programs also did not differ on the percentage of offenders who were revoked. Not surprisingly, having an arrest for a new sex crime committed while on probation was a significant and reliable predictor of probation revocation but this was only a modest predictor. Criminal history and social adjustment were much stronger predictors of revocation than an arrest for a new sex crime. Few offenders in either program absconded.

### Compliance with Treatment Orders

While the majority of offenders in both programs completed treatment satisfactorily, more of the standard probation program offenders had serious noncompliance with treatment than was the case for the specialized program offenders. This reflects the more intensive probation officer-therapist partnership under the specialized program. Our analyses indicate that the three most important predictors of serious noncompliance with treatment are: needing substance abuse treatment, prior arrests for violent offense, and denial of the offense. On the other hand, expression of great remorse for the offense was the strongest predictor of completing treatment satisfactorily.

### Overall Conclusions about Risk Assessment for Child Molesters

In order to make final recommendations about risk assessment, we combined data from all three counties including all offenders that victimized children under the age of 18 (N = 478). Twelve significant and generalizable predictors of sexual recidivism emerged in the combined child molester sample. From the five CTA models, we recommend that the following characteristics are routinely assessed and incorporated into risk assessments:

- Objective or subjective sexual preference for children,
- Interest in hands-off sexual offending,
- Sexual paraphilia,
- Sadistic, aggressive, and psychopathic deviant tendencies or personality



- Substance abuse.

In addition, our analyses suggest that current risk assessment tools place too much importance on prior arrests for sex crimes. Our analyses also highlight critical combinations of variables that are incorporated into a proposed scale, we labeled, Risk Assessment Tool of Sexual Recidivism (RAT-SR). The RAT-SR has much better predictive accuracy than current risk assessment tools available.

### **Overall Conclusions About the Evaluation Design**

Most prior evaluations of specialized or intensive supervision probation programs have failed to appreciate the opposing dual effects of increased monitoring. Prior research has used less sensitive analyses to determine whether the specialized group differed from the comparison group on recidivism rates. Our subgroup analyses, with the testing of interaction effects, have enhanced evaluation designs. Future evaluations now will be able to provide more sensitive and thorough analyses of the effects of a program. Moreover, the CTA analyses that we have used to determine the predictors of sexual, violent, and general recidivism represent an advancement over the traditional linear logistic regression analyses.

## **I. Introduction**

Sex offenders, especially child molesters, are regarded as malicious, deceitful, self-centered, perverted, and dangerous, tenacious individuals. Still, society must deal with these offenders and try to protect our children and women. It is easy to provide that knee-jerk response: 'just lock them away'. Prisons, however, are overcrowded and sex offenders are eventually released and reside in communities, often next to many children and women. Recent research indicates that sex offending may be a life-long problem for many sex offenders. Prentky, Lee, Knight, and Cerce (1997) conducted a longitudinal analysis of recidivism rates among 251 sex offenders who were discharged from the Massachusetts Treatment Center for Sexually Dangerous Persons over a twenty-five year period. The failure rate for having a new sexual offense charge among child molesters at the end of the study period was 52%, with an average of 3.64 years before reoffense. The failure rate for having a new sexual offense charge among adult rapists was 39%, with an average of 4.55 years before reoffense.

Despite the potential for a high failure rate, convicted sex offenders often receive a term of community-based probation as their sentence. A study that analyzed almost 1,000 cases of child sexual assault from ten jurisdictions found that 64% of the convicted sex offenders received probation and in 61% of those cases counseling was ordered as a condition of probation (Smith, Elstein, Trost, & Bulkeley, 1993). In 1996, 4,331 child molesters were registered with the police departments in Illinois (Welter, 1997). In contrast to other criminal offenders, child molesters are often productive members of a community and can be found at all levels of social status and occupational prestige (e.g., Greenfeld, 1996). Child molesters are employed in unskilled labor jobs, skilled jobs, a

professional occupation, and some are unemployed. Some child molesters also have family ties that still remain strong even after their offenses are revealed. Judges may choose a sentence of standard probation after considering successes in other areas of a child molester's life. Moreover, many child molesters, especially those who molest young children, may receive standard probation as part of a plea agreement due to the weakness of the evidence or the desire not to put children through a trial. Many jurisdictions now acknowledge that standard probation provides insufficient monitoring and surveillance of convicted child molesters serving community-based sentences (Lurigio, Jones, & Smith, 1995). Standard probation, however, still remains a frequently used option for many child molesters.

Across the nation, several jurisdictions have begun to address the limits of standard probation for supervising sex offenders. Intensive supervision programs that combine treatment and home visits are considered an alternative to standard probation. Loyola University received a grant from the Illinois Criminal Justice Information Authority to evaluate specialized intensive supervision sex offender units in Lake County, DuPage County, and Winnebago County. All three specialized probation programs are based on the containment approach, which is a nationally recognized intensive supervision community-based probation model for sex offenders (English, Pullen, Jones, & Krauth, 1996). The containment approach has three major components: (a) intensive supervision of offenders which includes frequent field searches of offender's homes and the verification of information obtained verbally from offenders; (b) treatment which emphasizes a cognitive-behavioral group therapy approach supplemented with cognitive-behavioral individual counseling; and (c) a partnership between probation

officers and treatment providers that includes frequent communication and the sharing of relevant information on specific offenders. Though all three specialized programs have a similar foundation and philosophy, they differ widely in what components of the containment approach are emphasized. These differences will be described in Chapters III, IV, and V on the evaluation of each county's specialized sex offender unit.

#### **A. Evaluations of Probation Programs and Recidivism**

Few studies have focused on sex offenders that are sentenced to standard probation and continue to reside in the community after their conviction. Berliner, Schram, Miller and Milloy (1995) examined recidivism rates of offenders who received a suspended jail sentence and were required to serve a probation term with mandatory treatment. Forty-four percent of probationers violated at least one of their conditions of probation. The most common violation was treatment participation, followed by noncompliance with financial obligations, and crime-related prohibitions. Seventeen percent of the probationers had their probation revoked. Offenders who were sentenced to the program were less likely to be rearrested for a sex offense during the first two years compared to offenders who served only jail time. Another prior study conducted in Vermont collected data from 122 adult male Caucasian sex offenders placed on probation at some point during a twelve-year period. The sample was comprised of 91 child molesters, 23 rapists, and eight "hands-off" offenders. The average time at risk was a little over five years, and 18.9% of the sex offenders were arrested for a new criminal offense of any kind (McGrath, Hoke, & Vojtisek, 1998).

Only two studies have examined possible risk markers for sex offenders on probation. Hanson (1998) reports an ongoing study of probation and parole officers' retrospective accounts of characteristics that distinguish 208 recidivist and 201 nonrecidivist sexual offenders. "Recidivists were described as having negative social relationships, holding attitudes tolerant of sexual offending, and lacking self-management skills." (Hanson, 1998, p. 59) These retrospective accounts are informative, but cannot reveal the characteristics that lead to optimal predictions of noncompliance risk. Maletsky (1990) followed almost 4,000 outpatient sex offenders for between one and 17 years. Men who had worked at three or more jobs during the three years preceding their offense or were unemployed at the time of their offense were almost four times more likely to be treatment failures compared to men who had more stable employment. Treatment failure included not completing treatment, maintaining a deviant arousal pattern throughout treatment, or being arrested for a sexual offense.

In the current evaluation, we have compared a sample taken from the specialized sex offender probation to a sample of sex offenders on standard probation in each county. The major outcomes are sexual recidivism (all new sex crimes excluding failure to register offenses), violent recidivism (all new sex and violent crimes excluding failure to register offenses), and general recidivism (new crimes of any type). In addition, we have compared the programs on probation termination status, revocations, absconding, serious noncompliance with treatment, and successful completion of the sex offender treatment program.

## **B. Predictors of Recidivism Risk**

Assessment of the likelihood that sex offenders will commit additional crimes while on probation and after serving their sentence is a very important task. The task, however, is difficult. Measures of recidivism often detect only some of the additional crimes that are committed. Studies generally rely on official measures of recidivism such as rearrest, reconviction, and violation of probation conditions. Official measures, however, underestimate the true rate of recidivism because many crimes do not come to the attention of authorities. A comparison of information from social services with official arrest records indicated that there were 2.4 reoffenses based on social service records for each arrest noted (Marshall and Barbaree, 1988). Studies of sex offenders who are guaranteed anonymity reveal that many sex offenders report engaging in multiple undetected paraphiliac and criminal behaviors (Abel et al., 1987). Furthermore, plea bargaining often hides the sexual nature of some criminal convictions. Additionally, most offenders do not provide complete accounts of their sexually deviant behavior, but disclosures of additional offenses during maintenance polygraphs often provide information about offenses undetected by officials. Official rap sheets thus should be supplemented with other sources such as probation files, treatment reports, and interviews with offenders with and without polygraph testing. These multiple sources of information can provide more complete information about the offender's sexual offending. Because the weaknesses of one recidivism measure are counteracted by strengths of other recidivism measures, multiple measures of recidivism can provide the best assessment of the recidivism rate.

In Chapters 3, 4, and 5, we provide a review of the predictors of sexual recidivism as we are discussing the profile makeup of our samples. In this introduction, we highlight only the most critical predictors.

Several studies have examined which offense and offender characteristics predict officially detected recidivism. Studies distinguish between static and dynamic characteristics. Static characteristics are not changeable and thus are outside of the control of probation officers or treatment providers. Static characteristics include factors such as criminal history, age of victims, gender of victims, prior treatment failures, and relationship of offender to the victim. Dynamic characteristics are changeable and include number of paraphilia, level of supervision, attitude of offender toward sexual offending, level of offender's denial, offender's sexual preferences, and offender's substance abuse. Both static and dynamic characteristics should inform probation officers' assessment of the offenders' risk of reoffending. Static characteristics provide needed information about the base rates of reoffending whereas dynamic characteristics can be the focus of treatment and surveillance efforts. Most prior research has focused only on which static characteristics predict recidivism. Our long-term evaluation of the impact of these sex offender programs will examine how well both static and dynamic variables predict reoffending.

Several studies have found that deviant penile arousal to photos of children predicted officially detected recidivism after removing the predictive power of other characteristics of the offender and offense (Barbaree and Marshall, 1988; Quinsey et al., 1995). Moreover, objective sexual preference for children is the strongest predictor of sexual recidivism based on a recent meta-analysis of the literature (Hanson & Busierre,

1998). However, a significant proportion of incest offenders are gynephiles (i.e., have a normal pattern of sexual preference for adult women) as measured by penile arousal; these incest offenders may be the “regressed types” who offend for other motivations such as interpersonal intimacy or to boost self-esteem or relieve stress (Freund, Watson, & Dickey, 1991).

Offenders who have multiple paraphilia are significantly more likely to be rearrested and to self-report additional offenses than are offenders who have a single paraphilia (Abel, et al., 1988). Child molesters average between 3.3 and 4.2 paraphilia, according to a study involving 561 nonincarcerated sex offenders who were assured confidentiality (Abel et al., 1988). Offenders whose pre-treatment and offense history included voyeurism and exhibitionism reoffended at a higher rate than offenders without such a history (Abel et al., 1988). Total prior arrests or convictions for sex crimes, however, have been inconsistent predictors of recidivism because they often do not reflect the true extent of an offender's sexual offending.

Another strong predictor of recidivism among samples of child molesters and a consistent predictor of recidivism among other groups of offenders is offenders' psychopathy scores (Quinsey, Rice, & Harris, 1995; Quinsey & Lalumiere, 1996). Sex offenders with high scores on psychopathy and on objective sexual preference to children recidivate sooner and at significantly higher rates compared to sex offenders without this combination (Serin, Mailloux, & Malcolm, 2001). Several studies have found that significant proportions of incest offenders (40% to 50%) have elevated psychopathy scores (for a review see Williams & Finkelhor, 1990). Psychopathy ratings, moreover,



are related to a higher deviant penile arousal on the plethysmography test, and to more previous offenses against children (Quinsey et al., 1995).

### **C. Effectiveness of Treatment**

Several studies have examined the effectiveness of treatment at reducing recidivism rates in populations of sex offenders on probation (see Furby, Weinrott, & Blackshaw, 1989; McGrath, Hoke, & Vojtisek, 1998). The differences and shortcomings in the research designs of these studies have led to mixed conclusions about the effectiveness of sex offender treatment. An earlier review of forty studies concluded that treatment tends not to be effective at reducing recidivism, but that there was not enough information available about which types of offenders benefit from treatment (Furby, Weinrott and Blackshaw, 1989). More recent reviews concluded that cognitive behavioral out-patient sex offender treatment appears to significantly reduce recidivism (Hall, 1995; Alexander, 1993; McGrath, 1995; Polizzi, MacKenzie, & Hickman, 1999; Scalora, Garbin, Roy & Blum, 1998; McGrath, Hoke, & Vojtisek, 1998).

Only two of the eight studies on the effectiveness of prison-based sex offender treatment were methodologically sophisticated to provide any conclusions, and one study found lower sexual recidivism rates from the treated group than the untreated group whereas the other study found no difference between the treated and untreated groups (Hanson, Steffy, and Gauthier, 1993; Nicholaichuk et al., 2000; Polizzi, MacKenzie, & Hickman, 1999). More recently, a small sample of 89 treated sex offenders at the Regional Treatment Centre had a significantly lower sexual recidivism rate compared to a matched untreated group of 89 sex offenders (Looman, Abracen, & Nicholaichuk, 2000).

In Germany, a prison-based program primarily for rapists centered around relapse prevention was reported to be so successful that the unit was made an independent social-therapeutic department (see Pfafflin, 1999).

Only one study has randomly assigned sex offenders to treatment or no treatment in a state hospital cognitive behavioral program. Findings show treatment benefits on violent recidivism and on sexual recidivism for certain groups of sex offenders (Marques, 1999). Treatment appears to be more effective for child molesters with male victims or with victims of both sexes (Marques, 1999), which is consistent with a recent review (Anderson, 1999).

Several studies suggest that intermediate treatment goals such as reducing sexual arousal to deviant stimuli can be reached. A treated group, for example, showed less sexual deviance at discharge on both the physiological and self-report measures of sexual deviance, showed shifts toward more acceptance of responsibility, and showed some skills in the relapse prevention techniques (Marques, Nelson et al., 1994). Moreover, child molesters that have molested at least five children and have mastered the relapse prevention program have significantly lower sexual recidivism (Marques, 1999). Earls and Castonguay (1989) found that targeted treatment to reduce sexual arousal to same-sex children was effective, but the sexual arousal to heterosexual pedophilic themes remained until specifically targeted in treatment. Treatment for one paraphilia, thus, does not generalize to other paraphilia that offenders may have.

The effectiveness of a treatment program is also determined by the rate at which offenders prematurely terminate or are expelled from treatment. Termination rates in the United States out-patient treatment programs have ranged from one-quarter to over one-

half (Moore, Bergman, & Knox, 1999) whereas in Belgium the drop-out rate is less than 10% (Cosyns, 1999). Research, however, is scarce on what factors predict failure to complete treatment. Abel et al., (1988) found that the highest rate of withdrawal from treatment occurred for offenders who felt the greatest pressure to participate in treatment. Moreover, 92% of the offenders who had multiple paraphilia and molested both boys and girls dropped out of treatment. In two studies, sex offenders who were never married had lower rates of successful completion (Miner & Dwyer, 1995; Moore, Bergman, and Knox, 1999). In a study of which juvenile sex offenders did not complete treatment, juveniles with impulsivity problems and older juveniles were more likely to terminate treatment prematurely (Kraemer et al., 1998).

Research is scarce on which groups of sex offenders will benefit from treatment. Clinical anecdotal accounts have highlighted the difficulty of treating sex offenders who completely deny the offense (Schlank & Shaw, 1996), clients with co-morbidities such as substance abuse or major mental health issues (Chaffin, 1994), and clients sexually aroused by children that have multiple convictions (McGrath, 1991). One study examined whether sex offenders receiving cognitive behavioral treatment recidivated within one year following the completion of the treatment. Five pretreatment factors could correctly classify 85.7% of offenders on whether treatment failed (recidivated) or was successful (did not recidivate). The five factors that indicated a higher likelihood of reoffending were: (a) molested both boys and girls as well as children and adolescents; (b) failed to accept increased communication with adults as a treatment goal; (c) committed both "hands on" and "hands off" sexual offenses; (d) divorced; and (e) molested both familial and nonfamilial victims (Abel et al., 1988). Two studies have

found that age, race, educational attainment, socio-economic class and prior number of criminal offenses of the offender, did not predict success or failure of cognitive behavioral therapy (Marshall & Barbaree, 1990).

Research has shown that incest offenders (Chaffin, 1992) and sex offenders in general (Moore, Bergman, and Knox, 1999) are less likely to successfully complete treatment if they are psychopathic deviants, though one study did not find a difference between incarcerated psychopathic deviants and those who were not psychopathic deviants (Shaw et al., 1995). Hart and Hare (1997) in their review of the research on psychopaths concluded: “group therapy and insight-oriented programs help psychopaths to develop better ways of manipulating, deceiving, and using people but do little to help them understand themselves” (p. 31) Research also has shown that though psychopathic deviants behave well in treatment, they are more likely to commit a new serious offense; thus, psychopathic deviants’ behavior in treatment is no indication that they are incorporating the lessons of treatment in their real lives outside of treatment (Seto & Barbaree, 1999). Psychopathic deviants also have had higher failure rates in inpatient treatment programs (e.g., Ogloff, Wong, & Greenwood, 1990; Moore, Bergman, and Knox, 1999).

In this evaluation, we examine the following questions to assess the combinations of sex offenders that may successfully benefit from treatment: (a) which groups of sex offenders are most likely to commit serious noncompliance with treatment?; and (b) which groups of sex offenders are most likely to successfully complete treatment? We also are able to address whether sex offenders that have a violation of probation petition (VOP) filed due to treatment noncompliance are more likely to commit sexual

recidivism, and for which groups of sex offenders is information about treatment noncompliance from a VOP an indication of a high risk that sexual recidivism will occur. Because most sex offenders in the standard probation and the specialized probation programs were ordered to undergo treatment, we could not obtain a matched untreated group; this design limitation precludes addressing overall treatment effectiveness.

## **Chapter II. Methodology for Identifying Groups that are at High-Risk for Recidivism and Treatment Failure**

An important part of this impact analysis is finding groups of offenders that are at a high-risk of recidivism or treatment failure by identifying combinations of offense and offender characteristics that provide optimal accuracy at predicting these outcomes. We considered 54 potential characteristics that could be related to recidivism or treatment failure; these characteristics are referred to as “predictors”. Appendix A provides frequencies and valid percentages of these 54 predictors for each of the three counties. There are eight demographic predictors: current age, race, current employment status, whether on welfare, income level, educational level, marital status, and number of biological or adopted children in the offender’s custody. There are eight measures of prior record: age at which criminal offending began, total number of prior arrests; number of prior arrests for drug crimes; number of prior arrests for sex offenses; number of prior arrests for violent crimes; number of prior arrests for misdemeanor crimes; number of prior arrests for property crimes, and total number of prior convictions. There are five predictors of probation conditions: whether ordered no contact with victim, whether ordered no contact with minors, number of months in jail, number of hours of community service, and whether on standard probation or specialized sex offender probation. We considered ten characteristics of the offense: statutory type of current offense, total number of charges, number of victims, relationship of offender to victim, gender of victim, age of youngest victim, whether an offender used force, whether penetration occurred (no, yes vaginal, yes oral, yes both vaginal and oral, yes anal or

some combination with anal), number of months abuse had been occurring and profile of sex offending (only hands on, only hands off offenses, both hands on and hands off).

We considered four measures related to clinical presentation at the time of the treatment evaluation: acceptance of responsibility for the offense, remorse for the offense, blame placed on victim, and reporting of additional undetected crimes in the past. There are eleven measures related to psychological and social adjustment: whether offender used alcohol, illicit drugs, or both, whether probation officer or therapist recommended substance abuse treatment, prior treatment for substance abuse, prior mental health treatment, presence of clinical depression, presence of a major mental illness, whether offender has had suicidal thoughts or attempts, shows a history of impulsive/compulsive behavior, was physically or sexually abused as a child, relies on significant others for support, and is in a sexually active relationship with an adult. We also created a measure of psychopathic deviancy from elevated MMPI or MCMI scores or diagnosis of the therapists, and created a measure of sadistic behavior using fantasies for sadistic sex acts, psychopathic deviant, and problems with aggression. We could not use these two measures in DuPage and Winnebago Counties due to the unavailability of such data. There are six measures of the offender's sexual preferences or fantasies: sexual orientation, number of paraphillia, whether offender denies deviant fantasies, is sexually aroused by children, fantasizes about hands off sex acts, and whether offender admits any other deviant sexual fantasy. We could not use measures of sexual preference in the Winnebago County analyses due to the large number of missing data.

Using these predictors, we performed statistical analyses to determine which predictors provided useful information to classify offenders into low, moderate, moderate

high, and high-risk categories. Characteristics that accurately predict whether offenders were classified as one category (e.g., no new arrest for sex crimes) or the other category (new arrest for sex crime) of an outcome variable such as sexual recidivism beyond what accuracy can be achieved through chance are called “significant predictors.”

Significance simply means that information obtained from the predictor does better than chance at accurately classifying offenders into either the no new arrests or new arrest category.<sup>1</sup> To determine the significant predictors of these six outcome variables, we employed a statistical tool that provides the maximum possible accuracy in classifying cases. This tool is called optimal discriminant analysis (ODA).<sup>2</sup>

In order to determine the relative performance of each significant predictor, we used the percentage of total theoretical possible improvement in classification accuracy achieved with the predictor—above the classification accuracy that could be achieved based only on chance. This measure is a standardized test statistic called the “effect strength for sensitivity” (ESS). ESS can range between 0 and 100, where 0 means no improvement in classification accuracy above chance, and 100 means that the predictor explains all variation (errorless classification). Predictors can be ranked as weak, moderate, or strong, based on the ESS. ESS < 25% indicates that a predictor provides

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<sup>1</sup> In order to determine whether a predictor does better than chance at predicting the outcome variable, we used standard statistical significance criteria. For all analyses statistical significance refers to the small probability of making a false claim that a predictor is related to new arrests when it actually will not predict new arrests in future samples. This is known as the Type one error rate or  $p$ . The Type one error rate,  $p$ , was assessed as an exact permutation probability, and for each comparison  $p < .05$  was used to establish statistical significance. This probability level was chosen to maximize the power of detecting significant predictors while still maintaining a relatively low probability of making a Type one error.

<sup>2</sup> Parametric analyses were inappropriate due to non-normality and range restriction, and traditional nonparametric analyses were inappropriate due to many tied data values (Soltysik & Yarnold, 1993; Yarnold & Soltysik, in press).



only weak accuracy in classification, ESS between 25% to 49% indicates moderate accuracy in classification above chance performance, and ESS equal to 50% or higher indicates strong accuracy in prediction above chance performance.

In addition to the strength of a predictor, it is important to know whether the predictor would perform at the same level of accuracy at classifying a new set of cases; predictors are generalizable if they have the same accuracy at classifying cases (measured by the ESS) in the new sample as in the original sample. Thus, significant predictors that will not replicate in a new data set have different ESS's in the original and new sample. We report whether a predictor was generalizable or ungeneralizable.<sup>3</sup> Only generalizable predictors were used to build a model.

Another factor that can affect the ability of predictors to classify accurately a new sample of data is the number of cases in each category of the outcome variable. All predictor variables reported have generalizable accuracy in classification of cases, as assessed using jackknife analysis, irrespective of the percentage of cases classified as one category of the outcome variable (e.g., new arrests).<sup>4</sup>

Finding characteristics that predict recidivism or treatment failure for the entire sample is an important first step, but in order to identify high-risk groups researchers must determine how to combine these significant predictors. Past research has generally assumed that significant predictors of treatment failure or outcomes related to recidivism

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<sup>3</sup> A jackknife validity analysis was used to assess how generalizable each significant predictor would be in classifying a new sample of data; the jackknife validity analysis employed was a leave-one-out (LOO) analysis where classification for each observation is based on all data except the case that is being classified.

<sup>4</sup> An efficiency analysis was conducted to assess how well a predictor performed over all possible base rates of the outcome variable. The outcome variable, however, could not have all cases classified in only one of the categories (e.g., all offenders are responsive and none are classified as unresponsive) (Ostrander, Weinfurt, Yarnold, & August, 1998).

could be combined in some linear (addition) method. Most prior studies have utilized linear statistical procedures (e.g., OLS regression, and logistic regression) to predict recidivism, which do not provide information about how to combine the significant predictors, may provide suboptimal models, and are rarely validated. We employed Classification Tree Analysis (CTA) to determine explicitly the combination of predictors that identify the clusters of offenders who are at low, moderate, moderately high, and very high risk to commit new crimes or fail in treatment. The CTA model does not assume a linear combination and combines significant predictors to provide optimal accuracy in the identification of which patterns of variables present a higher risk.<sup>5</sup> In this analysis, there are two methods that can be used to select which variable begins the tree model. One method, hierarchically optimal CTA, begins the tree with the generalizable statistically significant predictor that has the strongest predictive accuracy when using all the cases in the sample. The second method, globally optimal CTA, examines all possible models and begins the tree with the variable that produces the strongest CTA model. For each analysis, we typically used the hierarchal CTA method due to the numerous reliable predictors. In order for the predictor to enter a model or serve as the root (initial) variable of the tree, it had to make theoretical sense (as expected from the prior literature) and have the strongest generalizable ESS.

Our analyses represent a major advancement over previous studies on recidivism, treatment failure or probation outcomes in three critical ways. First, few studies have

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<sup>5</sup> Classification Tree Analysis (CTA) has been shown to have better predictive and classification accuracy than alternative linear (logistic, discriminant analysis, stepwise OLS regression) and nonlinear (CHAID, CART) statistical classification methodologies (Soltysik & Yarnold, 1993; Soltysik & Yarnold, 1994; Yarnold, 1996; Yarnold & Soltysik, 1991).

examined the predictors of outcome measures for samples of sex offenders on probation. Second, a recent meta-analysis of the predictors of recidivism for sex offenders primarily released from prison or private hospitals or from outpatient treatment clinics noted the lack of attention paid to how predictors should be combined (Hanson & Bussiere, 1998). Third, most prior research has not assessed the stability of their prediction models, or how well these models perform with samples of different percentages of treatment failures. The presented models contain only predictors that remained generalizable and stable in jackknife validity analysis.

Another critical part of this impact analysis is to determine how effective the specialized sex offender program compared to the standard probation program is at lower recidivism rates through deterring or changing sex offenders so that lower recidivism rates result. In addition, specialized sex offender probation program may serve to provide higher detection of sexual offending by sex offenders who may not be deterred or may be resistant to treatment. We design the study so that a comparable sample of sex offenders from standard probation served as a control group to compare to a sample of sex offenders from the specialized sex offender probation programs in each county. We conducted Cox Proportional Hazard Survival Analysis to estimate recidivism rates. Survival analysis has numerous advantages over comparing simple percentages of sexual recidivism, which we describe in the section on comparing outcomes of the control and grant sample.

### **Chapter III. Long-term Impact Analysis of Lake County**

Lake County is the State's third largest county with a 1990 census population of 516, 418. Its main population center and the county seat is the city of Waukegan, which is approximately 45 miles north of the city of Chicago. Lake County is part of the 19<sup>th</sup> Illinois Judicial Circuit, which also includes McHenry County. The sex offender program, however, is limited to Lake County. The probation department, or more officially the Lake County Court Services Division, serves both adult and juvenile offenders. The department caseload in 1997 when the grant program began consisted of 4,141 adult cases and 567 juvenile cases. Adult Court Services, as of July 1998 had a staff of 54 probation officers, 5 supervisors, 5 probation clerks and 7 support staff. Adult caseloads in the department as a whole averaged approximately 111 in 1997.<sup>6</sup>

#### **A. Defining Characteristics of Specialized Sex Offender Probation Compared to Standard Probation**

The manner by which standard probation sex offender (control) and specialized probation sex offender (grant) cases were handled were compared on eight factors: Target population, specialization, caseload, contact standards, special conditions, administrative sanctions, communication with treatment providers and treatment procedures. Findings indicate that the essential difference between the control and grant cases in Lake County centered upon specialization, caseload and supervision standards. The Lake County probation department had established a sex offender unit in late 1995

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<sup>6</sup> Population and department data reflect the situation as of 1997 when the specialized sex offender program began unless otherwise noted.

with officers carrying a mixed caseload of regular and sex offender cases. Caseloads averaged approximately 120 cases per officer. The sex offender grant program provided two surveillance officers who devoted full time to the community supervision and surveillance activities of sex offender cases assigned to probation staff in the sex offender unit. The hiring of two additional sex offender unit specialists resulted in caseload reductions to approximately 80 cases per officer of which 40 were sex offender cases. While unit staff continued to carry a mixed caseload, the two surveillance officers handled sex offender cases only.

Prior to the specialized sex offender program, the contact standard maintained for sex offenders in Lake County was the Administrative Office of the Illinois Courts' (AOIC) standard for maximum supervision cases of two face-to-face contacts per month and one field visit every other month. The specialized program's contact standards were much more demanding, consisting of a required three field contacts per month in addition to two face-to-face office contacts per month. While the Lake County program experienced some difficulty in meeting its demanding contact standards, the program averaged approximately four face-to-face contacts per month, two above the AOIC standard, and more than doubled the AOIC field visit standard of one every other month to reach an average of 1.7 per month.

The standard probation sex offender and the specialized sex offender programs did not differ on target populations. Both programs served offenders convicted of any misdemeanor or felony offense or offenders convicted of other offenses that had a sexual component. The assignment of special conditions for sex offenders in both programs was an essentially informal but effective process under which sex offenders were required to

meet a set of special conditions. Typical special conditions for sex offenders prohibited contact with the victim (s), and contact with minors. They required the offender to leave the home of the victim and made sex offender treatment mandatory. Both programs used a set of administrative sanctions to address minor violations rather than automatically refer the case back to court, though the grant program formalized these administrative sanctions whereas the standard probation program left it up to the discretion of each individual probation officer. These sanctions were divided into three levels of increasing severity depending on the seriousness of the violation. Typical sanctions included an increase in reporting frequencies, restrictions on travel, curfew, increased drug/alcohol testing, and increased surveillance. The treatment under both programs was essentially similar. Participation in sex offender group therapy was mandatory in most cases and there was a formal process of probation officer-treatment provider communication in place for both programs.

#### 1. Comparison of Grant and Control Sample on Probation Conditions

Lake County utilized a set of 15 special conditions for sex offenders for both the standard sex offender probation (control) and the specialized sex offender probation (grant) cases. Key conditions required the offender to actively participate in treatment, to avoid contact with minors including a prohibition against residing with any child under 18, loitering near where the victim resides, loitering near areas primarily used by children or accepting employment that would involve direct contact with children. Offenders were also required to register as sex offenders, to not possess pornographic material in any form, not use 900 phone numbers or use computers and other devices in violation of

Illinois Statutes related to sexual offenses. In addition, the court could impose additional requirements on sex offenders. We compared the control and grant samples on court imposed requirements. We found that, in many instances, more of the control offenders than grant offenders had special conditions as part of their probation especially conditions relating to no contact with the victim or children. Findings are presented in Table III.1.

Over two-thirds (69.9%) of the offenders in the grant sample had conditions restricting contact with the victim (10.7% only unsupervised contact; 59.2% no contact whatsoever). Slightly more, (80.0%) of the control sample had such conditions (9.6% only unsupervised contacts; 74.0% no contact whatsoever). While 48.3% of the grant sample had conditions restricting contact with minors (17.3% only unsupervised contacts; 25.0% no contacts whatever) a significantly higher percentage (56.7%) of the control sample had such conditions, particularly only unsupervised contacts (36.5%)  $X^2 (2) = 9.92, p < .007$ ). A higher percentage of the control offenders (24.3%) were prohibited from contact with the victim's family than was the case for grant offenders (17.3%).

There were also few real differences in the use of conditions requiring polygraph or plethysmograph testing, random urine testing, community service, and work release assignment. Most of the grant (93.3%) and control (98.1%) offenders did not have a condition requiring either a polygraph or plethysmograph test. A similar percentage (25.0%) of the grant offenders than the control offenders (18.3%) were required to undergo random urine testing. It should be noted that absence of a specific condition for such testing does not mean that such tests, especially polygraph examinations and urine testing, were not done. Similar proportions of the control cases (35.5%) than the grant cases (29.8%) were required to perform some hours of community service.

There were also no real differences between the two sample groups in conditions requiring curfew, victim restitution, or substance abuse treatment. Virtually all offenders in both groups (control, 91.3%; grant, 94.2%) did not have a curfew condition. Over 80% in both groups (grant offenders 80.6%; control offenders 83.7%) were not required to pay victim restitution. Slightly less than 30% of both groups were ordered to undergo substance abuse treatment.

On the other hand, a significantly higher proportion of grant offenders (35.8%) than control offenders (19.6%) were required to spend some time in jail as an initial condition of their probation,  $X^2 (1) = 6.13, p < .02$ . Allied to this was a work release condition with 19.8% of the grant offenders and 23.3% of the control offenders being required to participate in a work release program.

Almost identical percentages of the grant offenders (29.8%) and the control offenders (27.9%) were required to participate in substance abuse treatment. On the other hand, a significantly higher proportion of control offenders (14.9%) than grant offenders (6.5%) were required to participate in mental health assessment or treatment,  $X^2 (2) = 10.91, p < .01$ . A significantly higher percentage of control offenders (96.2%) than grant offenders (84.6%) were required to participate in sex offender counseling ( $X^2 (1) = 7.97, p < .01$ ). Two-thirds (67.3%) of the control offenders and 48.1% of the grant offenders had other conditions as part of their probation,  $X^2 (1) = 7.88, p < .01$ . Finally, a similar percentage of control offenders (11.5%) and grant offenders (9.6%) were required to stay away from where the sex offense occurred.



**Table III.1. Comparison of Lake County Control and Grant Samples on Court Imposed Special Conditions**

| <b>Special Conditions</b>                  | <b>Lake County Control Sample</b> | <b>Lake County Grant Sample</b> |
|--|-----------------------------------|---------------------------------|
| No unsupervised contact with victim        | 10 (9.6%)                         | 11 (10.7%)                      |
| Ordered to stay away from victim           | 77 (74.0%)                        | 61 (59.2%)                      |
| Curfew imposed                             | 9 (8.7%)                          | 6 (5.8%)                        |
| No unsupervised contact with minors        | 38 (36.5%)                        | 18 (17.3%)                      |
| Ordered to stay away from minors           | 21 (20.2%)                        | 26(25.0%)                       |
| Ordered to serve time in jail              | 18 (19.6%)                        | 34 (35.8%)                      |
| Sex offender counseling ordered            | 199 (96.5%)                       | 88 (84.6%)                      |
| Ordered to pay victim restitution          | 17 (16.3%)                        | 20 (19.4%)                      |
| Substance abuse treatment ordered          | 29 (27.9%)                        | 31 (29.8%)                      |
| Ordered to perform community service       | 40 (38.5%)                        | 31 (29.8%)                      |
| Ordered to stay away from victim’s family  | 25 (24.3%)                        | 18 (17.3%)                      |
| Ordered to take polygraph                  | 1 (1.0%)                          | 6 (5.8%)                        |
| Ordered to take plethysmograph             | 0 (0.0%)                          | 1 (1.0%)                        |
| Work release ordered                       | 24 (23.3%)                        | 20 (19.8%)                      |
| Random urine testing ordered               | 19 (18.3%)                        | 26 (25.0%)                      |
| Mental health assessment ordered           | 17 (16.3%)                        | 10 (9.6%)                       |
| Mental health treatment ordered            | 14 (13.5%)                        | 3 (2.9%)                        |
| Ordered to stay away from forest preserves | 1 (1.0%)                          | 1 (1.0%)                        |
| Ordered to stay away from other locations  | 12 (11.5%)                        | 10 (9.6%)                       |
| Other special conditions ordered           | 70 (67.3%)                        | 50 (48.1%)                      |

In summary, our findings indicate that in Lake County sex offender conditions were applied to both control and grant offenders. While a number of differences indicating that more of the control offenders had specific conditions attached than was the case for grant offenders, only four of these differences were statistically significant. There was also a significant difference in the condition requiring time in jail, which was more frequently applied to grant offenders than control offenders. Differences found in the no victim or no minor contact conditions might be due to research methodology in that coders coded a no contact condition only if it was a specific condition on the court document. However, all grant offenders were required to have no contact with victims or minors.

## **B. Profile of Lake County Grant and Control Samples**

Part of the research design for the impact evaluation included a control sample of sex offenders who were convicted for the same crimes as the grant sample, but who were sentenced to standard probation. Before comparing the control and grant samples on recidivism, we examined whether the samples have similar distributions on characteristics that prior studies have consistently found to be related to a higher risk of sexual recidivism. We first compare the grant and control samples to ensure that the control sample is, in fact, a legitimate comparison group. If the control and grant samples differ on important risk characteristics, the analyses will equate the two groups by entering the characteristics in the survival analysis before determining whether there is a difference between the control and grant group.

The research team coded information for 104 offenders in the grant sample and 104 offenders in the control sample. All cases that were sentenced between July 1997

and May 1999 were included in the grant sample. The research team selected control cases from generated lists of sex offenders on standard probation between 1994 and July of 1997. All coded information came from probation department case files, except information on criminal history, which was coded from rap sheets obtained from the Illinois State Police. The case files generally included a demographic intake interview completed by the probation officer shortly after sentencing, a police report, a listing of the offender's prior arrests and convictions, a listing of the offender's probation conditions, a list of all charges from the original indictment and a treatment evaluation. The treatment evaluations generally included an evaluation written by the treatment provider after an initial interview, an ABEL assessment, and for some offenders the file included scores on the MMPI or MMCI.

In our statistical analyses, we selected a probability level of .01 as significant. Due to the high number of statistical tests performed, it is common to find differences at .05 because by chance one comparison out of 20 comparisons should be significant. Thus, we selected a lower probability to reduce the possibility of labeling the two groups as different when in reality they were similar. We did not use the Bonferroni adjustment (dividing .05 by the number of tests conducted) because it required a much smaller probability that may increase the error of labeling the two groups as similar on a characteristic when in fact they were different. Thus, a probability of .01 as the significance requirement attempts to balance these two kinds of errors (commonly known as Type II and Type I errors, respectively).

## 1. Comparison of Grant and Control Samples on Demographic Characteristics

In order for the control sample to be a legitimate comparison group, they must have similar characteristics to the grant sample on characteristics that may affect recidivism. Based on statistical tests, the grant sample and the control sample are similar on all demographic characteristics, except receiving public aid.

The grant and control sample are similar on age, ethnicity, marital status, and employment. Both samples are relatively young with a mean age of 31.5 for the grant sample and 34.1 for the control sample. A substantial percentage of the control (20.2%) and grant (32.7%) offenders are between the ages of 18 and 24, with the youngest age at the time of conviction being 17 and the oldest age being 70.

Caucasian offenders are the majority of offenders in both the grant (60.6%) and control (67.3%) samples. Hispanic/Latino-Americans comprise the next largest proportion of offenders in the grant (23.1%) and control (19.2%) samples. African-Americans represent less than 14% of each sample. Both samples contain one Native American and there are also a few Asian-Americans (one in the control and two in the grant sample). Approximately half of each sample has never been married, 30% are currently married, 14% are divorced, and 7% are separated. Over half of both samples are currently employed full-time (67% in grant sample and 52.9% in the control sample), about one quarter is unemployed (21.4% in grant sample and 29.8% in the control sample), and the remainders are employed part-time or for an unspecified amount of time.

A similar percentage of control (39.1%) and grant (43.2%) offenders reported living in poverty at the time of the intake interview, making less than \$13,500 per year.

Roughly twenty percent of the grant (20.0%) and control (23.9%) samples made between \$13,501 to \$20,000 a year, and 26.1% of the control and 17.9% of the grant sample made \$20,001 to \$30,000 a year with the remainder percentage making more than \$30,000 a year. The grant sample is slightly better educated than the control sample, though a similar small percentage of control (8%) and grant (6%) samples completed a college degree. About twice as many control offenders (44.6%) compared to grant offenders (24.8%) failed to complete high school. About twice as many grant offenders (40.6%) than control offenders (26.8%) have some additional trade or college education after the high school diploma.

The grant and control sample show significant differences on welfare status. Most offenders in both samples do not receive public aid, but a greater percentage of control offenders (19.4%) compared to grant offenders (6.9%) did receive public aid while on probation,  $X^2(1) = 6.79, p < .009$ . Thus, though control and grant samples have similar annual incomes, control offenders are more likely to receive public aid.

In addition to these basic demographic variables, we collected information on offenders' social environment and their mental health adjustment. The grant and control samples were similar on ten measures of social environment and mental health adjustment, but differed on three characteristics, substance use, prior mental health treatment, and history of suicide attempts.

A similar percentage of control (67%) and grant (60%) offenders are currently engaged in a sexually active relationship with an adult partner. The majority of offenders (80%) in both samples are heterosexuals, 16% of the control and 12.9% of the grant samples are bisexuals, and the other offenders are homosexuals. Approximately half of

the grant (53.7%) and control (44.2%) offenders had significant others that they relied on for support, whereas over one-third were generally alone and the remainder were in social environments that contributed to deviance.

A history of being a victim of sexual abuse as a child has been an inconsistent high risk factor of sexual recidivism in past studies. The childhood background was similar with the majority of control (58.4%) and grant (68.5%) offenders growing up without either sexual or physical abuse. Approximately one-quarter of both samples experienced sexual abuse alone or in combination with physical abuse.

The grant and control samples were similar on current mental health status. About 56% of both samples were diagnosed with a current mental health problem. Mental health problems included a wide range of diagnoses including pedophile, paranoid schizophrenia, bi-polar disorder, major depression, obsessive/compulsive disorder, psychopathic deviancy, borderline personality, sadistic personality, personality disorders with narcissistic & schizoid features or with passive-aggressive and narcissistic features, and adjustment disorders with depressed mood. Approximately 35% demonstrated clinical depression, though they were able to function. About 28.5% of sex offenders in both samples used alcohol or drugs immediately before committing sexual crimes. The court or treatment providers recommended substance abuse treatment for about one-third of both samples.

Only a few studies have examined whether problems with anger, aggression, or impulse control place sex offenders at a higher risk for committing new sex crimes. Additional research is needed to examine the contribution of these characteristics. About half of the control (54.3%) and grant (47.4%) samples had no history of aggression, 38%

of the control sample and 43.3% of the grant sample had a history of mild or moderate aggression. Only about 8% of both samples showed a history of extreme or consistent aggression. The samples also did not differ on problems with anger. About 25% of both samples had some minimal anger about the offense and 15.5% of the control sample and 28.8% of the grant sample had consistent problems with anger or a revenge motive. The samples also were similar on problems with impulsive or compulsive behavior. About 26% of the control sample and 34% of the grant sample showed little evidence of problems with impulsive or compulsive behavior, and 44% of both samples were occasionally impulsive. About 30% of the control sample and 20% of the grant sample showed a history of compulsive or impulsive behavior.

The samples differed on current alcohol and illicit drug use, past mental health treatment, and prior history of suicide attempts. Most offenders (96.1%) in the control sample compared to 75% of the grant offenders disclosed either alcohol or drug use. About half of each sample used both alcohol and illicit drugs, and 25.5% of the grant sample and 30.4% of the control sample reported using only alcohol,  $X^2(3) = 22.62, p < .001$ . Though the majority of offenders in the control (70.3%) and grant (81.7%) sample reported no previous or current thoughts or attempts of suicide, a significantly greater percentage of the control sample (17.6%) than the grant sample (3.2%) had a history of suicide attempts,  $X^2(2) = 10.26, p < .006$ . A greater percentage of offenders in the control sample (41.4%) than in the grant sample (23.7%) had previous mental health treatment,  $X^2(1) = 6.46, p < .01$ . Overall, the control sample shows somewhat lower socio-economic status and a previous history of mental health problems combined with greater illicit drug or alcohol use.

## 2. Comparison of Control and Grant Samples on Offense Characteristics

The grant and control samples showed some significant differences in the type of current convicted offense. The samples did not differ on the percentage of offenders convicted of criminal sexual assault (7.7% in the control sample and 13.5% in the grant sample). The control sample had a significantly higher number of offenders convicted of aggravated criminal sexual abuse (45.2%) than did the grant sample (28.8%). Similarly, the control sample had a significantly higher number of offenders convicted of criminal sexual abuse or indecent solicitation (25%) than did the grant sample (11.5%). The grant sample had a significantly higher number of offenders convicted of other sex offenses (21.2%) than did the control sample (11.5%) and a significantly higher number of convictions for public indecency (25% grant; 10.6% control), ( $X^2(4) = 19.57, p < .001$ ).

The control (15.2%) and grant (7.9%) samples had a similar number of counts for family related charges. In both samples, approximately 20% had at least one count for aggravated criminal sexual abuse or criminal sexual assault against an adolescent, and approximately 14% had at least one count of criminal sexual abuse. The control sample (33%) compared to the grant sample (10.1%) had a significantly higher percentage of offenders who were charged with a count of aggravated criminal sexual abuse or criminal sexual assault against a child less than 13 years of age.

Nine studies have found that the following three offense characteristics do not significantly increase the risk of sexual recidivism: violating very young children, penetrating the victim during the sex offense, and using physical force on the victim during the sex offense. These three characteristics, however, certainly increase the



seriousness of the offense through preying on helpless young children, committing a clear violation of sexual norms, and using force to achieve the sex offense. In Illinois, committing a sex offense against a child younger than nine years old is a factor that increases the seriousness of the offense and potential penalty. The empirical literature, however, shows no significant increase in the risk of sexual recidivism for offenders who commit crimes against younger children (for a review see Hanson & Busierre, 1998). This finding may occur due to measurement error or due to the fact that crimes against young children are really not related to risk. Measures of whether sex offenders prey upon very young children may be unreliable due to the fact that many incidents against young children may not be documented in the files. Young children may be less likely to report the incidents due to their lack of awareness and more limited ability to communicate their victimization. Furthermore, many sex offenders who commit crimes against young children also commit crimes against latency children and adolescents as well as commit hands-off crimes; this measure thus does not capture a group of pedophiles that specializes in preying upon young children. This measure also can be distinguished from pedophilia in another way: pedophilia requires an exclusive sexual preference for children whereas some men who violate young children do not have any objective or subjective sexual preference for children or have both a sexual preference for children and adults. Thus, preying upon young children should not be confused with pedophilia; it is a very unreliable indicator that an offender is a pedophile.

Both the grant (23.1%) and the control sample (17.8%) were similar on the percentage of offenders who used physical force to achieve their sex crime. A little over half of the control (58.8%) and grant (51%) did not penetrate their victims. When

penetration occurred, vaginal penetration was most common whereas only 3.9% of the control and 6.9% of the grant sample used only oral penetration. A small subset of the control (7.8%) and grant (19.6%) used anal penetration or anal penetration in combination with oral or vaginal.

The majority of the control and grant sample victimized children, with only 23.9% of the grant sample and 7.8% of the control sample having violated adults. About 21% of both samples attacked children nine years old or younger and 21% of both samples attacked children between the ages of 14 and 15. A substantial percentage of the control (32.2%) and grant (22.8%) samples also focused on children between the ages of 10 to 13.

Hands-off offending has also been an inconsistent predictor of sexual recidivism in prior studies. Some studies report that offenders who are interested in hands-off sex offenses such as exhibitionism and voyeurism are more likely to re-offend because such offenders were compared to offenders who committed exclusively hands-on offenses (e.g., rapists, child molesters). However, an interest in hands-off offenses may increase the risk of sexual recidivism for those who have committed a “hands-on” offense, in that such interests increase the scope of illegal sexual behavior in which the offender may potentially engage. We created a combined objective and subjective measure of interest in hands-off offenses that classified an offender as being interested in such offenses if: (1) he showed an objective preference for voyeurism or exhibitionism on the ABEL assessment; (2) he had past arrests for public indecency; (3) he admitted to his treatment provider during initial interviews that he had committed a hands-off offense in the past or had fantasized about committing a hands-off offense, or (3) he admitted to his probation

officer during the initial intake interview that he fantasizes about or has committed past hands-off offenses. We found that approximately one-third of the control and grant samples showed at least some interest in hands-off offenses. We also examined the profile of the type of crimes that offenders have committed in the past and created a three category variable of only hands-on crimes, only hands-off crimes, and both hands-on and hands-off crimes. A similar percentage of the control (69.2%) and grant (66.3%) samples committed exclusively hands-on crimes. However, the control group (21.2%) compared to the grant sample (8.7%) was significantly more likely to have a combination of both hands-on and hands-off and less likely to commit exclusively hands-off crimes (9.6% in control and 25% in grant sample),  $X^2 (2) = 12.62, p < .002$ . Thus, it appears that the difference in current conviction does not represent a difference in offending behavior because both the grant and control sample have a similar propensity to commit hands-off offenses, but the control sample is more likely to have a mixed offense history of both hands-on and hands-off offending.

Prior research also shows that offenders who lack remorse or acceptance of responsibility at the initial treatment evaluation generally do not have a higher risk for sexual recidivism (see Hanson & Busierre, 1998). The control and grant samples were similar in their acceptance of responsibility with 28.7% of the control and 19.1% of the grant group fully accepting responsibility for all aspects of the offense. The majority of both samples minimized their responsibility (58.6% of the control and 67% of the grant sample) with approximately 13% in both sample denying all aspects of the offense. Most offenders in both the grant (76.6%) and control (65.9%) sample showed minimal or no

remorse for their offense at the time of intake, though a little over one-third of the control sample and about one quarter of the grant sample expressed a great deal of remorse.

Few studies have examined the number of months that the abuse had been occurring prior to the offender being arrested, in part because it is difficult to obtain a reliable measure of this characteristic. About 45% of both the control and grant samples committed their offense only on one occasion. The grant and control samples did not differ on number of months that the offending occurred. Only 17.1% of the grant sample and 22.8% of the control sample continued offending for over four years, and 9.6% of the grant sample and 14.1% of the control sample continued their offending between one and four years. The remainder of offenders committed offenses for one month to one year.

Sex offenders have a variety of appropriate and inappropriate sexual preferences and fantasies. Deviant sexual preferences involving children, force or hands-off offending are called “paraphilia” in the literature. It is unclear whether certain fantasies indicate a higher risk for sexual recidivism, or whether a higher number of paraphilia is related to higher risk for sexual recidivism. Only a sexual preference for children has been consistently and strongly related to sexual recidivism in the literature. The control and grant sample did not differ in the number of paraphilia that were identified at the time of probation intake. The majority of the control (61.5%) and grant (69.2%) samples had one paraphilia involving only females or only males, and 20.2% of the control and 9.6% of the grant sample had two or more paraphilia involving only one gender. Less than 20% of the control and grant sample had paraphilia involving both males and females with approximately 9% of both sample having two or more paraphilia involving both males and females.

### 3. Risk Characteristics Related to Sexual Recidivism

Prior research has identified several characteristics of the offense that increase the likelihood that sex offenders will reoffend (for reviews see Hanson & Bussiere, 1998; Heilbrun, Nezu, Keeney, Chung, & Wasserman, 1998; and Harris, Rice, & Quinsey, 1998). Moreover, in a more recent study of the recidivism of incest offenders, total number of previous criminal arrests, total number of sexual arrests, age at first conviction, and psychopathic deviancy predicted general recidivism for any crime (Firestone et al., 1999). This study of incest offenders also found that deviant sexual arousal did not predict sexual recidivism, which is consistent with other prior research on incest offenders (Quinsey, Chaplin & Carrigan, 1979). Based on the lower rates of recidivism and possible different characteristics that predicted recidivism, Firestone et al. (1999) noted that research on recidivism should not combine child molesters and rapists, and that separate tools for predicting recidivism in these populations should be explored.

Risk assessment of sex offenders is still at a relatively crude stage. One clear shortcoming of prior research is that studies have not empirically tested how to combine significant predictors so that the correct high-risk groups are identified (Hanson & Bussiere, 1998). Moreover, most prior research has, out of necessity, relied on static characteristics of the offender and offense to create risk assessment instruments. For example, one of the easiest and popular formal instruments is the Rapid Risk Assessment for Sex Offender Recidivism (RRASOR). The RRASOR includes only four factors that increase risk: male victim, unrelated victim, prior sex offenses, and being released from prison (or an inpatient secured institution) before the age of 25. Prior sexual history is given greater weight with one point assigned for one prior conviction or two prior arrests;

two points assigned for three prior convictions or three to five prior arrests, and three points assigned for four or more prior convictions or six or more prior arrests. One clear shortcoming of the RRASOR is that it relies on only official criminal history and ignores prior but undetected crimes that are disclosed to probation officers or treatment evaluators. Certainly, specialized sex offender probation programs that attempt to obtain a full criminal history would achieve better prediction by using all prior detected and self-reported crimes. Little is known about how well these formal risk assessments will perform at predicting recidivism among sex offenders on probation.

Our research examines a sample of sex offenders on either standard or specialized sex offender probation and begins to examine how best to combine relevant risk characteristics to maximize accuracy in identifying high-risk offenders. We first compare the specialized and control sample on six characteristics that have been consistently found to increase the risk of sexual recidivism, and then examine how the samples compare on prior formal risk assessment instruments. The six characteristics that have been most consistently and strongly related to sexual recidivism are:

- ❑ If the offender victimized a stranger;
- ❑ If the offender victimized a person outside of their own family;
- ❑ If the offender victimized a male;
- ❑ Number of prior arrests for sex crimes and total number of prior arrests;
- ❑ If the offender has pedophilic sexual interests;
- ❑ If the offender has a psychopathic deviant personality.

The majority of offenders in the control (68.3%) and specialized (74.0%) samples committed sex acts against victims that were not related to them, with 13.5% of the

control and 29.8% of the specialized sample offending against a stranger. A similar percentage of control (15.9%) and specialized (20.2%) offenders committed acts against male victims and are at a higher risk of reoffending.

Prior sexual history is a significant and moderate predictor of sexual recidivism, and the total number of prior arrests is a reliable, but modest predictor (Hanson & Bussiere, 1998). Most formalized risk assessment scales such as the Rapid Risk Assessment for Sex Offense Recidivism (RRASOR), the Violence Risk Appraisal Guide (VRAG), the Sex Offense Risk Appraisal Guide (SORAG), the Structured Anchored Clinical Judgment (SACJ-MIN), and Static-99 treat prior sexual arrests and convictions as a high risk factor. Table III.2 shows that a greater percentage of the specialized sample than the control sample has a prior criminal history and has committed prior sex crimes. Whereas 65.4% of the specialized sample has been arrested at least once for a prior crime of any type, only 43.5% of the control sample has been arrested for a prior crime,  $X^2(1) = 11.14$ ,  $p < .001$ . The specialized sample (45.2%) compared to the control sample (17.6%) were more likely to be convicted of at least one prior crime,  $X^2(1) = 18.09$ ,  $p < .001$ . The samples did not differ on number of arrests for property offenses, misdemeanors, drug offenses, or violent offenses. Prior criminal history varied in the control sample with 17.3% arrested for a property crime, 11.5% arrested for a drug crime, and 11.5% arrested for a violent crime. Prior criminal history also varied in the specialized sample with 21.2% arrested for a property crime, 15.4% arrested for a drug crime, and 18.3% arrested for a violent crime. The Static-99, the Structured Anchored Clinical Judgment minimum (SACJ-MIN), and the Violence Risk Appraisal Guide (VRAG) treat prior violent arrests as a risk factor for sexual recidivism (Hanson & Thornton, 2000).

Studies generally have not postulated why prior criminal history is related to general recidivism for committing any crime. One possible reason is that offenders learn that the criminal justice response is quite lenient. If offenders are arrested, but not convicted, these offenders may conclude that they can beat the system. A significant proportion of the control sample (57.1%) and specialized sample (30.9%) had a prior arrest history, but were never convicted for any offense.<sup>7</sup>

Prior history of sexual offending is a risk factor for future offending. The samples differed significantly on prior arrests for sex crimes, with 26% of the specialized sample and only 8.7% of the control sample having a prior arrest for a sex crime,  $X^2(1) = 10.88$ ,  $p < .001$ . Though the specialized and control sample differ on formal arrest history, they are quite similar in prior sexual crimes when self-reported undetected crimes are also included. About 42% of both samples disclosed or were arrested for a prior sex crime, when the full disclosed history of sexual offending is considered.

Often times, probation departments do not collect information about objective sexual preference or psychopathic deviancy. Under these circumstances, the RRASOR may be used to obtain a rough estimate of risk of sexual offending. As stated previously, the RRASOR combines age of offending (18 to 25 as high risk), prior arrests for sex crimes, male victim, and unrelated victim to obtain a risk assessment. We computed RRASOR scores for the sex offenders in the control and specialized sample and found that the samples were not statistically different from each other on these scores. Table III.2 presents the distribution. Most offenders were in the lower risk groups. In prior validation studies of the RRASOR offenders scoring two or less had an average 5-year

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<sup>7</sup> A prior study by the Criminal Justice Information Authority, however, documented that rap sheets do not contain 50% of the convictions.



recidivism rate of 12.6%. Offenders who score 1 on the RRASOR such as older child molesters who violate girls outside their families or young child molesters who violate girls within their families and have no prior record have less than a 15% chance of reoffending within 10 years (Hanson, 1998).

Typically, the term pedophilia has been used in prior research to denote sex offenders who have an exclusive sexual interest in toddler or latency children. When such a definition has been used, pedophilia has been consistently related to a higher risk of sexual recidivism. Because many offenders do not honestly self-report sexual interest in children, the most reliable way of measuring interest in toddler or latency children is via an objective phallometric or ABEL assessment. In fact, a recent meta-analysis found that the strongest predictor of sexual recidivism was a deviant sexual interest in children as measured by an objective phallometric assessment (Hanson & Bussiere, 1998).

To measure pedophilic interests, we created a variable that combined both objective and subjective sexual preferences. We classified an offender as having pedophilic interests if: (1) he showed an objective preference for toddler (ages 2-4) or latent (ages 8-10) girls or boys on the ABEL assessment, or (2) he admitted to his probation officer or treatment provider during the initial intake interview that he fantasizes about touching or having sex with children, infants, or babies. The control and specialized samples did not differ in the number of pedophiles identified. We found that 18.3% of the specialized sample and 7.7% of the control sample had at least some objective or subjective interest in pedophilic behavior. For approximately 42% of both samples, an ABEL assessment was not completed and the objective sexual preference toward children was unknown.

**Table III.2. Comparison of Lake County Standard Probation Sample and Specialized Probation Sample on Risk Factors of Sexual Recidivism**

| <b>Possible Risk Characteristics for Recidivism</b>                     | <b>Lake County Control Sample</b> | <b>Lake County Grant Sample</b> |
|---|-----------------------------------|---------------------------------|
| <b>Relationship of offender to victim</b>                               |                                   |                                 |
| Close family member   | 17 (16.3%)                        | 12 (11.5%)                      |
| Other relative  | 14 (13.5%)                        | 10 ( 9.6%)                      |
| Acquaintance  | 57 (54.8%)                        | 46 (44.2%)                      |
| Stranger*   | 14 (13.5%)                        | 31 (29.8%)                      |
| Unknown   | 2 (1.9%)                          | 5 (4.8%)                        |
| <b>Gender of victim</b>   |                                   |                                 |
| Boy   | 14 (13.9%)                        | 14 (14.1%)                      |
| Girl  | 85 (84.2%)                        | 79 (79.8%)                      |
| Both boys and girls   | 2 ( 2.0%)                         | 6 (6.1%)                        |
| <b>Prior criminal history</b>   |                                   |                                 |
| <b>Total number of prior arrests for any crime**</b>                    |                                   |                                 |
| None  | 60 (57.5%)                        | 36 (34.6%)                      |
| One   | 17 (16.3%)                        | 17 (16.3%)                      |
| Two to four   | 11 (10.6%)                        | 25 (24.0%)                      |
| Five or more  | 16 (15.4%)                        | 26 (25.0%)                      |
| <b>Total number of prior arrests for sex crimes***</b>                  |                                   |                                 |
| None  | 95 (91.3%)                        | 77 (74.0%)                      |
| One or more   | 9 ( 8.7%)                         | 27 (26.0%)                      |
| <b>Total number of disclosed sex crimes (arrests and self-reported)</b> |                                   |                                 |
| None  | 62 (59.6%)                        | 59 (57.3%)                      |
| One   | 30 (28.8%)                        | 25 (24.3%)                      |
| Two or more   | 12 (11.5%)                        | 19 (18.4%)                      |
| <b>Score on the RRASOR</b>  |                                   |                                 |
| 0   | 25 (24.0%)                        | 20 (19.2%)                      |
| 1   | 50 (48.1%)                        | 40 (38.5%)                      |
| 2   | 29 (27.9%)                        | 41 (39.4%)                      |
| 3   | 0 (0%)                            | 3 ( 2.9%)                       |

| <b>Possible Risk Predictors of Sexual Recidivism</b> | <b>Lake County Control Sample</b> | <b>Lake County Grant Sample</b> |
|--|-----------------------------------|---------------------------------|
| <b>Objective sexual preference for children</b>      |                                   |                                 |
| Unknown  | 44 (42.3%)                        | 44 (42.3%)                      |
| No   | 41 (39.4%)                        | 52 (50.0%)                      |
| Yes  | 19 (18.3%)                        | 8 ( 7.7%)                       |
|  |                                   |                                 |
| <b>Is offender a psychopathic deviant?</b>           |                                   |                                 |
| Unknown  | 60 (57.7%)                        | 57 (54.8%)                      |
| No   | 33 (31.7%)                        | 25 (24.0%)                      |
| Yes  | 11 (10.6%)                        | 22 (21.2%)                      |
|  |                                   |                                 |
| <b>Score from the SACJ-MIN</b>                       |                                   |                                 |
| Low risk   | 15 (14.4%)                        | 14 (13.5%)                      |
| Medium risk  | 46 (44.2%)                        | 41 (39.4%)                      |
| High risk  | 43 (41.3%)                        | 49 (47.1%)                      |
|  |                                   |                                 |
| <b>Score from the Static-99</b>                      |                                   |                                 |
| Low risk   | 21 (20.2%)                        | 11 (10.6%)                      |
| Medium risk  | 51 (49.0%)                        | 31 (29.8%)                      |
| Medium high risk                                     | 27 (26.0%)                        | 46 (44/2%)                      |
| High risk  | 5 (4.8%)                          | 16 (15.4%)                      |

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Psychopathic deviancy as measured using objective instruments such as the MMPI or Hare's Psychopathy Scale is also a reliable indicator of high risk for sexual recidivism. Psychopathic deviancy is a clinical term that refers to offenders who have a personality disorder consisting of lack of conscience, inability to feel concern about other people, self-centeredness, and manipulative behavior to achieve what they want without regard to the welfare of others. Psychopathic deviancy has been found in various studies to be one of the strongest predictor of recidivism after controlling for background, demographic, and offense characteristics (Harris, Rice & Quinsey, 1998; Quinsey, Lalumiere, Rice, & Harris, 1995). The two samples did not differ statistically on

psychopathic deviancy with 10.6% of the control and 22% of the grant sample discovered to be psychopathic deviants.

To summarize, the existence of psychopathic deviancy, offenses against non-familial victims, offenses against strangers, offenses against boy victims, a pedophilic interest, and prior arrests for sex crimes place offenders in a higher risk category for sexual recidivism. The Structured Anchored Clinical Judgement (SACJ-MIN) considers all of these factors in making predictions about the risk of sexual recidivism. In the first step, five characteristics are scored: any current sexual offense, any prior sexual offense, any current nonsexual violent offense, any prior nonsexual violent offense, and four or more sentencing occasions. If offenders have four or more of these five factors, they are considered high risk. Only 4.8% of the control and 9.6% of the grant sample are considered high risk. If offenders have two or three factors, they are considered medium risk (43.3% of the control and 48% of the grant). In the second step of the SACJ-MIN, an offender's initial risk assessment is moved one category higher if he has two or more of eight characteristics: any stranger victims, any male victims, never married, convictions for hands-off sex offenses, substance abuse, placement in residential care as a child, deviant sexual arousal, and psychopathy. We coded information on seven of these eight factors with the exception of placement in residential care as a child. The majority of both the control (79.8%) and the grant (75.9%) samples had two or more of these high risk characteristics and were, therefore, increased one risk category. The grant and control samples were very similar on the score for these seven risk factors with 31.7% of the grant and 34.6% of the control samples having two of the seven characteristics and 44.2% of the grant and 45.2% of the control having three or more of the seven risk

characteristics. The control and grant samples did not differ on the final risk assessment from the SACJ-MIN: low risk (14.4% control and 13.5% grant), medium risk (44.2% control and 39.4% grant), and high risk (41.3% control and 47.1% grant).

The Static-99 is a combined scale of the RRASOR and the SACJ-MIN, and has better predictive accuracy than the RRASOR or the SACJ-MIN (see Hanson & Thornton, 2000). Its name indicates that it includes only static variables and was developed in 1999. Prior sexual history is scored the same way as in the RRASOR. Each of the following nine risk factors adds one point to the total score: (1) four or more prior sentencing dates; (2) any convictions for hands-off sex offenses; (3) current violent offense that is not of a sexual nature; (4) prior violence arrests that are not of a sexual nature; (5) any unrelated victims; (6) any stranger victims; (7) any male victims; (8) being between the age of 18 to 24.99 at the time of the offense; and (9) never lived with a lover for at least two years. Scores can range from 0 to 12, with a score of 6 or more in the high- risk category. The grant sample scores on the Static-99 ranged from 0 to 5, with 48 offenders (59.3%) in the low risk category (score of 0 or 1), 28 offenders (34.6%) in the medium-low risk category, and 5 offenders (6.1%) in the medium high- risk category (score of 4 or 5). By these formalized risk assessment instruments, Lake County probation department is serving a relatively low risk group of sex offenders. Time, however, will tell just how accurate these instruments are at assessing the risk of sexual recidivism while on probation and in the long term.

Probation officers and trainers should note the warning of Hanson and Thornton (2000): “Static-99 is intended to be a measure of long-term risk potential. Given its lack of dynamic factors, it cannot be used to select treatment targets, measure change,

evaluated (sic) whether offenders have benefited from treatment, or predict when (or under what circumstances) sex offenders are likely to recidivate.” (p. 132) Such warnings also apply to the RRASOR and other instruments. These instruments may have little predictive value in the short period of time that offenders are on probation. Moreover, only the SACJ-MIN includes pedophilia, objective sexual preference to children, and only the VRAG and SACJ-MIN include psychopathic deviancy; these factors, however, have been found to be the strongest predictors of recidivism (see Hanson & Busierre, 1998); the other formal risk assessments do not include such information because it often is not available. Specialized sex offender probation programs, however, should routinely collect information on objective sexual preferences and personality disorders and this information should inform risk assessments. Furthermore, research has not assessed the RRASOR’s or Static-99’s predictive value with probation samples or their accuracy at predicting probation compliance or remaining arrest-free of any new sex crimes. Our research may begin to forge such important lines of inquiry, and to improve upon current risk assessments.

### **C. Probation Outcomes for Lake County**

The research team gathered data on three measures of compliance with probation conditions: number of violation of probation (VOP) petitions filed, percentage of offenders that were revoked and resentenced to prison or other sanctions (revocations), and percentage of offenders that absconded from probation.

Probation officers have much discretion on when to file a VOP with the court. Instead of filing a VOP, probation officers may use informal sanctions such as warnings

or requiring a noncompliant offender to come to an extra office visit, complete a log of their daily activities for a certain period of time, submit to drug or alcohol testing, and other sanctions. Thus, the number of VOPs filed is not a measure of how compliant sex offenders are on probation, but is a better indicator of how often probation officers resort to the most severe sanction available and seek the court's assistance in controlling sex offenders. The control sample had a significantly higher average number of VOP (Mean = 2.04) compared to the grant sample (Mean = 1.10),  $t(91.5) = 5.1$ ,  $p < .0001$ . About 76% of the control sample had at least one VOP filed whereas only 58% of the grant sample had at least one VOP filed,  $X^2(1) = 7.3$ ,  $p < .007$ . A substantial proportion of the control sample (40.2%) and a very small percentage of the grant sample (3.8%) had two or more VOPs filed,  $X^2(1) = 39.8$ ,  $p < .0001$ . The grant sample (Mean = 16.32) and control sample (Mean = 15.23) were similar on the average number of months on probation until the first VOP was filed.

What type of conditions did sex offenders violate? The control and grant sample were similar on the kinds of conditions that they violated. In the first VOP, 15.8% of the control sample and 24.4% of the grant sample had missed at least one office visit. In the first VOP, a small percentage of the control (3.9%) and grant (5.0%) sample had contact with the victim. The VOPs also noted that a significant percentage of control and grant sex offenders also were noncompliant with treatment; this noncompliance, however, is addressed in the next section. In the first VOP, a large percentage of the control (72.4%) and grant (61.7%) sample violated additional conditions of probation beyond contact with the victim, missed office visits, and treatment noncompliance. These additional violations included failure to pay probation and court fees, new arrests, angry and abusive

treatment of probation officer or treatment provider, failure to complete public service hours, testing positive for illicit drugs, intoxication from alcohol, failure to register as a sex offender, failure to submit to HIV testing, leaving the state without permission, and refusing to allow probation officers to visit and search their homes.

Why did the probation officers in standard probation resort to VOPs more often than the probation officers in the grant sex offender unit? There are several explanations for this difference. The court may have been more responsive to the VOP filed by the grant probation so that a second VOP was unnecessary. The data, however, do not support this hypothesis. The court revoked 36.4% of the control sex offenders and 33.3% of the grant sex offenders when the first VOP was filed. The grant probation officers may have used more administrative sanctions before filing a first or second VOP, and the grant sex offenders may have become more compliant after the administrative sanctions or warnings. We do not have data to compare the control and grant sex offenders on number of administrative sanctions, though we do know that the grant probation officers filed numerous administrative sanctions against grant sex offenders in the year of 2000. Moreover, the administrative sanction program was not formalized in standard probation; thus, standard probation officers may have resorted to VOPs because they did not have a standardized way to administer less severe and more informal sanctions for noncompliance with probation conditions.

