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The Outcomes of Hospitalized and Incarcerated Sex Offenders: A Study of Offender Types, Recidivism Rates, and Identifying Characteristics of the Repeat Offender

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THE OUTCOMES OF HOSPITALIZED AND INCARCERATED SEX OFFENDERS:
A STUDY OF OFFENDER TYPES, RECIDIVISM RATES, AND IDENTIFYING
CHARACTERISTICS OF THE REPEAT OFFENDER

by

Francine R. Rattenbury

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

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1985

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Finally, the author dedicates this work to her husband, Dr. Joseph Hermes, who comprehends the significance of her efforts to master the problems addressed herein, and who maintained a ready supply of support and encouragement during all stages of this project.

VITA

The author, Francine Ruth Rattenbury, is the daughter of Bartrum Lynn Rattenbury and Peggy (Kojima) Rattenbury. She was born April 24, 1953, in Fukuoka, Japan.

Her elementary education was obtained at United States Air Force schools in Japan, and public schools of Syracuse, New York and Victorville, California. She obtained her secondary education at Suitland Senior High School, Suitland, Maryland and at Plano High School, Plano, Illinois, where she graduated in 1971.

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Most recently, Ms. Rattenbury has been accepted for a two-year postdoctoral fellowship in the Clinical Research Training Program in Adolescence sponsored by the University of Chicago, Michael Reese Medical Center, and the Illinois State Psychiatric Institute.

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CHAPTER I

INTRODUCTION

Although the overall reported incidence of violent crime in the United States has shown a downward trend since 1981, examination of individual types of violent crime reveals no such decline in the incidence of sexual assault. According to the Federal Bureau of Investigation's (FBI) Uniform Crime Report (1984), the number of violent crimes reported to the police dropped 5% from 1982 to 1983. Within the overall category of violent crime, the reported incidence of murder dropped 8%, robbery dropped 8%, and aggravated assault dropped 2%. There was no change in the frequency of reported forcible rape, broadly defined as attempted or actual carnal knowledge of a female, forcibly and against her will.

Results of the National Crime Survey (NCS), which measures both reported and unreported victimizations of individuals age 12 or older, are consistent with the FBI's report indicating a downward trend in overall violent crime but no corresponding decline in frequency of sexual assault. A comparative examination of NCS results from 1982 to 1983 shows an 8.8% decline in number of violent crime victimizations, representing a 9.8% decrease in victimization rate per 1,000 households (Bureau of Justice Statistics, 1984). These differences in frequency and rate of violent crime victimization are statistically significant at

the 95% confidence level. Among the three NCS-measured violent crimes, victimization rates in the subcategories of robbery and assault showed significant declines of 19.1% and 7.6%, respectively. The victimization rate for rape, defined in the NCS as the attempted or actual sexual assault of a person 12 years of age or older, did not show a corresponding change. Rather, the victimization rate for rape showed a nonsignificant increase of 4.9%, or no change from 1982 to 1983.

In sum, while the incidence of violent crime in general has shown a recent downward trend, the specific violent offense of sexual assault has continued to occur at a steady rate. Surveys of victimization rates, which reflect the incidence of both reported and unreported crime, do not support the interpretation that increased willingness to report sexual assaults might be masking a downward trend in their actual incidence. In fact, a preliminary estimate of the reporting rate for rape in 1983 indicates a 33.9% decline from the reporting rate in the previous year (Bureau of Justice Statistics, 1984).⁵

Regarding the actual volume of sexual assaults in the United States, in 1983 an estimated 154,000 rapes and attempted rapes of adolescent and adult women occurred (Bureau of Justice Statistics, 1985). This figure corresponds to approximately one sexual assault per 600 females aged 12 and over. These numbers do not include the sexual assault of children, nor do they include attacks that involved both sexual assault and death of the victim. The latter type of offense would be considered, for statistical purposes, as homicide.

In a study of all cases of female rape reported in the National Crime Survey from 1973 through 1982, the Bureau of Justice Statistics

(1985) found that in at least 25% of these incidents, a weapon was used by the offender. Thirty-eight percent of the victims received physical injuries in addition to the rape or attempted rape itself.

It is evident that sexual assault continues to be a serious problem in the United States. Although the finding that the incidence of sexual assault has shown no increase thus far in the current decade may be heartening, it is on the other hand alarming to note the contrast between rates for rape and those for other violent offenses. One interpretation of the discrepancy in these trends is that sexual victimization has been relatively unresponsive to those social, legal, and other influences which have led to declines in the rates for other types of violence.

Reduction in the incidence of sexual assault is the major problem addressed by the present study. Currently, several approaches to this problem are in existence, with primary prevention as probably the most prominent among them. Unlike primary prevention, which largely emphasizes ways in which potential victims might avoid sexual assault, the present study focuses on prevention of further sex offending by already-identified offenders, and addresses three major areas:

1. Clarification of views regarding the characteristics of convicted sex offenders and their offenses;
2. The treatability of sex offenders; and
3. The development of statistical predictors of recidivism among sex offenders.

Characteristics of Sex Offenders and Their Offenses

One aim of the current study is to contribute to the body of descriptive literature on sex offenders and on criminal sexual behavior. Although much has been written on these topics, a great deal of the literature consists of generalizations derived from subjective impressions. Observations derived from more systematically obtained data are often limited in their generalizability, because they usually pertain to highly selected subgroups (Pacht, 1976). The specificity of these research observations is largely due to the fact that sample composition is defined by legal criteria, which vary with jurisdiction. As noted by Monahan and Davis (1983), most research on Mentally Disordered Sex Offenders (MDSOs) has been conducted in one jurisdiction (California), so that generalizations with regard to this group are particularly tenuous.

The sample specificity of research results from studies of sex offenders need not be an insurmountable problem. Rather, the recognition of this methodological difficulty highlights a need for replication of studies across multiple jurisdictions (Monahan & Davis, 1983), and for clear elaborations of sample composition in the presentation of research results. Also helpful would be avoidance of using the legal description of the offense in assigning subjects to groups, and using instead a description of the actual crime as recorded by police or other investigators. In addition, the likelihood of obtaining comparability of results across studies would be greatly enhanced by the adoption of some consistencies in terminology and methods of study among theorists

and researchers. In its current condition, the literature on sex offenders is striking in its lack of cohesion. Apparent inconsistencies between results across various studies can often be traced to variations in usage of terms such as "rape" and "pedophilia", or else cannot be resolved at all due to incomplete descriptions of methodology.

Despite these methodological variations, most researchers would probably agree that sex offenders are a heterogeneous group (Pacht, 1976; Quinsey, 1983; Slovenko, 1973), with wide variations in backgrounds, personality traits, methods of offending, and likelihood of future criminality. A number of typologies have been developed in efforts to identify more homogeneous subgroups of offenders, with use of victim characteristics as perhaps the most common among them. That is, the victim's age and relationship to the offender are characteristics generally used to classify the offender as a rapist, pedophile, or incest perpetrator.

Empirically-derived information regarding the personal histories and demographic characteristics of these sex offender subtypes would be of use in identification of variations in the needs of these individuals, so that appropriate treatment and rehabilitative strategies can be planned accordingly. Likewise, further information about the context in which sexual assault occurs, and the actual behaviors involved in criminal sexual assault, would aid in identification of problems to be addressed in programming for sex offenders. "Context" here refers to both environmental context, such as location of assault, and personal context, such as stressful life events which may precipitate assaultive behavior.

Treatability of Sex Offenders

As noted by Monahan and Davis (1983), the diversion of mentally disordered sex offenders (MDSOs) from the criminal justice system to the mental health system has been a subject of controversy since Michigan enacted this country's first "sex psychopath" statute in 1937. The evolution of these statutes has been linked to the development of sophisticated mass media, which made possible the widespread publicity of brutal sex crimes, thus increasing the public's anxiety about such offenses. In addition, the impressions of psychoanalysis and sexuality presented by mass media promoted the belief that most forms of sexual deviation should be treated (Group for the Advancement of Psychiatry, 1977).

At one time, more than half the states had enacted some form of MDSO statute (Slovenko, 1973). There currently exists a strong trend toward repeal of such statutes, which have been attacked on both legal and clinical grounds. Legally, these statutes have often been attacked on the basis of procedural inadequacies which are said to deny protection of individual rights (Brakel & Rock, 1971). From a clinical standpoint, a common criticism of these statutes is that the efficacy of treatment for sex offenders has not been demonstrated. Legal and clinical issues often overlap in the case of MDSO statutes: Courts have ruled that absence of treatment would render commitment punitive to an excessive degree, and therefore unconstitutional (Cohen, Groth, & Siegel, 1978).

Common barriers to effective sex offender treatment program evaluations include financial constraints that limit the possible scope of

the study, legal constraints on the employment of experimental designs, and difficulties in obtaining appropriate comparison groups for quasi-experimental approaches. As noted by Glaser (1978), an obvious risk in employment of comparison groups is that the groups may differ in respects that significantly affect the outcome measured, perhaps more than does the treatment itself.

While acknowledging these methodological difficulties, the Group for the Advancement of Psychiatry (1977), in perhaps the most influential report on the question of MDSO disposition, noted that possibilities for carrying out more effective research strategies have always existed, and that the repeal of MDSO statutes cannot be considered premature on the basis of a need for further research.

Given the current trend toward repeal of MDSO statutes, the practical utility of continued research on treatment efficacy may appear questionable. Approximately 19 states, however, have maintained their MDSO statutes (Favole, 1983), and results of program evaluations could serve to inform policy makers on the question of their continued operation. In the states that do not currently have provisions for treatment of sex offenders, research results could clarify the choice of whether to enact, or re-enact, such statutes (Monahan & Davis, 1983).

Prediction of Recidivism

The third major problem addressed by the current study is the paucity of empirical data regarding the course of sex offenders' criminal careers. Lack of knowledge regarding criminal careers in general has been recently noted by the Bureau of Justice Statistics (BJS,

1983a). As also noted by the BJS, policies and proposals for reducing the national crime rate are often based upon assumptions about criminal careers, despite lack of empirical support for such assumptions. One obvious remedy for lack of knowledge in this area is the conduction of methodologically sound followup studies. As noted long ago by Gray and Mohr (1965), "In the quest for judicial procedures which give a maximum of protection to society with a minimum of human waste, follow-up studies have an important role in determining the natural history of specific forms of socially unacceptable behavior" (p. 742).

Of particular interest in the current study is the identification of those sex offenders who are most likely to repeat their crimes. Such individuals have generally been labeled "career criminals" or "habitual offenders" and, although comprising a relatively small portion of the offender population, they account for a disproportionately large percentage of crimes (Rabkin, 1979; Tracy, Donnelly, Morgenbesser, & Macdonald, 1983). A current focus of the criminal justice system is on the establishment of specialized programs for "career criminals", in an effort to reduce the overall crime rate. Further research on the identifying characteristics of the repeat offender would aid in the process of selecting appropriate candidates for such programs.

In the past, a number of states have routinely provided specialized treatment to selected sex offenders. Although the legal criteria for inclusion in such programs have varied, candidate selection has generally been based on evidence of mental disorder that underlies the deviant sexual behavior. More recently, many states have abandoned differential processing of sex offenders. In states that have retained

their "Mentally Disordered Sex Offender" laws, the observation that certain offenders have a relatively low risk of reconviction with or without treatment, combined with scarcity of resources, has led to recommendations that specialized treatment be restricted to only those who are most likely to reoffend (e.g., Florida Mental Health Institute, 1984).

Psychiatric expertise in the clinical prediction of recidivism is generally recognized as inadequate (Group for the Advancement of Psychiatry, 1977; Quinsey, 1983). Despite the fact that development of reliable statistical predictors has long been encouraged (Dix, 1976; Gray & Mohr, 1965; Group for the Advancement of Psychiatry, 1977), systematic and methodologically sound research in this area has been scant. The present state of knowledge regarding sex offender recidivism cannot adequately meet either the criminal justice system's call for "career criminal" identification or the mental health system's need for narrowed referral criteria.

CHAPTER II

REVIEW OF THE RELATED LITERATURE AND STATEMENT OF HYPOTHESES

Characteristics of Sex Offenders Receiving Specialized Treatment

In 1965, the Wisconsin State Department of Public Welfare's Bureau of Research published a descriptive study of 1,110 male sex offenders found to be in need of specialized treatment during the state Sex Crimes Law's first 11 years of operation, between 1951 and 1962. The statistics compiled reflect the characteristics of 209 sex offenders who were given probationary sentences with stipulated outpatient or inpatient psychiatric treatment, as well as those of the 901 sex offenders who were given institutional sentences. Comparable statistics were not provided for the institutionalized offenders alone, nor were they provided for the 1,011 sex offenders who, during the same time period, were also examined but not recommended for specialized treatment.

During the time span covered by the Wisconsin Department of Public Welfare (1965) study, the State Sex Crimes Law required pre-sentence examinations for all individuals convicted of rape, attempted rape, sexual intercourse without consent, attempted sexual intercourse without consent, or indecent behavior with a child. Also eligible for pre-sentence examination were individuals who were considered to be sexually

motivated in the commission of nonsexual offenses. The purpose of the pre-sentence examination was to determine whether the offenders were "deviated", that is, in need of specialized treatment.

Between July 27, 1951 and June 30, 1962, the Department of Public Welfare conducted 2,125 pre-sentence examinations. The great majority of the offenders examined had been convicted of overtly sexual crimes. Less than 8% had been convicted of non-sexual offenses such as arson. Of the total number of sex offenders examined, 1,114 were found to be deviated; in all but 4 of these cases, the court disposition reflected the Department's recommendation, that is, the offenders were sentenced either to probation with stipulated treatment, or to institutional treatment. Initially, the State had no inpatient facility for treatment of sex offenders. Eventually, a treatment facility was established within an existing prison, the State Prison at Waupun.

The median age range of offenders committed to the Department for specialized treatment was 25 to 34 years, with 32% in this age category. Twenty-two percent were under age 25; 23% were between 35 and 44 years; 15% were between 45 and 54 years; and 8% were over 54 years of age.

At least 89% were white; 40% were married, and 44% had never married; and 42% had completed over 9 years of schooling. Eleven percent had a history of psychiatric hospitalization. Most (84%) had no known prior psychiatric treatment. At least 69% were described as having average or above-average levels of intelligence. The method for estimating intelligence level was not described.

Regarding prior criminal histories, 64% of the committed offenders had no known prior sex crime convictions. Twenty-seven percent had pre-

viously served time in adult correctional institutions. Sixty percent had no prior correctional experience as adults, and 89% had no juvenile criminal record. "Correctional experience" was undefined; it is unknown whether records of arrest were included as correctional experience.

Information pertaining to victims was presented for 1,052 cases. Excluded were cases for which there were "no specific victims", presumably those cases with multiple victims. The data presented contained some discrepancies; for example, in 12 cases with adult victims, the offenders were grouped in the offense categories of "indecent behavior with a child" or "enticing a child for immoral purposes." Summary statistics indicate that for the subsample with available data in this area, 62% of the victims were female; 80% were under age 18, with 27% under age 10; 17% were paternal incest victims, assaulted by their natural fathers or step-fathers. Forty-seven of the victims were adult males with whom the offenders had been convicted of sexual perversion; this subcategory of offense may contain instances of homosexuality between consenting adults.

In summary, the earliest group of Wisconsin sex offenders receiving specialized treatment were primarily white males who had assaulted either children or adolescents. More than one-third had selected male victims. There was wide variation in the ages of the offenders, with 54% having committed the current offense during young adulthood, before age 35. More than half had no education beyond junior high school, although most were apparently of at least average intelligence. More than half were currently or formerly married. Few of the offenders had received any sort of psychiatric treatment in the past. Nearly two-

thirds were first sex offenders. Few had any record of juvenile delinquency, and less than half had any prior adult correctional experience.

A second major treatment program for sex offenders is located at Atascadero State Hospital in California. In Frisbie's (1965) followup study of 1,921 treated sex offenders discharged from Atascadero from July 1954 through June 1960, some of the characteristics of those individuals are summarized. All of the patients in this study were discharged as "improved", and most (83%) were released directly to supervision in the community. During the time period covered by the study, treatment was available to the "sexual psychopath", a sex offender determined to be both predisposed toward commission of sex offenses, and a menace to the health and safety of others. In addition, treatability was required for sexual psychopath status. Evaluations for sexual psychopathy were mandatory for certain sex offenses involving children under age 14. Commitment under the sexual psychopath law was indeterminate, and release was contingent upon cessation of dangerousness. Upon release from commitment, the offender was returned to court for resumption of criminal proceedings.

In Frisbie's (1965) group of "improved" offenders, 80% were reported to have assaulted children or adolescents. The precise victim age criterion for classification in this category was not reported, but those who assaulted "late teenagers" were included. Also included was a large proportion of incest offenders, who made up as much as one-third of this group. Included among the remaining offenders were rapists, exhibitionists, voyeurs, transvestites, and "lewd persons".

The median age of the offenders varied with type of offense and age of victim. Among pedophiles with female victims, the median age was 41 years when the victim was under age 12; the median age was 29 years when the victim was over age 12. A median age of 33 was found for pedophiles who selected male victims. Rapists were described as "youngest of all," but no median age was reported.

Comparisons with statistics for the adult male population of California revealed that the Atascadero patients were disproportionately white, less likely to be currently married, and 1 1/2 years less educated. The mean age of the patients was 4.7 years younger, and there were more blue collar workers than would be expected.

Marital status within the patient sample varied with sex of the victim, with those in the group who assaulted boys being most likely to be single. The median number of years of education was 10.3 years. Forty percent were skilled or semi-skilled craftsmen. Sixteen percent were professional, managerial, supervisory, or sales-clerical workers.

As did Wisconsin's (1965) study of sex offenders receiving specialized treatment between 1951 and 1962, Frisbie's (1965) study contained a large proportion of sexual psychopaths who had committed offenses against children and adolescents. Further direct comparisons are difficult to make due to discrepant methods of presenting summary statistics. In the Frisbie study, rapists tended to be younger than pedophiles. Ages of pedophiles varied widely, with the oldest being those who assaulted female children, the youngest being those who assaulted female adolescents, and homosexual pedophiles being in the mid-range of age. The sample was said to contain disproportionately large numbers of

white and single individuals, and was also younger and less educated than the overall adult male population of California at that time.

Further information regarding characteristics of sex offenders treated in California was provided by Dix (1976), who published a study of 130 sex offense cases selected randomly from admissions to Atascadero during 1967, 1972, and 1974. Since Frisbie's (1965) subjects were discharged, the wording of California's sex offender law had changed such that "Mentally-Disordered Sex Offender" (MDSO) replaced "Sexual Psychopath", and "danger" (to the health and safety of others) replaced "menace". Essentially, during the time period covered by Dix's (1976) study, an individual convicted of any offense could be committed to the Department of Health for treatment if, by reason of mental defect, disease, or disorder, the offender were predisposed to the commission of sexual offenses to the extent of being dangerous to others.

The types of sex offenses committed by subjects in Dix's study are difficult to ascertain precisely, since classification criteria were not clearly stated. Although the "most serious" form of activity involved during commission of the current offense was to be the critical determinant of offense type, many of the cases classified as child "molestation" actually involved oral-genital contact or penetration. Absence of a stated age criterion for classification of a victim as a "child" lends further ambiguity to the findings.

It was reported that 70% of these committed offenders were classified as child molesters, and 18% of the remainder had engaged in forcible rape, forcible sodomy, or forcible oral copulation with victims. Whether the latter subgroup was restricted to adult victimizations or

not is unknown. In 3% of the cases the offender had engaged in exhibitionism, and less than 1% (1 offender) had engaged in incest. One offender was a voyeur, and one had made obscene phone calls. Six percent of the offenses were not directly sexual in nature. None of the cases were statutory rape cases.

The subgroup of "child molesters" was more closely examined. Regarding sex of the victims, 62% had assaulted only females, 34% had assaulted only males, and 4% had assaulted both male and female children during commission of the current offense. Assaults were limited to physical touching in 42% of the cases. In 32% of the cases, vaginal or anal penetration was achieved. Oral-genital contact was the most "serious" form of sexual activity involved in 26% of the cases. The means of implementing the assault was also rated. In 65% of the cases, neither force nor threat of force was used; 18% threatened to employ force or inflict injury; 18% actually used force, or caused injury to the children.

Prior criminal histories were examined for the total sample, and were available for all but one subject. The results indicated that 53% of the offenders had no prior sex crime convictions. Closer examination of their files revealed that within the subsample of 69 offenders with no official prior sex crime convictions, a substantial proportion - 74% - had previously engaged in criminal sexual behaviors which had not resulted in convictions. As Dix (1976) concluded, then, only a small proportion - 14% or less - of these MDSO's were committed to specialized treatment after only one incident of criminal sexual behavior, even though 53% had never before been convicted of such actions.

Also examined were the court-appointed physicians' reports, upon which court decisions regarding commitment to MDSO status were largely based. Dix found that the physicians relied heavily upon the social histories written by probation officers, with few inferences drawn from clinical observations in the interview. Dix also perceived substantial confusion among examiners regarding the impact of intoxicants upon MDSO determination, and observed that some examiners ruled out MDSO status because of offender intoxicant abuse. Also in the examiners' reports, there was uniform failure to articulate the likelihood of future sexual misconduct.

Regarding the criterion of presence of mental defect, disease, or disorder, comparisons of examiners' reports revealed a divergence of opinion regarding the necessity of an official psychiatric illness for MDSO status; some examiners apparently considered this criterion satisfied if the offender showed anything "abnormal" in his behavior or development. Most, however, did assign a DSM (American Psychiatric Association, 1968) diagnosis to those offenders recommended for MDSO status, usually a personality disorder. Many child molesters were labeled "passive-aggressive personality". No further data regarding diagnoses were presented by Dix (1976).

Regarding length of treatment, the offenders committed in 1967 were hospitalized from 5 to 24 months, with the highest percentage (40%) falling in the 13- to 16-month range. Offenders committed in 1972 tended to have longer hospital stays, with 44% in the 13- to 20-month hospitalization range and 26% still hospitalized at two years after admission in 1974, when the study was conducted.

To summarize Dix's (1976) results concerning the characteristics of California's MDSOs in the late 1960's and in the 1970's, most, like Wisconsin's "deviated" sex offenders, were apparently involved in offenses against children or adolescents, and more than one-third had selected male victims. Instances in which the sex crimes law was used to process non-sexual offenders were relatively rare, as were incest cases. As in the Wisconsin study, somewhat more than half had no prior sex offense convictions. Further examination, however, revealed that at most, only 14% had never engaged in criminal sexual behavior before the current offense.

Many offenders received initial diagnoses of personality disorder, including pedophiles, who were most often labeled as passive-aggressive. More than half of the pedophiles went beyond physical touching in their contacts with victims, with approximately one-third engaging in penetration. In most cases, the pedophiles used no physical force or violence (beyond the violence of the offense itself) in order to implement the assaults.

Dix (1976) did not address the racial composition of Atascadero patients, and Frisbie (1965) did not provide any numerical data with respect to race. In a comparative study of black and white residents of Los Angeles County committed to Atascadero between January, 1965 and May, 1966, Kirk (1975) found that 12.4% of the patients were black; 10% were Chicano; 75.5% were white; and 2.1% were of other racial origin. When compared with the overall racial composition of Los Angeles County residents at that time, the proportion of black MDSOs approximated the expected percentage.

Kirk (1975) attempted to identify differences between black and white MDSOs regarding the nature of their sexual offenses. When he controlled for social class as indicated by occupational status, however, no differences emerged with respect to age or sex of victim.

The alcohol consumption of Atascadero patients has also been studied. Rada, Kellner, Laws, and Winslow (1979) assessed both alcohol consumption at the time of offense and alcoholism in 382 MDSOs. Although offense categories were not defined, the authors reported that 53% of the patients were pedophiles, 32% were rapists, 9% were incest offenders, and 6% were exhibitionists. The mean age of the sample was 32.2 years, and 77% were white. Twenty percent had completed one or more years of college. Thirty-two percent were married at the time of the offense.

Data regarding drinking at the time of the offense were obtained by self-report, via a questionnaire which also asked whether the patient had been drinking heavily (more than 9 beers, or the equivalent in other alcoholic substances), moderately (5 to 9 beers), or lightly (less than 5 beers). Presence of alcoholism was assessed using the Michigan Alcoholism Screening Test (MAST).

Results indicated that 53% of the MDSOs had been drinking at the time of the index offense. There was little variation among subcategories of offense type. Most of the offenders who had been drinking reported that they were drinking moderately or heavily.

Half of the MDSOs met the MAST criteria for alcoholism. There was little variation among subgroups in proportion of alcoholics. The authors unexpectedly found that among child molesters and exhibition-

ists, two groups often referred to as "nonviolent" sex offenders, 41% and 58%, respectively, endorsed the item, "Have you gotten into fights when drinking?"

The authors also found a statistically significant association between alcoholism and drinking at the time of offense, both for the entire sample and within offense types. For the total group, 81% of the alcoholics were drinking at the time of the offense, while only 25% of the nonalcoholics were drinking.

Pedophiles and incest offenders receiving specialized treatment at a maximum-security mental health facility in Massachusetts were studied by Groth and Birnbaum (1979). The subjects in this sample were all convicted of sexual assault of victims age 15 or younger, and were referred for treatment because they were considered to be likely to repeat a sex offense that would jeopardize the safety of the victim.

Eighty-six percent of these 148 patients were pedophiles. The remainder were incestuous fathers, grandfathers, and brothers. The patients' ages ranged from 14 to 73 years, with the majority (71%) under age 35. Nearly three-fourths (74%) had been previously convicted of sex offenses. When first convicted of a sex offense, 82% of the patients were under age 30, including 7% who were under age 13.

Sixty percent had completed less than 10 years of schooling. Only 23% completed high school. Eighty-three percent were employed as unskilled or semiskilled workers. Forty-seven percent were married.

Groth and Birnbaum (1979) found very few drug users among their subjects. Regarding alcohol use, 30% were described as alcohol-dependent; of the remaining patients who did not abuse alcohol, 34% were

alcohol abstainers. As would be expected given that all of these patients were convicted sex offenders (as opposed to "not guilty" due to insanity), few (5%) showed any evidence of a psychotic process operating at the time of offense.

Sixty-six percent of the pedophiles knew the victims of the index offenses at least casually. It was reported that of the total sample, 51% selected only female victims; 28% selected only male victims; and 21% selected both male and female victims. Whether these latter figures refer to victims of the current offense only, or take into account past offenses as well, is unknown.

Regarding type of sexual activity involved in the current offense, the authors found that 53% of a subsample of 123 cases with available data in this area had engaged in oral, anal, or vaginal penetration of the victims, leaving 47% of the offenses with only "foreplay" involved.

Groth and Birnbaum (1979) also examined the greatest degree of violence used in commission of the current offense. More than half (59%) of the patients were limited to deception and enticement in gaining access to victims. For 12%, verbal threat was the most violent behavior evident; 5% displayed a weapon; 11% utilized minimal force, such as grabbing the victim's arm; 4% used more than moderate, but not extreme, force, such as striking the victim; and 9% used excessive force and brutality, with 2 instances resulting in the victim's death. Examination of criminal histories revealed that 18% had become progressively more violent with further offending.

Age of victims was also examined, apparently across the patients' criminal careers. The authors noted some degree of specificity in pre-

ferred age ranges, with only 7% of the patients having selected victims from among various age categories. Fourteen percent had limited their assaults to children age 5 or younger; nearly half (46%) had assaulted children aged 6 through 11 only; and one-third selected only young adolescent victims, aged 12 through 15.

The group of pedophiles and incest offenders studied by Groth and Birnbaum (1979) are difficult to compare with the Wisconsin Department of Public Welfare (1965) sample, since the latter group included a 20% proportion of rapists and other sex offenders. As a whole, however, the Massachusetts sample was younger and contained a substantially larger proportion of patients with prior sex offense convictions. Their victims were younger than those of the Wisconsin pedophiles and incest offenders. These differences may have been due to variation between states regarding criteria for specialized treatment status, and to the maximum security level status of all offenders in the Massachusetts group. That is, younger offenders who assaulted young children, and who possessed more extensive criminal histories, may have been perceived as requiring a maximum security setting while others may have been sent to less secure treatment centers. During much of the time period covered by the Wisconsin Department of Public Welfare (1965) study, only one treatment facility was available, and all "deviated" sex offenders were contained there regardless of individual security levels.

Despite the differences noted above, the Massachusetts group was similar to the Wisconsin group in overall proportion of married patients, and in educational level. In both instances, somewhat less than half were married, and approximately 60% had received no more than 9 years of schooling.