Though there was a difference in the filing of VOPs, the grant and control samples did not differ on the final probation outcomes of the percentage that terminated satisfactorily, the percentage that were revoked, and the percentage of offenders who absconded from probation. Table III.3 presents these findings. Approximately two-



thirds of the grant and control samples completed their probation satisfactorily. A satisfactory termination of probation, however, does not imply that the sex offenders were completely compliant. Many sex offenders had VOP filed or were given warnings or administrative sanctions and still were given satisfactory termination. Of sex offenders who were satisfactorily terminated, 15.7% of the control sample and 12.9% of the grant sample were arrested for or admitted to a new sex offense since being placed on probation. About 20% of the control and grant samples that were satisfactorily terminated admitted to or were arrested for a violent or sex crime.<sup>8</sup> Of those who had at least one new arrest for a sex crime including failure to register offenses, 48.6% of the control group and 34.4% of the grant group were terminated satisfactory whereas of those offenders without any new arrests for sex crimes 77.6% of the control group and 81.9% of the grant group were terminated satisfactory. Thus, new arrests for sex crimes is significantly related to whether probation is terminated satisfactory or unsatisfactory,  $p < .004$ . Some evidence that the grant sex offender probation was more stringent is revealed from the percentage of offenders who were satisfactorily terminated, but were arrested for a new offense of any type. Of those who terminated satisfactorily the control group (42.9%) compared to the grant group (28.6%) were somewhat more likely to be arrested during or after probation terminated,  $X^2(1) = 3.1, p < .078$ .

The grant and control samples also were similar on revocations and absconding. Whether new arrests were committed also was a significant predictor of whether an offender was revoked. Of those who were arrested for any new crime, 40.4% of the control and grant sample were revoked whereas only 12.8% of the control and 3.5% of

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<sup>8</sup> Lake County Probation Department routinely notifies the state's attorney's office of all new arrests. Courts sometimes do not revoke probation based only on a new arrest.

the grant sample were revoked when offenders were not arrested for any new crimes,  $p < .0001$ . Of offenders who were arrested for any new sex crime including failure to register as a sex offender, 50% of the grant sample and 43.2% of the control sample had their probation revoked whereas only 6.9% of the grant sample and 19.4% of the control sample had their probation revoked if they were not arrested for any new sex crime,  $p < .001$ . Thus, the court considered new arrests for sex crimes in making decisions about revocation, but new arrests alone was not either a necessary or sufficient reason to revoke an offender's probation.

**Table III.3 Control and Grant Samples in Lake County Compared on Probation Termination Status, Revocations, and Absconding**

| Sample  | % Terminated Satisfactorily | % Of Revocations | % Of Offenders who Absconded |
|---------|-----------------------------|------------------|------------------------------|
| Grant   | 67.3%                       | 20.2%            | 9.6%                         |
| Control | 67.3%                       | 27.9%            | 8.7%                         |

1. Predicting Whether a VOP is filed or not

The filing of a VOP indicates more about how probation officers administer severe sanctions for violation of probation conditions than about how noncompliant sex offenders are while on probation. Many sex offenders can be detected in noncompliance with several probation conditions including missing office visits, positive drug tests, and missing treatment appointments as well as having new arrests and still not have a VOP filed. How do probation officers generally decide whether to file a VOP? We examined this question using the entire sample of both control and grant sex offenders and conducted ODA to determine which characteristics were significantly related to the probation officer's decision to file a VOP. Eight characteristics were significantly related

to filing a VOP in the Lake County sample and were generalizable in LOO analysis. These characteristics are presented in Table III.4. Three clinical presentation variables were significant: Officers were more likely to file a VOP if an offender did not accept responsibility, did not express remorse, or denied committing the offense. Probation officers in the standard probation unit were more likely to file a VOP. Officers were more likely to file a VOP if an offender had prior mental health treatment, prior mental or drug treatment, or a history of impulsive behavior; perhaps, officers perceived these offenders as having a higher risk of committing a new sex crime. Probation officers also were more likely to file a VOP against offenders who had attacked acquaintances or strangers than against offenders who had attacked family members.

**Table III.4. Generalizable Significant Predictors of Whether a VOP was filed**

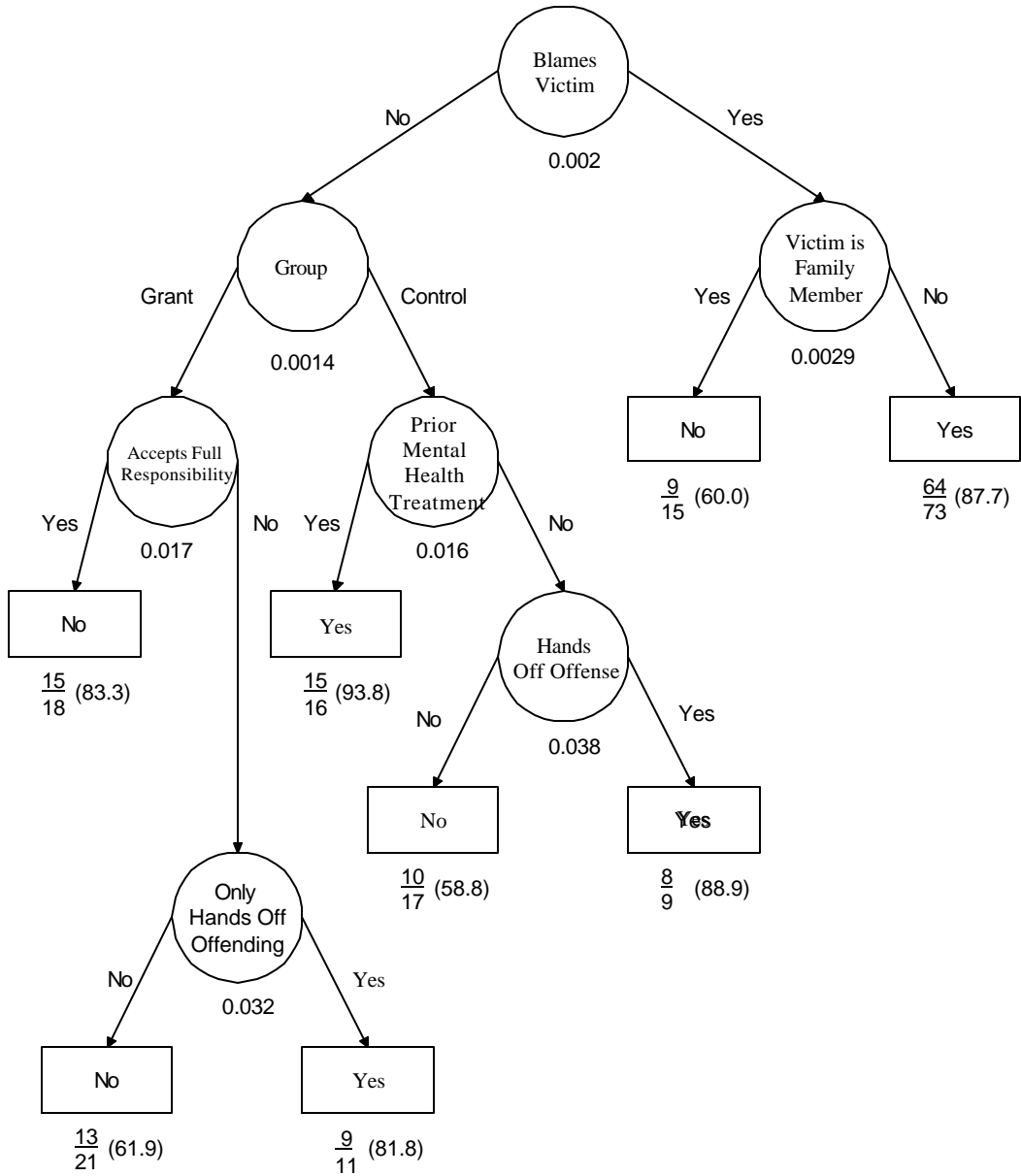
| <b>Predictors</b>                     | <b>Sample p-value</b> | <b>Stable ESS</b> |
|---------------------------------------|-----------------------|-------------------|
| Does not accepts responsibility       | .002                  | 26.1              |
| Does not expresses remorse            | .0079                 | 23.6              |
| Denies offense                        | .0055                 | 22.5              |
| On standard probation                 | .0083                 | 20.0              |
| Prior mental health treatment         | .04                   | 15.4              |
| Impulsive behavior                    | .0017                 | 28.7              |
| Prior drug or mental health treatment | .036                  | 16.3              |
| Victim is stranger or acquaintance    | .0032                 | 24.5              |

There were eight predictors that were significantly related to filing a VOP, but were unstable in the LOO analysis. Thus, these significant relationships are less likely to replicate in other studies. These ungeneralizable significant predictors were: total number of prior arrests, number of prior arrests for misdemeanors, for violent crimes, and for property offenses, total number of counts charged, RRASOR score, risk category based on the SACJ-MIN, and risk category based on the Static-99. Thus, criminal history measures and formalized risk assessments are unreliable predictors of filing a VOP.

*1a. CTA model: Predicting whether a VOP is filed*

The seven variable CTA model predicting whether a VOP was filed showed strong performance (ESS = 58.3) and had an overall classification accuracy of 79.4%. Figure III.1 presents this CTA model. Probation officers in the standard and specialized unit placed the most importance on whether sex offenders blamed the victim and the relationship of the sex offender to the victim. For the group of sex offenders that blamed the victim, probation officers were twice as likely to file a VOP against those that victimized strangers or acquaintances (88% chance) than against those that victimized family members (40% chance). Probation officers in the standard unit and the specialized unit differed on the criteria they used to decide whether to file a VOP against the group of sex offenders that did not blame the victim. The standard probation officers used prior mental health treatment in combination with whether the sex offenders had an interest in hands-off sexual offending. In the standard probation units, sex offenders with prior mental health treatment or those with an interest in exclusively hands-off offending had a high chance of having a VOP filed. In the specialized unit, probation officers considered whether sex offenders accepted full responsibility for the offense and whether sex offenders were interested in only hands-off sexual offending. In the specialized unit, sex offenders that did not accept full responsibility for the offense had a high chance of having a VOP filed, and those that accepted full responsibility for the offense and had an interest in exclusively hands-off sexual offending had a high chance of having a VOP filed. Sex offenders that were interested in only hands on sexual offending and did not accept full responsibility for the offense had a moderate chance of having a VOP filed.

Figure III.1: CTA Model Predicting Whether a VOP was Filed



1b. CTA model: Explanation of the figure

A brief explanation of this figure will allow the reader to interpret all the figures throughout this report. The circles in the figure identify the significant predictors with the number underneath the circle indicating the corresponding probability level. By following the arrows to the rectangular boxes, the defining characteristics of a cluster are obtained. The rectangular box indicates the outcome predicted for this cluster by the model: in the present case, whether a VOP was filed (Yes) or was not (NO). Beneath the rectangular box is a ratio. The number in the numerator indicates the number of correctly classified offenders for this outcome and the number in the denominator indicates the total number of offenders in the cluster. The number in parentheses is the accuracy in classification; when the outcome is “not filed (NO)” it is necessary to subtract the accuracy in classification from 100 to obtain the likelihood that an offender in this cluster would have a VOP filed. The reader should use the above explanation to understand all of the figures presented in this report; the outcomes and predictor variables will, of course, be different.

2. Predicting Whether Two or more VOPs were Filed

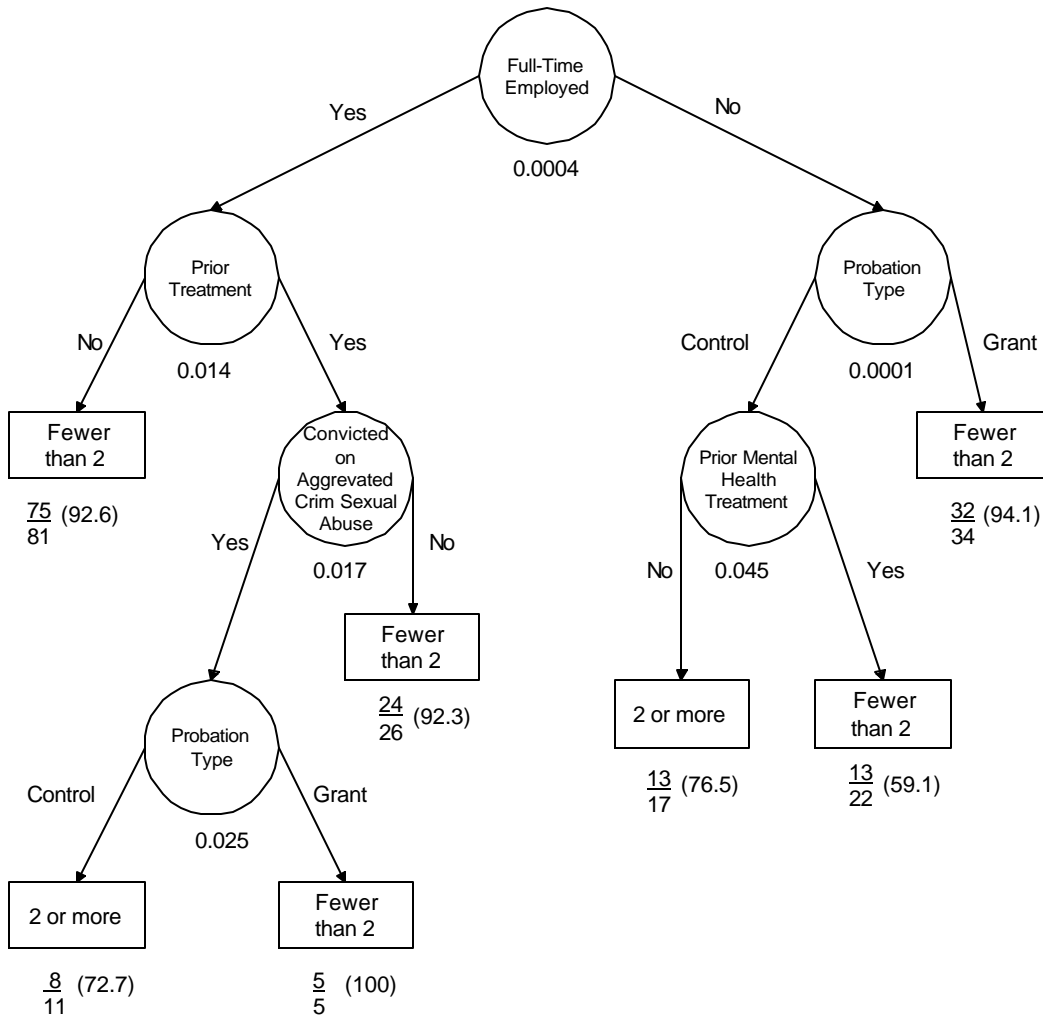
The next question is for which sex offenders are probation officers likely to file two or more VOPs. Table III.5 presents the significant and generalizable predictors that are related to filing two or more VOPs. Unemployment status is the strongest predictor related to the filing of two or more VOPs. Mental health history and child abuse victimization are also related to the filing of two or more VOP; offenders with these characteristics may be more difficult to deter or persuade with the filing of the first VOP.

**Table III.5. Generalizable Significant Predictors  
of Whether Two or More VOPs were filed in Lake County**

| <b>Predictors</b>                     | <b>Sample p-value</b> | <b>ESS</b> |
|---------------------------------------|-----------------------|------------|
| Offender's employment                 | .0004                 | 31.3       |
| Deviant sexual fantasies              | .044                  | 26.7       |
| Offender's relationship to victim     | .012                  | 24.8       |
| Abused as a child                     | .011                  | 23.7       |
| History of suicide attempts/thoughts  | .011                  | 21.2       |
| Prior drug or mental health treatment | .016                  | 20.2       |

We next built a CTA model to determine how characteristics combined to optimally predict filing of two or more VOPs. A six variable model emerged with an overall percentage of classification accuracy of 86.7% and showing moderately strong performance (ESS = 48.0). Figure III.2 presents this model. Two clusters were at high risk of having two or more VOPs filed against them. The first is comprised of sex offenders on standard probation who were unemployed or part-time employed and had no prior mental health treatment. The second cluster is comprised of sex offenders on standard probation who were employed full-time and had prior mental health or substance abuse treatment and were convicted of aggravated criminal sexual abuse. This later high-risk group may attempt to manipulate the system due to their knowledge of the mental health system and their relative status in the community with full-time employment; thus, these offenders probably do not take heed of the judge's warning when the first VOP is filed.

Figure III.2: CTA model Predicting Whether Two or More VOPs Were Filed



### 3. Predicting Probation Termination Status

Which offender and offense characteristics are related to whether offenders have an unsatisfactory termination of probation? ODA analysis using the entire Lake County sample was first conducted. Table III.6 presents the five characteristics that were significantly related to unsatisfactory termination of probation and were generalizable based on the LOO analysis. Offenders were more likely to have an unsatisfactory termination of probation if they did not express remorse in the initial treatment evaluation



or were not employed full-time. Criminal history of two or more prior convictions or at least one prior arrest for a misdemeanor crime significantly increased the chances that probation would be terminated unsatisfactorily. Offenders with a history of prior mental health treatment also had a significantly higher chance of terminating probation unsatisfactorily. Six other characteristics were significantly related to termination status but were unstable in LOO analysis. These ungeneralizable, but significant characteristics were: ethnicity, age at which offender began criminal offending, current age at time of conviction, marital status, risk category based on Static-99 scale, and income level. Thus, many demographic variables showed significant relationships, but these relationships would be less likely to replicate in other studies.

**Table III.6 Generalizable Significant Predictors of Whether Probation Was Terminated Unsatisfactorily in the Lake County Sample**

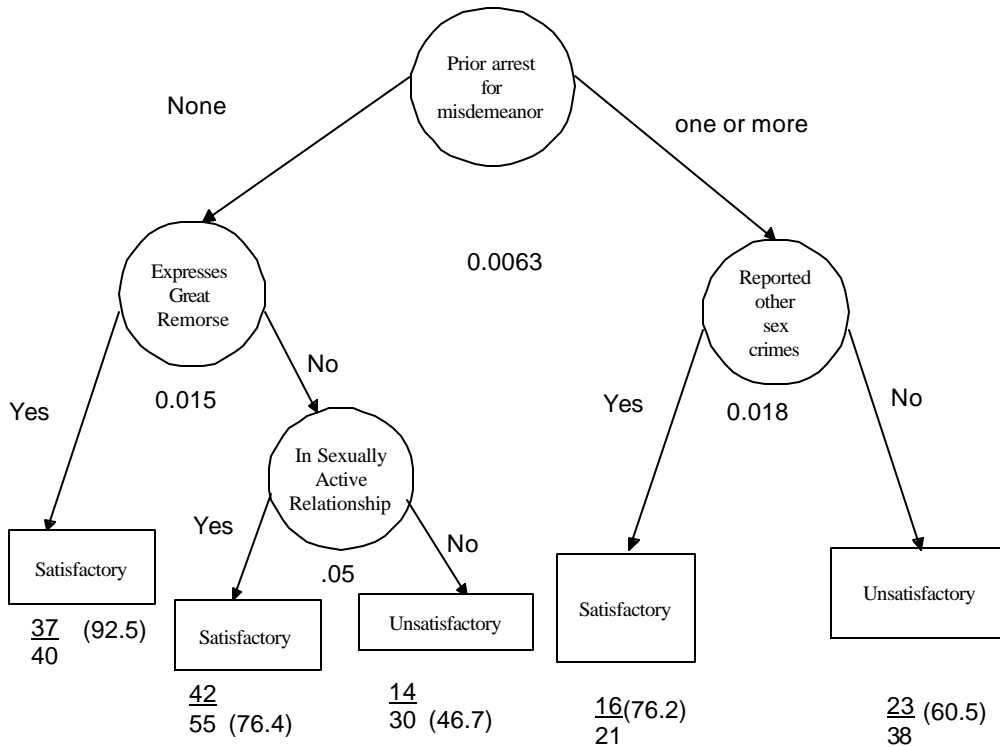
| <b>Predictors</b>                              | <b>Sample p-value</b> | <b>ESS</b> |
|--|-----------------------|------------|
| Not employed full-time                         | .012                  | 20.2       |
| Did not express remorse                        | .017                  | 22.2       |
| Prior mental health treatment                  | .011                  | 20.1       |
| Total number of prior convictions              | .032                  | 15.4       |
| Total number of prior arrests for misdemeanors | .0063                 | 19.0       |

Two CTA models were conducted with the number of prior arrests for misdemeanors starting one tree and employment starting the other tree. We did not start the tree with remorse because of a higher amount of missing data. The three variable CTA model with employment starting the tree had an overall percentage classification accuracy of 56.1% and showed moderate performance (ESS = 29.8). However, a stronger CTA model was found using prior arrests for misdemeanor to start the tree with

an overall classification accuracy of 71.7% and moderate performance (ESS = 43.6).

Figure III.3 depicts the CTA model with prior arrests for misdemeanors as the beginning variable.

**Figure III.3: CTA Model for Predicting Termination Status as of December, 2000**



Offenders who had no prior arrests for misdemeanors had a very low chance of an unsatisfactory termination of probation if they expressed great remorse, and about a 24% chance of unsatisfactory termination if they did not express great remorse but were in a sexually active relationship with an adult. Offenders with no prior arrests for misdemeanors had a 43% chance of unsatisfactory termination if they did not express great remorse and were not currently in an active sexual relationship with an adult. For

sex offenders with prior arrests for misdemeanor crimes, their willingness to disclose to the probation officer or therapists any additional past sex crimes was related to the likelihood of unsatisfactory termination. Those who did not disclose additional undetected sex crimes had a moderately high chance of unsatisfactory termination whereas those who disclosed additional sex crimes had a low chance of unsatisfactory termination. This pattern is quite sensible because offenders who disclosed additional undetected sex crimes in their history are more open and willing to discuss their sex offending, and may be more receptive to treatment and may benefit more from treatment.

#### 4. Predicting Probation Revocation

Judges have the power to decide if offenders who have a VOP filed should have their probation revoked and should be resentenced to prison or some other sentence. Judges rarely revoke probation; thus, it is interesting to see which offender and offense characteristics are related to the judge’s decision to revoke probation. Table III.7 presents the five predictors that were significantly related to revocation and were stable in LOO analysis.

**Table III.7 Generalizable Significant Predictors of Whether Probation Was Revoked**

| <b>Predictors</b>                        | <b>Sample p-value</b> | <b>ESS</b> |
|--|-----------------------|------------|
| Is not employed full-time                | .0013                 | 27.7       |
| Has prior mental health treatment        | .0018                 | 27.5       |
| Uses illicit drugs                       | .0064                 | 23.7       |
| Does not express great remorse           | .025                  | 23.3       |
| Does not rely on a social support system | .016                  | 22.7       |

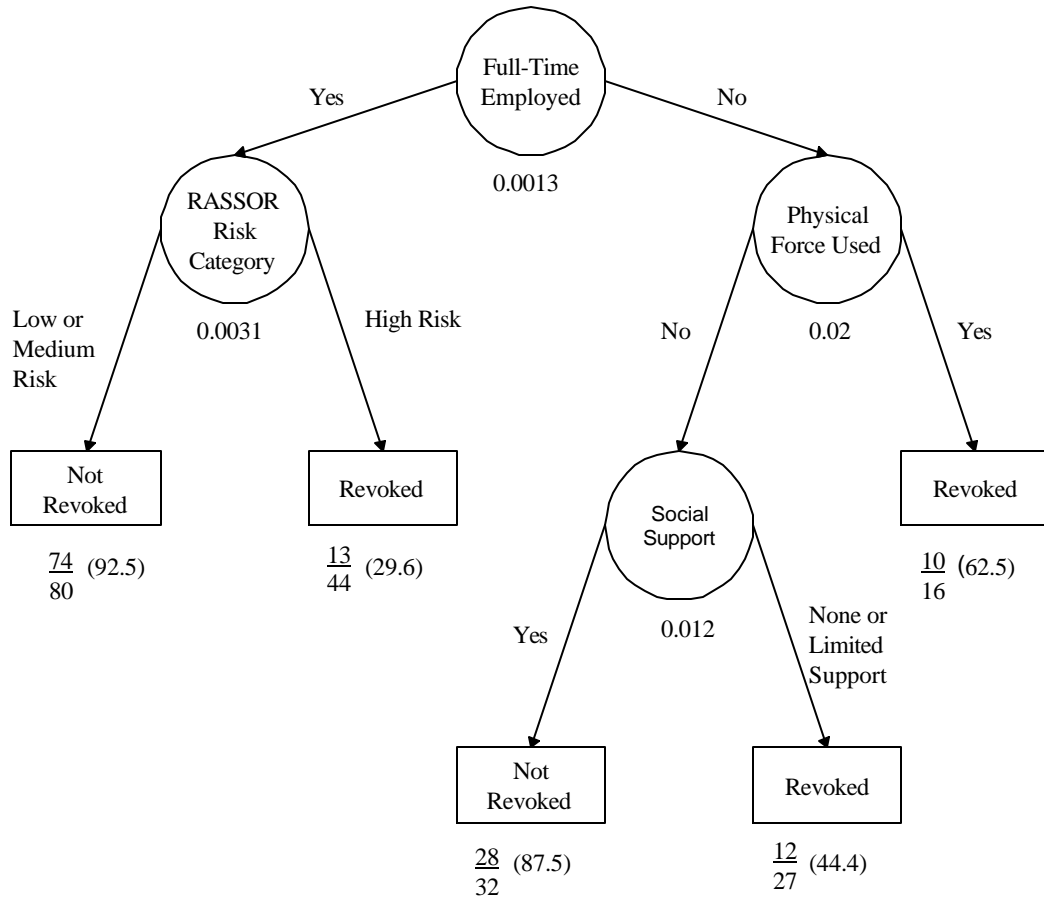
It appears that judges consider primarily the offender’s current standing in the community and mental health. Judges are less likely to revoke offenders who are employed full-time, express great remorse, and rely on a social support system.

Offenders are more likely to be revoked if they use illicit drugs and have had previous mental health treatment. Nine other characteristics were significantly related to whether an offender's probation was revoked, but were unstable in LOO analysis. These nine significant characteristics that are less likely to generalize to a new sample of data are: (a) age at which criminal offending began; (b) total number of prior convictions; (c) amount of time that sexual offending occurred; (d) ethnicity; (e) current age at conviction; (f) marital status; (g) number of children in the offender's custody; (h) whether abused as a child; and (i) income level. It appears that the basic demographic characteristics demonstrated significant, but unreliable relationships with the decision to revoke.

A four variable CTA model showed moderate performance (ESS = 44.0) in explaining the judge's decision to revoke and had an overall classification accuracy of 68.8%. Figure III.4 presents this CTA model. There were two groups who were at low risk, two groups at medium risk, and one group at moderately high risk of revocation. There were no groups found to be at the highest risk of over 70% chance of revocation.

Employment status was not a determining factor in defining low risk. Full-time employed offenders with a score of low or medium risk on the RRASOR and unemployed or part-time employed offenders who relied on a social support system and did not use force to commit the sex act were at the lowest risk of revocation. Unemployed or part-time employed offenders who used force to achieve the sex act had a moderately high chance of revocation.

**Figure III.4: CTA Model Predicting Whether Probation was Revoked**



**D. Treatment Outcomes for Lake County**

The research team assessed how well sex offenders were performing in treatment using several measures. First, we asked therapists during 1999 to submit monthly treatment reports on active sex offenders in the grant sample. In 2000, when funding for the long-term impact analysis was available, we did not collect additional monthly treatment reports because most of the grant sample had already been in treatment for a period of time (thus not allowing for a true baseline measure of improvement), or had already completed treatment. The N-of-1 analyses thus reflect only the data collected in

1998 and 1999. We also collected information regarding when a VOP was filed for failure to comply with treatment rules and have information about overall noncompliance with treatment rules for both the control and grant samples. For both the control and grant sample, we also collected information about whether treatment was completed satisfactorily or unsatisfactorily for cases that were terminated or had active warrants due to the fact that an offender had absconded. Using information about compliance and treatment completion status, we created a measure of serious noncompliance with treatment rules. We first present the N-of-1 findings for the grant sample. Second, we focus on comparing the grant and control group on noncompliance with treatment, treatment completion status, and serious noncompliance with treatment. Finally, we examine the predictors for satisfactory completion of treatment and for serious noncompliance with treatment.

### 1. N-of-1 Ipsative Changes in Sex Offenders' Attitudes While in Treatment

Therapists were asked to complete monthly treatment reports that assessed the level of each sex offender's attitudes on six dimensions related to sexual offending. Because different counties used different forms, we evaluate each county on three common questions: (1) to what degree did the offender participate in therapy sessions; (2) how committed is the offender to treatment; and (3) to what degree does the offender acknowledge personal responsibility for the offense. Each question was rated on a one to ten scale with one equal to the lowest progress on this dimension and ten equal to the highest progress. For example, on the participation question, one is equal to very limited participation and 10 is equal to very engaged participation. The analyses are based on

monthly treatment reports submitted from August of 1998 to February of 1999. The sample consisted of 26 offenders. The average number of monthly treatment reports submitted for an offender was seven with a range of two to 18 monthly treatment reports submitted for an offender. Half of the offenders had six or fewer monthly treatment reports submitted. This variation in the number of monthly treatment reports submitted was due to when the offenders were sentenced and were referred for treatment as well as differences in therapists' submissions of reports. Table III.8 presents the mean, standard deviation, median, and percentage of cases with 9 or 10 on the last rating for each dimension across all sex offenders and time periods.

As shown in Table III.8, the average rating is slightly above the midpoint for all dimensions. Interestingly, 42.3% were rated very high on acceptance of responsibility, followed by 34.6% rated high on participation, and 28.7% rated high on commitment in the last treatment report.

These bi-monthly ratings were used to assess how many offenders were responsive to treatment and thus changed on critical dimensions addressed in treatment. Responsiveness to treatment is an important intermediate outcome in evaluations of how well treatment reduces recidivism. It can be measured in several ways. For example, at least two independent neutral experts could observe and interview offenders several times during the entire treatment period; unfortunately, this design, though ideal at reducing response biases is intrusive, expensive, and could interrupt the treatment process.

**Table III.8. Descriptive Statistics of Therapists' Ratings of Sex Offenders' Progress in the Last Report in Lake County (N = 26)**

| <b>Dimension</b>                    | <b>Mean</b> | <b>Standard Deviation</b> | <b>Median</b> | <b>% With Rating of 9 or 10 on last treatment report</b> |
|-------------------------------------|-------------|---------------------------|---------------|--|
| Participation in therapy            | 7.12        | 1.95                      | 7.00          | 34.6%  |
| Commitment to treatment             | 6.77        | 2.25                      | 7.00          | 28.7%  |
| Acknowledge personal responsibility | 7.27        | 2.59                      | 8.00          | 42.3%  |

The evaluation team, therefore, decided to obtain bi-monthly treatment reports from providers on each offender and to measure systematically critical dimensions that treatment is designed to change.

There are both advantages and disadvantages to using progress reports from therapists as a measure of whether offenders are responsive. One important advantage is that therapists know where each offender began and how well he has met treatment standards. Therapists, moreover, typically judge the progress of offenders in relative terms to how previous and current clients are responding to similar treatment. A potential disadvantage, however, is that therapists will tend to cast offenders' progress in the best possible light to show that treatment is effective. In an attempt to reduce this positive bias, we instructed therapists that all data would be grouped and analyses on separate agencies would not be performed. We also instructed therapists that our primary goal was to understand the predictors of treatment responsiveness and not to address the question of whether treatment was effective. We believe progress reports can be reliably used to determine the characteristics that distinguish offenders who are responsive from those who are not responsive. These data, however, are quite limited to determine the effectiveness of treatment. Questions about the effectiveness of treatment at reducing



recidivism are better answered with matched-control sample designs, which we described in an earlier section.

A statistical approach to assess change is far more reliable than examining the absolute change between the first and last period or the average change across the time periods. The absolute change approach to determine the extent to which offenders improved over time is misleading. The approach does not provide a reliable standard to judge improvement, does not take into account the amount of variability in the ratings, and cannot provide information on how many offenders showed statistically reliable improvement.

A better approach to determining the extent to which offenders are responsive to treatment is to use statistical tools that do not have these disadvantages.<sup>9</sup> Accordingly, we used N-of-1 statistical analyses to assess responsiveness to treatment. There are two types of N-of-1 analyses that address different questions related to responsiveness to treatment. Ipsative N-of-1 analyses address the question: did this offender improve during the course of treatment compared to when the offender entered treatment?<sup>10</sup> On the data for each individual offender, we performed ipsative analyses on each of the three dimensions.

Table III.9 shows the results of the ipsative analysis for the 26 offenders with monthly treatment reports in Lake County. For therapists' ratings of participation, ten

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<sup>9</sup> As Mueser, Yarnold & Foy (1991) noted, "statistical analysis of single-subject data provides a rule-governed, systematic approach to assessing outcome that simply is not possible with visual inspection alone." (p. 135)

<sup>10</sup> N-of-1 analysis takes into account an individual's performance at the beginning of treatment or measurement (baseline performance) compared to his performance during the observation months. Because numerous data points are needed in order to employ time series analysis, we chose to employ N-of-1 analyses derived from classical test theory (see Yarnold, 1992). Ipsative single-case analyses first convert an individual's raw data into standard z scores using an individual's own mean and standard deviation for the variable being standardized.

(38.5%) of these offenders, ipsative single-case statistical analysis could not be conducted due to insufficient variability or missing data. About two-thirds of the remaining offenders remained stable on participation, and five offenders showed a statistically significant positive improvement. No statistically significant decreases were found.

Considering next the therapists' ratings of commitment, for nine (34.6%) of these offenders, ipsative single-case statistical analysis could not be conducted due to insufficient variability or missing data. Most offenders (N = 11; 64.7%) showed no significant change in commitment whereas six offenders (35.3%) showed a significant improvement in commitment as therapy progressed. Again, there were no statistically significant decreases in commitment as therapy progressed.

Finally, most offenders (N = 12; 63.2%) showed no detectable change in acceptance of responsibility over time. Over one-third (N = 7) of the offenders demonstrated significant change toward more acceptance of responsibility over time. No statistically significant decreases were detected. Data from seven (26.9% of the total sample) offenders could not be used for ipsative single-case statistical analysis due to insufficient measurements and/or variability.

In summary, for ratings of participation, about two-fifths of the sample could not be analyzed via ipsative single-case methods due to insufficient data, two-fifths of the sample showed temporally stable ratings, and one-fifth of the sample showed increasing participation ratings over time. For ratings of commitment, about one-third of the sample could not be analyzed, two-fifths of the sample showed temporally stable ratings, and

one-quarter of the sample showed increasing commitment ratings over time. Finally, for ratings of responsibility, about one-quarter of the sample could not be analyzed, about one-half of the sample showed temporally stable responsibility ratings over time, and about one-quarter of the sample improved over time on accepting personal responsibility for their offense.

**Table III.9. Summary of Ipsative Statistical Analysis of Participation, Commitment and Responsibility Ratings—Lake County (Number of Offenders)**

| Type of Change                     | Participation | Commitment | Responsibility |
|------------------------------------|---------------|------------|----------------|
| Statistically significant increase | 5             | 6          | 7              |
| Stable                             | 11            | 11         | 12             |
| Statistically significant decrease | 0             | 0          | 0              |
| Insufficient data                  | 10            | 9          | 7              |

## 2. N-of-1 Normative Changes in Sex Offenders' Attitudes While in Treatment

We next examined the relative improvement of Lake County sex offenders based on the total sample of sex offenders in all three counties. Table III.10 provides the average rating on the first monthly treatment report, the average rating on the last submitted monthly report, and the average rating across all monthly treatment reports and all sex offenders in Lake County. As shown, therapists tended to provide average ratings on the first monthly treatment report. However, 12.5% received a rating of three or less and 29.2% received a rating of eight or higher on the first monthly treatment report. Thus, many of the sex offenders at the time that the reports were submitted were doing above average on participation, commitment, and responsibility. On the last monthly treatment report submitted, the average rating moved from five to seven. Moreover, no

offender was rated at three or less and 41.7% were rated at three or higher. This eyeball approach, however, does not provide information about which offenders are improving the most relative to all of the sex offenders.

**Table III.10. Therapist’s Average Ratings for 24 Sex Offenders in Treatment in Lake County**

| Dimension                             | Group mean rating on first monthly report | Group mean rating on last monthly report | Group mean rating across all monthly reports |
|---------------------------------------|---|--|--|
| Participation                         | 5.88                                      | 7.12                                     | 6.37   |
| Commitment                            | 5.92                                      | 6.77                                     | 6.25   |
| Accept responsibility for the offense | 6.46                                      | 7.27                                     | 6.76   |

Whereas ipsative N-of-1 analyses examine whether offenders improve based on their own scores at the beginning of treatment, normative N-of-1 analyses examine which offenders show significant improvement compared to all sex offenders in the three counties for which we had treatment reports. Grouping data across treatment agencies insured that we had a more representative population of sex offenders and did not create a restricted range on our measures. Normative analyses have more practical implications.<sup>11</sup> These analyses can address questions such as: (1) if treatment resources are scarce, which offenders will most likely benefit from treatment? and (2) which offenders are most likely to terminate prematurely from treatment due to noncompliance with treatment rules?

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<sup>11</sup> N-of-1 normative analyses convert the raw data to z scores using the mean and standard deviation of the entire sample, which allows relative comparisons across offenders. To standardize the data, we used the mean and standard deviation across time for each question based on all monthly treatment reports.

The normative-based N-of-1 analyses revealed that only two offenders showed significant positive improvements with one offender improving on all three dimensions and the other improving only on commitment. There were no significant declines in treatment. Thus, most offenders remained rather stable in treatment from the therapist's point of view. These results, however, are based on a small sample of only 26 offenders, and a sample that therapists were rating at a high level at the time of the first monthly treatment report.

We developed absolute criteria to classify offenders as responsive to treatment. If offenders were still active in treatment and we had treatment reports, they were classified as responsive if they showed one significant ipsative or normative change in treatment or had a rating of nine or ten on two of the three dimensions in their last treatment report submitted. In Lake County seven offenders had at least one positive ipsative or normative change. However, two of these offenders had significant individual positive improvement on participation and commitment, but eventually failed to complete treatment, and thus was coded as unresponsive. There were eight offenders who had ratings of nine or ten on two of the three dimensions; of these eight offenders, six offenders had already completed treatment satisfactorily without any violations of probation petitions filed for failure to comply with treatment and two offenders were still active in treatment. This standard is a first attempt at determining responsiveness to treatment. We attempted to balance significant change with the final outcome and knowledge of whether violations of probation petitions were filed due to noncompliance. Using this standard, we were able to classify 13 of the 26 Lake County grant sex offenders for whom we had data as responsive to treatment.

### 3. Descriptive Statistics on Compliance with Treatment

We next considered noncompliance with treatment orders. Noncompliance with treatment rules were obtained from violation of probation petitions filed by probation officers. The number of VOPs filed that stated sex offenders were noncompliant with treatment orders ranged from none to six in the control sample and none to two in the grant sample. Fifty-one control sex offenders had a total of 89 VOPs filed for noncompliance with treatment and 28 grant sex offenders had a total of 32 VOPs filed for noncompliance with treatment. Table III.11 presents descriptive statistics on noncompliance with treatment orders, percentage of cases that satisfactorily completed treatment, and percentage of cases with serious noncompliance with treatment orders. Control sex offenders averaged almost one VOP for noncompliance with treatment orders per an offender, which was significantly higher than the grant samples average number of VOPS per an offender for noncompliance with treatment orders,  $t(183) = 4.05, p < .001$ . As shown in Table III.11, grant sex offenders compared to control sex offenders were significantly more likely to be compliant with treatment in that a higher percentage had no VOP filed for noncompliance with treatment and were significantly less likely to have two or more VOPs filed for noncompliance with treatment,  $X^2(2) = 15.91, p < .001$ . These findings suggest that judges allowed sex offenders on standard probation several chances to comply with treatment orders before revoking their probation whereas sex offenders on specialized probation were more likely to be revoked for noncompliance with treatment orders. Given the multiple chances and the higher number of closed cases

(N = 100 for control and 70 for grant), control sex offenders were significantly more likely to complete treatment satisfactorily,  $X^2 (1) = 4.21, p < .04$ .

We constructed a variable to assess serious noncompliance with treatment orders. Offenders were coded as committing serious noncompliance of treatment orders if they had one of the following: (1) unsatisfactory termination of treatment; (2) treatment ordered, but absconded from probation and treatment; (3) active, but had a violation of probation petition filed for noncompliance with treatment orders. There were 33 of the 79 cases that had a VOP filed for noncompliance with treatment that eventually completed treatment satisfactorily. We did not code these cases as serious noncompliance because either the VOP could have been filed to extend treatment or the offender responded to the warning to comply with treatment. As shown in Table III.11, control and grant sex offenders were similar in committing serious noncompliance with treatment orders.

**Table III.11. Descriptive Statistics on Treatment Outcomes for Grant and Control Samples in Lake County**

| Probation Sample | Average Number of VOPs Filed for treatment noncompliance per offender | % of sample with no VOP filed for treatment noncompliance | % of sample with 2 or more VOPs filed for noncompliance with treatment | % of closed cases that satisfactorily completed treatment | % of cases with serious treatment noncompliance |
|------------------|---|---|--|---|---|
| Grant Sample     | .32 (sd = .57)  | 68.2% (N = 60)  | 4.5% (N = 4)   | 47.1% (N = 33)  | 47.7% (N = 42)                                  |
| Control Sample   | .92 (sd = 1.20)   | 47.4% (N = 46)  | 24.7% (N = 24)   | 63.0% (N = 63)  | 38.0% (N = 38)                                  |

#### 4. Identifying High-Risk Groups for Serious Treatment Noncompliance

When treatment resources are scarce, it is important to understand which offenders pose a high risk to commit serious noncompliance with treatment. We first examined this issue using ODA on the entire sample. Table III.12 presents the significant and generalizable predictors of serious noncompliance. The two strongest predictors are clinical presentation variables: whether the offender expressed remorse and accepted responsibility for the offense at the first treatment evaluation. Offenders who did not present this good impression were more likely to commit serious noncompliance. Several criminal history measures also were stable predictors of serious noncompliance. Offenders were more likely to commit serious noncompliance if they had one or more prior arrests for misdemeanors, property crimes, or drug offenses or had two or more prior convictions. Offenders who were employed full-time or scored low or medium risk on the SACJ-MIN were significantly less likely to commit serious noncompliance with treatment. Offenders with prior mental health or drug treatment were more likely to commit serious noncompliance.

**Table III.12 Significant Generalizable Predictors of Serious Noncompliance With Treatment in the Entire Sample of Lake County**

| Predictors                                    | Sample p-value | ESS  |
|---|----------------|------|
| Accepts responsibility                        | .0022          | 25.8 |
| Expresses remorse                             | .0027          | 26.2 |
| SACJ-MIN category of risk                     | .003           | 20.7 |
| Employment status of offender                 | .035           | 17.3 |
| Total number of prior convictions             | .037           | 13.8 |
| Number of prior arrests for misdemeanors      | .0045          | 19.6 |
| Number of prior arrests for property offenses | .0095          | 15.1 |
| Number of prior arrests for drug offenses     | .042           | 10.1 |
| Use of force in sex offense                   | .017           | 15.0 |
| Prior treatment for drugs or mental health    | .018           | 16.0 |



There also were eight characteristics that showed significant relationships, but were unstable in LOO analysis: age at which criminal offending began, total number of prior arrests, current age at conviction, whether no contact with minors was ordered, use of drugs and alcohol, whether used drugs or alcohol before committing the sex offense, education level, and income level. These predictors are less likely to be significant when tested with new samples.

We examined two CTA models: one that started with remorse and one that started with blaming the victim or denying the offense. The final six variable CTA model with remorse starting the tree included 136 cases (remorse had missing data for 29 cases) and showed moderate performance (ESS = 46.8) and an overall classification accuracy of 73.5%. The final six variable CTA model with responsibility starting the tree classified 170 cases and showed strong performance (ESS = 50.4) and an overall classification accuracy of 76.5%. Figure III.5 presents the CTA model with responsibility starting the tree.

Four groups of offenders were at high risk of failing at treatment with over a 70% chance of committing serious noncompliance with the treatment order. One high-risk group included offenders who fully accepted responsibility or showed some minimization, used illicit drugs, and had a chronic history of impulsive behavior.

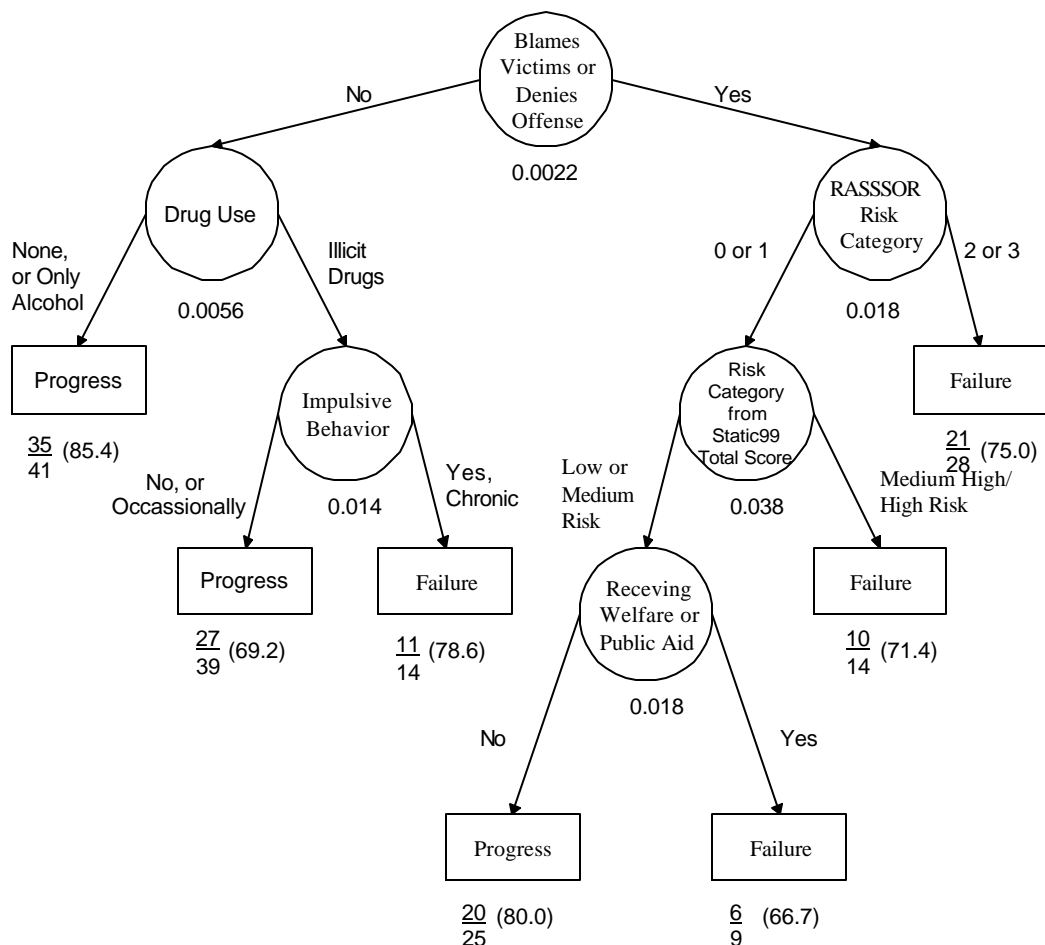
Interestingly, the RRASOR scores and scores from the Static-99 were the best variables to classify offenders who blamed the victim or denied the offense. There were two very high risk groups involving offenders who blamed the victim or denied the offense: (1) those who scored greater than two on the RRASOR and (2) those who scored zero or one on the RRASOR and scored in the high risk category based on the

Static-99 scale. Offenders who blamed the victim or denied the offense were at low risk of failure at treatment if they scored less than two on the RRASOR, were in the low or medium risk group based on the Static-99 and did not receive public aid. Offenders who accepted full responsibility or minimized parts of the offense were at the highest risk of failure if they were using illicit drugs and had chronic problems with impulsive behavior.

Offenders who blamed the victim and scored 2 or more on the RRASOR involved only sex offenders who committed their offense against acquaintances or strangers, and half had an objective sexual arousal to children. For those who victimized strangers, the majority were bisexual or homosexual single offenders who fondled boy victims. For those who victimized acquaintances, the majority victimized girls or women and half penetrated their victims, and one-third enjoyed sadistic sexual fantasies.

Offenders who blamed the victim and scored 0 or 1 on the RRASOR and were in the medium-high or very high risk group based on the STATIC-99 consisted of offenders with a criminal lifestyle. Most offenders had two or more prior arrests, and half had two or more prior convictions. Two-thirds of the offenders had committed prior sex crimes, prior violent crimes, and prior property crimes, and half had a prior arrest for a domestic violence offense. Two-thirds had served a prior period of probation, and half had served a prior period of incarceration. Two-thirds of the offenders had victimized adults, and were not child molesters, and all victims were women. Almost all victims were acquaintances or strangers except for one stepfather and stepdaughter incest, and most offenses did not involve penetration. Moreover, half of the offenders had fantasies about sadistic sex acts. Most were heterosexuals and had received prior drug or mental health treatment.

Figure III.5: CTA Model Predicting Failure at Treatment



Offenders who blamed the victim and scored 0 or 1 on the RRASOR and were in the low or medium risk group based on the STATIC-99 and were on public aid had some characteristics in common. Most offenders had no prior arrests or convictions, and fondled boys. Most had current mental health problems, and used alcohol or both alcohol and illicit drugs.

## 5. Identifying Groups that Have a High Chance of Satisfactorily Completing Treatment

Another important consideration when treatment slots are scarce is which sex offenders are most likely to complete treatment satisfactorily based on the treatment provider's criteria. Using the entire sample of 170 sex offenders in Lake County that had completed treatment, absconded from treatment, or were prematurely terminated from treatment, we examined which characteristics were significantly related to completing treatment satisfactorily. Table III.13 presents the ten significant and generalizable predictors of satisfactory completion of treatment.

The two strongest predictors of satisfactory completion of treatment were whether an offender expressed remorse or accepted responsibility for the offense with or without minimization in the initial treatment evaluation. Thus, if therapists formed an initial good impression of the offender, there was a higher likelihood of completing treatment successfully.

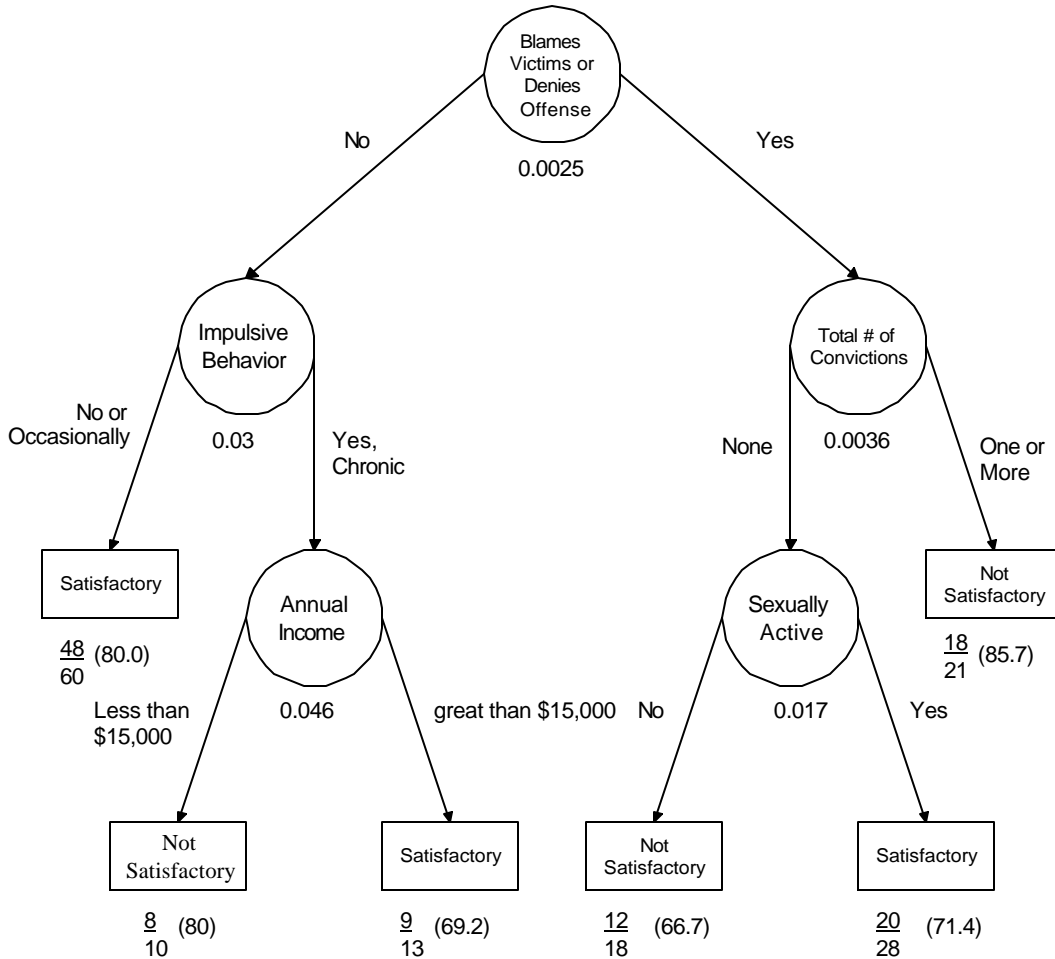
**Table III.13 Generalizable Significant Predictors of Satisfactory Completion of Treatment in the Entire Sample of Lake County**

| Predictors                                    | Sample p-value | ESS  |
|---|----------------|------|
| Expresses remorse                             | .003           | 28.1 |
| Accepts responsibility                        | .0025          | 27.0 |
| Static-99 risk categories                     | .0077          | 21.0 |
| Employment status                             | .019           | 20.1 |
| Used drugs/alcohol before crime               | .024           | 17.6 |
| Number of prior arrests for misdemeanors      | .032           | 16.3 |
| Number of prior arrests for property offenses | .034           | 13.2 |
| Type of probation                             | .044           | 15.6 |
| Used force in sex crime                       | .02            | 14.9 |

Offenders who used force during the sex offense or used alcohol or drugs before the sex offense were less likely to complete treatment satisfactorily. Offenders with prior arrests for misdemeanors or property offenses also were less likely to complete treatment successfully. Offenders employed full-time or on standard probation were more likely to complete treatment satisfactorily. Several other variables were significant, but were unstable in LOO analysis and therefore less likely to replicate with another dataset. These significant but ungeneralizable variables were: current use of alcohol or drugs, age began criminal offending, total number of prior arrests, total number of prior convictions, current age, ethnicity, amount of jail time ordered, highest education level achieved, and income level.

Though “expresses remorse” was the strongest variable for the entire sample, we began the tree with the second strongest variable “accepts responsibility” because the remorse variable had more missing data. Figure III.6 presents the five variable CTA model predicting satisfactory completion of treatment, which showed moderately strong performance (ESS = 48.8) and had an overall classification accuracy of 76.7%. Whether the offender blamed the victim or denied the offense started the tree. There were two groups that had a very high chance of completing treatment satisfactorily: Offenders who accepted responsibility or minimized their role at the initial evaluation and did not have problems with impulsive behavior; and (2) offenders who blamed the victim or denied the offense, had no prior convictions, and were in a sexually active relationship with an adult. Offenders who blamed the victim and had at least one prior conviction had a high chance of premature termination from treatment.

Figure III.6: CTA Model Predicting Satisfactory Treatment Completion



### E. Identifying High-Risk Groups for Committing New Sex Crimes

#### 1. Admits or Arrested for New Sex Crime Excluding Arrests for Failure to Register as a Sex Offender

In order to obtain a more complete measure of sexual recidivism, we obtained information about new arrests from Illinois State Police rap sheets, from the bi-monthly treatment reports, and from coding information in the offenders' probation case file, particularly from Violation of Probation Petitions. Rap sheets, probation case files, and

therapists' reports sometimes are not complete; thus, we combined these three sources when available to obtain a more complete measure of sexual recidivism. A similar percentage of control (25%) and grant (28.8%) were arrested or admitted to a new sex crime excluding arrests for failure to register as a sex offender.

We next examined which predictors significantly improved the accuracy of classifying offenders as committing or not committing a new sex crime. Table III.14 presents the predictors that were generalizable in the LOO analysis, and their effect strength of sensitivity. Three predictors that have been consistently strong in the literature emerged: number of prior misdemeanor crimes, objective sexual preference to children, and psychopathic deviancy. Objective sexual preference to children was the strongest predictor. Age at which criminal offending began and total number of prior arrests also were significant predictors, but their performance substantially diminished in the LOO analysis, suggesting that these predictors would not generalize to a new sample of data.

**Table III.14. Significant and Generalizable Predictors of New Sex Crimes (Excluding Failure to Register) in the Lake County Sample**

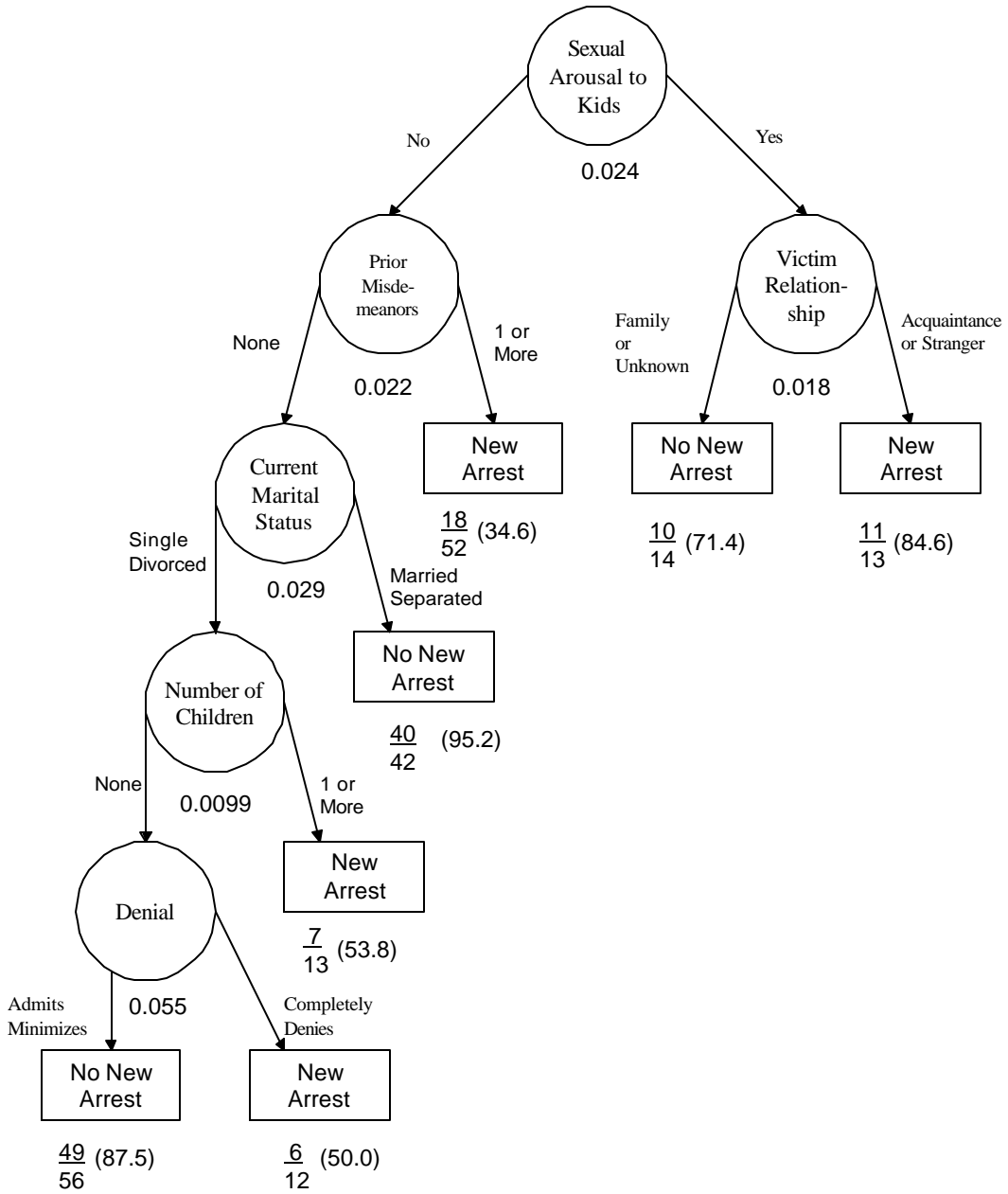
| Significant Predictor                          | Two-tailed p-value | ESS   |
|--|--------------------|-------|
| Number of prior arrests for misdemeanor crimes | .015               | 17.39 |
| Objective sexual preference to children        | .017               | 28.89 |
| Psychopathic deviant                           | .07                | 14.94 |

We next attempted to identify groups of offenders that are at high-risk of committing new sex crimes. CTA analysis revealed a six variable model that showed moderate performance (ESS = 43.7) and had an overall classification accuracy of 69.8%. Consistent with a prior meta-analysis, objective sexual preference toward children was the strongest predictor of the entire sample and began the classification tree. We

classified offenders in the highest risk group if they had a probability of 70% or greater of committing a new sex crime. Those at highest risk of committing new sex crimes were offenders who victimized strangers or acquaintances and had an objective sexual preference for children as measured by the ABEL. There were two clusters of offenders that had no known sexual preference for children and no prior arrests for misdemeanors, which are classified as having a moderately high risk for a new sex crime. We classified offenders as moderately high if the probability of committing a new sex crime was between 50 and 70 percent. The first cluster involved single or divorced offenders that had custody of one or more biological/adopted children. The second cluster were single or divorced sex offenders who did not have custody of any children, but completely denied committing the offense. Two clusters could be classified as having a medium risk, which was defined as a probability between 25 to 49% of committing a new crime. Medium risk offenders had a sexual preference for children and victimized a family member or had no known sexual preference for children and had one or more prior arrests for misdemeanors. Two clusters also could be classified as having a low risk, which was defined as having below a 25% chance of committing a new sex crime. Married or separated offenders with no known sexual preference for children and no prior arrests for misdemeanors were low risk. Single or divorced offenders with no known sexual preference for children, no biological or adopted children in their custody, and no prior arrests for misdemeanors who completely admitted or minimized parts of the offense also were low risk for committing a new sex crime.



Figure III.7: Admits or Arrested for a New Sex Crime



2. Admits to or Arrested for a New Sex Crime Including Failure to Register as a Sex Offender

We next examined predictors of any new sex crimes including offenders arrested for failure to register as a sex offender. There were five stable significant predictors of any new sex crime. Table III.15 presents these generalizable significant predictors. Consistent with prior studies, offenders who are sexually attracted to children are significantly more likely to commit a new sex crime. Offenders who admitted to therapists in the initial treatment evaluation that they had committed prior sex crimes that were not reported to police or offenders with prior arrests for violent crimes were more likely to commit a new sex crime. Offenders who admitted to sexual fantasies other than hands-off offending, sadistic acts, or sex with children also were slightly more likely to commit a new sex crime. Six other characteristics were significantly related to committing a new sex crime, but were unstable in LOO analysis; these predictors were number of prior sex crimes committed, education of offender, total number of prior arrests, amount of time that sex offending occurred, offender’s age at the time of first criminal offending, and current age of offender.

**Table III.15 Generalizable Significant Predictors of Any New Sex Crimes in the Lake County Sample**

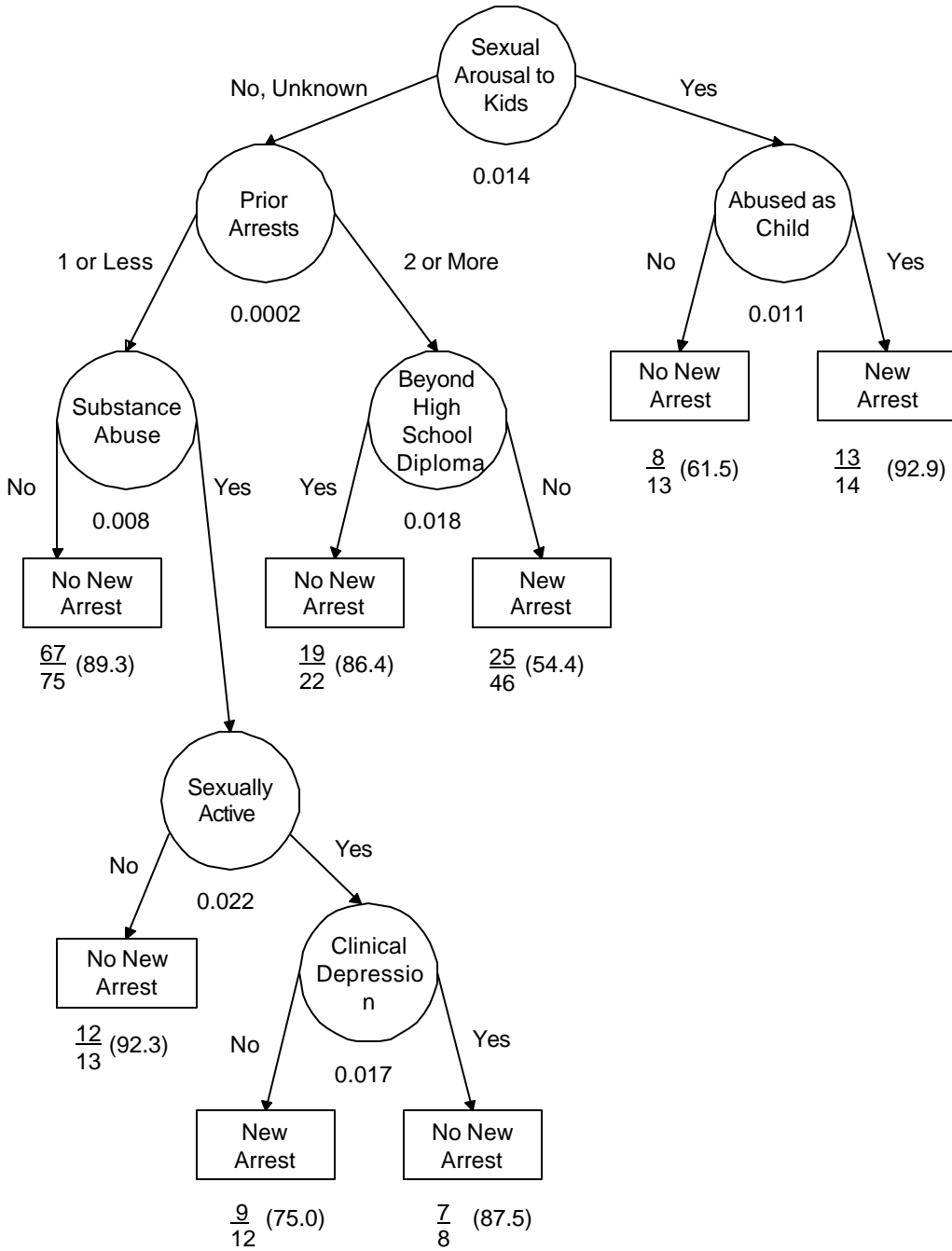
| Significant Predictors             | Two-tailed p-value | ESS  |
|------------------------------------|--------------------|------|
| Recommended for drug treatment     | .011               | 18.3 |
| Admitted to prior sex offenses     | .056               | 15.5 |
| Sexually attracted to children     | .013               | 19.6 |
| Admitted to other sexual fantasies | .06                | 15.6 |
| Prior arrests for violent offenses | .0075              | 14.6 |

A seven variable model had an overall classification accuracy of 78.8% and demonstrated strong performance (ESS = 54.2) at predicting any new sex crimes. Figure

III.8 presents this CTA model. Objective sexual arousal to children was the strongest predictor for classifying any new sex crimes including failure to register offenses. Overall, there were two clusters that could be classified as having the highest risk (70% or higher probability), one cluster as having moderately high risk (50 to 70% chance), two clusters as having medium risk (25 to 49% chance), and four clusters as having low risk (below 25% chance). Offenders that had a sexual preference for children and had been physically or sexually abused as children were in the highest risk category (13 of the 14 offenders committed a new offense). By contrast, offenders that had a sexual preference for children and were not sexually or physically abused as children were in the moderately high risk category. Thus, it appears that prior history of child abuse determines the extent to which sex offenders may act upon their sexual preference for children. The samples, however, are small and future research should attempt to replicate this finding with larger samples.

When sexual preference for children was unknown or nonexistent, total number of prior arrests for any crimes was the strongest predictor of sexual recidivism. Sex offenders were at a moderately high risk of sexual recidivism if they had two or more prior arrests and did not go beyond a high school education. However, educational achievement beyond high school served to negate the effects of having two or more prior arrests, and placed higher educational achievers with this criminal history in the low risk category.

**Figure III.8: Prediction of New Arrest for Sex Offense Including Failure to Register**



Several social adjustment characteristics defined offenders in the medium risk category. Non-depressed substance abusers (of alcohol or drugs) in a sexually active

adult relationship who had no known sexual arousal to children, and one or fewer prior arrests for any crime had a 25% chance of committing a new sex crime. Offenders who had one or fewer prior arrests and no substance abuse problem were at a low risk of committing a new sex crime. Depressed substance abusers in a sexually active adult relationship also were at a low risk of a new sex crime if they had only one prior arrest for any crime.

### 3. Identifying High-Risk Groups Committing New Sex or Violent Crimes

For the entire sample of Lake County, four predictors were significantly related to new arrests for either violent or sex crimes. Table III.16 presents generalizable and significant predictors of new violent and sex crimes for the entire sample of Lake County. The strongest predictor was marital status with married or separated offenders being more likely to be arrested for new violent or sex crimes; this relationship may be due to domestic violence, which was a common violent offense. Criminal history measures also were significant and reliable predictors. Offenders who had prior arrests for property crimes, prior arrests for misdemeanor crimes, or two or more prior convictions were significantly more likely to commit a new violent or sex crime. Consistent with prior research, offenders who had at least one prior arrest for a violent crime also showed a trend toward committing new violent or sex crimes; this trend was stable in the LOO analysis. Consistent with prior research, use of force in the sex crime was significantly related to committing new violent or sex crimes. Four predictors were significant, but unstable in LOO analysis: (1) total number of prior arrests; (2) age at which criminal offending began; (3) current age at time of conviction; and (4) income level.

A seven variable CTA model had an overall classification accuracy of 76.4% and demonstrated moderate performance (ESS = 45.2) at predicting new sex or violent crimes. There were two groups in the highest risk category, one group in the moderately high-risk category, one group in the medium risk category, and three groups in the low risk category. Figure III.9 presents this CTA model.

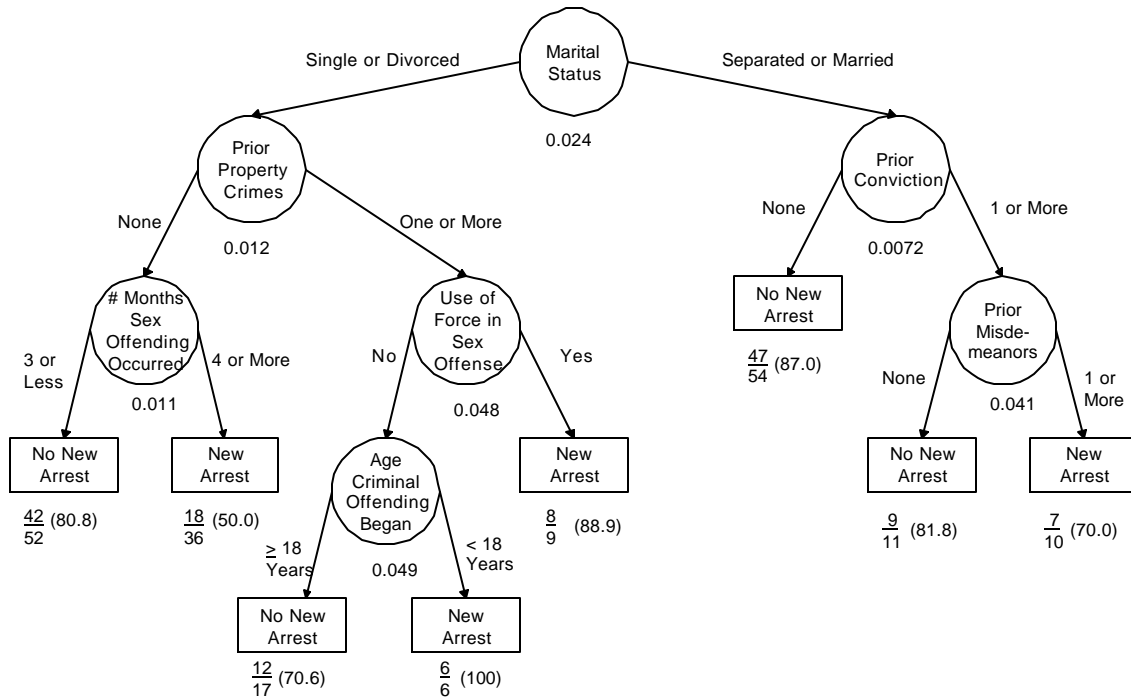
**Table III.16 Generalizable and Significant Predictors of New Violent or Sex Crimes in the Entire Sample of Lake County**

| Predictors                           | Exact p- value | ESS  |
|--------------------------------------|----------------|------|
| Marital Status                       | .019           | 19.6 |
| Prior arrests for property crimes    | .0061          | 16.8 |
| Prior arrests for violent crimes     | .062           | 10.2 |
| Prior arrests for misdemeanor crimes | .026           | 16.1 |
| Number of prior convictions          | .021           | 16.6 |
| Use of force in the sex crime        | .032           | 13.4 |

Marital status was the strongest predictor of general recidivism with single offenders more likely to commit new offenses. This finding is consistent with the literature. The seven variable CTA model revealed three groups in the highest risk category and one group in the moderately high risk category. Single or divorced sex offenders were at the highest risk of general recidivism if: (1) they committed prior property crimes and forced the sexual offense; or (2) they committed prior property crimes and began criminal offending before the age of 18. Single or divorced offenders also were at a moderately high risk if they had been committing sexual offenses for four or more months and were at a low risk if they had been committing sexual offenses for three months or less. Married or separated sex offenders were generally at low risk of general recidivism.

Married or separated sex offenders are placed in the high-risk category if they have at least one prior arrest and conviction.

**Figure III.9: Prediction of New Arrest for Violent or Sex Crime**



4. Identifying High Risk Groups for Committing At Least One New Crime of Any Type

Using the entire sample, several criminal history, substance abuse, and demographic variables significantly improved the prediction of whether offenders committed any new crimes. Table III.17 presents the significant generalizable predictors of committing any new crime. Five measures of criminal history were stable generalizable predictors. Prior research has also demonstrated the importance of criminal history at predicting general recidivism. Age at which criminal offending began was the strongest predictor. Prior arrests for misdemeanors, drug crimes, violent crimes, and property crimes also were generalizable significant predictors. Total number of prior

arrests and total number of prior convictions were significant predictors, but were unstable in the LOO jackknife validity analysis, suggesting that these variables may not generalize to other samples.

**Table III.17 Significant Generalizable Predictors of Committing Any New Crime in the Entire Sample of Lake County Sex Offenders**

| Predictor                             | Sample p-value | Stable ESS value |
|---------------------------------------|----------------|------------------|
| Age at which criminal offending began | .00001         | 30.77            |
| Prior arrests for misdemeanors        | .006           | 18.27            |
| Prior arrests for violent crimes      | .0016          | 16.35            |
| Prior arrests for drug crimes         | .002           | 15.38            |
| Prior arrests for property crimes     | .02            | 13.46            |
| Needs substance abuse treatment       | .007           | 18.27            |
| Uses alcohol                          | .015           | 18.76            |
| Used drugs/alcohol before sex crime   | .037           | 14.01            |
| Offender's income level               | .008           | 21.94            |
| Marital status                        | .04            | 16.14            |
| Used force in sex crime               | .02            | 13.46            |

Substance use and abuse also emerged as important significant generalizable predictors of general recidivism. Alcohol consumption and whether the court or therapist recommended substance abuse treatment were the two strongest predictors, though using illicit drugs or alcohol before the commission of the current sex crime also was a significant generalizable predictor.

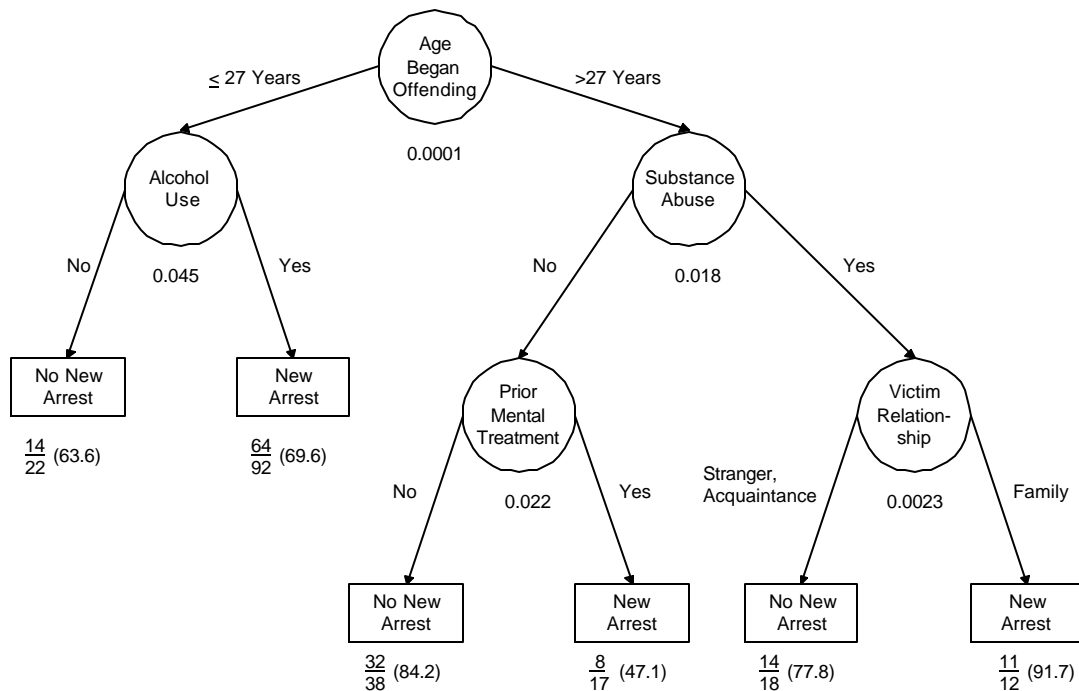
Consistent with prior research, single offenders and low-income offenders had a significantly higher risk at committing any new crime. The current age of the offender also was a significant predictor, but was unstable in the LOO validity analysis. The amount of community service ordered also was a significant predictor that was unstable in the LOO validity analysis.



We next identified the high-risk groups for committing general recidivism using CTA. A five variable CTA model had an overall classification accuracy of 71.9% and showed moderately strong performance (ESS = 43.4) at predicting general recidivism.

Figure III.10 presents this CTA model. Two groups were in the highest risk category for general recidivism: (1) Offenders who began criminal offending at the age of 27 or younger and used alcohol; and (2) offenders who began criminal offending at age 28 or older and were recommended for substance abuse treatment and had victimized a family member.

**Figure III.10: CTA Model Predicting General Recidivism**



Two groups were in the medium risk of general recidivism: (1) Offenders who began criminal offending at age 28 or older, had prior mental health treatment, but did not have a substance abuse problem; and (2) Offenders who began their criminal offending at age 27 or younger and did not use alcohol (though many reported using

illicit drugs). Two clusters of offenders who began their criminal offending at age 28 or older were in the low risk category: (1) Those who did not need substance abuse treatment, and had no prior mental health treatment; and (2) Those who were recommended for substance abuse treatment and had victimized a stranger or acquaintance.

5. Identifying High-Risk Groups of Committing Two or More New Crimes of Any Type

ODA analysis found several predictors of committing two or more new crimes emerged. Table III.18 presents the significant and generalizable predictors of committing two or more new crimes of any type. Once again, the importance of prior criminal history in predicting general recidivism is revealed with three measures being significant and generalizable: number of prior arrests for misdemeanors, number of prior arrests for property offenses, and number of prior arrests for drug offenses. In addition, three other measures of criminal history were significant predictors, but failed to generalize in the jackknife validity analysis: total number of prior convictions, age at which criminal offending began, and total number of prior arrests.

**Table III.18 Generalizable Significant Predictors of Committing Two or More New Crimes of Any Type in the Entire Sample of Lake County**

| Predictors  | Sample p-value | ESS  |
|---|----------------|------|
| Single status                                       | .0002          | 30.7 |
| Total number of prior arrests for misdemeanors      | .0026          | 21.6 |
| Employment status                                   | .0087          | 21.1 |
| Sexually aroused to children                        | .017           | 20.0 |
| SACJ-MIN categories of risk                         | .024           | 17.4 |
| Total number of prior arrests for property offenses | .0097          | 16.3 |
| Total number of prior arrests for drug offenses     | .0037          | 15.3 |
| Used force in committing sex offense                | .014           | 15.2 |

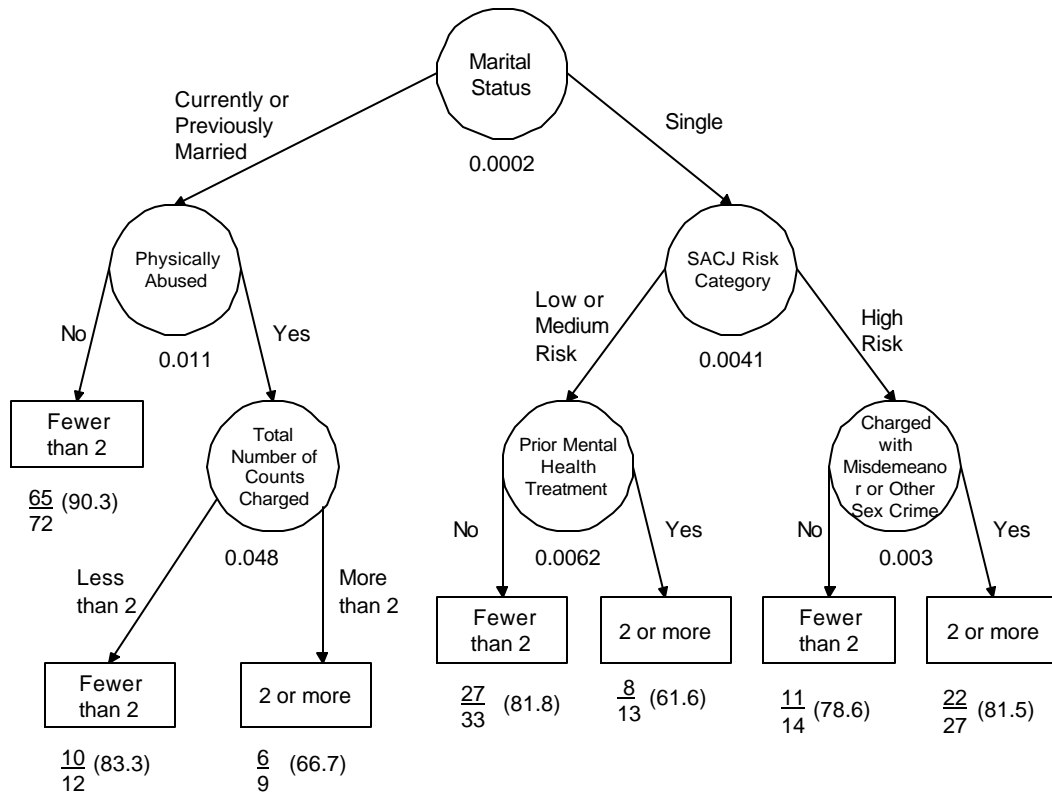
Single status was the strongest predictor, and supports prior findings that single offenders are more likely to recidivate. Though prior studies have found that young, low-income offenders are more likely to recidivate, age and income level were significant predictors in our study, but failed to generalize in the validity analysis.

Use of force and sexual arousal to children also emerged as significant weak generalizable predictors, and these variables have been weak significant predictors in prior studies of general recidivism among sex offenders. We also tested how well established instrument for predicting sexual recidivism did at predicting general recidivism. The SACJ-MIN instrument was a generalizable significant predictor of general repeat recidivism whereas the Static-99 category significantly predicted general repeat recidivism but did not generalize in the validity analysis.

A six variable CTA model demonstrated strong performance (ESS = 56.3) and had an overall classification accuracy of 82.8% in predicting which offenders would be arrested for two or more new crimes of any type. Figure III.11 presents this CTA model. One very high risk group emerged: single offenders with a high risk classification based on the SACJ-MIN and who were placed on probation for a misdemeanor or other sex crime including public indecency. This very high-risk cluster reveals the group of offenders who visits forest preserves for sex, attempts to solicit sex from minors, or exposes their private parts in public. By contrast, single offenders were at low risk of committing two or more new crimes if they scored high risk on SACJ-MIN and had been convicted of a felony hands-on sex crime (e.g., criminal sex assault); these offenders probably understood that their probation would be revoked and they would be sentenced to prison if they committed a second crime. Single offenders also were at low risk if they

scored low or medium risk on the SACJ-MIN and had no prior mental health treatment; however, this group was at moderately high risk of committing two or more new crimes if they had prior mental health treatment. Offenders who are or were married were at low risk if they either had not been physically abused as a child or had been physically abused as a child but had two or fewer counts brought against them for the current conviction that placed them on probation.

Figure III.11: CTA Model Predicting Two or More Arrests for Any Crime



## F. Comparison of Grant and Control Samples on Recidivism Outcomes

An important part of this evaluation is to compare the control and grant samples on rates of committing new sexual offenses, sexual or violent offenses, and general

recidivism. The evaluation team performed Cox proportional hazards survival analysis to determine whether the control and grant samples differed on the outcomes. This survival analysis provides a better estimate of failure rates in that it takes into account the amount of time at risk, the amount of time to failure, and controls for any other significant risk factors before estimating the difference between the control and grant sample on failure rates. Table III.19 also presents the simple percentage of offenders who were arrested while on probation and time to first arrest. An examination of simple proportions of failures on the outcome variables is misleading for several reasons. First, simple proportions do not take into account the amount of time to failure. Second, simple proportions do not adjust for the amount of time at risk of failure. Third, simple proportions cannot control for other characteristics that may be related to failure and that may account for the observed differences between the control and grant samples. Thus, the reader is advised to be cautious in drawing conclusions about recidivism and compliance from the simple proportions presented in Table III.19.

**Table III.19 Recidivism of Grant and Control Sample Offenders as Measured by New Arrests and Time to First Arrest**

| Probation Program | Mean Number of Days to First Arrest for a sex offense | Arrested for a new sex crime Excluding failure to register | Arrested for a new sex or violent crime | Arrested for a new crime of any type |
|-------------------|---|--|---|--------------------------------------|
| <b>Grant</b>      | Mean = 21.0 N = 30                                    | 28.8% N = 30   | 33.7% N = 35                            | 45.2% N = 47                         |
| <b>Control</b>    | Mean = 30.8 N = 26                                    | 25% N = 26   | 32.7% N = 34                            | 54.8% N = 57                         |

About a quarter of both the control and grant samples admitted to or were arrested for a new sex crime excluding failure to register. These crimes included nine offenders arrested for a class X felony of aggravated criminal sexual assault or predatory criminal sexual assault. In addition, many other offenders committed felonies involving criminal sexual assault (N = 4) or aggravated criminal sexual abuse (N = 15). Other offenses included eight offenders charged with public indecency, and ten offenders charged with criminal sexual abuse. Other new sex crimes included prostitution, soliciting a prostitute, child pornography, sexual exploitation of a child and unlawful entry into a school. Approximately one-third of the control sample (35.6%) and grant sample (30.8%) were arrested for a new sex crime including failure to register as a sex offender. Similarly, about one third were arrested for a new sex or violent crime, which did not include violations of failure to register as a sex offender. Of the 104 offenders who were arrested for any new crime, 14 (13.5%) were arrested for domestic battery. As expected, a much higher percentage of the control and grant samples committed a new crime of any type.

It is important to determine if the grant and control samples are similar in the amount of months before the first new arrest because the time to new arrest influences the rates of recidivism. In order to estimate the time to first arrest, we performed independent sample t-tests using only the sex offenders that had new arrests for the appropriate crime category. As shown in Table III.19, the grant sample was significantly faster at being arrested for a new sex crime,  $t(49) = 1.95, p < .057$ . Similarly, the grant sample was arrested on the average of 20.9 months for new sex crimes including failure to registers whereas the average was 31.1 months for the control sample,  $t(66) = 2.29, p < .025$ . This difference in time to first arrest also occurred for time to first arrest for any

crime: mean number of months is 18.7 for the grant sample and 28.47 for the control sample,  $t(100) = 2.66, p < .009$ . However, the grant sample (mean = 21.2) and control sample (mean = 28.32) had similar time to first arrest for a new violent or sex crime,  $t(67) = 1.41, p < .16$ . In the next section, more sensitive measures of failure rates based on arrest rates across time are provided with the use of Cox proportional hazard survival analysis. Failure rates from the Cox proportional hazard survival analysis take into account the amount of time to failure, the amount of time at risk, and control for other risk predictors that may explain the difference between the grant and control samples. The control sample also had a significantly longer opportunity to commit a new offense (mean = 57.62 months) than did the grant sample (mean = 34.05 months),  $t(206) = 11.62, p < .001$ . Thus, it is important to control for opportunity in estimating recidivism rates.

### 1. Conceptual Framework Comparing the Specialized Sex Offender Probation and the Standard Probation

The specialized sex offender probation program is based on the containment model, which has the top priority of keeping the offender from committing a new sex offense while in the community. To meet this goal, the specialized sex offender probation program compared to standard probation has much more intensive surveillance of sex offenders through increase requirements of additional office visits, visits to the offender's home, and following some sex offenders at random times as they go about their daily lives in the community. This increased surveillance could affect sex offenders in one of two ways. First, specialized sex offender programs with their additional

surveillance should be able to detect a higher number of sex offenses. For example, on sex offenders' computers, probation officers may discover child pornography, or during a home visit probation officers may discover drug paraphernalia and drugs. When following offenders in the community, probation officers may witness public indecency, indecent solicitation of child, or solicitation of prostitution. In addition, probation officers may be more likely to receive reports about sex offenders if significant others have met the probation officer. Thus, the more probation officer-offender field contacts and other related surveillance activity, the greater the probability that sex offenders will be detected and arrested. One hypothesis that we have labeled higher detection: is that the grant sample compared to the control sample will have a higher rate of new arrests for sex crimes. The higher detection hypothesis assumes that many sex crimes are not reported to or detected by criminal justice authorities; this assumption, of course, is widely supported in the literature.

Alternatively, the second way that increased surveillance can affect sex offenders is through deterring sex offenders from committing additional crimes due to the belief that they have a high chance of getting caught and facing severe consequences. Sex offenders on specialized sex offender probation should be deterred more than sex offenders on standard probation due to the increased surveillance of their behavior. Deterrence then can mask the effect of higher detection, and the two counter ways that increased surveillance can affect sex offender's behavior may result in no difference between the control and grant sample. Thus, it is important to examine subgroups that may be more likely to be deterred or subgroups that would continue with their normal offending behavior despite increased surveillance.



The deterrence hypothesis requires that sex offenders engage in rational calculations of their chance of being caught if they commit a new offense. Some sex offenders are more rational than others. For example, sex offenders who only commit public indecency crimes often engage in such lewd behavior because the risk of being caught adds excitement, but is low enough so that it is unlikely that the gains of committing a new offense outweigh the potential losses (such as a new arrest). Based on the assumption that sex offenders who commit exclusively hands-off sex offenses are rational and calculating, we hypothesized an interaction between type of probation program and whether offenders committed only hands-off offenses. We expected that hands-off only offenders would be arrested for fewer new sex offenses in the grant sample than in the control sample because the grant sample of hands-off only offenders would be deterred by the increased surveillance.

Sex offenders without any prior convictions also may be more likely to be deterred in the specialized sex offender program than in the standard probation program. In the specialized program, sex offenders that have no prior convictions are more likely to realize that the next conviction will lead to a jail sentence whereas sex offenders that have no prior convictions who are placed on standard probation may conclude that they received a light sentence and are unlikely to be caught or face severe consequences in the future. Thus, we hypothesized an interaction between prior convictions and program type on general recidivism (our measure of prior conviction was for any crime; thus, we were unable to test a hypothesis specific to sex offenses). Sex offenders without any prior convictions should have a much higher rate of recidivism in the standard probation program than in the specialized probation program. By contrast, sex offenders with prior

convictions may be more committed to the criminal lifestyle and continue with this lifestyle.

Mentally ill sex offenders are a group that cannot be deterred through increased surveillance because they do not think rationally about the chances of being caught before committing a sex offense. Thus, we also hypothesized an interaction between presence of mental illness and type of probation program. We expected that mentally ill offenders would have a higher rate of new arrests in the grant sample than in the control sample due to the increased surveillance in the specialized sex offender program that allows probation officers to detect new offenses. These hypotheses are tested in the next section.

In all survival analyses, we attempted to control for any differences between the specialized and standard probation samples. To provide a careful and stringent analysis of whether the specialized program had lower sexual, violent, and general recidivism rates than did the standard program, we entered 11 predictors in all survival analyses: (1) whether committed only hands-on sex offenses, only hands-off offenses, or both hands-on and hands-off sex offenses; (2) prior arrests for sex crimes; (3) current mental health status; (4) total number of prior arrests; (5) any prior convictions; (6) whether offender had a prior arrest but no prior conviction; (7) whether offender committed crime against stranger or acquaintance; (8) whether offender is sexually aroused to children; (9) whether had prior mental health or drug treatment; (10) number of prior arrests for violent crimes; (11) marital status; (12) whether served a term of prior probation; and (13) amount of time at risk to reoffend. These predictors were entered either because they had a significant relationship with sexual, violent, or general recidivism or the

standard and specialized samples differed on the characteristic and there was a theoretical possibility of a relationship with recidivism. We conducted three separate survival analyses to estimate time to first arrest for a new sex crime excluding failure to register offenses (sexual recidivism), a new violent crime (violent recidivism), or a new crime of any type (general recidivism). The following sections present the findings from these survival analyses.

## 2. Predicting Time to First Arrest For New Sex Crimes

Using a Cox proportional hazards survival analysis, we first estimated the effects of the 13 control variables on time to first arrest for a new sex crime. The overall model was significant,  $X^2(14) = 31.9, p < .004$ . Sex offenders that were sexually aroused to children were significantly more likely to commit new sex offenses, ( $b = 1.077, p < .006$ ). Offenders who had less time at risk to reoffend were significantly more likely to commit a new sex crime ( $b = -.28, p < .009$ ); this finding may reflect the fact that sex offenders are placed in jail after they commit a new crime, which shortens their time at risk.

In the second step, we entered type of probation program. The change in the overall chi-square was not significant,  $p < .75$ , and the type of probation program was not significant,  $p < .75$ . The chi-square for the overall model, however, remained significant, ( $X^2(15) = 32.1, p < .006$ ). Thus, after controlling for opportunity and the other significant effects, the specialized and standard probation samples did not differ in their rate of committing new sex offenses excluding failure to register offenses. The overall sexual recidivism rates reported at the means of the covariates for the entire sample were 4.1%

at one year, 9.9% at two years, 16% at three years, 22.6% at 49 months, and 33.3% at five years.

The finding of no difference between the standard and specialized probation programs is not informative. The specialized program may have had an impact on sexual recidivism for certain subgroups of sex offenders. It is necessary to examine possible differences for groups that are likely to be deterred and groups that may continue their sexual recidivism despite surveillance. In the final step, we tested the interaction hypotheses. After controlling for all variables, we entered the two interaction terms. (mental illness by type of probation and profile of offending by type of probation). The change in the Chi-square was significant, change  $X^2 (2) = 15.075$ ,  $p < .001$ , and the overall chi-square for the entire model was significant. Table III.20 in the first column presents the coefficients and associated probabilities for all variables entered in the Cox Regression that estimated time to first arrest for a new sex crime (excluding failure to register offenses).

The interaction term for type of probation program and mental illness was significant,  $b = 2.119$ ,  $p < .0005$ . In the specialized probation sample, mentally ill offenders compared to normal offenders were eight times more likely to commit a new sex crime,  $p < .001$ . The specialized program was able to detect at a significantly higher rate the sexual recidivism committed by mentally ill offenders. The sexual recidivism rate for mentally ill sex offenders was 52.62% at 36 months and 66.6% at 49 months in the specialized program compared with 11.44% at 36 months and 16.3% at 49 months in the standard program. The sexual recidivism rate for sex offenders that did not have

**Table III.20 Cox Regressions Estimating Time to First Arrest for New Sexual Recidivism, Violent Recidivism, and General Recidivism in Lake County**

| Predictors                                    | Model for new sexual recidivism |                    | Model for new violent recidivism |                   | Model for new general recidivism |                   |
|---|---------------------------------|--------------------|----------------------------------|-------------------|----------------------------------|-------------------|
|   | B                               | p <                | B                                | p <               | B                                | p <               |
| Total prior arrests                           | -.006                           | .692               | .020                             | .119              | .007                             | .588              |
| No Prior conviction                           | -.260                           | .644               | -.204                            | .617              | -.155                            | .685              |
| Prior Probation term                          | .776                            | .147               | .438                             | .347              | .461                             | .221              |
| Whether prior arrest, but No Prior Conviction | .674                            | .081 <sup>t</sup>  | .619                             | .079 <sup>t</sup> | .511                             | .083 <sup>t</sup> |
| Prior arrests for violence                    | .025                            | .921               | .232                             | .321              | .504                             | .008 <sup>*</sup> |
| Prior arrests for sex crimes                  | .059                            | .829               | -.328                            | .254              | -.242                            | .263              |
| Marital Status                                |                                 | .298               |                                  | .086 <sup>t</sup> |                                  | .107              |
| Currently married                             | -.592                           | .146               | -.834                            | .027 <sup>*</sup> | -.558                            | .057 <sup>t</sup> |
| Separated or Divorced                         | -.021                           | .955               | -.266                            | .414              | -.437                            | .117              |
| Sexual preference for children                | 1.204                           | .003 <sup>*</sup>  | .946                             | .022 <sup>*</sup> | .862                             | .008 <sup>*</sup> |
| Victimized Stranger or Acquaintance           | .446                            | .252               | .491                             | .175              | .054                             | .848              |
| Prior Treatment                               | .073                            | .831               | -.045                            | .886              | .172                             | .493              |
| Mentally Ill                                  | -1.042                          | .034 <sup>*</sup>  | -.627                            | .138              | -.257                            | .436              |
| Hands-off sex offending                       | 1.070                           | .020 <sup>*</sup>  | .799                             | .038 <sup>*</sup> | .514                             | .080 <sup>t</sup> |
| Amount of time to reoffend                    | -.022                           | .083               | -.015                            | .181              | -.016                            | .281              |
| Specialized Probation                         | -.303                           | .603               | -.150                            | .768              | -.431                            | .281              |
| Interaction terms:                            |                                 |                    |                                  |                   |                                  |                   |
| Mentally Ill * Program                        | 2.119                           | .0005 <sup>*</sup> | 1.591                            | .003 <sup>*</sup> | .32                              | .237              |
| Hands-off * Program                           | -1.818                          | .0025 <sup>*</sup> | -1.704                           | .002 <sup>*</sup> | -1.565                           | .001              |
| Overall Chi-square                            | (17) = 47.056, p < .001         |                    | (17) = 68.93, p < .0001          |                   | (16) = 34.03, p < .005           |                   |

mental illness did not differ appreciably in the specialized (22.4%) and standard program (29.15%) at 36 months. The significant main effect for mental illness indicates that mentally ill sex offenders (11.44% at 36 months) compared with normal sex offenders (29.15%) had a significantly lower sexual recidivism rate in the standard program.

We doubt that mentally ill offenders responded differently in the two probation programs. Instead, the specialized sex offender probation program was more likely to

detect their sexual offending due to the more intensive surveillance of their behavior.<sup>12</sup> Moreover, the mentally ill sex offenders in the control and grant sample were similar on committing serious noncompliance with treatment orders with 44% committing such violations; thus, treatment failure cannot account for the higher rate of recidivism in the grant sample. Mentally ill offenders clearly pose a high risk of reoffense, which becomes evident when the environment is enhanced to detect sexual offending. Mentally ill offenders were arrested for a wide range of sex offenses: prostitution, public indecency, criminal sexual abuse, aggravated criminal sexual abuse, criminal sexual assault, predatory criminal sexual assault of a child, aggravated criminal sexual assault with weapon against child victim, sexual exploitation of a child and unlawful entry into a school, and child pornography. Most of the new sex crimes were hands-on crimes, with only five public indecency charges.

As noted other mental illness covered a wide range of DSM-IVR diagnoses including personality disorders involving narcissism, borderline, antisocial, sadistic, adjustment disorders, bi-polar and major depression disorders, and schizophrenia and personality disorders with psychotic features such as delusions or paranoia. We also compared mentally ill offenders and offenders without current mental illness on all 54 demographic, offense, and offender characteristics. Overall the two groups were similar on the majority of demographic characteristics except that the mentally ill offenders were significantly more likely to be unemployed and receiving public aid. Two other significant differences were found. Mentally ill offenders compared to non-mentally ill

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<sup>12</sup> Additional survival analyses tested whether type of probation program interacted with psychopathic deviancy and with sadistic personality. Both interaction were significant, and indicated that psychopathic deviants and offenders with sadistic personality had higher sexual recidivism in the specialized program than in the standard program.

sex offenders were more likely to have been sexually and physically abused as children and were currently less likely to be involved in a sexually active relationship with an adult. These differences, further underscore why mentally ill offenders may continue their sexual offending despite increased surveillance and other restrictions.

The interaction term for type of probation program and exclusively hands-off offending was significant, ( $b = -1.818$ , two-tailed  $p < .005$ ). In the standard program, the significant main effect for type of offending ( $b = 1.07$ ,  $p < .02$ ) indicated that offenders who committed exclusively hands-off offenses were 2.9 times more likely to commit a new sex offense than were offenders who committed only hands-on sex offenses. The deterrence hypothesis was supported. Sexual recidivism for sex offenders interested in hands-off sex offenders was significantly lower in the specialized program (11.35%) compared with the standard program (63.39%). The sexual recidivism rate for sex offenders that were only interested in hands on sexual offending was not appreciably different in the specialized program (22.4%) and the standard program (29.15%) at 36 months. The significantly lower sexual recidivism rates in the specialized probation program for sex offenders that have committed or are interested in hands-off sexual offending suggest that these offenders can be deterred if placed in the specialized sex offender probation program with enhanced surveillance. It is important to note that this finding held for sex offenders that exclusively focused on hands-off sexual offending and sex offenders that committed hands on sexual offending and had interest or prior arrests for hands-off sexual offending.

### 3. Survival Analysis Estimating Time to First Arrest For a New Sex or Violent Crime

We first estimated the effects of the 13 control variables on time to first arrest for a new sex or violent crime (violent recidivism). The overall model was significant, (overall  $X^2(13) = 53.72, p < .001$ ). Sex offenders that are currently married compared to single sex offenders were significantly less likely to commit violent recidivism, ( $b = -.873, p < .019$ ). Sex offenders that are sexually aroused to children were twice as likely to commit a new sex or violent crime than were sex offenders that are not sexually aroused to children, ( $b = .794, p < .043$ ). Sex offenders with a greater number of prior arrests for any crime were significantly more likely to commit violent recidivism, ( $b = .024, p < .042$ ). There was a trend for sex offenders with a greater number of prior arrests for violent crime to have a higher chance of committing sexual recidivism, ( $b = .381, p < .087$ ). Also, sex offenders that had prior arrests, but no prior convictions were somewhat more likely to commit violent recidivism, ( $b = .612, p < .085$ ). Sex offenders with a shorter time at risk were more likely to commit violent recidivism, ( $-.020, p < .034$ ).

In the second step, type of probation program was entered in the model, but did not produce a significant change in the chi-square, ( $X^2(1) = .013, p < .91$ ). The overall violent recidivism rates for the entire sample reported at the mean of the covariates were 6.7% at one year, 15% at 25 months, 21.8% at three years, 31.9% at 49 months, and 39.3% at 62 months in Lake County. The finding of no difference between the standard and specialized probation programs is not informative. The specialized program may have had an impact on sexual recidivism for certain sub groups of sex offenders. It is necessary to examine possible differences for groups that are likely to be deterred and groups that may continue their sexual recidivism despite surveillance. In the final step,



we tested the interaction hypotheses. In the second column of Table III.20, the unstandardized coefficients and probability levels from the final model of the Cox Regression analysis that estimated time to first arrest for a violent crime is presented. The interaction between mental status and type of probation was significant, ( $b = 1.591$ ,  $p < .006$ ). As hypothesized, mentally ill sex offenders had significantly higher rates of violent recidivism at 36 months in the specialized program (55.79%) than in the standard program (17.6%). The rate of violent recidivism at 36 months did not differ for mentally ill (17.6%) and normal (30.4%) sex offenders in the standard program, as indicated by the non-significant main effect for mental illness. These findings support the higher detection hypothesis. In separate survival analyses, sex offenders that had psychopathic deviancy or sadistic sexual fantasies or chronic aggression problems also showed much higher rates of violent recidivism in the specialized program compared to the standard program.

The interaction for type of offending and type of probation program was significant, ( $b = -1.704$ ,  $p < .004$ ). Sex offenders interested in hands-off sexual offending had a much lower rate of violent recidivism at 36 months in the specialized program (11.83%) compared with the standard program (55.25%). This difference is quite substantial, and further supports the proposition that the increased surveillance and additional restrictions in the specialized sex offender program deterred sex offenders interested in hands-off sexual offending. Sex offenders interested in only hands on sexual offending were not appreciably deterred and showed similar rates of violent recidivism at 36 months in the specialized program (26.75%) and the standard program (30.35%).

#### 4. Survival Analysis Estimating Time to First Arrest For Any Type of New Crime.

We first entered the 13 control variables in a Cox proportional hazard survival regression to estimate their effects on time to first arrest for any new crime. The overall model was significant, ( $X^2(14) = 67.87, p < .001$ ). Sex offenders with prior arrests for violent offenses were more likely to commit general recidivism, ( $b = .56, p < .002$ ). Divorced, separated, or widowed sex offenders were significantly less likely to commit general recidivism than were single sex offenders, ( $b = -.633, p < .028$ ). Currently married sex offenders compared to single offenders were somewhat less likely to commit general recidivism, ( $b = -.488, p < .080$ ). Sex offenders that were sexually aroused by children were about 2.4 times more likely to commit general recidivism, ( $b = .891, p < .005$ ). Sex offenders with a shorter time at risk were more likely to commit general recidivism ( $b = -.019, p < .010$ ). All other variables were not statistically significant.

In step two, type of probation program was entered and did not produce a significant change in the model chi-square ( $X^2(1) = .012, p < .91$ ). The general recidivism rates for the entire sample reported at the mean of the covariates were 12.2% at one year, 25.8% at two years, 37.5% at three years, 51.1% at four years, and 69.3% at 62 months in Lake County.

In the third step, we tested two interaction terms: mental state by type of probation program and hands-off sexual offending by type of probation program. At the end of 37 months, offenders who had an interest in hands-off sex offenses had a general recidivism rate of 35% in the specialized program and 73.7% in the standard probation program. Thus, across all recidivism measures, offenders who had an interest in hands-

off sex offenders fared better in the specialized sex offender program; the lower recidivism rates are possibly due to the deterrent effect of increased surveillance and tighter restrictions. The interaction of mental status and probation program was not significant on time to first arrest for any crime, ( $b = .32, p < .47$ ); the specialized programs' increased surveillance and monitoring does not have a greater advantage at detecting all types of crimes committed by mentally ill offenders, only sex and violent crimes. Mentally ill offenders often committed crimes that the public or police officers could easily detect such as public drunkenness, disorderly conduct, driving while intoxicated, shoplifting, and forgery, and thus standard probation officers also become aware of these crimes.

## **F. Conclusions and Recommendations**

Overall, the Lake County specialized sex offender probation program is more beneficial than the standard probation sex offender program based on several findings. First, the deterrence hypothesis was supported in that sex offenders interested in hands-off sex offending had significantly lower sexual and violent recidivism rates in the specialized program as compared to the standard program. Second, a distinct advantage of the specialized sex offender probation program is its better capability at detecting sexual and violent offending in groups that do not make rational cost and benefit compliance decisions and may continue with their sexual or violent offending after being placed on probation. These groups include mentally ill offenders, psychopathic deviants, and sadistic offenders. One implication of this finding is that judges and professionals in the criminal justice system must carefully consider the sentence for mentally ill, sadistic,

and psychopathic deviant offenders. If these offenders are placed on community supervision, additional restrictions should be placed on these offenders to insure community safety such as house arrest, global monitoring system, and more intensive community service or treatment so that professionals know the whereabouts of these offenders most of the time.

Another key finding for the purposes of conducting thorough evaluations is that the specialized program did not have a beneficial effect on sexual, violent, and general recidivism for all groups of sex offenders. If we had stopped our analysis at this point, our conclusions would have been much different. It is important to look beyond the total sample aggregate findings of no difference. Because the specialized program has both deterrence and higher detection benefits, it is necessary to examine subgroups that may be deterred and those that may continue offending despite higher monitoring and surveillance. A deterrent effect for other possible subgroups that have a lot to lose if caught -- such as those that are employed and in an intimate relationship with an adult, or subgroups that may be more prone to realize the more severe consequences for continuing offending (such as those with prior probation sentences) -- should be explored in future research.

Approximately, two-thirds of the grant and control samples completed their probation satisfactorily. Of sex offenders who were terminated satisfactorily, about 20% of the control and grant samples admitted to or were arrested for a new violent or sex crime. Commission of a new sex offense was considered in the court's revocation decisions, but was neither a necessary nor sufficient criterion. Offenders had the highest chance of satisfactory termination (92.5% chance) if they had no prior arrests for

misdemeanor crimes and expressed great remorse for their offense. The grant and control samples also were similar on revocations with around 23% of offenders having their probation revoked, and a little under 10% of the sample absconded from their probation. Offenders were most likely to be revoked if they were unemployed or part-time employed and used physical force to commit the sex crime.

Based on N-of-1 analyses of therapists' monthly progress reports, 13 of the 26 grant sex offenders were responsive to treatment, which is consistent with the literature on treatment effectiveness. Over both samples, 33 of the 79 cases (41.8%) that had a VOP filed for noncompliance with treatment eventually completed treatment satisfactorily; these cases show some responsiveness to the probation officers' and courts' warnings to comply with the treatment order. Grant sex offenders compared to control sex offenders were significantly more likely to be compliant with treatment in that a higher percentage had no VOP filed for noncompliance with treatment. However, control and grant sex offenders had similar rates of serious noncompliance with treatment that included premature termination, absconding, or unsatisfactory completion.

Several recommendations about risk assessment instruments can be made from the CTA analyses predicting new sex crimes, general recidivism, and treatment failure. We place these recommendations within the context of prior research on sex offender recidivism and treatment failure.

Consistent with a recent meta-analysis (Hanson & Busieree, 1998), objective sexual preference was the strongest predictor of sexual recidivism. However, other research suggest that deviant sexual arousal to children is not useful for predicting sexual recidivism in an incest population (Bararee & Marshall, 1989; Firestone et al., 1999;

Proulx et al., 1990). Our CTA findings suggest an interaction between deviant sexual arousal to children and offender's relationship to the victim. Offenders with a sexual preference for children had about an 85% chance of sexual recidivism if they had victimized strangers or acquaintances and only a 29% chance if they had victimized family members.

When sexual preference for children was unknown or nonexistent, at least one prior arrest for misdemeanor crimes was the strongest predictor of sexual recidivism. In addition, single or divorced men with access to children had a moderately high chance of committing a new sex crime. Prior research has found that single marital status is a significant modest predictor of sexual recidivism (Hanson & Bussiere, 1998), and our findings indicate that single or divorced status is a more powerful risk predictor when access to children is considered. Single or divorced men also were at a moderately high risk of sexual recidivism if they completely denied the offense. Once again, denial has not been a consistent predictor of sexual recidivism, but when combined with marital status it becomes more informative. Hands-off offending, mental illness, psychopathic deviancy, and sadistic personality also are high-risk predictors of sexual recidivism based on the survival analyses.

Based on these findings, we recommend that Lake County attempt to collect objective sexual preference information and psychopathic deviancy information on all sex offenders. It should be noted that Lake County compared to the other counties has the best record at including objective sexual preference information and psychopathic deviancy information in their treatment evaluations.

Offenders were at high risk of general recidivism if they began criminal offending: (1) before the age of 28 and abused alcohol; or (2) at the age of 28 or later, had a substance abuse problem, and victimized a family member. A 1998 meta-analysis of seven studies that included alcohol abuse also found that it was a significant predictor of general recidivism (Hanson & Bussiere, 1998), more recent research on incest offenders (Firestone, Bradford et al., 1999) and extrafamilial child molesters (Firestone et al., 2000) has found that alcohol abuse is a predictor of general recidivism. Prior studies generally have not assessed illicit drug use or abuse; however, 65.7% of alcohol users in the Lake County sample also used illicit drugs and 40% of all alcohol users were recommended by the court or therapist for substance abuse treatment. Thus, our measure may be capturing alcohol abusers rather than alcohol usage. Our CTA findings suggest that risk assessment instruments for general recidivism of sex offenders should score five characteristics as high risk factors: (1) age younger than 28 at time of first criminal offending; (2) substance abuse; (3) alcohol abuse; (4) single marital status; and (5) charged with a misdemeanor crime. Offenders with three of these five characteristics should be considered high-risk. In addition, offenders should be considered high risk if they are in one of the two clusters described above.

The CTA analysis predicting serious noncompliance with treatment illustrated that blaming the victim was the most important predictor of treatment failure. It is also interesting that the RRASOR and STATIC-99 contributed to the CTA model for treatment failure. An examination of the offenders within these risk categories of the RRASOR and STATIC-99 revealed that all offenders had victimized strangers or acquaintances. From this examination, offenders who blamed the victim and victimized

strangers or acquaintances were at a very high risk of treatment failure if they had one of these four characteristics: (1) 2 or more prior arrests and at least one prior conviction; (2) sadistic sexual fantasies; (3) objective sexual preference for children; or (4) victimized boys. Offenders with a long criminal history often have an antisocial personality involving lack of conscience, and research on treatment effectiveness has noted the difficulty of treating this group (Seto & Barbaree, 1999). Other research has shown that psychopathic deviants are more likely to fail at treatment (Moore, Bergman, and Knox, 1999). Though there has been no prior research on the relationship of sadistic fantasies/personality and treatment failure, rapists are more likely to have sadistic sexual fantasies, and have been found to be more resistant to treatment (Anderson, 1999). As discussed previously, offenders who victimized strangers or acquaintances and had an objective sexual preference for children had a very high chance of sexual recidivism. Few studies have examined the effectiveness of treatment for sex offenders who victimized boys, though Anderson (1999) suggests that this population may need more aggressive types of treatment. In addition, offenders were at a high risk of treatment failure if they used illicit drugs and had a chronic history of impulsive behavior. It is interesting to note that the basic demographic characteristics did not enter the model to predict treatment failure, except receiving public aid. The public aid characteristic is not an important predictor of treatment failure because it entered at the last branch and classified only a very small subset of offenders; thus, this characteristic should not be incorporated in a risk assessment of treatment failure.

Offenders were most likely to complete treatment satisfactorily if they did not place all of the blame on the victim. Offenders who blamed the victim had a high chance



of completing treatment satisfactorily if they were in a sexually active relationship with an adult and had no prior convictions.

In conclusion, the Lake County Sex Offender Specialized Program appears to have had a positive impact on recidivism and serious noncompliance with treatment. Its field surveillance and informal sanctions including requiring offenders to keep logs of their time and activities has served to deter some sex offenders from committing further sex offenses or other crimes and to catch other offenders who may not be deterred. In addition, the case files generally contain information on psychopathic deviancy, sadistic fantasies, mental illness, and objective sexual preference to children that are important in assessing which offenders are at high risk of recidivism and treatment failure. One possible refinement that the program may wish to consider is to incorporate a formal risk assessment to determine which offenders should receive more surveillance in the community and more intensive office contacts. This suggestion is particularly relevant in light of the fact that caseloads are surpassing their intended target, requiring officers to judge how to divide their time among offenders on their caseload. Risk assessment for treatment failure also may serve to be useful for therapists. Having such information, therapists can monitor and probe high-risk sex offenders more closely.

## **Chapter IV. Long-term Impact Analysis of Specialized Sex Offender**

### **Probation in DuPage County**

DuPage County is the state's second largest county with a 1990 census population of 781,666. The county seat and judicial center are located in the city of Wheaton, which is approximately 35 miles directly west of the city of Chicago. DuPage County forms the 18<sup>th</sup> Judicial Circuit in Illinois. The probation department, known officially as the Department of Probation and Court Services, serves both adult and juvenile offenders. The department caseload as of December 31, 1997 consisted of 3,457 adult cases and 798 juvenile cases. As of July 1998 the adult division, which includes the former division of Adult Special Services, had a staff of 40 probation officers, 9 senior probation officers, 7 supervisors, and a deputy director or a total staff complement of 56. Adult caseloads in the department as a whole average about 100 cases per officer, but vary widely.

#### **A. Defining Characteristics of Specialized and Standard Sex Offender Probation**

The manner by which standard sex offender probation (control) and specialized sex offender probation (grant) cases were handled were compared on eight factors: Target population, specialization, caseload, contact standards, special conditions, administrative sanctions, communication with treatment providers, and treatment procedures. Findings indicate that the essential difference between the control and grant cases in DuPage County centered on specialization, caseload, and contact standards. Prior to the grant program, DuPage County had a special unit for sex offender cases but probation officers in this unit serviced a mixed caseload of sex offender and regular probation cases. Caseloads averaged approximately 100 per officer. Under the grant program, instituted in

1997, two officers were designated to carry only sex offender cases and caseloads averaged 43 for each of these officers. Also, prior to the grant program, the contact standard maintained for sex offenders in DuPage County was the Administrative Office of the Illinois Courts' (AOIC) standard for maximum supervision cases of two face-to-face contacts per month and one field visit every other month. The grant program's contact standards were much more stringent based on a three-level supervision system that required four face-to-face contacts per month in level I, two of which were to be home or field visits. Contact standards in level II were reduced to three face-to-face contacts per month and level III consisted of the AOIC standard. While the DuPage County program experienced considerable difficulty in meeting its field visit standards, overall face-to-face contacts averaged close to three per month, one visit above the AOIC standard.

The control and grant cases did not differ in target population...both served sex offenders convicted of a misdemeanor or felony crime and sentenced to probation. Beginning in 1996, a set of 15 special conditions for sex offender probationers was in use. Also, approved sex offender treatment providers plus requirements for an initial and maintenance polygraph have been a part of the program since 1995. However, the research team could find only polygraph reports for three of the 105 control cases whereas most of the grant cases had at least one polygraph report. This finding suggests that polygraph tests were a more consistent and frequent part of the specialized probation program than the standard probation program. Treatment providers and program staff have maintained a regular bi-monthly meeting schedule since the inception of the sex offender team, a practice that was continued throughout the period of the grant program.

## 1. Comparison of Grant and Control Samples on Probation Conditions

DuPage County utilized a set of 15 special conditions for sex offenders for both the standard sex offender probation (control) and the specialized sex offender probation (grant) cases. Key conditions required the offender to actively participate in treatment, to avoid contact with minors including a prohibition against residing with any child under 18, loitering near where the victim resides or near areas primarily used by children, or accepting employment that would involve direct contact with children. Offenders were also required to register as sex offenders, to not possess pornographic material in any form, not use 900 phone numbers or use computers and other devices in violation of Illinois Statutes related to sexual offenses. In addition, the court can impose additional requirements. The research team compared the control and grant samples on court-imposed requirements. Our analyses indicate that the grant cases compared to the control cases had more restrictions placed upon them, especially conditions prohibiting contact with victims or minors. Findings are presented in Table IV.1.

While 70.5% of the grant sample had conditions restricting contact with the victim (12.7% only unsupervised contact; 57.8% no contact allowed), only 40.7% of the control sample had such conditions (4.6% only unsupervised contacts; 36.1% no contact allowed)  $X^2 (2) = 19.78, p < .001$ . Similarly, 49.5% of the grant sample had conditions restricting contact with minors (10.9% only unsupervised contacts; 38.6% no contacts allowed), while only 7.6% of the control sample had such conditions (5.7% only unsupervised contacts; 1.9% no contacts allowed),  $X^2 (2) = 49.59 p < .001$ . An additional contact-related condition is restriction on contacts with the victim's family especially when the offender had a relationship with the victim's mother. A higher

percentage of the grant offenders (20.0%) were prohibited from contact with the victim's family than was the case for control offenders (9.3%), though this difference is not statistically significant.

There were also sharp differences in the use of conditions requiring polygraph or plethysmograph testing, random urine testing, community service, time in jail, and work release assignment. In general, the specialized sex offender program imposed a greater number of restrictions on sex offenders, with the exception that a higher percentage of sex offenders on standard probation were required to perform community service.

None of the sex offenders on standard probation had a condition requiring either a polygraph or plethysmograph test whereas 15 grant cases (14.6%) had such a condition. Random urine testing was a condition in 33% of the grant sample, but in only 2.8% of the control sample,  $X^2 (1) = 33.74$   $p < .001$ . It should be noted that the absence of a specific condition for such testing does not mean that such tests, especially polygraph examinations and urine testing, were not done. Probation officers may order offenders to undergo such testing when they suspect that other probation conditions, such as no contact with the victim, have been violated.

A higher proportion of the control cases (21.5%) than the grant cases (7.1%) were required to perform some hours of community service,  $X^2 (1) = 8.60$ ,  $p < .004$ . Also, a higher proportion of grant offenders (45.1%) than control offenders (26.7%) were required to spend some time in jail as an initial condition of their probation,  $X^2 (1) = 7.01$ ,  $p < .009$ . Similar findings occurred with work release: 33.3% of the grant offenders and 15.0% of the control offenders were required to participate in a work release program,  $X^2 (1) = 9.69$ ,  $p < .003$ .

**Table IV.1. Comparison of Probation Conditions in the Standard and Specialized Sex Offender Programs of DuPage County**

| <b>Special Conditions</b>                  | <b>DuPage County Control Sample</b> | <b>DuPage County Grant Sample</b> |
|--|-------------------------------------|-----------------------------------|
| No unsupervised contact with victim        | 5 (4.6%)                            | 13 (12.7%)                        |
| Ordered to stay away from victim           | 39 (36.1%)                          | 59 (57.8%)                        |
| Curfew imposed                             | 2 (1.9%)                            | 0 (0.0%)                          |
| No unsupervised contact with minors        | 6 (5.7%)                            | 11 (10.9%)                        |
| Ordered to stay away from minors           | 2 (1.9%)                            | 39 (38.6%)                        |
| Ordered to serve some jail time            | 27 (26.7%)                          | 41. (45.1%)                       |
| Sex offender counseling ordered            | 99 (90.0%)                          | 104 (99.0%)                       |
| Ordered to pay victim restitution          | 19 (87.6%)                          | 7 (7.0%)                          |
| Substance abuse treatment ordered          | 19 (7.5%)                           | 9 (8.9%)                          |
| Ordered to perform community service       | 23 (21.5%)                          | 7 (7.1%)                          |
| Ordered to stay away from victim's family  | 10 (9.3%)                           | 20 (20.0%)                        |
| Ordered to take polygraph                  | 0 (0%)                              | 14 (13.6%)                        |
| Ordered to take plethysmograph             | 0 (0%)                              | 1 (1.0%)                          |
| Work release ordered                       | 16 (15.0%)                          | 34 (33.3%)                        |
| Random urine testing ordered               | 3 (2.8%)                            | 34 (33.3%)                        |
| Mental health assessment ordered           | 11 (10.2%)                          | 13 (12.7%)                        |
| Mental health treatment ordered            | 4 (3.7%)                            | 6 (5.9%)                          |
| Ordered to stay away from forest preserves | 2 (1.9%)                            | 7 (7.0%)                          |
| Ordered to stay away from other locations  | 2 (1.9%)                            | 0 (0%)                            |
| Other special conditions ordered           | 28 (25.9%)                          | 22 (21.4%)                        |

There were no real differences between the two sample groups in conditions requiring curfew, sex offender counseling, victim restitution, substance abuse or mental health treatment, or “other” conditions. Virtually all offenders in both groups (control, 98.1%; grant, 100%) did not have a curfew condition. Almost all offenders in both groups (control 90.0%; grant, 99.0%) were required to participate in sex offender counseling. Almost all of the grant offenders (93.0%) and most of the control offenders (82.4%) were not required to pay victim restitution. Also, the most offenders in both samples (control, 92.5%; grant, 91.1%) were not required to participate in substance abuse treatment and most (control, 86.1%; grant, 81.4%) were also not required to participate in a mental health assessment or treatment.

About 22% of each group had other conditions as part of their probation. Finally, most control (96.3%) and grant (93.0%) offenders were not required to stay away from the location where the sex offense occurred.

As expected, the specialized sex offender probation program imposed more requirements, including jail time, than did the standard probation program. Thus, the specialized program had additional surveillance and contract standards as well as additional sanctions such as work release, and jail time imposed on the sex offenders. These additional requirements are meant to assist in keeping offenders from committing additional crimes while in the community.

## **B. Profile of DuPage County Grant and Control Samples**

Part of the research design for the impact evaluation included a control sample of sex offenders who were convicted for the same crimes as the grant sample, but who were

sentenced to standard probation. Before comparing the control and grant samples on recidivism, it is important to determine whether the control sample is a legitimate comparison group in that it has similar distributions on characteristics that have been found to be related to a higher risk of sexual recidivism. If the control and grant samples differ on important risk characteristics, the analyses will control for these differences to equate the two groups.

The research team coded information for 105 offenders in the grant sample and 110 offenders in the control sample. All offenders that were sentenced between July 1997 and January 2000 or were placed in the grant program after July 1997 were included in the grant sample. The research team selected control cases from lists of sex offenders on standard probation between January 1993 and June 1996. All coded information came from probation department case files, except criminal history was coded from rap sheets obtained from the Illinois State Police.

The case files generally included a demographic intake interview completed by the probation officer shortly after sentencing, a police report, a listing of the offender's prior arrests and convictions, a listing of the offender's probation conditions, a list of all charges from the original indictment, and a treatment evaluation. The treatment evaluations generally included an evaluation written by the treatment provider after an initial interview, and an ABEL assessment.

### 1. Comparison of Grant and Control Samples on Demographic Characteristics

In order for the control sample to be a legitimate comparison group, they must have similar characteristics to the grant sample on variables that may affect recidivism.



We conducted statistical comparisons between the grant sample and the control sample on those characteristics that may affect recidivism. According to these comparisons, the grant sample and the control sample are similar on the majority of characteristics.

The specialized and control samples in DuPage County are similar on age, ethnicity, marital status, employment, and education. Both samples are relatively young, with a mean age of 35.1 for the specialized sample and 33.8 for the control sample. Caucasian offenders comprised about 75% of the offenders, and the samples consisted of less than 5% African American offenders. About 40% of each sample have never been married, a third are currently married, 10% are divorced, 4% separated and 1% are widowed. Over 60% of the offenders are currently employed full-time and only 14.3% of the grant sample and 27.8% of the control sample are unemployed. The control and grant sample are better educated than sex offenders in the other counties, with 8.6% of control and 11.8% of grant offenders completing a college degree. About one-third of both samples obtained a high school degree, about 26% had some additional trade or college education after the high school diploma and 26.7% of the control sample and 15.7% of the specialized sample failed to complete high school.

The grant and control sample show significant differences on annual income status. Most offenders in both samples do not receive public aid, but 12.7% of control offenders and 6% of grant offenders did receive public aid while on probation. The distribution on income differed with the grant offenders having a better economic situation than control offenders,  $X^2(3) = 16.36, p < .001$ . A larger percentage of control (41.4%) than grant (27.0%) offenders reported living in poverty at the time of the intake interview, making less than \$13,500 per year. Roughly twenty percent of the grant

(21.0%) and a third of the control (34.3%) sample made between \$13,501 to \$20,000 a year, with 13.1% of the control and 26.0% of the grant sample making \$20,001 to \$30,000 a year and the remainder making more than \$30,000 a year.

In addition to these basic demographic variables, we collected information on their social and mental health status. A significantly higher percentage of the control sample (77.9%) than the grant sample (57.5%) were currently engaged in a sexually active relationship with an adult partner,  $X^2(1) = 8.7, p < .003$ . The majority of offenders in the grant (68.0%) and control (81.6%) samples were heterosexuals, 11.7% of the control and 25% of the grant samples were bisexuals, and the remainder were homosexuals.

Over two-thirds of the grant (68.9%) and control (72.4%) offenders had significant others that they relied on for support, whereas about 25% were generally alone and the remainder were in social environments that contributed to deviance. The childhood background also was similar with the majority of control (74.6%) and grant (75.3%) offenders growing up without either sexual or physical abuse. However, approximately 15% of both samples experienced sexual abuse alone or in combination with physical abuse.

The grant and control samples differed significantly on current mental health status in that 20.9% of the control offenders and 47.6% of the grant offenders demonstrated mental health problems,  $X^2(2) = 17.10, p < .001$ . A significantly higher percentage of the grant sample (19.2%) than the control sample (8.5%) demonstrated clinical depression, though they were able to function,  $X^2(2) = 14.43, p < .002$ . About 31% of grant group and 19% of control group offenders used alcohol or drugs

immediately before committing sexual crimes. These differences may occur in part due to more thorough treatment evaluations in the specialized program than in the standard program.

Only a few studies have examined whether problems with anger, aggression, or impulse control place sex offenders at a higher risk of committing new sex offenses. Additional research is needed to examine the contribution of these characteristics. While roughly the same proportions of each sample (control, 75.3%; grant, 67.1%) had no history of aggression, a higher percentage of the grant sample (30.6%) than the control sample (18.2%) had a history of mild or moderate aggression. Proportions were reversed for a history of extreme or consistent aggression (control, 6.5%; grant, 2.4%). The samples did not differ on problems with anger with 28.0% of the control sample and 19.5% of the grant sample having some minimal anger about the offense and about 6 % of both samples having consistent problems with anger or a revenge motive. The samples differed on problems with impulse control. A higher proportion of the grant sample (62.2%) than the control sample (44.6%) had problems with either or both impulsive and compulsive behaviors. Of the grant sample, 31.7% were occasionally impulsive, 17.1% had a history of compulsive behavior and 13.4% a history of both behaviors. The percentages for the control sample were 24.3%, 12.2% and 8.1% respectively.

The control sex offenders (48.1%) and grant sex offenders (39%) were similar in disclosing either alcohol or drug use. Over 40% of each sample disclosed using both alcohol and illicit drugs. It is interesting to note that 38.0% of the grant sample and 47.1% of the control sample reported using only alcohol, but only one offender in each sample disclosed using only drugs. The majority of offenders in the control sample

(80.9%) and two-thirds of the grant sample (67.1%) reported no previous or current thoughts or attempts of suicide, and only a small percentage in both groups (control sample 6.4%, grant sample 9.6%) had a history of suicide attempts. A greater percentage of offenders in the control sample (37.6%) than in the grant sample (21.6%) had previous mental health treatment.

Overall, the two samples were similar on the majority of demographic variables examined, but the grant offenders had a better annual income than did the control offenders. Significantly higher percentages of grant offenders than control offenders demonstrated mental health problems and depression. A significantly higher percentage of control offenders were in a sexually active relationship with an adult than was the case for grant offenders.

## 2. Comparison of Control and Grant Samples on Offense Characteristics

The grant and control samples showed no real differences in the type of current convicted offense. The samples did not differ on the percentage of offenders convicted of criminal sexual assault (6.4% in the control sample and 8.6% in the grant sample), or in the percentage of offenders convicted of aggravated criminal sexual abuse (30.9% in the control sample and 30.5% in the grant sample). They also did not differ on the percentage of offenders convicted of criminal sexual abuse or indecent solicitation (19.1% of the control sample and 12.4% of the grant sample). Finally, the proportion of offenders convicted of other sex offenses was similar, (grant sample 18.1%; control sample 13.6%), as was the percentage of convictions for public indecency (30.0% of the control sample and 29.5% of the grant sample).

Six to nine studies have found that the following three offense characteristics do not significantly increase the risk of sexual recidivism: violating very young children, penetrating the victim during the sex offense, and using physical force on the victim during the sex offense. These three characteristics, however, certainly increase the seriousness of the offense through preying on helpless young children, committing a clear violation of sexual norms, and using force to achieve the sex offense. In Illinois, committing a sex offense against a child younger than nine years old is a factor that increases the seriousness of the offense and potential penalty. The empirical literature, however, shows no significant increase in the risk of sexual recidivism for offenders who are known to commit crimes against younger children (for a review see Hanson & Busierre, 1998). This finding may occur due to measurement error or due to the fact that crimes against young children are really not related to risk. Measures of whether sex offenders prey upon very young children may be unreliable due to the fact that many incidents against young children may not be documented in the files. Young children may be less likely to report the incidents due to their lack of awareness and more limited ability to communicate the victimization. Furthermore, many sex offenders who commit crimes against young children also commit crimes against latency and adolescents as well as commit hands-off crimes; this measure thus does not capture a group of pedophiles that specialized in preying upon young children. This measure also can be distinguished from pedophilia in another way: pedophilia requires an exclusive sexual preference for children, whereas some men who violate young children do not have any objective or subjective sexual preference for children or have both a sexual preference for children

and adults. Thus, preying upon young children should not be confused with pedophilia; it is a very unreliable indicator that an offender is a pedophile.

Both the grant (16.7%) and the control sample (13.0%) were similar on the percentage of offenders who used physical force to achieve their sex crime. However, about two-thirds of the control (68.3%) and grant (60.8%) did not penetrate their victims. When penetration occurred, vaginal penetration was most common with only 8.7% of the control and 7.2% of the grant sample using only oral penetration. A small subset of the control (1.9%) and grant (3.1%) samples used anal penetration or anal penetration in combination with oral or vaginal.

The majority of the control (74.4%) and grant (75.3%) samples victimized children. The grant sample offenders (23.5%) and the control (19.5%) offenders were about equally likely to attack children nine years old or younger. A similar percentage of both samples (19.5% of the control offenders and 21% of the grant cases) attacked children between the ages of 14 and 15 and attacked children between the ages of 10 to 13 (22% of the control and 14.8% of the grant).

Hands-off offending has been an inconsistent predictor of sexual recidivism in prior studies. Some studies report that offenders who are interested in hands-off sex offenses such as exhibitionism and voyeurism are more likely to re-offend because such offenders were compared to offenders who committed exclusively hands-on offenses. However, an interest in hands-off offenses may increase the risk of sexual recidivism for those who have committed a hands-on offense, in that such interests increase the scope of illegal sexual behavior in which the offender may potentially engage. We created a combined measure of interest in hands-off offenses that classified an offender as being

interested in such offenses if he had one of the following: (1) showed an objective preference for voyeurism or exhibitionism on the ABEL assessment; (2) had past arrests for public indecency; (3) admitted to his treatment provider during initial interviews that he had committed a hands-off offense in the past or had fantasized about committing a hands-off offense, or (4) admitted to his probation officer during the initial intake interview that he fantasizes about or has committed past hands-off offenses. We found that a similar percentage of the grant (47.6%) and control (40.0%) samples showed at least some interest in hands-off offenses. We also examined the profile of the type of crimes that offenders have committed in the past and created a three category variable of only hands-on crimes, only hands-off crimes, and both hands-on and hands-off crimes. A similar percentage of the control sample (29.1%) and grant sample (27.60%) committed only hands-off crimes. About 11% of the control group and 18% of the grant group had committed a combination of both hands-on and hands-off offenses.

Prior research also shows that offenders who lack remorse or fail to accept of responsibility at the initial treatment evaluation generally do not have a higher risk for sexual recidivism (see Hanson & Busierre, 1998). The control and grant samples differed somewhat in their acceptance of responsibility with a higher percentage of the grant (42.2%) than the control group (31.5%) fully accepting responsibility for all aspects of the offense. Similar proportions of both samples minimized their responsibility (26.1% of the control and 33.3% of the grant) with approximately 10% in both samples denying all aspects of the offense. At the time of intake, over 40% of both the grant and control samples expressed minimal or no remorse for their offense. However, over 50% of each

group expressed a great deal of remorse. A small percentage of the control sample (3.8%) and grant sample (4.4%) defended the offense.

Few studies have examined the number of months that the abuse had been occurring prior to the offender being arrested, in part because it is difficult to obtain a reliable measure of this characteristic. About 40% of the control and 30% of the grant samples committed their offense only once, about 15% continued their offending between one to four years, and 22.8% of the specialized sample and 9.6% of the control sample continued offending for over four years. The remainder of offenders committed offenses for one month to one year.

Sex offenders have a variety of appropriate and inappropriate sexual fantasies, and it is unclear whether certain fantasies indicate a higher risk for sexual recidivism, or whether a higher number of paraphilia is related to higher risk for sexual recidivism. Only a sexual preference for children has been consistently and strongly related to sexual recidivism in the literature. The control and grant samples differed significantly in the number of paraphilia that were indicated at the time of intake. A higher percentage of control offenders (70.3%) than grant offenders (50.5%) had one paraphilia involving only females or only males, and 10.0% of the control offenders and 26.7% of the grant offenders had two or more paraphilia involving only one gender,  $X^2 (3) = 17.43, p < .001$ . Less than 10% of both samples had paraphilia involving both males and females.

In general, the two samples were similar with respect to offense related characteristics with the only real difference being in the number of paraphilia.



### 3. Comparison of Grant and Control Samples on Risk Predictors of Sexual Recidivism

Prior research has identified several characteristics of the offense that increase the likelihood that sex offenders will reoffend (for reviews see Hanson & Bussiere, 1998; Heilbrun, Nezu, Keeney, Chung, & Wasserman, 1998; and Harris, Rice, & Quinsey, 1998). Moreover, in a more recent study of the recidivism of incest offenders, the total number of previous criminal arrests, total number of sexual arrests, age of first conviction, and psychopathic deviancy predicted general recidivism for any crime (Firestone et al., 1999). This study of incest offenders also found that deviant sexual arousal did not predict sexual recidivism, which is consistent with other prior research on incest offenders (Quinsey, Chaplin & Carrigan, 1979). Based on the lower rates of recidivism and possible different characteristics that predicted recidivism, Firestone et al. (1999) noted that research on recidivism should not combine child molesters and rapists, and that separate tools for predicting recidivism should be explored.

Risk assessment of sex offenders is still at a relatively crude stage. One clear shortcoming of prior research is that studies have not empirically tested how to combine significant predictors so that the correct high-risk groups are identified (Hanson & Bussiere, 1998). Moreover, most prior research has, out of necessity, relied on static characteristics of the offender and offense to create risk assessment instruments. For example, one of the easiest and popular formal instruments is the Rapid Risk Assessment for Sex Offender Recidivism (RRASOR). The RRASOR includes only four factors that increase risk: male victim, unrelated victim, prior sex offenses, and committing the offense and being released from prison (or an inpatient secured institution) before the age of 25. Prior sexual history is given greater weight with one point assigned for one prior

conviction or two prior arrests; two points assigned for three prior convictions or three to five prior arrests, and three points assigned for four or more prior convictions or six or more prior arrests. One clear shortcoming of the RRASOR is that it relies on only official criminal history and ignores prior undetected crimes that are disclosed to probation officers or treatment evaluators. Certainly, intensive supervision probation programs that attempt to obtain a full criminal history would obtain better prediction using all prior detected and self-reported crimes.