Regarding alcohol consumption, it is unknown whether the 30% of the Groth and Birnbaum group considered to be "alcohol-dependent" were comparable to the 50% found to be "alcoholic" using the MAST at Atascadero (Rada et al., 1979). Either the variation in alcohol abuse is wide between settings, or the results obtained from the Massachusetts sample represent a conservative estimate of alcohol problems due to an absence of formal assessment.

Generalizing from the above-described sample of studies, which covers programs in three states and a time span of over 25 years, to the population-at-large of sex offenders to be found in specialized treatment settings, we find that a large proportion are white offenders who have assaulted children or adolescents, the majority of whom are unrelated to the patient by blood or marriage. The patients' ages are split approximately equally between the young adult and middle-aged ranges. Somewhat less than one-half were married at the time of the offense. More than half never completed high school. Occupational status is primarily blue collar, with up to 83% in unskilled or semi-skilled employment situations. One-third to one-half have been previously convicted of sex offenses. Approximately one-half may be alcoholic, with perhaps fewer alcoholics among pedophiles and incest offenders.

Among victims of pedophiles, approximately two-thirds are female. Approximately one-third are under age 10. Approximately two-thirds were acquainted with the offender. More than half of the pedophiles engage in oral-genital contact or penetration of victims, so that the term child "molester" appears to be an understatement when applied to this group. More than half apparently use no physically forceful or threatening behavior in accomplishing their assaults.

Distinguishing Features of MDSOs: Comparisons with
Untreated Sex Offenders

Wisconsin's "sex deviates" were compared with sex offenders not recommended for specialized treatment in a study of 501 individuals who underwent presentence evaluations (Pacht & Cowden, 1974). The case records of 380 treated offenders and 121 untreated offenders were examined and rated on a number of demographic, historical, and offense-related characteristics. Only ratings of at least moderate reliability were used in statistical analyses, which consisted primarily of nonparametric procedures. The rationale for employing nonparametric techniques is unclear, with the authors stating that they were used because "the data in most cases consisted of ratings" (p.16).

The following significant differences were found in comparisons of sex offenders recommended for specialized treatment and those recommended for correctional processing: Individuals in the treatment group were older and more frequently white; had more prior sex offenses, more prior psychiatric treatment, and more prior adult correctional experience; were less likely to be under the influence of alcohol at the time of the offense, and showed less drinking behavior in general; were more closely related to victims, as relatives or friends; and had known the victim for a longer period of time.

There were apparently no differences found in marital status, number and seriousness of prior offenses, prior living arrangements, prior juvenile correctional experience, educational level, intelligence level, and victim characteristics of age, sex, race, marital status, and degree of provocation.

Sturgeon and Taylor (1980) found, in a sample of imprisoned sex offenders paroled during the same year as their MDSO sample was released from Atascadero, that the prison and specialized treatment groups were different in types of offense committed. The prison group had twice the MDSO proportion of rapists, less than one-half the proportion of pedophiles, and one-third the proportion of incest offenders. The proportion of blacks in the prison group was twice that found in the MDSO group. The prison group was less educated. An overall comparison of age was not reported, but the pedophiles in prison were significantly older at admission than the MDSO pedophiles, while the imprisoned rapists were younger than the MDSO rapists.

Differences in prior criminal record were also found. The prison group had committed twice as many non-sexual personal crimes, and also had a higher proportion of individuals with prior property convictions. There was a slightly higher proportion of first sex offenders in the prison group.

The available research comparing MDSOs with sex offenders excluded from treatment has found some significant demographic, historical, and offense-related differences. The more consistent findings are related to race, prior criminal record, and type of offense. MDSO groups contained more whites, and more offenders with prior sex offense convictions. Sex offenders with "general" criminal histories of property and non-sexual violent offenses were more likely to be perceived as appropriate for correctional processing. Also more likely to be diverted to correctional settings were rapists, while incest offenders and pedophiles were overrepresented among MDSOs.

Results pertaining to education differed with jurisdiction, with California MDSOs being better-educated and Wisconsin MDSOs comparable to untreated sex offenders in educational level. Difference in overall age was reported only for the Wisconsin sample, in which MDSOs were older than their correctional counterparts. Examination of age within types of offense in California revealed an interaction between these variables, such that younger pedophiles and older rapists were more frequently afforded MDSO status.

Differences pertaining to alcohol consumption were examined only in the Wisconsin sample, and the findings indicated that the MDSOs were less likely to be under the influence of alcohol during the offense and, in general, drank significantly less than the correctional sex offenders. Although the absolute levels of alcohol consumption were not reported for either group, the Bureau of Justice Statistics (1983b) has found "an alcohol problem of staggering size" (p.3) among inmates of state correctional facilities, particularly among assaulters, burglars, and rapists. Among imprisoned rapists, 41% were very heavy drinkers during the year prior to the current offense. Rapists and assaulters were also most apt to be drinking prior to the offense, with 57% of the rapists under the influence of alcohol at the time.

These findings indicate excessive pre-offense involvement with alcohol, both generally and at commission of the offense, in at least one subtype of imprisoned sex offender. It may be the case that rapists are particularly prone to abuse alcohol and, if so, the differences in alcohol use between MDSO and correctional samples could be explained by the differential proportions of rapists in each group. Nonetheless, the

issue of alcohol abuse appears to be less problematic for Wisconsin MDSOs than for their correctional counterparts.

Recidivism Rates of Sex Offenders

Methodological Issues in Sex Offender Recidivism Research

The results and selected methodological features of studies on the recidivism of sex offenders are presented in Tables 1 and 2. In Table 1 are studies of correctionally-processed offenders, and in Table 2 are studies of treated offenders. The investigations within each table are approximately ordered by length of followup, beginning with the longest-term assessments. Entries in the "subject selection criteria" column indicate the point in the criminal justice system from which subjects were selected for followup assessment.

Certain methodological features are included in the tables in order to illustrate the variations in investigative methods. Although the results of the studies are often assumed to reflect variations in recidivism rates among various subtypes of offender, examination of the tables reveals that the differences in the rates found can be attributed to multiple sources of variation.

Aspects of methodology which, when varied, can contribute to findings of differential recidivism rates include the following:

Actual time-at-risk for recidivism. A critical determinant of time-at-risk is the point in the criminal justice system from which subjects were selected for subsequent followup. When conviction date is used as the starting point of the study, lack of uniformity in

Table 1

Recidivism Studies of Untreated Sex Offenders, Listed by Length of Follow-up

Investigators	Jurisdiction	Subject Selection Criteria	N ^a	Offense Type ^b	Follow-up Length ^c	Standard ^d	Any Recidivism ^a	Sexual Recidivism
Soothill & Gibbens, 1978	England and Wales	Release from prison, jail, or other custodial sentence; conviction date if noncustodial sentence	174	Pedophilia (heterosexual) and incest ^e	1-22 yrs.	Any SL reconvictions	48%	
						Sex or violence reconvictions		23%
Soothill, Jack, & Gibbens, 1976	England and Wales	Conviction (approx. 80% subsequently imprisoned)	86	Pedophilia and rape	22 yrs.	Any SL reconvictions	49%	
						Sex reconvictions		15%
Christiansen, Elers-Nielson, LeMaire, & Sturup, 1965	Denmark	Conviction, or Child Welfare placement if minor (at least 62% subsequently confined)	2,934 (455) (381) (1,614) (73) (323) (88)	All sex offenses Exhibitionism Rape ^g Pedophilia ^h Sibling incest Paternal incest ⁱ Other ^j	12-24 yrs ^f	Any reconvictions	24%	
							31% (28%) (24%) 19% 12% 12%	
						Sex reconvictions		11%

Table 1 (continued)

Investigators	Jurisdiction	Subject Selection Criteria	N ^a	Offense Type ^b	Follow-up Length ^c	Standard ^d	Any Recidivism ^a	Sexual Recidivism
Gibbens, Soothill, & Way, 1978	England and Wales	Conviction (96% subsequently imprisoned)	114	Paternal incest	13 yrs.	Any SL reconvictions	12%	
						Sex reconvictions		4%
Gibbens, Way, & Soothill, 1977	England and Wales	Conviction (at least 81% subsequently confined)	59	Pedophilia (heterosexual) ^k	12 yrs.	Any SL reconvictions	63%	
						Sex reconvictions		20%
			41	Aggressive rape ^l	12 yrs.	Any SL reconvictions	75%	
						Sex reconvictions		20%
			100	Non-Aggressive rape ^m	12 yrs.	Any SL reconvictions	28%	
						Sex reconvictions		3%

Table 1 (continued)

Investigators	Jurisdiction	Subject Selection Criteria	N ^a		Follow-up Length ^c	Standard ^d	Any Recidivism ^a	Sexual Recidivism
Sturgeon & Taylor, 1980	California	Release from prison to parole supervision	122	All sex offenses below	6 yrs.	Sex reconviotions		25%
			28	Pedophilia ⁿ (heterosexual)				18%
			16	Pedophilia ⁿ (homosexual)				38%
			68	Rape ^o				28%
			10	Incest ^p				0%
Soothill & Gibbens, 1978	England and Wales	Release from prison, jail, or other custodial sentence (approx. 82%); conviction date if non-custodial sentence (approx. 18%)	137	Pedophilia (heterosexual) (approx. 76%) and incest (approx. 24%) ^e	1-5 yrs.	Any SL reconviotions	24%	
								Sex or violence reconviotions
Tracy, Donnelly, Morgenbesser, & Macdonald, 1983	New York	Release from prison	141	All sex offenses	5 yrs.	Any reconviotions or parole violations resulting in return to prison	23%	
			68	Rape				19%
			73	Other				27%
			141	All sex offenses		Sex reconviotions or parole violations resulting in return to prison	13%	

Table 1 (continued)

^aNumbers in parentheses are approximate figures.

^b"Offense type" labels used by authors have in some cases been modified to achieve uniformity, and correspond as closely as possible to criteria of Appendix B . Authors' criteria for offense classification, when reported, are indicated by separate note.

^cLength of time between subject selection and measurement of "standard."

^d"SL" in this column refers to standard list offenses, which exclude minor offenses, e.g., traffic violations; most "serious" exclusion is common assault.

^eSexual assault of female under age 13.

^fNo reconviction data were available for first 4 yrs. of follow-up period.

^gIncludes "indecent towards women."

^h"Indecency" toward girls or boys, and sexual intercourse with "minors."

ⁱIncludes assault of step- and adopted children.

^j"Diverse forms of sexual criminality."

^kOffenders who "at some time" assaulted females age 14 or younger.

^lRapists convicted of nonsexual violent crimes, either before or during the follow-up period. Includes offenses for which victim ages were unknown.

^mRapists not classifiable as "aggressive." Includes offenses for which victim ages were unknown.

ⁿSexual assault of (a) non-consanguine victim under age 14, (b) non-consanguine victim age 14 through 17, with no force or threat of force, or (c) multiple victims, with at least 1 non-consanguine and under age 14.

^oSexual assault of non-consanguine female victim, age 14 or older, by force or threat of force.

^pSexual assault of consanguine relative.

Table 2

Recidivism Studies of Treated Sex Offenders, Listed by Length of Follow-up

Investigators	Jurisdiction	Subject Selection Criteria	N	Offense Type ^a	Follow-up Length ^b	Standard	Any Recidivism	Sexual Recidivism
Dix, 1976	California	Admission to hospital; included only if released, during follow-up period, as improved	24	All sex offenses, primarily pedophilia	7 yrs.	Any reconvictions, minor traffic excluded	29%	
						Sex reconvictions		17%
Sturgeon & Taylor, 1980	California	Release from hospital (21% transferred to prison)	260	All sex offenses below	6 yrs.	Any reconvictions, vehicle code violations excluded	29%	
						Sex reconvictions		15%
								20%
								15%
								19%
		5%						

Table 2 (continued)

Investigators	Jurisdiction	Subject Selection Criteria	N	Offense Type ^a	Follow-up Length ^b	Standard	Any Recidivism	Sexual Recidivism				
Pacht, Halleck, & Ehrmann, 1962	Wisconsin	Discharge from Department of Public Welfare control ("in most cases" discharge occurred at termination of parole supervision)	414	All sex offenses	1-9 yrs.	Any reconvictions	7%					
						Sex reconvictions		6%				
Frisbie, 1965	California	Release from hospital as improved (at least 14% transferred to prison, jail, or other confinement)	1,921	All sex offenses; 80% were pedophiles or incest offenders	1-7 yrs.	Sex reconvictions		20%				
							Not Reported ^f	All sex offenses	5 yrs.	Sex reconvictions	27%	
											Pedophilia and incest (heterosexual) ^g	18%
												Pedophilia and incest (homosexual) ^g
											Exhibitionism	41%
Voyeurs, transvestites, and "lewd persons"	47%											
Not Reported ^h	Paternal incest only ⁱ	6 yrs.	Sex reconvictions	10%								

Table 2 (continued)

Investigators	Jurisdiction	Subject Selection Criteria	N	Offense Type ^a	Follow-up Length ^b	Standard	Any Recidivism	Sexual Recidivism
Pacht, Halleck, & Ehrmann, 1962	Wisconsin	Paroled from treatment program (in prison setting)	475	All sex offenses	Duration of parole, up to 9 yrs.	Any parole violation	17%	
						Sex offense resulting in parole violation		9%
Roberts & Pacht, 1965	Wisconsin	Paroled from treatment program (in prison setting)	461	All sex offenses	Duration of parole, up to 2 yrs.	Any parole violation	25%	
						Any offense resulting in parole violation		6%

^a"Offense type" labels used by authors have in some cases been modified to achieve uniformity, and correspond as closely as possible to criteria of Appendix B. Authors' criteria for offense classification, when reported, are indicated by separate note.

^bLength of time between subject selection and measurement of "standard."

^cSexual assault of (a) non-consanguine victim under age 14, (b) non-consanguine victim age 14 through 17, with no force or threat of force, or (c) multiple victims, with at least 1 non-consanguine and under age 14.

Table 2 (continued)

^dSexual assault of non-consanguine female victim, age 14 or older, by force or threat of force.

^eSexual assault of consanguine relative.

^fBased on a subsample who were "in society" for at least 5 years during the follow-up period.

^gIncludes sexual assault of "late teenagers."

^hBased on a subsample who were "in society" for at least 6 years during the follow-up period. Reported separately in a later publication (Frisbie, 1966).

ⁱSexual assault of daughter or stepdaughter.

opportunity for recidivism results, such that subjects who are merely fined, or given probationary or other noncustodial sentences have the greatest opportunity for reconviction. In such studies, time-at-risk would be correlated with the "seriousness" of the offense as reflected in the sentence given, and a finding of higher reconviction rates for certain offenses may represent a methodological artifact. Thus, in a study such as that conducted by Christiansen, Elers-Nielson, LeMaire, and Sturup (1965), the finding that "recidivism was more usual among exhibitionists" (p. 84) may merely reflect greater opportunities for recidivism in this group. A second consequence of followup from conviction date is that the overall result obtained will be an underestimate of recidivism, relative to other studies in which the risk period and followup length are equivalent, and uniform for all subjects.

Criteria for classification of offense types. Unless sample compositions are clearly defined, there is no assurance that the populations sampled are uniform across investigations. For example, discrepant findings may result due to variations in the victim age criterion used to distinguish between pedophiles and rapists. Similarly, results obtained with a sample of exclusively paternal incest offenders may be quite different from those obtained with a mixed sample that includes sibling and other forms of incest. Only when offense classification criteria are explicitly reported can investigation results be effectively interpreted in the context of other findings.

A major impediment to development of a cohesive body of literature on sex offenders is the prevalence of incompletely-reported methodologies in published studies, especially with regard to sample composition.

For example, the study of Soothill, Jack, and Gibbens (1976), entitled "Rape: A 22-year cohort study," appears to be a followup study of rapists, utilizing individuals convicted of rape "as recorded in the Criminal Statistics of 1951" (p.63). The fact that offenders who would be classified as pedophiles by most other investigators are included in this group of "rapists" can only be discerned through reading of the case examples. In only one of the 5 cases presented was the offense classifiable as rape; the other offenders assaulted 11-, 14-, and 15-year-old victims, with the victim of the remaining case described as a "young girl".

As in the above example, many investigators determine the offense category of an individual solely on the basis of the legal description of the offense for which he was convicted, such as "rape" or "sexual intercourse with a child." This is not a reliable method for offender classification because first of all, legal criteria for terms such as "child" vary with jurisdiction. Secondly, the conviction offense may be a lesser offense than the one actually committed, due to plea bargaining.

Jurisdiction. Recidivism rates may vary with jurisdiction according to variations in the efficiency of local police departments and courts. In addition, local policies of probation and parole departments may influence reconviction rates of parolees. For example, in some instances revocation of parole may be considered a sufficient penalty for new offenses, with no official reconviction sought.

Definition of recidivism. As Tables 1 and 2 illustrate, recidivism rates vary widely with the criteria used. Definitions of recivism

may vary in type of contact with the criminal justice system required, and in type of crime measured (Tracy, Donnelly, Morgenbesser, & Macdonald, 1983).

Length of followup period. Recidivism rates will obviously vary with the length of the followup period. A 5-year followup period is generally considered to be an adequate time span for detecting the bulk of recidivists (Tracy et al., 1983).

Recidivism of Untreated Sex Offenders

The studies presented in Table 1 were conducted with samples of primarily untreated sex offenders. A few of these investigations included small proportions (2% to 7%) of offenders who received treatment dispositions (Christiansen et al., 1965; Gibbens, Way, & Soothill, 1977; Soothill, Jack, & Gibbens, 1976), but the authors did not single out these treated offenders for separate study.

This set of studies covers a variety of sexual offenses committed across a number of jurisdictions. Most of the longer-term followups were conducted in Europe, and selected subjects at the point of conviction.

A comparison of the studies conducted by Christiansen et al. (1965) and Soothill and Gibbens (1978) illustrates the problems of interpretation which arise when attempting to draw conclusions about sex offender recidivism from this body of literature, even when one study is an intentional replication of another. The study of Christiansen et al. is long-term and the largest in sample size. This study is especially prone to problems of interpretation due to differential risk periods,

not only because of followup from conviction dates, but also because recidivism was assessed at one point in time for individuals convicted across a 12-year period. Soothill and Gibbens (1978) suspected that because of Christiansen et al.'s methodology, their results tended to under-estimate the extent of sex offender recidivism.

Soothill and Gibbens used a life-table method for calculating recidivism rates in their study, "taking into account as the sample phased out of the follow-up as well as considering the length of custodial sentences" (p. 269). In contrast to Christiansen et al.'s proportion of 24% with reconvictions at 12 to 24 years following conviction, Soothill and Gibbens found a 48% cumulative reconviction rate across 22 years-at-risk. They found that a reconviction rate similar to that of the Christiansen et al. study at 12 to 22 years had accumulated across only 1 to 5 years-at-risk.

Unfortunately, method of calculating recidivism rates was not the only difference between these two studies. Although Soothill and Gibbens' intention was to "replicate the follow-up study (of Christiansen et al.) even more systematically" (p. 269), they studied only the most "serious" offenses of pedophilia and incest. As a result, their findings cannot be clearly attributed to the difference in recidivism calculation. Their study also differed in that their second measure of recidivism was for subsequent sexual and violent offenses combined, rather than for sexual offenses only.

Overall, the results of the studies presented in Table 1 suggest some general observations regarding the extent of recidivism to be found among correctionally-processed sex offenders:

1. At most only one-half of recidivists are reconvicted of sex offenses. This finding may suggest that a substantial proportion of these sex offenders are "general criminals" who commit isolated sex offenses as part of an overall pattern of violence and other crime. Alternatively, this relatively low sexual recidivism rate may reflect the difficulty of obtaining convictions for sex offenses generally, due to factors such as under-reporting and reluctance of known victims to aid in prosecution.
2. Reconviction rates for both sexual recidivism and recidivism in general appear to vary widely, depending on subtypes of offender sampled and on other methodological variations among studies.
3. A followup period of 5 years may under-estimate by 50% the extent of sex offender recidivism to be detected at 22 years after release from prison.
4. Paternal incest offenders may be least likely of all sex offenders to recidivate, both sexually and in general. A general reconviction rate of 12% was observed when these offenders were followed-up for at least 12 years after conviction (Christiansen et al., 1965; Gibbens et al., 1978). Rates for further sex offending have been particularly low, with 0% observed 6 years after release from prison (Sturgeon & Taylor, 1980) and 4% at 13 years after conviction (Gibbens et al., 1978).

5. Results pertaining to the relative recidivism rates of rapists and pedophiles are inconclusive with regard to further convictions in general. When these two groups were compared within the same study, the results of one investigation indicated a slightly higher general reconviction rate for rapists (Christiansen et al., 1965). In another comparative study, the rate for pedophiles was substantially higher than that of rapists, both aggressive and non-aggressive types combined (Gibbens et al., 1977).
6. There appears to be little difference between rapists and pedophiles in proportions reconvicted for sex offenses. Homosexual pedophiles, however, may have the highest sexual recidivism rate of all correctionally-processed sex offenders (Sturgeon & Taylor, 1980).

Recidivism of Treated Sex Offenders

As indicated in Table 2, the published recidivism studies of treated sex offenders have been conducted with discharges from Atascadero State Hospital and the Wisconsin State Prison treatment program. Examination of the study methods reveals the same methodological variations found among studies of correctionally-processed offenders.

In research with treated offenders, within-study differences in time-at-risk can vary not only because of follow-up from admission, but also because of followup from release date. Unlike imprisoned sex offenders for whom "release" indicates actual discharge to the community, MDSOs may be transferred to prisons or other correctional settings

upon release from the treatment program. In the studies of Table 2, only the Atascadero series is subject to the difficulties resulting from differential time-at-risk. The study conducted by Frisbie (1965) used a mixed methodology, and illustrates the difference in results obtained when time-at-risk is held constant for all subjects.

The reconviction rates found by Pacht, Halleck, & Ehrmann (1962) are the lowest of all these studies. These low rates may have been due to their method of subject selection. Pacht et al. studied individuals who were discharged from "departmental control" which, in most cases, extended through a parole period. As a result, any individuals who were unable to achieve discharge were excluded from study. A common reason for extended departmental control is parole revocation, which can result from rule violations, rearrests, or reconvictions. Thus, excluded from the Pacht et al. study of reconvictions was perhaps the "worst" outcome group, those who were unable to complete their supervised community experiences before incurring further legal difficulties.

Like the correctionally-processed offenders, only one-half, at most, of these treated recidivists had been reconvicted of sex offenses (Dix, 1976; Sturgeon & Taylor, 1980). Incest offenders had the lowest sexual recidivism rate of all (Frisbie, 1965; Sturgeon & Taylor, 1980). Little difference was found between rapists and pedophiles in proportions reconvicted of sex offenses. Within the pedophile group, however, a comparison of homosexual with heterosexual offenders revealed an opposite result to that found with correctionally-processed offenders. The sex offense reconviction rate for homosexual pedophiles was lower than that of heterosexual pedophiles and of rapists (Sturgeon & Taylor, 1980).

Further examination of Sturgeon and Taylor's (1980) results across Tables 1 and 2 reveals that substantially lower reconviction rates were found for rapists and homosexual pedophiles when treated, as compared with offenders convicted of similar offenses who were imprisoned. The treated incest offenders reoffended at a somewhat higher rate and heterosexual pedophiles at the same rate as the comparable imprisoned groups. It is tempting to infer from these findings that treatment is more effective with rapists and homosexual pedophiles than with the other offense types. The methodology involved, however, also leaves room for the interpretation that the results reflect a more effective application of commitment criteria when applied to rapists and homosexual pedophiles, such that greater success was achieved in selection of offenders who were amenable to treatment.

Evaluations of Sex Offender Treatment Programs

In order to adequately evaluate the efficacy of treatment programs, the outcomes of treated subjects should be compared with the outcomes of comparable subjects who did not receive the treatment. The controlled experiment, in which subjects are randomly assigned to treatment and control groups, is ideal for such a comparison. Outside of the laboratory situation, however, many barriers may exist to the use of controlled experimental designs. In the case of MDSO program evaluations, the obvious impediment to controlled experimental research is that legal considerations preclude random assignment to mental health and correctional processing.

An alternative to the use of experimental control is the employment of comparison groups, comprised of presumably similar individuals who have not been treated. In MDSO program evaluation, the problem remains of finding "similar individuals", since the same legal procedures which prevented random assignment should have also resulted in division of sex offenders into two qualitatively different groups, differing on characteristics such as presence of mental disorder, treatability, and dangerousness.

Most followup studies of treated sex offenders have failed to include comparison groups of any kind. When comparison groups have been utilized, they have differed from the treatment groups in ways which make it difficult to attribute differential outcomes to the effects of the treatment programs per se.

For instance, the followup study of Roberts and Pacht (1965) included a comparison group of prison parolees, and found that subjects in the treatment group committed significantly fewer new offenses. This study may have only served to demonstrate, however, the fact that sex offenders have a relatively low recidivism rate when compared with the general prison population (Gray & Mohr, 1965).

In Sturgeon and Taylor's (1980) followup study of Atascadero MDSOs, subsequent sexual recidivism of treated sex offenders was compared with that of imprisoned sex offenders released during the same year. Methodological features and results of this study were presented in Tables 1 and 2. The higher rate of sex offense reconvictions found for imprisoned sex offenders is difficult to interpret, given that this comparison group differed from the treatment group on a number of variables which may be associated with degree of recidivism risk.

Pedophiles and incest offenders were underrepresented in the prison group, which contained more than twice the proportion of rapists included in the MDSO group. Although the authors did not report a statistical assessment of this apparent difference in distributions of offense type, application of the Pearson chi-square test reveals that the difference was statistically significant, $\chi^2(2, N = 382) = 44.19$, $p < .001$.

The groups also differed in education and race. The MDSO group was better educated (40% completed high school, compared with only 23% of the prison group), and contained a greater proportion of whites (79%, compared with 62% in the prison group). There may have been further differences on characteristics that were not assessed, such as overall age, alcohol abuse histories, and post-release environment (urban vs. rural). The Atascadero group was at a definite advantage in terms of time-at-risk, since 21% of the MDSOs were transferred to prison upon release, and so did not have full opportunity to recidivate during the followup period.

In a recent review, Quinsey (1983) concluded that there have been no scientifically rigorous evaluations of sex offender treatment program efficacy. Given the overall dearth of research in this area, coupled with the inadequacies of the few evaluations that have been published, it appears that his conclusion is warranted.

Predictors of Recidivism

Christiansen et al. (1965) conducted one of the earliest attempts to identify predictors of sex offender recidivism. Methodological fea-

tures of this study were presented in Table 1. Reconviction data were obtained from the Central Police Register. The subjects' records were examined for both reconvictions of any type, and for sex crime reconvictions in particular. Statistical analyses were conducted, using tables in which year of conviction, place of conviction (capital vs. town vs. rural area), criminal history (first offenders vs. those with prior convictions of any type), and age were cross-tabulated.

The probability of subsequent conviction, for offenses of any type, was found to be significantly related to age of offender, location of the convicting court, and prior criminal history. Marital status was also examined, but its relationship with recidivism was not statistically significant. The direction of relationship with age was such that the older the offender at the time of the original offense, the lower the likelihood of any subsequent convictions. Offenders convicted in towns were more likely to reoffend than those convicted in rural districts, with 30% and 20% recidivating, respectively. Those with prior criminal histories were also more likely to recidivate; 19% of the subjects with no prior convictions of any type recidivated, compared with 39% of those with prior convictions. Among these non-first offenders, those with only sex crime convictions on their prior records, termed "purely sexual" criminals, were significantly less likely to recidivate than those with at least one prior non-sex conviction.

Also examined in relation to general, broadly-defined recidivism were type of sex offense and disposition, but the impact of these variables was not subjected to tests of statistical significance. Regarding type of offense, proportions of reconvicted rapists and pedophiles did

not deviate greatly from the proportion of reconvicted individuals found in the overall sample, which was 24%. Among exhibitionists and those convicted of "indecent toward women," which was undefined, the proportions of offenders with subsequent convictions were greater than in the overall sample, at 31% and 29%, respectively. Those convicted of incest were least likely to recidivate, with 19% of fraternal and 12% of paternal incest offenders reconvicted, respectively. Regarding disposition, the authors mentioned that the small group of offenders sentenced to placement in mental hospitals had the lowest proportion (11%) of general recidivists, but added that this finding may have been due to reduced opportunity for recidivism, since hospital stays were usually longer than prison terms.