Little is known about how well these formal risk assessments and prior risk characteristics, which are developed primarily from incarcerated or hospitalized samples or outpatient treatment clinic samples, perform in predicting recidivism among sex offenders on probation. Our research extends prior attempts to a large sample of sex offenders on either standard or intensive supervision probation and begins to examine how best to combine relevant risk characteristics to maximize accuracy in identifying high-risk offenders. We first compare the grant and control sample on six characteristics that have consistently been found to increase the risk of sexual recidivism. These six characteristics are:

- ❑ If the offender victimized a stranger
- ❑ If the offender victimized a person outside of their own family
- ❑ If the offender victimized a male
- ❑ Prior arrests for sex crimes and total number of prior arrests
- ❑ If the offender has pedophilic sexual interests
- ❑ If the offender has a psychopathic deviant personality

We then examine how the samples compare on formal risk assessment instruments.

The samples were quite similar on both the proportion of control (42.7%) and grant (38.1%) offenders that committed sex acts against unrelated victims (acquaintances) and against strangers (control 37.3% and grant 36.2%). A similar percentage of control (22.5%) and grant (20.2%) offenders committed acts against male victims and are at a higher risk of reoffending.

Prior sexual history is a significant and moderate predictor of sexual recidivism, though total number of prior arrests is a significant, but modest predictor (Hanson & Bussiere, 1998). Most formalized risk assessment scales such as the Rapid Risk Assessment for Sex Offense Recidivism (RRASOR), the Violence Risk Appraisal Guide (VRAG), the Sex Offense Risk Appraisal Guide (SORAG), the Structured Anchored Clinical Judgement (SACJ-MIN), and Static-99 use prior sexual arrests and convictions as high-risk indicators. Table IV.2 shows that a similar percentage of the grant and control samples have a prior criminal history and have been arrested for prior sex crimes. More than half of the grant sample (58.1%) has been arrested for at least one prior crime of any type, and 43.6% of the control sample has been arrested for a prior crime. The main difference is that the grant sample was arrested for a greater number of misdemeanors than the control sample, with 8.7% of the grant sample and 2.7% of the control sample being arrested for two or more misdemeanors. The samples differed only slightly on number of arrests for property offenses, drug offenses, or violent offenses. Prior criminal history varied in the control sample with 19.1% arrested for a property crime, 9.7% arrested for a drug crime, and 12.7% arrested for a violent crime. Prior criminal history also varied in the grant sample with 22.9% arrested for a property crime, 10.5% arrested for a drug crime, and 18.1% arrested for a violent crime. The Static-99,

the Structured Anchored Clinical Judgment minimum (SACJ-MIN), and the Violence Risk Appraisal Guide (VRAG) treat prior violent arrests as a risk factor for sexual recidivism (Hanson & Thornton, 2000).

Studies generally have not postulated why criminal history is related to general recidivism for committing any crime. One possible reason is that offenders learn that the criminal justice system is quite lenient. If offenders are arrested, but not convicted, these offenders may conclude that they can beat the system. A higher proportion of the control sample (53.5%) than the grant sample (35.5%) had a prior arrest history, but was never convicted for any offense.

Prior history of sexual offending is a risk factor for future offending. The samples did not differ on prior arrests for sex crimes, with 29.5% of the grant sample and 18.2% of the control sample having a prior arrest for a sex crime. The samples did not differ on formal arrest history. However, as shown in Table IV.2, a higher percentage of the grant sample compared to the control sample disclosed undetected prior sexual crimes,  $\chi^2(1)=9.28, p<.002$ . This difference in rate of disclosure of undetected sexual crimes is probably due in part to the greater use of the polygraph test in the grant sample. Thus, the control and grant samples differed significantly on the risk factor of prior sex crimes when the full disclosed history of sexual offending is considered.

Often times, probation departments do not collect information about objective sexual preference or psychopathic deviancy. Under these circumstances, the RRASOR may be used to obtain a rough estimate of risk of sexual offending. The RRASOR combines age of offending (18 to 25 as high-risk), prior arrests for sex crimes, having a male victim, and having an unrelated victim to obtain a risk assessment.

**Table IV.2. Comparison of DuPage County Grant and Control Group on Risk Factors of Sexual Recidivism**

| <b>Possible Risk Characteristics Related to Sexual Recidivism</b>       | <b>DuPage County Control Sample</b> | <b>DuPage County Grant Sample</b> |
|---|-------------------------------------|-----------------------------------|
| <b>Relationship of offender to victim</b>                               |                                     |                                   |
| Close family member   | 7 (6.4%)                            | 19 (18.1%)                        |
| Other relative  | 10 (9.1%)                           | 5 (4.8%)                          |
| Acquaintance  | 47 (42.7%)                          | 40 (38.1%)                        |
| Stranger  | 41 (37.7%)                          | 38 (36.2%)                        |
| Unknown   | 5 (4.5%)                            | 3 (2.9%)                          |
| <b>Gender of victim</b>   |                                     |                                   |
| Boys  | 23 (22.5%)                          | 20 (20.2%)                        |
| Girls   | 76 (74.5%)                          | 71 (71.7%)                        |
| Both boys and girls   | 3 (2.9%)                            | 8 (8.1%)                          |
| <b>Prior criminal history</b>   |                                     |                                   |
| <b>Total number of prior arrests for any crime</b>                      |                                     |                                   |
| None  | 62 (56.4%)                          | 44 (41.9%)                        |
| One   | 17 (15.5%)                          | 17 (16.2%)                        |
| Two to Four   | 18 (18.1%)                          | 26 (24.8%)                        |
| Five or More  | 13 (11.8%)                          | 18 (17.1%)                        |
| <b>Total number of prior arrests for sex crimes</b>                     |                                     |                                   |
| None  | 90 (81.8%)                          | 74 (70.5%)                        |
| One or More   | 20 (18.2%)                          | 31 (29.5%)                        |
| <b>Total number of disclosed sex crimes (arrests and self-reported)</b> |                                     |                                   |
| None  | 74 (67.3%)                          | 48 (46.6%)                        |
| One or More   | 36 (32.7%)                          | 55 (53.4%)                        |
|   |                                     |                                   |
| <b>Score on the RRASOR</b>  |                                     |                                   |
| 0   | 62 (56.4%)                          | 44 (41.9%)                        |
| 1   | 17 (15.5%)                          | 17 (16.2%)                        |
| 2   | 10 ( 9.1%)                          | 15 (14.3%)                        |
| 3   | 4 ( 3.6%)                           | 4 ( 3.8%)                         |
| <b>Objective sexual preference for children</b>                         |                                     |                                   |
| No  | 33 (30.0%)                          | 51 (48.6%)                        |
| Yes   | 5 (4.5%)                            | 21 (20.0%)                        |
| Unknown   | 72 (65.5%)                          | 33 (31.4%)                        |
| <b>Is offender a psychopathic deviant?</b>                              |                                     |                                   |
| Unknown   | 96 (87.3%)                          | 80 (76.2%)                        |
| No  | 14 (12.7%)                          | 23 (21.9%)                        |
| Yes   | 0 ( 0.0%)                           | 2 ( 1.9%)                         |

| <b>Significant Predictors</b>   | <b>DuPage<br/>Control Sample</b> | <b>DuPage<br/>Grant Sample</b> |
|---------------------------------|----------------------------------|--------------------------------|
| <b>Score from the SACJ-MIN</b>  |                                  |                                |
| Low risk                        | 17 (15.5%)                       | 8 ( 7.6%)                      |
| Medium risk                     | 53 (48.2%)                       | 36 (34.3%)                     |
| High risk                       | 40 (36.4%)                       | 61 (58.1%)                     |
|                                 |                                  |                                |
| <b>Score from the Static-99</b> |                                  |                                |
| Low risk                        | 14 (12.7%)                       | 15 (14.3%)                     |
| Medium risk                     | 38 (34.5%)                       | 34 (32.4%)                     |
| Medium high risk                | 43 (39.1%)                       | 40 (38.1%)                     |
| High risk                       | 15 (13.6%)                       | 16 (15.2%)                     |

We computed RRASOR scores for the sex offenders in the control and grant sample and found that the samples were not statistically different from each other on these scores. Table IV.2 presents the distribution with most of these offenders in the lower risk groups. In prior validation studies of the RRASOR offenders scoring two or less had an average 5-year recidivism rate of 12.6%. Offenders who score 1 on the RRASOR such as older child molesters who violate girls outside their families or young child molesters who violate girls within their families and have no prior record have less than a 15% chance of reoffending within 10 years (Hanson, 1998).

Typically, the term pedophilia has been used in prior research to denote sex offenders who have an exclusive sexual interest in toddler or latency children. When such a definition has been used, pedophilia has been consistently related to a higher risk. Because many offenders do not honestly self-report sexual interest in children, the most reliable way of measuring interest in toddler or latency children is via an objective phallometric or ABEL assessment. In fact, a recent meta-analysis examining the predictors of sexual recidivism found that the strongest predictor was a deviant sexual

interest in children as measured by an objective phallo metric assessment (Hanson & Bussiere, 1998).

Unfortunately, two-thirds of the control sample and one-third of the grant sample did not have an ABEL assessment. To measure pedophilic interests, we created a variable that combined both objective and subjective sexual preferences. We classified an offender as having pedophilic interests if: (1) he showed an objective preference for toddler (ages 2-4) or latent (ages 8-10) girls or boys on the ABEL assessment, or (2) he admitted to his probation officer or treatment provider during the initial intake interview that he fantasizes about touching or having sex with children, infants, or babies. The control and grant samples did differ in the number of pedophiles. We found that sex offenders in the grant sample (20%) were more likely to have either an objective or subjective interest in pedophilic behavior than were sex offenders in the control sample (4.5%),  $X^2(2) = 28.08, p < .0001$ .

Psychopathic deviancy as measured using objective instruments such as the MMPI or Hare's Psychopathy Scale is also a reliable indicator of a higher risk for sexual recidivism. Psychopathic deviancy has been found in various studies to be one of the strongest predictors of recidivism, after controlling for background, demographic, and offense characteristics (Harris, Rice & Quinsey, 1998; Quinsey, Lalumiere, Rice, & Harris, 1995). Unfortunately, the treatment evaluations did not contain information about psychopathic deviancy for most DuPage County cases.

To summarize, the presence of psychopathic deviancy, committing offenses against non-familial victims, committing offenses against strangers, committing offenses against boy victims, a pedophilic interest, and prior arrests for sex crimes place offenders

in a higher risk category. The Structured Anchored Clinical Judgement (SACJ-MIN) considers all of these factors in making predictions about the risk of sexual recidivism. In the first step, five characteristics are scored: any current sexual offense, any prior sexual offense, any current nonsexual violent offense, any prior nonsexual violent offense, and four or more sentencing occasions. If offenders have four or more of these five factors, they are considered high risk. Only 2.7% of the control and 4.8% of the grant sample are considered high risk. If offenders have two or three factors, they are considered medium risk (38.2% of the control and 60.9% of the grant samples). In the second step of the SACJ-MIN, an offender's initial risk assessment is moved one category if he has two or more of the following eight characteristics: any stranger victims, any male victims, never married, any convictions for hands-off sex offenses, substance abuse, placement in residential care as a child, deviant sexual arousal, and psychopathy. We coded information on six of these eight factors, with the exception of placement in residential care as a child and psychopathic deviancy. The majority of both the control (80.8%) and the grant (83.9%) samples had two or more of these high risk characteristics and were increased one risk category. The samples were very similar on the score for these six risk factors with 24.8% of the grant and 27.3% of the control samples having two of the six characteristics and 59.1% of the grant and 52.7% of the control having three or more of the six risk characteristics. As shown in Table IV.2 the samples differ significantly on the final risk assessment from the SACJ-MIN with a higher percentage of the grant sample in the high-risk category,  $X^2(2)=10.74, p<.005$ .

The Static-99 is a combined scale of the RRASOR and the SACJ-MIN, and has better predictive accuracy than the RRASOR or the SACJ-MIN (see Hanson & Thornton,



2000). Its name indicates that it includes only static variables and that it was developed in 1999. Prior sexual history is scored the same way as in the RRASOR. Each of the following nine risk factors adds one point to the total score: (1) four or more prior sentencing dates; (2) any convictions for noncontact sex offenses; (3) current index nonsexual violent offense; (4) prior nonsexual violence arrests; (5) any unrelated victims; (6) any stranger victims; (7) any male victims; (8) being between the age of 18 to 24 at the time of arrest; and (9) never lived with a partner for at least two years. Scores can range from 0 to 12, with a score of 6 or more being in the high-risk category.

The grant sample scores on the Static-99 ranged from 0 to 5, with 15 offenders (14.3%) in the low risk category (score of 0 or 1), 24 offenders (32.4%) in the medium risk category, and 40 offenders (38.1%) in the moderate high-risk category (score of 4 or 5) and 16 or 15.2% in the high-risk category. By these formalized risk assessment instruments, the DuPage County program is serving a diverse group of sex offenders, which ranges widely on risk of sexual recidivism, and overall averages a medium risk.

Time, however, will tell just how accurate these instruments are at assessing the risk of sexual recidivism while on probation and in the long-term. Probation officers and trainers should note the warning of Hanson and Thorton (2000): “Static-99 is intended to be a measure of long-term risk potential. Given its lack of dynamic factors, it cannot be used to select treatment targets, measure change, evaluated (sic) whether offenders have benefited from treatment, or predict when (or under what circumstances) sex offenders are likely to recidivate” (p. 132). Such warnings also apply to the RRASOR and other instruments. These instruments may have little predictive value in the short period of time that offenders are on probation. Moreover, none of the formal risk assessments

include pedophilia, objective sexual preference to children, several objective sexual paraphilias, and only the VRAG includes psychopathic deviancy; these factors however are the strongest predictors of recidivism (see Hanson & Busierre, 1998); none of the formal risk assessments include such information because it often is not available. Intensive supervision probation programs for sex offenders, however, should routinely collect information on objective sexual preferences and personality disorders and this information should inform risk assessments. Furthermore, research has not assessed the RRASOR's or Static-99's predictive value with probation samples or their accuracy at predicting probation compliance or remaining arrest-free of any new sex crimes. Our research may begin to forge such important lines of inquiry, and to improve upon current risk assessments.

The overall conclusion is that the two samples are similar on the vast majority of characteristics examined. The grant sample, however, includes a greater percentage of sex offenders who are sexually aroused by children, have committed prior sex crimes, have more paraphilia, have a current mental health problem, and who are at high-risk based on the SAC-J. Thus, the grant sample may be more at risk of sexual recidivism, and we will control for these differences in our survival analyses to determine the impact of the specialized grant program.

### **C. Probation Outcomes for DuPage County**

The research team gathered data on three measures of compliance with probation conditions: number of violations of probation (VOP) petitions filed, percentage of offenders that were revoked and resented to prison or other sanctions (revocations), and percentage of offenders that absconded from probation.

Probation officers have much discretion on when to file a VOP with the court. Instead of filing a VOP, probation officers may use informal sanctions such as warnings, requiring a noncompliant offender to come to extra office visits, or to submit to additional drug/alcohol testing. Thus the number of VOPs filed is not a measure of how compliant sex offenders are on probation, but is a better indicator of how often probation officers resort to using the most severe sanction available and seek the court's assistance in controlling sex offenders. Probation officers filed an average of about 1.5 VOPs per offender in the grant and control sample. An almost identical proportion of the grant sample (46.7%) and the control sample (44.8%) had at least one VOP filed, with 14.4% of grant and 11.5% of control offenders having two or more VOPs filed. The grant sample (mean = 10.41) and control sample (mean = 10.64) were similar on the average number of months on probation until the first VOP was filed.

The samples differed somewhat on the type of conditions that offenders violated that resulted in a VOP being filed. In the first VOP, 28.6% of the grant sample and 20.9% of the control sample had missed at least one office visit. A significantly higher percentage of the grant sample (11.6%) than the control sample (2.3%) had contact with the victim,  $X^2(2) = 26.25, p < .001$ . Also, a significantly higher percentage of the grant sample (67.4%) than the control sample (34.9%) were noncompliant with treatment,  $X^2(1) = 9.12, p < .004$ . Noncompliance with treatment is addressed in the next section. In the first VOP a large percentage of both the grant (74.9%) and control (70.5%) sample violated additional conditions beyond contact with victims, missed office visits, and treatment noncompliance. These additional conditions included failure to pay probation and court fees, new arrests, consumption of alcohol, failure to maintain full employment,

failure to register as a sex offender, failure to provide daily logs, failure to report new address, failure to cooperate with polygrapher, failure to appear in court, and testing positive for illicit drugs.

In addition to some significant differences in the reasons for filing a VOP, the two samples did not differ appreciably on the proportion of offenders who completed probation unsatisfactorily. Whereas 14.5% of the control sample terminated probation unsatisfactorily, a quarter (25.7%) of the grant sample was terminated unsatisfactorily. There was little difference between the samples on the percentage of offenders revoked or absconded. Table IV.3 presents these findings. Although over 50% in each sample completed probation satisfactorily, it should be noted that this does not always mean that the offender was completely compliant. Many offenders had VOPs filed or were given warnings or administrative sanctions and still were given satisfactory termination. Of the sex offenders who were satisfactorily terminated, 21.3% of the control (20 cases) and 28.1% (26 cases) of the grant sample were arrested for or admitted to a new sex offense since being placed on probation. It should be noted that over three quarters of such arrests in the grant group and close to half in the control group were for failure to register offenses. In addition, 36.5% of the control sample and 50% of the grant sample had new arrests for new offenses of any type while on probation and were terminated satisfactory. It should be noted that the DuPage County Probation Department notifies the state's attorney's office of any new arrests. Courts sometimes do not revoke probation based only on a new arrest, even for new sex crimes. In the standard probation condition, new arrests for sex offenses including failure to register were not significantly related to probation status as of April, 2001: 80% of those with new arrests and 87.1% of those

who had no new arrests had satisfactory probation status,  $X^2(1) = .77, p < .38$ . In the specialized probation program, sex offenders with new arrests for sex crimes were less likely to have satisfactory status (63.4%) compared to sex offenders without new arrests for sex crimes,  $X^2(1) = 4.15, p < .036$ . Thus, new arrests for sex crimes are only modest significant predictors in the specialized probation program, and have no significant impact in the standard probation program.

The grant and control groups were similar on revocations and absconding with only a small percentage of revocations and an even smaller percentage of absconding. There was some evidence that new arrests for any crime and new arrests for sex crimes were considered by the court in decisions to revoke.

**Table IV.3 Control and Grant Samples in DuPage County Compared on Probation Termination Status, Revocations, and Absconding**

| <b>Sample</b> | <b>% Terminated Satisfactorily</b> | <b>% of Revocations</b> | <b>% of Offenders Who Absconded</b> |
|---------------|------------------------------------|-------------------------|-------------------------------------|
| Control       | 85.5%                              | 12.7%                   | 3.6%                                |
| Grant         | 74.3%                              | 13.3%                   | 4.8%                                |

1. Predicting Whether A VOP is filed

The filing of a VOP indicates more about how probation officers administer severe sanctions for violation of probation conditions than about how noncompliant sex offenders are while on probation. Probation officers may know that a sex offender is noncompliant with several probation conditions including missing office visits, positive drug tests, and missing treatment appointments and still not file a VOP. How do probation officers generally decide whether to file a VOP? We examined this question using the entire sample of both control and grant sex offenders and conducted ODA to

determine which characteristics were significantly related to the probation officer's decision to file a VOP. We also used treatment status as a predictor. Table IV.4 presents the seven significant predictors. As expected, treatment status was the strongest predictor, suggesting that dynamic changes during probation are more important than the static offense and offender characteristics. Offenders who completed treatment unsatisfactory or did not have sex offender treatment as a probation condition were at a higher risk of having a VOP filed.

Substance abuse also is significantly related to whether probation officers file a VOP. Officers are more likely to file a VOP if sex offenders used drugs before committing the sex crime or the court or therapists recommended that a sex offender undergo drug treatment.

One clinical variable was significantly related to filing a VOP: sex offenders who did not express remorse for the crime were more likely to have a VOP filed.

**Table IV.4 Significant and Generalizable Predictors Related to Filing A VOP Using the Entire Sample of DuPage County Cases**

| <b>Significant Predictors Related to Filing A VOP</b> | <b>Two-tailed Sample p-value</b> | <b>ESS</b> |
|---|----------------------------------|------------|
| Unsatisfactory treatment status                       | .0001                            | 36.1       |
| Using drugs before committing sex crime               | .0022                            | 18.9       |
| Court/therapists recommend drug treatment             | .05                              | 11.4       |
| Does not express remorse for the sex crime            | .041                             | 15.8       |
| Did not complete high school                          | .0099                            | 19.1       |
| Has an annual income of less than \$20,000            | .032                             | 16.8       |
| At least one prior arrest for a misdemeanor crime     | .019                             | 12.9       |
| Arrested for a new crime of any type                  | .0003                            | 27.4       |
| Arrested for two or more new crimes of any type       | .0001                            | 22.4       |
| Arrested for a new sex or violent crime               | .037                             | 13.0       |

Two demographic characteristics were significantly and reliably related to whether a VOP was filed. Probation officers were more likely to file a VOP against sex offenders who had dropped out of high school or who made less than \$20,000 a year. Current age of the offender and marital status also were significantly related to whether a VOP was filed, but did not remain stable in the LOO analysis.

Only one criminal history measure was both significant and generalizable. Probation officers were more likely to file a VOP if an offender had at least one prior arrest for a misdemeanor crime. Three other criminal history measures were significant predictors, but did not remain stable in the LOO analysis: age at which criminal offending began, prior arrests for property crimes, and number of prior convictions.

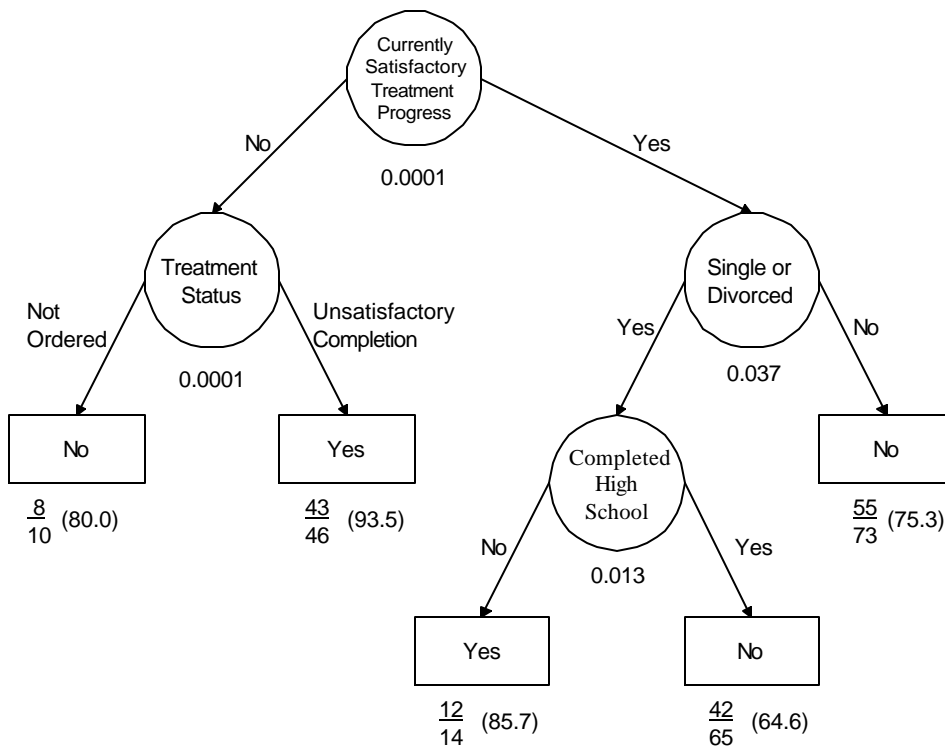
Three of the five measures of being arrested for a new crime were significant and generalizable predictors. As measured by the ESS, the general recidivism measures outperformed the criminal history, social adjustment, and demographic predictors. However, the significant predictor of new arrest for sex or violent crime was a weak predictor. Moreover, being arrested for a new sex crime including or excluding failure to register offenses did not significantly predict having a VOP filed.

In addition, none of the offense characteristics were both significant and generalizable predictors. The amount of time that sex offending continued was a significant predictor, but did not remain stable in the LOO analysis, which suggests that this finding will not replicate when new samples of data are employed.

1a. CTA model: Predicting Whether a VOP is Filed

Figure IV.1 presents the four variable CTA model predicting whether a VOP was filed. The CTA model showed strong performance (ESS = 51.6) and an overall classification accuracy of 76.9%. Not surprisingly, sex offenders with unsatisfactory completion of treatment had a VOP filed. Interesting, sex offenders who did not have a court order to participate in treatment had an 80% chance of having a VOP filed. Sex offenders who were making satisfactory treatment progress had a very high chance of having a VOP filed if they were single or divorced and did not complete a high school education. Single or divorced sex offenders who were making satisfactory treatment progress had a medium chance of having a VOP filed if they completed a high school education.

Figure IV.1: CTA Model Predicting Whether a VOP Was Filed





### 1b. CTA model: Explanation of the Figure

A brief explanation of this figure will allow the reader to interpret all the figures throughout this report. The circles in the figure identify the significant predictors with the number underneath the circle indicating the corresponding probability level. By following the arrows to the rectangular boxes, the defining characteristics of a cluster are obtained. The rectangular box indicates the outcome predicted for this cluster by the model: in the present case, whether a VOP was filed (Yes) or was not (NO). Beneath the rectangular box is a ratio. Here, the number in the numerator indicates the number of correctly classified offenders for this outcome and the number in the denominator indicates the total number of offenders in the cluster. The number in parentheses is the accuracy in classification; when the outcome is “not filed (NO)” it is necessary to subtract the accuracy in classification from 100 to obtain the likelihood that an offender in this cluster would have a VOP filed. The reader should use the above explanation to understand all of the figures presented in this report; the outcomes and predictor variables will, of course, be different.

### 2. Predicting Whether Two or More VOPs were Filed

Thirteen characteristics were significant and generalizable predictors of having two or more VOPs filed. These findings are presented in Table IV.5. The strongest predictors were measures of criminal history. Sex offenders were at a significantly higher risk of having two or more VOPs filed if they had at least one prior arrest for a misdemeanor, a property crime, or a violent crime or if they had at least one prior conviction. In addition, age at which criminal offending began and total number of prior arrests were

significantly related to having two or more VOP filed, but did not remain stable in the LOO analysis, which suggests that these two characteristics will not be significant predictors using new samples of data.

Offenders who did not express remorse were significantly more likely to have at least two VOP filed against them. Denial of the offense also was a significant predictor, but it did not remain stable in the LOO analysis.

Several characteristics of mental health and social adjustment were significantly and reliably related to having at least two VOPs filed. Mentally ill offenders, offenders with previous or current suicidal thoughts or attempts, and offenders who used drugs before committing the sex crime were at a higher risk. Offenders who were not in a sexually active relationship with an adult also were at a higher risk of having two or more VOPs filed against them.

**Table IV.5 Significant and Generalizable Predictors of Having Two or More VOPs Filed Using the Entire Sample of DuPage County Cases**

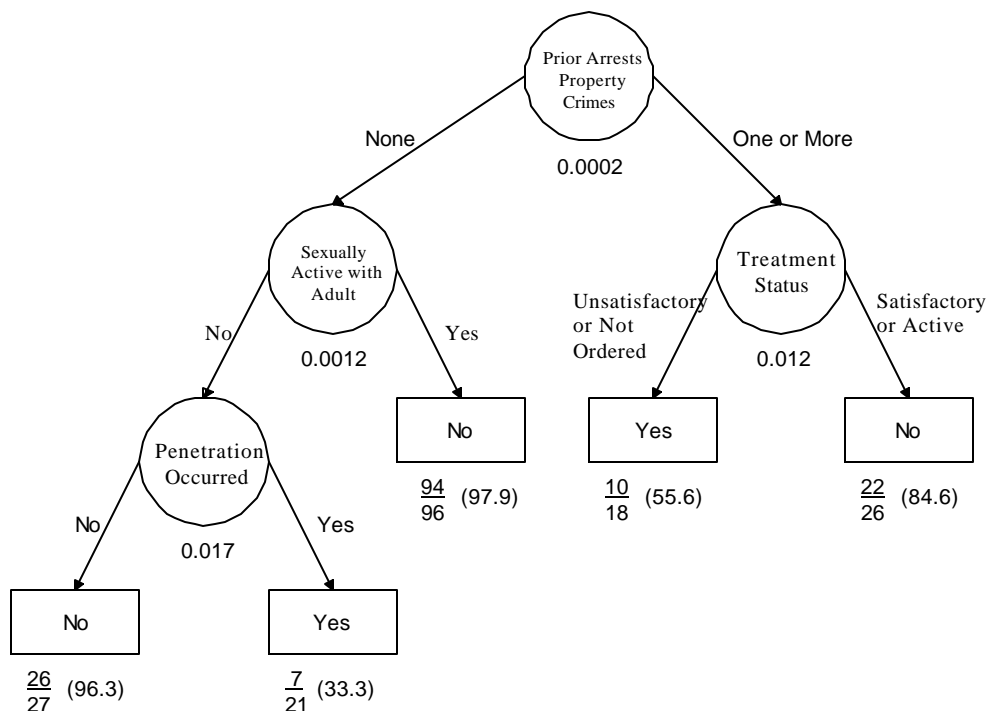
| <b>Significant Predictors<br/>Related to Having<br/>Two or more VOPs Filed</b> | <b>Two -tailed<br/>Sample<br/>p-value</b> | <b>ESS</b> |
|--|---|------------|
| At least one prior arrest for a property crime                                 | .0002                                     | 33.5       |
| At least one prior conviction  | .0006                                     | 35.0       |
| At least one prior arrest for a misdemeanor                                    | .0029                                     | 25.0       |
| At least one prior arrest for a violent crime                                  | .0033                                     | 25.0       |
| Did not express remorse for a sex crime  | .0028                                     | 33.4       |
| Having a current mental illness  | .019                                      | 28.4       |
| Having suicide thoughts or attempts  | .021                                      | 25.0       |
| Not in a sexually active relationship with an adult                            | .036                                      | 22.9       |
| Using drugs before committing the sex crime                                    | .05                                       | 19.4       |
| Single or divorced sex offender  | .029                                      | 26.1       |
| Arrested for two or more new crimes of any type                                | .0005                                     | 29.1       |
| Arrested for a new crime of any type   | .0082                                     | 27.5       |
| Arrested for a new sex crime including failure to register                     | .029                                      | 21.4       |

Only one demographic characteristic was related to having two or more VOPs filed: single and divorced sex offenders were at a significantly higher risk. Finally, treatment status was a significant predictor, but was very unstable in the LOO analysis, suggesting that this finding would not replicate when new samples of data are analyzed.

In addition, three of the measures of arrests for new crimes after probation began were significant and generalizable as shown in Table IV.5. Interesting, some of the prior criminal history measures and lack of remorse were stronger measures than having new arrests.

The CTA model predicting two or more VOP filed showed strong performance (ESS = 57.4) and an overall classification accuracy of 84.6%. Figure IV.2 presents this four variable CTA model.

Figure IV.2: CTA Model Predicting Whether Two or More VOPs Were Filed



Sex offenders with at least one prior arrest for a property crime who made unsatisfactory treatment progress or did not have treatment ordered had a moderately high chance of having two or more VOPs filed. Sex offenders who had no prior arrests for property crimes and were not sexually active with an adult had a medium chance of having two or more VOPs filed if they had penetrated the victim and a low chance if they had not penetrated the victim.

### 3. Predicting Probation Termination Status

Which offender and offense characteristics are related to whether offenders have an unsatisfactory termination of probation? ODA analysis using the entire DuPage County sample was first conducted. Table IV.6 presents the eight characteristics that were significantly related to unsatisfactory termination of probation and were generalizable based on the LOO analysis. The strongest predictor was whether the offender used drugs before committing the sex crime, with drug usage placing offenders at a higher risk of having an unsatisfactory termination. If the court or therapist recommended drug treatment, offenders also were more likely to be unsatisfactorily terminated.

Three criminal history measures were significant and generalizable predictors of unsatisfactory termination: having prior arrests for property or violent crimes, and having prior convictions. In addition, offenders with a sadistic personality were at a significantly higher risk of unsatisfactory termination. Two criminal history measures, age at which criminal offending began and total number of prior arrests, were significant predictors, but did not remain stable in the LOO analysis.

**Table IV.6 Significant and Generalizable Predictors of Unsatisfactory Termination of Probation Using the Entire Sample of DuPage County Cases**

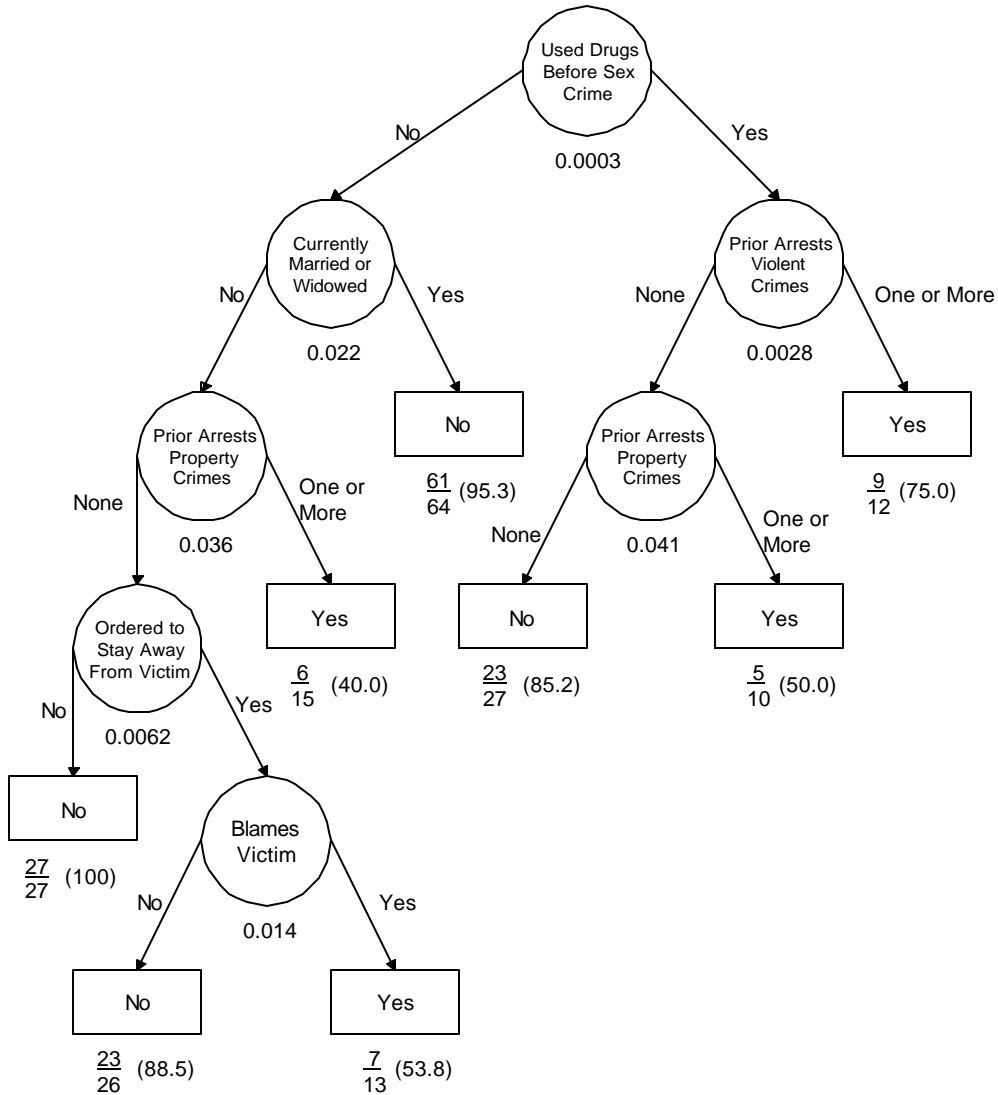
| <b>Significant Characteristics Related to Unsatisfactory Termination of Probation</b> | <b>Two-tailed Sample p-value</b> | <b>ESS</b> |
|---|----------------------------------|------------|
| Using drugs before committing the sex crime   | .0006                            | 29.0       |
| At least one prior arrest for a property crime  | .0001                            | 26.2       |
| At least one prior arrest for a violent crime   | .0048                            | 21.5       |
| At least one prior conviction   | .0028                            | 25.6       |
| Court/therapist recommended drug treatment  | .0048                            | 19.8       |
| Prior mental health or drug treatment   | .047                             | 16.3       |
| Single or separated sex offenders   | .0059                            | 25.3       |
| Sadistic personality or sexual preferences  | .013                             | 20.9       |

Prior mental health or drug treatment also increased the risk of unsatisfactory termination. Furthermore single or separated sex offenders were significantly more likely to be unsatisfactorily terminated. Three other characteristics were significant predictors, but did not remain stable in the LOO analysis: current mental health status, offender's acceptance of responsibility, and highest educational level achieved.

The six variable CTA model predicting unsatisfactory probation termination showed strong performance (ESS = 58.3) and an overall classification accuracy of 83%. Figure IV.3 presents this model. Offenders who used drugs before committing the sex crime that placed them on probation were at a very high risk of unsatisfactory termination if they had at least one prior arrest for a violent crime and were at a moderately high risk if they had no prior arrests for violent crime, but at least one prior arrest for a property crime. There were no very high-risk groups for offenders who did not use drugs before committing the sex crime. These offenders were at a moderately high risk of unsatisfactory termination if they were single, divorced, or separated, had no prior arrests for property crimes, had a court order to avoid contact with the victim, and blamed the victim. Single, divorced or separated offenders who did not use drugs before committing

the crime were at a medium risk of unsatisfactory termination if they had at least one prior arrest for a property crime.

Figure IV.3: CTA Model Predicting Unsatisfactory Termination of Probation



#### 4. Predicting Probation Revocation

Judges have the power to decide if offenders who have a VOP filed should have their probation revoked and should be sentenced to prison or some other sanction. Judges

rarely revoke probation; thus, it is interesting to see which offender and offense characteristics are related to the judge’s decision to revoke probation. Table IV.7 presents the eleven predictors that were significantly related to revocation and were stable in LOO analysis. Four of the eight significant and generalizable predictors were measures of criminal history. Offenders with at least one prior conviction, prior arrest for any crime, prior arrest for property crimes, or prior arrests for violent crimes were significantly more likely to have their probation revoked.

**Table IV.7 Significant and Generalizable Predictors of Revocation Using the Entire Sample of DuPage County**

| <b>Significant Characteristics Related to Revocation</b>  | <b>Two-Tailed Sample p value</b> | <b>ESS</b> |
|---|----------------------------------|------------|
| At least one prior arrest for property crimes             | .0004                            | 31.6       |
| At least one prior conviction                             | .023                             | 23.6       |
| At least one prior arrest for any crime                   | .044                             | 22.9       |
| At least one prior arrest for violent crimes              | .019                             | 19.4       |
| Using drugs before committing the sex crime               | .0027                            | 28.7       |
| Court/therapist recommended drug treatment                | .0089                            | 21.8       |
| Currently mentally ill                                    | .028                             | 24.5       |
| Not in a sexually active relationship with an adult       | .034                             | 23.2       |
| Arrested for new sex crimes including failure to register | .032                             | 20.2       |
| Arrested for a new crime of any type                      | .049                             | 20.4       |
| Arrested for two or more new crimes of any type           | .0015                            | 27.4       |

Offenders who used drugs before committing their sex offense or needed drug treatment also were at a higher risk of being revoked. Mentally ill offenders and sex offenders that were not in sexually active adult relationships also were more likely to be revoked.

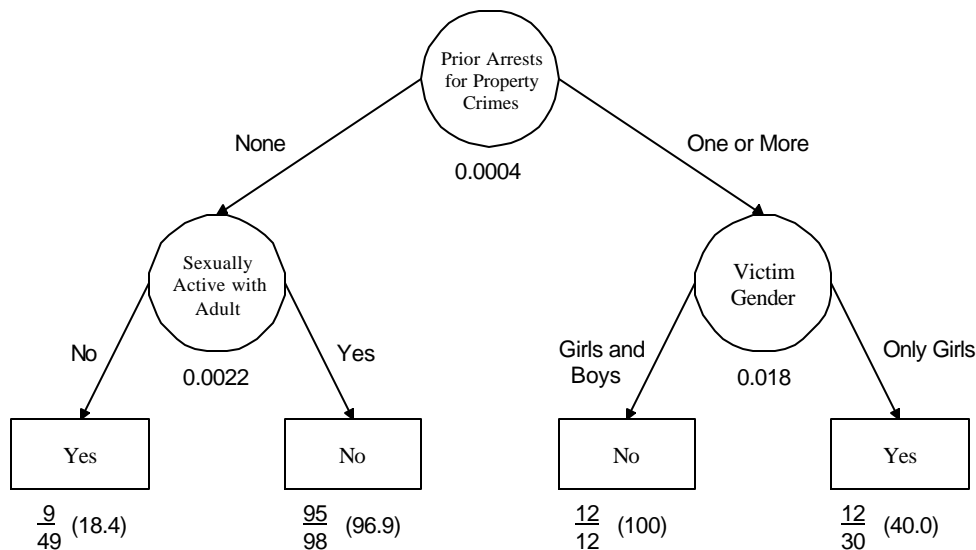
In addition, we tested five variables related to committing new offenses. Three of these variables were significant and generalizable, albeit weak predictors as presented in

Table IV.7. Being arrested for a new sex crime excluding failure to register and being arrested for a new sex or violent crime were not significantly related to having probation revoked. Thus, revocations are clearly based on more than new arrests.

Three variables were significantly related to revocation, but were unstable in the LOO analysis: income level, age at which criminal offending began, and marital status. These significant, but ungeneralizable predictors may not be related to revocation when new samples of data are used.

A three variable CTA model showed strong performance (ESS = 52.3%) and had an overall classification accuracy of 67.7%. Figure IV.4 presents this CTA model.

Figure IV.4: CTA Model Predicting Probation Revocation in Dupage County



Offenders who had at least one prior arrest for property crimes and had victimized girls had a moderate chance of having their probation revoked. Offenders who had at least one prior arrest for property crimes and had boy victims were not revoked, and most offenders with no prior arrests for property crimes who were in a sexually active



relationship with an adult were not revoked. Variables related to arrests for new crimes did not enter the CTA model.

##### 5. Outcomes related to polygraph tests

The sex offender grant program in DuPage County had well established working relationships with polygraph examiners and therefore, unlike the programs in Lake and Winnebago Counties, the DuPage program was able to obtain polygraph tests on a substantial number of offenders. While the DuPage program polygraph findings cannot be generalized to the other two programs, they are nevertheless instructive.

The evaluation team examined case files and the computerized case data system to identify polygraph data. Of the 107 DuPage grant cases studied, polygraph examinations were given to 83 or 77.6% of the cases. The majority, (54.2%) received only one exam, 41% receive two and 4.8% received three or more. Conclusive results of the polygraph tests were available on 75 cases. Analysis of data on these 75 cases reveals a mixed pattern of passing and failure over time. About a third (32.0%) of the offenders passed all polygraph examinations given and 68% failed at least one examination. The pass-fail patterns were as follows: 8% failed both the initial and maintenance exam; 4% passed the initial exam but failed the maintenance exam; 18.7% failed the initial exam but passed the maintenance exam; 37.3% failed the initial exam and were not given any other exams; and 20% passed the initial exam and were not given any other exams. Total test results were inconclusive on seven cases, and data was missing on one other case. The evaluation team also attempted to locate polygraph tests and results for the control

sample. Only two cases had polygraph results. This finding suggests that polygraph tests were not a regular feature of the standard probation program.

Examination failure usually resulted from failure to answer all questions truthfully. Of those offenders who failed one or more polygraph exams, almost half (49.9%) failed questions relating to contact with minors. Data on the number of questions failed were available on 36 cases. Offenders failed an average of 2.8 questions with the number of failed questions ranging from 1 (6 offenders) to 17 (4 offenders). In 32 cases, the judgment as to the truthfulness of an answer could not be determined and was classified as inconclusive. In 29.4% of the exam failures, however, the offender partially or fully disclosed sexual offenses that were not part of the current charge. A total of 14 offenders admitted on the maintenance polygraph to committing at least one new sexual offense while on probation. A total of 66 new sex offenses were reported. The number of new offenses per offender ranged from 1 to 25 offenses with a median of 2. Of these new offenses, 25.8% involved fondling of children and 60.6% were hands-off offenses. The offender with 25 new offenses was making contact through the Internet.

## 6. Predicting Polygraph Failure

In an attempt to better understand polygraph failure, we first conducted a number of bivariate analyses to identify those that were significantly related to polygraph failure. The seven cases with inconclusive polygraphs were included in the failure group.

We focused first on five key characteristics that have been most consistently and strongly related to sexual recidivism. As noted elsewhere in this report these are:

- If the offender victimized a stranger,

- If the offender victimized a person outside of their own family,
- If the offender victimized a male,
- Prior arrests for sex crimes and total number of prior arrests,
- If offender has pedophilic sexual interests.

None of these characteristics were related to polygraph failure.

We next examined a number of selected offense and offender variables that we believed could theoretically be related to polygraph failure. These included: type of offense, whether or not the offender admitted to new sex offenses, number of months the offense had occurred, whether or not force was used, whether penetration occurred, number of and age of the victim, whether the offender accepted responsibility for the offense, the degree of remorse for the offense, offenders' education level, substance abuse, illicit drug use, and employment status. Only type of offense, age of the youngest victim, illicit drug use and employment were related to polygraph failure.

These variables were entered into a stepwise logistic regression to isolate which combination of characteristics best predicted polygraph failure. Only employment and illicit drug use emerged as significant predictors of polygraph failure in a manner that suggested it was full-time employed illicit drug users who were most likely to fail a polygraph. We conducted an additional stepwise logistic regression using a host of other variables and again confirmed that illicit drug use and employment were the two variables that emerged as useful predictors of polygraph failure.

## 7. Outcomes Related to Urinalysis

A key condition for sex offender probation and indeed for most regular probation programs is that the offenders submit to random drug tests through urine analysis. A total of 721 drug tests were administered in the grant sample. The average number of tests administered per offender was 7.2 with a median of 6. The drug test failure rate was relatively low with only 63 or 8.7% of the test being positive. The number of failed tests ranged from one to seven with a mean of two. Drug test results were available for 100 of the 107 grant sex offenders. The vast majority 78% passed all drug tests with 22% failing one or more. We examined the relationship between drug test failure and selected drug-related offender variables to learn whether drug test failure was related to prior drug use, prior drug treatment, type of drug used and use of drugs prior to the offense. Only one of these variables, whether the offender used alcohol/drugs before sexual crimes, was related to drug test failure. While 36.0% of offenders with substance abuse before sexual crimes failed one or more drug tests only 17.5% of offenders with no substance use before sexual crimes did so ( $X^2(1) = 3.50, p < .07$ ). The highest drug test failure rate (30.2%) was among offenders who disclosed the use of both alcohol and drugs, while the drug test failure rate for alcohol use only or no substance use was 16.2%. There was no significant relationship between prior substance abuse treatment and drug test failure, although 30.0% of those with prior treatment failed at least one drug test compared to 20.5% of those without prior treatment.

## **D. Treatment Outcomes in DuPage County**

The research team assessed how well sex offenders were performing in treatment using several measures. First, we asked therapists during 1999 to submit monthly treatment reports on active sex offenders in the grant sample. In 2000, when funding for the long-term impact analysis was available, we collected additional monthly treatment reports from the probation files of grant sample cases.

We also collected information regarding when a VOP was filed for failure to comply with treatment rules and have information about overall noncompliance with treatment rules for both the control and grant samples. For both the control and grant samples, we also collected information about whether treatment was completed satisfactorily or unsatisfactorily for cases that were terminated or had active warrants due to the fact that an offender had absconded. Using information about compliance and treatment completion status, we created a measure of serious noncompliance with treatment rules.

We first present the N-of-1 findings for the grant sample. Second, we focus on comparing the grant and control group on noncompliance with treatment, treatment completion status, and serious noncompliance with treatment. Finally, we examine the predictors for satisfactory completion of treatment and for serious noncompliance with treatment.

### 1. N-of-1 Ipsative Changes in Therapist's Perception of Offenders' Progress

Therapists were asked to complete monthly treatment reports that assessed the level of each sex offender's attitudes on six dimensions related to sexual offending.

DuPage County, however, developed a modified standardized form that was compatible with the research team's monthly report form. Because different counties used different forms, we evaluate each county on three common questions: (1) to what degree did the offender participate in therapy sessions; (2) how committed is the offender to treatment; and (3) to what degree does the offender acknowledge personal responsibility for the offense. Each question was rated on a one to ten scale with one equal to the lowest progress on this dimension and ten equal to the highest progress.<sup>13</sup> For example, on the participation question one is equal to very limited participation and ten is equal to very engaged participation. The analyses are based on monthly treatment reports submitted from September 1998 to September 2000.

The average number of monthly treatment reports submitted for an offender is five with a range of two to nine monthly treatment reports submitted for an offender. Half of the offenders had five or fewer monthly treatment reports submitted. This variation in the number of monthly treatment reports submitted was due to when the offenders were sentenced and were referred for treatment as well as differences in therapists' submissions of reports.

Table IV.8 presents the mean, standard deviation, median across all DuPage County sex offenders and time periods, and the percentage of cases with nine or ten on the last monthly treatment report submitted. For all three dimensions, the average was above the midpoint and half of the sample of 36 had an average rating of seven on participation and commitment and an average rating of eight on acceptance of

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<sup>13</sup> The DuPage County treatment form rated each offender using one to five point scales; thus, we converted their scale by multiplying their score by 2 such that a rating of 1 on their report was equal to a rating of 2 on our ten point scale, and a rating of 5 on their report was equal to a rating of 10 on our ten point scale.

responsibility. Interestingly, half of the sample had a rating of 9 or 10 on acceptance of responsibility for the last monthly treatment report collected, and about one quarter of the sample had a rating of nine or ten on participation or commitment in the last monthly treatment report collected. Thus, therapists were rating these offenders very positively from the time treatment reports were collected to the end of the data collection.

These ratings were used to assess how many offenders were responsive to treatment and changed on critical dimensions addressed in treatment. Responsiveness to treatment is an important intermediate outcome in evaluations of how well treatment reduces recidivism. It can be measured in several ways. For example, at least two independent neutral experts could observe and interview each offender at several points during the entire treatment period; unfortunately, this design though ideal at reducing response biases is intrusive, expensive, and could interrupt the treatment process. The evaluation team, therefore, decided to obtain monthly treatment reports from providers on each offender and to measure systematically critical dimensions that treatment is designed to change.

**Table IV.8. Descriptive Statistics of Therapists’ Ratings of Sex Offenders’ Progress in the Last Report in DuPage County (N = 36)**

| Dimension                            | Mean | Standard Deviation | Median | % With a Rating of 9 or 10 on last treatment report |
|--------------------------------------|------|--------------------|--------|---|
| Participation in therapy             | 6.83 | 1.99               | 7      | 25%   |
| Commitment to treatment              | 6.43 | 2.37               | 7      | 27.8%   |
| Acknowledged personal responsibility | 7.52 | 2.50               | 8.10   | 50.0%   |

There are both advantages and disadvantages to using progress reports from therapists as a measure of whether offenders are responsive. One important advantage is that therapists know where each offender began and how well he has met treatment standards. Therapists, moreover, typically judge the progress of offenders in relative terms to how previous and current clients are responding to similar treatment. A potential disadvantage, however, is that therapists will tend to cast offenders' progress in the best possible light to show that treatment is effective. In an attempt to reduce this positive bias, we instructed therapists that all data would be grouped and analyses on separate agencies would not be performed. We also instructed therapists that our primary goal was to understand the predictors of treatment responsiveness and not to address the question of whether treatment was effective. We believe progress reports can be reliably used to determine the characteristics that distinguish offenders who are responsive from those who are not responsive. These data, however, are quite limited to determine the effectiveness of treatment. Questions about the effectiveness of treatment at reducing recidivism are better answered with matched-control sample designs, which we described in an earlier section.

A statistical approach to assess change is far more reliable than examining the absolute change between the first and last period. The visual examination of data to determine the extent to which offenders improved over time, however, is misleading. This approach does not provide a reliable standard to judge improvement, does not take into account the amount of variability in the ratings, and cannot provide information on how many offenders showed statistically reliable improvement.



A better approach to determining the extent to which offenders are responsive to treatment is to use statistical tools that do not have the disadvantages of the eyeball method.<sup>14</sup> Accordingly, we used N-of-1 statistical analyses to assess responsiveness to treatment. There are two types of N-of-1 analyses that address different questions related to responsiveness to treatment. Ipsative N-of-1 analyses address the question: did this offender improve during the course of treatment compared to when the offender entered treatment?<sup>15</sup> On the data for each individual offender, we performed ipsative analyses on each of the three dimensions. Ipsative N-of-1 analysis takes into account an individual's performance at the beginning of treatment or measurement (baseline performance) compared to his performance during the observation months.

DuPage County had thirty-six offenders with monthly treatment reports. (See Table VI.9). Considering first the therapists' ratings of participation, for 7 (19.4%) of these offenders, ipsative single-case statistical analysis could not be conducted due to insufficient measurements and/or variability, leaving a sample of 29. Most offenders remained stable in participation with three offenders showing a significant positive improvement, and one offender showing a statistically significant decrease in participation.

Considering next the offenders' ratings of their own commitment, 29 offenders had sufficient data. Again most offenders (N = 23; 79.3%) remained stable in commitment as therapy progressed. Statistically significant improvements in

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<sup>14</sup> As Mueser, Yarnold & Foy (1991) noted, "statistical analysis of single-subject data provides a rule-governed, systematic approach to assessing outcome that simply is not possible with visual inspection alone." (p. 135)

<sup>15</sup> Because numerous data points are needed in order to employ time series analysis, we chose to employ N-of-1 analyses derived from classical test theory (see Yarnold, 1992). Ipsative single-case analyses first convert an individual's raw data into standard z scores using an individual's own mean and standard deviation for the variable being standardized.

commitment were found for 3 offenders. Three offenders showed statistically significant decrease in commitment as therapy progressed. Responsibility ratings showed an identical pattern of findings.

In summary, the findings on commitment, participation, and data or variability responsibility showed a very similar pattern. About one-fifth of the sample could not be analyzed via ipsative single-case methods due to insufficient in the data, two-thirds of the sample showed temporally stable ratings, a small minority (one in twelve) showed positive improvement over time, and a tiny minority (one in twenty-nine) reported diminished performance.

**Table VI.9. Summary of Ipsative Statistical Analysis of Participation, Commitment and Responsibility Ratings—DuPage County  
(Number of Offenders)**

| <b>Type of Change</b>              | <b>Participation</b> | <b>Commitment</b> | <b>Responsibility</b> |
|------------------------------------|----------------------|-------------------|-----------------------|
| Statistically significant increase | 3                    | 3                 | 3                     |
| Stable                             | 25                   | 23                | 23                    |
| Statistically significant decrease | 1                    | 3                 | 3                     |
| Insufficient data                  | 7                    | 7                 | 7                     |

2. N-of-1 Normative Changes in Sex Offenders’ Attitudes while in Treatment

We next examined the relative improvement of DuPage County sex offenders based on the total sample of sex offenders in all three counties. Table IV.10 provides the average rating on the first monthly treatment report, the average rating on the last submitted monthly report, and the average rating across all monthly treatment reports and

all sex offenders in DuPage County. As shown, DuPage therapists tended to provide above average ratings on the first monthly treatment report that was collected. However, on the first monthly treatment report a rating of three or less was given to 13.9% on their participation, 22.2% on their commitment, and 16.7% on their acceptance of responsibility. On the first monthly treatment report collected, therapists gave a substantial percentage high ratings of eight or higher, with 41.6% given this high rating for participation, 26.1% given this high rating on commitment to treatment, and 50% given this rating for acceptance of responsibility. Thus, many of the sex offenders at the time that the reports were first collected were performing at an above average level on participation, commitment, and responsibility. On the last monthly treatment report submitted, the average rating moved only slightly. Moreover, a rating of three or less on the last treatment report collected was given to only 11.1% of offenders for participation, 16.7% of the offenders for commitment, and 16.7% of the offenders for acceptance of responsibility. This visual examination, however, does not provide information about which offenders are improving the most relative to all of the sex offenders.

Normative N-of-1 analyses examine which offenders show significant improvement compared to all sex offenders in the three counties for which we had treatment reports. Normative analyses have more practical implications than Ipsative N-of-1 analyses.<sup>16</sup> These analyses can address questions such as: (1) if treatment resources are scarce, which offenders will most likely benefit from treatment?

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<sup>16</sup> N-of-1 normative analyses convert the raw data to z scores using the mean and standard deviation of the entire sample. To standardize, we used the mean and standard deviation across time for each question based on all monthly treatment reports. Grouping data across treatment agencies insured that we had a more representative population of sex offenders and did not create an artificial restricted range on our measures.

and (2) which offenders are most likely to terminate prematurely from treatment due to noncompliance with treatment rules?

The normative-based N-of-1 analyses revealed that only two offenders showed significant positive improvements with one offender improving on participation and acceptance of responsibility and the other improving only on commitment to treatment. There were no significant declines in treatment. Thus, most offenders remained rather stable in treatment from the therapist’s point of view. These results, however, are based on a small sample of only 36 offenders, and a sample that therapists were rating at a high level at the time of the first monthly treatment report.

**Table IV.10. Therapist’s Average Ratings for 36 Dupage County Sex Offenders**

| <b>Dimension</b>   | <b>Mean rating on first monthly report across Sex offenders</b> | <b>Mean rating on last monthly report across sex offenders</b> | <b>Mean rating across all monthly reports and all sex offenders</b> |
|--|---|--|---|
| <b>Participation in treatment</b>                          | 6.72<br>(sd = 2.22)   | 6.83<br>(sd = 2.42)  | 5.75<br>(sd = 2.14)   |
| <b>Commitment to treatment</b>                             | 6.17<br>(sd = 2.83)   | 6.42<br>(sd = 2.59)  | 5.32<br>(sd = 2.26)   |
| <b>Acknowledge personal responsibility for the offense</b> | 7.31<br>(sd = 2.98)   | 7.61<br>(sd = 2.57)  | 6.0<br>(sd = 2.45)  |

We developed absolute criteria to classify offenders as responsive to treatment. If offenders were still active in treatment and we had treatment reports, they were classified as responsive if they showed one significant ipsative or normative change in treatment or had a rating of nine or ten on two of the three dimensions in their last treatment report submitted. In DuPage County five offenders had at least one positive ipsative or

normative change. However, two of these five offenders had significant individual positive improvement, but eventually failed to complete treatment, and thus was coded as unresponsive. There were nine offenders who had ratings of nine or ten on two of the three dimensions; of these nine offenders, eight offenders had already completed treatment satisfactorily without any violations of probation petitions filed for failure to comply with treatment and one offender was still active in treatment. This standard is a first attempt at determining responsiveness to treatment. We attempted to balance significant change with the final outcome and knowledge of whether violations of probation petitions were filed due to treatment noncompliance. Using this standard, we were able to classify 10 of the 36 DuPage county grant sex offenders for whom we had monthly treatment report data as responsive to treatment.

### 3. Descriptive Statistics on Compliance with Treatment

We next considered noncompliance with treatment orders. Noncompliance with treatment rules was obtained from violation of probation petitions filed by probation officers. The number of VOPs filed that stated sex offenders were noncompliant with treatment orders ranged from zero to three in the control sample and zero to two in the grant sample. Eighteen control sex offenders had a total of 26 VOPs filed for noncompliance with treatment and 37 grant sex offenders had a total of 40 VOPs filed for noncompliance with treatment. Table IV.11 presents descriptive statistics on noncompliance with treatment orders, percentage of cases that satisfactorily completed treatment, and percentage of cases with serious noncompliance with treatment orders. Both control and grant sex offenders averaged substantially below one VOP for

noncompliance with treatment orders per an offender. As shown in Table IV.11, sex offenders in standard probation were significantly less likely to have a VOP filed for noncompliance with treatment (80.4% of offenders had no VOP filed) than were sex offenders in the specialized probation program (64.8% had no VOP filed),  $X^2 (2) = 10.97$ ,  $p < .004$ . This finding may reflect more about offender's compliance than probation officers' discretion to allow more chances to comply with treatment order before filing a VOP since probation officers in the standard and specialized unit were similar in their rate of filing VOPs. Given the higher number of closed cases (N = 91 for control and 71 for grant), control sex offenders were significantly more likely to complete treatment satisfactorily,  $X^2 (1) = 18.18$ ,  $p < .0001$ .

**Table IV.11. Descriptive Statistics on Treatment Outcomes for Grant and Control Samples in DuPage County**

| <b>Sample</b>  | <b>Averaged number of VOPs filed for treatment noncompliance (TC)</b> | <b>% of sample that had no VOP filed for TC</b> | <b>% of sample with 2 or more VOPs filed for TC</b> | <b>% of closed cases with satisfactory completion of treatment</b> | <b>% of cases with serious treatment noncompliance</b> |
|----------------|---|---|---|--|--|
| Grant Sample   | Mean = .38<br>(sd = .54)  | 64.8%<br>(N = 68 of 105)                        | 2.9<br>(N = 3)                                      | 54.3%<br>(N = 38 of 70)  | 34.3%<br>(N = 36 of 105)                               |
| Control Sample | Mean = .27<br>(sd = .65)  | 80.4%<br>(N = 74 of 92)                         | 6.6%<br>(N = 6)                                     | 84.8%<br>(N = 78 of 92)  | 13.1%<br>(N = 13 of 99)                                |

We constructed a variable to assess serious noncompliance with treatment orders. Offenders were coded as committing serious noncompliance of treatment orders if they had one of the following: (1) unsatisfactorily termination of treatment; (2) treatment ordered, but absconded from probation and treatment; (3) active, but had a violation of probation petition filed for noncompliance with treatment orders. There were 16 cases

that had a VOP filed with noncompliance with treatment but eventually completed treatment satisfactorily. We did not code these cases as serious noncompliance because either the VOP could have been filed to extend treatment or these offenders responded to the warning to comply with treatment. As shown in Table IV.11, sex offenders in the grant sample were more likely to have serious noncompliance with treatment (34.3%) than were sex offenders in the control sample (14%),  $X^2(1) = 11.43, p < .001$ .

#### 4. Identifying Groups that have a high chance of serious noncompliance with treatment

Which sex offenders are most likely to commit serious noncompliance with treatment? To address this question, we first performed univariate ODA analyses using the entire sample of DuPage County cases. The 13 significant and generalizable predictors are presented in Table IV.12.

**Table IV.12 Significant and Generalizable Predictors of Serious Noncompliance with Treatment Using the Entire Sample of DuPage County Cases**

| <b>Significant characteristics related to Serious noncompliance with treatment</b> | <b>Two tailed p-value</b> | <b>ESS</b> |
|--|---------------------------|------------|
| At least one prior conviction  | .0001                     | 33.6       |
| At least one prior arrest for property crimes                                      | .0092                     | 18.6       |
| At least one prior arrest for misdemeanors   | .023                      | 15.2       |
| At least one prior arrest for violent crimes                                       | .0024                     | 20.4       |
| In the specialized sex offender probation program                                  | .001                      | 27.5       |
| Used drugs before committing the sex crime   | .0007                     | 27.8       |
| Court/therapists recommend drug treatment  | .007                      | 18.5       |
| Has a current mental illness   | .0055                     | 23.6       |
| Is not remorseful for the sex crime  | .045                      | 18.4       |
| Single or separated marital status   | .018                      | 22.5       |
| Not in a sexually active relationship with an adult                                | .032                      | 19.2       |
| At high risk based on the SAC-J assessment   | .036                      | 17.5       |

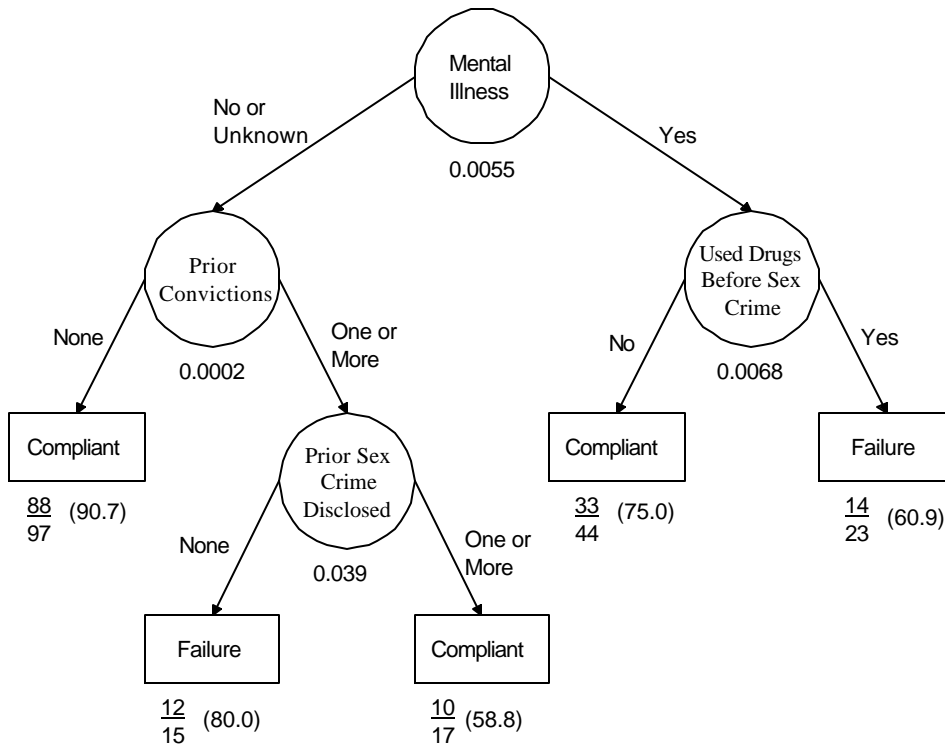
Four measures of criminal history were significantly related to serious noncompliance, and were stable in the LOO analyses: prior convictions, and prior arrests for property crimes, violent crimes, and misdemeanors. Having at least one prior conviction was the strongest predictor of serious noncompliance with treatment. In addition, two other measures of criminal history were significantly related to serious noncompliance, but were not stable in the LOO analyses: total number of prior arrests, and age at which criminal offending began.

In addition to criminal history, offenders in the specialized sex offender program had a higher rate of committing serious noncompliance with treatment. This difference on serious noncompliance between the two types of probation programs may have occurred because the specialized programs used maintenance polygraphs more frequently and consistently and were able to detect additional violations. Additionally, specialized sex offenders have a much higher rate of current mental illness, of problems with impulse or compulsive behaviors, and higher rates of having two or more sexual paraphilia. Thus, offenders on specialized probation may be more reluctant to follow treatment rules and have a higher propensity to abscond from treatment, have higher numbers of unexcused absences, and show less participation and progress in treatment.

We built two CTA models: One beginning with prior conviction (ESS = 36.5 and percentage accurately classified = 76.6%) and one beginning with mental illness (ESS = 40.7 and percentage accurately classified = 80.1%). The mental illness model shows better performance and is presented in Figure IV.5.



Figure IV.5: CTA Model Predicting Serious Noncompliance with Treatment



Sex offenders with no known mental illness and no prior convictions had a very high chance of successful completion of treatment. Mentally ill sex offenders had a 60% chance of treatment failure if they used drugs before committing a sex crime and a 25% of treatment failure if they did not use drugs before committing a sex crime. Sex offenders that used drugs before the sex crime may have had more difficulty breaking their denial and may have attributed the sex crime to the use of drugs. Offenders with no known mental illness and with at least one prior conviction had a 68% chance of treatment failure and an even higher chance of treatment failure if they did not disclose a prior sex crime to the treatment provider or were not arrested for a prior sex crime.

These findings indicate how the high risk predictors such as mental illness, prior convictions and use of alcohol or drugs before the commission of the sex crime should be combined to provide the optimal prediction of treatment failure.

5. Identifying groups that have a high chance of satisfactorily completing treatment

When treatment resources are scarce, it is important to consider which sex offenders will be the best candidates to complete satisfactorily and benefit from treatment. We first identified the offense and offender characteristics that were significantly related to completing treatment satisfactorily. For this ODA analysis, we had 162 cases with information on treatment completion. Table IV.13 presents the significant and generalizable predictors of satisfactory completion of treatment.

**Table IV.13 Significant and Generalizable Predictors of Satisfactory Completion of Treatment in the Entire Sample of DuPage County**

| <b>Significant Characteristics Related to Satisfactory Completion of Treatment</b> | <b>Two-tailed p value</b> | <b>ESS</b> |
|--|---------------------------|------------|
| Standard probation   | .0001                     | 36.8       |
| No prior convictions for any crime   | .0001                     | 34.0       |
| Did not use drugs before committing sex offense                                    | .0003                     | 31.2       |
| In a sexually active relationship with an adult                                    | .002                      | 28.0       |
| At least two counts were charged for the current offense                           | .022                      | 22.6       |
| No current mental illness  | .022                      | 22.4       |
| No penetration or only oral penetration  | .023                      | 22.0       |
| At least one prior arrest for a property crime                                     | .0058                     | 21.9       |
| At least one prior arrest for a violent crime                                      | .0037                     | 21.0       |
| Not ordered to stay away from the victim   | .048                      | 20.3       |
| Not ordered to stay away from minors   | .0096                     | 19.1       |
| Therapist or court did not recommend drug treatment                                | .0077                     | 19.3       |
| Expressed some remorse   | .051                      | 18.9       |
| At least one prior arrest for a misdemeanor crime                                  | .025                      | 16.6       |

Type of probation is the strongest predictor with offenders on standard probation more likely to complete treatment satisfactorily. This difference is not due to changes in treatment policies. Treatment standards and practices remained the same after the inception of the grant program. However, there are several reasons why sex offenders on standard probation have a higher chance of completing treatment satisfactorily.

The less stringent conditions of standard probation may allow sex offenders more opportunity to comply with treatment before a violation of probation petition is filed and probation is revoked. Also, based on the SAC-J, the grant sample is comprised of a greater percentage of sex offenders at high-risk of committing additional sex crimes. The grant sample also includes a higher percentage of mentally ill offenders, offenders with two or more paraphilia, and offenders who are sexually aroused by children.

Several measures of criminal history were significant and generalizable predictors of satisfactorily completing treatment. Offenders who had no prior arrests for misdemeanors, property crimes, or violent crimes were more likely to complete treatment. Offenders who had no prior convictions also had a significantly better chance of completing treatment satisfactorily. Offenders who already had one prior conviction for any crime, clearly, had not learned from their experience with the criminal justice system, and perhaps had fewer propensities to learn from group therapy and comply with the rules. In addition, offenders who were charged with two or more counts were less likely to complete treatment. Two other criminal history measures were significant predictors, but were not stable in the LOO analysis: total number of prior arrests and age at which criminal offending began. These two relationships are less likely to replicate with a new sample.

Interestingly, none of the demographic characteristics were significantly and reliably related to completing treatment satisfactorily. However, married men were significantly more likely to complete treatment satisfactorily, but this relationship did not remain stable in the LOO analysis.

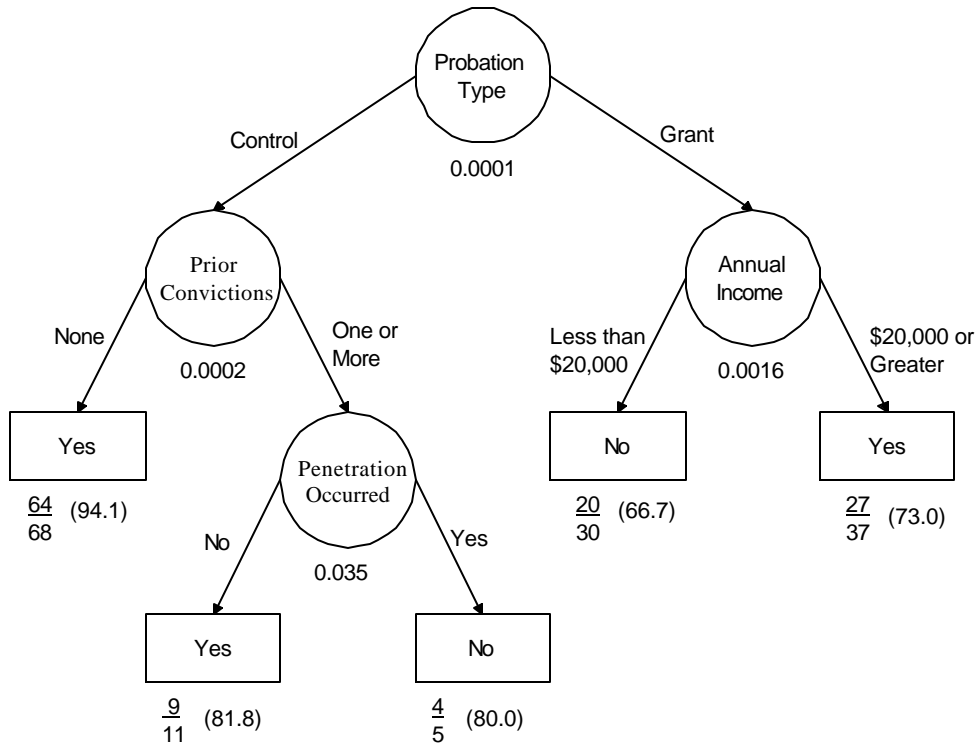
Several social and mental health adjustment characteristics were significant and generalizable predictors. Offenders without a current mental illness, those who expressed remorse, and those in a sexually active relationship with an adult were more likely to complete treatment. Offenders who used drugs before committing the crime or who were recommended for drug treatment had a significantly lower chance of completing treatment satisfactorily.

One offense characteristic, whether the offender performed vaginal or anal penetration, was related to a lower chance of completing treatment satisfactorily. Offenders who were ordered to stay away from the victim or from minors also had a lower chance of completing treatment successfully. These offenders are likely to have a prior history of sex crimes or may violate this condition, which when combined with other noncompliance may lead to probation revocation.

We next built a CTA model starting with type of probation. The final model is presented in Figure IV.6, and showed strong performance (ESS = 50.9) and an overall classification accuracy of 83.2%. Interestingly, for the specialized sex offender grant program, income was the strongest reliable predictor. Sex offenders who had an annual income of \$20,000 or greater had over a 70% chance of completing treatment satisfactorily. This finding probably occurs because therapists will prematurely terminate

sex offenders after they fail to pay for treatment over several months, and sex offenders with a higher income are more able to pay.

Figure IV.6: CTA Model Predicting Satisfactory Completion of Treatment



For sex offenders on standard probation, two groups have over a 80% chance of completing treatment satisfactorily: (1) sex offenders with no prior convictions; and (2) sex offenders who have at least one prior conviction who were charged with a sex crime that did not involve vaginal or anal penetration. These two groups may have a higher success because they are not convinced that their actions are ethical and not harmful, and are less associated with the criminal lifestyle.

## **E. Identifying High-Risk Groups for Committing New Sex Crimes**

### 1. Admits or Arrested for New Sex Crime Excluding Arrests for Failure to Register as a Sex Offender

In order to obtain a more complete measure of sexual recidivism, we obtained information about new arrests from Illinois State Police rap sheets and from coding information in the offenders' probation case file, particularly from polygraph reports and from the VOP. Rap sheets, probation case files, and therapists' reports sometimes are not complete; thus, we combined these three sources when available to obtain a more complete measure of sexual recidivism. A higher percentage of the grant sample (23.8%) compared to the control sample (11.8%) were arrested or admitted to a new sex crime excluding arrests for failure to register as a sex offender,  $X^2(1) = 5.3, p < .021$ .

We first examined the offense and offender characteristics that were significantly and reliably related to new sex crimes. Table IV.14 presents the nine significant and generalizable predictors of new sex crimes excluding failure to register offenses. The strongest predictors were measures of whether offenders were interested in or had committed hands-off offenses, with hands-off offending increasing the risk of new sexual recidivism. Sex offenders were at a significantly higher risk of sexual recidivism if they had a current mental illness, had a history of having problems with impulse control, or had a history of suicide thoughts or attempts.

No demographic characteristics were related to sexual recidivism. However, full-time employed offenders had a significantly higher chance of sexual recidivism; part of

this relationship may be due to the fact that full-time employed illicit drug users were more likely to fail polygraph tests, which resulted in disclosures of new offenses.

Offenders who were convicted of violating two or more victims were at a higher risk of sexual recidivism. Sex offenders in the specialized grant program also had a higher rate of new sex offenses excluding failure to register. Only one measure of prior criminal history was significantly and reliably related to sexual recidivism: having at least one prior conviction.

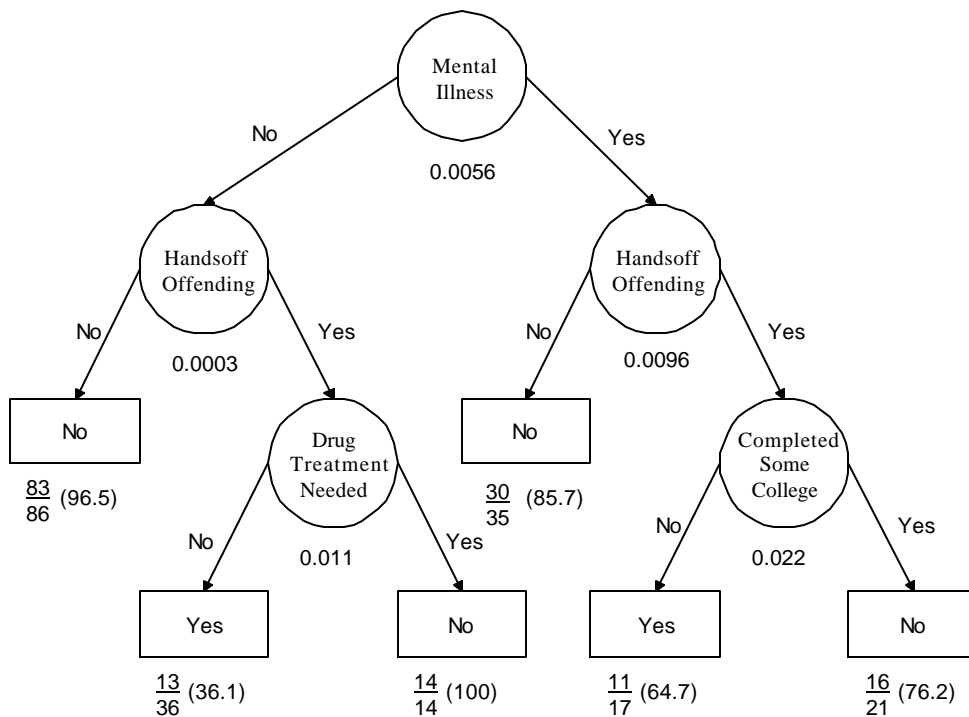
**Table IV.14 Significant and Generalizable Predictors of New Sex Crimes Excluding Failure to Register Using the Entire Sample of DuPage County**

| <b>Significant Characteristics</b>     | <b>Two-tailed sample p-value</b> | <b>ESS</b> |
|--|----------------------------------|------------|
| Interest in hands-off offending        | .0001                            | 42.8       |
| Profile history of hands-off offending | .0001                            | 40.7       |
| Currently mentally ill                 | .0058                            | 25.9       |
| Chronic history of impulsive behavior  | .0034                            | 29.0       |
| Thoughts or attempts of suicide        | .016                             | 23.7       |
| Employed full-time                     | .011                             | 24.7       |
| 2 or more victims                      | .0084                            | 22.9       |
| In the specialized grant program       | .037                             | 20.6       |
| At least one prior conviction          | .043                             | 18.3       |

There were six other predictors that showed significant relationships with new sex crimes, but were unstable in the LOO analysis. These ungeneralizable characteristics that may not replicate with new samples included: prior arrests for sex crimes, the number of prior sex crimes disclosed or detected, the statutory type of current convicted offense, the amount of time that the offender committed sexual offenses, the number of sexual paraphilia, the relationship of the offender to the victim, and the risk category based on the Static-99.

We built two CTA models one beginning with hands-off offending (ESS = 47.2; percentage accurately classified = 79.4%) and one beginning with mental illness (ESS = 48; percentage accurately classified = 79.9%). The CTA model beginning with mental illness classified 24 new sex crimes whereas the CTA model beginning with hands-off classified 21; moreover, a total of 209 cases were classified with the mental illness model compared to 155 cases with the hands-off model. Thus, the mental illness CTA model is the better model and is presented in Figure IV.7.

Figure IV.7: CTA Model Predicting New Sex Crimes



Offenders were at a very low risk of committing new sex crime if they had no interest in hands-off offending, irrespective of their mental health status. Offenders with no known mental illness were at a very low risk if they had an interest in hands-off offending, but were in need of drug treatment. Offenders with no known mental illness



were at a medium risk of committing new sex crime if they had an interest in hands-off offending and did not need of drug treatment.

Offenders with mental illness were at a low risk of being arrested for a new sex crime if they had an interest in hands-off offending and had some college education. Mentally ill offenders with an interest in hands-off offending were at a moderately high risk of being arrested for new sex crimes if they had not completed some college education. Thus, hands-off offending and mental illness are critical risk factors when combined with education level and whether offenders need drug treatment.

2. Identifying Groups of Offenders at High-Risk of Sexual Recidivism Including Failure to Register

We first examined which offense and offender characteristics were significant and generalizable predictors of all new sex crimes including failure to register as a sex offender. This initial examination analyzed the entire sample of DuPage County cases. Five characteristics were significant and generalizable and are presented in Table IV.15.

**Table IV.15 Significant and Generalizable Predictors of All New Sex Crimes Using the Entire Sample of DuPage County Cases**

| <b>Significant Predictors of All New Sex Crimes</b>      | <b>Two-tailed Sample p-value</b> | <b>ESS</b> |
|--|----------------------------------|------------|
| Performed vaginal, oral, or anal penetration             | .0062                            | 21.2       |
| In specialized sex offender probation program            | .012                             | 19.2       |
| Court-order to restrict contact with the victim          | .038                             | 17.2       |
| Court-order to allow only supervised contact with minors | .021                             | 15.6       |
| At least three or more counts in the current charge      | .044                             | 16.8       |

The strongest predictor is whether penetration occurred, with sex offenders who performed penetration at a higher risk of being arrested for any new sex crime. Sex offenders in the specialized sex offender probation program also were significantly more likely to commit a new sex crime than were sex offenders in standard probation.

Two characteristics of the probation conditions were significant and generalizable predictors. Offenders who had court orders to stay completely away from the victim or to not have unsupervised contact were at a higher risk of committing a new sex crime. Offenders who had court orders to not have unsupervised contact with minors and those with three or more counts brought against them for the current charge that placed them on probation were at a higher risk.

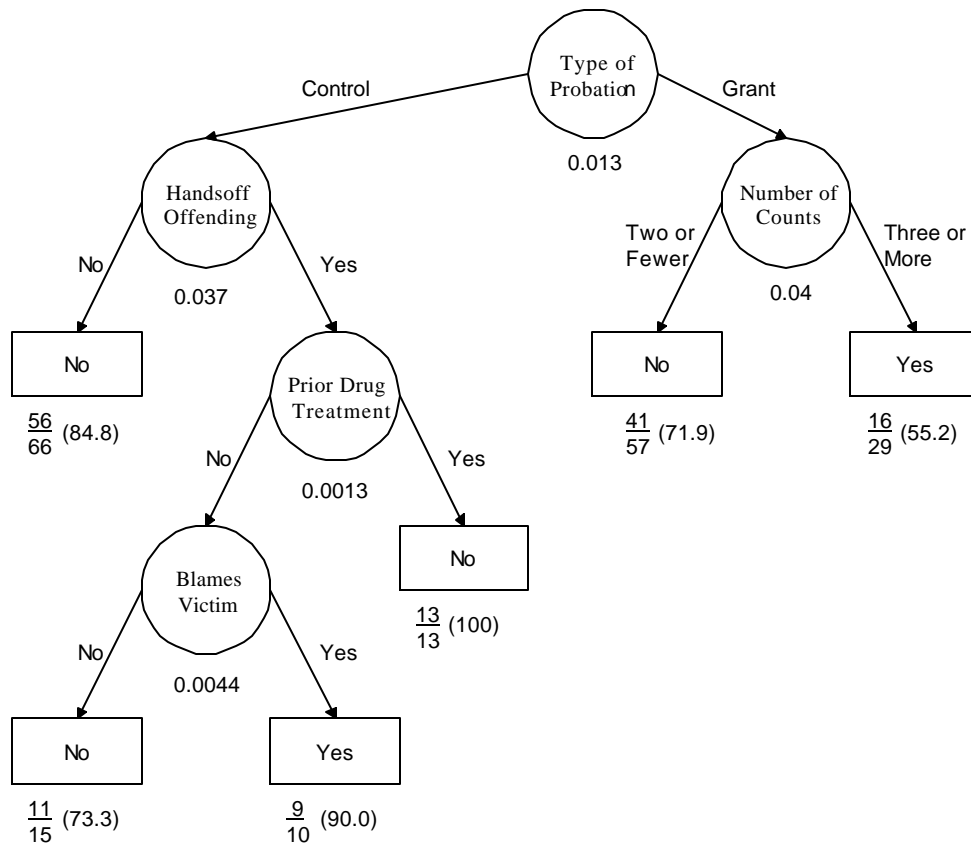
Two characteristics were significant predictors, but did not generalize in the LOO analysis: two or more sexual paraphilia and being placed on probation for a misdemeanor sex crime. These characteristics may not be significant predictors when new samples of data are employed.

The CTA model predicting new sexual recidivism including failure to register offenses showed moderate performance (ESS = 35.1) and an overall classification accuracy of 76.8%. Figure IV.8 presents this model, which starts with the type of probation program.

Sex offenders in the specialized program who were charged with 3 or more counts for the offenses that placed them on their current probation had a moderately high chance of committing a new sex crime including failure to register offenses. A very small group of sex offenders in the standard probation program had a very high chance of committing a

new sex crime if they were interested in hands-off offending, did not have prior drug treatment, and blamed the victim or denied the offense.

Figure IV.8: CTA Model Predicting New Sex Crimes Including Failure to Register Offenses



### 3. Identifying Groups of Offenders at High-Risk of Committing New Violent Crimes

We identified 14 significant and generalizable predictors related to committing a new violent or sex crime. Table IV.16 presents these predictors.

Interest in hands-off offending was the strongest predictor, followed closely by whether the current offense for which they were placed on probation was public indecency. Three criminal history measures were significant and stable predictors: prior convictions, total number of prior arrests, and prior arrests for misdemeanors.

Several measures related to mental health and social adjustment were significant and generalizable predictors. Sex offenders with a mental illness, prior thoughts or attempts of suicide, or a history of problems with impulse control were more likely to commit a new sex or violent crime. Offenders having two or more paraphilia, a bisexual orientation, and not in a sexually active relationship with an adult also were at higher risk of committing a new sex or violent crime. One formal risk assessment tool was a significant and generalizable predictor: offenders who were at high risk based on the SAC-J were more likely to commit a new sex or violent crime.

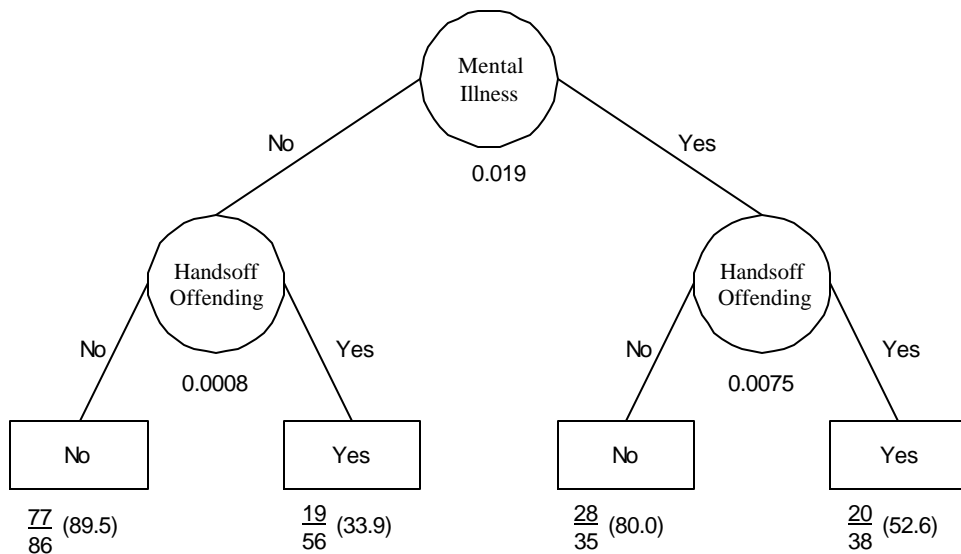
**Table IV.16 Significant and Generalizable Predictors of New Violent or Sex Crimes Using the Entire Sample of DuPage County**

| <b>Significant Characteristics</b>                  | <b>Two-tailed sample p-value</b> | <b>ESS</b> |
|---|----------------------------------|------------|
| Interest in hands-off offending                     | .0001                            | 36.5       |
| History of committing hands-off offenses            | .0001                            | 35.3       |
| Current offense is public indecency                 | .0004                            | 31.6       |
| At least one prior conviction                       | .0001                            | 32.7       |
| At least one prior arrest                           | .0036                            | 23.5       |
| At least one prior arrest for misdemeanor crimes    | .0009                            | 20.2       |
| Current mental illness                              | .017                             | 20.3       |
| Prior thoughts or attempts of suicide               | .048                             | 19.1       |
| History of problems with impulse control            | .0003                            | 31.5       |
| Two or more sexual paraphilia                       | .0033                            | 23.2       |
| Bisexual sexual orientation                         | .02                              | 17.6       |
| Not in a sexually active relationship with an adult | .012                             | 20.1       |
| At high risk based on the SAC-J                     | .0042                            | 22.4       |

We built two CTA models, with hands-off offending beginning one model (ESS = 37.8 and percentage accurately classified = 67.9%) and the other beginning with mental illness (ESS = 36.5 and percentage accurately classified = 67%). The hands-off CTA

model was a five variable model and the mental illness was a two variable model, and both models accurately classified 39 cases as committing new sex or violent crimes. The two variable model beginning with mental illness is more parsimonious and performs at the same level as the five variable model; thus it is the better model. Figure IV.9 presents the CTA model that starts with mental illness, which is a linear model combining mental illness status and interest in hands-off offending. Mentally ill offenders with an interest in hands-off offending have a moderately high chance of committing a new violent or sex crime. Offenders with no known mental illness and an interest in hands-off offending have a medium risk of committing a new sex or violent crime. Offenders with no interest in hands-off offending have a low chance of committing a new sex or violent crime.

Figure IV.9: CTA Model Predicting New Sex or Violent Crime



#### 4. Identifying Groups at High-Risk of Having A New Arrest For Any Type of Crime

We used ODA to determine the significant and generalizable predictors of new arrests for any type of crime. Six predictors were significant and generalizable are presented in

Table IV.17. The strongest predictor was number of prior convictions with offenders who had at least one prior conviction at a higher risk of committing general recidivism.

In addition, prior arrests for misdemeanor crimes or property crimes also placed offenders at a higher risk of general recidivism. Sex offenders in the specialized probation program were more likely to be arrested for general recidivism than were sex offenders in the standard probation program. Of course, this finding does not control for the few differences in offense and offender characteristics between the control and grant cases and the amount of time available to reoffend, and may disappear when these factors are controlled.

**Table IV.17 Significant and Generalizable Predictors of New Arrests for Any Crime Using the Entire Sample of DuPage County Cases**

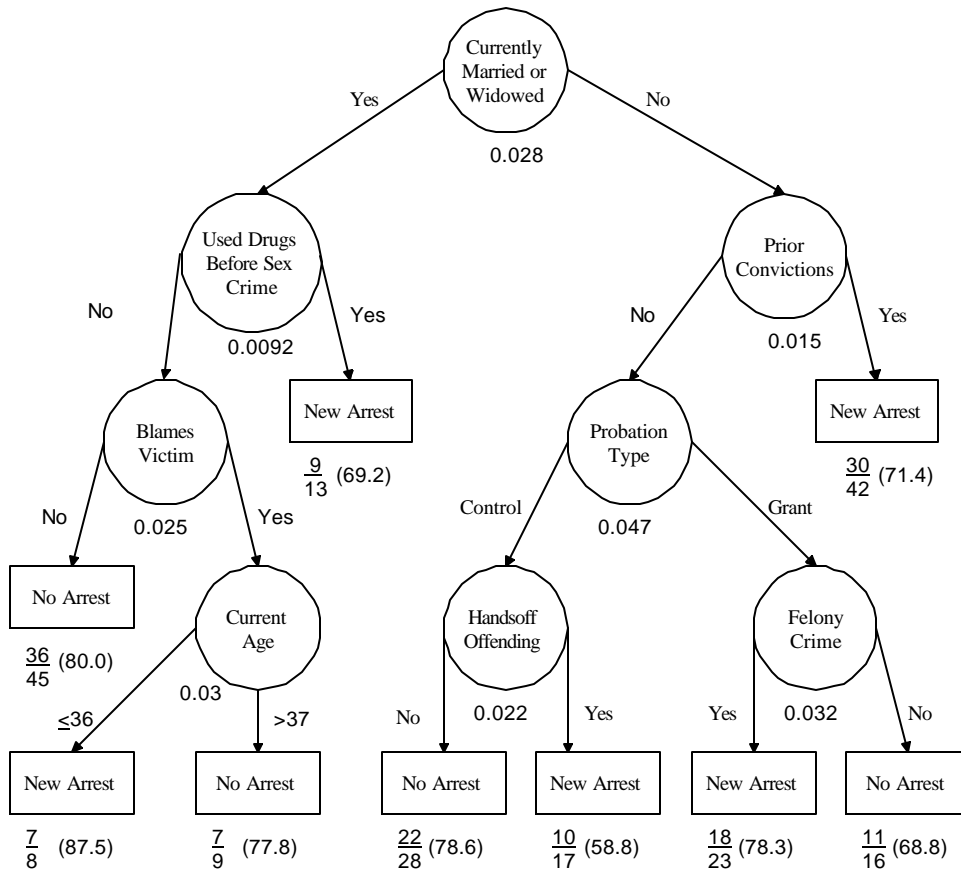
| <b>Significant Predictors Related to New Arrests for Any Crime</b> | <b>Two-tailed sample p-value</b> | <b>ESS</b> |
|--|----------------------------------|------------|
| At least one prior conviction                                      | .0039                            | 19.2       |
| At least one prior arrest for misdemeanor crimes                   | .0063                            | 14.5       |
| At least one prior arrest for property crimes                      | .0064                            | 15.7       |
| In specialized sex offender probation program                      | .021                             | 16.2       |
| Single, divorced or separated                                      | .028                             | 17.6       |

Only one demographic characteristic is a significant and generalizable predictor: marital status. Single, divorced, or separated sex offenders were at a higher-risk of being arrested for crimes of any type. Current age of the offender also is a significant predictor, but is unstable in the LOO analysis, which suggests that age will not be a significant predictor when new samples of data are analyzed.

We built two CTA model to assess the groups at high-risk for committing a new crime of any type. The first model started with the strongest predictor, number of prior convictions, and resulted in a five variable model that showed moderate performance

(ESS = 37%) and an overall percentage classified accuracy of 68.8%. The second model started with marital status, which is a consistent predictor of general recidivism in the prior literature and appeared as the initial variable in the other counties. The CTA model starting with marital status performed much better, demonstrating strong performance (ESS = 49.5) and an overall percentage classification accuracy of 74.6%. Figure IV.10 presents this eight variable CTA model.

Figure IV.10: CTA Model Predicting New Crime of Any Type



In general, currently married or widowed sex offenders were at a low risk of general recidivism. However, married or widowed sex offenders were at a very high risk of general recidivism if they denied the offense and were 37.5 years of age or younger.

Married or widowed sex offenders were at a moderately high risk of general recidivism if they used drugs before committing the sex crime that placed them on probation.

There were two groups of sex offenders who were not married that were at a very high risk of general recidivism: (1) offenders with at least one prior conviction; and (2) offenders in the specialized program with no prior convictions who were placed on probation for a misdemeanor crime. Sex offenders that were not married had a moderately high chance of committing a sex offense if they were in the standard probation program and had no prior convictions and an interest in hands-off offending. Sex offenders in the specialized program had a medium risk of general recidivism if they had no prior conviction and were placed on probation for a felony sex crime.

#### 5. Identifying Groups At High-Risk of Committing Two or More Crimes of Any Type

Table IV.18 presents the five significant and generalizable predictors related to committing two or more crimes of any type. Sex offenders having at least one prior arrest for a property crime were significantly more likely to commit two or more new crimes. Offenders with one prior conviction are also at a significantly higher risk. Other criminal history measures are also significant, but did not remain stable in the LOO analysis: age at which criminal offending began, total number of prior arrests, and prior arrests for violent crimes.

Only one demographic characteristic was significant and generalizable: single or divorced sex offenders were at a higher risk of committing two or more new crimes. The prior literature also has found that single offenders are at higher risk of general recidivism. Three other demographic characteristics were significant, but did not remain



stable in the LOO analysis: current age of the offender, annual income level, and highest educational level achieved.

**Table IV.18. Significant and Generalizable Predictors of Two or More New Crimes of Any Type Using the Entire Sample of DuPage County Cases**

| <b>Significant Predictors of Two or More New Crimes of Any Type</b> | <b>Two-tailed sample p-value</b> | <b>ESS</b> |
|---|----------------------------------|------------|
| At least one prior arrest for a property crime                      | .0001                            | 35.3       |
| At least one prior conviction                                       | .0022                            | 26.6       |
| Single or divorced sex offenders                                    | .0059                            | 27.2       |
| Using drugs before committing the sex crime                         | .0001                            | 30.1       |
| Court/therapists recommend drug treatment                           | .013                             | 18.4       |

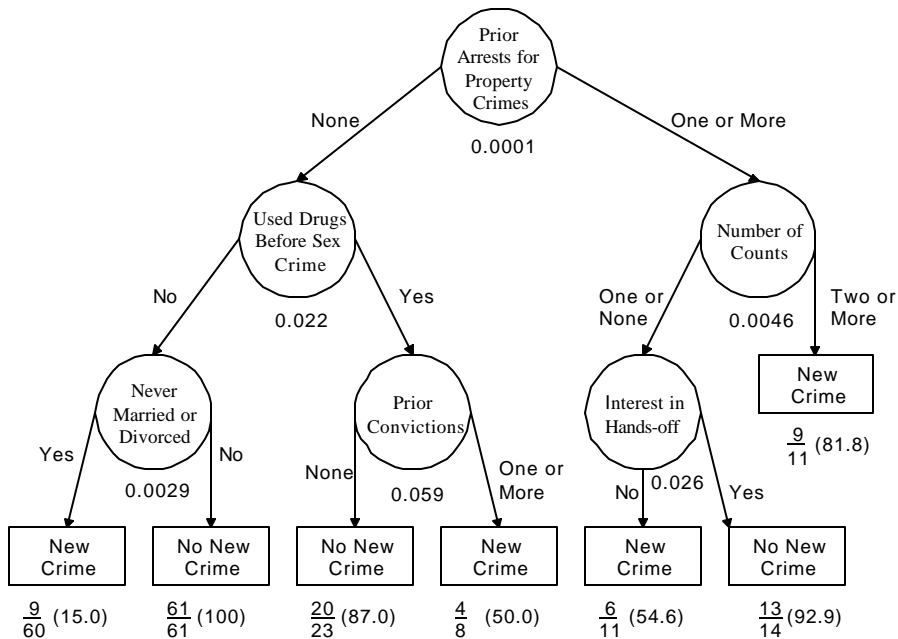
The two other significant and generalizable predictors measured aspects of substance abuse. Offenders were at a significantly higher risk if they used drugs before committing the sex crime or if the court or therapists recommended drug treatment.

In addition, the SAC-J risk assessment was a significant predictor, but did not generalize in the LOO analysis, which suggests that it may not remain a significant predictor when other data are analyzed.

Two CTA models were performed. The first CTA model was a six variable model beginning with number of prior arrests for property crimes and showed moderate performance (ESS = 47.8) and an overall percentage classification accuracy of 64.9%. The second CTA model was a four variable model beginning with marital status; it showed moderate performance (ESS = 33.4) and an overall percentage classification accuracy of 83.5%. The first CTA model clearly is the better model based on ESS and on the fact that it had a 87.5% accurate classified of cases committing two or more new crimes compared to the other model which had a 40.5% accurate classified of cases committing two or more new crimes. Figure IV.11 presents the CTA model beginning

with number of prior arrests for property crimes. In general, sex offenders with no prior arrests for property crimes who did not use drugs before committing the sex crime that placed them on probation had a very low chance of committing two or more new crimes. Sex offenders with no prior arrests for property crimes and no prior convictions who used drugs before committing the sex crime also had a low chance of committing two or more new crimes. Sex offenders with at least one prior arrest for property crime and only one prior count in the original indictment whose offense history included hands-off offending also had a low chance.

Figure IV:11: CTA model predicting two or more new crimes of any type



Two groups of offenders had a moderately high chance of committing two or more new crimes: (1) offenders with no prior arrests for property crimes and at least one prior conviction who used drugs before committing the sex crime; and (2) offenders with at least one prior arrest for a property crimes, only one charge in the original indictment, and committed only hands-on sex offending. Sex offenders with at least one prior arrest

for property offenses and at least two prior counts in the original indictment had over an 80% chance of committing two or more new crimes.

#### **F. Comparison of Grant and Control Samples on Recidivism Outcomes**

An important part of this evaluation is to compare the control and grant samples on rates of committing new sexual offenses, sexual or violent offenses, and general recidivism. The evaluation team performed Cox proportional hazards survival analysis to determine whether the control and grant samples differed on the outcomes. This survival analysis provides a better estimate of failure rates in that it takes into account the amount of time at risk, the amount of time to failure, and controls for any other significant risk factors before estimating the difference between the control and grant sample on failure rates. Table IV.19 also presents the simple percentage of offenders who were arrested while on probation and time to first arrest. An examination of simple proportions of failures on the outcome variables is misleading for several reasons. First, simple proportions do not take into account the amount of time to failure. Second, simple proportions do not adjust for the amount of time at risk of failure. Third, simple proportions cannot control for other characteristics that may be related to failure and that may account for the observed differences between the control and grant samples. Thus, the reader is advised to be cautious in drawing conclusions about recidivism and compliance from the simple proportions presented in Table IV.19. The type of new arrests for sex crimes included 23 sex offenders that were arrested for or admitted to hands-off sex offenses including public indecency and voyeurism, and many of these offenders committed multiple offenses. One sex offender was arrested for aggravated

criminal sexual assault, and another sex offender was arrested for criminal sexual assault. Seven sex offenders were arrested for aggravated criminal sexual abuse, and three sex offenders were arrested for or admitted to the possession of child pornography. One sex offender admitted to committing frottage in the mall.

**Table IV.19 Recidivism of Grant and Control Sample Offenders as Measured by New Arrests and Time to First Arrest In DuPage County**

| <b>Probation Program</b> | <b>Mean Number of Days to First Arrest for a sex offense</b> | <b>Arrested for a new sex crime excluding failure to register</b> | <b>Arrested for a new sex or violent crime</b> | <b>Arrested for a new crime of any type</b> |
|--------------------------|--|---|--|---|
| <b>Grant</b>             | Mean = 27.1<br>N = 25  | 23.8%<br>N = 25   | 28.6%<br>N = 30                                | 56.2%<br>N = 59                             |
| <b>Control</b>           | Mean = 35.5<br>N = 13  | 11.8%<br>N = 13   | 22.7%<br>N = 25                                | 40.0%<br>N = 44                             |

It is important to determine if the grant and control samples are similar in the amount of months before the first new arrest because the time to new arrest influences the rates of recidivism. In order to estimate the time to first arrest, we performed independent sample t-tests using only the sex offenders that had new arrests for the appropriate crime category. As shown in Table IV.19, the grant sample was faster at being arrested for a new sex crime, though this difference is not statistically significant,  $p < .18$ . Similarly, the grant sample was arrested on the average of 15.3 months for new sex crimes including failure to registers whereas the average was 43.8 months for the control sample,  $t(64) = 5.75$ ,  $p < .001$ . This difference in time to first arrest also occurred for time to first arrest for any crime: mean number of months is 16.2 for the grant sample and 26.15 for the control sample,  $t(67) = 4.47$ ,  $p < .001$ . Moreover, the

grant sample (mean = 25.15) and control sample (mean = 42.13) differed on time to first arrest for a new violent or sex crime,  $t(53) = 3.15, p < .003$ . In the next section, more sensitive measures of failure rates based on arrest rates across time are provided with the use of Cox proportional hazard survival analysis. Failure rates from the Cox proportional hazard survival analysis take into account the amount of time to failure, the amount of time at risk, and control for other risk predictors that may explain the difference between the grant and control samples. The control sample also had a significantly longer opportunity to commit a new offense (mean = 78.07 months) than did the grant sample (mean = 32.79 months),  $t(213) = 21.44, p < .001$ . Thus, it is important to control for opportunity in estimating recidivism rates.

### 1. Conceptual Framework Comparing the Specialized Sex Offender Probation and the Standard Probation

The specialized sex offender probation program is based on the containment model, which has the top priority of keeping the offender from committing a new sex offense while in the community. To meet this goal, the specialized sex offender probation program compared to standard probation has much more intensive surveillance of sex offenders through increase requirements of additional office visits, announced visits to the offender's home, and requiring offenders to undergo maintenance polygraphs and maintain daily logs of their activities and whereabouts.

This increased surveillance, greater restrictions on contact, and structured treatment could affect sex offenders in one of two ways. One hypothesis that we have labeled higher detection is that the grant sample compared to the control sample will have

a higher rate of new arrests for sex crimes. However, probation officers in the specialized program may actually catch some sex offenders who have committed sex crimes. For example, when checking sex offenders' computers, probation officers may discover child pornography. When the polygrapher informs sex offenders that they failed the polygraph test and are not being truthful, offenders may disclose sex crimes that were undetected by the authorities. The higher detection hypothesis assumes that the probation officers in the standard program will not have knowledge about many of the new sex crimes committed because such crimes are often not reported to the police.

Alternatively, the second way that increased surveillance can affect sex offenders is through deterring sex offenders from committing additional crimes due to the belief that they have a high chance of getting caught and facing severe consequences. Sex offenders on specialized sex offender probation may be deterred more than sex offenders on standard probation due to the increased surveillance of their behavior through daily logs, office contacts, more frequent polygraph exams, and announced field visits. However, announced field visits are not likely to place fear in sex offenders that their behavior in daily life is under surveillance because offenders have time to prepare and destroy any evidence of noncompliance before the probation officers arrive at their home. For these reasons, the deterrence effect may be weaker in DuPage County than in Lake and Winnebago County.

The fact that the deterrence effect and the higher detection advantage produce opposite results may lead to the specialized and standard programs having similar recidivism rates. This finding of similar recidivism rates, however, does not mean that the program had no impact because the higher detection effect can obscure support for

the deterrence process. Program evaluators thus are faced with what appears to be a conundrum, though less so for the DuPage program since unannounced field surveillance was not an integral part of the program. Even if an overall recidivism rate for the specialized sex offender program is observed, professionals still must attempt to answer the question: which sex offenders are deterred? One possible solution is to develop a conceptual framework about subgroups of sex offenders that may be more likely to be deterred and subgroups that would continue with their normal offending behavior despite increased restrictions, contact, surveillance, and treatment. In order to identify subgroups, it is important to understand the assumptions of the deterrence hypothesis.

The deterrence hypothesis requires that sex offenders engage in a rational calculation of their chance of being caught if they commit a new offense. Some sex offenders are more rational than others. For example, sex offenders who only commit public indecency crimes often engage in such lewd behavior because the risk of being caught adds excitement, but is low enough so that it is unlikely that the gains of committing a new offense outweigh the potential losses (such as a new arrest). Based on the assumption that sex offenders who commit exclusively hands-off sex offenses are rational and calculating, we hypothesized an interaction between type of probation program and whether offenders committed only hands-off offenses. We expected that hands-off only offenders would be arrested for fewer new sex offenses in the grant sample than in the control sample because the grant sample of hands-off only offenders would be deterred by the increased surveillance.

Mentally ill sex offenders are a group that cannot be deterred through increased surveillance because they do not think rationally about the chances of being caught

before committing a sex offense. Thus, we also hypothesized an interaction between presence of mental illness and type of probation program. We expected that mentally ill offenders would have a higher rate of new arrests in the grant sample than in the control sample due to the increased surveillance in the specialized sex offender program that allows probation officers to detect new offenses. These hypotheses are tested in the next section.

In all survival analyses, we attempted to control for any differences between the specialized and standard probation samples. To provide a careful and stringent analysis of whether the specialized program had lower sexual, violent, and general recidivism rates than did the standard program, we entered 13 predictors in all survival analyses: (1) whether committed only hands-on sex offenses, only hands-off offenses, or both hands-on and hands-off sex offenses; (2) prior arrests for sex crimes; (3) current mental health status; (4) total number of prior arrests; (5) any prior convictions; (6) whether offender had a prior arrest but no prior conviction; (7) whether offender committed crime against stranger or acquaintance; (8) whether offender is sexually aroused to children; (9) whether had prior mental health or drug treatment; (10) number of prior arrests for violent crimes; (11) marital status; (12) whether served a term of prior probation; and (13) amount of time at risk to reoffend. These predictors were entered either because they had a significant relationship with sexual, violent, or general recidivism or the standard and specialized samples differed on the characteristic and there was a theoretical possibility of a relationship with recidivism. We conducted three separate survival analyses to estimate time to first arrest for a new sex crime excluding failure to register offenses (sexual recidivism), a new violent crime (violent recidivism), or a new crime of



any type (general recidivism). The following sections present the findings from these survival analyses.

## 2.Survival Analysis Estimating Time to First Arrest for New Sex Crimes

Using a Cox proportional hazards survival analysis, we first estimated the effects of the 13 control variables on time to first arrest for a new sex crime. The overall model was significant,  $X^2(14) = 69.5, p < .001$ . Sex recidivism included any arrest or self-report of a new sex crime excluding failure to register offenses. Offenders interested in hands-off sex offending were 4.8 times more likely to commit a sex offense than were offenders that were not interested in hands-off sexual offending, ( $b = 1.575, p < .001$ ). Single offenders were almost three times more likely to commit a new sex offense than were currently married offenders, ( $b = 1.07, p < .03$ ). Offenders with shorter time at risk were more likely to commit a new sex crime, ( $b = -.06, p < .001$ ); this finding reflects the fact that offenders who committed new crimes were often placed immediately in jail, which shortened their time at risk. All other predictors were not significant.

In the second step, type of probation was entered, and the change in chi-square was not significant, ( $X^2(1) = .038, p < .846$ ). Thus, the control and grant samples have similar rates of recidivism. The overall sexual recidivism rates reported at the means of the covariates were .8% at one year, 1.9% at 25 months, 5.1% at three years, 11.1% at 49 months, and 21.4% at 62 months in DuPage County.

In the last step, we tested two interactions: the mental illness by probation type interaction, the hands-off by probation program, and prior probation term served by probation program. Due to collinearity, we tested these effects separately. The mental

**Table IV.20 Cox Regression Models Estimating Time to First Arrest for New Sex Crime, Violent Crime, or Any Type of Crime in DuPage County**

| Predictors for Survival Analyses of DuPage County Data | Sexual Recidivism Model |                       | Violent Recidivism Model |                    | General Recidivism Model |                   |
|--|-------------------------|-----------------------|--------------------------|--------------------|--------------------------|-------------------|
|  | B                       | p <                   | B                        | p <                | B                        | p <               |
| Total number of prior arrests                          | -.001                   | .95                   | -.008                    | .68                | .005                     | .70               |
| No prior conviction                                    | .067                    | .913                  | -.600                    | .216               | -.636                    | .061 <sup>t</sup> |
| Prior probation term                                   | 1.778                   | .04 <sup>*</sup>      | 1.397                    | .023 <sup>*</sup>  | .390                     | .254              |
| Whether prior arrest, but no prior conviction          | -.685                   | .256                  | -.413                    | .409               | -.074                    | .826              |
| Prior arrests for violence                             | -.215                   | .602                  | -.113                    | .699               | -.091                    | .665              |
| Prior arrests for sex crimes                           | -.085                   | .783                  | -.005                    | .983               | -.286                    | .154              |
| Marital status   |                         | .164                  |                          | .028 <sup>*</sup>  |                          | .003              |
| Currently married                                      | .976                    | .059 <sup>t</sup>     | -.343                    | .362               | -.376                    | .156              |
| Separated or divorced                                  | .21                     | .62                   | .817                     | .043 <sup>*</sup>  | .644                     | .029 <sup>*</sup> |
| Sexual preference for children                         | -.689                   | .29                   | -.480                    | .388               | -.245                    | .470              |
| Victimized stranger or acquaintance                    | 1.01                    | .149                  | 1.416                    | .029 <sup>*</sup>  | -.231                    | .426              |
| Prior treatment  | .152                    | .702                  | -.007                    | .983               | -.107                    | .654              |
| Mentally ill   | -.283                   | .149                  | .613                     | .055 <sup>*</sup>  | .267                     | .254              |
| Hands-off sex offending                                | 1.64                    | .001 <sup>*</sup>     | 1.066                    | .002 <sup>*</sup>  | .517                     | .131              |
| Amount of time to reoffend                             | -.061                   | .001 <sup>*</sup>     | -.037                    | .005 <sup>*</sup>  | -.023                    | .006 <sup>*</sup> |
| Specialized probation                                  | .248                    | .754                  | .533                     | .405               | .734                     | .128              |
| Interaction terms:                                     |                         |                       |                          |                    |                          |                   |
| Mentally ill * Program                                 |                         |                       |                          |                    |                          |                   |
| Hands-off * Program                                    |                         |                       |                          |                    | -.845                    | .026 <sup>*</sup> |
| Prior probation * Program                              | -1.582                  | p < .045 <sup>*</sup> | -1.214                   | .0375 <sup>*</sup> |                          |                   |
| Prior treatment * Program                              |                         |                       |                          |                    |                          |                   |
| Overall Chi-square                                     | (17) = 47.06, p < .001  |                       | (16) = 82.55, p < .0001  |                    |                          |                   |

illness by probation program interaction and the hands off by probation program interaction were not significant. It is not surprising that the specialized program showed no beneficial deterrent effect for hands-off sex offenders. Given that the specialized program announced their home visits and did not follow probationers as they went about their daily lives, these offenders probably concluded that the probation officers would not

find out about their behavior. Moreover, although the specialized program performed more maintenance polygraphs, both the standard and specialized program informed sex offenders that they would be required to undergo a maintenance polygraph. In the specialized program several offenders confessed to public indecency at the interview with the polygrapher, which supports the higher detection hypothesis.

Whether offenders served a prior probation term by probation program interaction was significant and is entered in the final model presented in the first column of Table IV.20. Sex offenders that had served a prior probation period had a significantly lower rate of sexual recidivism in the specialized program at 37 months (45.7%) compared to the standard probation program (90.1%). For sex offenders that were serving their first probation sentence, the sexual recidivism rates of the specialized program (39.38%) and the standard program (32.37%) were not appreciably different. The significant main effect for prior probation period indicates that sex offenders that had served a prior period of probation were significantly more likely to commit a new sex crime than were those who were serving their first period of probation.

### 3.Survival Analysis Estimating Time to First Arrest for a New Sex or Violent Crime

A Cox proportional hazard survival analysis estimated the time to first new arrest for a new violent or sex crime and determined whether the grant and control samples differed on recidivism rates. In the first step, we examined which of the thirteen control variables were related to violent recidivism. The overall model was significant, ( $X^2$  (14) = 80.2,  $p < .001$ ). Five characteristics were significantly related to violent recidivism.

Mentally ill sex offenders were almost two times more likely to commit a new sex or violent crime than were sex offenders without a mental illness, ( $b = .657, p < .039$ ). Sex offenders that were interested in hands-off sexual offending were almost 2.9 times more likely to commit a new sex or violent crime than were sex offenders who were exclusively interested in hands-on sexual offending, ( $b = 1.057, p < .002$ ). Sex offenders that victimized strangers or acquaintances were four times more likely to commit a new sex or violent crime than were sex offenders that victimized family members, ( $b = 1.408, p < .028$ ). Divorced and separated sex offenders were 2.3 times more likely to commit violent recidivism than were single offenders, ( $b = .852, p < .027$ ). Single offenders and currently married offenders had similar rates of violent recidivism. Sex offenders that had shorter time at risk also had higher rates of violent recidivism, and this finding reflects the fact that when offenders committed new crimes they were placed in jail which shorten their time at risk, ( $b = .96, p < .041$ ). All other variables were not significant predictors.

In step two, type of probation program was entered and the change in chi-square was not significant, ( $X^2(1) = .118, < .73$ ); thus, the control and grant samples have similar rates of recidivism for sex or violent crimes. The overall rate of recidivism for sex or violent crimes for the entire sample at the mean of the covariates were 2.1% at one year, 3.7% at 25 months, 8.2% at three years, 16.3% at 49 months, and 28.4% at 62 months in DuPage County.

In step three, interaction terms were tested first in separate models to avoid multicollinearity problems. The interaction between type of sexual offending and probation program and the interaction between mental illness and probation program

were not significant. The interaction between type of probation program and whether served prior periods of probation was significant, (change in  $X^2(1) = 3.14$ , one-tailed  $p < .038$  and  $b = -1.214$ ). Supporting a deterrence effect, sex offenders with prior periods of probation had significantly lower violent recidivism rates in the specialized program than in the standard program. (See Table IV.21).

**Table IV.21 Violent Recidivism Rates in the Standard and Specialized Program By Whether Sex Offenders Served a Prior Probation Sentence**

| Program     | No Prior Periods of Probation |           | Served Prior Probation Sentence |           |
|-------------|-------------------------------|-----------|---------------------------------|-----------|
|             | 12 months                     | 37 months | 12 months                       | 37 months |
| Specialized | 6.14%                         | 22.59%    | 7.33%                           | 26.46%    |
| Standard    | 3.65%                         | 13.95%    | 13.96%                          | 45.52%    |

The main effect for prior probation period was significant, ( $b = 1.438$ , two-tailed  $p < .019$ ). The main effect indicates that sex offenders in the standard probation program that had served prior probation sentences were four times more likely to commit a new violent or sex crime than were sex offenders in the standard probation program that were serving their first term of probation. This high-risk group of sex offenders with prior probation sentences appeared to be deterred in the specialized program for two reasons. First, the specialized program had a lower violent recidivism rate than the standard program. Second, whether sex offenders served a prior probation sentence was not a significant predictor of violent recidivism in the specialized program, suggesting that the greater supervision was beneficial to this traditionally high-risk group of probationers.

## 5. Survival Analysis Estimating Time to First Arrest For Any New Crime

We performed a Cox proportional hazard survival analysis to estimate the time to first arrest for committing any new crime. In the first step, we entered the 13 control variables. The model was significant, ( $X^2(11) = 37.11, p < .0001$ ). Sex offenders without a prior conviction were significantly less likely to commit a new crime of any type than were sex offenders with a prior conviction, ( $b = -.660, p < .053$ ). Single status has been a consistent predictor of general recidivism in prior studies, and also appears as a significant predictor in the DuPage County sample. Currently married sex offenders were significantly less likely to commit a new offense than were single sex offenders, ( $b = -.505, \text{one-tailed } p < .04$ ). Divorced and separated sex offenders also were more likely to commit a new offense than were single sex offenders, ( $b = .645, \text{two-tailed } p < .026$ ). Time at risk also predicted general recidivism, ( $b = -.028, p < .001$ ). The other variables were not significant predictors.

In the second step, we entered type of probation program, and the change in chi-square was not significant, ( $X^2(1) = .865, p < .353$ ). Thus, the standard program and specialized program had similar general recidivism rates. The overall general recidivism rates for the entire sample were 15% at one year, 24.6% at two years, 33.4% at three years, 43.7% at 49 months, and 55.6% at 62 months in DuPage County.

In the third step, we tested the interaction terms using separate models. The mentally ill by type of probation program and the prior probation period by type of probation program were not significant. The type of probation program and hands-off offending was significant and was entered into the final model, (change in chi-square  $(1) = 4.39, p < .036$ , and overall chi-square  $(14) = 69.02, p < .0001$ ). The coefficients and probability

levels can be found in the last column of Table IV.20. Sex offenders interested in hands-off offending had a significantly higher recidivism rate at 37 months in the standard probation program (96.9%) compared to the specialized program (59.4%). Hands-off offending was not a significant risk predictor of general recidivism in the standard probation group,  $p < .13$ . However, in the specialized probation program, sex offenders exclusively interested in hands-on sexual offending had a significantly higher general recidivism rate at 12 months (98.4%) than did sex offenders interested in hands-off offending (59.4%),  $p < .036$ . This finding may reflect the fact that sex offender interested only in hands on sexual offending in the specialized program had a lower educational achievement, were more likely to live in poverty, and have a current substance abuse problem compared with sex offenders in the specialized program that had an interest in hands off sexual offending. This pattern of findings, especially since hands-off sexual offending was not a predictor of general recidivism in the standard program, does not clearly support a deterrent effect.

It is possible that the specialized program and standard samples of sex offenders interested in hands off sexual offending differed on critical characteristics related to sexual and general recidivism. The hands-off offenders in the specialized program may have been less rational than the hands-off offenders in the standard program. To test the veracity of this explanation, we compared the hands-off offenders in the specialized and standard programs on several measures of mental health status and sexual preference.

The specialized program group of hands-off sex offenders compared to the hands off sex offenders on standard probation were significantly more likely to have two or more sexual paraphilia, a current mental health problem, and to have committed the sex

offending over a longer period of time. In the specialized program, 60% had two or more sexual paraphilia and 54% had mental health problems whereas in the standard probation program, 27% had two or more sexual paraphilia and 25% had mental health problems. Moreover, hands-off offenders in the specialized program continued their sexual offending for an average of 69.9 months compared to 30 months for hands-off offenders in the standard program. These differences suggest that hands-off offenders in the specialized program may have been less calculating in their sexual offending and more driven by compulsive or impulsive behavior to commit public indecency offenses. Furthermore, an examination of the new offenses that were committed supports the conclusion that the specialized sex offenders interested in hands off sexual offending focused almost exclusively on sexual offending. All of the new arrests were for some new sex crime except for four driving while intoxicated arrests and one drug possession arrest. Another indication that the specialized group of hands off offenders was not inclined to commit misdemeanor and other crimes is the difference in income level between the standard and specialized samples of hands off sex offenders. One-third of the sex offenders interested in hands off offending in the specialized sample had an annual income of \$30,000 or higher compared with only 10.2% of this group of offenders in the standard program.

In summary, these differences in the sample of hands-off sexual offenders in the standard and specialized samples as well as the differences between the exclusively hands on sex offenders and the hands off sex offenders in the specialized program suggest that the composition of the sample can explain the interaction effect on general recidivism. It appears that the increased monitoring of the specialized program did not deter sex



offenders interested in hands off sexual offending from committing sexual recidivism, and these offenders were less inclined to commit other types of crimes due to their sexual obsession and higher economic and educational status.

## **G. Conclusions and Recommendations**

By formalized risk assessment instruments, the DuPage County programs are serving a medium risk group of sex offenders that have primarily been convicted of misdemeanor sex crimes or aggravated criminal sexual abuse. There is, however, wide variation in risk of sexual recidivism, which underscores the need to institute a risk assessment instrument to determine which offenders should receive more intensive field and group therapy surveillance. The strengths of the specialized program compared to the standard program were increased office contact, an administrative sanction program, having offenders complete daily logs or travel logs, and more regular drug and polygraph testing. In our examination of the grant sample cases, polygraph examinations were given to 77.6% of the cases with 45.8% receiving two or more polygraph tests. In comparison, we only found two polygraph tests for the control sample. Additionally, a total of 721 drug tests were administered in the grant sample. The average number of tests administered per offender was 7.2 with a median of 6. The drug test failure rate was relatively low with only 63 or 8.7% of the test being positive.

We had theorized that the specialized and standard probation programs would differ on the rate of sexual, violent, and general recidivism for sex offenders interested in hands off sexual offending. The findings, however, suggest that the specialized sex offender program's more intense offender contacts did not deter hands-off offenders in

the specialized program from committing new sex crimes. The department's policy of announcing home visits as well as a low level of field surveillance and probation officers infrequently going to the treatment site to check on offenders' attendance of their group therapy sessions may have contributed to the absence of a deterrent effect. In addition, this group of hands off sex offenders were less rational and calculating about committing sex offenses than the typical sex offender interested in hands off offending; the specialized sample of hands off sex offender typically were more likely to have current mental illness, more than one sexual paraphilia, and had been committing their sexual offenses over a longer time period than were sex offenders interested in hands off sexual offending in the standard program.

Although sex offenders interested in hands off sexual offending were not deterred, sex offenders that had served a previous term of probation were deterred from committing sexual and violent recidivism. Sex offenders that served a prior term of probation had a significantly lower rate of sexual and violent recidivism in the specialized program than in the standard program. These sex offenders were more rational and understood the consequences of reoffending – that prison time was likely if a new offense was committed. Sex offenders that were serving their first term of probation may not have understood that the specialized program was indeed more strict and harsh than the standard program and was the last stop before prison.

There was no evidence of that the specialized program compared to the standard program was more likely to detect the new crimes that mentally ill sex offenders committed. The failure to have a higher detection of sexual or violent recidivism for groups that are less rational may be due to the fact that DuPage County does not have an

adequate field surveillance component in its specialized sex offender probation program. Probation officers call at least one day in advance to tell offenders when they will be coming to their home for a visit/search of the premises. Sex offenders thus have plenty of time to remove any contraband or other evidence that suggest probation conditions are being violated. The department should change their policy to require probation officers to conduct unannounced home visits. Also, Lake County was very successful at detecting mentally ill sex offenders' recidivism because it included random surveillance of sex offenders while the offenders were out in the community going about their daily lives.

### 1. Predictors of Recidivism

Findings from CTA analyses indicate that mental health status and a preference for hands-off offending were two key predictors of sexual recidivism but were not predictors of general recidivism. Mentally ill offenders interested in hands-off offending and with some college education had about a 75% chance of sexual recidivism excluding failure to register. Another important observation is that none of the formalized risk assessment instruments were significant and stable predictors of sexual recidivism. Moreover only one risk assessment instrument, the Static-99, was a significant predictor that did not remain stable in the LOO analysis. Our CTA model showed substantial improvement in overall classification accuracy and in sensitivity at predicting those who committed sexual recidivism.

Another implication of the importance of mental health status is that clinicians and probation officers should consider sex offenders that have diagnoses of bipolar

depression, thought disorders, adjustment disorders, pedophilia, objective sexual preference to children, or personality disorders as having a higher risk of recidivism. Prior studies did not test mental health status in general; future studies should further test the importance of this characteristic. Whereas sex offenders can more easily fool treatment evaluators about their sexual preferences or psychopathic deviancy (especially when objective tests are not performed), they have more difficulty hiding other mental health problems. In our samples, most sex offenders with an objective sexual preference for children also had other mental health problems.

In predicting violent recidivism, one risk assessment instrument, the SACJ-MIN, was significant and generalizable and improved classification accuracy 22.4% over what chance could. However, our CTA model showed an improvement of classification accuracy of 36.5% over chance using only two predictors, mental illness and hands-off offending whereas the SACJ-MIN uses 13 predictors. In the CTA model, mentally ill offenders with an interest in hands-off offending had a moderately high chance of committing new sex or violent crime. Offenders with no known mental illness but also with an interest in hands-off offending had a medium risk of committing new sex or violent crime. Offenders with no interest in hands-off offending had a low chance of committing new sex or violent crime.

Marital status combined with other factors was a key predictor in predicting general recidivism. Married or widowed sex offenders were at very high risk of general recidivism if they denied the offense and were 37.5 years of age or younger and at moderate risk of general recidivism if they used drugs before committing the offense that placed them on probation. There were two groups of unmarried offenders that were at

very high risk of general recidivism: (1) offenders with at least one prior conviction; and (2) offenders in the specialized program without prior convictions but who were placed on probation for a misdemeanor crime.

## 2. Probation Outcomes

A significantly higher percentage of specialized program offenders compared to standard program offenders terminated probation unsatisfactorily. The two programs did not differ on rates of revocation or absconding. Offenders who used drugs before committing the offense that placed them on probation were at very high risk of unsatisfactory termination if they also had one prior arrest for a violent crime. They were at moderate risk of unsatisfactory termination if they had no prior arrests for a violent crime, but at least one prior arrest for a property crime. There were no very high-risk groups of offenders who did not use drugs. Offenders who used drugs before committing their offense or needed drug treatment were also at a high risk of being revoked. Thus, drug use is a key variable in probation outcome. Moreover, new arrests for sex crimes are only modest significant predictors of unsatisfactory termination in the specialized program, and have no significant impact in the standard probation program.

## 3. Compliance With Treatment Orders

Based on the N-of-1 analyses, most offenders remained stable in treatment, perhaps because the first treatment report occurred sometime after many sex offenders had been in treatment. Overall, 10 of the 36 (27.7%) were classified as responsive to treatment. Approximately 85% of the control sample and 54% of the grant sample

completed treatment satisfactorily, with the control sample showing a statistically significant higher rate. This level of successful completion is clinically and substantially significant, and the specialized program demonstrates a level success found in prior studies whereas the control sample exceeds the typical success rate.

The research team examined the number of violation of probation (VOP) petitions filed for treatment noncompliance and used significant declines in treatment progress from the monthly treatment reports as well as premature termination of treatment to define serious noncompliance with treatment. Moreover, offenders on the specialized program compared to the standard program were more likely to have VOPs filed for noncompliance with treatment and to have serious noncompliance with treatment. It appears that these differences are not due to probation officers in the standard program allowing more chances to comply with the treatment order before filing a VOP. An almost identical proportion of the grant and control sample (approximately 45%) had at least one VOP filed, and were similar on the average number of months on probation until the first VOP was filed. Furthermore, the difference between the specialized and standard probation programs on successful completion remains after controlling for mental health status, marital status, using drugs before the crime, prior convictions and other significant predictors identified by ODA. Thus, the better explanation for this difference is that sex offenders in the specialized program were more likely to be noncompliant.

Sex offenders with no known mental illness and with at least one prior conviction had an 80% chance of treatment failure if they also did not reveal during their treatment evaluation at least one prior sex offense that was undetected by the authorities. Offenders

with no known mental illness and with at least one prior conviction, but who did disclose a prior sex crime or who were arrested for a prior sex crime had a 42% chance of treatment failure. These findings indicate the importance of mental health status in combination with prior convictions and willingness to disclose prior sex crimes in the successful completion of treatment. It is also informative that none of the basic demographic characteristics predicted treatment failure or entered the CTA model for treatment failure.

Annual income, however, did enter the CTA model predicting successful completion of treatment with sex offenders in the specialized program having a 73% chance of successful completion of treatment if they had an annual income of \$20,000 or more and having only a 43% chance of successful completion of treatment if they made less than \$20,000. We recommend that the DuPage County specialized program find some way to increase the success rate of offenders living in poverty. This finding of the importance of annual income in successful completion of treatment may involve several factors: (a) offenders' ability to pay for treatment; (b) offenders' ability to read, write, and understand homework assignment; (c) offenders' ability to understand spoken English or to communicate in group settings. For the standard probation group, annual income was not a predictor of treatment completion. Offenders on standard probation had a very high success rate if they had no prior convictions or had one or more prior convictions, but did not commit any anal, oral or vaginal penetration during the sex crime.

#### 4. Summary

In conclusion, the DuPage County specialized sex offender program demonstrated an ability to deter sex offenders that had served a prior term of probation, but were not able to detect a higher rate of offending by mental ill persons. We recommend that announced field visits are replaced with unannounced field and home visits, and that probation officers begin more frequent observations of group therapy to send the message to sex offenders that there is a tight partnership between the therapist, probation officer, and polygrapher. In addition joint meetings with sex offenders, therapists, and probation officers should be held to discuss the expectations, rules, and goals of treatment and probation and the possible sanctions that may result if treatment noncompliance or sexual recidivism occurs. We also suggest that DuPage County implement a policy requiring all treatment evaluations to contain an objective sexual preference test, a full disclosure polygraph test, and an objective personality test.



## **V. Long-term Impact Analysis of Specialized Sex Offender Probation in Winnebago County**

Winnebago County is located approximately 90 miles northwest of Chicago and had a 1990 census population of 252, 913. The probation department, or more officially, the Department of Court Services, is located in the court complex in the city of Rockford, which is the second largest city in Illinois (1990 population 139,943). Winnebago County along with Boone County forms the Seventeenth Judicial Circuit. The sex offender program serves only Winnebago County. The probation department serves both adult and juvenile offenders and is organized into two divisions. The Winnebago sex offender program is restricted to adult offenders. The adult division is made up of 3 supervisors, 4 senior probation officers and 26 probation officers. The average caseload in the standard probation unit is approximately 202 cases per officer.

### **A. Defining Characteristics of the Specialized and Standard Sex Offender Probation Programs**

Prior to the implementation of the specialized sex offender program, sex offenders in Winnebago County were supervised along with all other cases as part of standard probation and were part of the regular 202 cases per officer. Supervision standards for sex offender cases were the Administrative Office of the Illinois Courts' (AOIC) standard for maximum supervision cases of two face-to-face contacts per month and one field visit every other month. The specialized sex offender program, instituted in 1997, designated two senior probation officers to form a sex offender unit that would supervise sex offender cases only. Also, supervision standards were increased using a three-level supervision system that required four face-to-face contacts per month in level I, two of

which were to be home or field visits. Contact standards in level II required three face-to-face contacts per month and level III, one face-to-face contact per month.

In addition to contact standards, the specialized sex offender probation program and standard probation differed on target population. All sex offenders convicted of either misdemeanor and felony sex offenses were included in the standard probation program. The specialized program was restricted primarily to felony offenses. Sex offenders in both the regular and specialized programs were required to meet a set of special conditions that typically restricted contact with the victim, with minors, and made sex offender treatment mandatory. Under the specialized program, however, the use of such conditions was more formalized. Both programs used a set of administrative sanctions to address minor violations rather than automatically refer the case back to court. The treatment program under both programs was essentially similar, except that it was more structured under the specialized sex offender program. Moreover, probation officers in the specialized sex offender program served as co-directors of the group therapy sessions, which sent a clear message to sex offenders that probation officers and therapists were sharing information and communicating frequently. Thus, contact and communication between probation officers and treatment providers were greatly increased under the specialized sex offender program compared to the standard program.

### 1. Comparison of Specialized and Control Samples on Special Conditions

Winnebago County utilized a set of 15 special conditions for sex offenders for both the standard sex offender probation (control) and the specialized sex offender probation (specialized) cases. In addition, the court could impose additional conditions

on the sex offenders. Table V.1 provides a comparison of the control and specialized samples on the court-imposed probation conditions. Our comparison indicates that a number of these conditions were part of the probation order to a significantly greater degree for the specialized cases than control cases, especially conditions prohibiting contact with minors, those requiring urine testing, and sex offender counseling, and time in jail as part of the probation sentence.

While 85.2% of the specialized sample had conditions restricting contact with the victim (18.1% only supervised contact allowed; 57.1% no contact allowed), only 63.1% of the control sample had such conditions (15.1% only supervised contact allowed; 47.6% no contact allowed). A significantly higher percentage (40.0%) of the specialized sample had conditions restricting contact with minors (19.0% only supervised contact allowed; 1.9% no contact allowed) while only 5.9% of the control sample had such conditions (3.9% only supervised contact allowed; 2.0% no contact allowed),  $X^2(2) = 34.15, p < .001$ . An additional contact-related condition is restriction on contacts with the victim's family, especially contact with the mother in cases where the offender had a relationship with the victim's mother. The samples did not differ on this condition as shown in Table V.1.

There were also sharp differences in the use of conditions requiring random urine testing, sex offender counseling and time in jail. Random urine testing was a condition in 19.0% of the specialized sample but in none (0.0%) of the control sample,  $X^2(1) = 21.71, p < .001$ . It should be noted that the absence of a specific condition for such testing does not mean that such tests were not done. Also, all of the specialized offenders (100%) compared to 81.6% of the control offenders were required to participate in sex

offender counseling,  $X^2 (1) = 21.32, p < .001$ . In addition, a significantly higher proportion of specialized offenders (63.4%) than control offenders (39.4%) were required to spend some time in jail as an initial condition of their probation,  $X^2 (1) = 10.85, p < .002$ .

There were no real differences between the two sample groups in conditions requiring polygraph or plethysmograph testing, curfew, community service, work release, victim restitution, substance abuse or mental health treatment, or other conditions. The majority in both samples (specialized, 95.2%; control, 100%) was not required to undergo either polygraph or plethysmograph testing. Similarly, virtually all offenders in both groups (control, 98.1%; specialized, 100%) did not have a curfew condition. Community service was a condition in 20.2% of the specialized sample and 17.7% of the control sample, but work release as a condition of probation was only used in 4.8% of the specialized sample and 8.8% of the control sample. The majority of the specialized offenders (80.8%) and control offenders (79.4%) were not required to pay victim restitution. Slightly more of the specialized sample (41.3%) than the control sample (33.3%) were required to participate in substance abuse treatment but most (control, 91.3%; specialized, 93.3%) were not required to participate mental health assessment or treatment. About 40% of each group had other conditions as part of their probation. Finally, only 8.6% of specialized offenders and 5.8% of the control offenders were required to stay away from the location where the sex offense occurred.

While there were few differences between the two samples on the majority of conditions, the significant differences indicate that in Winnebago County specialized sex offender probation was more restrictive and rigorous than Winnebago County standard probation.

**Table V.1. Comparison of Winnebago County Control and Specialized Samples on Special Conditions**

| <b>Court Ordered Special Conditions</b>     | <b>Winnebago Control Sample</b> | <b>Winnebago Specialized Sample</b> |
|---|---------------------------------|-------------------------------------|
| Unsupervised contact with victim prohibited | 16 (15.5%)                      | 19 (18.1%)                          |
| Ordered to stay away from the victim        | 49 (47.6%)                      | 60 (57.1%)                          |
| Curfew imposed                              | 1 (1.0%)                        | 2 (1.9%)                            |
| Unsupervised contact with minors prohibited | 4 (3.9%)                        | 20 (19.0%)                          |
| Ordered to stay away from minors            | 2 (2.0%)                        | 22 (21.0%)                          |
| Ordered to serve jail time                  | 37 (39.4%)                      | 59 (63.4%)                          |
| Sex offender counseling ordered             | 84 (81.6%)                      | 105 (100.0%)                        |
| Victim restitution ordered                  | 21 (20.6%)                      | 20 (19.2%)                          |
| Substance abuse treatment ordered           | 34 (33.3%)                      | 43 (41.3%)                          |
| Community service ordered                   | 14 (13.7%)                      | 21 (20.2%)                          |
| No contact with victim's family ordered     | 8 (7.8%)                        | 19 (18.1%)                          |
| Polygraph and plethysmograph ordered        | 0 (0.0%)                        | 5 (4.8%)                            |
| Work release ordered                        | 9 (8.8%)                        | 5 (4.8%)                            |
| Random urine testing ordered                | 0 (0.0%)                        | 20 (19.0%)                          |
| Mental health assessment ordered            | 1 (1.0%)                        | 5 (4.8%)                            |
| Mental health treatment ordered             | 8 (7.8%)                        | 2 (1.9%)                            |
| Ordered to stay away from forest preserves  | 3 (2.9%)                        | 1 (1.0%)                            |
| Ordered to stay away from other locations   | 3 (2.9%)                        | 7 (6.7%)                            |
| Other special conditions ordered            | 42 (40.8%)                      | 43 (41.0%)                          |

## **B. Profile of Winnebago County Specialized and Control Samples**

Part of the research design for the impact evaluation included a control sample of sex offenders who were convicted for the same crimes as the specialized sample, but who were sentenced to standard probation. Before comparing the control and specialized samples on recidivism, it is important to determine whether the samples have similar distributions on characteristics that have been found to be related to a higher risk of sexual recidivism. We first compare the specialized and control samples to ensure that the control sample is, in fact, a legitimate comparison group. If the control and specialized samples differ on important risk characteristics, the analyses will control for these differences to equate the two groups.