Using a more narrow definition of recidivism, Christiansen et al. (1965) examined criminal history and age of offender in relation to subsequent convictions for sex offenses. They found that offenders with any prior convictions were significantly more likely to commit a subsequent sex offense than were first offenders. Within the group of offenders with prior convictions, those who had committed only sex offenses in the past were most likely to recidivate with a new sex offense. Age of offender was not significantly related to sexual recidivism.

During the course of her followup investigations, Frisbie (1965) attempted to identify the distinguishing characteristics of treated sex offenders who recommitted sex offenses (see Table 2). No tests of statistical significance were conducted in her comparisons of sexual recidivists versus others among her sample of 1,921 sex offenders followed-up

one to seven years after release from Atascadero. She noted that the sexual recidivists tended to be younger and better-educated. Relative youth and higher educational level were in turn closely associated with those offense types for which sexual recidivism was more prominent. Exhibitionists had the highest proportion of sexual recidivists, with 40.7% having repeated sex offenses. Among "pedophiles", a group which included incest offenders, those with male victims had the next-highest proportion of sex offense repeaters, at 34.5%. Among the "pedophiles" with female victims, only 18.2% were subsequently convicted of a sex offense. In this group of "pedophiles", sexual orientation may have been confounded with offense type, in that most incest offenders probably fell into the "female victim" group. As noted in a later publication (Frisbie, 1966), incest offenders had the lowest proportion of sex offense reconvictions, at 10%, and this may have accounted for the low proportion of recidivists in the female-victim "pedophile" group.

Among pedophiles with unrelated victims, Frisbie (1965) found that marital status interacted with sex of victim in predicting sexual recidivism. Those with male victims were less recidivistic if single, while those with female victims were less recidivistic if married.

In 1966, Frisbie published preliminary impressions of community functioning in a sample of 887 pedophiles and incest offenders, said to be a mixed sample of prison and Atascadero discharges on parole, probation clients, and unsupervised direct discharges. At two years into the research project, she reported her impression that the highest proportion of recidivists convicted of subsequent non-sexual offenses was found among pedophiles and incest offenders who had assaulted victims in the mid- to late-adolescence age range, ages 14 to 18.

In a more recently-published series of sex offender studies, factors associated with reconviction were examined among several subgroups that were said to vary according to offense type. The subjects of these studies were individuals who had been charged with sex offenses and who appeared in the Higher Courts of England or Wales in 1951 or 1961.

The first of these studies to be published (Soothill, Jack, & Gibbens, 1976) included an examination of recidivism among individuals convicted in 1951. Methodological aspects of this research report were summarized in Table 1. It should be noted that their group of 86 convicted subjects consisted of individuals with official charges of "rape" but, using the definitions adopted for the present study, also included an unknown proportion of pedophiles.

Twenty-six (30%) of the convicted group had no record of any prior convictions. The authors reported no explicit comparisons of subsequent convictions between these first offenders and those with prior convictions. The results indicate, however, that while 65% of the offenders with prior convictions were reconvicted of some crime in the 22 years subsequent to 1951, only 12% of the first offenders recidivated as so-defined. Using subsequent convictions for any offense as the index of recidivism, then, these results suggest that convicted sex offenders with prior convictions of any type may be more likely to recidivate than those who have never before been convicted of a crime.

Gibbens, Soothill, and Way (1978) reported a study of sibling and parent-child incest offenders. Most relevant to the current report are their findings regarding recidivism in paternal incest cases (see Table 1). The authors found that a criminal history consisting of any prior

convictions for standard-list (SL) offenses (which exclude minor traffic violations and other less serious crimes) was associated with subsequent convictions for SL offenses. Only 1.5% (1 individual) of the 68 offenders without prior SL convictions were reconvicted, while 28% of the 46 offenders with prior convictions were reconvicted.

Gibbens, Way, and Soothill (1977) examined type of offense as a predictor of recidivism among individuals who appeared in court in England or Wales in 1961, charged with sexual assault of females (see Table 1). Their subjects were classified, on the basis of police records, into three groups. Those charged "at some time" with sexual assault of a female under the age of 15 were classified as pedophiles. The remaining subjects, including those for whom victim age was unknown, were classified as either aggressive or non-aggressive rapists, depending on whether they were convicted of any violent non-sexual offenses, either before or subsequent to their 1961 court appearances. Thus, in the rapist groups, subsequent criminal record was a consideration in classification as aggressive or non-aggressive, such that any rapist viewed as non-aggressive on the basis of prior criminal history was re-classified as aggressive if convicted of a violent offense during the "follow-up" period.

Regarding new convictions for any offense, the aggressive rapist group had the highest proportion of recidivists with 75%, followed by pedophiles at 63%, and non-aggressive rapists at 28%. Regarding new convictions for sex offenses only, the aggressive rapist and pedophile groups both contained 20% proportions of recidivists, while the non-aggressive rapists had the lowest proportion of reoffenders at 3%.

Soothill and Gibbens (1978) studied the recidivism of 174 individuals convicted in 1951 or 1961, in England or Wales, of sexually assaulting females under the age of 13 (see Table 1). Although no supporting figures were reported, the authors noted that previous crime, as measured by conviction for any SL offense, was a useful indicator of subsequent criminality in their study.

Sturgeon and Taylor (1980) examined the relationship of type of prior criminal record to recidivism in a sample of 382 convicted sex offenders released from Atascadero or prison in 1973 (see Tables 1 and 2). Offenders with prior criminal records of only non-sexual offenses were compared with a combined group of offenders with prior criminal records of only sex offenses and with no criminal records of any kind. These groups were termed "generalized" and "sexual" criminals, respectively. Using subsequent reconviction for any offense as the criterion for recidivism, the authors found that generalized criminals reoffended at a greater rate than did sexual criminals. This result was found in both the treatment and prison groups. In the treatment group, the recidivism rate for sexual criminals was 18%, while the rate for generalized criminals was 39%. In the prison group, the comparable rates were 36% and 56%, respectively. No results of statistical analyses of these data were reported.

Given the numerous reports indicating that prior criminal record is predictive of recidivism, Sturgeon and Taylor's (1980) results are not surprising, since all first offenders were included in the "sexual criminal" group. A comparison of sexual versus generalized offenders within the group with established criminal histories might have been more meaningful.

Tracy, Donnelly, Morgenbesser, and Macdonald (1983), in a study of 82 convicted sex offenders released in 1972 from the New York State Department of Correctional Services, examined reconvictions within five years (see Table 1). The criterion for recidivism was return to department custody, via new conviction or parole violation.

The authors classified offenders according to three outcome types: Return to custody due to new sex conviction or parole violation involving arrest for new sex offense; return to department custody due to conviction for non-sex offense or parole violation not involving arrest for a sex offense; and non-returned offenders. There were 17 subjects in the "repeat sex" group, 15 subjects in the "repeat non-sex" group, and 50 subjects in the "non-returned" group. Information pertaining to types of sex offenses represented was not reported. The authors did state, however, that returned offenders as a whole consisted of 13 rapists and 20 other sex offenders, before one subject was dropped from the prediction study due to insufficient case folder information. The victim age criterion for classification of an offense as "rape" was not reported.

The subjects' case folders were examined in order to obtain information on prior criminal record, involvement of alcohol abuse and relationship to the victim in the index offense, and psychiatric diagnosis. The three groups were then compared in order to determine whether, by examining percentages across groups, certain characteristics were more prominent in the returned versus non-returned offenders and, within those returned, "repeat sex" versus "repeat non-sex" offenders.

The authors found that a history of prior arrests was more frequent in returned as compared with non-returned offenders, but did not distinguish the repeat sex from the repeat non-sex group. The repeat sex group was different from the other groups in proportion of offenders with prior arrests for sex offenses; 82% of the repeat sex, 60% of the repeat non-sex, and 18% of the non-returned offenders had prior arrests for sex crimes.

Examination of proportions of offenders with personality disorder diagnoses yielded a similar observation; this diagnosis was more frequently found among returned than among non-returned offenders and, within those returned, was more frequent in the repeat sex group than in the repeat non-sex group. Seventy-one percent of the repeat sex offenders, 47% of the repeat non-sex offenders, and 22% of the non-returned offenders had been given personality disorder diagnoses. Diagnostic criteria were not stated.

Similarly, involvement of alcohol abuse during the offense was more prevalent among returned than among non-returned offenders. Within those returned, however, alcohol abuse during the index offense was more prevalent among those who recidivated with non-sexual offenses or violations. Sixty-six percent of the repeat non-sex, 53% of the repeat sex, and 38% of the non-returned offenders' case folder data contained evidence that alcohol abuse was a factor in the original sex offense. Criteria for determining involvement of alcohol were not revealed, nor were results of inter-rater reliability assessment presented.

Type of sex offense was apparently not evaluated as a potential predictor of outcome, except to examine proportions of incest offenders

among the three outcome groups. Incestuous relationship was broadly defined and included involvements with the children of common-law spouses and paramours. The authors found that none of the incest offenders were included in the repeat sex group, but equivalent proportions were found in the repeat non-sex and nonreturned groups. Twenty-seven percent of the returned non-sex and 30% of the nonreturned offenders were incest offenders.

Results pertaining to the offender-victim relationship were not formally presented. The authors noted, however, that the repeat sex offender was more likely to have assaulted a stranger during the index offense, as compared with non-returned offenders, whose victims were more likely to have been relatives or acquaintances. The proportion of strangers among victims of returned non-sex offenders was not mentioned.

Given that incest offenses automatically fell into the category of those in which the victim was not a stranger, and that no incest offenders were subsequently returned to custody for new sex offense convictions or sex-related violations, it is difficult to evaluate, independently of offense type, the importance of relationship to victim as a predictor of repeat sex offending.

One variable not examined as a predictor of recidivism in the above studies is social-sexual competence. According to Rada (1978), many theories pertaining to the etiology of sexual psychopathology assume that the ability to develop mature heterosexual relationships has been arrested in some fashion. In clinical practice, a similar assumption is implied by the fact that social-sexual skills training is often included in sex offender treatment programs (Grossman, 1980; Pacht,

1976). Research in this area indicates that inadequate social-sexual functioning is not restricted to any particular sex offender types (Baxter, Marshall, Barbaree, Davidson, & Malcolm, 1984).

Most of the research reviewed here involved only informal examinations of the relative prevalence of certain offender, offense, and victim characteristics across outcome groups. As a whole, however, these studies suggest that variables which discriminate, to varying extents, between repeaters and non-repeaters can be identified, and that certain variables may serve to identify the offender who is more likely to reoffend with a new sex crime in particular.

Sex offenders with prior criminal records of convictions are apparently more likely than first offenders to reoffend (Christiansen et al., 1965; Soothill et al., 1976; Gibbens et al., 1978; Soothill & Gibbens, 1978). The important aspect of criminal record may not be limited to convictions; Tracy and colleagues (1983) included those with any prior arrests, as well as those actually convicted, in their group of individuals considered to have prior criminal records, and found a higher proportion of reoffenders in this group as compared with the group of those with neither convictions nor arrests in the past.

Although the relationship of prior criminal record to subsequent sex crime convictions has been addressed less often, there is some evidence that prior convictions of any type may be a useful indicator of high risk for continued sex offending (Christiansen et al., 1965). Those with prior arrests or convictions for sex offenses in particular may be especially prone toward subsequent sex crime convictions (Tracy et al., 1983). Among individuals with prior convictions, those whose

past offenses were exclusively sexual in nature may be at highest risk for committing another sex offense (Christiansen et al., 1965), while those with exclusively non-sexual offenses in their criminal pasts may be at highest risk for reoffending in general (Sturgeon & Taylor, 1980).

Offense type may also play a role in distinguishing recidivists. Of the three types of sex offenders included in the current study, incest offenders appear least likely to recidivate, both in terms of any subsequent offenses (Christiansen et al., 1965) and sex offenses in particular (Frisbie, 1965; Tracy et al., 1983). Studies of rapists and pedophiles have yielded mixed results concerning their relative recidivism rates.

Age of offender may be an indicator of risk for later criminality but not for sex reconvictions in particular, with younger offenders at greater risk for further convictions in general (Christiansen et al., 1965). Although an association between younger age and greater risk of sexual recidivism has been observed, the independent contribution of age was difficult to estimate when type of offense was also taken into account. A similar association between educational level and sexual recidivism was observed, but again, education was also related to offense type (Frisbie, 1965).

Marital status of offenders was apparently unrelated to general recidivism in a sample of mixed offender types (Christiansen, 1965). When examined within a group of pedophiles, however, an interaction of offender marital status with sex of victim was observed in relation to sexual recidivism. Homosexual pedophiles were less recidivistic if single at the time of the offense, while heterosexual pedophiles were less recidivistic if married (Frisbie, 1965).

Christiansen and colleagues (1965) observed that subjects convicted in urban areas were more likely to reoffend than those convicted in rural areas. Although this finding is not surprising, given the higher crime rates in urban areas generally (Federal Bureau of Investigation, 1984), it does highlight the importance of taking such potential sources of variance into account in the design of recidivism research and in interpretation of results.

Diagnosis of offender was found to be related to risk of both general and sexual recidivism in one study. The results suggest that sex offenders with personality disorder diagnoses are more likely to reoffend in general than are other sex offenders and that, when they do recidivate, they are more likely than others to recommit sex offenses (Tracy et al., 1983).

Involvement of alcohol abuse in commission of the original sex offense was also found to be more common among recidivists than among non-recidivists, but was more closely associated with commission of subsequent non-sexual offenses than sexual ones (Tracy et al., 1983).

Relationship of offender to victim was also examined as a potential predictor of sexual recidivism, with assault of a stranger (as opposed to acquaintance or relative) said to indicate greater likelihood of further sex offending (Tracy et al., 1983). Given the study design, however, it was difficult to evaluate the independent contribution of relationship relative to type of crime.

One study included an attempt to compare the recidivism rates for aggressive versus nonaggressive rapists (Gibbens et al., 1977). The use of subsequent as well as prior offenses in classifying the subjects as

aggressive or not, however, reduces the applicability of the findings to the area of recidivism prediction.

Age of the victim was examined as a potential predictor of recidivism. It was observed that, among pedophiles and incest offenders, individuals who assaulted adolescents were more likely to commit subsequent non-sexual offenses than were those who had assaulted younger children.

In summary, the literature relevant to sex offender recidivism prediction suggests that prior convictions for any type of offense would be a strong predictor of subsequent convictions. Prior research has also found relative youth of the offender, a diagnosis of personality disorder, urban environment, and involvement of alcohol abuse during the offense to be associated with increased risk of reconviction. The offense of incest has been associated with relatively low reconviction rates.

Of particular concern to those interested in reduction of sexual assault rates would be the identification of offender characteristics and offense circumstances that serve to identify sex offenders who are more likely to reoffend with a sex crime as opposed to some other crime such as theft. The literature in this area suggests that sex offenders with prior sex offense convictions are more likely than first sex offenders to reoffend sexually. It may be the case that those with "purely sexual" criminal histories are a particularly high-risk group. Personality disorder diagnosis, found to distinguish to some extent reoffenders in general, may also serve to identify those most likely to reoffend sexually. Offenders who were drinking excessively at the time

of the offense may be less likely to reoffend sexually than non-sexually. Younger offenders, better-educated offenders, and those who assault strangers may also be at high risk for sex reoffending, but these characteristics are also closely associated with offense types that are linked with higher recidivism rates. Among major offense types, incest offenders are at lowest risk for further sex reoffending. Certain variables may be useful indicators of sexual recidivism risk within offense types, such as generalized aggressive tendencies among rapists and marital status within pedophiles. The finding of an interaction between marital status and sex of victim associated with extent of sexual recidivism among pedophiles may indicate that complex relationships among variables may be found within offense type categories.

Overall, results of sex offender followup studies indicate that sex offenders are not a homogeneous group with regard to outcome and that there is wide variation among them in terms of both general and sexual recidivism risk. The extent to which prior findings may be sample-specific can only be evaluated through further replications. In addition, the degree of interrelationship found among a number of hypothesized predictors of recidivism suggests a need for identification of those variables most relevant to the predictive task.

Statement of Hypotheses

The present research is a followup study of male sex offenders who were released directly to the community from either a state psychiatric hospital or a correctional facility between the years 1976 and 1983, inclusive. These offenders had been convicted of crimes classifiable as pedophilia, rape, or paternal incest.

One major problem addressed is the relative lack of knowledge regarding the characteristics of sex offenders and their offenses. In order to obtain such information, the subjects' Pre-Sentence Investigations were rated according to a reliable set of scales that addressed characteristics of the current offense and prior criminal record, as well as aspects of the subjects' histories pertaining to family background, education, medical and psychiatric treatment, and social-sexual development. These characteristics were examined across offense types in order to provide a detailed description of the present sample and, more generally, to contribute to the descriptive literature on the sex offender and his offenses.

The second major problem addressed is one of program evaluation. The immediate, concrete goal of the study is to provide a particular mental health setting with evaluative feedback on the effectiveness of its sex offender treatment program in prevention of future criminal sexual activity. Since legal considerations precluded random assignment of subjects to treatment versus prison settings, subjects in the comparison group of imprisoned sex offenders were selected on the basis of matching criteria in order to obtain comparability with the treatment group on factors potentially related to outcome. It was hypothesized that the proportion of sexual recidivists is smaller among treated offenders.

The identification of statistically-derived predictors of recidivism is the third major problem addressed. By means of a discriminant function analysis, the ability of certain variables to predict membership in outcome groups was assessed. Three types of outcome were compared: Post-release conviction for at least one sex offense, post-re-

lease conviction for only non-sexual offenses, and no convictions of any type subsequent to release. The major hypothesis was that predictor variables which distinguish among these outcome groups can be identified.

Two functions were expected to result from the discriminant analysis. One function would distinguish the non-recidivistic group from the other two groups of reconvicted offenders. Reconviction in general was expected to be associated with general criminal history, age, and type of offense. In accord with the findings of prior research, it was hypothesized that younger offenders, those with prior convictions of any type, and non-incest offenders are most likely to recidivate.

The second function was expected to distinguish the repeat sex offender. Reconviction for sex offenses was expected to be associated with sexual criminal history, involvement of alcohol in the offense, relationship to the victim, and setting from which the offender was released. It was hypothesized that offenders with prior sex offense convictions, those who were under the influence of alcohol during the offense, those who assaulted strangers, and those who were imprisoned are most likely to recidivate with a new sex crime.

Diagnosis was also expected to show a significant relationship with recidivism. Diagnoses were available for only the specialized treatment group, and were examined in a supplementary analysis. It was hypothesized that the diagnosis of personality disorder is most prevalent among reconvicted offenders and, within the reconvicted groups, is more frequent among those who recidivate sexually.

The relationship between recidivism and pre-offense level of social-sexual competence was also examined. Although as yet no empirical evidence exists for the assumption of a relationship between these variables, arrested or deviant social-sexual development has been implicated as a factor in the etiology of sexual psychopathology on theoretical grounds, and Quinsey (1983) has suggested that deficiency in heterosexual skill may be an important predictor of further sex offending.

Because sufficient data to rate level of social-sexual competence were not available for many subjects, this variable was not included in the main analyses, but was examined for subsamples of offenders within the three outcome groups. It was hypothesized that sexual recidivists show the lowest level of social-sexual competence, as measured by the Phillips scale.

CHAPTER III

METHOD

Subjects

Legal Criteria for Diversion of Sex Offenders to Specialized Treatment

The Wisconsin Sex Crimes Law, operative from July, 1951 until July, 1980, provided for psychiatric treatment of selected sex offenders. In its earlier version, under Wisconsin Statutes Section 959.15, the length of treatment commitments was indeterminate, and most of the treatment was conducted at the Sex Deviate Facility within the Wisconsin State Prison, a maximum security correctional setting (Roberts & Pacht, 1965). Indeterminate sentencing allowed the imposition of maximum custody for life, if necessary, for those who could not utilize treatment and who would remain a danger to society (Pacht, Halleck, & Ehrmann, 1962).

All subjects in the current study were convicted during operation of the Wisconsin Sex Crimes Law as described in the statutes of Chapter 975 (Wisconsin Department of Justice, 1980). In accordance with these statutes, any person convicted of a sex crime was committed to the Department of Health and Social Services for a presentence social;

physical, and mental examination. Included under the definition of "sex crime" was any crime except homicide or attempted homicide that probably was directly motivated by a desire for sexual excitement. The presentence examination was conducted for the purpose of determining appropriateness for specialized treatment.

If the examination resulted in a recommendation that specialized treatment be provided, a hearing was conducted on the issue. At this hearing, the defendant had the right to counsel, the opportunity to appear with and to compel appearance of witnesses, and the right to examination by a physician or clinical psychologist of his or her own choosing. The defendant also had the right to waive the hearing.

If the offender was found to be in need of specialized treatment, he was committed to the Department of Health and Social Services for a period of time not to exceed the maximum sentence for the underlying offense. If not in need of treatment, he was sentenced under the terms of the criminal code applicable to the offense. In either case, the court had the option of staying execution of the commitment or sentence and placing the defendant on probation. For those in need of specialized treatment, a condition of probation was participation in treatment while in the community.

Those whose commitments were not stayed were conveyed to a sex crimes law treatment facility. Several state hospitals had established programs for sex offenders by this time, so that treatment could be carried out in mental health settings. Designation of the particular treatment facility was based both on geographical location of the committing court, and on the security level deemed necessary for secure custody of the offender.

Eligibility for early release of committed offenders required a recommendation to that effect from the Special Review Board (SRB), an examining body consisting of a psychiatrist, a social worker, and an attorney. The SRB was to examine each offender at least once per year. If deemed by the SRB to be capable of making an acceptable adjustment in society, and if it were reasonably likely that he was not a danger to the public, the offender could be released on parole.

Commitment Criteria and their Methodological Implications

A pertinent aspect of the procedures for processing sex offenders in Wisconsin is the process whereby appropriateness for treatment was determined, since those procedures governed the assignment of subjects to groups in the present study. The criteria for recommendation of specialized treatment were specified by an administrative order (see Appendix A). Essentially, a sex offender was recommended for specialized treatment if his crime was judged to be the product of sexual psychopathy and if, in addition, he was considered treatable or sexually dangerous.

The legal criteria are not especially informative in ascertaining the initial distinctions between treated and untreated sex offenders. The only attribute required of all offenders in the treatment group was "sexual psychopathy", but sexual psychopaths were not necessarily excluded from correctional processing; any who were considered untreatable and not dangerous were sent to prison. Even the supposition that the entire treatment group and only some of the correctional group were sexual psychopaths would not constitute any real information regarding

group distinctions, since the term "sexual psychopathy" was not defined by the administrative order, and the concept has no clinical validity in the field of psychiatry (Group for the Advancement of Psychiatry, 1977).

"Treatability" and "dangerousness" were undefined as well. Had criteria for application of these terms been provided, the question of relative proportions of treatable and dangerous individuals in the treatment group would still remain.

The ambiguities involved in determination of committed sex offender status could potentially be resolved by access to the actual criteria used by examining psychiatrists in making their recommendations to the court. In an effort to determine the bases for Sex Crimes Law commitments under the provisions of Chapter 975, the Wisconsin Bureau of Mental Health conducted an inspection of presentence examination psychiatric notes in the records of 153 sex offenders receiving specialized treatment in December, 1980 (J. Skinner, personal communication, January 25, 1982). Examination of the psychiatric notes indicated that 37% of these offenders had been committed on the basis of dangerousness alone, 12% on the basis of treatability alone, and 46% due to both dangerousness and treatability. The notes in 5% of the records did not reflect the language of the administrative order, and so could not be categorized according to these terms.

Including those offenders who met both criteria, it can be seen that approximately 58% were viewed as treatable, and approximately 83% were viewed as dangerous. Regarding definitions of these terms, the Bureau of Mental Health report indicated that "dangerousness" was often inferred from the fact that the individual had committed the offense.

"Treatability" was often addressed in vague terms, such as "(the offender) might be a suitable treatment candidate," or else assumed by the fact that the offender did not object to treatment, or showed an interest in treatment when asked.

The examining psychiatrists' interpretations of "sexual psychopathy" were not addressed in the Bureau of Mental Health report. Official diagnoses, however, do not reflect a literal interpretation of "psychopathy", an antiquated term for a type of personality disorder, and strongly suggest that "psychopathology" was the actual criterion used.

Also not addressed in the Bureau of Mental Health report, which examined the presentence evaluations of only those offenders who were subsequently committed for treatment, were the examining psychiatrists' criteria for excluding sex offenders from the treatment program.

From both legal and clinical standpoints, then, the criteria for inclusion in the specialized treatment group were ambiguous. The clinical advantages of this situation have been noted by Pacht et al. (1962):

Most medico-legal procedures require psychiatric evaluation to conform to a rigid rule of responsibility or committability. Since the Wisconsin (Sex Crimes) law does not require such a fixed test, it permits a more meaningful and scientific application of psychodynamic principles...(The staff is) free to develop their own criteria for selecting the most suitable candidates for recommitment into the treatment program. (pp. 803- 804)

With reference to the program evaluation aspect of the current study, however, the ambiguity of selection factors is problematic in the sense that the variables to be controlled are not readily apparent. As noted by Glaser (1978), an obvious risk in quasi-experiments, as compared with classical controlled experiments, is that the treatment and comparison groups may differ in respects that significantly affect the

outcome measured, perhaps to a greater extent than the treatment itself. On the other hand, these same ambiguities introduce a greater degree of arbitrary assignment than would be the case had the criteria been operationalized and rigorously applied.

Although in the present study the commitment criteria were unclear, the absence of systematic biases in diversion of offenders to treatment could not be assumed. On the basis of prior research (Pacht & Cowden, 1974; Sturgeon & Taylor, 1983), it was expected that a random sampling of imprisoned sex offenders would result in significant differences between specialized treatment and prison groups on race, prior sex offense convictions, alcohol abuse, offense types, age, and educational level. Since these variables may also be expected to influence reconviction risk, a fair comparative assessment of recidivism required the selection of correctional subjects by matching, with equivalence between groups as an alternate aim whenever matching was not feasible.

The major potentially confounding characteristic that could not be rendered comparable between groups was diagnosis. Because few sex offenders sentenced to correctional facilities were given diagnoses, neither matching nor comparability between groups could be accomplished for this variable.

Although the commitment criterion of "sexual psychopathy" is essentially meaningless (Group for the Advancement of Psychiatry, 1977), it is generally assumed that offenders receiving specialized treatment are mentally disordered in some way. It may be argued that presence of mental disorder is a negative prognostic sign which would exert a stronger influence on outcome than treatment itself, thus placing even

treated disordered offenders at a disadvantage when compared with "normal" offenders. The strength of such an argument when applied to MDSO program evaluations is diminished to a large extent for several reasons. First, few convicted sex offenders are likely to manifest severe, pervasive mental disorders such as psychosis (Dix, 1976; Gebhard, Gagnon, Pomeroy, & Christenson, 1965; Grossman, 1980), perhaps because offenders so-diagnosed are frequently found "not guilty" of their offenses.

Secondly, "personality disorder", a diagnosis frequently assigned to MDSOs (Dix, 1976; Sturgeon & Taylor, 1980), has been found to characterize many imprisoned sex offenders as well (Tracy et al., 1983). The personality traits of many sex offenders may simply characterize criminals in general (Freund, Heasman, & Roper, 1982).

Finally, the commitment criteria of most MDSO statutes suggest that a mixed prognostic picture results in the specialized treatment group, given that in most cases both mental disorder and treatability are required for MDSO status. Wisconsin's Sex Crimes Law is no exception; although the criterion of "sexual psychopathy" may imply that criminality is complicated by presence of mental disorder and so perhaps less amenable to change than criminality alone, the "treatability" aspect of the commitment criteria suggest a more favorable prognosis.

Method of Subject Selection

Subjects in the specialized treatment group were selected from among sex offenders committed under the terms of Wisconsin's Sex Crimes Law, Wisconsin §975-06, and released from Mendota Mental Health Institute (MMHI) between the years 1976 and 1983, inclusive. Only those

offenders released legitimately and directly to the community were included in the study. Excluded from the original group of 120 research candidates were 20 offenders who were transferred from MMHI to serve additional sentences at state correctional facilities, 1 offender who was transferred to a county jail, and 15 offenders who were transferred to more secure treatment facilities. Also excluded were 2 escapees.

The Pre-Sentence Investigations (PSIs) of the 82 remaining research candidates were examined in order to determine the types of sex offenses represented. Classification of an offense as pedophilia, rape, or incest was based on age of victim and on the nature of the offender-victim relationship (see Appendix B). Only paternal relationships were classified as incestuous. Non-incestuous assaults were categorized as rape or pedophilia depending on the age of the victim, with assault of an individual aged 16 or younger considered to be a pedophilic offense. An exception to the victim age criterion was made if both the offender and the victim were age 16 or younger at the time of the offense, and their ages differed by no more than 2 years. In these instances of age-cohort assault by a young adolescent offender, the offense was to be categorized as "rape".

If the offender's index conviction was for multiple counts involving more than one victim, he was classified as an incest offender if the relationship with any victim would be considered incestuous; otherwise, categorization as a pedophile or rapist depended on the age of the youngest victim.

Nearly all of the remaining research candidates were classifiable as pedophiles, rapists, or incest offenders. The single exhibitionist

was dropped from the study. A second offender dropped from the study had been officially convicted of arson, and examination of his PSI revealed no evidence of any actual or attempted sex crime during commission of that offense.

The PSIs of the 80 remaining MMHI research candidates were also examined for determination of status on the matching variables of prior sex offense convictions, race, county of commitment, and history of alcohol or drug abuse. Data pertaining to release mechanism (Special Review Board or mandatory) were obtained from MMHI medical records.

The State of Wisconsin Division of Corrections (DOC) provided a computer-generated listing of the 996 sex offenders released from correctional facilities during the time period covered by the study. In addition to the offender name and DOC identification number, the list included information regarding release date, release mechanism, race, and county of commitment. Security classification upon release was also listed for offenders released after 1979.

The process of screening DOC sex offenders for matches consisted of determining likely candidates on the basis of available information provided on the computer-generated listing, determining the location of the file that would contain the PSI corresponding to the index offense, and examining the index offense PSI to ascertain the offender's status on the remaining matching variables. For offenders released prior to 1980, the screening process also involved examination of institutional documents in the index offense file to determine final security classification.

DOC client files were located at either the Central Records Office, the Record Center warehouse, or on microfiche at the State Historical Society. Location of files among these three possible sites, which were separated from each other by several miles, depended on whether the case of interest was "terminated" or "active" and, if terminated, the age of the record. "Termination" referred to completion of probation and parole supervision. The number of files in existence for a particular client depended on the number of times the client had been successfully terminated from supervision, regardless of the number of offenses committed. For instance, only one file would exist for an offender with continuous contact with the correctional system since his first offense 10 years ago, and information pertaining to any of his offenses would be found in that one "active" file.

The DOC file maintenance and storage systems were relevant to the methodology of the current study in that ease of screening for possible matches was related to the client's parole performance subsequent to release from prison for the index offense. The first step in the screening process was determination of index file location, based on whether the offender was continuously active since the index offense, or had been terminated at some point subsequent to release from prison. If terminated, care was taken to obtain the appropriate "T(ermination)-number" corresponding to the offense of interest. T-numbers had been assigned in sequential order, with most distantly-terminated files having the lowest T-numbers.

This first step in the screening process was conducted using computer terminals and manual records, both located in the Central Records

Office. The Central Records Office also contained all of the active files and the most recently-terminated files. The quickest method of screening, then, would have involved examination of the readily-available files stored at the Central Records Office, but could have easily resulted in obtaining a disproportionate number of poor outcome cases.

In order to avoid a bias in DOC client outcome related to location of client files, the locations of all potential DOC subject records were determined prior to commencement of screening. The percentages of files located at each of the three sites were calculated separately for each release year. These overall proportions were applied to the actual numbers of matches needed per release year, and determined the quotas of research cases to be obtained from each site. By adhering as closely as possible to these quotas, it was expected that variations in subsequent correctional experiences of the DOC matches would be representative of those to be found among their release-year cohorts generally.

Involved in the matching process were the author and an MMHI research analyst. We were periodically assisted for several weeks at a time by two mental health aides who had been temporarily relieved from direct patient contact due to work-related injuries. The matching phase of the study required approximately six months of screening, with exhaustion of all plausible candidates. The individuals involved in the screening process were instructed to record the status on all matching variables of all offenders screened, regardless of whether the candidate appeared to be an immediate match. In this manner a reserve batch of screened candidates was readily available for subsequent consideration as the matching criteria were relaxed, thus avoiding repeated screenings

of the same files. The reserve batch was also viewed as a potential source of substitute subjects should adjustments in mean age or educational level be required for obtaining comparability with the specialized treatment group.

Type of index sex offense, prior sex offense convictions (yes or no), and security classification upon release were maintained as primary, inflexible matching criteria. The remaining secondary criteria were relaxed according to a hierarchical paradigm, based on hypothesized strength of association with recidivism. That is, position in the hierarchy reflected the importance of controlling a particular variable, and was either logically determined or based on past empirical findings. Relaxed first was county of commitment, followed by release mechanism, history of alcohol or drug abuse, race, and year of release. Year of release was abandoned as a matching criterion only when relaxation of all other secondary variables continued to yield no matches on the primary criteria. In such instances, the immediately prior or subsequent release years were examined for suitable candidates, depending on whether the specialized treatment subjects in need of matches had been released during the first or second halves of their release years.

The search for comparable imprisoned sex offenders yielded cohorts, matched on the primary criteria, for 75 offenders from the specialized treatment setting. Further information on the outcome of the matching procedures is presented in Chapter IV.

Sample Composition

The subject selection and matching procedures resulted in a total sample of 150 male sex offenders released directly to the community between the years 1976 and 1983, inclusive. Half of the subjects, the specialized treatment group, were committed under the terms of Wisconsin's Sex Crimes Law, Wisconsin §975-06 (1970), and were released from a minimum-medium security level forensic treatment unit at Mendota Mental Health Institute. The remaining subjects, the comparison group, were released from minimum or medium security level correctional facilities.

Of the 150 offenders in the present study, 59% were classified as pedophiles, 31% as rapists, and 11% as incest offenders. Approximately two-thirds (64%) had no prior sex offense convictions. A similar proportion (63%) had a history of at least occasional alcohol or drug abuse. Most (89%) were white. Only 20% were convicted of their index offenses in the county containing the city of Milwaukee, the major urban area in the state. Many (71%) were given early release from sentence by Special Review or parole boards.

Demographic data for the two groups are presented in Table 3. Mean age at commission of the offense under study (index offense) was 30.3 years in the specialized treatment group and 31.8 years in the comparison group. The difference between groups on age at index offense was not significant, $t(144) < 1.0$, ns.

More than half of the sex offenders -- 60% of the specialized treatment and 67% of the prison group -- were either currently or formerly married. The groups did not differ on marital status at commission of the index offense, $\chi^2(2, N = 137) = 1.10$, ns.

Table 3

Demographic Characteristics of Offenders in Each Group

Demographic variable	Specialized treatment			Prison			χ^2 or <u>t</u>	p
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a		
Age	30.3	10.5	73	31.8	10.6	73	- .87	<u>ns</u>
Under 21	3%			7%				
21 - 30	39%			29%				
31 - 40	35%			35%				
41 - 50	15%			20%				
51 - 60	5%			9%				
Over 60	4%			0%				
Marital status			64			73	1.10	<u>ns</u>
Married	41%			42%				
Formerly married	19%			25%				
Never married	41%			33%				

Table 3 (continued)

Demographic variable	Specialized treatment			Prison			χ^2 or <u>t</u>	<u>p</u>
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a		
Educational level			63			72	3.30	<u>ns</u>
Did not complete high school	49%			58%				
High school diploma	30%			32%				
Beyond high school	21%			10%				
Social class								
Raw score	56.3	15.7	35	58.9	13.8	42	-.78	<u>ns</u>
Scaled score								
I	3%			0%				
II	0%			5%				
III	11%			5%				
IV	46%			45%				
V	40%			45%				

Note. These data reflect status at commission of index offense.

^aNumbers of offenders, out of 75 in each group, with available data on these measures.

The proportions of offenders who did not complete high school were 49% in the specialized treatment group and 58% in the comparison group. A higher proportion of treated offenders had received some education beyond high school. A comparison of groups according to proportions without high school educations, with only high school educations, and with education beyond high school revealed that the variations observed were not statistically significant, $\chi^2(2, N = 135) = 3.30, ns$.

Social class of family of origin was measured using a two-factor index of social position (Hollingshead, 1957). Sufficient parental information was available to rate 35 subjects in the specialized treatment group and 42 subjects in the comparison group. The mean raw scores for both groups, 56.29 and 58.93, respectively, fell in the range of Social Class IV. Social Class IV roughly conforms to a working class category. The data available in this area indicates that the groups did not differ in social class, $t(75) < 1.0, ns$.

The discharge diagnoses of most offenders in the specialized treatment group were available. Offenders discharged before January 1, 1980 were diagnosed according to the criteria of the second edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM II) (American Psychiatric Association, 1968), while those discharged thereafter were diagnosed according to the criteria of the third edition (DSM III) (American Psychiatric Association, 1980). Offender diagnoses were categorized according to the broader classes of paraphilia, psychosis, personality disorder, mental retardation, and alcohol abuse or dependence. There were a number of offenders with multiple diagnoses. Of the 73 offenders in the specialized treatment group with available dis-

charge diagnoses, 79% were given diagnoses of paraphilia; 4% of psychosis; 75% of personality disorder; 4% of mental retardation; and 30% of alcohol abuse or dependence.

Materials

Pre-Sentence Investigations and Rating Scales

The Pre-Sentence Investigation (PSI) is a detailed account of the present offense, prior criminal record, personal history, and family history, and is completed for all offenders prior to sentencing. A probation and parole agent is assigned to complete the PSI, using all available documents as well as interviews with the offender and family members. Victim and offender accounts of the offense are usually taken from police records, and often include verbatim transcripts of the statements given.

The Pre-Sentence Investigation Rating Scales, designed for use in the current study, consist of 106 items (see Appendix C). Guidelines for rating these scales are presented in Appendix D. Addressed in the PSI Rating Scales are characteristics of the index offense, prior criminal record, family background, education, employment and financial situations, medical and psychiatric history, and social-sexual development. Gaps in the numbering system reflect the removal of unreliable items.

The PSI Rating Scales originally consisted of 133 items. Prior to rating PSIs for the current sample, the PSIs of 20 sex offenders, most of whom were not included in the study, were obtained and evaluated by the two raters. In general, items were removed if coefficients of less

than .70 resulted from assessment of inter-judge reliability. Ratings on quantitative scales were assessed using the intraclass correlation coefficient (ICC) (Bartko, 1966). The Cohen (1960) k coefficient was used to assess agreement on nominal scales.

Items removed due to low reliability coefficients were the following: Several ratings of aggressive behaviors during the index offense (threat of force or injury; striking or choking; sadistic behavior); use of abduction or kidnapping during the index offense; whether subject was a victim of neglect in childhood; discipline problems in school; disruption in employment situation six months prior to index offense; receipt of unearned financial support at time of index offense; prior diagnoses of alcoholism or drug abuse; history of developmental problems or delays; and sociability and peer relationships in adulthood.

Items were also removed if the reliability study revealed that in most instances sufficient information was not available for rating. PSI data were often insufficient for rating whether physical contact was involved in commission of prior sex offenses; psychiatric diagnoses of siblings; scholastic performance and adaptation to school in childhood; scholastic performance in adolescence; and sociability and peer relationships in childhood and adolescence.

When reliability coefficients were low due to small variances within the judges' ratings, percent agreements of .70 or higher were considered adequate for item retention. This alternate reliability criterion was applied to ratings of duration of assault (Item 45) and number of prior jail terms served (Item 54).

In some cases, items with low reliability in their original forms were retained if changes in coding procedures resulted in adequate agreement. Items 57 through 62b and 66 through 71b were originally rated for number of prior convictions in each offense category, but were changed to reflect only the presence or absence of such offenses. The nature of prior sex crime convictions (Items 74 - 78b) underwent a similar change in coding procedure. Agreement on adaptation to school during adolescence (Item 106), taken from the Premorbid Adjustment Scale of Cannon-Spoor, Potkin, and Wyatt (1982), was low in its original 7-point scale, but was adequate when judges were to discriminate among only four levels.

Although care was taken to utilize as PSI measures only those rating scales for which adequate reliability could be demonstrated, it should be noted that the error variance due to unreliability of measurement would lead to decision errors of only the type 2 (beta) variety, and not to type 1 (alpha) errors. Thus, given a situation in which a variable was measured using an unreliable scale, any significant results would have been obtained in spite of the unreliability of measurement, and not because of it. On the other hand, low reliability may lead to nonrejection of the null hypothesis when it should in fact be rejected, thus masking true differences between groups.

A number of PSI classification schemes and rating scales originated elsewhere in the literature. These items are described in greater detail below.

Offense classification scheme. The criteria for determining the nature of offenses, presented along with examples in Appendix E, were

based on the typology developed by Clinard and Quinney (1967). The offense types of public order, property, and personal were selected as the major categories in the current study. The category of "property crimes" corresponds to Clinard and Quinney's "occasional property" and "conventional" crimes combined. A major deviation from their typology was in classification of robbery, considered by Clinard and Quinney to be a "conventional crime". Since robbery involves direct personal contact and some degree of threat to the victim, it was considered to be a personal crime in the present study.

The nature of prior convictions (Items 57 - 62b and 66 - 71b) was recorded separately for those committed in adolescence, prior to age 18, and those committed in adulthood. Two of the major offense type categories were further broken down, with traffic violations recorded separately from other public order crimes, and sex crimes and murder or attempted murder separated from other personal crimes.

The k coefficients (or percent agreements) for rating presence or absence of prior convictions in each category ranged from .80 to 1.0, with one exception. The k coefficient for "other public order" crimes in adulthood (Item 67) was lower, at .60, but was retained in order to maintain completeness of the overall classification scheme. Discussion of disagreements in this area revealed a consistent error by one judge in classifying "contributing to the delinquency of a minor" as a personal rather than public order crime.

Types of sexual activities involved. Items 32 through 34 directly reflect the types of sexual behaviors noted by Dix (1976) in his analysis of MDSO pedophilic activity. In the present study, an intermediate

rating choice of "attempted but not completed" was used in addition to Dix's categories of presence or absence. The k coefficients of agreement were .93 for each of these items.

Premeditation. The rating of premeditation (Item 48) was suggested by Groth and Birnbaum (1979) as a relevant contribution to clinical assessment of the sex offender. This rating was directly derived from their clinical assessment protocol. Assessment of inter-judge agreement resulted in a k coefficient of .73 in the present study.

Social class. The two-factor index of social position developed by Hollingshead (1957) was used to determine social class (Items 99 - 101). The two-factor index takes into account both occupation and educational level. Since the criminal backgrounds of many of the offenders in the current study may have resulted in restricted employment opportunities and interruptions of education, it was decided that parental standing on these variables would provide a more realistic estimate of the offender's social class.

The referent for rating social class, then, was the head of household when the offender was 18 years of age. (See Appendix F for methods of handling unusual living situations.) The k coefficient of agreement on the five social class categories was .71.

Educational level and adaptation to school. The PSI Rating Scales originally included a number of items from the Premorbid Adjustment Scale (PAS) developed by Cannon-Spoor, Potkin, and Wyatt (1982). The PAS includes ratings of premorbid social-sexual adjustment, to a large extent derived from the Phillips scale (Phillips, 1953), but includes estimates of scholastic performance and adjustment, sociability, and

peer relationships as well. Thus premorbid social-sexual adjustment contributes to ratings on the PAS but is not the sole focus of the instrument.

PAS items were included in order to compare the predictive ability of this instrument relative to the Phillips scale. The PAS was intended for use with psychiatric patients, using hospital records, or family members if available, as sources of data. In the present study, the "Personal History" section of the PSI was used to obtain ratings of sociability and withdrawal, peer relationships, scholastic performance, and adaptation to school. Preliminary examination of a number of PSIs revealed that accounts of adolescent development were not detailed enough to provide separate estimates of functioning in the early (ages 12 - 15) and late (ages 16 - 18) periods, as called for in the original PAS, and so items pertaining to adolescence were combined to obtain a single series of ratings on overall performance from ages 12 through 18.

Also included was the PAS 7-point rating scale for current educational level. PAS ratings of social-sexual functioning overlapped considerably with Phillips scale items, and so were not repeated in the PSI Rating Scales.

The inter-judge reliability study revealed that in most cases the PSI did not provide sufficient information to rate many of the PAS items. Ratings of "sociability and withdrawal" and "peer relationships" in adulthood were scoreable, but yielded low ICC coefficients of agreement, at $-.13$ and $.32$, respectively. Sufficient information was also provided to rate "adaptation to school" during adolescence, but the associated ICC coefficient was $.63$ for the original 7-point scale. The

item was retained as a 4-point scale (Item 106), for which the coefficient of agreement was .71. The PAS rating of current educational level was scoreable also, with an ICC coefficient of agreement at .85, and was retained in its original form (Item 102).

Phillips scale. The Phillips scale (Phillips, 1953) was originally developed for use in distinguishing "process" from "reactive" schizophrenics. The process-reactive dimension has been posited as an indicator of prognosis in schizophrenia, but results of more recent research have indicated that its utility is limited when applied to prediction of longer-term outcome (Bromet, Harrow, & Kasl, 1974; Westermeyer & Harrow, 1980).

The Phillips scale (Items 125 - 130) was selected for use in the present study because of its emphasis on social-sexual development, a variable that may have implications for prognosis of sex offenders. The "Personal History" section of the PSI, which includes descriptions of sexual development and social relationships, was used as the data source in obtaining Phillips scale ratings.

Inter-rater reliability assessment revealed that sufficient information for completing all five Phillips subscales was often lacking, particularly for subscale B, "Social Aspects of Sexual Life During Adolescence and Immediately Beyond." When data were missing for only one or two subscales, their values were estimated using a prorating procedure in which the average of completed scales was substituted for the missing values. The final Phillips score was obtained by summing the five subscale scores.

Final Phillips scale ratings were obtainable for only ten pairs of subjects in the reliability study. The associated ICC reliability coefficient of .67 was somewhat short of the general criterion for retention of items, but was considered to reflect adequate inter-judge agreement given the small number of scores available for assessment.

Crime Information Bureau Identification Transcripts

The Wisconsin Department of Justice Crime Information Bureau (CIB) provided all available identification transcripts, or "rap sheets", for offenders in the sample. These CIB transcripts were the source of recidivism data in the present study. Indicated for each entry of the transcript was the agency which provided the information, offender name and identifying number, date of interaction with the contributing agency, nature of the transaction, and disposition. Also provided by the CIB was a coding key for interpreting abbreviations used in the transcripts.

The degree of elaboration regarding the nature of transactions varied, but usually included "Uniform Offense Classifications" numbers, interpretable with a second coding key (Appendix G) provided by the CIB. The classification code, along with a brief verbal description and statute number when given, usually provided sufficient information to determine the nature of the offense addressed and, within the larger category of sexual offenses, the type of sex offense.

Dispositions were also listed with varying degrees of completeness. Usually, entries under "disposition" would provide information on dismissal of charges, conviction date, nature and length of sentence, and facility to which committed.

The data obtained from CIB transcripts was transferred to Recidivism Worksheets (Appendix H) using a companion coding key (Appendix I). Working from the Recidivism Worksheet, Recidivism Summary forms (Appendix J) were completed as the final step in preparation of data for analysis.

Procedure

The matching process, as noted earlier, yielded 75 pairs of offenders. Each offender was assigned a random identification number for the research project, to be used in lieu of his name.

Following a series of several training sessions and the reliability study, the PSIs were distributed to the raters (the author and an MMHI research analyst) for scoring according to the PSI Rating Scales and their Guidelines. Two PSIs of offenders in the specialized treatment group, both from the earliest release year in the study, could not be located. The PSIs of their corresponding matched subjects in the prison group were not rated. The remaining batch of 146 PSIs was ordered according to the randomly-assigned identification numbers and halved for assessment by the two raters. The raters were blind to group membership (specialized treatment or prison) of the offenders.

Recidivism data for the program evaluation and prediction aspects of the study were obtained from CIB transcripts. There were six offenders with no transcripts on file at the CIB. Offenders with missing transcripts appeared to be randomly distributed across release years ranging from 1978 through 1981, and consisted of four subjects in the specialized treatment group and two subjects in the prison group.

Offenders with missing recidivism data and their matches were dropped from the program evaluation study. Only those who were actually missing the recidivism data were dropped from the prediction study.

The raw recidivism data consisting of 144 CIB transcripts were interpreted by the author, using abbreviation and coding keys provided by the CIB, descriptions of legal statutes where referenced, and consultations with CIB officials as needed. Incomplete transcript entries were interpreted in a conservative manner. For instance, lack of conviction was assumed when disposition following arrest was unknown.

The raw data were transformed to correspond with the classification schemes of the present study, with all relevant transactions and their outcomes recorded in chronological sequence on the Recidivism Worksheets. The Worksheets reflected only those contacts with contributing agencies which occurred between the offender's index release date and January 1, 1985.

A mental health aide, functioning as a research assistant, was trained in final coding of the recidivism data. Working from the Recidivism Worksheets, the nature and frequency of contacts with law enforcement and correctional agencies were recorded on the Recidivism Summary forms.

CHAPTER IV

RESULTS

The results are presented in four major sections. The outcome of the matching procedures, which determined the final sample composition, is presented first. Secondly, the characteristics of the pedophiles, rapists, and incest offenders in the sample are described. The third section gives the results comparing recidivism of treated and incarcerated sex offenders. Finally, results pertaining to statistical prediction of recidivism are presented. The results of these four sets of statistical analyses are followed by a summary of the findings.

Outcome of Matching Procedures

Exact fit on the primary matching variables could not be obtained for five of the 80 sex offenders originally included in the specialized treatment group, leaving 75 treated offenders paired with a like number of imprisoned offenders convicted of the same offenses, with the same sex offense histories (in terms of presence or absence of prior convictions), and also released from minimum or medium security level settings.

The five unmatched offenders were all pedophiles who had been previously convicted of sex offenses. Regarding release years, three had been discharged from the hospital in 1977, and two had been discharged

in 1980. The 1977 and 1980 release years were the most difficult years for finding matches generally, and were the only years of release for which alternate DOC candidates had to be taken from the immediately preceding or following release years.

The final outcome of the matching procedures, relative to each matching variable, is presented in Table 4. In addition to equivalence obtained on the primary matching variables as noted above, the success of the matching process was also reflected in the comparability of the specialized treatment and prison groups on number of months since release, race, county of commitment, and release mechanism.

As already noted in the description of the sample presented in Chapter III, the groups were also comparable in age and educational level at commission of the index offense, so that the composition of the prison group which resulted as the end-product of matching required no adjustments on these variables. In addition, as also noted in Chapter III, the groups were comparable on marital status and social class.

The only variable for which the matching attempt did not result in equivalence or comparability of groups was alcohol or drug abuse history (presence or absence). In the specialized treatment group, 47% of the offenders' histories showed no evidence of any substance abuse episodes, compared with only 28% of the imprisoned offenders. The difference between groups on proportions of offenders with and without substance abuse histories was significant, $\chi^2(1, N = 150) = 5.62, p < .05$.

The difficulty in finding DOC subjects without histories of substance abuse is not surprising given results of previous research indicating that Wisconsin sex offenders excluded from treatment showed

Table 4

Matching Variables: Number of Offenders in Each Category

Matching variable	Specialized treatment Group ^a	Prison Group ^a	Total	χ^2 or t	p
Type of sex offense				0	<u>ns</u>
	Pedophilia	44	44	88	
	Rape	23	23	46	
	Incest	8	8	16	
Previous sex offense conviction				0	<u>ns</u>
	No	48	48	96	
	Yes	27	27	54	
Security classification at release				--	--
	Minimum or medium	75	75	150	
	Maximum	0	0	0	

Table 4 (continued)

Matching variable	Specialized treatment Group ^a	Prison Group ^a	Total	χ^2 or <u>t</u>	<u>p</u>
Year released				1.01	<u>ns</u> ^b
	1976	5	6	11	
	1977	9	7	16	
	1978	10	11	21	
	1979	10	14	24	
	1980	10	6	16	
	1981	11	11	22	
	1982	11	11	22	
	1983	9	9	18	
Race				.14	<u>ns</u>
	White	67	66	133	
	Black	8	8	16	
	Native American	0	1	1	
County of commitment				0	<u>ns</u>
	Milwaukee	15	15	30	
	Other	60	60	120	

Table 4 (continued)

Matching variable	Specialized treatment Group ^a	Prison Group ^a	Total	χ^2 or <u>t</u>	<u>p</u>
History of alcohol or drug abuse				5.62	<.05
	No	35	21	56	
	Yes	40	54	94	
Release mechanism				.85	<u>ns</u>
	Special Review or Parole Board	56	51	107	
	Mandatory release	19	24	43	

^an = 75

^bBased on comparison of mean number of months since release.

significantly more drinking behavior than those who were treated (Pacht & Cowden, 1974), and is also consistent with results of a recent national survey of imprisoned offenders on the prevalence of alcohol problems in the general prison population, particularly among rapists (Bureau of Justice Statistics, 1983b). In the present study, the difficulty in matching treated sex offenders without alcohol or drug abuse histories with imprisoned sex offenders of similar substance abuse backgrounds was confronted in nearly equal proportions among pedophiles and rapists, with 23% and 22% unmatched in this fashion, respectively. In the incest group, there was one treated offender (13%) for whom a comparable imprisoned offender also lacking in substance abuse history was not located.

Comparisons of Pedophiles, Rapists, and Incest Offenders
on Pre-Sentence Investigation Rating Scales

The three offender types represented in the current study were compared in order to ascertain differences and similarities among them in victim and offense characteristics, criminal histories, and personal backgrounds. For the purpose of these analyses, the total sample of 150 sex offenders, both treated and imprisoned offenders combined, was subdivided into three offense type groups consisting of 88 pedophiles, 46 rapists, and 16 incest offenders. These groups were then compared on data obtained using the PSI Rating Scales. The statistical significance of differences observed was assessed using one-way analysis of variance (ANOVA) for interval or ratio scales and the chi-square test when data were nominal.

Because of the large number of comparisons involved, a cross-validation technique was used to identify those differences least likely to have resulted from chance alone. All results significant at the .05 level in the total sample were subjected to cross-validation. The cross-validation procedure involved random division of the sample into two halves, which were each analyzed and subjected to tests of statistical significance. Only those variables which met the criterion of significance at the .10 level in both halves of the sample were considered to reliably differentiate the offender groups.

A summary of PSI data obtained for each offender group is presented in Table 5. Also indicated in Table 5 are the results of statistical tests on group differences observed. The probability levels given refer to results obtained in the total sample, and are provided for only those variables which also met the cross-validation criteria for significance. Differences which were significant in the total sample but not in the cross-validation procedures were viewed as representing chance fluctuations, and are reported as "not significant (ns)."

In addition, data pertaining to all significant ANOVA results were subjected to comparisons of group means using the Student-Newman-Keuls procedure. The results of this procedure are also indicated in Table 5.

The results obtained in these comparisons of pedophiles, rapists, and incest offenders are described below.