The research team coded information for 105 offenders in the specialized sample and 103 offenders in the control sample. All cases that were sentenced between July 1997 and February 2000 or were grand fathered into the specialized program were included in the specialized sample. The research team selected control cases from lists of sex offenders on standard probation between June of 1989 and July of 1997. Cases were randomly selected through selecting every fourth case in an alphabetized list of offenders until the sample size was reached. All coded information came from probation department case files, except that criminal history was coded from rap sheets obtained from the Illinois State Police.

The case files generally included a demographic intake interview completed by the probation officer shortly after sentencing, a police report, a listing of the offender's prior arrests and convictions, a listing of the offender's probation conditions, a list of all charges from the original indictment and a treatment evaluation. The treatment

evaluations generally included an evaluation written by the treatment provider after initial interviews. It should be noted that many of the control sample cases did not have treatment reports.

### 1. Comparison of Specialized and Control Samples on Demographic Characteristics

As previously mentioned, in order for the control sample to be a legitimate comparison group, they must have similar characteristics to the specialized sample on variables that may affect recidivism. We conducted statistical comparisons between the specialized sample and the control sample on characteristics that may affect recidivism. Our analysis indicates that the specialized sample and the control sample are similar on the majority characteristics, but do differ on some characteristics.

The specialized and control sample are similar on all demographic variables. Both samples are relatively young with a mean age of 34.5 for the specialized sample and 34.0 for the control sample. Caucasian offenders comprised 69% of the offenders in both samples, and about 24% of the samples consisted of African-Americans. Hispanic-Latino offenders comprise 1.9% of the control and 6.7% of the specialized samples. Both samples contain two Asian/Pacific Islanders and the specialized sample also included two Native American offenders. Approximately half of each sample has never been married, 25 % are currently married, 20% are divorced, and 3% are widowed. A slightly higher percentage of the control offenders (13.7%) than the specialized (5.7%) offenders were separated. The control sample has 52% full-time employed sex offenders and 32.4% unemployed and the specialized sample has 38.8% full-time employed sex offenders and 42.7% unemployed, and the remainders are employed part-time or for an unspecified amount of time.

The specialized and control samples are similar on welfare status and education. Most offenders in both samples do not receive public aid, but 18.8% of control offenders and 11.8% of specialized offenders received public aid while on probation. The distribution on income was also similar. An almost identical percentage of control (62.9%) and specialized (66.3%) offenders reported living in poverty at the time of the intake interview, making less than \$13,500 dollars per year. Roughly twenty percent of the specialized (15.3%) and control (19.6%) samples made between \$13,501 to \$20,000 a year, with 12.4% of the control and 13.3 % of the specialized sample making \$20,001 to \$30,000 a year and the remainder making more than \$30,000 a year. A similar small percentage of control (2.0%) and specialized (2.9%) offenders completed a college degree. About half of the specialized offenders and 38% of the control offenders failed to complete high school. A similar percentage of specialized offenders (3.8%) and control offenders (3.0%) have some additional trade or college education after the high school diploma.

In addition to these basic demographic variables, we collected information on their social and mental health status. Over half of control (64.3%) and specialized (53.3%) offenders were currently engaged in a sexually active relationship with an adult partner. The majority of offenders (over 88%) in both samples were heterosexuals, 5 % of the control and 9.8% of the specialized samples were bisexuals, and the remainders were homosexuals. Approximately half of the specialized (54.7%) and control (52.6%) offenders had significant others that they relied on for support, whereas over one-third were generally alone, and the remainder were in social environments that contributed to deviance. The childhood background was also similar, with the majority of control



(75.5%) and specialized (71.9%) offenders growing up without either sexual or physical abuse. However, approximately one-quarter of both samples experienced sexual abuse alone or in combination with physical abuse.

The specialized and control samples were also similar on current mental health status in that over 70% of both samples did not demonstrate mental health problems. About 27% of both samples were diagnosed with a current mental health problem. Mental health information was obtained from the treatment evaluation, and often included a DSM IV-R diagnosis. The relatively low rate of mental illness in this sample as compared to the other counties may be due to less thorough treatment evaluations that generally did not include an ABEL test or tests for psychopathic deviancy (as well as missing evaluations for some control offenders). Mentally ill sex offenders had a range of mental health problems, and typically had more than one diagnosis. Four offenders had sadistic personalities and one offender was labeled as having an antisocial personality. Several sex offenders had adjustment disorders in combination with some personality disorder such as borderline personality, passive-aggressive personality, dependent personality, and manic obsessive compulsive. A few offenders had psychotic thought disorders such as schizophrenia, and experiencing hallucinations or “being in another world”. Seven offenders were diagnosis with Bipolar disorder (Major Affective Disorder involving depression and manic behavior), typically in combination with substance abuse and other personality disorders. Approximately 15% demonstrated clinical depression, though they were able to function. The great majority of offenders in the control (90.1%) and specialized (89.0%) sample reported no previous or current thoughts of or attempts of suicide, and only about 10% in both groups (control sample

9.8%, specialized sample 9.9%) had a history of suicide attempts. Some sex offenders in the control sample (23.7%) and the specialized sample (17.5%) had previous mental health treatment.

Only a few studies have examined whether problems with anger, aggression, or impulse control place sex offenders at a higher risk of committing new sex crimes. Additional research is needed to examine the contribution of these characteristics. About two-thirds of the control (66.3%) and specialized (68.1%) samples had no history of aggression, 28.1% of the control sample and 25.2% of the specialized sample had a history of mild or moderate aggression. Only about 6% of both samples showed a history of extreme or consistent aggression. The samples also did not differ on problems with anger. A third of the control sample and a quarter (26.1%) of the specialized sample had some minimal anger about the offense and about 12% of both samples had consistent problems with anger or a revenge motive. A significantly higher percentage of the control sample (37.6%) than the specialized sample (15.1%) were occasionally impulsive and 10.0% of the control sample compared to 8.1% of the specialized sample had a history of compulsive or impulsive behavior,  $X^2(3) = 15.94, p < .002$ .

About a third of the offenders, (33.3% in the control sample and 39.1% of the specialized sample), revealed either alcohol or drug use. About half of each sample disclosed using both alcohol and illicit drugs. It is interesting to note that 38.2% of the specialized sample and 32.3% of the control sample reported using only alcohol, but only one offender in each sample disclosed using only drugs. About a third, 35.7% of specialized group and 42.0% of control group offenders, used alcohol or drugs immediately before committing sexual crimes. Overall, the two samples were basically

similar on all of the demographic and mental health or social adjustment characteristics variables examined.

## 2. Comparison of Control and Specialized Samples on Offense Characteristics

The specialized and control samples showed some significant differences in the type of current convicted offense. The samples did not differ on the percentage of offenders convicted of criminal sexual assault (21.4% in the control sample and 21.9% in the specialized sample) but the specialized sample had a higher number of offenders convicted of aggravated criminal sexual abuse (61.9%) than did the control sample, (44.7%). On the other hand, the control sample had a higher number of offenders convicted of criminal sexual abuse or indecent solicitation (17.5%) than did the specialized sample (10.5%). While the proportion of offenders convicted of other sex offenses was similar (specialized sample 4.8%; control sample 5.8%), the control sample had a significantly higher percentage of convictions for public indecency (10.7%) than the specialized sample (1.0%),  $X^2 (4) = 13.37, p < .01$ .

Six to nine studies have found that the following three offense characteristics do not significantly increase the risk of sexual recidivism: violating very young children, penetrating the victim during the sex offense, and using physical force on the victim during the sex offense. These three characteristics, however, certainly increase the seriousness of the offense by preying on helpless young children, committing a clear violation of sexual norms, and using force to achieve the sex offense. In Illinois, committing a sex offense against a child younger than nine years old is a factor that increases the seriousness of the offense and potential penalty. The empirical literature,

however, shows no significant increase in the risk of sexual recidivism for offenders who commit crimes against younger children (for a review see Hanson & Busierre, 1998). This finding may occur due to measurement error or due to the fact that crimes against young children are really not related to risk. Measures of whether sex offenders prey upon very young children may be unreliable due to the fact that many incidents against young children may not be documented in the files. Young children may be less likely to report the incidents due to their lack of awareness and more limited ability to communicate the victimization. Furthermore, many sex offenders who commit crimes against young children also commit crimes against adolescents as well as commit hands-off crimes; this measure thus does not capture a group of pedophiles that specializes in preying upon young children. This measure also can be distinguished from pedophilia in another way: pedophilia requires an exclusive sexual preference for children, whereas some men who violate young children do not have any objective or subjective sexual preference for children or have both a sexual preference for children and adults. Thus, preying upon young children should not be confused with pedophilia; it is a very unreliable indicator that an offender is a pedophile.

Both the specialized (23.3%) and the control sample (18.3%) were similar on the percentage of offenders who used physical force to achieve their sex crime. However, over 40% of the sex offenders in the control and specialized samples did not penetrate their victims. When penetration occurred, vaginal penetration was most common with roughly 5% of both samples using only oral penetration. About 13% of the control and specialized sex offenders used anal penetration or anal penetration in combination with oral or vaginal.

The majority of the control (87.9%) and specialized (91.2%) sample victimized children. However, the specialized sample offenders (37.3%) compared to the control (22.0%) were more likely to attack children nine years old or younger. A similar percentage of both samples (control, 15.4% and specialized 21.6%), attacked children between the ages of 14 and 15. A substantial percentage of the control (37.4%) and specialized (27.5%) samples also focused on children between the ages of 10 to 13.

Hands-off offending has been an inconsistent predictor of sexual recidivism in prior studies. Some studies report that offenders who are interested in hands-off sex offenses such as exhibitionism and voyeurism are more likely to re-offend because such offenders were compared to offenders who committed exclusively hands-on offenses. However, an interest in hands-off offenses may increase the risk of sexual recidivism for those who have committed a hands-on offense, in that such interests increase the scope of illegal sexual behavior in which the offender may potentially engage. We created a combined objective and subjective measure of interest in hands-of offenses that classified an offender as being interested in such offenses if: (1) he showed an objective preference for voyeurism or exhibitionism on the ABEL assessment; (2) he had past arrests for public indecency; (3) he admitted to his treatment provider during initial interviews that he had committed a hands-off offense in the past or had fantasized about committing a hands-off offense, or (3) he admitted to his probation officer during the initial intake interview that he fantasizes about or has committed past hands-of offenses. We found that a higher percentage of the control (16.7%) than the specialized (8.7%) samples showed at least some interest in hands-off offenses. We also examined the profile of the type of crimes that offenders have committed in the past and created a three category

variable of only hands-on crimes, only hands-off crimes, and both hands-on and hands-off crimes. A larger percentage of the control sample (9.7%) than the specialized sample (1.0%) committed only hands-off crimes. However, the control group (7.8%) and the specialized group (5.7%) were equally likely to have a combination of both hands-on and hands-off offenses. Thus, it appears that the difference in current conviction does represent a difference in offending behavior because, while both the specialized and control sample have a similar propensity to commit hands-on offenses, the control sample is more likely to have an offense history of hands-off offending.

Prior research also shows that offenders who lack remorse or fail to accept responsibility in the initial treatment evaluation generally do not have a higher risk for sexual recidivism (see Hanson & Busierre, 1998). The control and specialized samples were similar in their acceptance of responsibility, with 24.7% of the control and 16% of the specialized group fully accepting responsibility for all aspects of the offense. Similar proportions of both samples minimized their responsibility (55.1% of the control and 64.9% of the specialized) with approximately 20% in both sample denying all aspects of the offense. At the time of intake, most offenders in both the specialized (74.8%) and control (62.1%) samples expressed minimal or no remorse for their offense.

Approximately 20% of each group expressed a great deal of remorse. However, a greater percentage of the control sample (14.9%) than the specialized sample (1.1%) defended the offense,  $X^2(3) = 12.76, p < .01$ .

Few studies have examined the number of months that the abuse had been occurring prior to the offender being arrested, in part because it is difficult to obtain a reliable measure of this characteristic. About 50% of the control and 40% of the

specialized samples committed their offense only on one occasion. In general, the specialized and control samples did not differ on number of months that the offending occurred. Only 14.2% of the specialized sample and 9.7% of the control sample continued offending for over four years, and 15.2% of the specialized sample and 14.7% of the control sample continued their offending for over one to four years. The remainder of offenders committed offenses for one month to one year.

Sex offenders have a variety of appropriate and inappropriate sexual fantasies. Deviant sexual preferences involving children, force, hands-off offending etc., are called paraphilia in the literature. It is unclear whether certain fantasies indicate a higher risk of sexual recidivism, or whether a higher number of paraphilia is related to a higher risk of sexual recidivism. Only a sexual preference for children has been consistently and strongly related to sexual recidivism in the literature. The control and specialized samples did not differ in the number of paraphilia that were identified at probation intake. The majority of the control (79.6%) and specialized (77.1%) offenders had one paraphilia involving only females or males, and 7.8% of the control and 9.5% of the specialized offenders had two or more paraphilia involving only one gender. Less than 10% in both samples had one paraphilia involving both males and females and only 5% of both samples had two or more paraphilia involving both males and females.

### 3. Comparison of Specialized and Control Samples on Risk Predictors of Sexual Recidivism

Prior research has identified several characteristics of the offense that increase the likelihood that sex offenders will reoffend (for reviews see Hanson & Bussiere, 1998;

Heilbrun, Nezu, Keeney, Chung, & Wasserman, 1998; and Harris, Rice, & Quinsey, 1998). Moreover, in a more recent study of the recidivism of incest offenders, the total number of previous criminal arrests, total number of sexual arrests, age at first conviction, and psychopathic deviancy predicted general recidivism for any crime (Firestone et al., 1999). This study of incest offenders also found that deviant sexual arousal did not predict sexual recidivism, which is consistent with other prior research on incest offenders (Quinsey, Chaplin & Carrigan, 1979). Based on the lower rates of recidivism and possible different characteristics that predicted recidivism, Firestone et al. (1999) noted that research on recidivism should not combine child molesters and rapists, and that separate tools for predicting recidivism should be explored.

Risk assessment of sex offenders is still at a relatively crude stage. One clear shortcoming of prior research is that studies did not empirically test how to combine significant predictors so that the correct high-risk groups are identified (Hanson & Bussiere, 1998). Moreover, most prior research has, out of necessity, relied on static characteristics of the offender and offense to create risk assessment instruments. For example, one of the easiest and popular formal instruments is the Rapid Risk Assessment for Sex Offender Recidivism (RRASOR). The RRASOR includes only four factors that increase risk: Male victim, unrelated victim, prior sex offenses, and committing the offense and being released from prison (or an inpatient secured institution) before the age of 25. Prior sexual history is given greater weight with one point assigned for one prior conviction or two prior arrests; two points assigned for three prior convictions or three to five prior arrests, and 3 points assigned for four or more prior convictions or six or more prior arrests. One clear shortcoming of the RRASOR is that it relies on only official



criminal history and ignores prior but undetected crimes that are disclosed to probation officers or treatment evaluators. Certainly, intensive supervision probation programs that attempt to obtain a full criminal history would obtain better prediction using all prior detected and self-reported crimes.

Little is known about how well these formal risk assessments and prior risk characteristics developed primarily from incarcerated, hospitalized, or outpatient treatment clinic samples perform in predicting recidivism among sex offenders on probation. Our research extends prior attempts to a large sample of sex offenders on either standard or intensive supervision probation and begins to examine how best to combine relevant risk characteristics to maximize accuracy in identifying high-risk offenders. We first compare the specialized and control sample on six characteristics that have consistently been found to increase the risk of sexual recidivism, and then examine how the samples compare on formal risk assessment instruments. The six characteristics that have been most consistently and strongly related to sexual recidivism are:

- ❑ If the offender victimized a stranger
- ❑ If the offender victimized a person outside of their own family
- ❑ If the offender victimized a male
- ❑ Prior arrests for sex crimes and total number of prior arrests
- ❑ If the offender has pedophilic sexual interests
- ❑ If the offender has a psychopathic deviant personality

The samples differed significantly on both the proportion of control (60.2%) and specialized (43.8%) offenders that committed sex acts against unrelated victims and against strangers (control, 8.7% and specialized 1.9%),  $X^2(4) = 12.1, p < .02$ . This, no

doubt, is a function of the fact that the Winnebago specialized program focused on incest offenders.

A small percentage of control (10.6%) and specialized (4.9%) offenders committed acts against male victims and therefore are at a higher risk of reoffending.

Prior sexual history is a significant and moderate predictor of sexual recidivism, though total number of prior arrests is a reliable, but modest predictor (Hanson & Bussiere, 1998). Most formalized risk assessment scales such as the Rapid Risk Assessment for Sex Offense Recidivism (RRASOR), the Violence Risk Appraisal Guide (VRAG), the Sex Offense Risk Appraisal Guide (SORAG), the Structured Anchored Clinical Judgment (SACJ-MIN), and Static-99 use prior sexual arrests and convictions as high risk factors. Table V.2 shows that a similar percentage of the specialized and control samples have a prior criminal history and have committed prior sex crimes. More than half of the specialized sample (58.1%) has been arrested for at least one prior crime of any type, and 52.4% of the control sample has been arrested. The main difference is that the specialized sample was arrested for a greater number of misdemeanors (83%) than the control sample (61%), with 16.2% of the specialized sample and 6.8% of the control sample being arrested for two or more misdemeanors. The samples differed only slightly on number of arrests for property offenses, drug offenses, or violent offenses. Prior criminal history varied in the control sample with 24.3% arrested for a property crime, 11.7% arrested for a drug crime, and 31.1% arrested for a violent crime. Prior criminal history also varied in the specialized sample with 38.1% arrested for a property crime, 21.9 % arrested for a drug crime, and 31.4% arrested for a violent crime. The Static-99, the Structured Anchored Clinical Judgment minimum (SACJ-MIN), and the

Violence Risk Appraisal Guide (VRAG) treat prior violent arrests as a risk factor for sexual recidivism (Hanson & Thornton, 2000).

Studies generally have not postulated why criminal history is related to general recidivism for committing any crime. One possible reason is that offenders learn that the criminal justice system is quite lenient. If offenders are arrested, but not convicted, these offenders may conclude that they can beat the system. A higher proportion of the control sample (34.0%) than the specialized sample (14.8%) had at least one prior arrest, but was never convicted of any offense.<sup>17</sup>

Prior history of sexual offending is a risk factor for future offending. The samples did not differ on prior arrests for sex crimes, with 11.4 % of the specialized sample and 11.7 % of the control sample having a prior arrest for a sex crime. In addition to the fact that the specialized and control sample did not differ on formal arrest history, they are also quite similar in prior sexual crimes when self-reported, undetected crimes are also included. About 20% of both samples disclosed or were arrested for a prior sex crime; thus, the control and specialized samples do not differ on the risk factor of prior sex crimes when the full disclosed history of sexual offending is considered.

Often times, probation departments do not collect information about objective sexual preference or psychopathic deviancy. Under these circumstances, the RRASOR may be used to obtain a rough estimate of risk of sexual offending. As stated previously, the RRASOR combines age of offending (18 to 25 as high risk), prior arrests for sex crimes, male victim, and unrelated victim to obtain a risk assessment. We computed RRASOR scores for the sex offenders in the control and specialized sample and found

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<sup>17</sup> A prior study by the Criminal Justice Information Authority, however, documented that rap sheets do not contain 50% of the convictions.

that the samples were not statistically different from each other on these scores. Table V.2 presents the distribution, and the majority falls into the lower risk groups. In prior validation studies of the RRASOR offenders scoring two or less had an average 5-year recidivism rate of 12.6%. Offenders who score 1 on the RRASOR such as older child molesters who violate girls outside their families or young child molesters who violate girls within their families and have no prior record have less than a 15% chance of reoffending within 10 years (Hanson, 1998).

**Table V.2. Comparison of Winnebago County Specialized and Control Group on Risk Factors of Sexual Recidivism**

| <b>Possible Risk Characteristics for Recidivism</b> | <b>Winnebago County Control Sample</b> | <b>Winnebago County Specialized Sample</b> |
|---|--|--|
| <b>Relationship of offender to victim</b>           |  |  |
| Close Family member                                 | 19 (18.4%)                             | 26 (24.8%)                                 |
| Other Relative                                      | 18 (17.5%)                             | 32 (30.5%)                                 |
| Acquaintance  | 53 (51.5%)                             | 44 (41.9%)                                 |
| Stranger*   | 9 (8.7%)                               | 2 (1.9%)                                   |
| Unknown   | 4 (3.9%)                               | 1 (1.0%)                                   |
|   |  |  |
| <b>Gender of victim</b>                             |  |  |
| Boys  | 10 (10.6%)                             | 5 (4.9%)                                   |
| Girls   | 79 (84.0%)                             | 92 (89.3%)                                 |
| Both boys and girls                                 | 5 (5.3%)                               | 6 (5.8%)                                   |
|   |  |  |
| <b>Prior criminal history</b>                       |  |  |
| <b>Total number of prior arrests for any crime</b>  |  |  |
| None  | 49 (47.6%)                             | 44 (41.9%)                                 |
| One   | 11 (10.7%)                             | 8 (7.6%)                                   |
| Two to four   | 22 (21.4%)                             | 25 (23.8%)                                 |
| Five or more  | 21 (20.5%)                             | 28 (26.9%)                                 |
|   |  |  |
| <b>Total number of prior arrests for sex crimes</b> |  |  |
| None  | 91 (88.3%)                             | 93 (88.6%)                                 |
| One or more   | 12 (11.7%)                             | 12 (11.5%)                                 |

| <b>Possible Risk Characteristics Continued</b>                          | <b>Winnebago County Control Sample</b> | <b>Winnebago County Specialized Sample</b> |
|---|--|--|
| <b>Total number of disclosed sex crimes (arrests and self-reported)</b> |  |  |
| None  | 82 (80.4%)                             | 84 (80.0%)                                 |
| One   | 13 (12.7%)                             | 16 (15.2%)                                 |
| Two or more   | 7 (6.9%)                               | 5 (4.8%)                                   |
|   |  |  |
| <b>Score on the RRASOR</b>  |  |  |
| 0   | 28 (27.2%)                             | 43 (41.0%)                                 |
| 1   | 45 (43.7%)                             | 38 (36.2%)                                 |
| 2   | 28 (27.2%)                             | 21 (20.0%)                                 |
| 3   | 2 (1.9%)                               | 3 (2.9%)                                   |
|   |  |  |
| <b>Objective sexual preference for children*</b>                        |  |  |
| Unknown   | 35 (34.0%)                             | 35 (33.3%)                                 |
| No  | 45 (66.2%)                             | 54 (77.1%)                                 |
| Yes   | 23 (33.8%)                             | 16 (22.9%)                                 |
|   |  |  |
| <b>Is offender a psychopathic deviant?</b>                              |  |  |
| Unknown   | 81 (78.6%)                             | 84 (80.0%)                                 |
| No  | 22 (21.4%)                             | 20 (19.0%)                                 |
| Yes   | 0 (0.0%)                               | 1 (1.0%)                                   |
|   |  |  |
| <b>Score from the SACJ-MIN</b>  |  |  |
| Low risk  | 13 (12.6%)                             | 13 (12.4%)                                 |
| Medium risk   | 54 (52.4%)                             | 54 (51.4%)                                 |
| High risk   | 36 (35.0%)                             | 38 (36.2%)                                 |
|   |  |  |
| <b>Score from the Static-99</b>   |  |  |
| Low risk  | 22 (21.4%)                             | 23 (21.9%)                                 |
| Medium risk   | 43 (41.7%)                             | 51 (48.6%)                                 |
| Medium high risk  | 29 (28.2%)                             | 30 (28.6%)                                 |
| High risk   | 9 (8.7%)                               | 1 (1.0%)                                   |

Typically, the term pedophilia has been used in prior research to denote sex offenders who have an exclusive sexual interest in toddler or latency children. When such a definition has been used, pedophilia has been consistently related to a higher risk of sexual recidivism. Because many offenders do not honestly self-report sexual interest

in children, the most reliable way of measuring interest in toddler or latency children is via an objective phallometric or ABEL assessment. In fact, a recent meta-analysis examining the predictors of sexual recidivism found that the strongest predictor was a deviant sexual interest in children as measured by an objective phallometric assessment (Hanson & Bussiere, 1998).

To measure pedophilic interests, we created a variable that combined both objective and subjective sexual preferences. We classified an offender as having pedophilic interests if: (1) he showed an objective preference for toddler (ages 2-4) or latent (ages 8-10) girls or boys on the ABEL assessment, or (2) he admitted to his probation officer or treatment provider during the initial intake interview that he fantasizes about touching or having sex with children, infants, or babies. The control and specialized samples did not differ in the number of pedophiles. We found that 22.9% of the specialized sample and 33.8% of the control sample had at least some objective or subjective interest in pedophilic behavior. For approximately a third of both samples, an ABEL assessment was not completed and the objective sexual preference toward children was unknown.

Psychopathic deviancy as measured using objective instruments such as the MMPI or Hare's Psychopathy Scale is also a reliable indicator of a higher risk for sexual recidivism. Psychopathic deviancy has been found in various studies to be one of the strongest predictors of recidivism after controlling for background, demographic, and offense characteristics (Harris, Rice & Quinsey, 1998; Quinsey, Lalumiere, Rice, & Harris, 1995). For 80% of the entire sample, we did not have information on

psychopathic deviance. Only one offender could be labeled a psychopathic deviant from the information in the treatment evaluations.

To summarize, offenses against non-familial victims, offenses against strangers, offenses against boy victims, a pedophilic interest, and prior arrests for sex crimes place offenders in a higher risk category. The Structured Anchored Clinical Judgement (SACJ-MIN) considers all of these factors in making predictions about the risk of sexual recidivism. In the first step, five characteristics are scored: any current sexual offense, any prior sexual offense, any current nonsexual violent offense, any prior nonsexual violent offense, and four or more sentencing occasions. If offenders have four or more of these five factors, they are considered high risk. Only 3.9% of the control and 1.0% of the specialized sample are considered high risk. If offenders have two or three factors, they are considered medium risk (39.9% of the control and 50.5% of the specialized sample).

In the second step of the SACJ-MIN, an offender's initial risk assessment is moved up one category if he has two or more of the following eight characteristics: any stranger victims, any male victims, never married, convictions for hands-off sex offenses, substance abuse, placement in residential care as a child, deviant sexual arousal, and psychopathy. We coded information on seven of these eight factors with the exception of placement in residential care as a child. The majority of both the control (79.6%) and the specialized (72.4%) samples had two or more of these high risk characteristics and were increased one risk category. The specialized and control samples were very similar on the score for these seven risk factors with 44.8% of the specialized and 35% of the control samples having two of the seven characteristics and 27.6% of the specialized and 44.7% of the control having three or more of the seven risk characteristics. The control

and specialized samples did not differ significantly on the final risk assessment from the SAC as shown in Table V.2.

The Static-99 is a combined scale of the RRASOR and the SACJ-MIN, and has better predictive accuracy than the RRASOR or the SACJ-MIN (see Hanson & Thornton, 2000). Its name indicates that it includes only static variables and that it was developed in 1999. Prior sexual history is scored the same way as in the RRASOR. Each of the following nine risk factors adds one point to the total score: (1) four or more prior sentencing dates; (2) any convictions for noncontact sex offenses; (3) current index nonsexual violent offense; (4) prior nonsexual violence arrests; (5) any unrelated victims; (6) any stranger victims; (7) any male victims; (8) being between the age of 18 to 24 at the time of arrest; and (9) never lived with lover for at least two years. Scores can range from 0 to 12, with a score of 6 or more in the high-risk category. The specialized sample scores on the Static-99 ranged from 0 to 5, with 23 offenders (21.9%) in the low risk category (score of 0 or 1), 51 offenders (48.6%) in the medium-low risk category, and 30 offenders (28.6%) in the medium high-risk category (score of 4 or 5). By these formalized risk assessment instruments, the Winnebago County program is serving a medium risk group of sex offenders.

Time, however, will tell just how accurate these instruments are at assessing the risk of sexual recidivism while on probation and in the long-term. Probation officers and trainers should note the warning of Hanson and Thornton (2000): “Static-99 is intended to be a measure of long-term risk potential. Given its lack of dynamic factors, it cannot be used to select treatment targets, measure change, evaluate (sic) whether offenders have benefited from treatment, or predict when (or under what circumstances) sex offenders



are likely to recidivate” (p. 132). Such warnings also apply to the RRASOR and other instruments. These instruments may have little predictive value in the short period of time that offenders are on probation. Moreover, none of the formal risk assessments include pedophilia, objective sexual preference to children, several objective sexual paraphilias, and only the VRAG includes psychopathic deviancy; these factors however are the strongest predictors of recidivism (see Hanson & Busierre, 1998); none of the formal risk assessments include such information because it often is not available. Intensive supervision probation programs for sex offenders, however, should routinely collect information on objective sexual preferences and personality disorders and this information should inform risk assessments. Furthermore, research has not assessed the RRASOR’s or Static-99’s predictive value with probation samples or their accuracy at predicting probation compliance or remaining arrest-free of any new sex crimes. Our research may begin to forge such important lines of inquiry, and to improve upon current risk assessments.

### **C. Probation Outcomes for Winnebago County**

The research team gathered data on three measures of compliance with probation conditions: number of violations of probation (VOP) petitions filed, percentage of offenders that were revoked and resentenced to prison or other sanctions (revocations), and percentage of offenders that absconded from probation.

Probation officers have much discretion on when to file a VOP with the court. Instead of filling a VOP, probation officers may use informal sanctions such as warnings, requiring a noncompliant offender to come to extra office visits, or submit to additional

drug/alcohol testing. Thus the number of VOPs filed is not a measure of how compliant sex offenders are on probation, but is a better indicator of how often probation officers resort to using the most severe sanction available and seek the court's assistance in controlling sex offenders. The specialized sample had a slightly lower average number of VOPs (mean = 1.42) compared to the control sample (mean = 1.52). A significantly higher proportion of the control sample (46.6%) than the specialized sample (21.9%) had at least one VOP filed,  $X^2(1) = 14.11, p < .001$ . Also, a slightly higher percentage of control offenders (15.6%) than specialized offenders (8.6%) had two or more VOPs filed. The specialized sample (mean = 21.00) and control sample (mean = 19.69) were similar on the average number of months on probation until the first VOP was filed...over a year and a half in both samples.

The samples differed somewhat on the type of conditions that offenders violated that resulted in a VOP being filed. In the first VOP, 65.2% of the specialized sample and 34.8% of the control sample had missed at least one office visit,  $X^2(1) = 5.74 p < .02$ . However, while none of the specialized offenders had VOPs filed for contact with victims, 8.3% of the control offenders had such VOPs filed. A similar percentage of the specialized sample (55.6%) and the control sample (56.3%) were noncompliant with treatment. Noncompliance with treatment is addressed in the next section. In the first VOP a large percentage of both the specialized (86.7%) and control (66.0%) sample violated additional conditions beyond contact with victims, missed office visits, and treatment noncompliance. These additional conditions included failure to pay probation and court fees, new arrests, failure to register as a sex offender, failure to report new address, failure to pay restitution, and testing positive for illicit drugs.

The two samples were similar on the proportion of offenders who completed probation unsatisfactorily. Over a third (41.7%) of the control sample and about one fourth of the specialized sample (26.1%) terminated probation unsatisfactorily. There was little difference between the samples on the percentage of offenders revoked or absconded. Table V.3 presents these findings. Although over 50% in each sample completed probation satisfactorily, it should be noted that this does not always mean that the offender was completely compliant. Many offenders had VOPs filed or were given warnings or administrative sanctions and still were given satisfactory termination. Of sex offenders who were satisfactorily terminated, 13.8% (N = 8) of the control sample and 10.3% (N = 7) of the specialized sample were arrested for or admitted to a new sex offense since being placed on probation. It should be noted that in six of these 15 cases (40%) the offense was for failure to register as a sex offender. In three others the offense was a misdemeanor (one for public indecency; two for solicitation of a prostitute). In addition, a third of both samples that had new arrests for new offenses of any type while on probation were terminated satisfactory. It should be noted that the Winnebago County Probation Department notifies the state's attorney's office of any new arrests. Courts sometimes do not revoke probation based only on a new arrest. Of those offenders who had at least one new arrest for a sex crime including failure to register offenses, 38.1% of the control sample (3 cases) and 63.6% of the specialized sample (7 cases) were terminated satisfactory. Of those offenders with no new arrests for sex crimes, 63.4% of the control sample and 75.3% of the specialized sample terminated satisfactorily. Thus, new arrests for sex crimes are related to whether probation is terminated satisfactory or unsatisfactory.

**Table V.3 Control and Specialized Samples in Winnebago County Compared on Probation Termination Status, Revocations, and Absconding**

| Sample      | % Terminated Satisfactorily | % of Revocations | % of Offenders Who Absconded |
|-------------|-----------------------------|------------------|------------------------------|
| Control     | 58.3%                       | 12.6%            | 2.9%                         |
| Specialized | 73.9%                       | 10.5%            | 1.9%                         |

The specialized and control groups were similar on revocations and absconding. There was some evidence that new arrests for any crime and new arrests for sex crimes were considered by the court in decisions to revoke. Approximately 25% of both the control and specialized offenders who had new arrests for any offense or had a new sex offense were revoked. However, new offenses were neither a necessary nor sufficient reason to revoke an offender’s probation.

1. Predicting Whether Winnebago County Probation Officers File a VOP

The filing of a VOP indicates more about how probation officers administer severe sanctions for violation of probation conditions than about how noncompliant sex offenders are while on probation. Many sex offenders can be detected in noncompliance with several probation conditions including missing office visits, positive drug tests, and missing treatment appointments as well as have new arrests and still not have a VOP filed. How do probation officers generally decide whether to file a VOP? We examined this question using the entire sample of both control and specialized sex offenders and conducted ODA to determine which characteristics were significantly related to the probation officer’s decision to file a VOP. Twelve characteristics were significantly related to filing a VOP in the Winnebago County sample and were generalizable in LOO

analysis. These characteristics are presented in Table V.4. Probation officers in the standard probation unit were significantly more likely to file a VOP, and this characteristic was the strongest generalizable predictor. Two demographic characteristics were significant and generalizable. VOPs were more likely to be filed if the offender was African-American or if the offender was unemployed. Four other demographic characteristics were significant predictors, but did not generalize in the validity analysis: current age of the offender, marital status, education level and income level. Offenders who denied the offense were more likely to have a VOP filed. Remorse also was a significant predictor, but did not generalize in the validity analysis.

**Table V.4. Generalizable Significant Predictors of Whether a VOP was Filed in Winnebago County**

| <b>Predictors</b>                              | <b>Sample p-value</b> | <b>Stable ESS</b> |
|--|-----------------------|-------------------|
| On standard probation                          | .0006                 | 27.5              |
| African-American offender                      | .0028                 | 21.2              |
| Unemployed                                     | .0049                 | 23.0              |
| Recommended drug treatment                     | .0071                 | 19.7              |
| Used drugs before the offense                  | .037                  | 16.7              |
| Prior treatment for drugs or mental health     | .016                  | 17.9              |
| No children in custody                         | .028                  | 14.7              |
| Was not ordered to have no contact with minors | .039                  | 13.9              |
| Committed a new sex offense                    | .0075                 | 14.4              |
| Number of prior arrests for property crimes    | .0027                 | 21.0              |
| Number of prior arrests for violent crimes     | .016                  | 17.6              |
| Medium to high risk based on the SACJ-MIN      | .027                  | 16.8              |

Three characteristics associated with substance abuse were significant and generalizable. If the court or therapist recommended substance abuse treatment, offenders were more likely to have a VOP filed. If offenders used drugs before the sex offense or had prior treatment for substance abuse or mental health, they were more likely to have a VOP filed. Illicit drug users also were significantly more likely to have a

VOP filed, but the ESS was slightly reduced in the validity analysis. Offenders who did not have children in their custody or were not ordered to have no contact with minors were more likely to have a VOP filed. Offenders who had prior arrests for property crimes or violent crimes also had a significantly higher chance of having a VOP filed. Offenders who were at medium to high risk based on the SACJ-MIN also were at a higher risk of having a VOP filed.

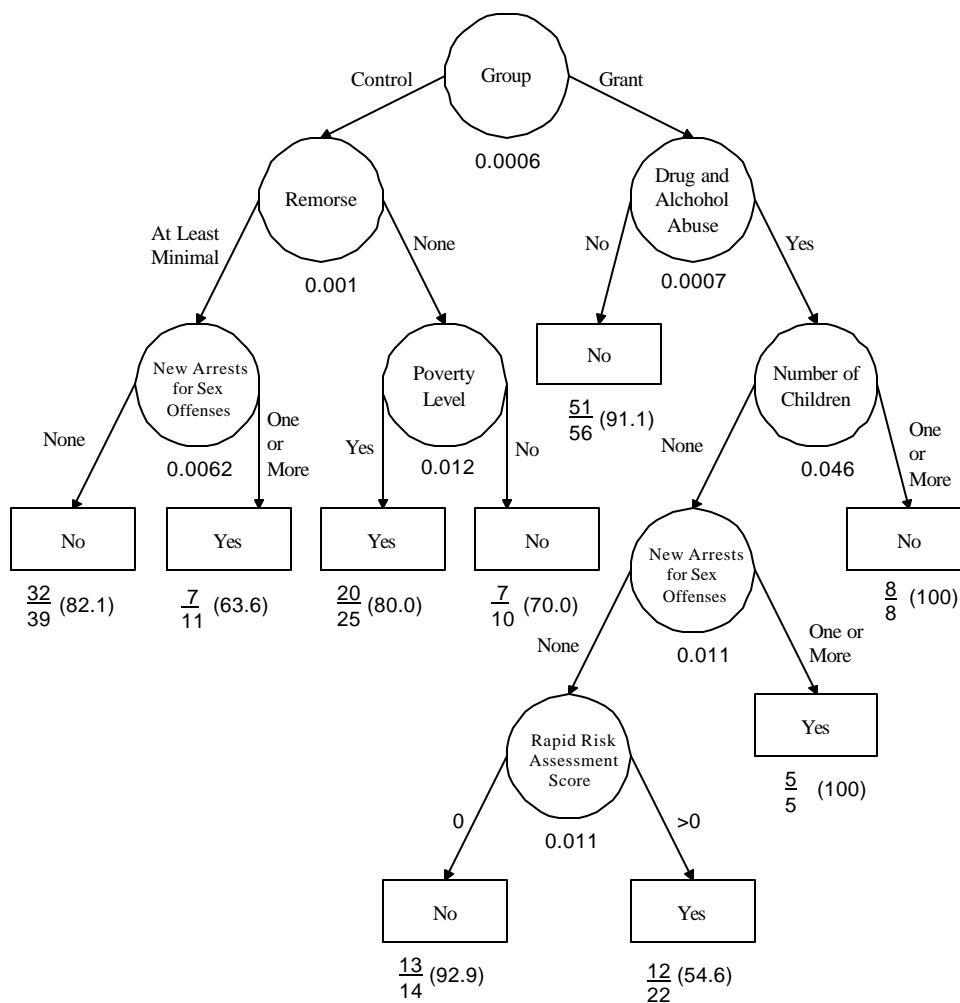
In addition, six other characteristics were significant, but did not generalize in the validity analysis: age at which criminal offending began, total number of prior arrests, denies the offense, expresses no remorse, number of victims, and limited social support.

#### 1a. CTA model: Predicting whether a VOP is filed

The eight variable CTA model predicting whether a VOP was filed showed strong performance (ESS = 60.9) and had an overall classification accuracy of 81.6%. Figure V.1 presents this CTA model. First, the model shows that probation officers in standard probation and in the specialized sex offender probation used different criteria to determine when to file a VOP. For the standard probation group, probation officers were most likely to file a VOP if the offender expressed no remorse and lived in poverty. Standard probation officers had a moderately high chance of filing a VOP if offenders expressed minimal to great remorse and were arrested for one or more new sex crimes. By contrast, probation officers in the specialized sex offender program (specialized) were most likely to file a VOP if an offender used both illicit drugs and alcohol, had no children in their custody, and were arrested for one or more new sex offenses. Probation officers had a moderately high chance of filing a VOP if the offender used both illicit

drugs and alcohol, had no children in their custody, and scored greater than zero on the RRASOR. Thus, remorse and poverty level were critical variables for deciding whether to file a VOP in the standard probation unit whereas poly substance abuse and having no children in their custody were critical variables in the specialized group. New arrests for sex crimes entered the decision model for both standard probation officers and officers in the specialized unit, but entered farther down in the decision tree after the other critical variables.

Figure V.1: CTA Model Predicting Whether a VOP was Filed In Winnebago County



### 1b. CTA model: Explanation of the figure

A brief explanation of this figure will allow the reader to interpret all the figures throughout this report. The circles in the figure identify the significant predictors with the number underneath the circle indicating the corresponding probability level. By following the arrows to the rectangular boxes, the defining characteristics of a cluster are obtained. The rectangular box indicates the outcome predicted for this cluster by the model: in the present case, whether a VOP was filed (Yes) or was not (NO). Beneath the rectangular box is a ratio. Here, the number in the numerator indicates the number of correctly classified offenders for this outcome and the number in the denominator indicates the total number of offenders in the cluster. The number in parentheses is the accuracy in classification; when the outcome is “not filed (NO)” it is necessary to subtract the accuracy in classification from 100 to obtain the likelihood that an offender in this cluster would have a VOP filed. The reader should use the above explanation to understand all of the figures presented in this report; the outcomes and predictor variables will, of course, be different.

### 2. Predicting Probation Termination Status

Which offender and offense characteristics are related to whether offenders have an unsatisfactory termination of probation? ODA analysis using the entire Winnebago County sample was first conducted. Table V.5 presents the nine characteristics that were significantly related to unsatisfactory termination of probation and were generalizable in the validity analyses. The strongest significant and generalizable predictor was illicit drug use. Offenders on standard probation also were significantly more likely to have



unsatisfactory termination. Three demographic characteristics were significant and generalizable. African-American offenders, unemployed offenders, and offenders who did not have any children in their custody were more likely to terminate probation unsatisfactorily. Offenders with prior treatment for drugs or mental health were also more likely to terminate unsatisfactorily. Offenders with prior arrests for violent crimes or misdemeanor crimes also were more likely to terminate unsatisfactorily. Having an arrest for a new sex crime while on probation also was a significant and generalizable predictor of unsatisfactory termination, but was substantially weaker predictor than illicit drug use.

**Table V.5 Generalizable Significant Predictors of Whether Probation Was Terminated Unsatisfactorily in the Winnebago County Sample**

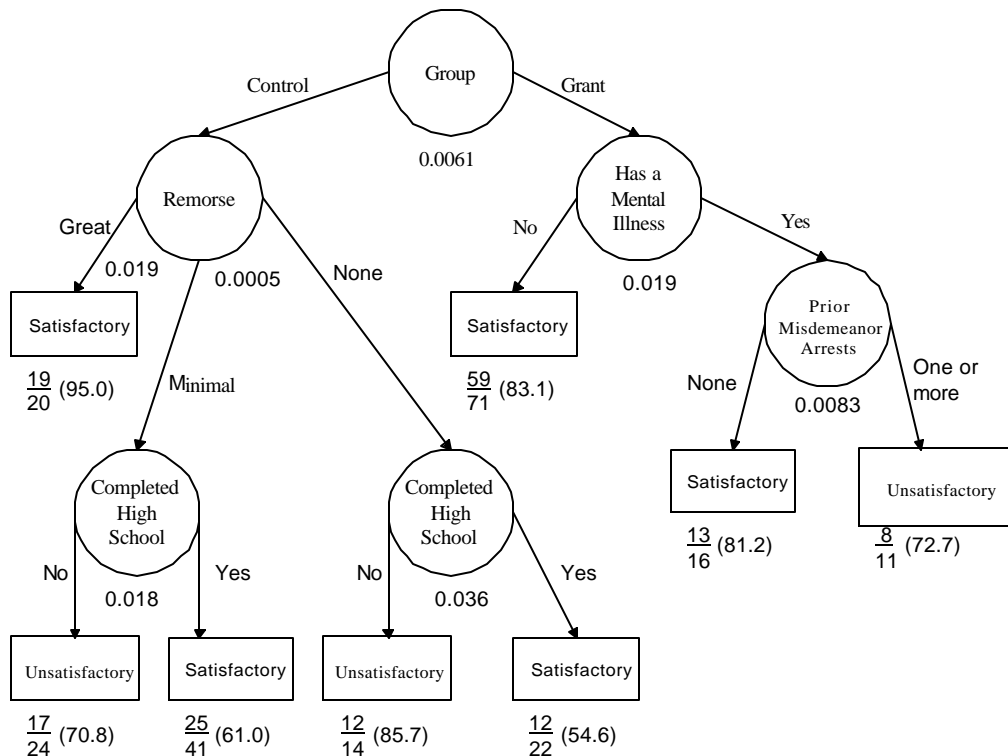
| <b>Predictors</b>                                 | <b>Sample p-value</b> | <b>ESS</b> |
|---|-----------------------|------------|
| Illicit drug use                                  | .0001                 | 31.4       |
| Standard probation                                | .0075                 | 20.4       |
| Not employed                                      | .046                  | 17.6       |
| African-American offender                         | .047                  | 14.5       |
| No children in his custody                        | .046                  | 14.0       |
| Prior treatment for drugs or mental health        | .013                  | 18.6       |
| At least one prior arrest for a violent crime     | .026                  | 16.9       |
| At least one prior arrest for a misdemeanor crime | .038                  | 13.8       |
| Arrested for at least one new sex crime           | .016                  | 13.6       |

Six other characteristics were significantly related to unsatisfactory termination, but were not generalizable in the validity analyses. These characteristics were: age at which criminal offending began, number of prior arrests for property crimes, total number of prior arrests, denies the offense, expresses no remorse, and education level.

Two CTA models were conducted with illicit drug use starting one model and type of probation program starting the other tree. The two variable CTA model with illicit drug use starting the tree showed moderate performance (ESS = 35.9) and had an overall classification accuracy of 73.1%. Offenders who used illicit drugs and denied the offense or placed most of the blame on the victim had a 55% chance of terminating unsatisfactory whereas offenders who did not use illicit drugs had a 17.5% chance of terminating unsatisfactory. Offenders who used illicit drugs and accepted some responsibility for the offense had a medium chance (24%) of terminating unsatisfactory.

Figure V.2 depicts the five variable CTA model starting with type of probation.

Figure V.2: CTA Model Predicting Termination Status as of April, 2001



It showed moderate performance (ESS = 38.3) and had an overall classification accuracy of 75.3%. As shown in the model, different characteristics predicted termination status for the standard probation and specialized probation groups.

For the standard probation, offenders who expressed no or minimal remorse and did not complete high school had a very high chance of terminating probation unsatisfactorily. Offenders who expressed no or minimal remorse and completed high school had a medium chance of completing probation unsatisfactorily. It is quite striking that 95% of offenders on standard probation who expressed great remorse terminated probation satisfactorily.

For offenders on specialized sex offender probation, mentally ill offenders with one or more prior arrests for misdemeanors had a very high chance of terminating probation unsatisfactorily, but had a low risk of terminating probation unsatisfactorily if they had no prior arrests for misdemeanor crimes. Offenders on specialized sex offender probation who did not have a mental illness had an 83.1% chance of satisfactorily completing probation.

### 3. Predicting Probation Revocation

Judges have the power to decide if offenders who have a VOP filed should have their probation revoked and should be resentenced to prison or some other sentence. Judges rarely revoke probation; thus, it is interesting to see which offender and offense characteristics are related to the judge's decision to revoke probation. Table V.7 presents the ten predictors that were significantly related to revocation and were stable in LOO analysis. Judges appear to consider criminal history in their decisions to revoke. Three

measures of criminal history were significantly related to a higher chance of revoking probation: any prior arrests for property crimes or misdemeanor crimes and any prior convictions. Total number of prior arrests and age at which criminal offending began also were significantly related to a higher chance of revocation, but these characteristics were not generalizable in the validity analysis; thus, they are unlikely to replicate with a new sample of data. Having a new arrest for a sex crime also was significantly related to a higher chance of revocation, but was a much weaker predictor than the criminal history, social adjustment, or demographic measures. Single offenders and unemployed offenders were more likely to have their probation revoked. Offenders who used both alcohol and illicit drugs had a higher chance of revocation compared to offenders who used no substances or only alcohol or only illicit drugs. Current age of the offender, having a history of being a victim of sexual or physical abuse as a child, and no expression of remorse also were significantly related to revocation, but did not generalize in the validity analysis.

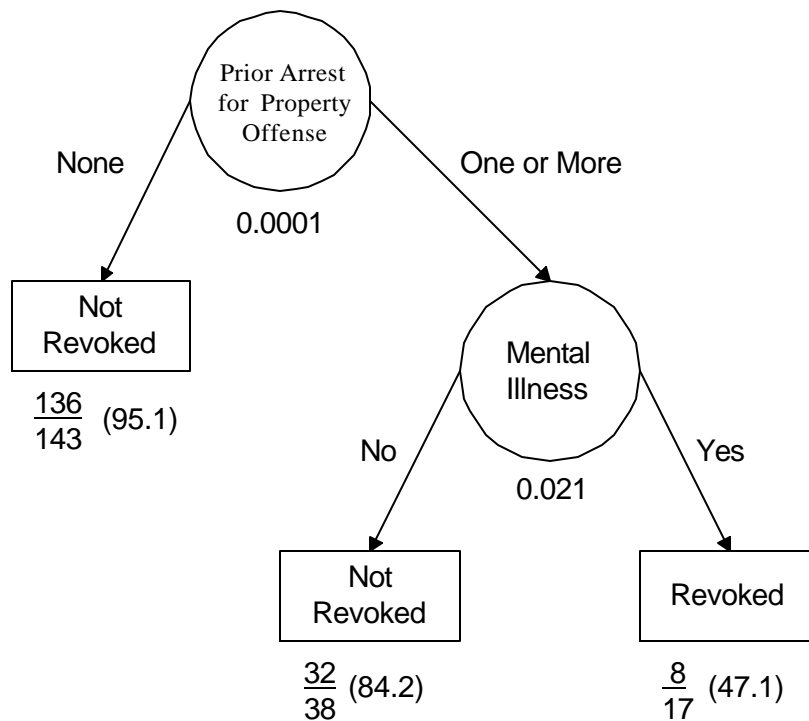
**Table V.6 Generalizable Significant Predictors of Whether Probation Was Revoked in Winnebago County**

| <b>Predictors</b>                         | <b>Sample p-value</b> | <b>ESS</b> |
|---|-----------------------|------------|
| Prior arrests for property crimes         | .0001                 | 44.8       |
| Prior arrests for misdemeanor crimes      | .0082                 | 25.7       |
| Prior arrests for violent crimes          | .0061                 | 30.6       |
| At least one prior conviction             | .0076                 | 30.9       |
| At least one new arrest for a sex crime   | .021                  | 19.8       |
| Single                                    | .0022                 | 37.8       |
| Unemployed                                | .0008                 | 38.8       |
| Uses both alcohol and illicit drugs       | .0046                 | 34.0       |
| Does not rely on a social support network | .0012                 | 37.7       |
| History of compulsive behavior            | .035                  | 25.4       |

It appears that judges consider primarily an offender’s criminal history and current standing in the community in regard to employment, marital relationship, and substance abuse.

A two variable CTA model showed moderate performance (ESS = 33.0) and had an overall classification accuracy of 88.9%. Figure V.3 presents this model.

**Figure V.3: CTA Model Predicting Whether Probation was Revoked**



Offenders who had no prior arrests for property crimes had a very low chance of revocation with only 4.9% of the offenders having their probation revoked. Similarly, offenders who had prior arrests for property crimes, but had no current mental illnesses had a low chance of revocation with only 15.8% having their probation revoked. Offenders with prior arrests for property crimes and a current mental illness had a

medium chance of revocation with 47.1% having their probation revoked. No combinations produced a moderately high or high chance of revocation.

We also tried building a CTA model with prior convictions starting the tree, but no other variables entered the tree.

#### **D. Treatment Outcomes for Winnebago County**

The research team used several measures to assess how well sex offenders were performing in treatment. First, we asked therapists during 1999 to submit monthly treatment reports on active sex offenders in the specialized sample. In 2000, when funding for the long-term impact analysis was available, we collected additional monthly treatment reports from the probation files of specialized sample cases.

We also collected information regarding when a VOP was filed for failure to comply with treatment rules and obtained information about overall noncompliance with treatment rules for both the control and specialized samples. For both the control and specialized sample, we also collected information about whether treatment was completed satisfactorily or unsatisfactorily for cases that were terminated or had active warrants due to the fact that an offender had absconded. Using information about compliance and treatment completion status, we created a measure of serious noncompliance with treatment rules.

We first present the N-of-1 findings for the specialized sample. Second, we focus on comparing the specialized and control group on noncompliance with treatment, treatment completion status, and serious noncompliance with treatment. Finally, we

examine the predictors for satisfactory completion of treatment and for serious noncompliance with treatment.

### 1. N-of-1 Ipsative Change in Therapist's Ratings of Sex Offenders' Progress

Therapists were asked to complete monthly treatment reports that assessed the level of each sex offender's attitudes on six dimensions related to sexual offending. Because different counties used different forms, we evaluate each county on three common questions: (1) to what degree did the offender participate in therapy sessions; (2) how committed is the offender to treatment; and (3) to what degree does the offender acknowledge personal responsibility for the offense. Each question was rated on a one to 10 scale with one equal to the lowest progress on this dimension and 10 equal to the highest progress. For example, on the participation question one is equal to very limited participation and 10 is equal to very engaged participation. The analyses are based on monthly treatment reports submitted from August of 1998 to December of 2000. The average number of monthly treatment reports submitted for an offender is five with a range of 2 to 13 monthly treatment reports submitted per offender. Half of the offenders had five or fewer monthly treatment reports submitted. This variation in the number of monthly treatment reports submitted was due to when the offenders were sentenced and were referred for treatment as well as differences in therapists' submissions of reports. Table V.7 presents for each dimension the mean, standard deviation, and median averaged across time per an offender, and the percentage of Winnebago cases with nine or ten rating on the last submitted treatment report.

The large standard deviations indicate that Winnebago therapists used the entire scale to rate sex offenders. The average ratings per an individual across all time periods is slightly below five, suggesting that Winnebago therapists tended to reserve high ratings for only the sex offenders that showed excellent performance. This observation is further supported by the small percentage of offenders who received a rating of nine or ten on the last treatment report submitted. Interestingly, 20% of sex offenders received a nine or ten for acceptance of responsibility in the last monthly treatment report whereas only a very small percentage (4.7%) received a nine or ten on participation or commitment in the last monthly treatment report.

**Table V.7. Descriptive Statistics of Therapists' Ratings of Sex Offenders' Progress in the Last Report in Winnebago County (N = 57)**

| Dimension                           | Mean | Standard Deviation | Median | % With a Rating of 9 or 10 on last treatment report |
|-------------------------------------|------|--------------------|--------|---|
| Participation in therapy            | 4.87 | 2.03               | 4.83   | 4.7%  |
| Commitment to treatment             | 4.35 | 4.32               | 1.89   | 4.7%  |
| Acknowledge personal responsibility | 4.96 | 5.00               | 1.99   | 20.3%   |

These ratings were used to assess how many offenders were responsive to treatment and thus changed on critical dimensions addressed in treatment. Responsiveness to treatment is an important intermediate outcome in evaluations of how well treatment reduces recidivism. It can be measured in several ways. For example, at least two independent neutral experts could observe and interview each offender at several points during the entire treatment period; unfortunately, this design though ideal at reducing response biases is intrusive, expensive, and could interrupt the treatment



process. The evaluation team, therefore, decided to obtain bi-monthly treatment reports from providers on each offender and to measure systematically critical dimensions that treatment is designed to change.

There are both advantages and disadvantages to using progress reports from therapists as a measure of whether offenders are responsive. One important advantage is that therapists know where each offender began and how well he has met treatment standards. Therapists, moreover, typically judge the progress of offenders in relative terms to how previous and current clients are responding to similar treatment. A potential disadvantage, however, is that therapists will tend to cast offenders' progress in the best possible light to show that treatment is effective. In an attempt to reduce this positive bias, we instructed therapists that all data would be grouped and analyses on separate agencies would not be performed. We also instructed therapists that our primary goal was to understand the predictors of treatment responsiveness and not to address the question of whether treatment was effective. We believe progress reports can be reliably used to determine the characteristics that distinguish offenders who are responsive from those who are not responsive. These data, however, are quite limited to determine the effectiveness of treatment. Questions about the effectiveness of treatment at reducing recidivism are better answered with matched-control sample designs, which we described in an earlier section.

A statistical approach to assess change is far more reliable than examining the absolute change between the first and last period. Simply looking at absolute change to determine the extent to which offenders improved over time is misleading. The approach does not provide a reliable standard to judge improvement, does not take into account the

amount of variability in the ratings, and cannot provide information on how many offenders showed statistically reliable improvement.

A better approach to determining the extent to which offenders are responsive to treatment is to use statistical tools that do not have these disadvantages.<sup>18</sup> Accordingly, we used N-of-1 statistical analyses to assess responsiveness to treatment. There are two types of N-of-1 analyses that address different questions related to responsiveness to treatment. Ipsative N-of-1 analyses address the question: did this offender improve during the course of treatment compared to when the offender entered treatment?<sup>19</sup> On the data for each individual offender, we performed ipsative analyses on each of the three dimensions.

The largest sample, with 57 offenders, was obtained for Winnebago County. See Table V.8. Considering first the therapists' ratings of offenders' participation, for 17 of these offenders, ipsative single-case statistical analysis could not be conducted, due to insufficient measurements (at least four serial measurements are required) and/or insufficient variability (disallowing computation of the lag-1 autocorrelation coefficient). Ipsative analysis, thus, was performed on the remaining 40 cases. Therapists rated 18 (45%) offenders as being higher in the most current period, versus in the initial or first period, the difference between first and last ratings was statistically significant ( $p < 0.05$ ). In contrast, four (10%) offenders showed a significant decrease in participation since the

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<sup>18</sup> As Mueser, Yarnold & Foy (1991) noted, "statistical analysis of single-subject data provides a rule-governed, systematic approach to assessing outcome that simply is not possible with visual inspection alone." (p. 135)

<sup>19</sup> N-of-1 analysis takes into account an individual's performance at the beginning of treatment or measurement (baseline performance) compared to his performance during the observation months. Because numerous data points are needed in order to employ time series analysis, we chose to employ N-of-1 analyses derived from classical test theory (see Yarnold, 1992). Ipsative single-case analyses first convert an individual's raw data into standard z scores using an individual's own mean and standard deviation for the variable being standardized.

beginning of their therapy ( $p < 0.05$ ). And, 18 (45%) of the offenders showed no statistically significant difference between first and last ratings.

Considering next the therapists' ratings of commitment, the findings are very similar to participation: 18 (45%) of offenders showed a significant positive change ( $p < .05$ ), 3 (7.5%) showed a significant decrease in commitment, and 19 (47.5%) offenders remained stable showing neither a significant positive improvement or a negative change.

Finally, considering the therapists' ratings of the offenders' acceptance of responsibility for the offense, 42 offenders had sufficient data. Fewer offenders showed a significant change on acceptance of responsibility than a change on participation or commitment. Acceptance of responsibility requires more cognitive and emotional work and is a more gradual process than improving participation or commitment. Over half of the offenders ( $N = 24$ ; 57.1%) showed no significant positive improvement or negative change. Therapists, however, noticed a significant improvement in 15 (35.7%) offenders' acceptance of responsibility as therapy progressed ( $p < .05$ ). For three offenders, therapists noted a statistically significant decrease in their acceptance of responsibility ( $p < .05$ ).

**Table V.8. Summary of Ipsative Statistical Analysis of Participation, Commitment and Responsibility Ratings—Winnebago County (Number of Offenders)**

| <b>Type of Change</b>              | <b>Participation</b> | <b>Commitment</b> | <b>Responsibility</b> |
|------------------------------------|----------------------|-------------------|-----------------------|
| Statistically significant increase | 18                   | 18                | 15                    |
| Stable                             | 18                   | 19                | 24                    |
| Statistically significant decrease | 4                    | 3                 | 3                     |
| Insufficient data                  | 19                   | 19                | 17                    |

In summary, overall, 22 of the 57 offenders showed positive individual improvement over time on at least one of the three dimensions, and five offenders showed significant declines on at least one dimension from where they first were rated. For ratings of participation, about one-third of the sample could not be analyzed via ipsative single-case methods due to insufficient data, approximately one-third of the sample showed temporally stable ratings, nearly one-third of the sample showed increasing participation ratings over time, and a small minority of the sample—about 1 in every 16 offenders—reported diminished participation ratings over time. Parallel findings emerged for commitment, with even fewer offenders—about 1 in 20—reporting diminished commitment over time. Finally, for responsibility ratings, about one-quarter of the sample could not be analyzed, two-fifths of the sample showed temporally stable ratings over time, one-quarter of the sample showed increasing responsibility ratings over time, and a small minority of the offenders—about 1 in every 20—reported diminished responsibility ratings over time.

## 2. N-of-1 Normative Changes in Sex Offenders' Attitudes while in Treatment

We next examined the relative improvement of Winnebago County sex offenders based on the total sample of sex offenders in all three counties. Table V.9 provides the average rating on the first monthly treatment report, the average rating on the last submitted monthly report, and the average rating across all monthly treatment reports and all sex offenders in the three counties. A sample of 64 offenders could be used in the normative analyses. As shown, Winnebago therapists tended to provide slightly below average ratings on the first monthly treatment report that was collected, and the average

on the first monthly treatment report was almost two points lower than the average across all sex offenders in all three counties. Moreover, on the first monthly treatment report a rating of three or less was given to 39.1% on their participation, 54.7% on their commitment, and 42.2% on their acceptance of responsibility. On the first monthly treatment report collected, therapists gave only a very small percentage high ratings of eight or higher with 7.8% given this high rating for participation and commitment, and 6.2% given this rating for acceptance of responsibility. Thus, many of the sex offenders at the time that the reports were first collected were doing below average on participation, commitment, and responsibility. Winnebago ratings are much lower on the first treatment report compared to Lake and DuPage county; this difference occurs in part because Winnebago therapists actually submitted the first monthly treatment report when many of the sex offenders had just entered treatment whereas in DuPage and Lake county many sex offenders had been in treatment for at least one year. On the last monthly treatment report submitted, the average rating moved about one and one-half rating points higher. Moreover, a rating of three or less on the last treatment report collected was given to only 11.1% of offenders for participation, 16.7% of the offenders for commitment, and 16.7% of the offenders for acceptance of responsibility. This visual approach, however, does not provide information about which offenders are improving the most relative to all of the sex offenders.

Whereas ipsative N-of-1 analyses examine whether offenders improve based on their own scores at the beginning of treatment, normative N-of-1 analyses examine which offenders show significant improvement compared to all sex offenders in the three counties for which we had treatment reports. Normative analyses have more practical

implications.<sup>20</sup> These analyses can address questions such as: (1) if treatment resources are scarce, which offenders will most likely benefit from treatment? and (2) which offenders are most likely to terminate prematurely from treatment due to noncompliance with treatment rules?

**Table V.9. Therapist’s Average Ratings for 64 Sex Offenders in Treatment in Winnebago County**

| Dimension   | Mean rating on first monthly report across Sex offenders | Mean rating on last monthly report across sex offenders | Mean rating across all monthly reports and all sex offenders |
|---|--|---|--|
| Participation in treatment                          | 4.28<br>(sd = 2.37)                                      | 6.00<br>(sd = 2.24)                                     | 5.75<br>(sd = 2.14 )   |
| Commitment to treatment                             | 3.77<br>(sd = 2.17)                                      | 5.17<br>(sd = 2.30)                                     | 5.32<br>(sd = 2.26 )   |
| Acknowledge personal responsibility for the offense | 4.36<br>(sd = 2.37)                                      | 6.11<br>(sd = 2.44)                                     | 6.0<br>(sd = 2.45)   |

The normative-based N-of-1 analyses revealed that twenty offenders showed significant positive improvements. Six of these 20 offenders showed improvement on more than one dimension with four offenders improving on all three dimensions, one offender improving on both participation and commitment, and two offenders improving on both commitment and acceptance of responsibility. The other offenders improved only on one dimension with four offenders improving on participation, two offenders improving on commitment, and seven offenders improving on acceptance of responsibility. One offender showed a significant decline on acceptance of

<sup>20</sup> N-of-1 normative analyses convert the raw data to z scores using the mean and standard deviation of the entire sample. To standardize, we used the mean and standard deviation across time for each question based on all monthly treatment reports. Grouping data across treatment agencies insured that we had a more representative population of sex offenders and did not create an artificial restricted range on our measures.

responsibility. Thus, about two thirds of the offenders remained rather stable in treatment from the therapist's point of view, with 31.3% showing positive improvement and 1.6% showing a significant decline. These results, however, are based on a sample of 64 offenders.

We developed absolute criteria to classify offenders as responsive to treatment. If offenders were still active in treatment and we had treatment reports, they were classified as responsive if they showed one significant ipsative or normative change in treatment or had a rating of nine or ten on two of the three dimensions in their last treatment report submitted. In Winnebago County, 33 offenders had at least one positive ipsative or normative change. However, seven of these offenders had significant individual positive improvement, but eventually failed to complete treatment, and thus were coded as unresponsive. There was one offender who had ratings of nine or ten on two of the three dimensions, and he completed treatment satisfactorily with one violation of probation petition filed for failure to comply with treatment. This standard is a first attempt at determining responsiveness to treatment. We attempted to balance significant change with the final outcome and knowledge of whether violations of probation petitions were filed due to noncompliance. Using this standard, we were able to classify 28 of the 64 (43.75%) Winnebago County specialized sex offenders for whom we had monthly treatment report data as responsive to treatment.

### 3. Descriptive Statistics on Compliance with Treatment

We next considered noncompliance with treatment orders. Noncompliance with treatment rules was obtained from violation of probation petitions filed by probation

officers. The number of VOPs filed that stated sex offenders were noncompliant with treatment orders ranged from none to two in the control sample and none to two in the specialized sample. Twenty-two control sex offenders had a total of 28 VOPs filed for noncompliance with treatment and 16 specialized sex offenders had a total of 19 VOPs filed for noncompliance with treatment. Table V.10 presents descriptive statistics on noncompliance with treatment orders, percentage of cases that satisfactorily completed treatment, and percentage of cases with serious noncompliance with treatment orders. Both control and specialized sex offenders averaged substantially below one VOP for noncompliance with treatment orders per an offender, with the control group having a significantly higher number of VOPs filed for noncompliance with treatment,  $t(135) = 1.95, p < .05$ . As shown in Table V.10, probation officers in standard probation and specialized probation did not file a VOP in the majority of cases and were not different in their propensity to file a VOP or multiple VOPs. Control and specialized sex offenders also were similar in that about 60% of both groups satisfactorily completed treatment.

We constructed a variable to assess serious noncompliance with treatment orders. Offenders were coded as committing serious noncompliance of treatment orders if they had one of the following: (1) unsatisfactory termination of treatment; (2) treatment ordered, but absconded from probation and treatment; (3) active, but had a violation of probation petition filed for noncompliance with treatment orders. There were five cases that had a VOP filed with noncompliance with treatment but eventually completed treatment satisfactorily. We did not code these cases as serious noncompliance because either the VOP could have been filed to extend treatment or the offender responded to the warning to comply with treatment. As shown in Table V.10, 28.6% of the sex offenders



in the specialized sample and 40.5% of the sex offenders in the control sample had serious noncompliance with treatment, and did not differ statistically from each other.

**Table V.10. Descriptive Statistics on Treatment Outcomes for Specialized and Control Samples in Winnebago County**

| Probation Sample   | Averaged Number of VOPs Filed for being noncompliant with treatment per offender | % of sample with no VOP filed for being noncompliant with treatment | % of sample with 2 or more VOPs filed for being noncompliant with treatment | % of closed cases with satisfactory completion of treatment | % of cases with serious treatment noncompliance |
|--------------------|--|---|---|---|---|
| Specialized Sample | Mean = .19 (sd = .50)  | 84.8% (N = 89 of 105)   | 2.9% (N = 3)  | 60% (N = 39 of 65)  | 28.6% (N = 30 of 105)                           |
| Control Sample     | Mean = .38 (sd = .77)  | 73.8% (N = 62 of 84)  | 7.1% (N = 6)  | 59.5% (N = 50 of 84)  | 40.5% (N = 34 of 84)                            |

#### 4. Identifying Groups That Are at High-Risk of Serious Noncompliance With Treatment

When treatment resources are scarce, it is important to understand which offenders pose a high-risk to commit serious noncompliance with treatment. We first examined this issue using ODA on the entire sample of offenders in Winnebago County. Table IV.11 presents the significant and generalizable predictors of serious noncompliance with treatment. The strongest predictor is prior arrests for violent offenses, with any prior arrests for violence increasing the likelihood of serious noncompliance with treatment. The next strongest predictor is whether the court or therapist recommended substance abuse treatment with offenders who need treatment more likely to commit serious noncompliance. Whether offenders used illicit drugs also was a significant predictor, but did not generalize in the validity analysis. Two clinical presentation variables also were significant predictors, but did not generalize in the

validity analysis. Offenders who expressed remorse and admitted some aspects of their sex offense were less likely to commit serious noncompliance.

Some demographic characteristics also were related to serious noncompliance with treatment. Minority offenders or offenders who were not employed full-time were more likely to commit serious noncompliance with treatment. Being younger than 33 also was significantly related to serious noncompliance, but did not generalize in the validity analysis. Interestingly, lower education level and lower income level were significant predictors, but did not generalize in the validity analysis.

**Table V.11 Significant Generalizable Predictors of Serious Noncompliance with Treatment in the Entire Sample of Winnebago County**

| <b>Predictors</b>                            | <b>Sample p-value</b> | <b>ESS</b> |
|--|-----------------------|------------|
| Prior arrests for violent offenses           | .001                  | 23.6       |
| Did not express remorse                      | .0024                 | 25.6       |
| Recommended to participate in drug treatment | .0039                 | 22.8       |
| Not Employed full-time                       | .017                  | 21.3       |
| Offender is a racial minority                | .0069                 | 19.7       |
| Prior arrests for misdemeanors               | .012                  | 16.9       |
| Prior treatment for mental health or drugs   | .018                  | 17.78      |
| Prior mental health treatment                | .032                  | 14.1       |

Prior arrest for a misdemeanor crime also was a significant and generalizable predictor. Total number of prior arrests also was a significant predictor, but did not generalize in the validity analysis. Age at which criminal offending began also was a significant predictor, but did not generalize in the validity analysis.

Offenders who had prior substance abuse or mental health treatment were more likely to commit serious noncompliance. Thus, many of these offenders did not use knowledge gained about the mental health system to fool therapists in believing that they were complying with treatment. Similarly, offenders with prior mental health treatment

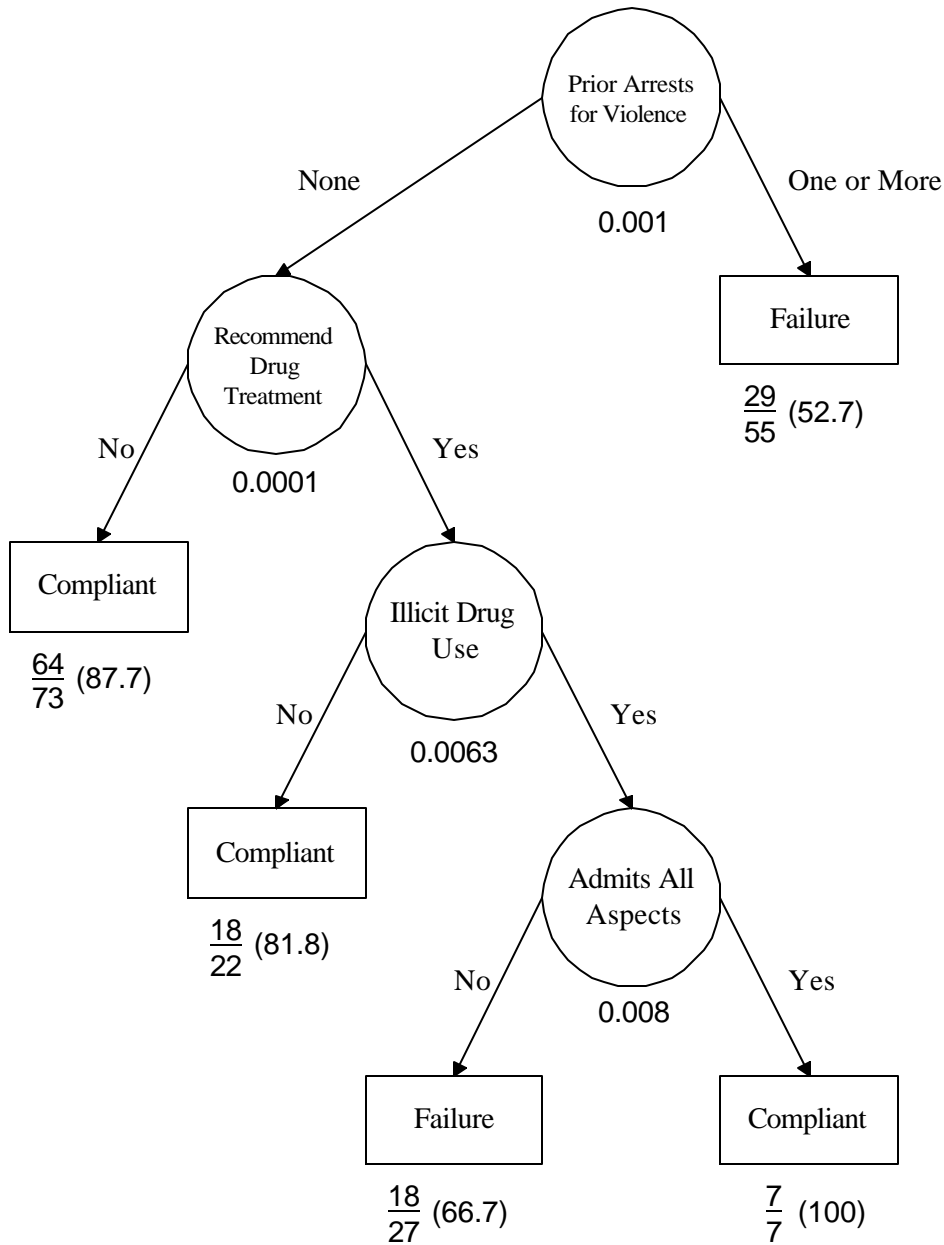
were more likely to commit serious noncompliance with treatment. Finally, whether offenders relied on social support was a significant predictor, but did not generalize in the validity analysis.

We created two CTA models. Prior arrests for violent crime started one model, which had strong performance (ESS = 50.1) and an overall classification accuracy of 73.9%. Whether the court or therapist recommended substance abuse treatment started the other model, which had almost as strong of a performance (ESS = 48.9%) and an overall classification accuracy of 77.5%. The model starting with violence was able to accurately classify 47 offenders who committed serious noncompliance with treatment whereas the model starting with drug treatment was able to accurately classify 38 offenders who committed serious noncompliance with treatment. The CTA model starting with violence is the better model, based on the ESS and the percentage of offenders who committed serious noncompliance with treatment that were accurately classified. Figure V.4 presents the four variable CTA model starting with violence. Offenders using illicit drugs that are in need of substance abuse treatment and have not been arrested for prior violent offenses, but either deny the offense or minimize their involvement are at moderately high risk of committing serious noncompliance. Offenders who have been arrested for prior violent offenses have a moderately high risk of committing serious noncompliance with treatment.

It is interesting that the four variable CTA model starting with recommended substance treatment also identified similar high-risk groups. For example, offenders who needed substance abuse treatment and denied the offense have over a 70% chance of committing serious noncompliance. This group is similar to the moderately high risk in

the CTA model starting with violence.

**Figure V.4. CTA Model Predicting Serious Noncompliance with Treatment**



There were, however, some different combinations. Two moderately high-risk groups were: 1) offenders who did not need substance abuse treatment, but had prior arrests for violent crimes; and (2) offenders who needed substance abuse treatment, did not deny the offense, and had prior mental health treatment.

It is clear in comparing these two CTA models that prior arrests for violence, currently needing substance abuse treatment, and denial of the offense are the three most important characteristics in predicting which offenders will commit serious noncompliance in Winnebago County.

#### 5. Identifying Groups That Have a High Chance of Satisfactorily Completing Treatment

Another important consideration when treatment slots are scarce is which sex offenders are most likely to complete treatment satisfactorily based on the treatment provider's criteria. Using the entire sample of 149 sex offenders in Winnebago County that had completed treatment, absconded from treatment, or were prematurely terminated from treatment, we examined which characteristics were significantly related to completing treatment satisfactorily. Table V.12 presents the seven significant and generalizable predictors of satisfactory completion of treatment. The strongest predictor of satisfactorily completing treatment was whether the offender expressed remorse at the initial treatment evaluation. Acceptance of responsibility for the offense was a significant predictor, but did not generalize in the validity analysis. The next strongest predictor is whether the court or therapist recommended drug treatment with offenders who needed drug treatment having a significantly lower chance of completing treatment satisfactorily.

Use of illicit drugs also significantly lowered the chances of completing treatment satisfactorily, but did not generalize in the validity analysis.

**Table V.12 Generalizable Significant Predictors of Satisfactory Completion of Treatment in the Entire Sample of Winnebago County**

| <b>Predictors</b>                | <b>Sample p-value</b> | <b>ESS</b> |
|----------------------------------|-----------------------|------------|
| Expressed remorse                | .0011                 | 28.8       |
| Needs substance abuse treatment  | .0009                 | 27.9       |
| Separated or currently married   | .016                  | 24.2       |
| Caucasian                        | .0044                 | 22.9       |
| Score on the RRASOR              | .027                  | 21.3       |
| Prior arrests for violent crimes | .018                  | 20.0       |
| Prior arrests for misdemeanors   | .021                  | 16.7       |

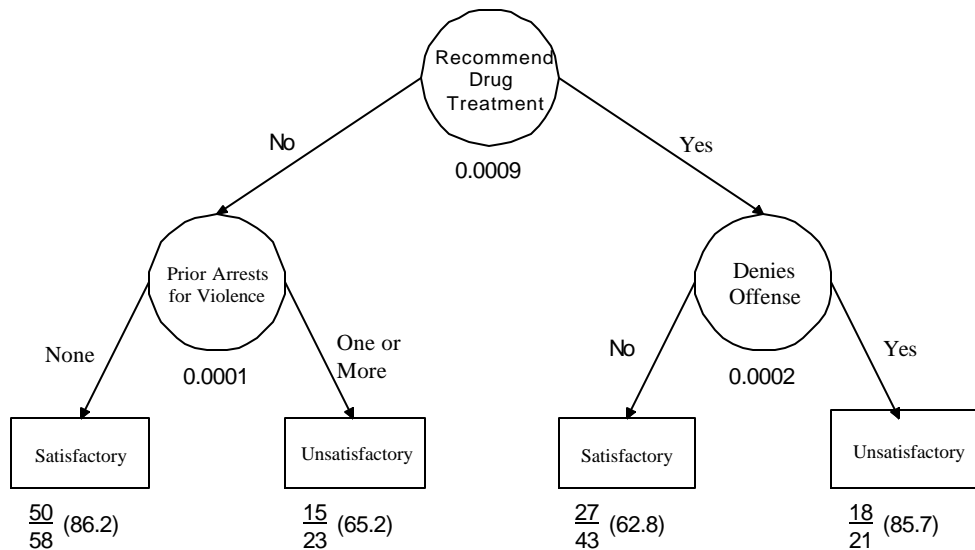
Several demographic characteristics were related to satisfactory completion of treatment. Separated or currently married offenders and Caucasian offenders had a significantly higher chance of completing treatment satisfactorily. Age of the offender, education level, income level, and employment status also were significant predictors, but did not generalize in the validity analysis.

Several criminal history measures also were significant predictors. Offenders who scored higher on the RRASOR had a lower chance of completing treatment. Offenders had a lower chance of satisfactory completion if they had any prior arrests for violent crimes or misdemeanors. Age at which criminal offending began and total number of prior arrests also were significant but were unstable in the validity analysis.

Because the variable of expressed remorse had a high number of missing data, we began the CTA model with whether the court or therapist recommended substance abuse treatment. The final three variable model showed moderate performance (ESS = 45.4)

and had an overall classification accuracy of 75.9%. Figure V.5 presents this CTA model.

**Figure V.5 CTA Model Predicting Satisfactory Treatment Completion**



The group with a very high chance of completing treatment included offenders who had no prior arrests for violent crime and did not need substance abuse treatment. Offenders who had prior arrests for violent crimes and did not need substance abuse treatment had a moderate chance of completing treatment satisfactorily. Offenders who did need substance abuse treatment and admitted at least part of the offense had a moderately high chance of completing treatment satisfactorily whereas if they denied the offense they had a very high chance of premature termination from treatment (a low chance of completing treatment satisfactorily). This finding is consistent with research demonstrating the difficulty of treating sex offenders who completely deny the offense.

## E. Identifying High-Risk Groups for Committing New Sex Crimes

### 1. Admits to or Arrested for New Sex Crime

We examined which predictors significantly improved the accuracy of classifying offenders as committing or not committing a new sex crime, excluding failure to register offenses. Table V.13 presents the predictors that were generalizable in the LOO analysis, and their effect strength of sensitivity. Offenders with a history or interest in hands-off offending were significantly more likely to commit a new sex crime. Offenders who did not have a court order to stay away from the victim also were significantly more likely to commit new sex crimes. Typically, courts will not make any contact with the victim a condition of probation if the offender committed a hands-off offense or violated a stranger, which explains why this structural characteristic predicts sexual recidivism. Having prior treatment for mental health or drug problems also increased the likelihood of sexual recidivism. All four of the statistically significant predictors were stable in LOO analysis, suggesting that these results would likely generalize to an independent random sample. There were no other significant predictors of new sex crimes.

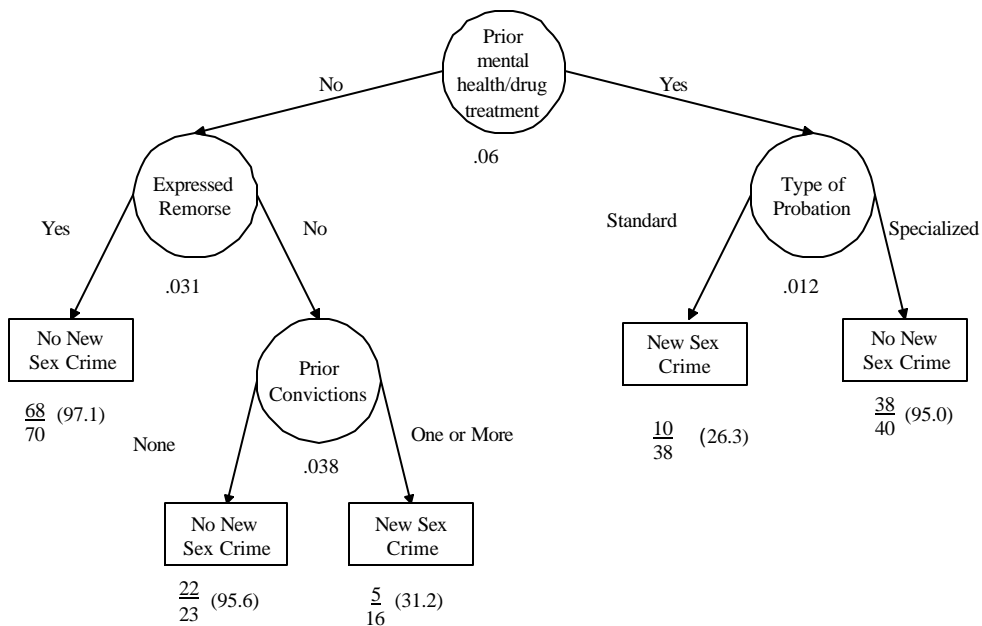
**Table V.13 Generalizable Significant Predictors of Any New Sex Crimes  
In the Winnebago County Sample**

| <b>Significant Predictor</b>                     | <b>Two-tailed<br/>p-value</b> | <b>ESS</b> |
|--|-------------------------------|------------|
| Committed or fantasized about hands-off offenses | 0.001                         | 29.0       |
| Profile of committing hands-off offenses         | 0.0009                        | 29.0       |
| No court order to stay away from the victim      | 0.018                         | 29.3       |
| Prior drug or mental health treatment            | 0.058                         | 21.8       |



We next attempted to identify groups of offenders that are at high-risk of committing new sex crimes via CTA analysis; no CTA model was possible using the variables measuring hands-off offending or court order to stay away from the victim. It is important to keep in mind that in Winnebago County we could not use sexual preference toward children, other sexual fantasies, psychopathic deviancy, or sadism as variables because the treatment evaluations generally did not provide information about these constructs. However, we were able to build a model using prior drug or mental health that showed strong performance (ESS = 51.6) and had an overall classification accuracy of 75.6%. Figure V.6 presents this model; however, this model did not identify any groups of offenders that were at moderately high or very high risk.

Figure V.6: CTA Model Predicting New Sex Crimes In Winnebago County Data



Two groups of offenders were at medium risk of committing new sex offenses:  
 (1) Offenders on standard probation with prior treatment for mental health or substance

abuse; and (2) Offenders without prior treatment for mental health or substance abuse that did not express remorse and had one prior conviction for any crime. These combinations identified a higher total number of sex offenders who committed sex crimes (N = 15) compared with measures of hands-off offending that identified 8 offenders, though the measure of hands-off offending had a similar percentage of accurately classifying sex offenders (28% for the CTA combinations compared to 32% for hands-off offending variable).

2. Admits to or Arrested for a New Sex Crime Including Failure to Resister

We next examined predictors of any new sex crimes including offenders arrested for failure to register as a sex offender. There were two stable and two unstable statistically significant predictors of any new sex crime (see Table V.14).

**Table V.14 Generalizable Significant Predictors of Any New Sex Crimes in the Winnebago County Sample**

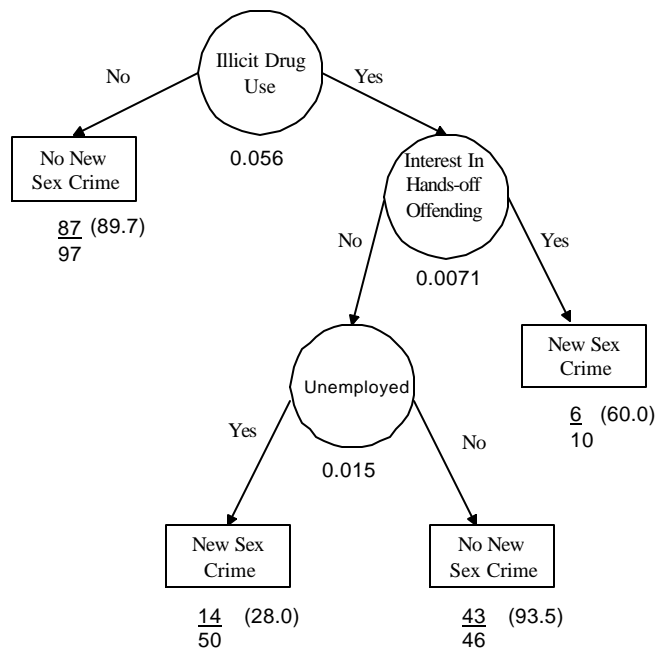
| <b>Significant Predictors</b>                    | <b>Two-tailed p-value</b> | <b>ESS</b>  |
|--|---------------------------|-------------|
| History of committing hands-off sex offenses     | 0.0082                    | 18.1        |
| Committed or fantasized about hands-off offenses | 0.0066                    | 18.1        |
| Used illicit drugs                               | .057 (.048)               | 20.6 (17.1) |
| Chronic impulsive behavior                       | .045 (.12)                | 18.4 (13.2) |

Both stable significant predictors related to whether sex offenders were interested in hands off sex offending. Sex offenders who had a prior history of hands-off sex offending or fantasized about hands-off offending were more likely to commit a new sex crime. Taking illicit drugs or having a chronic problem with impulsive behavior significantly increased the likelihood of a new sex crime, but these predictors were not

generalizable in the validity analysis, which suggests that they may not replicate in an independent random sample of data.

We attempted to build a CTA model using hands-off offending as the initial variable; however, no CTA model could be found. Thus, due in part to the low rate of offending, it was very hard to find a model to predict all new sex crimes. Though it is not sound procedure to build a CTA model using an unstable variable, we did attempt to create one using illicit drug use since the ESS changed only slightly and the p-value remained significant. The resulting model is presented in Figure V.7, and showed moderate performance (ESS = 37.1) and classification accuracy of 73.9%.

**Figure V.7: CTA Model Predicting All New Sex Crimes Including Failure To Register In Winnebago County**



Illicit drug users that also have an interest in hands-off offending are at a moderately high risk of committing a new sex crime. Unemployed illicit drug users with no interest in hands-off offending were at a medium risk of committing new sex crimes whereas employed illicit drug users with no interest in hands-off offending were at a very low risk

of committing new sex crimes. Sex offenders who used only alcohol or no substances are also at a low risk of sexual offending.

### 3. Identifying High Risk Groups Committing A New Violent or Sex Crime

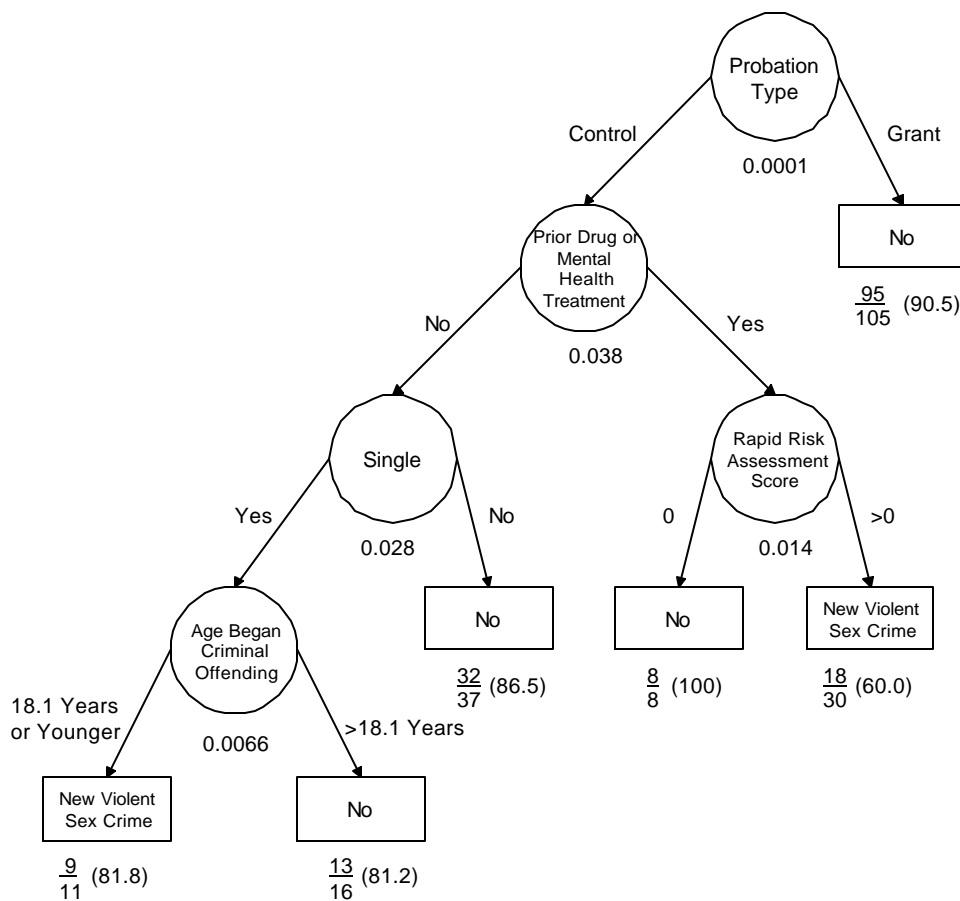
There were seven significant and generalizable predictors of committing either a new violent or sex crime. These predictors are presented in Table V.15. The strongest predictor was type of probation with offenders on standard probation significantly more likely to commit a new sex or violent crime. Offenders with either prior mental health or substance abuse treatment also were significantly more likely to commit a new violent or sex crime. In this analysis, offenders with no court order to stay away from the victim also were significantly more likely to commit a new violent or sex crime. One risk assessment scale, the Static-99, also was a significant and generalizable predictor. In addition, three measures of criminal history or offense were significant predictors, but did not remain stable in the LOO analysis: (1) age at which criminal offending began; (2) number of prior arrests for violent crimes; and (3) a score of 1 or higher on the RRASOR risk assessment instrument.

**Table V.15 Generalizable Significant Predictors of A New Violent or Sex Crime in the Winnebago County Sample**

| <b>Significant Predictors</b>           | <b>Two-tailed p-value</b> | <b>ESS</b> |
|---|---------------------------|------------|
| Standard probation                      | 0.0001                    | 36.1       |
| Offender is single                      | 0.057                     | 20.7       |
| Prior drug or mental health treatment   | 0.041                     | 17.4       |
| High risk on the Static-99 scale        | 0.049                     | 17.2       |
| No court order to stay away from minors | 0.049                     | 15.4       |
| Prior mental health treatment           | 0.035                     | 15.3       |

We next built CTA models to identify groups that were at high risk of committing a new violent or sex crime. We compared the performance of two models. One model used probation type as the beginning variable and one model used marital status as the beginning model. The one beginning with marital status showed slightly lower performance (ESS = 45.6) and overall percentage of classification accuracy (75.8%) than the model beginning with probation type (ESS = 51.4 with an overall classification accuracy of 84.5%). Moreover, the one starting with marital status did not identify any group that was at very high risk of committing a new violent or sex crime. Figure V.8 presents the CTA model that begins with probation type.

**Figure V.8: CTA Model Predicting New Arrest For Violent OR Sex Crime**



The model shows that the low percentage of sexual or violent recidivism in the specialized probation program could not be predicted by any offense or offender characteristics. For the sample on standard probation, the model identified one group that had a very high chance of committing new sex or violent crimes: Single offenders who had no prior treatment for mental health or drug problems and began their criminal offending at 18 years of age or younger. Offenders who had prior mental health or substance abuse treatment and a score greater than one on the RRASOR were at a moderately high risk of committing a new sex or violent crime.

#### 4. Identifying High-Risk Groups Committing At Least One New Crime of Any Type

Table V.16 presents the six generalizable and significant predictors of at least one new arrest for any crime. Consistent with prior research, single men have a significantly higher chance of committing a new crime than do married men. As expected, criminal history measures also were related to general recidivism. Men who had prior arrests for violent crimes, drug crimes, or misdemeanors were significantly more likely to commit a new crime, and these measures were stable in the validity analysis. Several other criminal history measures were significantly related to general recidivism, but were unstable in the LOO analysis. These unstable, but significant predictors included: age at which criminal offending began, total number of prior arrests, total number of prior convictions, and prior arrests for property crimes. The other two significant and generalizable predictors were measures of the type of probation. Offenders on standard probation and offenders who were not ordered to stay away from the victim were more likely to commit new crimes.

In addition, several characteristics of the offender and offense were significant, but ungeneralizable predictors of general recidivism. Illicit drug users, offenders younger than 36, unemployed offenders, offenders without a high school education, offenders who committed the offense over a period of at least 1.5 months, and offenders who committed the crime against strangers or acquaintances were at a higher risk of general recidivism. The RRASOR and Static-99 risk assessment instruments also were significant predictors, but were extremely unstable in the LOO analysis, which suggests that they would not generalize to a new sample. All of these predictors may not be significant when new samples of data are analyzed.

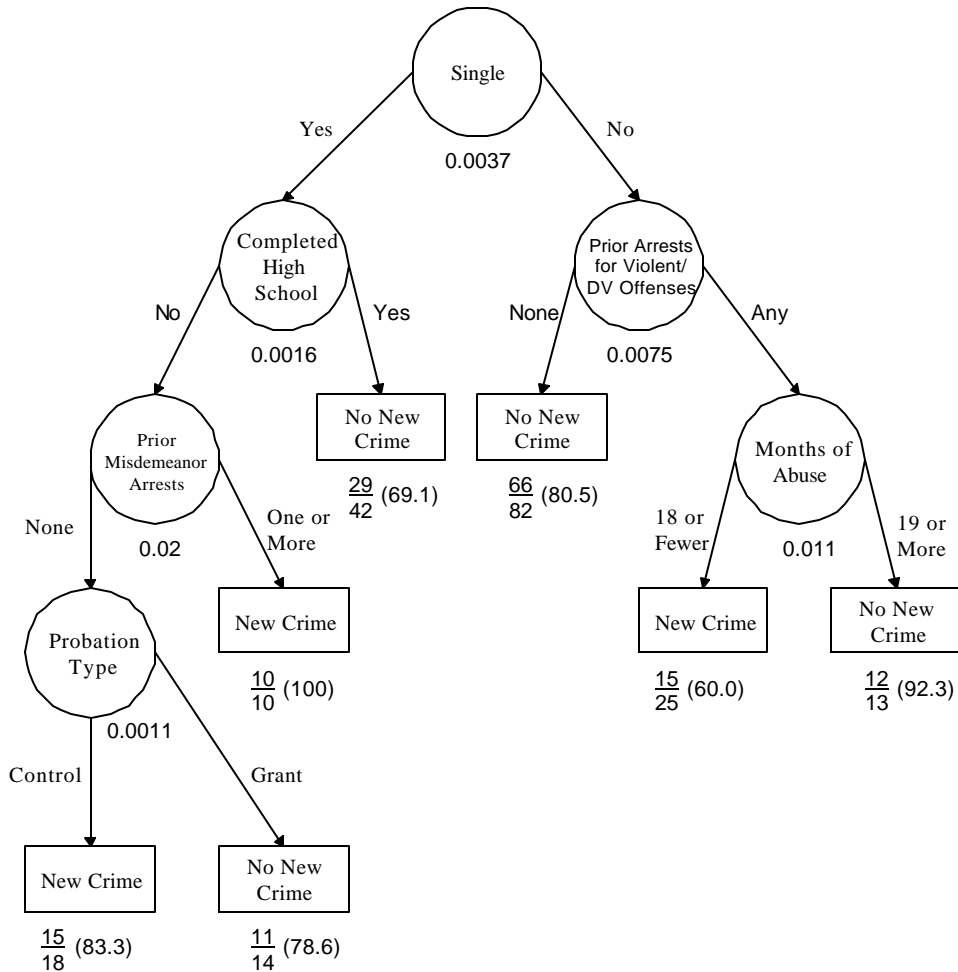
**Table V.16 Generalizable Significant Predictors of Any New Crime in the Winnebago County Sample**

| <b>Significant Predictors</b>                     | <b>Two-tailed p-value</b> | <b>ESS</b> |
|---|---------------------------|------------|
| Offender is single                                | 0.0037                    | 23.8       |
| At least one prior arrest for a violent crime     | 0.0005                    | 23.3       |
| Standard probation                                | 0.0035                    | 21.5       |
| No court order to stay away from minors           | 0.0083                    | 15.8       |
| At least one prior arrest for a misdemeanor crime | 0.043                     | 13.4       |
| At least two prior arrests for a drug crime       | 0.038                     | 10.9       |

We next built a CTA model starting with the marital status predictor. This model demonstrated moderate performance (ESS = 44.9) and had an overall classification accuracy of 77.5%. Two groups of single men who had not completed high school were identified as high risk: (1) those who had at least one prior misdemeanor arrest; and (2) those on standard probation. It appears that standard probation does not provide enough structure and supervision for single undereducated sex offenders. Married men with at least one prior arrest for a violent crime and who continued the abuse for 18 months or

less were at a moderately high risk of committing a new crime of any type. Single men who completed high school had a medium chance of committing a new crime.

Figure V.9: CTA Model Predicting New Arrest For Any Crime



### 5. Identifying High-Risk Groups Committing Two or More New Crimes of Any Type

Table V.17 presents the 11 stable and generalizable predictors of committing at least two new crimes of any type. Marital status was the strongest predictor with single men at higher risk of committing at least two new crimes. Two of the risk assessment



instruments, Static-99 and SACJ-MIN, were stable and significant predictors. Three measures of criminal history placed sex offenders at higher risk of committing two or more new crimes: three or more prior arrests, one prior arrest for a property crime, and at least one prior conviction. Sex offenders who expressed no remorse also had a higher chance of committing at least two new crimes. Three measures related to the structure of the probation were generalizable and significant predictors with offenders on standard probation, those having no order to stay away from minors, and those ordered to perform more than 45 hours of community service at higher risk. Minority status also was a significant and stable albeit weak predictor of being arrested for at least two new crimes.

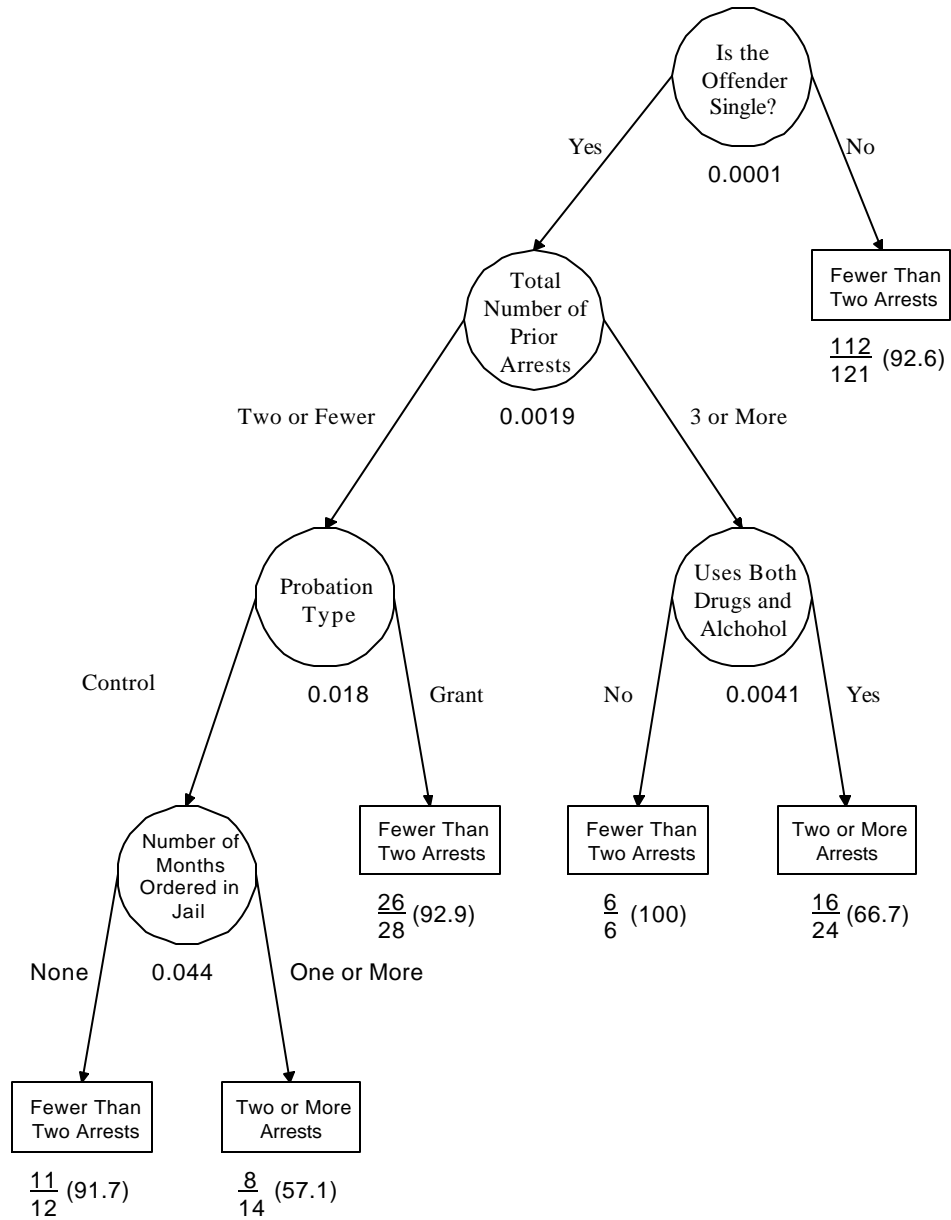
**Table V.17 Generalizable Significant Predictors of At Least Two New Crimes in the Winnebago County Sample**

| <b>Significant Predictors</b>                      | <b>Two-tailed p-value</b> | <b>ESS</b> |
|--|---------------------------|------------|
| Offender is single                                 | 0.0001                    | 42.6       |
| Medium or high risk on STATIC-99 scale             | 0.0007                    | 30.2       |
| At least one prior arrest for property crime       | 0.0028                    | 26.2       |
| Three or more prior arrests                        | 0.0087                    | 25.8       |
| At least one prior conviction                      | 0.011                     | 24.4       |
| Medium or high risk on SACJ-MIN scale              | 0.007                     | 24.1       |
| Expresses no remorse                               | 0.024                     | 23.9       |
| On standard probation                              | 0.012                     | 23.1       |
| Minority ethnic group                              | 0.04                      | 18.9       |
| No order to stay away from minors                  | 0.023                     | 18.7       |
| Greater than 45 hours of community service ordered | 0.024                     | 16.4       |

In addition, there were eight significant predictors that failed to remain stable in the LOO validity analysis: Not completing high school, living in poverty, unemployed, illicit drug use, beginning criminal offending at age 23 or younger, currently 33 years of age or older, committing the offense for 2.5 months or greater, and having a score of 1 or higher on the RRASOR.

We next built a CTA model to determine which sex offenders were at high risk of being arrested for at least two new crimes of any type. Figure V.10 presents this model.

**FIGURE V.10. CTA Model Predicting Two or More New Any Crime**



The CTA model began with marital status and showed strong performance (ESS = 58.4) and had an overall classification accuracy of 87.3%. Offenders who were currently or formerly married were at low risk of committing at least two new crimes. The model did not identify any groups that had a very high chance (70% or higher) of being arrested for at least two new crimes. Single offenders that had 3 or more prior arrests and used both drugs and alcohol were at a moderately high risk of reoffending.

#### **F. Comparison of Specialized and Control Samples on Recidivism Outcomes**

An important part of this evaluation is to compare the control and specialized samples on rates of committing new sexual offenses, sexual or violent offenses, and general recidivism. The evaluation team performed Cox proportional hazards survival analysis to determine whether the control and specialized samples differed on these outcomes. This survival analysis provides a better estimate of failure rates in that it takes into account the amount of time at risk, the amount of time to failure, and controls for any other significant risk factors before estimating the difference between the control and specialized sample on recidivism rates. Table V.18 presents the simple percentage of offenders who were arrested while on probation and time to first arrest.

An examination of simple proportions of recidivism on the outcome variables is misleading for several reasons. First, simple proportions do not take into account the amount of time to recidivate. Second, simple proportions do not adjust for the amount of time at risk of recidivism. Third, simple proportions cannot control for other characteristics that may be related to recidivism and that may account for the observed differences between the control and specialized samples. Thus, the reader is advised to

be cautious in drawing conclusions about recidivism and compliance from the simple proportions presented in Table V.18.

**Table V.18 Recidivism of Specialized and Control Sample Offenders as Measured by New Arrests and Time to First Arrest**

| <b>Probation Program</b> | <b>Mean number of days to first arrest for a sex offense</b> | <b>Arrested for a new sex crime excluding failure to register</b> | <b>Arrested for a new sex or violent crime</b> | <b>Arrested for a new crime of any type</b> |
|--------------------------|--|---|--|---|
| <b>Specialized</b>       | mean = 20.4<br>N = 7   | 11.4% N = 12  | 9.5% N = 10                                    | 26.7% N = 28                                |
| <b>Control</b>           | mean = 35.6<br>N = 14  | 20.4% N = 21  | 34.0% N = 35                                   | 46.6% N = 48                                |

It is important to determine if the specialized and control samples are similar in the amount of months before the first new arrest because the time to new arrest influences the rates of recidivism. In order to estimate the time to first arrest, we performed independent sample t-tests using only the sex offenders that had new arrests for the appropriate crime category. As shown in Table V.18, the specialized sample had an average first arrest for new sex crimes excluding failure to register offenses 15 months sooner than the control sample; this difference is substantial, though not statistically significant due in part to the small sample size contributing to low power to detect true differences,  $t(18) = 1.53, p < .143$ . Moreover, the specialized sample was arrested significantly faster for new sex crimes including failure to registers (mean = 26 months) whereas the average was 51 months for the control sample,  $t(29) = 2.49, p < .019$ .

The specialized and control samples, however, had similar times to first arrests for any new crime: mean number of months is 23.5 for the specialized sample and 31.2 for

the control sample,  $t(74) = 1.20, p < .23$ . The specialized sample had a faster time to first arrest for a new violent or sex crime (mean = 25.2 months) than did the control sample (mean = 39.2),  $t(24) = 1.69, p < .10$ . The difference in means approaches significance, but is not statistically significant due in part to the small sample size.

Table V.18 shows that the specialized and control samples had relatively low rates of sexual recidivism excluding failure to register offenses, and these rates are not statistically different,  $X^2(1) = 2.79$ , Fisher's exact  $p = .076$ , one-tailed. The specialized sample, however, had slightly significantly lower rate of sexual recidivism including failure to register offenses (11.4%) than did the control sample (20.4%),  $X^2(1) = 3.16$ , Fisher's exact  $p = .057$ , one-tailed. Table V.18 shows that the specialized samples' recidivism rates were substantially and significantly lower than the control samples' recidivism rates for new arrests of violent or sex crimes and for new arrests of any type,  $p < .001$ .

In the next section, more sensitive measures of recidivism rates based on arrest rates across time are provided with the use of Cox proportional hazard survival analysis. Recidivism rates from the Cox proportional hazard survival analysis take into account the amount of time to failure, the amount of time at risk, and control for other risk predictors that may explain the difference between the specialized and control samples. The control sample had a significantly longer opportunity to commit a new offense (mean = 83.82 months) than did the specialized sample (mean = 37.62 months),  $t(206) = 13.12, p < .001$ . Thus, it is important to control for opportunity in estimating recidivism rates.

## 1. Conceptual Framework Comparing the Specialized Sex Offender Probation and the Standard Probation

The specialized sex offender probation program is based on the containment model, which has the top priority of keeping the offender from committing a new crime, especially sex offenses, while in the community. To meet this goal, the specialized sex offender probation program compared to standard probation has much more intensive surveillance of sex offenders through increased requirements of additional office visits and visits to the offender's home. Moreover, the specialized program more often had court-orders to stay away from minors and the victim than did the standard probation program. The Winnebago specialized sex offender program also had much more structured treatment where the probation officer served as a co-leader of the group therapy. The probation officer's participation in group therapy sent a message to offenders that the therapist and probation officer had frequent contact and were sharing information about the offenders. Thus, sex offenders were made aware that they could not play the probation officer against the therapist or vice versa. The containment model emphasizes that professionals need to share information to lower the risk that sex offenders will commit new sex crimes.

This increased surveillance, greater restrictions on contact, and structured treatment could affect sex offenders in one of two ways. One hypothesis that we have labeled higher detection is that the specialized sample compared to the control sample will have a higher rate of new arrests for sex crimes. The higher detection hypothesis assumes that many sex crimes are not reported to or detected by criminal justice authorities; this assumption, of course, is widely supported in the literature. However,

Winnebago probation officers only visited homes from 9-5 on weekdays; thus, we expect to find little support for the detection hypothesis given the structural features of field visits and the infrequent use of polygraph testing.

Alternatively, the second way that increased surveillance can affect sex offenders is through deterring sex offenders from committing additional crimes due to their belief that they have a high chance of getting caught and facing severe consequences. Sex offenders on specialized sex offender probation should be deterred more than sex offenders on standard probation due to several features of the specialized program. Sex offenders in the specialized program had increased contact with probation officers through office visits, treatment staffings, and probation officers' observation of group therapy. They also were more often required to have no contact with the victim or with minors, and were often required to keep a log of their whereabouts and activities. The deterrence hypothesis predicts that the specialized program will have a significantly lower rate of sexual, violent, and general recidivism than the standard program.

Complementary to this deterrence process, the more structured therapy in the Winnebago specialized sex offender program may have changed sex offenders' beliefs, coping skills, and risk management so that they are more able to refrain from committing additional sex offenses. Moreover, because probation officers in the specialized program observed group therapy sessions and held joint meetings with the therapist and offender, sex offenders became aware that probation officers and therapists were working as partners and sharing information about the offender. Thus, sex offenders in the specialized program compared to the standard program should have been more likely to conclude that they could not play the therapist against the probation officer or attempt to

just go through the motions of treatment. This process also would result in lower recidivism rates in the specialized program compared to the standard program.

The fact that the deterrence effect and the higher detection advantage produce opposite results may lead to no overall difference in recidivism between the specialized and standard programs. This finding of no overall difference, however, does not mean that the program had no impact because the higher detection effect can obscure support for the deterrence process. Program evaluators thus are faced with what appears to be a conundrum, though less so for the Winnebago program since increased field surveillance was not an integral part of the program. Even if a lower overall recidivism rate for the specialized sex offender program is observed, professionals still must attempt to answer the question: which sex offenders are deterred? One possible solution is to develop a conceptual framework about subgroups of sex offenders that may be more likely to be deterred and subgroups that would continue with their normal offending behavior despite increased restrictions, contact, surveillance, and treatment. In order to identify subgroups, it is important to understand the assumptions of the deterrence hypothesis.

The deterrence hypothesis requires that sex offenders engage in a rational calculation of their chance of being caught if they commit a new offense. Some sex offenders are more rational than others. For example, sex offenders who commit only public indecency crimes often engage in such lewd behavior because the risk of being caught adds excitement, but is low enough so that it is unlikely that the gains of committing a new offense outweigh the potential losses (such as a new arrest). Winnebago County has only a few exclusively hands-off offenders; thus, this subgroup cannot be used to test the deterrence hypothesis.



The treatment literature has identified one group of offenders that are at high risk of treatment failure and possibly recidivism: offenders who have had prior mental health or drug treatment. These offenders, given their arrest for a sex crime, have failed to respond to treatment, and are in need of more aggressive and structured treatment. Furthermore, sex offenders with prior mental health or drug treatment have acquired knowledge about what criteria therapists use to assess progress in treatment, and may attempt to use this knowledge to appear to “progress” without changing their beliefs or behavior. The partnership between therapists and probation officers in the specialized program may catch sex offenders who attempt to provide misinformation to one of the professional, and may challenge offenders to make actual progress through communicating the treatment goals and requirements in a joint meeting (staffing) of the therapist, probation officer and offender. The standard probation program did not have this level of partnership or structure in its treatment. Thus, we can hypothesize an interaction between prior drug or mental health treatment and probation program, and anticipate that offenders with prior treatment will have significantly higher recidivism rates in the standard program as compared to the specialized program. This pattern assumes that sex offenders in the standard probation program with prior treatment will be more successful at “fooling” therapists into believing that they were progressing whereas the partnership between therapists and probation officers in the specialized program will more often advert these attempts, which may illustrate to offenders that they will be caught if they commit noncompliance.

Sex offenders who have already served one probation term may have different perceptions of the criminal justice system if they are placed on standard probation again.

Thus, an interaction between probation program and whether offenders have prior periods of probation is expected. In the specialized program, sex offenders with prior probation terms should have similar recidivism rates as sex offenders without prior probation terms who are in the specialized program, but should have significantly lower rates than sex offenders with prior probation terms in the standard probation program.

In addition, sex offenders with a violent history have a moderately high chance of sexual or violent recidivism. Sex offenders with a history of violent offenses may respond better to the structured treatment and supervision of the specialized program, and may believe that they are more likely to be detected and to receive a prison or jail sentence for a new violent offense. Sex offenders with a history of violent offenses when placed on standard probation may conclude that the system is lenient and may continue with their violent offending. Thus, we proposed an interaction between probation type and prior arrests for violent offenses where violent offenses is a predictor of recidivism in the standard probation group, but not in the specialized program, and offenders with a violent history have a lower recidivism rate in the specialized program.

Mentally ill sex offenders are a group that cannot be deterred through increased surveillance because they do not think rationally about the chances of being caught before committing a sex offense. Thus, we also hypothesized an interaction between presence of mental illness and type of probation program. We expected that mentally ill offenders would have a higher rate of new arrests in the specialized sample than in the control sample due to the increased surveillance in the specialized sex offender program that allows probation officers to detect new offenses. These hypotheses are tested in the next section.

In all survival analyses, we attempted to control for any differences between the specialized and standard probation samples. To provide a careful and stringent analysis of whether the specialized program had lower sexual, violent, and general recidivism rates than did the standard program, we entered 13 predictors in all survival analyses: (1) whether committed only hands-on sex offenses, only hands-off offenses, or both hands-on and hands-off sex offenses; (2) prior arrests for sex crimes; (3) current mental health status; (4) total number of prior arrests; (5) any prior convictions; (6) whether offender had a prior arrest but no prior conviction; (7) whether offender committed crime against stranger or acquaintance; (8) whether offender is sexually aroused to children; (9) whether had prior mental health or drug treatment; (10) number of prior arrests for violent crimes; (11) marital status; (12) whether served a term of prior probation; and (13) amount of time at risk to reoffend. These predictors were entered either because they had a significant relationship with sexual, violent, or general recidivism or the standard and specialized samples differed on the characteristic and there was a theoretical possibility of a relationship with recidivism. We conducted three separate survival analyses to estimate time to first arrest for a new sex crime excluding failure to register offenses (sexual recidivism), a new violent crime (violent recidivism), or a new crime of any type (general recidivism). The following sections present the findings from these survival analyses.

## 2. Survival Analysis Estimating Time to First Arrest for New Sex Crimes

A Cox proportional hazards survival analysis was conducted to examine the effect of probation program on time to first arrest for a new sex crime. A new sex crime

included all sex crimes except failure to register. We first examined the effects of the 13 predictors on sexual recidivism rates.

Sex offenders with an interest in hands-off sexual offending were more likely to commit a new sex crime compared to sex offenders with an exclusive interest in hands-on sexual offending, ( $b = 1.598, p < .002$ ). Currently married sex offenders were less likely to commit a new sex crime than were single offenders, ( $b = -1.233, p < .04$ ). All other variables were not statistically significant.

In the second step, we entered type of probation program. The change in the overall chi-square was not significant ( $X^2 (1) = .325, p < .568$ ). The chi-square for the overall model, however, remained significant, ( $X^2 (15) = 29.43, p < .014$ ). Thus, after controlling for the relevant predictors, the specialized and standard probation programs did not differ in their rate of new sexual recidivism. For the entire sample, the sexual recidivism rates at the mean of the covariates were .4% at one year, 4.4% at 28 months, 6.4% at 38 months, 7.2% at 53 months, and 8.6% at 76 months in Winnebago County.

In the final step, we tested the interaction hypotheses. The interaction term for prior probation periods and type of program was not significant and was not included in the final model. After controlling for all variables, we entered the interaction term of prior drug or mental health treatment and type of probation program. The change in the Chi-square was significant, change  $X^2 (1) = 3.19$ , one-tailed  $p < .037$ . The interaction term was significant ( $b = -1.836$ , one-tailed  $p < .022$ ), and the main effects for prior treatment approached significance. The final model is presented in the first column of Table V.19. The main effect for hands off sexual offending remained significant.

**Table V.19 Cox Regressions Estimating Time to First Arrest for Sexual, Violent, and General Recidivism in Winnebago County (Unstandardized Coefficients and Probability levels)**

| Predictors                                    | Model for sexual recidivism |                   | Model for violent recidivism |       | Model For gender recidivism |       |
|---|-----------------------------|-------------------|------------------------------|-------|-----------------------------|-------|
|   | b                           | p <               | b                            | p <   | b                           | p <   |
| Total prior arrests                           | -.003                       | .974              | .097                         | .048* | .053                        | .123  |
| No Prior conviction                           | .298                        | .74               | .616                         | .279  | .297                        | .502  |
| Prior Probation Term                          | .893                        | .246              | 1.273                        | .015* | 1.289                       | .003* |
| Whether prior arrest, but No Prior Conviction | -.024                       | .979              | -.632                        | .286  | -.051                       | .904  |
| Prior arrests for violence                    | .32                         | .428              | -.009                        | .975  | .249                        | .239  |
| Prior arrests for sex crimes                  | .351                        | .38               | .193                         | .579  | .151                        | .551  |
| Marital Status                                |                             | .136              |                              | .013* |                             | .002* |
| Currently married                             | -1.16                       | .059 <sup>†</sup> | -1.068                       | .007* | -.796                       | .007* |
| Separated or Divorced                         | -.65                        | .26               | -.926                        | .04*  | 1.13                        | .003* |
| Sexual preference for children                | -.147                       | .83               | -1.287                       | .016* | -1.108                      | .015* |
| Victimized Stranger or Acquaintance           | -.294                       | .587              | -.443                        | .24   | .036                        | .902  |
| Prior Treatment                               | 1.253                       | .056 <sup>†</sup> | .365                         | .266  | .302                        | .233  |
| Mentally Ill                                  | .158                        | .567              | .059                         | .734  | .005                        | .97   |
| Hands-Off sex offending                       | 1.561                       | .004*             | .569                         | .184  | .586                        | .094  |
| Amount of time to reoffend                    | -.004                       | .72               | -.022                        | .012* | -.009                       | .107  |
| Specialized Probation                         | .584                        | .496              | 1.301                        | .024* | -.180                       | .658  |
| Interaction terms:                            |                             |                   |                              |       |                             |       |
| Prior Probation * Program                     |                             |                   | -1.658                       | .022* | -1.102                      | .021* |
| Prior Treatment * Program                     | -1.836                      | .045*             |                              |       |                             |       |
| Overall Chi-square                            | (16) = 34.03, p < .005      |                   | (16) = 82.55, p < .0001      |       | (16) = 62.49, p < .0001     |       |

Sex offenders with prior treatment had significantly lower sexual recidivism in the specialized program than in the standard program. At 12 months, sex offenders with prior mental health or drug treatment had a recidivism rate of 1.05% in the specialized probation program and 3.63% in the standard program. At 38 months, sex offenders with prior mental health or drug treatment had a recidivism rate of 4.68% in the specialized

program and 15.44% in the standard program.<sup>21</sup> Sex offenders with prior mental health or drug treatment have acquired knowledge about what criteria therapists use to assess progress in treatment, and have already failed once in such treatment. One interpretation of this interaction is that sex offenders in the standard probation program with prior mental health or drug treatment were more successful at “fooling” therapists into believing that they were progressing and making changes in treatment. Conversely, sex offenders in the specialized program could not as easily fool therapists due to the increased communication between therapists and probation officers, and due to probation officers’ observations of treatment and knowledge of their behaviors. In the specialized program, there was no significant difference between sex offenders that had prior mental health or drug treatment (4.68%) and those that had no prior treatment (8.24%) at 38 months, which suggests that prior treatment did not provide any advantage when the partnership between probation officers and treatment providers was strengthened. Conversely, there was a much greater difference in sexual recidivism rates at 38 months for sex offenders in the standard program that had prior treatment (15.44%) and those that had no prior treatment (4.68%); the direction, however, suggested that prior treatment was a factor that increased the risk of sexual recidivism in the standard probation program. Based on the differences in sexual recidivism rates, the Winnebago County specialized sex offender probation program is more beneficial than the standard for offenders who have had prior treatment for mental illness or drug treatment.

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<sup>21</sup> Recidivism rates for separate groups are calculated using the formula (baseline survival rate raised to  $e^{(\text{coefficient for the variable})}$ ). In calculating the specialized program, the interaction coefficient, the coefficient for group, and the coefficient for prior treatment are added together to determine the value in which to raise e.

### 3. Survival analysis estimating time to first arrest for a new violent or sex crime

A Cox proportional hazard regression was performed to determine the effect of probation program on time to first arrest for a new violent or sex crime. In the first step, we examined which of the 13 control variables related to violent recidivism. The overall chisquare was significant ( $X^2(14) = 27.57, p < .016$ ). Currently married sex offenders were significantly less likely to commit a new violent or sex crime than were single offenders, ( $b = -1.010, p < .018$ ). Separated and divorced sex offenders were significantly less likely to commit a new sex or violent offense than were single sex offenders, ( $b = -1.112, p < .005$ ). All other variables were not significant.

In the next step, type of probation program was entered and the change in chi-square was significant ( $X^2(1) = 15.28, p < .0001$ ). Table V.20 presents the 95% confidence interval of recidivism rates for the control and specialized samples. As shown in Table V.20, the confidence intervals do not overlap in any of the time periods, which indicates that sex offenders on standard probation were significantly more likely to reoffend than the sex offenders on specialized probation at all time periods.

**Table V.20 Violent Recidivism Estimates for the Standard and Specialized Program in Winnebago County (95% confidence interval)**

| Time Period | Standard Probation |         |        | Specialized Probation |         |        |
|-------------|--------------------|---------|--------|-----------------------|---------|--------|
|             | Lower              | Average | Upper  | Lower                 | Average | Upper  |
| 13 months   | 3.2%               | 8.34%   | 13.48% | .48%                  | 1.52%   | 2.56%  |
| 36 months   | 14.8%              | 25.00%  | 35.2%  | 2.74%                 | 4.94%   | 7.14%  |
| 65 months   | 26.0%              | 39.63%  | 50.31% | 4.24%                 | 7.74%   | 11.24% |

In the next step, we tested two interaction terms: probation program by prior mental health and drug treatment, and probation program by prior periods of probation.

The probation program by prior mental health or drug treatment and the probation program by prior convictions were not significant. In the final model, only the probation program by prior probation periods was entered into the model, and the change in chi-square was significant ( $X^2(1) = 4.32$ , one-tailed  $p < .019$ ). Sex offenders that had served a prior term of probation had substantially lower violent recidivism rates at the end of three years in the specialized program (16.72%) compared with the standard program (97.06%). In the specialized program, sex offenders that had served a prior term of probation had a slightly lower violent recidivism rate (16.72%) than those that were serving their first probation sentence (23.58%); however, in the standard probation program, the difference in violent recidivism rates at 36 months was more substantial with those serving their first probation sentence having a much lower rate (62.76%) than sex offenders that had a prior term of probation (97.06%). This pattern of findings suggest that serving a prior term of probation is a stronger predictor of violent recidivism in the standard probation program than in the specialized probation program.

In the final model, the main effect for type of program remained significant, ( $b = -1.428$ ,  $p < .016$ ). This finding indicates that even after controlling for differential effect of probation programs on the effects of prior probation sentences, the specialized program had a significantly lower violent recidivism rate than did the standard probation program.

#### 4. Survival Analysis Estimating Time to First Arrest for a New Crime of Any Type

We performed a Cox proportional hazard survival regression to determine if the standard probation program and specialized program differed on time to first arrest for a



new crime of any type. In the first step, we entered the 13 control variables to examine which variables were significant predictors of general recidivism. The overall chi-square was significant, ( $X^2(14) = 48.54, p < .0001$ ). Sex offenders that served prior periods of probation were significantly more likely to commit a new crime than were sex offenders that had not served a prior period of probation, ( $b = .796, p < .038$ ). Currently married sex offenders were significantly less likely to commit a new crime than were single offenders, ( $b = -1.178, p < .001$ ). Separated or divorced sex offenders were significantly less likely to commit a new crime than were single offenders, ( $b = -.886, p < .003$ ). Sex offenders with a greater number of arrests for violent crimes were significantly more likely to commit a new crime, ( $b = .419, p < .037$ ). Sex offenders that were sexually aroused to having sex with children were significantly less likely to commit a new crime, ( $b = -.865, p < .05$ ). All other variables were not significant.

In step 2, type of probation program was entered and the change in chi-square approached significance, ( $X^2(1) = 3.31, \text{one-tailed } p < .069$ ). The program effect, however, was further reduced and not significant when the interaction effect was entered, ( $p < .658$ ). These findings suggest that overall the two programs have similar rates of general recidivism. For the entire sample, the general recidivism rates at the mean of the covariates were 9.7% at one year, 19.3% at two years, 21.9% at three years, 26.6% at four years and 32.7% at 62 months in Winnebago County.

In step 3, when the interaction term between prior periods of probation and probation program was entered, the change in chi-square was significant, ( $X^2(1) = 4.14, p < .04$ ). The interaction between prior periods of probation and type of probation program is very similar to how it performed when estimating time to first new arrest for

violent or sex crime. Sex offenders that had served prior periods of probation were 3.6 times more likely to commit a new crime than were sex offenders who had not served any prior periods of probation, ( $b = 1.289, p < .003$ ). The interaction pattern was similar to how it performed for violent recidivism, suggesting that the specialized program was able to deter a traditionally high-risk group of sex offenders: those that have served prior periods of probation.

## **G. Conclusions and Recommendations**

By established formalized risk assessment instruments, the Winnebago County program is serving a medium risk group of sex offenders. The Winnebago County specialized sex offender program has demonstrated an overall reduction in violent recidivism, but had similar rates of sexual and general recidivism as the standard program. It also is particularly more effective than standard probation for two groups that are traditionally considered at high risk of recidivism: (1) those with prior mental health or drug treatment, and (2) offenders who have served prior sentences of probation. Sex offenders with a prior period of probation had significantly lower general and violent recidivism rates in the specialized program than in the standard program. Moreover, having at least one prior period of probation was a high-risk predictor of recidivism in the standard probation program, but was unrelated to recidivism in the specialized program. It appears that the specialized program provides some structure and more intensive contact that sex offenders who have served prior period of probation need in order to refrain from committing new crimes. Finally, offenders with a history of mental health or drug treatment had a lower rate of sexual recidivism in the specialized program than in

the standard program, and prior mental health or drug treatment served as a predictor of sexual recidivism in the standard program, but not in the specialized program.

We attribute these findings to two key components of the specialized program. First, probation officers and therapists shared information about sex offenders more frequently in the specialized program, and probation officers observed group therapy sessions and had joint meetings with the therapist and offender. This partnership between probation officers and therapist has been recognized as a central component of the containment model, and one that may stop sex offenders from playing professionals against each other or providing different information to probation officers. The interactive effect of type of probation program and prior mental health or drug treatment, we believe, supports the effectiveness of this partnership. In addition, sex offenders in the specialized program were required to have greater office contact and to keep daily logs of their activities, and this more intensive contact may have had a deterrence effect. The lower rates of recidivism for those who served prior periods of probation as well as those with a history of violence underscore the potential deterrent effect of the Winnebago program.

About 50% in each sample completed probation satisfactorily. One-third of both samples that had arrests for new crimes of any type were terminated satisfactorily. Having an arrest for a new sex crime was a significant and reliable predictor of unsatisfactory termination, but was substantially weaker predictor than illicit drug use. The standard and specialized programs differed on the predictors of unsatisfactory termination according to the CTA model. In considering which offenders are at high-risk of unsatisfactory termination, the following conclusions can be made:

- Mental illness and prior arrests for misdemeanors interacted to predict unsatisfactory termination in the specialized program.
- Mentally ill offenders that had one or more prior arrests for misdemeanors had a very high chance of unsatisfactory termination in the specialized program, but had a very low chance if they had no prior arrests for misdemeanor crimes.
- Educational level and lack of remorse interacted to predict unsatisfactory termination in the standard program.
- Offenders that lacked remorse and did not complete high school had a very high chance of unsatisfactory termination, but only a medium chance if they completed high school. It is perplexing that 95% of the 21 offenders on standard probation who expressed great remorse terminated probation satisfactorily, even though 19% were arrested for a new crime, and 14% were arrested for a new violent crime. None of these offenders were arrested for a new sex crime.

Furthermore, in making decisions about revocation, judges primarily considered an offender's criminal history and current standing in the community as indicated by employment, social support network, marital status, and substance abuse. Criminal history and social adjustment characteristics were much stronger predictors of revocation than was having an arrest for a new sex crime committed while on probation.

Comparatively, having an arrest for a new sex crime was a significant and reliable predictor of revocation, albeit very modest. Similar results are found in considering probation officers' decisions to file a VOP, having an arrest for a new sex crime was a significant and reliable predictor, but prior arrests for property crimes and unemployed status were much stronger predictors.

The Winnebago program provided the most monthly treatment reports and tended to reserve high ratings on treatment progress for a small percentage of offenders. Based on N-of-1 analyses, 20 offenders showed improvement relative to sex offenders in all three counties and 22 offenders showed improvement relative to where they were at the first submitted treatment report. Overall, 28 of the 64 offenders (43.75%) for whom we had treatment reports were classified as responsive to treatment. This level of treatment responsiveness is similar to levels found in other studies on the effectiveness of sex offender treatment. About 60% of both the standard and specialized sex offender groups completed treatment satisfactorily. About 29% of the specialized offenders and 41% of the control offenders had serious noncompliance with treatment, which are not statistically different rates. In considering who is at high risk for serious noncompliance with treatment, therapists and probation officers should consider the following criteria:

- Offenders who need drug treatment and deny the offense have over a 70% chance of committing serious noncompliance with treatment.
- Offenders who are arrested for prior violent crimes have a moderately high chance of treatment failure.
- Offenders who had prior mental health treatment and needed substance abuse treatment and admitted to the offense had a moderately high chance of treatment failure.

It is clear that the three most important risk predictors of serious noncompliance with treatment are needing substance abuse treatment, prior arrests for violent offenses, and denial of the offense. In addition, expression of great remorse for the offense was the strongest predictor of completing treatment satisfactorily, which is clearly related to

accepting responsibility for the offense or denying the offense. Few studies have addressed which offenders will complete treatment or commit serious noncompliance with treatment or will be prematurely terminated. Prior studies have highlighted the difficulty of treating sex offenders who completely deny the offense (Schlank & Shaw, 1996), and clients with co-morbidities such as substance abuse issues and sex offending have also been considered more challenging cases (Chaffin, 1994).

Our analyses also provide guidance on risk assessments for sexual, violent, and general recidivism. However, one caveat is needed. The Winnebago data did not contain reliable information on objective sexual preference for children, psychopathic deviancy, sadistic personality, or mental illness in general. Thus, our recommended risk assessments are for when these attributes are not available. One recommendation that we also made in our previous report deserves repeating: treatment evaluations should include an objective sexual preference test and a personality test to assess psychopathic deviancy and sadistic tendencies. These variables have been the strongest predictors of sexual recidivism in the literature, and also emerged as predictors in the evaluation of the Lake County specialized sex offender probation program. Because Winnebago treatment evaluations did not contain this information, and often did not contain information on mental illness, it was difficult to find a strong CTA model that predicted sexual recidivism. Our recommendation thus is to use formal risk assessment instruments and also consider offenders who victimize strangers or acquaintances and have an objective sexual interest in children as high risk for sexual recidivism.

In addition, we can make some observations specific to Winnebago County analyses. From these analyses, the following four characteristics are high-risk predictors

of sexual recidivism: prior incarcerations, hands-off offending, offenders with chronic impulsive control problems and prior convictions, and offenders in standard probation who have had prior mental health or drug treatment. The Static-99 risk instrument also was a significant and generalizable predictor of violent or sexual recidivism, explaining 18.1% of the classification error above chance classification. However, our CTA model for violent/sexual recidivism outperformed the STATIC-99 and explained 45.6% of the classification error above what could be accounted for by chance. Offenders who are single and started criminal offending at a 18 years of age or younger are at very high risk of violent recidivism whereas single offenders who started criminal offending after the age of 18 had a low chance of violent or sexual recidivism. Offenders who have prior drug or mental health treatment and victimized strangers or acquaintances had a moderately high chance of sexual or violent recidivism. Offenders who had no prior drug or mental health treatment and were married, separated, or divorced had a low chance of violent or sexual recidivism.

For general recidivism, several characteristics that have been identified in the prior literature as reliably significant predictors emerged. Our analyses, however, suggest how these characteristics should be combined to form high-risk groups. Offenders are at high risk of general recidivism if they:

- Are high school drop-outs and single and have prior arrests for misdemeanor crimes
- Are married, divorced, or separated, have prior arrests for violent crimes, and had continued their sexual offending for 18 months or less.

Thus, marital status, prior criminal history, length of time of sexual offending, and educational level are all important risk characteristics to consider in assessing risk of general recidivism.

In conclusion, the Winnebago Specialized Sex Offender Program has had a positive impact on sexual, violent and general recidivism, and is particularly beneficial for traditionally high-risk groups such as those with prior periods of probation, with a history of violent offending, and with a history of mental health or drug treatment. We suggest that the program continue to increase its field contacts and make these contacts unannounced at all hours of the week. The program should also continue its effort at joint meetings with therapists and offenders and attendance at treatment. In order to accomplish a higher level of surveillance, the program may need to increase its staff. The program has demonstrated its effectiveness relative to standard probation, and may wish to expand its target population to include hands-off sex offenders and those convicted of misdemeanor criminal sexual abuse.



## **VI. Risk Assessment Instruments for Child Molesters**

In the prior chapters, we have attempted to provide recommendations about risk assessment based on separate analyses of each county's data. Risk assessment of sex offenders is still at a relatively crude and early stage. The Rapid Risk Assessment for Sex Offender Recidivism (RRASOR) is the most popular risk assessment tool in the United States and Canada and combines only four characteristics in a linear fashion. The RRASOR considers: male victim, unrelated victim, prior sex offenses, and being released from prison (or an inpatient secured institution) before the age of 25. Prior sexual history is given greater weight with one point assigned for one prior conviction or two prior arrests; two points assigned for three prior convictions or three to five prior arrests, and three points assigned for four or more prior convictions or six or more prior arrests. One clear shortcoming of the RRASOR is that it relies on only official criminal history and ignores prior but undetected crimes that are disclosed to probation officers or treatment evaluators. Certainly, specialized sex offender probation programs that attempt to obtain a full criminal history would achieve better prediction by using all prior detected and self-reported crimes. A widely used risk assessment tool in the United Kingdom, the SACJ-MIN, relies on 13 predictors and uses a two step process to classify offenders. We have described the scoring of this tool in previous chapters.

The Static-99 is a combined scale of the RRASOR and the SACJ-MIN, and has better predictive accuracy than the RRASOR or the SACJ-MIN (see Hanson & Thornton, 2000). Its name indicates that it includes only static variables and was developed in 1999. Prior sexual history is scored the same way as in the RRASOR. Each of the

following nine risk factors adds one point to the total score: (1) four or more prior sentencing dates; (2) any convictions for hands-off sex offenses; (3) current violent offense that is not of a sexual nature; (4) prior violence arrests that are not of a sexual nature; (5) any unrelated victims; (6) any stranger victims; (7) any male victims; (8) being between the age of 18 to 24.99 at the time of the offense; and (9) never lived with a lover for at least two years. Scores can range from 0 to 12, with a score of 6 or more in the high- risk category.

All of these formal risk assessment tools assume that the risk characteristics are combined in a linear fashion. Researchers have not attempted to determine the most optimal way to combine the risk characteristics to provide the best overall accuracy in classification. Hanson and Bussiere (1998) noted the lack of attention to how predictors of sexual recidivism should be combined, and suggested that future research begin to explore this issue. Instead of assuming that the significant predictors should be added together, we conducted a non-linear analysis (CTA) to identify the medium and high risk groups for sexual, violent, and general recidivism as well as treatment failure.