Victim Characteristics

Age of victim. The mean ages of victims were 11.3 years in the pedophile group, 26.0 years in the rapist group, and 13.3 years in the

Table 5

Means and Standard Deviations, or Percentages, for Pre-SentenceInvestigation Rating Scales

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
Victim Characteristics ^c										
15.-17. Age ^d	11.3	3.4	78	26.0	16.1	31	13.3	3.6	16	< .0001
Proportion of victims in each age range:										<u>PIR</u>
Under age 5	3%			--			--			
Age 5-8	19%			--			--			
Age 9-12	33%			--			37%			
Age 13-16	44%			--			53%			
Age 17-20	1% ^e			54%			5%			
Age 21-30	--			27%			5%			
Age 31-40	--			8%			--			
Age 41-50	--			3%			--			
Age 51-60	--			3%			--			
Over age 60	--			5%			--			
22. Sex			83			46			16	<u>ns</u>
Female only	75%			96%			100%			
Both male and female	1%			0%			0%			
Male only	24%			4%			0%			

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
23.-25. Relationship to Offender			80			46			16	< .0001
All related or acquainted	65%			28%			100%			
At least one victim was a stranger	35%			72%			0%			
26.-28. Greatest degree of resistance among victims	2.6	1.5	77	3.9	1.3	46	2.4	1.3	16	< .0001 <u>PIR</u>
1 = None	33%			7%			38%			
2 = Verbal only	18%			11%			6%			
3 = Physical, passive	23%			17%			38%			
4 = Pushing	5%			17%			13%			
5 = Attempt to harm offender or escape	21%			48%			6%			
Offense Characteristics										
29.-31. Location of offense			78			46			16	< .001
Home of subject or victim	36%			35%			81%			
Secluded area	33%			17%			19%			
Public area	31%			48%			0%			

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
32.-34. Greatest degree of sexual aggression Sexual activities involved:	4.3	1.7	82	4.9	1.6	45	5.5	1.4	16	<u>ns</u>
Touching only	31%			13%			13%			
Oral-genital contact	35%			36%			31%			
Penetration (vaginal or anal)	45%			60%			88%			
36.-40. Greatest degree of physical aggression Aggressive behaviors involved:	2.1	1.1	80	3.2	.7	46	1.8	1.0	16	<.0001 <u>PIR</u>
1 = None	49%			7%			63%			
2 = Verbal abuse	10%			17%			6%			
3 = Physical coercion	51%			87%			38%			
4 = Weapon displayed	5%			30%			0%			
5 = Weapon utilized	0%			0%			0%			
42. Offender sexual dysfunction evident during offense	5%		80	13%		46	13%		16	<u>ns</u>
43. Victim bribed or promised compensation	10%		80	0%		46	13%		16	<u>ns</u>

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
45. Duration of assault	2.1	1.2	80	1.4	.5	45	3.7	.9	16	<.0001
1 = Less than 1 hour	46%			67%			6%			<u>PRI</u>
2 = 1-24 hours	26%			31%			6%			
3 = More than 24 hours	1%			2%			0%			
4 = Ongoing sexual relations (at least 3 separate assaults of same victim)	26%			0%			88%			
Age and mental status of offender at commission of offense										
Age:	31.5	11.6	84	27.9	7.6	46	37.8	8.3	16	<.005
Under 21	25%			17%			0%			<u>PRI</u>
21-30	30%			54%			6%			
31-40	21%			17%			63%			
41-50	16%			11%			19%			
51-60	7%			0%			13%			
Over 60	1%			0%			0%			
46. Offender was under influence of alcohol or drugs	33%		80	50%		46	31%		16	<u>ns</u>
47. Offender may have been psychotic	1%		80	4%		46	0%		16	<u>ns</u>

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			<u>p</u> ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
48. Premeditation			62			29			13	<u>ns</u>
Spontaneous	10%			14%			0%			
Opportunistic	39%			48%			15%			
Intentional	52%			38%			85%			
Attribution of blame										
14. Official plea of guilt entered	81%		77	66%		44	81%		16	<u>ns</u>
49. Verbalized full or qualified admission of guilt	55%		77	68%		44	73%		15	<u>ns</u>
Prior Criminal Record										
56. Juvenile arrest record	31%		83	30%		46	25%		16	<u>ns</u>
64. and 73. Any prior convictions	81%		83	80%		46	94%		16	<u>ns</u>

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
Type of prior offense convictions										
Public order	65%			60%			81%			<u>ns</u>
Property	41%			42%			63%			<u>ns</u>
Personal	54%			48%			44%			<u>ns</u>
Other	6%			2%			13%			<u>ns</u>
51. Age at first conviction	22.0	9.1	81	20.0	6.1	43	23.3	6.7	15	<u>ns</u>
63. and 72. Any prior sex offense convictions	43%		88	26%		46	25%		16	<u>ns</u>
Type of prior sex offense convictions:										
Pedophilia	24%			9%			6%			<u>ns</u>
Rape	6%			17%			6%			<u>ns</u>
Incest	4%			2%			6%			<u>ns</u>
Exhibitionism	4%			0%			6%			<u>ns</u>
Other	5%			2%			0%			<u>ns</u>
50. Age at first sex offense conviction	27.2	9.7	84	26.3	6.7	46	36.2	9.2	16	<.001 <u>PRI</u>

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			<u>p</u> ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
Summary of Criminal History			80			43			16	<u>ns</u>
No prior arrests or convictions	18%			14%			6%			
Arrests but no convictions	3%			5%			0%			
Nonsexual offense convictions only	35%			58%			69%			
Both sexual and nonsexual offense convictions	38%			21%			25%			
Sexual offense convictions only	8%			2%			0%			
Family Background										
100. Social class (raw score)	57.2	16.9	44	57.3	11.1	24	61.6	11.2	9	<u>ns</u>
81. Parents separated or divorced by age 16	31%		77	38%		40	7%		15	<u>ns</u>
82. Father died by age 16	14%		74	10%		42	0%		15	<u>ns</u>

Table 5 (continued)

Item	Pedophiles		Rapists		Incest Offenders		p ^b
	<u>M</u> or %	<u>SD</u> <u>n</u> ^a	<u>M</u> or %	<u>SD</u> <u>n</u> ^a	<u>M</u> or %	<u>SD</u> <u>n</u> ^a	
Family Background (continued)							
83. Mother died by age 16	9%	79	0%	42	0%	16	<u>ns</u>
80. Primary source of parenting:		79		44		15	<u>ns</u>
Both biological parents	61%		61%		100%		
Single biological mother	13%		14%		0%		
Biological parent and stepparent	9%		14%		0%		
Neither biological parent	18%		11%		0%		
84. Physically abused in childhood	8%	78	17%	42	20%	15	<u>ns</u>
85. Sexually abused in childhood	3%	79	2%	42	0%	15	<u>ns</u>
87. Family history of alcohol abuse	34%	74	38%	40	20%	15	<u>ns</u>

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
88. Family history of mental disorder	15%		74	15%		40	13%		15	<u>ns</u>
89. Siblings engaged in criminal activity	29%		70	29%		38	33%		15	<u>ns</u>
90. Siblings committed sex crimes	3%		70	3%		38	20%		15	<u>ns</u>
Education										
107. Learning disability suspected or diagnosed	16%		69	7%		41	7%		14	<u>ns</u>
102. Educational level			77			43			15	<u>ns</u>
Did not complete junior high school	7%			2%			20%			
Did not complete high school	53%			37%			47%			
High school diploma	25%			44%			27%			
Beyond high school	16%			16%			7%			

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
106. Adaptation to school during adolescence	1.2	.8	51	.9	1.0	34	.9	.6	9	<u>ns</u>
0 = Good	18%			44%			22%			
1 = Fair	47%			21%			67%			
2,3 = Poor or very poor	35%			35%			11%			
Employment and Finances										
109. Unstable employment history	36%		70	49%		35	14%		14	<u>ns</u>
110. Financial problems when offense committed	10%		69	23%		39	25%		16	<u>ns</u>
Medical and Psychiatric History										
121. Chronic health problems	14%		80	16%		43	38%		16	<u>ns</u>
6. History of alcohol or drug abuse	63%		88	61%		46	69%		16	<u>ns</u>

Table 5 (continued)

Item	Pedophiles			Rapists			Incest Offenders			p ^b
	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	<u>M</u> or %	<u>SD</u>	<u>n</u> ^a	
113. Any previous psychiatric hospitalizations	21%		82	18%		44	25%		16	<u>ns</u>
115.-118. Previous psychiatric diagnoses:										
Sexual deviation or paraphilia	9%		75	0%		41	0%		13	<u>ns</u>
Psychosis	5%		78	2%		41	0%		14	<u>ns</u>
Personality disorder	8%		75	10%		41	0%		13	<u>ns</u>
Mental retardation	4%		79	0%		42	0%		15	<u>ns</u>
Social-Sexual History										
123. Marital status at commission of offense			78			43			16	<u>ns</u>
Married	37%			35%			81%			
Formerly married	22%			23%			19%			
Never married	41%			42%			0%			
124. Any history of homosexual activity	23%		80	7%		43	6%		16	<u>ns</u>
130. Phillips scale	12.8	6.9	55	12.8	6.9	33	10.9	6.9	9	<u>ns</u>

Table 5 (continued)

^aNumbers of offenders, out of 88 pedophiles, 46 rapists, and 16 incest offenders in the total sample, with sufficient information to rate items.

^bOverall p values reported are for variables with $p < .10$ in both cross-validation samples. Also reported in this column are Student-Newman-Keuls results for all significant ANOVAs. P = pedophiles; R = rapists; I = incest offenders. Underlined groups do not differ from each other at the .05 level of significance.

^cMultiple victims (up to 3) included.

^dMeans and proportions based on 150 victims.

^eFor one offender classifiable as a "pedophile," assault of an adult victim was also involved in the index conviction.

incest group. The analysis of variance indicated a significant difference in victim age, $F(2, 122) = 33.47, p < .0001$.

Rape victims were significantly older than the victims of either pedophilia or incest. The majority of rape victims, 81%, were young adults age 30 or below. The finding that victims of offenders in the rapist group were significantly older than those of offenders in the other groups is not surprising, since by definition offenses involving victims under age 17 would not have been classified as rape.

Victims of pedophilia and incest did not differ in mean age. In both of these offense groups, the early- to mid-adolescence age range (13 - 16 years old) contained the highest proportion of victims, followed by the pre-adolescent age range (9 - 12 years old).

Sex of victim. Proportions of male and female victims did not differ among the groups. Although in the overall sample variations in sex of victims were observed, this result was not replicated in the cross-validation study. It should be noted, however, that in the present sample only 16% of the offenders were known to have committed homosexual assaults during the course of offenses leading to the index conviction, and the majority (91%) of these homosexual assaults were committed by subjects in the pedophilia group. Less than 1% of the sample had assaulted both males and females during the index offenses. All of the incest offenders in the sample had assaulted only female victims.

Relationship to offender. The proportions of offenders who assaulted at least one complete stranger during the course of the index offenses varied significantly among the groups, $\chi^2(2, N = 142) = 29.67, p < .0001$. The proportion of such offenders in the incest group was the lowest, as would be expected by definition.

Pedophiles and rapists differed significantly on this variable, $\chi^2(1, N = 126) = 15.78, p < .0005$. In non-incestuous sexual assaults, child and adolescent victims were more likely than adult victims to be acquainted with the offender. Approximately two-thirds of the pedophiles were known to their victims at least casually. In contrast, nearly three-fourths of the rapists had assaulted complete strangers.

Degree of resistance. Victims of offenders in the three groups differed significantly in the degree to which they overtly resisted the assault, $F(2, 136) = 12.81, p < .0001$. Adult victims showed the greatest degree of resistance, with 48% of the rapists confronting at least one victim who attempted to harm or escape from him, and only 7% finding no overt resistance at all.

Victims of pedophilia and incest did not differ in degree of resistance shown. When considering the data of these two groups as a whole, the findings indicate that only 18% of the offenders who assaulted children and adolescents were confronted by attempts at injury or escape by their victims. One-third of these offenders were met with no resistance at all, and 16% were confronted with only verbal expressions of resistance.

Offense Characteristics

Location of offense. Location of offense, based on the most public site chosen among the assaults leading to the index conviction, differed significantly according to type of offense, $\chi^2(4, N = 140) = 18.98, p < .001$. Not surprisingly, the majority of incest offenders conducted their assaults exclusively in the home, with only 19% known to

have engaged in incestuous sexual behavior in an out-of-home, secluded area at least once.

Pedophiles and rapists, significantly more likely than incest offenders to conduct assaults outside their homes or the homes of victims, did not differ from each other in location of offense, $\chi^2(2, N = 124) = 4.96$, ns. More than one-third of the pedophiles and rapists were bold enough to have conducted an assault in a public area, where other people could have come upon the interaction, at least once during the course of their index assaults.

Physical aggression. The groups differed significantly in degree of physical aggression shown during the course of the index assaults, $F(2, 139) = 22.66$, $p < .0001$. Rapists were most aggressive, with 87% using physical coercion and 30% displaying weapons. The prominent use of physical coercion by rapists is consistent with the data indicating that this group was also most likely to meet with victim resistance.

Pedophiles and incest offenders did not differ significantly from each other in extent of physical aggression. When combining the data for these groups, it can be seen that approximately one-half of these assaults on children and adolescents involved no physical aggression. On the other hand the data also indicate that these offenders were as likely to be physically coercive as to be totally nonaggressive. Only 4% of the pedophiles and incest offenders were armed with weapons.

In the current sample none of the offenders wielding weapons actually used them during their assaults. This finding may reflect the subject selection criteria of the present study, which examined offenders released from only minimum or medium security settings. More aggressive

offenders may not have been considered appropriate for such settings. Also, sex offenders who shot, stabbed, or bludgeoned their victims were most likely to have been convicted of homicide or attempted homicide in addition to the sex offense, and would have been excluded from eligibility for MDSO status. In the correctional system, such offenders would have been classified according to the more severe offense, or "governing statute", and would not have appeared in the original pool of sex offenders obtained from DOC.

Duration of assault. The difference among groups in the most extensive period of time during which the offender had control of any victim during commission of his index offenses was significant, $F(2, 138) = 30.67, p < .0001$. The differences in means on this scale were significant in comparisons among all three groups.

Incest offenders showed the most extensive contact with victims over time, with the great majority -- 88% -- engaging in at least three separate incidents of sexual contact with the victim. They were followed by pedophiles who had significantly shorter contacts, with only 26% engaging in ongoing sexual relations with a single victim. The pedophiles were more frequently involved in relatively brief contacts of less than one hour duration.

The contacts of rapists with victims were shortest of all, with two-thirds of them lasting less than an hour. Very few of the rapists -- 2% -- detained their victims for more than 24 hours, and none were sexually involved with victims in an ongoing fashion.

Sexual behaviors involved. The ratings of sexual behaviors involved in the index offenses were combined to form a scale ranging

from "attempted touch" to "penetration". Each offender was rated on this scale of "sexual aggression" according to the most "serious" form of sexual behavior or attempted sexual behavior exhibited during the index offenses. The difference among groups observed in the total sample was not replicated in the cross-validation procedure, and was considered to be a chance finding.

The proportions of offenders who engaged in each form of sexual contact with victims indicate that less than one-fourth limited their assaults to physical touch or "fondling". More than half engaged in vaginal or anal penetration, and approximately one-third involved their victims in oral-genital activities.

Sexual dysfunction. Sexual dysfunction on the part of the offender, such as difficulty in achieving or maintaining erection, was not often reported by either victims or offenders in any of the offender groups, and its frequency of occurrence did not differ across groups, $\chi^2(2, N = 142) = 2.82, ns$.

Bribery or promised compensation. Few of the victim or offender accounts indicated that immediate bribes or promises of compensation were used to gain access to victims. Although the proportions of such incidents ranged from 0% to 13% across groups, the variation observed was not statistically significant, $\chi^2(2, N = 142) = 5.28, ns$.

Age and Mental Status of Offender

Age of offender. Age at index offense differed significantly according to offense type, $F(2, 143) = 5.69, p < .005$. Incest offenders were significantly older ($M = 37.8$) than either pedophiles ($M = 31.5$)

or rapists ($\underline{M} = 27.9$), with 63% in their thirties and 32% over age 40. The type of offender-victim relationship required in this study for categorization of an offense as incest would to a large extent ensure that fewer subjects in this group would be of adolescent or young-adult age groups, since only those offenders in a paternal role with the victim were considered incestuous.

The pedophiles and rapists did not differ in mean age. More than half -- 60% -- of the offenders in these groups were under age 31. In both groups, the proportions of offenders in each age range declined steadily across subsequent decades.

Substance use and psychosis. The groups did not differ significantly in proportions of offenders under the influence of alcohol or drugs at the time of the index offense, $\chi^2(2, \underline{N} = 142) = 4.15, \underline{ns}$. According to the accounts of offenders and victims, only 38% of subjects in the total sample had been drinking or using drugs before committing their sex offenses.

Only 2% of these sex offenders showed any evidence that they may have been psychotic during the offense, and the proportions of possibly psychotic subjects did not differ across offender types, $\chi^2(2, \underline{N} = 142) = 1.74, \underline{ns}$.

Premeditation. The ratings of premeditation, made according to whether the index offense appeared to be spontaneous, opportunistic, or intentional, did not differ across the offender groups, $\chi^2(4, \underline{N} = 104) = 8.07, \underline{ns}$. Overall, approximately half of the offenders with scoreable data in this area actively sought out at least one of their victims, with deliberate intent to commit a sexual assault. A little more than

one-third (39%) were "opportunistic", that is, impulsively took advantage of a situation that provided an opportunity for assault. Only 10% appeared totally spontaneous in commission of their sex offenses, having never anticipated such behavior until it erupted unexpectedly.

Attribution of Blame

The groups did not differ on either of the two measures of acceptance of responsibility for the offense. The plea entered to the court was available for 91% of the sample, of which 76% of the offenders pleaded guilty to the index charges. The proportion of offenders for whom admission of guilt was noted in the PSI was 61%. The latter measure took into account any statements of responsibility for the offense made to police, relatives, the court, or the agent who conducted the investigation.

Prior Criminal Record

General criminal history. There were no differences among the pedophilia, rape, and incest groups on any measure of general criminal background. Overall, the great majority of sex offenders in the present study, which examined only offenders sentenced or committed to periods of confinement for their index offenses, possessed prior criminal histories beginning, on the average, in their early twenties.

In the combined sample, 30% of the offenders possessed juvenile arrest records. The proportions of offenders with juvenile records did not vary with offense type, $\chi^2(2, N = 145) < 1.0, ns$. The mean ages at first conviction were 22.0 years for pedophiles, 20.0 years for rapists,

and 23.3 years for incest offenders. The variation in age at first conviction was not significant, $F(2, 136) = 1.32$, ns.

Most of the offenders -- 82% -- had been convicted of some type of crime prior to the index offense. Possession of prior convictions did not differentiate among the offender types, $\chi^2(2, N = 145) = 1.67$, ns.

Neither did the groups differ in proportions with prior public order convictions, $\chi^2(2, N = 143) = 2.36$, ns, prior property convictions, $\chi^2(2, N = 144) = 2.59$, ns, prior personal offense convictions, $\chi^2(2, N = 144) < 1.0$, ns, or convictions for other types of offenses, $\chi^2(2, N = 143) = 2.45$, ns. In the total sample, 65% of the offenders had been previously convicted of public order offenses; 51% of personal offenses; and 44% of property offenses. A small number -- 6% -- had been convicted of offenses not classifiable in any of these categories.

Sexual criminal history. The only aspect of prior sex offense history which differentiated among the groups was age at first sex crime conviction, $F(2, 143) = 8.05$, $p < .001$. This difference was due to incest offenders ($M = 36.2$) being significantly older at first sex conviction than either pedophiles ($M = 27.2$) or rapists ($M = 26.3$), who did not differ on this variable.

The groups did not differ in proportions with and without prior convictions for sex offenses, $\chi^2(2, N = 150) = 4.77$, ns. Overall, approximately two-thirds of the sample were first offenders in relation to prior histories of sex crimes only.

When the groups were compared on types of prior sex offenses committed, no reliably significant differences emerged. Proportions of offenders with prior pedophilic convictions varied across groups in the

overall analysis, but did not meet the cross-validation criteria for significance. Although type of prior sex conviction was not significantly related to type of index sex conviction, examination of the data also reveals that offenders with prior pedophilia convictions were most frequently pedophiles; those with prior rape convictions were most frequently rapists; and those with prior incest convictions were most frequently incest offenders. These observations, combined with recognition of the small numbers of offenders with prior sex convictions in each group, suggest that there may be more consistency in victim selection than is apparent in this sample of predominantly "first" sex offenders.

Type of criminal history. The groups did not differ according to the five types of criminal history rated, $\chi^2(8, N = 139) = 12.50, ns$. In the total sample, nearly half (46%) had criminal histories consisting of convictions for only nonsexual offenses. Approximately one-third (31%) had both sexual and nonsexual convictions in their criminal backgrounds. Only 18%, as noted previously, had no prior convictions, and most of these first offenders had no record of arrest. Very few offenders (5%) had criminal histories consisting entirely of sex offense convictions.

Family Background

The groups did not differ on any aspect of family background measured, including social class, $F(2,74) < 1.0, ns$, and proportions in each group who, in childhood, were physically abused, $\chi^2(2, N = 135) = 3.18, ns$, or sexually abused, $\chi^2(2, N = 136) < 1.0, ns$. Neither did they differ in proportions who experienced, before age 16, the separa-

tion or divorce of parents, $\chi^2(2, N = 132) = 4.98$, ns, death of their fathers, $\chi^2(2, N = 131) = 2.47$, ns, or death of their mothers, $\chi^2(2, N = 137) = 5.42$, ns. They did not differ in source of parenting, $\chi^2(6, N = 138) = 10.51$, ns. There were no differences among the groups in proportions with family histories of alcohol abuse, $\chi^2(2, N = 129) = 2.35$, ns, or mental disorder, $\chi^2(2, N = 129) < 1.0$, ns. The offenders who had siblings did not vary across offense types in proportions with criminally active siblings, $\chi^2(2, N = 123) < 1.0$, ns. The proportions of offenders whose siblings had also been convicted of sex offenses differed across offense types in the overall analysis, but this variation did not meet the cross-validation criteria for significance.

Most of the offenders with sufficient parental information to rate social class fell approximately evenly into the lowest categories, with 46% in Social Class IV and 43% in Social Class V. Only 8% of the social position scores fell in the range of Social Class III, 3% in Social Class II, and 1% (1 offender) in Social Class I.

Regarding parental separations and deaths, 30% of the total sample had experienced the separation or divorce of their parents before the age of 16. Those whose fathers or mothers died before they were 16 years old represented 11% and 5% of the sample, respectively.

Approximately two-thirds of the sample -- 65% -- were raised primarily by both biological parents. Those who were raised by neither biological parent made up 14% of the sample. The remaining offenders were raised either single-handedly by their natural mothers (12%) or by one natural parent and a stepparent (9%).

Evidence of childhood physical abuse was apparent in 12% of the cases. In only 2% of the cases studied was there any evidence that the offender had been a victim of sexual abuse in childhood.

Examination of family psychiatric and criminal histories revealed that 33% of the offenders had natural relatives with alcohol abuse problems, and 15% had relatives with mental disorders (excluding alcoholism or drug addiction). Criminal activity by siblings was present in 32% of the cases, with 5% of the offenders having siblings who had also committed sex offenses.

Education

The groups did not differ on any measure related to education. Overall, 7% of the sample did not complete junior high school, and 47% completed junior high but not high school. The proportion with high school diplomas, but no education beyond high school, was 31%; an additional 15% possessed high school diplomas and some further vocational or academic training. A chi-square test comparing the proportions of offenders in these educational categories within the three offense types revealed no significant difference among the groups, $\chi^2(6, N = 135) = 10.97, ns$.

The proportions of offenders with suspected or diagnosed learning disabilities also did not differ among offense types, $\chi^2(2, N = 124) = 2.16, ns$. Overall, 12% of the sample were learning-disabled, or suspected of having learning disabilities.

Neither did the groups differ in mean ratings of adaptation to school in adolescence, $F(2, 91) = 1.38, ns$. Of the 94 offenders with

scoreable data in this area, 28% showed a good adaptation to school; 39% were fair in their adaptation; and 33% showed poor or very poor adaptation to school as adolescents, with dislike for school, frequent truancy, and frequent discipline problems.

Employment and Finances

The groups did not differ in proportions of offenders with unstable employment histories, $\chi^2(2, N = 119) = 5.16$, ns, nor in proportions experiencing financial problems at the time of the offense, $\chi^2(2, N = 124) = 4.15$, ns. Overall, 37% of the offenders had never held any job for two years. The proportion experiencing financial difficulties when the offenses were committed was 16%.

Medical and Psychiatric History

There were no differences among groups on any aspect of medical or psychiatric history measured. This lack of significant findings applied to proportions in each group with chronic physical health problems, $\chi^2(2, N = 139) = 5.31$, ns, with histories of alcohol or drug abuse, $\chi^2(2, N = 150) < 1.0$, ns, and with previous psychiatric hospitalizations, $\chi^2(2, N = 142) < 1.0$, ns. Overall, 17% of the offenders had chronic health problems; 63% had alcohol or drug abuse histories; and 20% had prior psychiatric hospitalizations.

The groups did not differ in proportions of offenders with past diagnoses of sexual deviation or paraphilia, $\chi^2(2, N = 129) = 5.33$, ns, psychosis, $\chi^2(2, N = 133) = 1.15$, ns, personality disorder, $\chi^2(2, N = 129) = 1.33$, ns, or mental retardation, $\chi^2(2, N = 136) = 2.21$, ns.

Overall, the proportions of offenders with known prior diagnoses in these categories were 5% for sexual deviation or paraphilia, 4% for psychosis, 8% for personality disorder, and 2% for mental retardation.

Social-sexual Development

There were no cross-validated differences on any aspect of social-sexual history measured, including Phillips scale scores, $F(2, 94) < 1.0$, ns. Marital status and history of homosexual activity differentiated the groups in the overall analyses, but did not meet the cross-validation criteria for significance. Overall, 42% of the offenders were married at the time of the index offense; 22% were separated, divorced, or widowed; and 37% had never been married. The proportion of offenders with known histories of homosexual activity was 16%.

Comparative Evaluation of Recidivism in Treated and Untreated Sex Offenders

Recidivism Sample

The six offenders with no records at the CIB and their matches were not included in the program evaluation. The program evaluation sample consisted of 69 offenders released from MMHI and 69 matched subjects released from prisons, resulting in a total of 138 sex offenders available for comparative examination of the recidivism data. There were 39 pairs of pedophiles, 22 pairs of rapists, and 8 pairs of incest offenders. There were no records of prior sex offenses for 65% of this subsample.

The secondary matching criteria were re-examined to assess comparability of the program evaluation groups. As in the total sample, the program evaluation groups were comparable in number of months since release, $t(136) < 1.0$, ns, racial composition, $\chi^2(2) = 1.01$, ns, proportions of offenders committed in Milwaukee versus other counties, $\chi^2(1) < 1.0$, ns, and proportions with parole or SRB versus MR releases, $\chi^2(1) < 1.0$, ns. The groups were also comparable in proportions of offenders with alcohol or drug abuse histories, $\chi^2(1) = 3.73$, ns.

In the total program evaluation sample of 138 offenders, the mean number of months since release from either the hospital or prison was 57.1 months, or 4.75 years. Most (89%) of the offenders were white; 10% were black, and 1 offender was a Native American. The committing court was located in Milwaukee County in 20% of the cases. Nearly two-thirds of the offenders (62%) had histories of alcohol or drug abuse. Approximately three-fourths (73%) received early releases by SRB or parole boards.

Results of Recidivism Study

Comparative recidivism data are presented in Table 6. The specialized treatment (ST) and prison (P) groups differed in only one aspect of recidivism measured. A significantly greater proportion of treated offenders subsequently violated conditions of parole, $\chi^2(1) = 4.74$, $p < .05$. The proportion of parole violators in the ST group was 26.1%, compared with 11.6% in the P group. Few offenders in either group -- none in the ST and only two in the P group -- were subsequently returned to confinement solely on the basis of rule violations. Thus,

Table 6

Numbers and Percentages of Recidivating Offenders From Each Setting

Outcome variable	Specialized treatment ^a		Prison ^a		χ^2	p
	<u>n</u>	%	<u>n</u>	%		
Parole violators, total	18	26.1	8	11.6	4.74	<.05
Parole violators with revocations for rule violations only	0	0	2	2.9	2.03	<u>ns</u>
Rearrested offenders, total	27	39.1	25	36.2	.03	<u>ns</u>
Rearrested offenders, sex offenses only	15	21.7	10	14.5	.78	<u>ns</u>
Reconvicted offenders, total	15	21.7	14	20.3	.0	<u>ns</u>
Reconvicted offenders per offense type:						
Public order crimes:						
Traffic violations	0	0	1	1.4	1.01	<u>ns</u>
Other	4	5.8	5	7.2	.12	<u>ns</u>
Property crimes	2	2.9	7	10.1	2.97	<u>ns</u>
Personal crimes:						
Murder or attempted murder	1	1.4	1	1.4	.0	<u>ns</u>
Sex offenses	9	13.0	6	8.7	.30	<u>ns</u>
Other	2	2.9	1	1.4	.34	<u>ns</u>
Other crimes	0	0	1	1.4	1.01	<u>ns</u>

Table 6 (continued)

Outcome variable	Specialized treatment ^a		Prison ^a		χ^2	<u>p</u>
	<u>n</u>	%	<u>n</u>	%		
Reconvicted offenders, per sex offense type:						
Pedophilia	3	4.3	1	1.4	1.03	<u>ns</u>
Rape	2	2.9	4	5.8	.70	<u>ns</u>
Incest	0	0	0	0	--	--
Exhibitionism	2	2.9	0	0	2.03	<u>ns</u>
Other sex offenses	1	1.4	0	0	1.01	<u>ns</u>
Unknown ^b	1	1.4	1	1.4	.0	<u>ns</u>

^an = 69 in each group

^bSex offenses too vaguely described to be classified

although non-compliance with the rules of supervision was more prevalent among treated offenders, the severity of their infractions was in no case sufficient to lead to re-imprisonment.

In terms of general recidivism, the groups did not differ in numbers rearrested, $\chi^2(1) < 1.0$, ns, or reconvicted, $\chi^2(1) < 1.0$, ns. The groups also did not differ when examined according to numbers of offenders reconvicted of the various offense types.