Our analyses represent a major advancement over previous studies on recidivism and treatment failure in four critical ways. First, few studies have examined the predictors of outcome measures for samples of sex offenders on probation; most research has been with incarcerated or hospitalized samples or samples of outpatient clinic clients.

Second, most prior research has not assessed the stability of their prediction models, or how well these models perform with samples of different percentage of recidivism (Hanson & Busierre, 1998). The presented models contain only predictors

that remained generalizable and stable in a LOO jackknife validity analysis, and are stable across changes in the rate of recidivism.

Third, we forged new ground by directly testing how to combine significant predictors rather than assuming that a linear model is appropriate. Only one published study, to our knowledge, has used a classification tree analysis to assess the predictors of recidivism. Steadman et al., (2000) used CHAID (Chi-squared Automatic Interaction Detector) to assess the predictors of violent recidivism among mentally ill patients recently released from psychiatric hospitals. Steadman et al. (2000) asserted that the classification tree approach is a better representation of how clinicians typically make risk judgments. We believe that the CTA approach also more closely represents how probation officers attempt to think about which offenders are more at risk of sexual recidivism.

Fourth, we follow the recommendation to examine risk prediction using more narrowly defined groups of sex offenders (Firestone et al., 1999). Only six prior studies that met the inclusion criteria of a recent meta-analysis of sex offender recidivism focused exclusively on child molesters (Hanson & Bussiere, 1998). To make final recommendations about possible risk assessments tools for child molesters, we combined the data from all three counties and analyzed a sample of 478 sex offenders placed on probation for a sex crime against a child under the age of 18. The CTA analyses will be able to detect whether incest and extra familial child molesters have different risk predictors or recidivism rates.

Studies that include a mixed sample of sex offenders such as rapists, child molesters, and exclusively hands-off offenders may have masked subgroups within the

samples of child molesters, and did not test whether the same characteristics predict high risk for child molesters and rapists. Some research shows that child molesters compared to adult rapists on the average have a greater number of victims and continue to repeat offenses until they are caught (Abel et al., 1988; Prentky, Lee, Knight, & Cerce, (1997). For example, in a longitudinal study over a twenty-year period, the failure rate of 52% of child molesters having a new sexual offense charge was much higher than the failure rate of 39% of adult rapists having a new sexual offense charge. Furthermore, child molesters committed a new offense on the average one year sooner than did adult rapists (Prentky et al., 1997) Moreover, in a study of the recidivism of incest offenders who were incarcerated or on probation, total number of previous criminal arrests, total number of sexual arrests, age of first conviction, and the psychopathy predicted general recidivism for any crime (Firestone et al., 1999). This study of incest offenders also found that deviant sexual arousal did not predict sexual recidivism.

Previous research also has found differences between child molesters and rapists in their denial and response style (Nugent & Kroner, 1996; Abel et al. 1988). Child molesters were significantly more concerned with what other people thought of them, and engaged in more minimization and impression management than did adult rapists. Child molesters were more likely to admit to the offense than were adult rapists (Nugent & Kroner, 1996).

These differences between child molesters and adult rapists lend some support to theories that there are different subgroups of sex offenders. Based on the lower rates of recidivism and possible different characteristics that predicted recidivism, Firestone et al. (1999) noted that research on recidivism should not combine child molesters and rapists,

and that separate tools for predicting recidivism should be explored. Thus, our research empirically examines whether the risk characteristics in prior studies using incarcerated child molesters predict noncompliance among child molesters on probation.

In this chapter, we present ODA and CTA analyses for sexual recidivism, violent recidivism (defined as either a new sex or violent crime), and general recidivism (defined as any new crime). We believe that including failure to register offenses into the definition of sexual recidivism obscures the meaning of sexual recidivism since failure to register offenses are an act of omission whereas other sex crimes are an act of commission (failing to refrain from committing an act against the law). Thus, sexual recidivism includes all sex crimes except failure to register offenses. We also present and discuss analyses on the predictors of serious noncompliance with treatment.

#### **A. Risk Assessment of Sexual Recidivism**

A small percentage of child molesters (17.4%) were arrested for or admitted to a new sex crime. The majority of new crimes were hands-on offenses including nine aggravated criminal sexual assaults, four predatory criminal sexual assaults, and five criminal sexual assaults. The most frequent new charge was a felony, aggravated criminal sexual abuse, occurring 24 times, and the misdemeanor charge of criminal sexual abuse occurred 12 times. Four offenders were arrested for or admitted to child pornography. Two offenders were charged with solicitation of a minor, and one offender committed frottage in the mall in combination with three other sex crimes. Sixteen hands-off offenses occurred with the majority involving indecent exposure and a couple involving voyeurism; several offenders who committed hands-off offenses also

committed new hands-on offenses. Two offenders were charged with solicitation of a prostitute.

To first address which characteristics were high risk predictors of sexual recidivism, we performed ODA univariate analysis using the entire sample of child molesters. Twelve significant and generalizable predictors emerged and are presented in Table VI.1. Lake County had a significantly higher sexual recidivism rate than DuPage and Winnebago County; the more intensive field surveillance probably contributed to the significantly higher sexual recidivism rate. Hands-off offending was the strongest offense or offender characteristic, with offenders interested in hands-off offending significantly more likely to commit sexual recidivism. This finding is consistent with prior research that has found a higher sexual recidivism rate for sex offenders interested and involved in both hands-on and hands-off offending (Hanson & Busierre, 1998). Moreover, the STATIC-99 also considers convictions for hands-off sex offenses as a risk predictor; our measure of hands-off offending includes both sexual preference without documented behavior and past self-report or arrests for hands-off sex crimes.

Mentally ill offenders and offenders with two or more paraphilia or offenders interested in both boys and girls were significantly more likely to commit sexual recidivism. Subjective or objective sexual preference for children was not measured for one-third of the sample, which may account for why it did not appear as a predictor. Several other indicators of mental health status emerged as significant and reliable predictors. Offenders with a history of impulsive or compulsive behavior problems were significantly more likely to commit sexual recidivism. Offenders with sadistic or aggressive personality or sexual fantasies, those with a history of suicidal thoughts or

attempts, and those with clinical depression had higher recidivism rates than offenders without these mental health problems. Thus, mental health status is a key risk predictor of sexual recidivism.

Two measures of criminal history were significant and generalizable. Offenders with at least one prior arrest for a misdemeanor crime or a violent crime had significantly higher sexual recidivism rates. Age at which criminal offending began also was a significant predictor, but did not generalize in the validity analysis.

**Table VI.1 Significant and Generalizable Predictors of Sexual Recidivism Excluding Failure to Register Offenses in Child Molesters**

| <b>Significant Predictors of Sexual Recidivism</b>          | <b>Two-tailed Sample p-value</b> | <b>ESS</b> |
|---|----------------------------------|------------|
| Lake County   | .0002                            | 25.1       |
| Hands-off sexual offending                                  | .0001                            | 22.8       |
| Has a mental illness  | .0023                            | 19.7       |
| Two or more paraphilia or single paraphilia with both sexes | .0008                            | 19.1       |
| Problem with impulsive or compulsive behavior               | .0031                            | 17.9       |
| Evidence of clinical depression                             | .015                             | 13.8       |
| Sadistic or aggressive sexual fantasies or personality      | .002                             | 18.0       |
| Suicidal thoughts or attempts                               | .038                             | 9.9        |
| High risk based on the SACJ-MIN                             | .0075                            | 16.1       |
| Moderately high or high risk based on the Static-99         | .0093                            | 16.0       |
| Prior arrests for misdemeanors                              | .013                             | 12.8       |
| Prior arrests for violent crimes                            | .022                             | 11.8       |

It is interesting to note that no basic demographics emerged as significant and generalizable predictors of sexual recidivism, which is consistent with a prior meta-analysis of predictors of sexual recidivism (Hanson & Bussiere, 1998). Current age and highest educational level achieved were significant predictors, but did not remain stable in the LOO analysis, which suggests that these significant relationships will not replicate

in new samples of data. The STATIC-99 uses a young current age (18-24) as a risk predictor; our data suggest that it is an unstable and weak predictor of sexual recidivism.

Classification of risk from two of the formalized risk assessment instruments, the Static-99 and SACJ-min, were significant and generalizable predictors of sexual recidivism. Both risk assessment tools accounted for 16% of the total possible improvement in classification accuracy beyond what could be achieved by chance alone; this percentage indicates that both risk assessment tools provided only weak accuracy in the prediction of sexual recidivism.

Part of this weak accuracy can be contributed to using offense and criminal history indicators that did not significantly predict sexual recidivism for our entire sample. For example, having male victims, unrelated victims, or stranger victims were not significant predictors in the entire sample; the CTA model will test whether these variables are important when combined in a multiplicative way with other characteristics. It also is informative that neither prior arrests for sex crimes nor a more full sexual history (prior arrests and self-reported undetected sex crimes) predicted sexual recidivism. This lack of relationship suggests that the RRASOR and STATIC-99 may place too much importance on prior arrests for sex crimes.

### 1. CTA models of Sexual Recidivism in the Child Molester Sample

We next attempted to address the question of which way to combine the predictors of sexual recidivism to produce the optimal overall classification accuracy in predicting sexual recidivism. We performed five CTA models to assess the best combination of predictors and the best model. For the five CTA models, the beginning



predictors were: two or more sexual paraphilia, sadistic or aggressive, or antisocial (psychopathic deviant) personality or sadistic sexual fantasies, hands-off offending, mental health status, and county. We describe the performance of each model and the medium and high risk groups from each model. The best model, described last, is the model beginning with sadistic tendencies.

The three variable CTA model starting with county was able to classify accurately 33 of the cases (39.7% of the observed cases) that committed a new sex crime and had an overall classification accuracy of 78.2%; it accounted for 26.1% of the improvement in classification accuracy above what could be accounted for by chance. Objective or subjective sexual preference was the predictor for Lake County and hands-off offending was the predictor for DuPage and Winnebago County. For Lake County, child molesters with an objective or subjective sexual preference for children had a 55.6% chance of committing a new sex crime. For DuPage and Winnebago County, offenders with an interest in hands-off offending had a medium risk (30% chance) of committing a new sex crime.

The four variable CTA starting with two or more sexual paraphilia was able to classify accurately 42 of the cases (56% of the observed cases) that committed a new sex crime and had an overall classification accuracy of 74.3%. It accounted for 33.7% of the theoretical possible improvement in classification accuracy above what could be achieved by chance alone. Thus, it outperformed the model starting with county. Offenders with a single paraphilia had a very low chance of sexual recidivism in DuPage and Winnebago County and a medium chance in Lake County. Offenders with two or more sexual paraphilia and an interest in hands-off sexual offending that were classified as medium

high to high risk based on the STATIC-99 had a 63% chance of committing a new sex crime. Almost all offenders classified as medium-high to high risk based on the STATIC-99 victimized stranger or acquaintance children, with the exception of one stepfather and step-daughter incest case. Most offenders had one or more prior arrests, did not commit penetration, and disclosed or were arrested for prior sex crimes.

What were the differences between the 17 offenders accurately classified as committing sexual recidivism and the 10 offenders inaccurately classified as committing sexual recidivism in this high-risk group of offenders? The most striking difference is that 88.9% of the inaccurately classified cases compared to 23.1% of the accurately classified cases successfully completed treatment. Over two-thirds of the accurately classified cases compared to 10% of the inaccurately classified cases had serious noncompliance with treatment. It is interesting to note that the inaccurately and accurately classified cases in this moderately high risk group did not differ on whether a VOP was filed for treatment noncompliance; based on the successful completion rate, however, they did differ on how they responded to this sanction and warning from the court. This difference underscores the importance of incorporating dynamic risk factors such as treatment success into the risk assessment instrument.

The seven variable CTA model beginning with mental health status was able to accurately classify 49 of the cases (60.5% of the observed cases) that had sexual recidivism and had an overall classification accuracy of 73.8%. It was able to account for 37.1% of the possible improvement in classification accuracy above what could be accounted for by chance. Mentally ill offenders with an interest in hands-off offending who minimized their responsibility for the offense had a moderately high (54%) chance

of sexual recidivism. In DuPage and Lake County, two groups of child molesters that victimized strangers or acquaintances had a medium risk of sexual recidivism: (a) those with two or more sexual paraphilia or (b) those with a single sexual paraphilia who victimized a 16 or 17 year old. Child molesters in DuPage and Lake County with no known mental illness were at a very low risk of sexual recidivism if they victimized a family member or relative or had a single sexual paraphilia and committed the sex offense that placed them on probation against a stranger or acquaintance child younger than 16. Sex offenders with no known mental illness in Winnebago County had a low risk of sexual recidivism.

The fourth CTA model starting with hands-off offending is stronger than the previous models explaining 44% of the possible improvement in classification accuracy beyond what could be accounted for by chance and accurately classifying 69 of the cases (71.8% of the observed cases) that committed a new sex crime. This model had an overall classification accuracy of 72.1%. Offenders who were interested in hands-off offending and were convicted of a hands-on sex crime had a moderately high (60%) chance of sexual recidivism. Three groups of offenders who were not interested in hands-off offending had a medium risk of sexual recidivism: (1) Lake or DuPage County offenders with a sadistic or aggressive personality or sexual fantasy; (2) Lake or DuPage County offenders with no known sadistic tendencies and a need for substance abuse treatment as recommended by the court or therapist; and (3) Unemployed Winnebago County offenders who did not disclose any prior undetected sex crimes to the treatment evaluator.

The last model starting with sadistic and aggressive tendencies is the strongest model accounting for 51.4% of the possible improvement in classification accuracy beyond what chance could achieve and accurately classifying 58 of the cases (73.4% of the observed cases) with sexual recidivism. The model involved eight variables and had an overall classification accuracy of 77.2%. Figure VI.1 presents this model. Child molesters with sadistic, aggressive, or psychopathic deviant tendencies had a 35.8% chance of committing a new sex crime. No additional static variables combined with sadistic tendencies to increase classification accuracy, but we did test the ability of treatment noncompliance and treatment failure to improve the classification accuracy. Filing of a VOP for treatment noncompliance did significantly predict the sexual recidivism of child molesters with sadistic, aggressive, or psychopathic deviant tendencies (one-tailed  $p < .037$ ); it classified accurately 65.2% of the observed cases of sexual recidivism and had an overall classification accuracy of 62%. Sadistic child molesters who had a VOP filed for treatment noncompliance were at a moderately high risk (50%) of sexual recidivism. Probation officers obtain information about treatment noncompliance while sex offenders are on probation and typically before they have committed a new sex crime; thus, probation officers can use this dynamic factor to adjust risk assessments and to increase supervision and surveillance of sadistic child molesters that are being noncompliant with treatment to attempt to prevent additional new sex crimes. Knowledge of serious noncompliance with treatment including premature termination, absconding from treatment or unsuccessful completion is less of a dynamic factor because it often occurs after sex offenders have committed new sex crimes. Treatment failure also was a significant predictor of sexual recidivism for the sadistic

child molesters, one-tailed  $p < .002$ . Interestingly, treatment failure and filing of a VOP for treatment noncompliance had the same accuracy at classifying those cases with new recidivism (62%), but treatment failure increased the chance of sexual recidivism to 60% and had an overall accuracy of 71%.

There was one very high risk group of child molesters with no known aggressive, sadistic, or psychopathic deviant tendencies: Offenders interested in hands-off offending and younger than 35.5 years who had 3 or more counts brought against them in the original indictment had about a 77% chance of new sexual recidivism. Offenders interested in hands-off offending with 2 or fewer counts in the original indictment had a medium risk of sexual recidivism if they minimized their responsibility for the offense and attribute some, but not all of the blame to the victim.

In Winnebago and DuPage County, child molesters with no known sadistic or aggressive tendencies and no interest in hands off offending had a very low chance of sexual recidivism. In Lake County, this group of child molesters had a medium chance of sexual recidivism (about 33%) if they: (a) were recommended to substance abuse treatment by the court or treatment evaluator; or (b) were classified as medium high to high risk on the STATIC-99. Offenders classified as medium high to high risk on the STATIC-99 in this medium risk cluster had several defining features: Almost all had victimized female strangers or acquaintances (except one stepfather-stepdaughter incest), were never married, and had no prior arrests or self-reported prior sex crimes. The cases that were classified accurately differed from the cases that were classified inaccurately in this cluster on prior convictions, serving prior probation sentences, using force to achieve the sex crime, having two or more sexual paraphilia, being physically or sexually abused

as a child, and treatment failure. The cases that were classified accurately more often had these potential risk predictors. For example, 75% of the accurately classified cases had a prior conviction and served a prior probation term whereas only 35% of the inaccurately classified cases had a prior conviction and only 25% served a prior probation sentence. Whereas half of the accurately classified cases had two or more sexual paraphilia or were physically or sexually abused as a child, about 17.5% of the inaccurately classified cases had these characteristics. Use of force to commit the sex crime occurred in 62.5% of the accurately classified cases and 18.2% of the inaccurately classified cases. Finally, 85.7% of the accurately classified cases failed treatment compared to only 33% of the inaccurately classified cases.

We also tested how well filing of a VOP for treatment noncompliance and treatment failure predicted sexual recidivism for the group of child molesters with no known sadistic tendencies; hands-off offending did as well as information about treatment noncompliance or failure, with about a 25% chance of sexual recidivism. We performed one additional test of how informative were treatment noncompliance and treatment failure, and examined its predictive power for child molesters with no known sadistic tendencies and an interest in hands-off offending and child molesters with no known sadistic tendencies and no interest in hands-off offending. For child molesters with no known sadistic tendencies and an interest in hands-off offending, treatment failure created a 50% chance and filing of a VOP for treatment noncompliance created a 41% chance of sexual recidivism. Thus, information about treatment progress did as well or better than the combination of three or more counts, minimizing responsibility, and less than 35.5 years of age when criminal offending began. For child molesters with no

known sadistic tendencies and no interest in hands-off offending, filing of a VOP for treatment noncompliance created only a 20% chance of sexual recidivism and treatment failure created only a 22% chance of sexual recidivism. Information about treatment progress for this group is much less informative, and treatment noncompliance does not indicate even a medium chance of sexual recidivism.

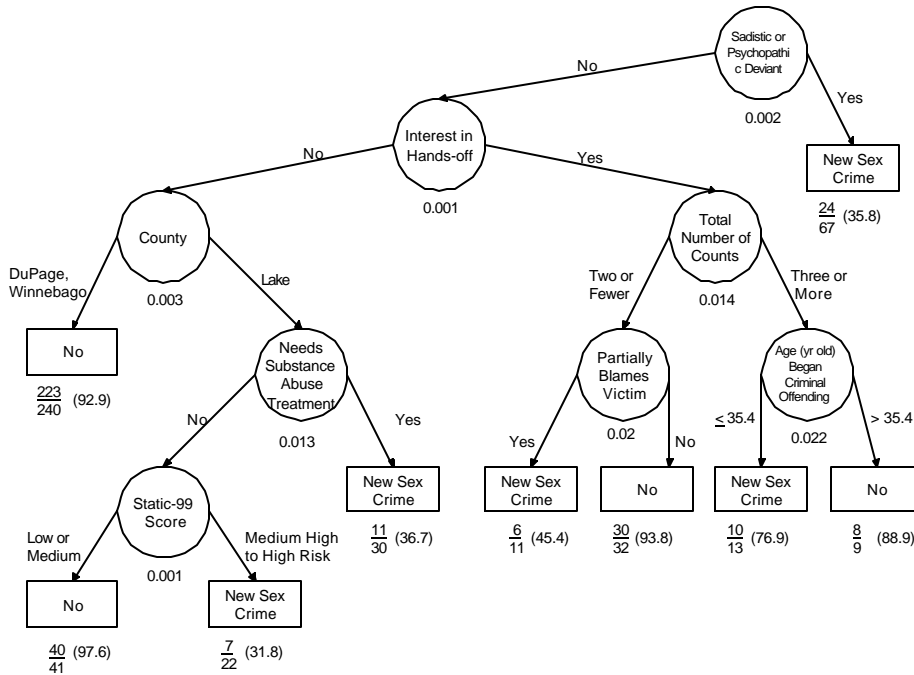
The most important variables in the CTA models are sadistic, aggressive, or psychopathic deviant tendencies, objective or subjective sexual preference for children, two or more sexual paraphilia, victimized both boys and girls, stranger or acquaintance victims, hands-off offending, county, substance abuse treatment, and treatment noncompliance.

## 2. Comparison of the CTA models with the STATIC-99 and SACJ-MIN

How much do these CTA models improve the classification accuracy compared to the performance of the two stable and significant risk assessment instruments? The risk assessment instruments showed only weak accuracy of 16% of the possible improvement in classification accuracy above what chance could achieve alone. All of the CTA models explained a substantial amount more of the possible improvement in classification accuracy: (1) 10% additional by the county model; (2) 17.6% additional by the 2 or more sexual paraphilia model; (3) 21% additional by the mental health model; (4) 28% additional by the hands-off CTA model; and (5) 35.4% additional by the sadistic and aggressive tendencies model. The hands-off CTA model was about 2.8 times more accurate than the STATIC-99 and SACJ-MIN formalized risk assessment instruments,

and the sadistic and aggressive tendency model was over 3 times more accurate than the STATIC-99 and SACJ-MIN.

Figure VI.1: CTA Model Predicting Sexual Recidivism



### 3. Recommendations on Risk Assessment for Sexual Recidivism

These analyses have proven to be informative about which groups of child molesters are at medium and high risk of committing new sex crimes. There are several improvements that can be made to current risk assessment tools such as the RRASOR, SACJ-MIN, or STATIC-99. Before discussing these recommendations, another important observation is that it is evident from these analyses that there are county differences in rates of sexual recidivism and in predictors. Lake County has a higher sexual recidivism rate due to the more intensive unannounced field surveillance, and also



has better measurement of objective and subjective sexual preferences for children, which allows this consistent and strong predictor to enter the CTA model.

Across the five models, there are some consistent patterns and clusters of medium and high risk groups of child molesters. We offer these suggestions:

- *Specialized sex offender probation programs should routinely assess sexual preference for children, and incorporate this information into their risk assessment.* The findings from Lake County underscore the importance of this assessment: Child molesters with a sexual preference for children had a 55% chance of a new sex crime.

If an ABEL or plethysmograph cannot be performed, probation officers can use the MTC:CM3 scale (Knight, 1992; Knight et al., 1989) or a recently published brief screening scale to identify pedophilic interests (Seto & Lalumiere, 2001). The MTC:CM3 scale assesses the extent to which children are a major focus of the offender's thoughts and fantasies through self-report that such focus has occurred for at least six months. When self-reports are not forthcoming, the individual can be classified as "preoccupied with children" if one or more of the following behavioral criteria are present: "(a) three or more sexual encounters with children over a time period that is greater than 6 months; (b) evidence that the offender has had enduring relationships with children (excluding parental contact); or (c) the offender has initiated contact with children in numerous situations over his lifetime" (Prentky, Knight, & Lee, 1997). Probation officers typically should be able to obtain the first behavioral criteria from police reports, and probation officers and treatment evaluators can construct a few questions to assess the last two behavioral criteria. Given the availability of a brief

screening scale to identify pedophilic interests, neither expense nor court objections over the ABEL or plethysmograph should prevent a somewhat reliable assessment of sexual preference for children.

- *Current risk assessment tools place too much importance on prior arrests for sex crimes.* It is undisputed that prior arrests alone do not represent a sex offender's full sexual offending history, and thus such measures are unreliable. Moreover, neither prior arrests for sex crimes nor the full disclosed history of sexual offending (prior arrests and self-reported past undetected sex crimes) significantly predicted sexual recidivism.
- *Hands-off sexual offending should be incorporated into formal risk assessment tools.* In our analyses, hands-off offending entered all five CTA models and was a significant and reliable predictor for the entire sample.

The STATIC-99 considers convictions for hands-off sexual offending as a risk predictor, but given the vast number of incidents that go unreported or solved by authorities, a much more comprehensive measure of hands-off sexual offending should be used. Our measure includes prior arrests or self-reported undetected prior sex crimes, and self-reported sexual fantasies about hands-off offending.

- *Extra familial (those victimizing either strangers or acquaintances) child molesters are at a very high risk of sexual recidivism if they have one of the following: an objective or subjective sexual arousal to children or at least two sexual paraphilia or victimized both boys and girls.*

In the entire Lake County sample, this group had an 85% chance of sexual recidivism whereas incest or other relative offenders with an objective or subjective sexual

arousal toward children had only a 29% chance of sexual recidivism. The CTA models of the child molester sample also revealed the combination of extra familial child molesters and two or more paraphilia or victimized both boys and girls.

- *Sex offender probation programs should routinely assess sexual paraphilia and incorporate this information into their risk assessment tool.* The measure of two or more sexual paraphilia was a significant and reliable predictor of recidivism in the entire sample of child molesters, and entered two of the CTA models.

Offenders who have multiple paraphilia are significantly more likely to be rearrested and to self-report additional offenses than are offenders who have a single paraphilia (Abel, et al., 1987). Child molesters average between 3.3 and 4.2 paraphilia, according to a study involving 561 non-incarcerated sex offenders who were assured confidentiality (Abel et al., 1987).

- *Sex offender probation programs should routinely assess sadistic, aggressive, and psychopathic deviant tendencies or personality as well as sadistic sexual fantasies.* Our measure of sadistic tendencies combined psychopathic deviancy, history of extreme aggression, and sadistic sexual fantasies, and was a stable and significant predictor of sexual recidivism, and served as the starting predictor in the strongest CTA model. Prior research also shows that psychopathic deviancy is a strong predictor of sexual recidivism.
- *Substance abuse also should be incorporated into risk assessment instruments for child molesters without interest in hands-off offending or sadistic tendencies.*

The SACJ-MIN considers substance abuse a risk factor, and it clearly emerged as risk factor in two of our CTA models for those with no known sadistic, aggressive, or

psychopathic deviant tendencies or those with no interest in hands-off offending. Though a prior meta-analysis of predictors of sexual recidivism found little evidence for its predictive validity alone (Hanson & Busierre, 1998), two recent studies of incest offenders (Firestone, Bradford, et al., 1999) and extra familial child molesters (Firestone, Bradford et al., 2000) found that alcohol abuse predicted sexual recidivism.

- *Mentally ill offenders with an interest in hands-off sexual offending that placed some, but not all of the blame on the victim are a medium risk group for committing sexual recidivism.*

Having made these observations, we provide a risk assessment tool of sexual recidivism (RAT-SR) that we created based on the CTA and univariate models, taking into consideration the most influential predictors and combinations. The RAT-SR is presented in Table VI.2. It accounts for 27.8% of the possible improvement in classification accuracy above what can be explained by chance, and the high risk category identified 43 offenders (51.8% of the observed cases) that had sexual recidivism. In comparison, the STATIC-99 and SACJ-MIN accounted for only 16% of the possible improvement in classification accuracy above what could be explained by chance, indicating that the RAT-SR explained an additional 11.8% of the improvement in classification accuracy, and had a nearly 74% greater effect strength. The RAT-SR has three stages, with no further stage necessary after the offender has been classified as high risk. In stage one, there are five groups of child molesters that are at high risk. If the offender's characteristics do not match the defining features of any of these five groups, the assessment continues to stage two where there are three groups of sex offenders who

**Table VI.2 Risk Assessment Tool of Sexual Recidivism (RAT-SR)**

|  |  |
|--|--|
| <p>Stage one.</p> <p>1. Classify child molesters as <b>high risk</b> if they have all of the characteristics in any one of the following two groups:</p> |  |
|  | 1. Sexual preference for children <b>AND</b> victimized strangers or acquaintances   |
| <b>OR</b>  |  |
|  | 2. Either a history of sadistic or extremely aggressive/violent acts or sadistic sexual fantasies or psychopathic deviancy <b>AND</b> noncompliance with treatment   |
| <b>OR</b>  |  |
|  | 3. Victimized Stranger or Acquaintance Victims <b>OR</b> Two or more prior sex crimes (from self-reports or arrests) <b>AND</b> an interest in hands-off offending <b>AND</b> two or more sexual paraphilia <b>OR</b> attracted to both boys and girls   |
| <b>OR</b>  |  |
|  | 4. Two or sexual paraphilia <b>AND</b> an interest in hands-off offending <b>AND</b> at least one prior conviction   |
| <b>OR</b>  |  |
|  | 5. Victimized Stranger or Acquaintance Victims <b>AND</b> Victimized Both Boys and Girls in Current Offense  |
| <p><b>No Further Assessment is Needed if Already Classified as High Risk. Otherwise continue.</b></p>  |  |
| <p>Stage 2. Classify child molesters as having a <b>medium risk</b> if they have all of the characteristics in any one of the following four groups:</p> |  |
|  | <p>1. Mentally ill <b>AND</b> interested in hands-off sexual offending <b>AND</b> place some, but not all of the blame on the victim</p> <p>2. No known sadistic or psychopathic deviant tendencies <b>AND</b> interest in hands-off sexual offending <b>AND</b> noncompliance with treatment</p> <p>3. Victimized Stranger or Acquaintance Victims <b>AND</b> Two or more sexual paraphilia</p> |
| <p>No Further Assessment is Necessary if Offender Has Already Been Classified as High Risk. Otherwise Continue.</p>                                      |  |

Stage 3. For each of the five attributes, offenders should receive one point if it is consistent with their offense or offender characteristics. Scores can range from 0 to 5:

- \_\_\_ Stranger or Acquaintance Victim
- \_\_\_ Victimized both boys and girls
- \_\_\_ Has a current mental illness
- \_\_\_ Two or more prior sex crimes (self-reported or arrests)
- \_\_\_ Sadistic or aggressive sexual fantasies or personality or psychopathic deviancy

Scores of 3 to 4: Medium risk      Score of 5: High Risk

are at medium risk of sexual recidivism. The assessment then continues to stage 3, where five characteristics are scored to determine whether any previously classified medium risk offenders are high risk as well as to classify the offenders that have not been placed in a prior category. Future research will need to validate the RAT-SR with new samples of data, but it shows promise for implementation in these three counties.

### **B. Risk Assessment of Violent Recidivism**

We defined violent recidivism as either a new violent or sexual crime, and 23.8% of the 478 sample committed violent recidivism. We first use univariate ODA to examine the offense and offender characteristics that are significant and generalizable predictors of violent recidivism. Table VI.2 presents the 15 significant and generalizable predictors. Five measures of criminal history were significant, generalizable predictors. Offenders were more likely to commit violent recidivism if they had at least one prior arrest for a violent, property, or misdemeanor crime, had served a prior sentence of probation, or had a prior conviction.

Three measures of mental health status were significant and generalizable. Child molesters had a significantly higher risk of violent recidivism if they had prior mental health or substance abuse treatment, or had a prior history of suicidal thoughts or attempts.

Lake County had a significantly higher rate of violent recidivism compared to Winnebago and DuPage County. Three offense characteristics were risk predictors. Child molesters that victimized strangers or acquaintance children were at higher risk than incest or other relative child molesters. Child molesters that used force to commit the sex crime or had an interest in hands-off sexual offending were at a significantly higher risk.

**Table VI.3 Significant and Generalizable Predictors of Violent Recidivism Including Sex Crimes in Child Molesters**

| <b>Significant Predictors of Violent Recidivism Including Sex Crimes</b> | <b>Two-tailed Sample p-value</b> | <b>ESS</b> |
|--|----------------------------------|------------|
| Medium high or high risk based on Static-99                              | .0001                            | 20.4       |
| High risk based on SACJ-MIN  | .03                              | 11.6       |
| Never married  | .0005                            | 19.0       |
| Acquaintances or stranger victims  | .012                             | 15.4       |
| Hands-off sexual offending   | .0075                            | 11.7       |
| Used force during sex crime  | .033                             | 9.2        |
| Served prior periods of probation  | .002                             | 14.1       |
| At least one prior conviction  | .0071                            | 13.5       |
| At least one prior arrest for a violent crime                            | .0064                            | 12.7       |
| At least one prior arrest for a property crime                           | .021                             | 10.6       |
| At least one prior arrest for a misdemeanor crime                        | .034                             | 9.7        |
| Lake County  | .024                             | 13.6       |
| Prior mental health or drug treatment                                    | .033                             | 11.0       |
| Prior drug treatment   | .035                             | 9.5        |
| Suicidal thoughts or attempts  | .048                             | 8.6        |

Only one demographic characteristic predicted violent recidivism. Child molesters who were never married had a significantly higher risk of new violent or sex crime than did child molesters who were currently or formerly married.

Two of the formal risk assessment instruments, STATIC-99 and the SACJ-MIN, were significant and generalizable predictors. Child molesters with a medium-high or high risk classification based on the STATIC-99 and those with a high risk based on the SACJ-MIN were at a higher risk of violent recidivism. The STATIC-99 was twice as accurate as the SAC-J in predicting violent recidivism.

### 1. CTA Model Predicting Violent Recidivism

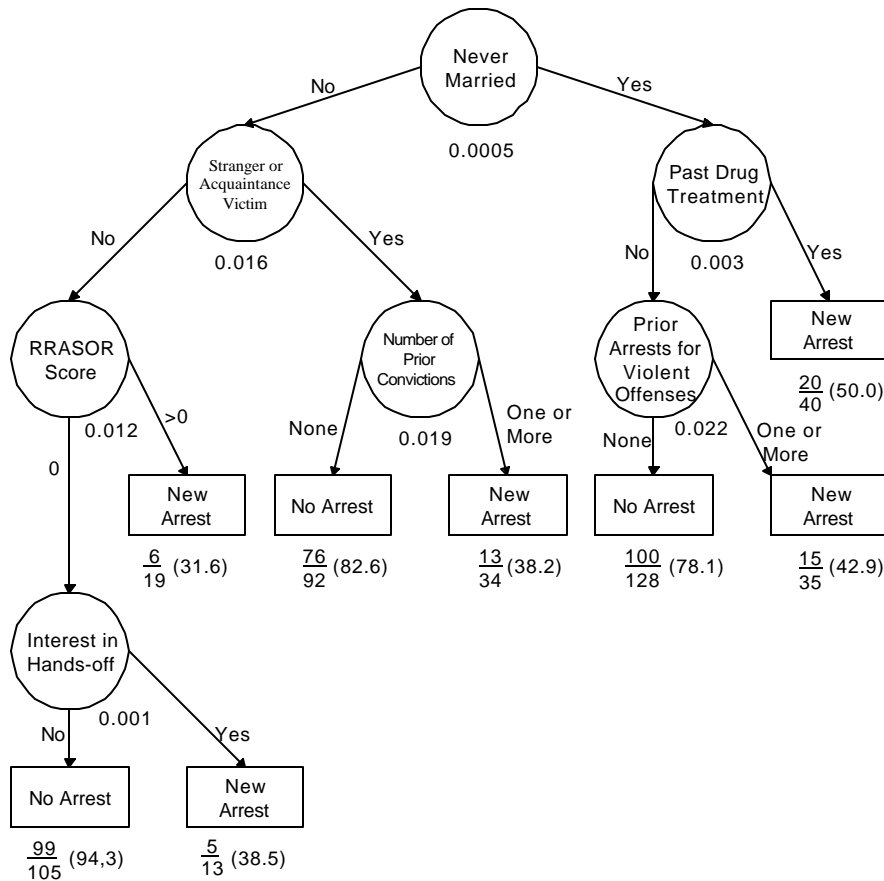
We began the CTA model with the strongest predictor, marital status, and the final model was an eight variable model with an overall classification accuracy of 71.7%. It showed moderate performance accounting for 31.2% of the possible improvement in classification accuracy above what could be explained by chance, and accurately classifying 74 cases (67.9% of the observed cases) with violent recidivism. Figure VI.I presents this model. Child molesters who were never married had a 50% chance of sexual recidivism if they were recommended for substance abuse treatment by the court or treatment evaluator and about 43% chance if they had at least one prior arrest for a violent crime.

There were no moderately high or high-risk groups among currently or formerly married child molesters. Three groups of formerly or currently married child molesters had a medium risk of violent recidivism: (1) those who victimized strangers or acquaintances and had at least one prior conviction; (2) those who victimized family



members and had a score of 1 or higher on the RRASOR; and (3) those who victimized family members, had a score of 0 on the RRASOR, and had an interest in hands-off sexual offending.

Figure VI.2: CTA Model Predicting Violent Recidivism



## 2. Comparison of CTA Model with Formal Risk Assessment Instruments and Recommendations

The CTA model explained an additional 11% of the possible improvement in classification accuracy over what the STATIC-99 did, and explained an additional 19.5%

over what the SACJ-MIN did. The STATIC-99 used nine variables and the SACJ-MIN used 13 variables whereas the CTA model used 11 variables (counting the four variables in the RRASOR). All of the variables included in our CTA model for violent recidivism are included in at least one formalized risk assessment instrument for sexual recidivism. Consistent with our CTA, the SACJ-min includes never married as a risk factor, and closely related the STATIC-99 includes never lived with a partner for two years. The SACJ-MIN and our CTA model include substance abuse, but the STATIC-99 does not include this as a risk factor. The SACJ-MIN, VORAG, and STATIC-99 include prior arrests for a violent offense as a risk factor, and our model suggests that when combined with never married, offenders have a medium risk of violent recidivism. Stranger victims have been included in the RRASOR, SACJ-MIN, STATIC-99 and other instruments; our model, however, illustrates that incest offenders or child molesters who victimize other family members have a medium risk when their RRASOR score is one or higher or they have an interest in hands-off offending.

The CTA model presents rather straightforward-defined clusters of sex offenders at medium or high risk of violent recidivism. The model did not identify any groups with a 70% chance or higher (which is an extremely high criteria for violent recidivism), though those over 50% chance should be considered at high risk. All of the variables included in the model have received prior support as predictors of violent recidivism in previous studies. This research, thus, has answered the critical question of how previously supported predictors should be combined, and it is clear that our model does not support a linear or additive model.

### C. Risk Assessment of General Recidivism Among Child Molesters

A large percentage of the sample (43.1%) had committed at least one new crime of any type. We first examined the static predictors of general recidivism in this child molester sample. Table VI.3 presents the 13 significant and generalizable predictors. In the entire sample, all of the performance of all significant predictors at accurately classifying cases of general recidivism was weak with a range of 6.7% to 16.2% of the possible improvement in classification accuracy accounted for by a single significant and reliable predictor.

**Table VI.4 Significant and Generalizable Predictors of General Recidivism In Child Molesters**

| <b>Significant Predictors of General Recidivism</b> | <b>Two-tailed Sample p-value</b> | <b>ESS</b> |
|---|----------------------------------|------------|
| At least one prior arrest for a violent crime       | .0001                            | 16.2       |
| At least one prior arrest for any crime             | .001                             | 15.3       |
| At least one prior arrest for a misdemeanor crime   | .024                             | 8.8        |
| At least one prior arrest for a property crime      | .0001                            | 14.0       |
| At least one prior arrest for a drug crime          | .041                             | 6.7        |
| Served a prior period of probation                  | .041                             | 8.1        |
| Medium high or high risk based on STATIC-99         | .0006                            | 14.9       |
| High risk based on SACJ-MIN                         | .0045                            | 12.5       |
| Used force during the sex crime                     | .0001                            | 14.7       |
| Acquaintance victim                                 | .024                             | 12.2       |
| Oral, vaginal, or anal penetration occurred         | .017                             | 12.5       |
| Uses both illicit drugs and alcohol                 | .0045                            | 14.3       |
| Never married, separated, or divorced               | .0041                            | 14.2       |
| Lake or DuPage County                               | .0038                            | 14.4       |

Six criminal history measures were significant and reliable predictors, with the strongest predictor overall all significant predictors being at least one prior arrest for a violent crime. Child molesters with prior arrests for property crimes, drug crimes,

misdemeanor crimes or any crime or who had served a prior period of probation also had a significantly higher risk of general recidivism. The importance of criminal history is consistent with the prior literature on the predictors of general recidivism in sex offender samples (see Hanson & Busierre, 1998; Firestone et al., 1999; Firestone et al., 2000).

Three offense characteristics were significant predictors of general recidivism. Child molesters that used force during the sex crime, performed oral, vaginal, or anal penetration, or victimized acquaintances had higher risk of general recidivism.

Two demographic characteristics predicted general recidivism. Child molesters who were never married, were separated or were divorced had higher rate of general recidivism, which is consistent with the literature. The literature also emphasizes the importance of living in poverty, high school drop-outs, and young age (between 18 and 25) as high risk predictors of general recidivism. Age and education level were significant predictors of general recidivism, but were unstable in the LOO analysis, suggesting that this significant relationship is unlikely to replicate in future samples using current cut points and assignment rules.

Sex offenders that used both illicit drugs and alcohol also had significantly higher rates of general recidivism. Lake and DuPage County had higher rates of general recidivism than did Winnebago County.

Two of the formalized risk assessment tools, the STATIC-99 and SACJ-MIN, were significant and reliable predictors of general recidivism, though they had weak accuracy.

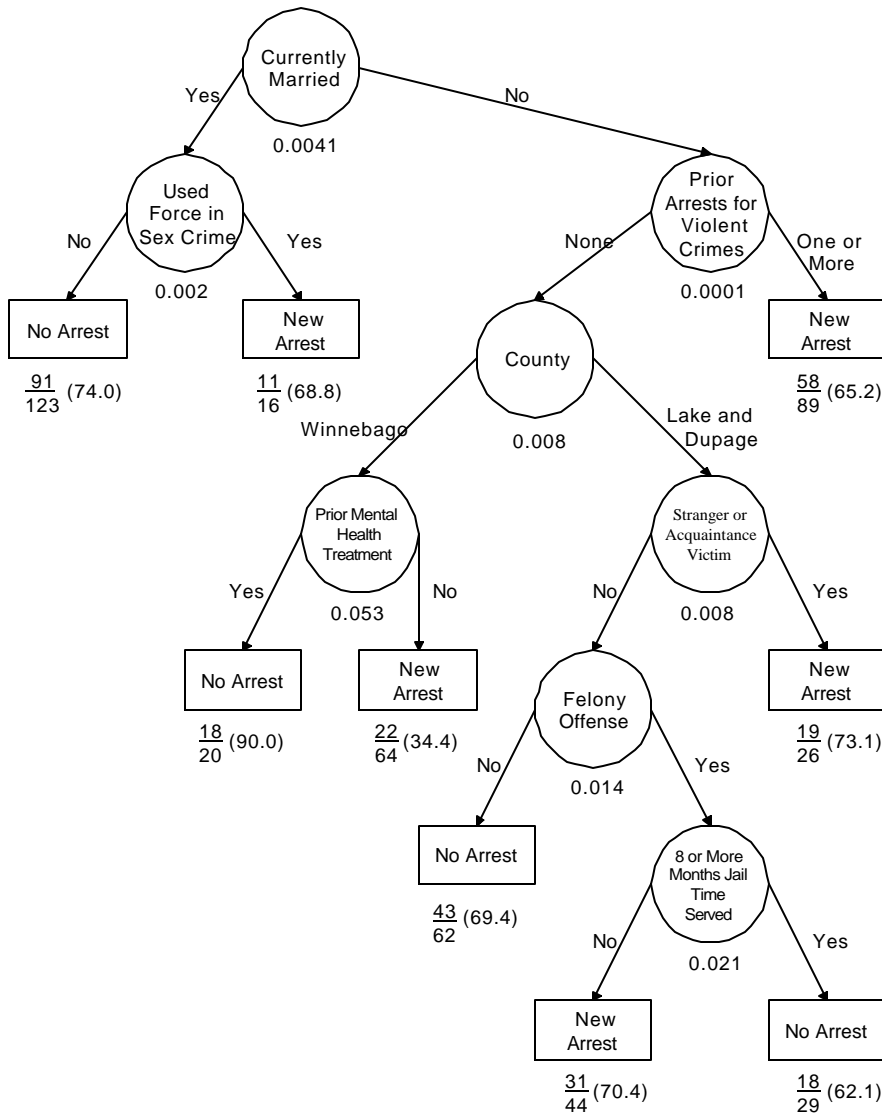
## 1. CTA models predicting General Recidivism

We performed two CTA models. The CTA model beginning with number of prior arrests for violent crimes accounted for 28.2% of the possible improvement in classification accuracy above what could be achieved by chance alone, and accurately classified 139 of the cases with general recidivism. It had an overall classification accuracy of 63.5%. The CTA model beginning with marital status showed much better performance, accounting for 36.7% of the possible improvement in classification accuracy above what could be achieved by chance alone, and accurately classifying 139 of the cases with general recidivism. It had an overall classification accuracy of 68.4%. This model also substantially outperformed the STATIC-99 and SACJ (which were not designed to predict general recidivism) and accounted for an additional 22% of the possible improvement in accuracy compared to these two instruments. Figure VI.3 presents the CTA model beginning with marital status.

Currently married and single offenders had a similar chance of general recidivism when they used force to achieve the crime or had committed prior violent crimes. Currently married child molesters who used force to achieve the sex crime had about a 69% chance of committing general recidivism. Never married, separated, or divorced child molesters with at least one prior arrest for a violent crime had a 65% chance of committing general recidivism.

In Lake and DuPage County, two groups of never married, separated or divorced child molesters with no prior arrests for violent crimes were at high risk of general recidivism: (1) those with sexual arousal to children; and (2) those who committed criminal sexual assault or aggravated criminal sexual abuse and were sentenced to 8

Figure VI.3: CTA Model Predicting General Recidivism



months or less in jail for the crime that placed them on probation. If this group spent more than 8 months in jail, they had a medium risk of general recidivism. In Lake and DuPage County, never married, divorced, or separated child molesters with no prior arrests for violent crimes had a medium risk of general recidivism if they were convicted of a misdemeanor sex crime.

In Winnebago County, never married, separated, or divorced child molesters without any prior arrests for violent crimes and no previous mental health treatment had a medium risk of general recidivism.

## 2. Conclusions about the predictors of general recidivism

Consistent with prior literature, criminal history and marital status are the two central risk predictors of general recidivism. The most important combination is prior arrests for violent crimes and a single, divorced, or separated marital status. It is also clear that there are county differences in the significant predictors of general recidivism. Given these county differences and the moderate performance of our CTA model, much additional work needs to be done before any definitive risk assessment tool for general recidivism can be developed.

### **D. Risk Assessment for Serious Noncompliance with Treatment**

Table VI.4 presents the seventeen significant and generalizable predictors of serious noncompliance with treatment. The two strongest predictors were remorse and placing blame on the victim. Child molesters that did not express remorse or placed some or all of the blame on the victim were significantly more likely to fail at treatment. Denial also was related to significantly higher rates of treatment failure.

The need for substance abuse treatment or uses both alcohol and illicit drugs also were relatively strong predictors of treatment failure. The measures of previous drug treatment and using drugs or alcohol before committing the sex crime were significant, but weak predictors of treatment failure.

Three demographic characteristics were related to serious noncompliance with treatment. Unemployed child molesters, never married child molesters, and African-Americans or Hispanic/Latino-American child molesters had significantly higher rates of serious noncompliance with treatment. Current age and highest educational achievement also were significant predictors, but did not generalize in the LOO analysis, suggesting that these significant relationships will not replicate at current classification performance levels using present assignment rules when new data samples are analyzed.

**Table VI.5 Significant and Generalizable Predictors of Serious Noncompliance with Treatment in Child Molesters**

| <b>Significant Predictors of Satisfactory Completion of Sex Offender Treatment</b> | <b>Two-tailed Sample p-value</b> | <b>ESS</b> |
|--|----------------------------------|------------|
| Does not express remorse   | .0001                            | 27.0       |
| Places blame on the victim   | .0001                            | 21.5       |
| Does not acknowledge that the offense occurred                                     | .0057                            | 15.2       |
| Recommended for substance abuse treatment  | .0001                            | 20.0       |
| Uses both illicit drugs and alcohol  | .0002                            | 22.1       |
| Did not use drugs before committing sex crime                                      | .0006                            | 16.3       |
| Prior drug treatment   | .029                             | 9.8        |
| Unemployed or employed part-time   | .0012                            | 17.4       |
| Never married  | .0026                            | 15.5       |
| African-American or Hispanic/Latino  | .0042                            | 13.8       |
| Prior convictions  | .0007                            | 16.1       |
| Prior arrests for violent crimes   | .0002                            | 17.3       |
| Prior arrests for misdemeanor crimes   | .0008                            | 14.5       |
| Prior arrests for property crimes  | .0038                            | 12.6       |
| Prior periods of probation   | .0035                            | 12.1       |
| Lake County  | .039                             | 11.2       |
| Used force during the sex crime  | .0006                            | 12.8       |

Five measures of criminal history were significant and generalizable. Child molesters with prior convictions, prior periods of probation, or prior arrests for violent crimes,



property crimes, or misdemeanor crimes were significantly more likely to commit serious noncompliance with treatment.

Lake County had significantly higher rates of serious noncompliance with treatment than did DuPage or Winnebago County. Only one characteristic of the offense was significantly and reliably related to serious noncompliance with treatment. Child molesters who committed physical force to achieve the sex offense were significantly more likely to commit serious noncompliance with treatment than were child molesters who did not use force.

#### 1. CTA model predicting serious noncompliance with treatment

We began the CTA model with placing blame on the victim because the remorse variable had a higher percentage of missing data. The CTA model beginning with blame showed strong performance accounting for 50.1% of the possible improvement in classification accuracy above what could be achieved by chance alone, and accurately classifying 96 (77.42% of the observed cases) that had serious noncompliance with treatment. The CTA model had an overall classification accuracy of 74.2%.

For child molesters who placed most of the blame on the victim, annual income level and current age were the strongest predictors. Child molesters that mostly blamed the victim for the offense, had an annual income below the poverty level of \$13,500, and were 37.5 years of age or younger had a 75.5% chance of committing serious noncompliance with treatment. By contrast, if child molesters placed most of the blame on the victim and had an annual income of higher than \$13,500, they had only a 24.4% chance of committing serious noncompliance with treatment.

For child molesters who accepted all the blame or only partially blamed the victim, there was one very high risk group, and four medium risk groups. Child molesters were at a very high risk of noncompliance if they used both drugs and alcohol, victimized a stranger or acquaintance, had no prior arrests for sex crimes, and lived in poverty. Two of the medium risk groups used both drugs and alcohol, were currently or formerly married and victimized family members had one of the following combination of characteristics: (1) at least one prior arrest for a property crime; or (2) no prior arrests for a property crime and limited or no social support. The other two medium risk group used only alcohol or no drugs or alcohol and either (1) had at least one prior arrest for a violent crime; or (2) had no prior arrests for a violent crime and a chronic history of impulsive or compulsive behavioral problem.

## 2. Conclusions concerning risk predictors of serious noncompliance with treatment

The most important predictors of serious noncompliance with treatment are blaming the victim, lack of expression of remorse, and using both illicit drugs and alcohol. Approximately one-third of the sample is classified using annual income, never married and victimized strangers or acquaintances, prior arrests for violent crimes, and chronic problem with impulse control in combination with blame and illicit drug use. Future research should further test the predictive accuracy of these combinations.

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**APPENDIX A**

**TABLES A1 THROUGH A9**

**LIST OF PREDICTORS IN EACH COUNTY**

**Table A1: Demographic Predictors in Each County****(Valid Percentage)**

| Predictors  | Dupage County | Lake County | Winnebago County |
|---|---------------|-------------|------------------|
| Age of Offender   |               |             |                  |
| 17  | 2.8           | 1.9         | 0.5              |
| 18 – 24   | 20.9          | 26.4        | 29.8             |
| 25 – 30   | 19.1          | 42.0        | 13.5             |
| 31 – 35   | 18.1          | 14.4        | 16.3             |
| 36 – 40   | 15.3          | 14.4        | 11.5             |
| 41 – 45   | 7.9           | 7.2         | 10.6             |
| 46 – 50   | 5.6           | 8.2         | 6.3              |
| 51 and up   | 10.2          | 7.2         | 11.5             |
| Ethnicity   |               |             |                  |
| White, non-Hispanic   | 77.2          | 63.9        | 68.8             |
| Black, non-Hispanic   | 4.2           | 12.5        | 24               |
| Hispanic  | 14            | 21.2        | 4.3              |
| Other   | 2.4           | 4.7         | 2.9              |
| Employment Status   |               |             |                  |
| Unemployed  | 21.1          | 25.6        | 37.6             |
| Employed part-time  | 7.5           | 8.2         | 9.3              |
| Employed full-time  | 63.4          | 59.9        | 45.9             |
| Employed, unable to determine if full or part-time              | 7.0           | 6.3         | 7.3              |
| Retired   | 0.9           | 0.0         | 0.0              |
| Whether receiving welfare                                       |               |             |                  |
| No  | 90.6          | 86.9        | 84.7             |
| Yes   | 9.4           | 13.1        | 15.3             |
| Income level  |               |             |                  |
| Poverty below \$13,500  | 34.2          | 41.2        | 64.6             |
| \$13,501 – 20,000   | 27.6          | 21.9        | 17.4             |
| \$20,001 – 30,000   | 19.6          | 21.9        | 12.8             |
| More than \$30,000  | 18.6          | 15.0        | 5.1              |
| Education Level   |               |             |                  |
| Did not complete High School                                    | 21.3          | 34.7        | 44.1             |
| GED or High School diploma                                      | 33.8          | 31.7        | 38.2             |
| High School diploma and Trade School                            | 5.8           | 5.4         | 3.4              |
| Some College  | 26.6          | 21.3        | 11.8             |
| College Degree BS/MS  | 12.6          | 6.9         | 2.5              |
| Marital Status  |               |             |                  |
| Single  | 45.3          | 47.8        | 41.5             |
| Divorced  | 11.2          | 15.5        | 19.8             |
| Widowed   | 0.5           | 0.0         | 2.4              |
| Separated   | 4.2           | 7.2         | 9.7              |
| Currently married   | 38.8          | 29.5        | 26.6             |
| Number of biological and adopted children in offender's custody |               |             |                  |
| 0   | 76.5          | 71.1        | 80.1             |
| 1   | 11.3          | 11.8        | 6.3              |
| 2   | 8.3           | 7.8         | 7.3              |
| 3   | 2.0           | 6.4         | 4.4              |
| 4 or more   | 2.0           | 2.5         | 2.0              |

**Table A2: Prior Record Predictors in Each County  
(Valid Percentages)**

| Predictors                               | Dupage County | Lake County | Winnebago County |
|--|---------------|-------------|------------------|
| Age at which criminal offending began    |               |             |                  |
| 12-17                                    | 1.9           | 4.5         | 8.2              |
| 18-24                                    | 44.4          | 45.2        | 50.3             |
| 25-30                                    | 17.5          | 20.4        | 10.9             |
| 41-45                                    | 7.5           | 3.8         | 3.4              |
| 46-50                                    | 3.1           | 5.7         | 4.1              |
| Total number of prior arrests            |               |             |                  |
| 0  | 48.4          | 46.2        | 44.7             |
| 1  | 16.3          | 16.3        | 9.6              |
| 2  | 11.6          | 5.8         | 11.5             |
| 3  | 3.7           | 7.2         | 7.7              |
| 4 or more                                | 20.1          | 24.8        | 26.4             |
| Number of prior arrests for drug crimes  |               |             |                  |
| 0  | 90.2          | 86.5        | 83.2             |
| 1  | 3.7           | 8.2         | 10.6             |
| 2 or more                                | 6.1           | 5.3         | 6.3              |
| Number of prior arrests for sex offenses |               |             |                  |
| 0  | 76.7          | 82.7        | 88.9             |
| 1  | 12.1          | 10.1        | 5.8              |
| 2 or more                                | 11.1          | 7.3         | 5.3              |
| Number of arrests for violent offenses   |               |             |                  |
| 0  | 85.1          | 84.1        | 71.6             |
| 1  | 7.0           | 7.7         | 17.3             |
| 2 or more                                | 8.1           | 7.8         | 11.1             |
| Number of prior arrests for misdemeanors |               |             |                  |
| 0  | 82.3          | 71.6        | 76.9             |
| 1  | 12.1          | 9.1         | 11.5             |
| 2 or more                                | 5.7           | 19.3        | 11.6             |
| Number of arrests for property crimes    |               |             |                  |
| 0  | 79.1          | 80.8        | 68.8             |
| 1  | 9.3           | 12.0        | 15.4             |
| 2 or more                                | 11.8          | 7.3         | 16.0             |
| Total number of prior convictions        |               |             |                  |
| 0  | 70.7          | 68.4        | 57.8             |
| 1  | 13.0          | 15.0        | 16.2             |
| 2 or more                                | 16.4          | 16.7        | 26.0             |
|  |               |             |                  |
|  |               |             |                  |

**Table A3: Probation Condition Predictors in Each County  
(Valid Percentages)**

| Predictors   | Dupage County | Lake County | Winnebago County |
|--|---------------|-------------|------------------|
| <b>No contact with the victim</b>                  |               |             |                  |
| Yes, no unsupervised or supervised contact Allowed | 46.7          | 66.7        | 52.4             |
| Yes, only unsupervised contact not allowed         | 8.6           | 10.1        | 16.8             |
| Not a condition                                    | 44.8          | 23.2        | 30.8             |
| <b>No contact with minors</b>                      |               |             |                  |
| Yes, no unsupervised or supervised contact Allowed | 19.8          | 22.6        | 11.6             |
| Yes, only unsupervised contact not allowed         | 8.2           | 26.9        | 11.6             |
| Not a condition                                    | 72.0          | 50.5        | 76.8             |
| <b>Number of months in jail</b>                    |               |             |                  |
| 1 day –1 month                                     | 34.7          | 29.9        | 17.0             |
| 2 months - 5 months                                | 45.8          | 28.4        | 38.3             |
| 6 months - 9 months                                | 16.7          | 22.4        | 38.3             |
| 10 months or more                                  | 2.8           | 19.4        | 6.4              |
| <b>Number of hours of community service</b>        |               |             |                  |
| 1 hour – 100 hours                                 | 70.0          | 60.6        | 68.6             |
| 101 hours – 200 hours                              | 23.3          | 36.6        | 14.3             |
| 201 hours or more                                  | 6.7           | 2.8         | 17.1             |
| <b>Type of probation program</b>                   |               |             |                  |
| Standard   | 51.2          | 50.0        | 49.5             |
| Specialized  | 48.8          | 50.0        | 50.5             |
|  |               |             |                  |
|  |               |             |                  |

**Table A4: Characteristic of Offense Predictors in Each County**  
**(Valid Percentages)**

| Predictors   | Dupage County | Lake County | Winnebago County |
|--|---------------|-------------|------------------|
| <b>Statutory Type of Offense</b>                                     |               |             |                  |
| Aggravated Criminal Sexual Assault                                   | 0.5           | 0.0         | 0.0              |
| Criminal Sexual Assault  | 7.4           | 10.6        | 21.6             |
| Aggravated Criminal Sexual Abuse                                     | 30.7          | 37.0        | 53.4             |
| Criminal Sexual Abuse/Indecent Exposure/Solicitation of a Prostitute | 15.8          | 18.3        | 13.9             |
| Public Indecency   | 29.8          | 17.8        | 5.8              |
| Other Sex Offense  | 15.8          | 16.3        | 5.3              |
| <b>Total Number of Charges</b>                                       |               |             |                  |
| 1  | 57.2          | 37.0        | 51.7             |
| 2  | 20.3          | 25.5        | 30.2             |
| 3  | 12.3          | 14.1        | 9.9              |
| 4  | 5.3           | 12.5        | 2.9              |
| 5 or more  | 4.6           | 10.7        | 5.2              |
| <b>Number of Victims</b>   |               |             |                  |
| 1  | 72.1          | 76.1        | 77.2             |
| 2 or more  | 27.9          | 24.1        | 22.8             |
| <b>Relationship of Offender to Victim</b>                            |               |             |                  |
| Father   | 4.8           | 1.5         | 8.4              |
| Uncle  | 4.8           | 4.0         | 10.3             |
| Grandfather  | 2.9           | 1.0         | 2.5              |
| Stepfather   | 4.8           | 11.9        | 11.3             |
| Other relative   | 2.4           | 8.0         | 14.3             |
| Unrelated  | 80.2          | 73.6        | 53.2             |
| <b>Gender of Victim</b>  |               |             |                  |
| Boy  | 21.4          | 14.0        | 7.6              |
| Girl   | 73.1          | 82.0        | 86.8             |
| Both boys and girls  | 5.5           | 4.0         | 5.6              |
| <b>Age of Youngest Victim</b>  |               |             |                  |
| 1 day –5 years   | 11.5          | 8.7         | 9.0              |
| 5.1 years - 10 years   | 14.7          | 17.9        | 25.5             |



|  |      |      |      |
|--|------|------|------|
| 10.1 years to 15 years                 | 37.8 | 49.1 | 48.4 |
| 15.1 years to 20 years                 | 25.0 | 17.3 | 13.3 |
| 20.1 or more                           | 6.9  | 10.9 | 3.8  |
| <b>Whether an Offender Used Force</b>  |      |      |      |
| Yes                                    | 14.8 | 20.5 | 20.8 |
| No                                     | 85.2 | 79.5 | 79.2 |
| <b>Whether Penetration Occurred</b>    |      |      |      |
| No                                     | 64.7 | 54.9 | 42.3 |
| Yes, vaginal                           | 20.4 | 25.0 | 38.8 |
| Yes, oral                              | 8.0  | 5.4  | 5.0  |
| Yes, anal                              | 0.0  | 1.0  | 1.5  |
| Yes, unspecified                       | 0.0  | 1.0  | 0.0  |
| Yes, both oral and vaginal             | 2.5  | 8.3  | 7.5  |
| Yes, both oral and anal                | 1.5  | 2.0  | 0.5  |
| Yes, both anal and vaginal             | 2.0  | 1.5  | 3.0  |
| Yes, vaginal, oral, and anal           | 1.0  | 1.0  | 1.5  |
| <b>Number of Months Abuse Occurred</b> |      |      |      |
| 1 time – 2 months                      | 50   | 52.4 | 52.4 |
| 2.1 months to 12 months                | 20   | 16.4 | 20.7 |
| 12.1                                   | 30   | 31.2 | 26.9 |
| <b>Profile of Sex Offending</b>        |      |      |      |
| Only Hands-On                          | 57.2 | 67.8 | 88.0 |
| Only Hands-Off                         | 24.7 | 15.9 | 5.3  |
| Both Hands-On and Hands-Off            | 18.1 | 16.3 | 6.7  |
|  |      |      |      |
|  |      |      |      |

**Table A5: Clinical Presentation Predictors in Each County  
(Valid Percentages)**

| Predictors   | Dupage County | Lake County | Winnebago County |
|--|---------------|-------------|------------------|
| <b>Responsibility For Offense</b>                                    |               |             |                  |
| Fully accepted responsibility for all aspects of the offense         | 36.8          | 23.9        | 20.2             |
| Minimizes personal responsibility                                    | 29.7          | 30.3        | 25.1             |
| Minimizes personal responsibility/<br>blames victim or circumstances | 22.5          | 32.4        | 35.0             |
| Denies offense   | 11.0          | 13.3        | 19.7             |
| <b>Remorse For Offense</b>   |               |             |                  |
| Expresses great remorse  | 53.5          | 28.5        | 23.6             |
| Expresses minimal remorse  | 25.9          | 45.3        | 34.8             |
| Expresses no remorse   | 16.5          | 21.2        | 33.7             |
| Defends offense or similar activities                                | 4.1           | 5.0         | 7.9              |
| <b>To Whom Offender Attributes<br/>Responsibility</b>                |               |             |                  |
| Most blame on victim   | 23.1          | 35.4        | 37.3             |
| Some blame on victim   | 36.0          | 40.9        | 38.9             |
| Accepts blame  | 40.9          | 23.8        | 23.8             |
| <b>Reporting of undetected sex crimes</b>                            |               |             |                  |
| No   | 53.5          | 55.3        | 77.9             |
| Yes  | 32.6          | 29.3        | 10.6             |
| Unknown  | 14.0          | 15.4        | 11.5             |
|  |               |             |                  |

**Table A6: Psychological and Social Adjustment Predictors in Each County**

(Valid Percentages)

| Predictors   | Dupage County | Lake County | Winnebago County |
|--|---------------|-------------|------------------|
| <b>Whether Offender Disclosed Drug/Alcohol Use</b>                               |               |             |                  |
| <b>Prior to Offense</b>  |               |             |                  |
| No   | 11.9          | 15.2        | 12.3             |
| Yes, alcohol   | 42.6          | 27.9        | 35.3             |
| Yes, illicit drugs   | 1.0           | 3.4         | 1.0              |
| Both alcohol and drugs   | 44.6          | 53.4        | 51.5             |
| <b>Whether Substance Abuse was Recommended by Therapist or Probation Officer</b> |               |             |                  |
| No   | 78.7          | 78.8        | 67.7             |
| Yes  | 21.3          | 21.2        | 32.3             |
| <b>Prior Treatment for Substance Abuse</b>                                       |               |             |                  |
| No   | 78.9          | 78.0        | 73.1             |
| Yes  | 21.1          | 22.0        | 26.9             |
| <b>Prior Mental Health Treatment</b>   |               |             |                  |
| No   | 70.4          | 67.8        | 79.4             |
| Yes  | 29.6          | 32.2        | 20.6             |
| <b>Presence of Clinical Depression</b>   |               |             |                  |
| No   | 80.5          | 61.1        | 91.7             |
| Yes  | 19.5          | 38.9        | 8.3              |
| <b>Presence of a Major Mental Illness</b>  |               |             |                  |
| No   | 57.7          | 38.5        | 63.5             |
| Yes  | 22.8          | 51.0        | 24.5             |
| Unknown  | 19.5          | 10.6        | 12.0             |
| <b>History of Suicidal Thoughts of Attempts</b>                                  |               |             |                  |
| No thoughts/No attempts  | 72.1          | 76.1        | 84.2             |
| Thoughts/No attempts   | 19.4          | 13.6        | 5.3              |
| Thoughts/History of attempts   | 8.5           | 10.3        | 9.9              |
| History of attempts/Presently planning   | 0.0           | 0.0         | 0.7              |
| <b>History of Impulsive/Compulsive Behavior</b>                                  |               |             |                  |
| Little evidence  | 46.2          | 30.0        | 62.6             |
| Occasional impulsive   | 28.2          | 44.4        | 26.8             |
| History compulsive   | 14.7          | 15.0        | 9.5              |
| Documented history impulsive/compulsive  | 10.9          | 10.6        | 1.1              |
| <b>History of Abuse as a Child</b>   |               |             |                  |
| None   | 75.0          | 63.5        | 73.7             |

|  |      |      |      |
|--|------|------|------|
| Sexual   | 10.9 | 12.9 | 11.9 |
| Physical   | 9.6  | 11.2 | 7.7  |
| Both sexual and physical                         | 4.5  | 12.4 | 6.7  |
| <b>Social Support System</b>                     |      |      |      |
| Significant others/relies on others for support  | 70.7 | 48.9 | 53.6 |
| Limited support/generally left alone             | 25.5 | 38.4 | 35.5 |
| Significant others contributes to deviancy       | 3.7  | 12.1 | 8.7  |
| Involved/interested in criminal support group    | 0.0  | 0.5  | 2.2  |
| <b>Whether in a Sexually Active Relationship</b> |      |      |      |
| No   | 31.9 | 36.5 | 41.4 |
| Yes  | 68.1 | 63.5 | 58.6 |

**Table A7: Sexual Preferences of Fantasies Predictors in Each County**

(Valid Percentages)

| Predictors   | Dupage County | Lake County | Winnebago County |
|--|---------------|-------------|------------------|
| <b>Sexual Orientation</b>                                |               |             |                  |
| Heterosexual   | 74.9          | 81.0        | 90.6             |
| Bisexual   | 18.2          | 14.4        | 7.4              |
| Homosexual   | 6.9           | 4.6         | 2.0              |
| <b>Number of paraphilia</b>                              |               |             |                  |
| Single paraphilia/one sex                                | 60.9          | 65.4        | 78.4             |
| Single paraphilia/both sexes                             | 11.2          | 10.6        | 7.7              |
| Two paraphilia/1 sex or three paraphilia/1 sex           | 18.1          | 14.9        | 8.7              |
| Two paraphilia/both sexes or three paraphilia/both sexes | 9.8           | 9.1         | 5.3              |
| <b>Deviant Urges/Fantasies</b>                           |               |             |                  |
| Deviant thoughts spoken openly                           | 46.2          | 34.9        | 4.3              |
| Deviant thoughts minimized/hidden                        | 20.5          | 46.5        | 26.1             |
| Denies deviant thoughts                                  | 33.3          | 18.6        | 69.6             |
| <b>Sexually Aroused by Minors</b>                        |               |             |                  |
| No   | 76.4          | 77.5        | 71.7             |
| Yes  | 23.6          | 22.5        | 28.3             |
| <b>Fantasizes About hands -Off Offenses</b>              |               |             |                  |
| No   | 64.0          | 74.4        | 87.4             |
| Yes  | 36.0          | 25.6        | 12.6             |
| <b>Admits Other Deviant Sexual Fantasies</b>             |               |             |                  |
| No   | 84.0          | 79.2        | 97.8             |
| Yes  | 16.0          | 20.8        | 2.2              |

**Table A8: Psychopathic Deviant Predictors in Each County  
(Valid Percentages)**

| Predictors                                | Dupage County | Lake County | Winnebago County |
|---|---------------|-------------|------------------|
| <b>Is Offender a Psychopathic Deviant</b> |               |             |                  |
| No  | 17.2          | 27.9        | 20.2             |
| Yes                                       | 0.9           | 15.9        | 0.5              |
| Unknown                                   | 81.9          | 56.3        | 79.3             |
|   |               |             |                  |

**Table A9: Sadistic Behavior Predictors in Each County  
(Valid Percentages)**

| Predictors                  | Dupage County | Lake County | Winnebago County |
|-----------------------------|---------------|-------------|------------------|
| <b>Is Offender a Sadist</b> |               |             |                  |
| No                          | 69.3          | 60.1        | 79.3             |
| Yes                         | 5.6           | 19.2        | 3.4              |
| Unknown                     | 25.1          | 20.7        | 17.3             |
|                             |               |             |                  |