Overall, 38% of the offenders were rearrested, and 21% were subsequently convicted of a new crime. The proportions of offenders convicted of new offenses, according to offense type, was .7% for traffic violations and 6.5% for other public order crimes; 6.5% for property crimes; 10.9% for sex offenses, 1.4% for murder or attempted murder, and 2.2% for other personal crimes; and .7% for crimes which were not classifiable as public order, property, or personal offenses.

The hypothesis that treated offenders are less likely than imprisoned offenders to commit new sex offenses was not supported. The total proportion of offenders rearrested on sex crime charges was 18%, and the ST and P groups did not differ in proportions with sex offense rearrests, $\chi^2(1) < 1.0$, ns. Neither did they differ in proportions reconvicted of sex crimes, $\chi^2(1) < 1.0$, ns. With 13.0% of the ST group and 8.7% of the P group reconvicted of sex offenses, the finding was not in the predicted direction.

The groups also did not differ in proportions subsequently convicted of the various sex offense subtypes. None of the subsequent sex crimes were incest offenses. Of the 15 sexual recidivists in the total sample, 40% were convicted of rape, 27% of pedophilia, 13% of exhibi-

tionism, and 7% of other sexual offenses. In two cases, the information available was not sufficient to classify the offense according to type of sex crime.

Timing of Recidivism

The 29 reconvicted offenders in the present sample were examined further in order to ascertain whether treatment may have had an effect on the timing of recidivism. The mean length of time elapsed between release and first reconviction was 21.60 months ($SD = 20.79$) in the ST group and 15.57 months ($SD = 14.06$) in the P group. The difference in timing of recidivism in general was not significant, $t(27) < 1.0$, ns.

The timing of sexual recidivism was examined as well. The mean numbers of months elapsed until reconviction for a sex offense were 18.56 ($SD = 19.79$) in the ST group and 14.17 ($SD = 18.04$) in the P group. This difference in timing of sexual recidivism was not significant, $t(13) < 1.0$, ns.

Thus, it appears that the timing of recidivism was not contingent upon whether an offender had been released from the specialized treatment or prison settings. Although the treated offenders were liberated for longer periods of time before reconviction, the difference in delay of recidivism was not significant.

Uncontrolled Subject Variables

Although the subjects in the P group were comparable to those in the ST group in a number of ways, the examining psychiatric staff nonetheless recommended that they serve their sentences in prison rather

than in treatment facilities. In an attempt to ascertain those characteristics of the offender and his offense which may have influenced the examiners' judgments as to appropriateness of specialized treatment, the PSI Rating Scales data of the ST and P groups were compared.

Only the 138 subjects in the program evaluation study were examined in this manner. Since the purpose of these comparisons was to ascertain ST versus P group differences for this particular sample, and not to generalize to the populations of treated and imprisoned sex offenders, no cross-validation procedures were considered necessary.

Comparisons of the ST and P groups on the PSI data revealed that the offenders referred for specialized treatment were more frequently individuals who worked alone in commission of sex offenses, $\chi^2(1, N = 134) = 5.83, p < .02$. Of the treated offenders, only 1% had accomplices, while 12% of the imprisoned offenders committed their sex crimes with the involvement of at least one other offender.

A greater number of treated offenders (28%) than imprisoned offenders (6%) had assaulted males during their index offenses, $\chi^2(1, N = 134) = 11.80, p < .0001$. Fewer treated (3%) than imprisoned offenders (14%) showed evidence of sexual dysfunction during the index offense, $\chi^2(1, N = 131) = 3.88, p < .05$. A greater number of treated (12%) than imprisoned offenders (2%) used bribery to gain access to victims, $\chi^2(1, N = 131) = 4.01, p < .05$, and more of those treated (46%) than imprisoned (25%) conducted the index assaults in public areas, $\chi^2(2, N = 129) = 9.37, p < .01$.

Fewer treated offenders (27%) than imprisoned offenders (51%) were under the influence of alcohol or drugs at the index crime, $\chi^2(1, N =$

131) = 6.65, $p < .01$. On a scale ranging from touch only to penetration, the treated offenders were less sexually aggressive than those imprisoned, $t(130) = -2.73$, $p < .01$.

More treated (90%) than imprisoned offenders (64%) pleaded guilty to the index charges, $\chi^2(1, N = 126) = 10.63$, $p < .005$. A greater number of offenders in the treated group (74%) admitted guilt than in the prison group (51%), $\chi^2(1, N = 125) = 6.33$, $p < .05$.

A greater number of imprisoned offenders had prior convictions for property offenses (54%) than did treated offenders (34%), $\chi^2(1, N = 132) = 4.52$, $p < .05$.

More treated (28%) than imprisoned offenders (5%) had histories of homosexual activities. There was a significant difference in overall Phillips scale scores, $t(86) = 2.43$, $p < .05$, with those in the treated group showing a less mature level of social-sexual development, which was particularly evident in subscale ratings of adolescent social-sexual functioning, $t(53) = 3.23$, $p < .005$.

In summary, the treated offenders were more likely than imprisoned offenders to admit their guilt, were less sexually aggressive, and were less likely to have committed prior property offenses. Possession of some or all of these features may have led to perception of an offender as more "treatable", that is, less defensive, less extreme in degree of sexual violation, and less "criminal-minded".

The offenders selected for specialized treatment were also more likely to have committed the assault in a public area, more likely to have bribed victims, and less likely to have shown evidence of sexual dysfunction during the offense. Such characteristics may have contrib-

uted to perception of an offender as more "dangerous", as indications that he was bolder, more cunning, and less conflicted about engaging in the criminal sexual act.

The treated offenders were less likely to have been influenced by drugs or alcohol during the offense, and less likely to have been in the company of other offenders. These features of the offense may have also contributed to perception of "dangerousness", as indications that the criminal act was not mediated by either chemical disinhibition or peer pressure.

The treated offenders, compared with those sent to prison, were more likely to have engaged in homosexual activity, both during and prior to the index offense. They also showed a less mature level of social-sexual adjustment, particularly evident in the accounts of their adolescent development. These traits were likely to contribute to an impression of an offender as sexually "deviated" or "pathological".

These differences between treated and imprisoned offenders are consistent with the commitment criteria which initially determined the settings of confinement. Despite the effort to match the treated and untreated groups, it appears that the treated group did contain higher proportions of both pathological and dangerous offenders, and the imprisoned group contained a higher proportion of less treatable offenders. In a sense, each group had initial advantages over the other in terms of presumed intractability associated with these traits. Since these observed differences are qualitative in nature, however, they cannot be assumed to cancel each other out and thus render the groups comparable.

Overall, examination of uncontrolled variables reveals that the two groups of offenders initially differed in ways that may have influenced subsequent recidivism rates, perhaps to a greater extent than type of intervention imposed. Although the ST offenders may have been more amenable to treatment, the imprisoned offenders appeared to be less dangerous and, in terms of social-sexual adjustment, were more mature.

Prediction of Recidivism

In order to examine whether recidivism could be predicted, a hierarchical discriminant function analysis was conducted. This method attempts to predict classes of a dependent variable by a number of independent variables. In the present case, the dependent variable was outcome group. There were three outcome groups: (1) offenders with no reconvictions (non-recidivism group), (2) offenders with only non-sex offense reconvictions (nonsexual recidivism group), and (3) offenders with at least one sex offense reconviction (sexual recidivism group).

An attempt was made to predict which of the three outcome groups each sex offender would fall into on the basis of his status on eight independent variables. The nature of the independent variables was determined by a review of the literature; those variables showing significant relationships with outcome in prior research were selected as predictor variables in the present study. Predictors were entered into the analysis using blockwise selection (Pedhazur, 1982). Prediction was assessed first using two criminal history variables, and then with the addition of two index offense-related variables, two age-related variables, and two substance abuse variables, in turn. Type of intervention

was not included as an independent variable because comparative recidivism results had indicated that the likelihood of reconviction in this sample was not related to whether an offender had been treated or imprisoned.

Criminal history variables were convictions prior to the index offense and sex offense convictions prior to the index offense, both rated as absent or present. Offense-related variables were a dummy-coded variable for type of index offense (pedophilia, rape, or incest) and assault of a stranger at index offense (no or yes). Age-related variables were age at index offense and age at first sex offense conviction. Substance abuse variables were history of alcohol or drug abuse (absent or present) and under influence of alcohol or drugs at index offense (no or yes).

Of the original 150 cases, 14 were dropped because of missing data. Of these dropped cases, six had no criminal records at the Crime Information Bureau and four were missing Pre-Sentence Investigations. The remaining four dropped cases were missing data which appeared to be randomly scattered across variables.

For the 136 cases with complete data, threats to the assumptions of multivariate analysis were assessed using the procedures recommended by Tabachnick and Fidell (1983). Upon initial assessment of multivariate outliers with $p < .01$, two outlying cases were detected. Examination of the data revealed a coding error for one outlying case, which was corrected. A second assessment of multivariate outliers left only one outlying case which was dropped from the analysis.

The assumptions of linearity, normality, and homogeneity of variance-covariance matrices were met. Examination of bivariate relationships revealed no curvilinear functions. The two age-related measures were significantly skewed, and were therefore transformed so that they no longer deviated significantly from normality. There was no evidence of departures from homogeneity of covariance matrices, Box's $M = 13.86$, approximate $F(21, 1873.9) < 1.0$, ns.

A hierarchical method of analysis was selected in order to constrain the atheoretical entry of variables which otherwise results from use of a computerized stepwise procedure. The order of entry was both empirically and conceptually based. Empirically, the order of entry reflects the hypothesized strengths of these predictors as reflected in results of prior research. That is, criminal history variables have been most frequently observed as predictors of recidivism, followed by the offense-related variables of type of crime and relationship to victim. Age of offender has been less often linked with recidivism, and substance abuse is the most questionable predictor variable.

Conceptually, criminal history is temporally, and therefore logically or causally prior, and should be entered first. Offense-related variables are broad in nature, reflecting primarily the type of crime committed. The other two clusters of age-related and substance abuse variables are largely dependent on the existence of the offense-related variables because they refer in part to the specific conditions under which the offense was committed, and should therefore be last in the hierarchy.

It was hypothesized that variables which distinguish among outcome groups can be identified. This hypothesis was confirmed. Results of the analysis indicated that discrimination among the three groups was not accomplished on the basis of the two criminal history variables alone, $F(4, 262) = 1.94, p = .10$. There was statistically significant discrimination among groups after adding the two offense-related variables, $F(10, 256) = 1.89, p < .05$, as there was after adding the two age-related variables, $F(14, 252) = 1.74, p < .05$, and the two substance abuse variables, $F(18, 248) = 1.88, p < .02$.

The ability of these variables to discriminate among the three groups was improved with the removal of the criminal history variable of prior sex offense convictions, $F(16, 250) = 2.11, p < .01$, and with removal of the offense-related variable of type of index offense, $F(12, 254) = 2.68, p < .005$.

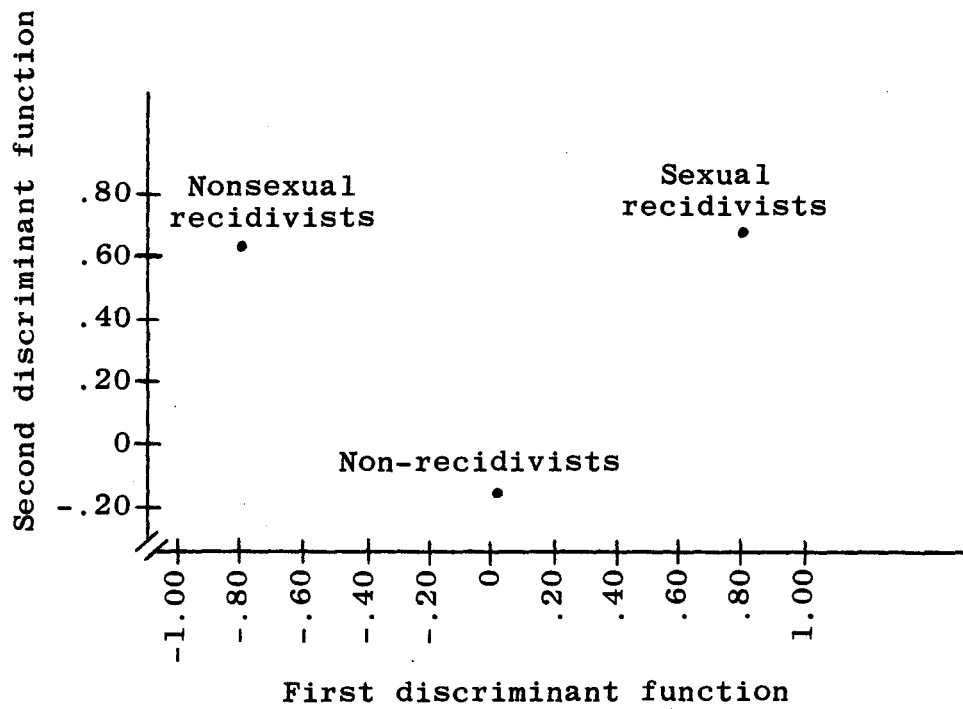
A discriminant function analysis finds weights for each of the independent variables such that the resulting function will be maximally effective in predicting membership in the three outcome groups. After computing the best possible function (the first discriminant function), it then goes on to find additional functions, each being orthogonal (i.e., uncorrelated) with the first function. With three outcome groups, it is only possible to calculate two discriminant functions.

It is possible to assess the extent to which each discriminant function explains the variation among the three outcome groups. The first discriminant function was significantly related to outcome, $\chi^2(12) = 30.92, p < .005$. The second discriminant function was also significantly related to outcome, $\chi^2(5) = 13.72, p < .05$. The two functions

were not substantially different in their power to discriminate among the outcome groups: The first function accounted for 56% of the variation in discrimination, whereas the second function accounted for 44%; these percentages are not very different. This is also shown in the canonical correlations for each function, that is, the correlations between each function and outcome. These canonical correlations indicated that there was a moderate relationship between each discriminant function and outcome: .35 for the first function and .32 for the second function. Together, the two functions account for 22.5% of the variability in outcome.

It was hypothesized that the two functions might differ in their ability to distinguish among the three outcome groups. Specifically, it was thought that one function might serve to distinguish between types of recidivism, and the other might serve to distinguish between recidivism and nonrecidivism. This hypothesis was confirmed, as shown in Figure 1. Figure 1 presents a plot of the three group centroids (or group means) with the value of the first discriminant function on the horizontal axis, and the value of the second discriminant function on the vertical axis. As can be seen in Figure 1, the first discriminant function seems to be particularly effective in distinguishing between types of recidivism; the horizontal separation between nonsexual recidivists and sexual recidivists is greatest. The second discriminant function seems to be effective in distinguishing between recidivism of either type and non-recidivism, whereas it does not at all distinguish between the two types of recidivism, as can be seen by the vertical separation among the three groups.

FIGURE 1

Plot of 3 Group Centroids on 2 Discriminant Functions

In a discriminant function analysis, it is also possible to make some tentative conclusions about which independent variables are strongest in predicting outcome. This is done by examining the correlations between each independent variable and the discriminant function. These correlations are presented in Table 7. For the first discriminant function, which was most effective in distinguishing between sexual and nonsexual recidivists, the strongest predictor is assault of a stranger. The findings show that sexual recidivists were more likely to have assaulted strangers (80%) than were nonsexual recidivists (27%). Also highly correlated with the first function is general criminal history. Examination of bivariate relationships reveals that the sexual recidivism group had a higher proportion of offenders with no prior convictions (21%) than did the nonsexual recidivism group (0%).

For the second discriminant function, which was most effective in distinguishing the two recidivistic groups from the non-recidivists, the primary predictor is age at first sex offense conviction. Both sexual and nonsexual recidivists were younger at first sex conviction ($\bar{M} = 24.8$ years and $\bar{M} = 24.7$ years, respectively) than were non-recidivists ($\bar{M} = 29.1$ years). Substance abuse history was also highly correlated with the second function. Recidivists as a whole were more likely to have histories of alcohol or drug abuse (72%) than were non-recidivists (59%).

When comparing these findings with the hypothesized results, it can be seen that they are more compatible with expectations pertaining to predictors of sexual recidivism than with those pertaining to recidivism in general. It was hypothesized that sexual recidivism is

Table 7

Results of Discriminant Function Analysis

Predictor variable	Correlations of predictor variables with <u>discriminant functions</u>		Univariate F (2,132)
	1	2	
Criminal history			
PRIORANY	-.36	.32	1.93
PRIORSEX	-.42	.38	3.28
Offense-related			
PEDO	-.15	.04	.82
RAPE	.27	.08	2.07
STRANGER	.66	.32	4.78
Age			
INDEXAGE	-.23	-.21	.82
SEXAGE	.16	-.56	2.52
Substance abuse			
INDEXSA	.12	-.28	.73
PRIORSA	.32	.35	1.84
Canonical <u>R</u>	.35	.32	
Eigenvalue	.142	.112	

associated with relationship to the victim, sexual criminal history, and involvement of alcohol in the offense. This hypothesis was partially supported; offenders who assaulted strangers were more likely to recidivate with a sex crime than with a nonsexual crime. The prior sex conviction variable apparently detracted from the discriminating ability of the functions, and was removed from the analysis. Its bivariate relationship with outcome was opposite of expectation: The proportion of offenders with prior sex offense convictions in the sexual recidivism group was substantially lower than in the non-recidivism group. The nonsexual recidivism group contained the highest proportion of offenders with prior sex convictions, at 67%, followed by sexual recidivists with 36%, and non-recidivists with 33%. Involvement of alcohol in the offense was more closely associated with general recidivism than with sexual recidivism, and the direction of relationship was also opposite of expectation. Offenders were somewhat more likely to recidivate if they had not been under the influence of alcohol or drugs at the index offense. History of substance abuse was also included as an independent variable, and was somewhat more strongly associated with general than with sexual recidivism.

It was hypothesized that recidivism in general is associated with age, general criminal history, and type of offense. This hypothesis was not supported. Age at index and general criminal history were more closely associated with the distinction between types of recidivism. Age at first sex offense conviction, however, was strongly associated with general recidivism. Type of offense was removed from the analysis as it apparently detracted from the efficiency of multivariate pre-

diction. Examination of the bivariate relationship between offense type and outcome reveals, however, that the association is consistent with expectation: All of the individuals in the sexual recidivism group were non-incest offenders. More than half -- 57% -- of the sexual recidivists were rapists, and the remainder were pedophiles.

The ability of the predictor variables to correctly classify cases was assessed. Sample sizes were used to estimate prior probabilities of group membership. The discriminant function equations were applied to the same cases from which they were derived. Table 8 presents the results of the classification procedure. The group memberships of 77.0% of the offenders were correctly identified. The disproportionate classification of 94.1% of the offenders as non-recidivistic, however, greatly exceeded the 78.5% of the sample who actually did not recidivate. Rates of correct classification for the three groups were 95.3%, 13.3%, and 7.1% for non-recidivists, nonsexual recidivists, and sexual recidivists, respectively. The procedure was strongest in properly classifying non-recidivists, and was least effective in classifying sexual recidivists.

In terms of distinguishing between non-recidivists and the two recidivistic groups combined, 20% of those identified as non-recidivists were "false negatives" who had actually been reconvicted of offenses. Of those identified as recidivists, 63% were "false positives" who had been conviction-free since release. In prediction of sexual recidivism in particular, the rate of false negatives was 10%. The false positive rate was 50%. Overall, classification based on the functions is only moderately successful, perhaps due to skewness of the outcome variable.

Table 8

Classification Results

Actual group	<u>n</u>	Predicted group membership		
		Non- recidivists	Nonsexual recidivists	Sexual recidivists
Non-recidivists	106	101	4	1
Nonsexual recidivists	15	13	2	0
Sexual recidivists	14	13	0	1

In summary, the discriminant function analysis successfully identified two discriminant functions which distinguished non-recidivists from recidivists in general, and distinguished sexual from nonsexual recidivists.

The results indicated that general recidivism is primarily associated with the combined influence of age at first sex offense conviction and history of alcohol or drug abuse. Most likely to reoffend, either sexually or nonsexually, are sex offenders with histories of substance abuse who were also relatively young when first convicted of a sex offense.

Sexual recidivism is primarily associated with the combined influence of relationship to victim and general criminal history. Most likely to reoffend sexually, as opposed to nonsexually, are first offenders who have sexually assaulted strangers.

The two discriminant functions were statistically significant and together accounted for 22.5% of the variance associated with outcome group membership. When used to classify cases, 77% of the offenders were correctly placed in the outcome groups. The classification procedure also revealed, however, rather high false positive rates of 63% and 50% for prediction of general and sexual recidivism, respectively.

Results Using Alternative Order of Entry

In a hierarchical discriminant function analysis, the contribution of a particular independent variable is assessed only after variables with higher priority have contributed their portions of both unique and shared variation to prediction of the dependent measure. The apparent

importance of an independent variable may depend on its point of entry into the predictive equation.

The priority ordering of independent variables in the present study was originally based on results of prior research, but was also seen to follow a logical sequence, from temporally prior to offense-dependent characteristics. The latter variables included age, and influence of alcohol or drugs. Although the primary variables of interest here were age and substance use at the time of the index offense, their historical counterparts - age at first sex conviction and history of substance abuse - were included at the same levels of entry, and allowed to compete with them for precedence. It may be argued that since history of substance abuse and, to some extent, age when first convicted of a sex crime are variables which are temporally prior to the current offense, they should be assigned higher priority levels.

In order to determine whether assignment of higher priority levels to these variables would lead to results that significantly differ from those obtained in the original analysis, a second hierarchical discriminant function analysis was performed, with substance abuse history and age at first sex conviction entered first. The order of the remaining variables was unchanged. Results of the analysis indicated that discrimination was not accomplished on the basis of these first two variables alone, $F(4, 262) = 2.28, p < .10$. There was significant discrimination after adding the 2 criminal history variables, $F(8, 258) = 2.04, p < .05$, as there was after adding the two sets of offense-related variables, $F(14, 252) = 2.01, p < .05$ and $F(18, 248) = 1.88, p < .05$. Thus, substance abuse history and age at first sex conviction alone did not sufficiently discriminate among the 3 groups.

As in the analysis reported earlier, the first discriminant function was effective in distinguishing between types of recivism. The second function tended to distinguish non-recidivists from recidivists of either type. The primary predictors for each function were identical to those observed in the original analysis: Assault of a stranger was the primary predictor for the first function, and age at first sex conviction was the primary predictor for the second function.

Unlike the original results, however, only the first discriminant function was significant, $\chi^2(18) = 32.68$, $p < .05$. The analyses also differed in the relative importance of the remaining predictor variables. Type of sex offense and prior sex convictions, variables which were removed from the predictive equation in the original analysis, were now allowed to remain in the equation, and were highly correlated with the first and second functions, respectively.

Type of sex offense was represented by 2 dummy-coded variables. Neither of these variables was highly correlated with either function in the original analysis. In the alternative analysis, it was only the rape/other dichotomy that was highly correlated with the first function. Examination of the bivariate relationship with outcome reveals that rapists were the only offenders who were more likely to be reconvicted of sexual, rather than only nonsexual, crimes.

Although prior sex convictions was aligned with the second, non-significant function, its bivariate relationship with outcome was also examined in order to observe the direction of the relationship. Offenders with prior sex offense convictions were almost twice as likely to be reconvicted as those without prior sex convictions. Sexual recidivism,

however, did not account for this difference in reconvictions. Rather, the higher reconviction rate in the group with prior sex convictions was due to a higher proportion of nonsexual recidivists in that group; only 6% of first sex offenders, compared with 20% of those with prior sex convictions, were nonsexual recidivists. Thus, while offenders with prior sex offense convictions were more likely to be subsequently reconvicted, they were no more at risk than first sex offenders for sexual recidivism. Instead, offenders with prior records of sex crimes were more likely than first sex offenders to recidivate nonsexually.

Classification results of the alternative analysis were very similar to those obtained with the original ordering of variables. As before, 77.0% of the offenders were correctly identified, and 94.1% were classified as non-recidivists. Rates of correct classification for the 3 outcome groups were identical to those observed in the original analysis. The only difference in the classification results was in proportion of false positives, which was lower in the nonsexual recidivism group but higher in the sexual recidivism group.

In summary, the alternative ordering of independent variables yielded a predictive equation which was no more effective than the original equation in classifying cases. The overall proportions of correctly classified offenders were identical in the two analyses. Although the relative importance of a number of predictors shifted with the change in order of entry, the primary predictors were consistent across both analyses. Thus, the original observations of relationship to victim and age at first sex conviction as primary predictors of recidivism can be considered robust with respect to ordering of input variables.

Diagnosis and Recidivism

Diagnoses were available for 64 treated offenders in the recidivism prediction subsample. The diagnostic compositions of the outcome groups are presented in Table 9. The numbers of diagnosed subjects in the nonsexual and sexual recidivism groups are small ($n = 5$ and $n = 7$, respectively), and so results pertaining to the relationship between diagnosis and outcome in this sample should be interpreted cautiously.

The hypothesis that the diagnosis of personality disorder is most prevalent among reconvicted offenders, and especially among sexual recidivists, was not supported. As indicated in Table 9, the diagnoses of paraphilia, personality disorder, and alcoholism were not significantly related to outcome, $\chi^2(2) < 1.0$, ns, $\chi^2(2) < 1.0$, ns, and $\chi^2(2) = 1.79$, ns, respectively. Few offenders were psychotic or mentally retarded (2% and 3%, respectively, of the entire subsample). The relationships between these diagnoses and outcome could not be properly evaluated because of skewness on both dimensions.

Contrary to expectation, these treated offenders with personality disorder diagnoses did not show a strong propensity to reoffend, either sexually or non-sexually, and diagnosis in general was not related to outcome. The small numbers of offenders in two of the outcome groups requires that these findings be viewed as tentative.

Social-sexual Competence and Recidivism

Phillips scale scores were available for 67 non-recidivists, 12 nonsexual recidivists, and 12 sexual recidivists. A one-way analysis of

Table 9

Proportions of Outcome Groups with Offenders in Each Diagnostic Category

Group	n	Diagnosis				
		Paraphilia ^a	Psychosis	Personality disorder	Mental retardation	Alcoholism
Non-recidivists	52	79%	2%	79%	4%	37%
Nonsexual recidivists	5	80%	0%	80%	0%	20%
Sexual recidivists	7	86%	0%	71%	0%	14%
Total	64	80%	2%	78%	3%	33%
	χ^2	.18	--	.21	--	1.79
	p	<u>ns</u>	--	<u>ns</u>	--	<u>ns</u>

Notes. Row percentages do not add to 100 because multiple diagnoses per offender were possible. χ^2 was not calculated when both diagnosis and outcome variables were significantly skewed.

^aIncludes diagnoses of sexual deviation.

variance was used to assess the significance of differences in Phillips scale scores among the three outcome groups. It was hypothesized that sexual recidivists show the lowest level of social-sexual competence. Although the group means differed in the predicted direction, with the sexual recidivists showing the least mature level of social-sexual competence ($\underline{M} = 13.4$, $\underline{SD} = 9.1$) as compared with nonsexual recidivists ($\underline{M} = 11.3$, $\underline{SD} = 6.5$) and non-recidivists ($\underline{M} = 12.3$, $\underline{SD} = 6.7$), the difference was not significant, $F(2, 88) < 1.0$, ns. Apparently, level of social-sexual competence, as measured by the Phillips scale, had no bearing on risk of subsequent convictions.

Summary of Results

The first set of analyses addressed the characteristics of sex offenders and their offenses. Comparisons of pedophiles, rapists, and incest offenders revealed a number of significant differences among these groups, related primarily to characteristics of the index offense and its victims. The differences between rapists and other offenders on victim age, and between incest offenders and others on relationship to victim, logically result from application of the sex offense classification criteria. More importantly in relation to these variables, it was found that victims of pedophiles and incest offenders did not differ in mean age, and that most of these victims were between the ages of 9 and 16. Pedophiles were less likely than rapists to assault strangers. Two-thirds of the pedophiles assaulted individuals who were known to them, while less than one-fourth of rapists did so.

The offender groups were also differentiated by degree of resistance given by victims. Rapists met with the greatest degree of resistance, with nearly half of their victims having attempted to harm or escape from them. Pedophiles and incest offenders did not differ in degree of resistance shown by victims. One-third of the assaulted minors apparently showed no resistance at all.

The offender groups also differed in location of offense, degree of physical aggression, and duration of assault. Pedophiles and rapists, more likely than incest offenders to conduct assaults outside the home, did not differ from each other in location of offense. More than one-third of the pedophilic and rape offenses occurred in public areas. Rapists were most aggressive, with 87% using physical coercion and 30% displaying weapons. Pedophiles and incest offenders did not differ in degree of aggression shown. One-half of the offenses against minors were non-aggressive, and only 4% involved weapons. Pedophilic offenses were of greater duration than rapes, and one-fourth of the pedophiles engaged in longer-term, ongoing sexual relations with victims.

Incest offenders were oldest at the index offense. Nearly all of the incest offenders were over age 30, with nearly one-third over 40 years of age. Pedophiles and rapists did not differ in age at index. More than half of the pedophiles and rapists were under age 31.

The only aspect of criminal record that discriminated the groups was age at first sex offense conviction. Incest offenders were first convicted of a sex offense later in life, in their mid-thirties on the average. The central tendency among pedophiles and rapists was for first sex conviction in their mid- to late-twenties.

The groups were not differentiated by any measure related to family background, education, employment and finances, medical and psychiatric history, or social-sexual competence.

On the whole, only 16% of the offenders in the total sample, and 25% of the pedophiles, assaulted males during the index offenses. More than one-half of the offenses involved vaginal or anal penetration, and one-third involved oral-genital activity. Pedophiles were no less likely than other offenders to engage in penetration or oral-genital contact. Offender sexual dysfunction during the assault was rare.

Offenders rarely used bribery to gain access to victims. Little more than one-third of the sample were under the influence of alcohol or drugs during the offense, and only 2% were possibly psychotic. One-half of the assaults were premeditated, that is, the offender set out in search of a victim with the deliberate intent to commit a sexual assault. Three-fourths of the offenders in this sample pleaded guilty to the index charges.

Most of the sample had prior records of criminal convictions. They began their criminal careers, on the average, in their early twenties. Two-thirds had prior public order convictions, half had prior convictions for personal crimes, and 44% were previously convicted of property offenses.

Only one-third had been previously convicted of sex offenses. Few offenders in this sample were "purely sexual" criminals with only sex crimes on their prior records.

Regarding family backgrounds, most offenders were of the lower social classes. Two-thirds had been raised by parents with intact mar-

riages. Few accounts of offender development made any mention of physical or sexual abuse in childhood. One-third of the offenders had family histories of alcohol abuse, and 15% had relatives with diagnosed mental disorders. One-third had siblings with criminal records, and 5% of the offenders had siblings who had also committed sex offenses.

Less than one-half of the sample completed high school. Of those who were in school at some point in adolescence, two-thirds showed at least a fair adaptation to school.

Nearly two-thirds of the offenders had stable employment histories. Few appeared to be experiencing financial stress at the time of the index offense.

Most offenders were without chronic physical health problems. Nearly two-thirds, however, had histories of alcohol or drug abuse, and 20% had prior psychiatric hospitalizations.

Nearly two-thirds of the sample were either married when the index offense was committed, or had been married at some point in the past. Most had no histories of homosexual activity.

The pedophiles, rapists, and incest offenders in the present sample, then, were primarily differentiated on the basis of their ages and behaviors at the index, or most recent, offense. The only background variable that discriminated among offender types was age when first convicted of a sex offense, with incest offenders being significantly older than offenders in the other two groups. Otherwise, these sex offender types were quite similar in their criminal, personal, and family histories.

Pedophiles and incest offenders, the two groups of offenders who victimized minors, were similar in preferred victim age groups, in degree of resistance encountered from victims, and in degree of physical aggression used during the offense. They differed in that incest offenders were significantly older, both at the index offense and when first convicted of a sex offense.

Pedophiles and rapists were similar in location of assaults and in age. They differed in propensity to assault strangers, in degree of resistance encountered from victims, and in degree of physical aggression shown during the offense. Rapists were significantly more aggressive, physically.

The second set of analyses attempted to evaluate the relative recidivism rates of treated and untreated sex offenders. Available for comparative evaluation of recidivism rates were 69 treated offenders and 69 imprisoned offenders successfully matched on type of index offense, history of prior sex offense convictions, and security level at release. The groups were equivalent in number of months since release, racial composition, county of commitment (Milwaukee vs. other), release mechanism, and history of substance abuse.

Offenders in the program evaluation study, as in the total sample, were predominantly white, and all were released from minimum or medium security settings. There were 39 pairs of pedophiles, 22 pairs of rapists, and 8 pairs of incest offenders. Approximately two-thirds were first sex crime offenders, and 62% had histories of substance abuse. Three-fourths had been granted early releases.

Recidivism was evaluated an average of 4.75 years after release. Overall, 21% of the sample were reconvicted of offenses, and 11% were reconvicted of sex offenses in particular. The difference between treated and imprisoned offenders in proportions with sex crime convictions was not significant, and was not in the predicted direction.

The only measure of recidivism which differentiated treated and imprisoned offenders was number of parole violators, with a greater number found in the specialized treatment group. Otherwise there were no differences in numbers rearrested or reconvicted of either sexual offenses or crimes in general, and no difference in timing of recidivism.

Although the matching procedures were successful in obtaining equivalence between the specialized treatment and prison groups on certain measures, examination of uncontrolled variables revealed a number of initial differences that may have influenced subsequent recidivism rates to a greater extent than type of intervention imposed.

The final set of analyses represented an attempt to identify predictors of recidivism. As hypothesized, the discriminant function analysis successfully identified two functions which distinguished sexual from nonsexual recidivists and recidivists in general from non-recidivists. As anticipated, relationship to victim was highly correlated with sexual recidivism, and was its primary predictor. Also highly correlated with sexual recidivism was general criminal history. None of the correlates of recidivism in general were among the anticipated predictors. Instead, general recidivism was primarily associated with age at first sex offense conviction, and was also highly correlated with history of substance abuse.

Most likely to reoffend, either sexually or nonsexually, were offenders with histories of substance abuse who were relatively young when first convicted of a sex offense. Most likely to reoffend sexually were first offenders who had assaulted strangers.

Although the two discriminant functions were statistically significant, their utility in actual classification of cases was limited by the extremely high base rate for non-recidivism. In addition, high false positive rates of 63% for recidivism in general and 50% for sexual recidivism were found.

Results of a second discriminant function analysis, performed with an alternative ordering of independent variables for entry into the predictive equation, yielded similar overall classification results. The primary predictors were consistent across both analyses, indicating that the importance of these variables in distinguishing outcome groups, as observed in the initial analysis, is a robust finding.

In supplementary analyses based on smaller sample sizes, hypotheses regarding the relationships of social-sexual competence and diagnosis to recidivism were evaluated. Although the relative levels of social-sexual competence were in the predicted direction, with sexual recidivists being least competent, the difference among means in the three outcome groups was not significant. The hypothesis related to diagnosis was also not supported: Offenders with diagnosed personality disorders were no more likely than other offenders to reoffend either in general or sexually.

CHAPTER V

DISCUSSION

The purpose of the present study was threefold: (1) to provide further knowledge regarding the characteristics of sex offenders and their offenses, (2) to evaluate the relative effectiveness of treatment and incarceration in prevention of sex offense reconvictions, and (3) to identify predictors of sex offender recidivism. Two groups of subjects were studied: 75 Wisconsin sex offenders released from a minimum-medium security level treatment facility, and 75 Wisconsin sex offenders released from minimum or medium security level prisons. Subjects were released between the years 1976 and 1983, inclusive. There were 44 pedophiles, 23 rapists, and 8 paternal incest offenders in each group.

In order to advance knowledge regarding the perpetrators, victims, and circumstances of sex crimes, a set of reliable scales was developed for rating information contained in the subjects' Pre-Sentence Investigations. The data obtained for the three sex offender types were compared in order to ascertain the distinguishing features and commonalities of pedophiles, rapists, and incest offenders.

In order to assess the relative effectiveness of treatment and incarceration, the subject's subsequent criminal records were obtained from the Wisconsin Crime Information Bureau. The imprisoned sex offenders had been selected for comparison with treated subjects on the basis

of similarities on eight characteristics. Subjects with available recidivism data were matched on type of sex offense, on whether they had previously been convicted of sex crimes, and on security level at release. They were equivalent in number of months since release, racial composition, proportions with substance abuse histories, proportions committed in Milwaukee versus other counties, and release mechanism. The treated and imprisoned sex offenders were compared on proportions in each group with subsequent parole violations, rearrests, and reconvictions. Recidivism was evaluated one to nine years, or an average of approximately five years, after release from the hospital or from prison.

A hierarchical discriminant function analysis was conducted in order to determine whether recidivism could be predicted. The independent variables in this multivariate procedure were selected on the basis of their bivariate relationships with recidivism, as observed in prior research. The predictive utility of criminal history, type of sex offense, relationship to victim, age, and substance abuse were evaluated. Given his status on the independent variables, an attempt was made to predict whether an offender would not recidivate, would recidivate with only nonsexual crimes, or would recidivate with sexual crimes.

The following discussion will examine the results obtained in the context of the hypotheses and problems addressed in this study. Next, conclusions will be presented. Finally, the limitations of the present study and recommendations for future research will be specified.

Distinguishing Features and SimilaritiesAmong Sex Offender Types

As expected, the Pre-Sentence Investigations proved to be a rich source of information on the characteristics and backgrounds of convicted sex offenders. A number of features were found to distinguish among pedophiles, rapists, and paternal incest offenders. These differences were almost exclusively limited to characteristics of their offenses, including victim traits. Otherwise, these offenders were quite similar in personal histories and came from similar family backgrounds. They were also similar in most aspects of criminal history, with the exception of age when first convicted of a sex offense.

Pedophiles were distinguished by an only moderate propensity to assault strangers, which was naturally stronger than for incest offenders, but significantly less than that of rapists. Pedophiles were almost twice as likely to assault children they knew than they were to assault children whom they did not know. In addition, pedophiles engaged in lengthy exploitation of victims more frequently than rapists, but not as often as incest offenders. One-fourth of these pedophiles engaged in ongoing sexual relations with their victims.

Like incest offenders, pedophiles tended to be relatively non-aggressive physically; to encounter only verbal resistance, at most, by half of their victims; and showed a preference for children who were at least pre-pubertal. Like those of rapists, the assaults of pedophiles were equally likely to occur in the home, in a secluded area, or in a public location. Pedophiles were also similar to rapists in age, both

when first convicted of a sex offense and in age when committing the current offense.

Rapists naturally assaulted individuals who were older than the victims of pedophilia or incest. Most of their victims were age 30 or younger, and half were under 21. Rapists were also distinguished by a strong propensity to assault strangers. They were more than twice as likely to assault a stranger than they were to assault someone they knew. This finding is consistent with results of recent research conducted by the Bureau of Justice Statistics (1982) indicating that rape is one of the violent crimes most often committed by strangers, and that 65% of rape perpetrators do not know their victims.

Rapists were also the most physically aggressive type of sex offender. Most used at least physical coercion, and approximately one-third were armed with weapons. They were most likely as well to encounter resistance during their assaults, and one-half of their victims attempted to harm or escape from them. Their contacts with victims tended to be brief, one-time assaults of less than one hour's duration.

Paternal incest offenders were of course more likely than pedophiles or rapists to assault individuals known to them, and to conduct these assaults in the home on an ongoing basis. Incest offenders were also distinctly older, both when first convicted of a sex offense, and at the beginning of the incestuous behavior leading to the current conviction. The onset of their criminal sexual behavior tended to occur later in life, in their mid-thirties.

These sex offender types were homogeneous with regard to several aspects of their criminal sexual behavior, most aspects of criminal background, and in all aspects of personal and family history examined.

With respect to offense-related characteristics, the offender types were equally likely to be under the influence of alcohol or drugs when committing their sex crimes. Overall, 40% of these offenders committed their crimes when they had been drinking or using drugs. They were also similar in the likelihood that they had sought out victims with deliberate intent to commit a sex offense. Half of their sex offenses were premeditated in this fashion.

They also did not differ in extent of sexual liberties taken with victims. Notably, pedophiles were no more likely than rapists to limit themselves to physical touch or "fondling", and they were as likely as rapists to engage in vaginal or anal penetration of victims. Nearly one-half of the pedophiles penetrated their victims, and one-third involved their victims in oral-genital activity.

In terms of criminal background, the majority of offenders in each group possessed records of prior non-sexual offense convictions, and the average age at onset of known criminal behavior was uniform across offense types. No group was more likely than the others to contain offenders with prior convictions for violent offenses, including sex crimes. Neither was any group more likely to contain public order or property offenders.

Similarities across offense types in personal and family backgrounds extended to social class, educational level, stability of employment history, parenting source, experiences of parental divorce or death, psychiatric and substance abuse history, marital status, and level of social-sexual competence.

Notably, more than half of these offenders did not complete high school. Nearly two-thirds were substance abusers at some point in their lives. Instances of physical abuse or sexual victimization in childhood were rarely reported; 12% had been victims of childhood physical abuse, and only 2% were known to be victims of sexual abuse.

The present study demonstrated that empirical study of sex offenders using as sources of data archival documents such as Pre-Sentence Investigations can be a productive venture, and that reliable rating scales can be developed to allow assessments of their backgrounds and criminal behaviors. The results obtained are consistent with the view that sex offenders are a heterogeneous group (Pacht, 1976; Quinsey, 1983; Slovenko, 1973), but indicate that, at least for confined sex offenders, the differences among sex offender types may be largely limited to characteristics of their criminal sexual behaviors. Confined pedophiles, rapists, and paternal incest offenders are not very different in their personal, criminal, and family backgrounds.

Recidivism of Treated and Imprisoned Sex Offenders

It was hypothesized that sex offenders who received specialized treatment would be less likely to recidivate sexually than those who were imprisoned. This hypothesis was not supported by the results of the present study. The proportions of sexual recidivists in the treated and imprisoned groups did not differ.

Previous studies of sex offender treatment outcome which also included comparison groups have found significantly more favorable outcomes for those treated (Roberts & Pacht, 1965; Sturgeon & Taylor,

1980). The comparison group used in the present study differed from those employed in previous research in that, first of all, it contained only sex offenders, rather than offenders from the general prison population. Secondly, offenders in the present comparison group were matched with those in the treatment group on type of offense, history of prior sex offense convictions, and security level at release. They were also equivalent to the treatment group on a number of other variables that could have some bearing on outcome, such as release mechanism and substance abuse history.

A major problem addressed in the present study was the difficulty in obtaining appropriate comparison groups for evaluation of sex offender treatment programs. A comparison group is considered adequate to the extent that it does not differ from the treatment group in ways that significantly affect the outcome measured (Glaser, 1978).

In the present study, matching was used in an attempt to obtain an appropriate comparison group. The hypothesis with regard to relative recidivism results reflects the expectation that, given the assumed adequacy of the comparison group, the present study would demonstrate the efficacy of sex offender treatment in a more credible manner than have studies in the past.

The expected result was not obtained. One possible explanation for the lack of difference in outcome is that when adequate comparison groups are employed, treatment can be viewed as having no effect on subsequent recidivism rates. It may be said that favorable results have been observed in comparisons with sex offenders in the general prison population only because the initial selection process systematically assigned those with better prognoses to the treatment settings.

Alternatively, it may be the case that, despite attempts to obtain similar imprisoned offenders through matching, the comparison group in the present study was less than adequate. Comparisons of the treated and imprisoned offenders on uncontrolled variables yielded evidence that, although those imprisoned may have been less amenable to treatment, the treated offenders initially showed more signs of dangerousness and psychopathology. If the treated offenders at the outset were indeed "handicapped" in this manner, the finding that they were no more recidivistic than the imprisoned offenders despite these initial differences may be viewed as an indication of treatment efficacy.

As a treatment outcome study, then, the results of the present research may be equivocal and may not provide any direct evidence to bear on the question of whether specialized treatment is more effective than incarceration in prevention of subsequent sex crimes. Methodologically, however, the study demonstrates a unique approach to the problem of obtaining adequate comparison groups for sex offender program evaluations. The lack of success in yielding interpretable results indicates that the painstaking and time consuming application of matching procedures does not guarantee equivalence of groups. It may be the case that no amount of selectivity in choosing comparison group subjects can override the factors that initially formed the basis for differential processing, and that the question of sex offender treatment efficacy should be approached with methods other than comparison of matched groups.

Statistical Prediction of Recidivism

The hypothesis that recidivism predictors could be statistically identified was confirmed. Also confirmed was the hypothesis that one set of predictors would serve to distinguish between types of recidivism, and the other would distinguish between recidivism and non-recidivism.

It was hypothesized that the strongest predictors of whether an individual would recidivate sexually or nonsexually are sexual criminal history, involvement of alcohol or drugs in the offense, and relationship to victim. Of these expected predictors, relationship to victim was the strongest, and was the primary predictor of sexual recidivism. Also highly correlated with sexual recidivism was general criminal history.

It was hypothesized that the strongest predictors of whether an individual would recidivate or not recidivate are general criminal history, current age, and type of sex crime. This hypothesis was not supported. Instead, age when first convicted of a sex offense was the primary predictor of recidivism, followed by substance abuse history.

Results of a second analysis, using an alternative order of variables for consideration in the predictive equation, indicated that the observed relationship of the primary predictors with outcome is a robust finding. The relative importance of the remaining predictors shifts with the order in which variables are presented for consideration.

Thus, the most reliable predictors of outcome in the present sample are relationship to victim and age at first sex offense conviction.

Most likely to reoffend are offenders who were relatively young when first convicted of a sex offense. Most likely to reoffend sexually, as opposed to nonsexually, are those who have sexually assaulted strangers.

Prior research on predictors of recidivism have focused on their bivariate relationships with outcome. The present results indicate that when these predictors are considered together, their multivariate relationship with outcome is not consistent with a simple, additive model. Looked at individually, the relative influence of hypothesized predictors is difficult to ascertain. Some variables may seem important only because they are highly correlated with other, more critical predictors of outcome. Such was the case in the present sample with type of sex offense. It may be that incest offenders are at lowest risk for recidivism not because of having committed incest per se, but because their first sex offense convictions tended to occur later in life. Likewise, the present results indicate that influence of alcohol or drugs when offending, and current age, do not figure prominently as predictors of recidivism in a multivariate context.

The observed direction of relationship with recidivism was consistent with hypotheses for all predictors except criminal history. Although unanticipated, the relationship observed is not illogical. The result obtained indicates that among sex offenders who will recidivate, those without prior criminal records are more likely to commit a second sex offense than they are to commit nonsexual offenses such as theft.

Although the two discriminant functions were statistically significant, and together accounted for 22.5% of the variability in outcome, they were of limited utility when applied to classification of cases.

Application of the discriminant function equations resulted in correct classification of 77% of the offenders, yet also resulted in false positive rates of 63% and 50% for prediction of general and sexual recidivism, respectively.

In the program evaluation sample, only 11% of the offenders recidivated with nonsexual offenses and 10% recidivated with sexual offenses. The difficulty posed by low base rates such as these is that the lower the frequency of a given behavior, the more difficult it becomes to develop a predictive instrument that will perform any better than simply predicting that the behavior will not occur. This base rate problem, which plagues research in this area and in prediction of dangerousness generally, is compounded by the fact that on statistical grounds alone, overprediction of rare events is a common occurrence (Quinsey, 1983).

In the present instance, simply predicting that none of the offenders would recidivate results in classification of cases with 78.5% accuracy. Application of the discriminant function equations results in classification of cases with 77% accuracy. Uniform prediction of non-recidivism in this sample, then, would achieve a greater degree of overall accuracy.

Whether a predictive method can be considered applicable depends on the purpose of classification, and on the risks and costs associated with errors of various types. The present investigation was prompted in part by the criminal justice system's need to identify repeat offenders as a target group for participation in specialized programs, in an effort to reduce the overall crime rate. Application of the prediction

model derived in the present study would result in exclusion of at least 90% of recidivistic sex offenders from specialized programming, and up to 63% of the offenders designated as "recidivists" would receive specialized services unnecessarily.

Nonetheless, the success of the discriminant function analysis from a statistical standpoint, reflected in the significance of the results and the proportion of variance accounted for in outcome, suggests that the statistical approach to prediction of sex offender recidivism is by no means without merit. Continued research on factors associated with recidivism could lead to development of statistical models with greater practical utility. The primary predictors identified here suggest a beginning point for continued efforts to discover the sources of variation in outcome.

Conclusions

Confined pedophiles, rapists, and paternal incest offenders are a heterogeneous group with regard to characteristics of their criminal sexual behaviors, but not very different in their personal, criminal, and family backgrounds. Most of these confined offenders can be characterized as "generalized criminals", with prior records of nonsexual offenses. Most derive from families of the lower social classes, and more than half are without high school diplomas. Many have histories of substance abuse. In general, it appears that the problems of sex offenders found in confined settings are not limited to the area of sexual deviation.

The characteristics of many pedophiles found in confined settings do not fit the stereotype of the passive "child molester" who, like the exhibitionist, is often viewed as the type of sex offender who does not pose a serious threat to the physical safety of others. (Beit-Hallahmi, 1974; Sadoff, 1975). Rather, these pedophiles are as sexually aggressive as rapists, and nearly one-half engage in penetration of victims. Penetration of such youthful victims is certainly physically, as well as emotionally, harmful. Also contrary to the "benign" reputation of these pedophiles is the finding that their criminal histories are characterized by public order, property, and personal offenses to the same extent as the criminal histories of rapists.

Despite the extent of sexual activity involved, many of the children exploited by these offenders put up little, if any, resistance. In addition to the difference in size and strength involved, the lack of resistance may be due to the fact that the offender is likely to be someone that they know. The relative lack of resistance exhibited by victims of pedophiles and incest offenders in the present sample confirms the need for continued primary prevention efforts aimed at encouraging assertive responding to attempted childhood sexual abuse.

Confined rapists are more likely to assault strangers than acquaintances. Consistent with common belief, they are the most physically aggressive sex offenders. In addition, they are most likely to encounter resistance, and half of their victims attempt to harm or escape from them.

Although confined paternal incest offenders show more similarities to pedophiles than to rapists, they are distinctly older at the onset of

the behaviors leading to the current conviction. In fact, these incest offenders show no evidence of criminal sexual tendencies until later in life, generally in their mid-thirties. This finding is consistent with the notion that incest is often precipitated by a particular set of circumstances existing in the family as the children enter adolescence (Cormier & Boulanger, 1973), and is distinct from the compulsive propensity toward sexual relations with minors that is said to characterize pedophiles. The significant difference in age between pedophiles and incest offenders most likely accounts for the bimodal distribution of age observed when these two offender types are combined to form one group for research purposes.

Evaluation of the effectiveness of treatment in reduction of recidivism rates for these sex offenders continues to be plagued by difficulties related to availability of adequate comparison groups. Matching on relevant subject characteristics has been suggested as a remedy for this problem and was attempted in the present study. Evaluation of uncontrolled variables, however, revealed that the treatment and comparison groups may have initially differed in ways that would influence outcome to a greater extent than would the intervention itself. Matching does not sufficiently override the factors that initially form the basis for differential processing of sex offenders. The question of sex offender treatment efficacy should be approached with alternative methods of investigation.

Statistical prediction methods show some potential as effective tools for identifying sex offenders most likely to reoffend. At present such methods appear to be of limited practical utility due to high error

rates. A discriminant function analysis can, however, successfully identify two functions which distinguish non-recidivists from recidivists in general, and distinguish sexual from nonsexual recidivists. It can be tentatively posited that sex offenders most likely to reoffend, either sexually or nonsexually, are those who were relatively young when first convicted of a sex offense. Most likely to reoffend sexually, as opposed to nonsexually, are offenders who have sexually assaulted strangers. These initial findings obtained from multivariate analysis should be viewed as working hypotheses, and constitute a starting point for continued research on the sources of variation in outcome of sex offenders.

Limitations and Recommendations

The number of incest offenders in the sample was relatively small. Generalizability of the results pertaining to their characteristics and distinguishing features would be enhanced by further research involving replication of these findings.

The cross-validation technique used in the present study increased the likelihood of identifying only reliable differences among the sex offender groups. At the same time, it reduced the power of the statistical tests to detect real differences, due to decreased sample sizes in the split halves. Thus, further research is needed to determine whether the sex offender types are homogeneous to the extent indicated by the present results.

Most of the offenders in the present sample were white and committed their offenses in rural or small urban areas. Further research is

necessary to determine the applicability of the present findings to non-white sex offenders in large metropolitan areas.

All subjects in the present study were either imprisoned or psychiatrically hospitalized as a result of their sex offenses, that is, they were sentenced to periods of confinement rather than probation. Additionally, sex offenders convicted of murder or attempted murder were excluded from the sample. Thus, the present sample represents an intermediate group of sex offenders who were neither so violent as to seriously injure or kill their victims, nor so "benign" as to elicit probationary sentences. The findings and conclusions of the present study resulted from examination of this intermediate group of non-homicidal sex offenders who are considered dangerous enough to warrant institutional sentences. It is possible that examination of only this intermediate group resulted in restriction of ranges on some variables, thus accounting for the extent of homogeneity found in criminal, personal, and family backgrounds. Replication of the study with homicidal sex offenders and with those on probation would reveal the extent to which the present findings are generalizable.

The present study represents an investigation of only those sex offenders who were apprehended and convicted of their offenses. Sex offenders who are not apprehended or who otherwise avoid conviction may differ significantly from those who are convicted. Likewise, the results regarding subsequent criminal activity of these sex offenders probably represent a conservative estimate of actual recidivism. It is estimated that sex offenders avoid detection approximately twice as often as they are apprehended for their sex crimes (Groth, Longo, &

McFadin, 1982). Recidivism data obtained in follow-up interviews with guaranteed anonymity could provide a more realistic estimate of reoffense rates, and may also serve to ameliorate the base rate problem associated with statistical prediction of recidivism.

The sex offenders in the present study were also a select group in that they had been charged, convicted, and sentenced according to the laws and procedures in the State of Wisconsin. Replication of the study in other jurisdictions would enhance the generalizability of the findings.

The relative strengths of association among variables in multivariate analysis often shift with changes in sample composition. Thus the relative strengths of the various predictor variables included in the present study need repeated evaluation before any conclusions can be drawn regarding their general degree of relationship to outcome. For instance, analysis of a sample containing equal proportions of pedophiles, rapists, and incest offenders may provide evidence of a stronger relationship between sex offender type and outcome than was apparent in the present study. The relatively small number of incest offenders included in the present sample may have minimized the likelihood of taking into account the better outcomes of these offenders in assessing the overall relationship between sex offender type and outcome.

The findings with regard to predictors of recidivism merely reflect degrees of association observed with outcome, and do not constitute any evidence pertaining to causality. Thus, for example, the finding of an association between substance abuse history and recidivism simply reflects the extent to which these variables were correlated, and

does not imply any causal connection between substance abuse and chronic criminal behavior.

The combined influence of predictor variables in the present study accounted for 22.5% of the variability in criminal outcome. This proportion of variance accounted for is moderately high relative to the usual degrees of association observed in social science research but, as demonstrated in the present study, is not sufficient to allow for practical application of the discriminant function equations. The remaining 77.5% of the variability in outcome consists of error variance and the influence of unmeasured sources of variation. Measurement error in the present study can be attributed in part to use of reconviction as the measure of recidivism. Use of more accurate indicators of recidivism, such as data obtained through anonymous interviews, would serve to reduce error variance, and would likely reveal that a portion of offenders identified as "false positives" are in fact true recidivists.

Regarding unmeasured sources of variation, a number of potential predictors of outcome were unavailable for inclusion in the present research, and should be examined in future studies of statistical prediction. These include measurement of sexual arousal patterns (Quinsey, 1983) and personality factors (Schorsch, 1982) that may be related to recidivism risk. It would also be worthwhile to examine the extent of variation in outcome accounted for by events and circumstances that follow release. The post-release environment, including the availability of family and other sources of support, may figure prominently in the predictive equation. The quality of parole supervision may also be important in prevention of further offending (Dingman, Frisbie, & Vanasek, 1968; Frisbie, 1965).

The present study examined a combined sample of sex offender types in the attempt to identify statistical predictors of recidivism. It may be the case that the predictors of recidivism are different for the various subclassifications of offender, and that separate examinations of pedophiles, rapists, and incest offenders would yield improvement in predictive ability.

The evaluation of recidivism among treated and imprisoned sex offenders in the present study cannot be viewed as an adequate assessment of treatment efficacy because the matching procedures involved did not yield a comparison group that was sufficiently similar to the treated group. Methods other than comparison of matched groups may result in more fruitful assessments of sex offender treatment efficacy. These would include time series analyses examining whether the implementation and withdrawal of Mentally Disordered Sex Offender laws have been accompanied by any corresponding changes in sexual assault rates.

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APPENDIX A

ADMINISTRATIVE ORDERS

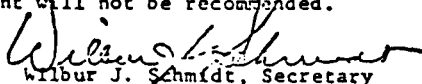
POLICY

Order Number 1.33
Originating Date _____
Latest Revision 11-25-70SUBJECT: Sex Crimes Law: Recommendations For Specialized Treatment

If a person is convicted of certain crimes specified in sec. 975.01, Wisconsin Statutes, the Court is required under this section to commit him to the Department for a presentence social, physical and mental examination. Upon completion of such examination, the Department is required by sec. 975.04, Wisconsin Statutes, to send to the Court the report of the results of such examination, together with the recommendations of the Department. By virtue of secs. 975.05 and 975.06, Wisconsin Statutes, such recommendation shall state whether or not such offender requires specialized treatment for any physical or mental aberration the examination may disclose.

The following criteria shall be applied to determine whether or not the Department shall recommend specialized treatment for sex offenders committed for examination under sec. 975.01, Wisconsin Statutes, and all recommendations to a Court pursuant to sec. 975.04, Wisconsin Statutes, shall be made in accordance with this Order:

1. It shall first be determined whether or not the offense for which such offender has been convicted was the product of sexual psychopathy.
2. If the offense was not the product of sexual psychopathy, specialized treatment will not be recommended.
3. If the offense is found to be a product of sexual psychopathy, it shall then be determined whether or not the offender is either:
 - a) Potentially responsive to available specialized treatment assuming adequate motivation; or
 - b) Sexually dangerous.
4. If the offense is the product of sexual psychopathy and either or both of the criteria specified in Paragraph 3 hereof exist, the Department will recommend specialized treatment.
5. If neither of the criteria specified in Paragraph 3 hereof exist, specialized treatment will not be recommended.


Wilbur J. Schmidt, Secretary

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

APPENDIX B

Classification Scheme - TYPE OF SEX CRIME
(F. Rattenbury, M.A., and M. Kaye, Ph.D.)

1. Pedophilia: Non-incestuous sexual assault (including statutory rape) of victim age 16 or younger. (See incest criteria below to determine whether assault is "non-incestuous.")
Exception: Does not include sexual assault of victim age 16 or younger if offender was also age 16 or younger, and victim was not more than 2 years older or younger than offender. Offenses of this type are to be categorized as rape.
Examples: "Pedophilia" would include sexual assault of a 13-year-old victim by a 16-year-old offender. "Rape" would include sexual assault of a 13-year-old victim by a 15-year-old offender.
2. Rape: Sexual assault of victim over age 16. Also includes sexual assault of victim age 16 or younger if offender was also age 16 or younger, and victim was not more than 2 years older or younger than offender (see examples above).
3. Incest: Sexual assault of offender's own child or step-child. Also includes the child of offender's paramour if the mother and offender had been living together continuously for at least one year prior to the offense.
4. Exhibitionism: Indecent exposure or other exhibitionistic offense, with victim of any age.
5. Other: Includes statutory rape of victim over age 16; obscene phone calls; voyeurism; bestiality.
9. Unknown.

Note: If no detailed information is provided, categorize the offense by its legal description. If the legal description is very broad, such as "sexual assault," classify as "unknown."

APPENDIX C

PRE-SENTENCE INVESTIGATION RATING SCALES

F. Rattenbury, M.A.; M. Kaye, Ph.D.; C. Schwanz, B.S.

Subject Number: _____

Card Number 0 4 (1 - 2)
 Sample _____ (3)
 1 = Mendota
 2 = Corrections

MATCHING VARIABLES

1. Release year (see project records) 19 _____ (4- 5)
2. Type of crime (see "Present Offense") _____ (6)
 - 1 = Pedophilia (victim age 16 or younger)
 - 2 = Rape (victim over age 16)
 - 3 = Incest
 - 4 = Exhibitionism
 - 5 = Other, specify: _____
3. Any prior sex convictions? (see "Prior Record") _____ (7)
 - 1 = No
 - 2 = Yes
4. Race of subject (see Face Sheet) _____ (8)
 - 1 = White
 - 2 = Black
 - 3 = American Indian
 - 4 = Mexican
 - 5 = Other, specify: _____
5. County of commitment (see Face Sheet) _____ (9)
 - 1 = Milwaukee
 - 2 = Other
6. Any history of alcohol or drug abuse? (see project records) _____ (10)
 - 1 = No
 - 2 = Yes
7. Security classification upon release (see project records) _____ (11)
 - 1 = Minimum or medium
 - 2 = Maximum
8. Release mechanism (see project records) _____ (12)
 - 1 = Parole or SRB
 - 2 = MR
9. Age when released (see project records) _____ (13-14)

PRESENT OFFENSE

Description

11. Classification (of most severe offense if multiple counts)	_____ (17)
1 = First Degree	
2 = Second Degree	
3 = Third Degree	
4 = Fourth Degree	
12. Number of counts	_____ (18-19)
13. Number of accomplices	_____ (20-21)
14. Plea	_____ (22)
1 = Guilty	
2 = Not Guilty	

Victim Characteristics

15. Age: Victim 1	_____ (23-24)
16. Age: Victim 2	_____ (25-26)
17. Age: Victim 3	_____ (27-28)
18. Summary age (adult age 17 or older)	_____ (29)
1 = All victims were adults	
2 = Most victims were adults	
3 = Equal numbers of adult and child victims	
4 = Most victims were children	
5 = All victims were children	
19. Sex Victim 1 (1 = female; 2 = male)	_____ (30)
20. Sex Victim 2	_____ (31)
21. Sex Victim 3	_____ (32)
22. Summary Sex	_____ (33)
1 = Female victim(s)	
2 = Male Victim(s)	
3 = Both male and female victims	
Relationship to Subject (items 23-25 below)	
1 = Blood relation	
2 = Step relation	
3 = Known to subject but no legal family relationship	
4 = Not previously known to subject	
23. Victim 1	_____ (34)
24. Victim 2	_____ (35)
25. Victim 3	_____ (36)

Degree of Resistance (items 26-28 below)

- 1 = None
- 2 = Verbal only
- 3 = Physical, passive
- 4 = Physical, active: attempt to push subject away
- 5 = Physical, active attempt to harm or escape from subject

26. Victim 1	_____	(37)
27. Victim 2	_____	(38)
28. Victim 3	_____	(39)

Offense Characteristics

Location of Crime (items 29-31 below)

- 1 = Subject's home
- 2 = Victim's home
- 3 = Public area (e.g., public building, residential area; locations where crime is more likely to be interrupted by others)
- 4 = Secluded area (other than subject's or victim's home) (e.g., remote section of forest preserve; locations where crime is less likely to be interrupted by others)
- 5 = Other (specify below)

29. Victim 1	_____	(40)
30. Victim 2	_____	(41)
31. Victim 3	_____	(42)

Activities Involved (items 32-34 below) (adapted from Dix, 1976)

- 1 = Absent
- 2 = Attempted but not completed
- 3 = Present

32. Physical touching	_____	(43)
33. Oral-genital contact	_____	(44)
34. Penetration (vaginal or anal)	_____	(45)

Aggressive Behaviors Involved (items 35-40 below)

- 1 = Absent
- 2 = Present

36. Verbal humiliation or other verbal abuse	_____	(47)
37. Physical coercion	_____	(48)
39. Weapon shown but not used	_____	(50)
40. Weapon utilized	_____	(51)
42. Any evidence of sexual dysfunction during offense?	_____	(53)
1 = No		
2 = Yes (e.g., difficulty achieving or maintaining erection)		
43. Was any victim bribed or promised compensation? (1 = no; 2 = yes)	_____	(54)

45. Duration of assault (longest period of time that subject had control of victim): _____ (56)
- 1 = Less than 1 hour
 - 2 = 1 to 24 hours
 - 3 = More than 24 hours
 - 4 = Ongoing sexual relations (at least 3 separate incidents with same victim)
 - 9 = II (insufficient information; unable to rate)

Subject Mental Status at Time of Crime(s)

46. Under influence of alcohol or drugs (during any offense if multiple counts) _____ (57)
- 1 = No
 - 2 = Suspected
 - 3 = Yes
47. Psychotic? (during any offense if multiple counts) _____ (58)
- 1 = No
 - 2 = Suspected
 - 3 = Yes
48. Premeditation (use offender's version unless contradicted by other aspects of the case) _____ (59)
(Groth and Birnbaum, 1979)
- 1 = Spontaneous, i.e. subject never anticipated committing a sexual assault until it erupted unexpectedly.
 - 2 = Opportunistic, i.e., idea suddenly came to mind when opportunity presented itself that gave access to victim, and subject acted on impulse.
 - 3 = Intentional, i.e., subject set out in search of victim with the deliberate intent to commit a sexual assault.
 - 9 = II

Subject Attribution of Blame

49. Responsibility (based on most recent statement of subject noted in PSI) (adapted from Groth and Birnbaum, 1979) _____ (60)
- 1 = Full admission; offender's version of offense corresponds in all major aspects to victim's version, or Qualified admission; e.g., admits to offense but claims he cannot remember incident, minimizes his actions or their seriousness, externalizes responsibility for offense.
 - 2 = Denial - claims victim consent, or claims false accusation or mistaken identity.
 - 9 = II

PRIOR CRIMINAL RECORD

50. Age at first conviction-Sex crime _____ (61-62)
 51. Age at first conviction-Any crime _____ (63-64)
 52. Number of past parole or probation
 revocations _____ (65-66)
 53. Number of prior placements in juvenile
 correctional facilities (do not count direct
 transfers as separate placements) _____ (67-68)
 54. Number of prior jail terms served (do not
 count direct transfers as separate terms) _____ (69-70)
 55. Number of prior prison terms served (do not
 count direct transfers as separate terms) _____ (71-72)

Juvenile (under age 18) criminal record

56. Did subject have a juvenile arrest record? _____ (73)
 (1 = no; 2 = yes)
 Nature of crimes for which subject was convicted as
 juvenile (items 57-62b below; adapted from Clinard
 and Quinney, 1967)
 1 = None
 2 = At least one prior conviction as juvenile
57. Public order crimes: Traffic violations _____ (75)
 only
58. Other public order crimes, including drunken-
 ness, vagrancy, disorderly conduct, prostitution,
 homosexuality, gambling _____ (77)

Subject Number: _____ (78-80)
 Card Number: _____ 0 5 (1- 2)

59. Property crimes, including burglary, larceny,
 auto theft, shoplifting, check forgery,
 vandalism _____ (4)
- 60a Personal crimes: Sex crimes only _____ (6)
 60b Personal crimes: Murder and attempted murder
 only _____ (8)
61. Other personal crimes, including assault and
 robbery _____ (10)
- 62a Other, including occupational crimes (e.g.,
 embezzlement, false advertising) and political
 crimes (e.g. military draft violations,
 radicalism)
 Specify: _____

- 62b Unknown _____ (14)

63. Summary sex crimes _____ (15)
 1 = No record of juvenile arrests
 2 = Record of juvenile arrests, but no convictions
 3 = Record of juvenile convictions
64. Summary any crimes _____ (16)
 1 = No record of juvenile arrests
 2 = Record of juvenile arrests, but no convictions
 3 = Record of juvenile convictions

Prior Adult (age 18 or older) Criminal Record

65. Did subject have a prior adult arrest record? _____ (17)
 (1 = no; 2 = yes)
 Nature of crimes for which subject was previously convicted as adult (items 66-71b below; adapted from Clinard and Quinney, 1967)
 1 = None
 2 = At least one prior conviction as adult
66. Public order crimes: Traffic violations only _____ (19)
67. Other public order crimes, including drunkenness, vagrancy, disorderly conduct, prostitution, homosexuality, gambling _____ (21)
68. Property crimes, including burglary, larceny, auto theft, shoplifting, check forgery, vandalism _____ (23)
- 69a Personal crimes: Sex crimes only _____ (25)
- 69b Personal crimes: Murder and attempted murder only _____ (27)
70. Other personal crimes, including assault and robbery _____ (29)
- 71a Other, including occupational crimes (e.g., embezzlement, false advertising) and political crimes (e.g. military draft violations, radicalism) _____ (31)
 Specify: _____

- 71b Unknown _____ (33)
72. Summary of sex crimes _____ (34)
 1 = No record of prior adult arrests
 2 = Record of prior adult arrests, but no convictions
 3 = Record of prior adult convictions
73. Summary any crimes _____ (35)
 1 = No record of prior adult arrests
 2 = Record of prior adult arrests, but no convictions
 3 = Record of prior adult convictions

Cumulative Record of Sex Crimes (includes both juvenile and adult records)

Nature of Sex Crimes for which Subject was Previously Convicted (items 74-78b below)

- 1 = None
2 = At least one prior conviction as juvenile or adult
74. Pedophilia (victim age 16 or younger) _____ (37)
75. Rape (victim age over 16) _____ (39)
76. Incest _____ (41)
77. Exhibitionism _____ (43)
78a Other, specify: _____ (45)
78b Unknown _____ (47)

FAMILY INFORMATION

80. Parenting received primarily from: _____ (49-50)
(before adolescence, if equally split among two or more categories)
1 = Both natural parents
2 = Single natural mother
3 = Single natural father
4 = Natural mother and stepfather
5 = Natural father and stepmother
6 = Relatives other than parents (e.g., aunt or grandmother)
7 = Adoptive parents
8 = Foster parents
9 = Institutional placements
10 = Other, specify: _____
99 = II
81. Did parents separate or divorce before subject's 16th birthday? _____ (51)
(1 = No; 2 = Yes; 9 = II)
82. Did father die prior to subject's 16th birthday? (1 = No; 2 = Yes; 9 = II) _____ (52)
83. Did mother die prior to subject's 16th birthday? (1 = No; 2 = Yes; 9 = II) _____ (53)
- History of Subject as Victim of Child Abuse (items 84-85 below)
- 1 = Absent or suspected
2 = Present
9 = II
84. Physical abuse _____ (54)
85. Sexual abuse _____ (55)

87. Any natural family history of alcohol abuse? _____ (57)
 (1 = No; 2 = Suspected; 3 = Yes; 9 = II)
88. Any natural family history of mental disorder? _____ (58)
 (1 = No; 2 = Suspected; 3 = Yes; 9 = II)
89. History in sibling of any criminal activity? _____ (59)
 (1 = No; 2 = Suspected; 3 = Yes; 9 = II)
90. History in sibling of sex crimes? _____ (60)
 (1 = No; 2 = Suspected; 3 = Yes; 9 = II)
91. History in sibling of other correctional
 problems not noted in items 89 and 90 above _____ (61)
 (1 = No; 2 = Suspected; 3 = Yes; 9 = II)
 Specify: _____
92. History in sibling of mental health problems? _____ (62)
 (1 = No; 2 = Suspected; 3 = Yes; 9 = II)
- Social Class
98. Occupation of head of household _____ (68)
99. Education of head of household _____ (69)
100. Raw Score _____ (70-71)
101. Scaled Score _____ (72)

EDUCATION

102. Highest educational level achieved _____ (73)
- 0 = Completed college and/or graduate school,
 or professional school (law, for example)
- 1 = Completed high school and some college or
 vocational training school or business
 school (such as secretarial or computer
 programming schools)
- 2 = Completed high school
- 3
- 4 = Completed eight grade
- 5
- 6 = Did not get beyond fifth grade
- 9 = II
106. Adaptation to school during adolescence _____ (75)
 (ages 12-18)
- 0 = Good adaptation, enjoys school, no or rare
 discipline problems, has friends at school,
 likes most teachers
- 1 = Fair adaptation, occasional discipline
 problem, not very interested in school, but
 no truancy, or rare. Has friends in school,
 but does not often take part in extra-
 curricular activities
- 2 = Poor adaptation, dislikes school, frequent
 truancy, frequent discipline problem
- 3 = Refuses to have anything to do with school--
 delinquency or vandalism directed against
 school
- 9 = II

107. Any history of learning disability? _____ (76)
 (1 = No; 2 = Suspected; 3 = Yes; 9 = II)

Subject Number: _____ (78-80)
 Card Number: 0 6 (1- 2)

EMPLOYMENT/FINANCES

109. Stable employment history? _____ (5)
 1 = Yes; has held any job for 2 years or more
 2 = No; does not meet criterion above
 9 = II

112. Was subject experiencing financial problems
 at time of crime? (1 = No; 2 = Yes; 9 = II) _____ (8)

MEDICAL/PSYCHIATRIC HISTORY

113. Any prior psychiatric hospitalizations? _____ (10)
 (1 = No; 2 = Yes)

Past psychiatric diagnoses (items '15-118 below)
 0 = absent
 1 = present

115. Sex deviance _____ (12)

116. Psychosis _____ (13)

117. Character disorder _____ (14)

118. Mental retardation _____ (15)

121. Any history of chronic health problems? _____ (18)
 (1 = no; 2 = yes)
 If yes, specify: _____

SOCIAL/SEXUAL HISTORY

123. Marital status at time of offense _____ (20)
 1 = Married
 2 = Widowed
 3 = Separated
 4 = Divorced
 5 = Never married
 9 = II

124. Any history of homosexual activity? _____ (21)
 (1 = No; 2 = Yes; 9 = II)

Phillips Scale

Circle appropriate scores below, and enter values at end of section (items 125-130)

A. Recent Sexual Adjustment

1. Stable heterosexual relation and marriage 0
2. Continued heterosexual relation and marriage but unable to establish home 1
3. Continued heterosexual relation and marriage broken by permanent separation 2
4. a. Continued heterosexual relation and marriage but with low sexual drive 3
- b. Continued heterosexual relation with deep emotional meaning but emotionally unable to develop it into marriage 3
5. a. Casual but continued heterosexual relations, i.e., "affairs" but nothing more 4
- b. Homosexual contacts with lack of or chronic failure in heterosexual experiences 4
6. a. Occasional casual heterosexual or homosexual experience with no deep emotional bond 5
- b. Solitary masturbation with no active attempt at homosexual or heterosexual experiences 5
7. No sexual interest in either men or women 6

B. Social Aspects of Sexual Life During Adolescence and Immediately Beyond

1. Always showed a healthy interest in girls with a steady girlfriend during adolescence 0
2. Started taking girls out regularly in adolescence 1
3. Always mixed closely with boys and girls 2
4. Consistent deep interest in male attachment with restricted or no interest in girls 3
5. a. Casual male attachments with inadequate attempts at adjustment to going out with girls 4
- b. Casual contacts with boys and girls 4
6. a. Casual contacts with boys with lack of interest in girls 5
- b. Occasional contact with girls 5

7. No desire to be with boys or girls;
never went out with girls 6
- C. Social Aspects of Recent Sexual Life: 30 years
of age or above
1. Married and has children, living
as a family unit 0
 2. Married and has children but unable
maintain or establish a family home 1
 3. Has been married and had children but
permanently separated 2
 4. a. Married but considerable marital
discord 3
 - b. Single but has had engagement or
 deep heterosexual relationship but
 emotionally unable to carry it
 through to marriage 3
 5. Single with short engagements or
relationships with women which do not
appear to have much emotional depth
for both partners, i.e., "affairs" 4
 6. a. Single, has gone out with a few
 girls but without other indications
 of a continuous interest in women 5
 - b. Single, consistent deep interest in
 male attachments, no interest in
 women 5
 7. a. Single, occasional male contacts,
 no interest in women 6
 - b. Single, interested in neither men
 nor women 6
- D. Social Aspects of Recent Sexual Life: Below
30 Years of Age
1. Married, living as a family unit with
or without children 0
 2. a. Married, with or without children,
 but unable to establish or maintain
 a family home 1
 - b. Single, but engaged or in a deep
 heterosexual relationship (presum-
 ably leading toward marriage) 1
 3. Single, has had engagement or deep
heterosexual relationship but has been
emotionally unable to carry it through
to marriage 2
 4. Single, consistent deep interest in
male attachment, with restricted or
lack of interest in girls 3
 5. Single, casual male relationships with
restricted or lack of interest in
women 4

- 6. Single, has gone out with a few girls casually but without indications of a continuous interest in women 5
 - 7. a. Single, never interested in or never associated with women or men 6
 - b. Antisocial 6
- E. Personal Relations: History
- 1. Always had a number of close friends but did not habitually play a leading role . . . 1
 - 2. From adolescence on had a few close friends 3
 - 3. From adolescence on had a few casual friends 3
 - 4. From adolescence on stopped having friends 4
 - 5. a. No intimate friends after childhood 5
 - b. Casual but never any deep intimate mutual friendships 5
 - 6. Never worried about boys or girls; no desire to be with boys and girls 6
- F. Recent Premorbid Adjustment in Personal Relations
- 1. Habitually mixed with others, but not a leader 1
 - 2. Mixed only with a close friend or group of friends 3
 - 3. No close friends; very few friends, had friends but never quite accepted by them . . 4
 - 4. Quiet; aloof; seclusive; preferred to be by self 5
 - 5. Antisocial 6

Phillips Scores
(leave missing items blank)

125.	A	_____	(22)
126.	B	_____	(23)
127.	C/D	_____	(24)
128.	E	_____	(25)
129.	F	_____	(26)

130. Sum A-F _____ (27-28)
(leave blank if more than 2 subscores missing)

Diagnosis _____ (70-74)

Rater _____ (76)

1 = FR
2 = CS

Subject Number: _____ (78-80)

APPENDIX D

GUIDELINES FOR COMPLETING PSI RATING SCALES

MATCHING VARIABLES

Complete items 1 and 7-9 ("see project records")
after the entire PSI has been rated.

PRESENT OFFENSE

Description

Item 12 (number of counts): Sex offenses only.

Example: Rape + kidnapping = 1 count.

Victim Characteristics

Be sure to attend to only those offenses that correspond to the crimes listed on the face sheet. Sometimes other suspected offenses are described, or pending charges are elaborated. Sometimes information is included about charges that have been dropped. We are interested only in what happened during the offender's contact with the victims of those offenses for which he has been convicted and which form the basis for the PSI you are rating, that is, those offenses listed on the face sheet.

Ordering of victims: This is arbitrary. It is important, however, to be consistent. For example, all the data attributed to "Victim 1" should refer to the same person. It may be convenient to order the victims by count number, i.e., "Victim 1" would be the victim of "Count 1". (Keep in mind that several different counts or offenses may be committed during contact with the same victim.)

Items 26-28 (Degree of resistance): Rate according to victim's account. If unavailable, rate according to offender's account.

Offense Characteristics

If multiple victims, refer only to the material pertaining to the subject's interactions with the victim(s) of the sex offense conviction(s).

Example: If two victims were abducted at the same time and the crimes involved resulted in convictions on two counts of robbery, two counts of kidnapping, one count of sexual assault, and one count of battery, you need

to examine the crime descriptions and ascertain to which victim the sex conviction refers. Then rate this section with reference to all of the subject's interactions with this victim, including the robbery if it occurred during a span of time continuous with the sex offense. (E.g., do not include the behaviors involved in the robbery if the two offenses occurred on separate days, or if the offender returned to commit the sex offense several hours after the robbery.)

When other offenses are committed during the course of the sex offense and the resultant ratings would be discrepant, take the rating that pertains to the sex offense only.

Example: Location of crime (items 29-31) - Victim was robbed in her home, where no sexual behaviors occurred, after which she was driven to a forest preserve, where she was sexually assaulted. Rate "4", secluded area. Exception: Aggressive behaviors involved (items 36-40) - Score as "present" those behaviors that occurred at any time during the entire episode of contact that you are rating. In the above example, if the subject was threatened with injury during the robbery but no threats were verbalized at the scene of the sex offense, rate "threat of force or injury" (item 35) as "present."

Items 29-31 (Location of crime): If subject and victim reside in the same home, and offense occurred in that home, rate as "1" (subject's home).

Item 32 (Physical touching): Implied if either items 33 (oral-genital contact) or 34 (penetration) are attempted or present.

FAMILY INFORMATION

Items 81-83 refer to natural parents.

Item 88: Exclude alcohol or drug abuse, mental retardation.

Items 89-92 refer to full or half-siblings. If none, leave blank.

MEDICAL/PSYCHIATRIC HISTORY

Items 115-117: Leave blank if history of mental illness is present, but no diagnosis can be ascertained.

SOCIAL/SEXUAL HISTORY

Items 125-129 (Phillips Scale): Leave blank only if the area is not covered in the PSI. Otherwise, give best rating possible; assume no problem if none are mentioned.

Item 130 (Sum A-F): Rate as "99" (II) if more than two of items 125-129 are blank. If only one or two of items 125-129 are missing, follow this formula to compute the value to be entered for item 130:

$$\frac{\text{Sum of items completed} + (\text{Average of items completed} \times \text{Number of items missing})}{\text{Sum A-F}}$$

APPENDIX E

F. Rattenbury, M.A. and M. Kaye, Ph.D. (Adapted from Clinard & Quinney, 1967)

1. Public order crimes: Crimes against public order. Many public order crimes do not involve real injury to another person. They may disturb the community, as in the case of prostitution, or they may be injurious to the individual, as in drunkenness.

Included here are traffic violations, drunkenness, vagrancy, disorderly conduct, prostitution, homosexuality, gambling, contributing to the delinquency of a minor.

2. Property crimes: Crimes that are in violation of the values of private property. Exclude robbery, which should be considered a personal crime.

Included here are burglary, larceny, auto theft, shoplifting, check forgery, vandalism.

3. Personal crimes: Crimes that involve violence, threatened violence, or the use of physical force.

Included here are kidnapping, robbery, rape, murder, attempted murder, assault.

APPENDIX F

Social Position

The social position rating is based on the occupational and educational standings of the head of household when the subject was 18 years old.* The father (or father figure, e.g. step-father or foster father) is usually the primary basis for the rating, but mother's social position may be used if information on the father is unavailable. Mother's social position is definitely the basis for rating if she was the sole head of household.

To calculate the social position raw score, the score for occupation is multiplied by 7, and the score for education is multiplied by 4. These weighted scores are summed for a total raw score:

<u>Factor</u>	<u>Scale Score</u>	X	<u>Factor Weight</u>	=	<u>Score X Weight</u>
Occupation	_____		7		_____
Education	_____		4		_____
TOTAL RAW SCORE					= _____

The raw scores range from a low of 11 to a high of 77. Based on this total score, Hollingshead and Redlich scale social class as follows:

<u>SCALED SCORE</u>	<u>RANGE OF RAW SCORES</u>
1	11 - 17
2	18 - 27
3	28 - 43
4	44 - 60
5	61 - 77

* If, at age 18, subject was:

- a) In military service - Rate head of most recent household before enlistment.
- b) In correctional institution or hospital - Rate head of most recent household before admission.
- c) In household of only recent membership (6 months or less) - Rate head of most recent household in which subject resided for at least one year.
- d) In an orphanage or other institution for homeless individuals, and had not resided in a conventional household since age 12 - Do not score for social position. Leave items blank.

APPENDIX G

5.3 - NATIONAL CRIME INFORMATION CENTER
UNIFORM OFFENSE CLASSIFICATIONS

SOVEREIGNTY

Treason -	0101
Treason Misprision -	0102
Espionage -	0103
Sabotage -	0104
Sedition -	0105
Selective Service -	0106
(free text)	0199

MILITARY

Desertion -	0201
(free text)	0299

IMMIGRATION

Illegal Entry -	0301
False Citizenship -	0302
Smuggling Aliens -	0303
(free text)	0399

HOMICIDE

Homicide-Wilful Kill-Family-Gun -	0901
Homicide-Wilful Kill-Family - (Identify weapon)	0902
Homicide-Wilful Kill-Nonfamily-Gun -	0903
Homicide-Wilful Kill-Nonfamily - (Identify weapon)	0904
Homicide-Wilful Kill-Pub Off-Gun -	0905
Homicide-Wilful Kill-Pub Off - (Identify weapon)	0906
Homicide-Wilful Kill-Pol Off-Gun -	0907
Homicide-Wilful Kill-Pol Off - (Identify weapon)	0908
Homicide-Wilful Kill-Manel-Veh -	0909
Homicide-Neglig Manel - (Identify weapon)	0910
Homicide-Wilful Kill-Gun -	0911
Homicide-Wilful Kill - (Identify weapon)	0912
Homicide - (free text)	0999

KIDNAPPING

Kidnap Minor For Ransom -	1001
Kidnap Adult For Ransom -	1002
Kidnap Minor To Sexually Asslt -	1003
Kidnap Adult To Sexually Asslt -	1004
Kidnap Minor -	1005
Kidnap Adult -	1006
Kidnap Hostage For Escape -	1007
Abduct- No Ransom Or Asslt -	1008
Kidnap-Hijack Aircraft -	1009
Kidnap - (free text)	1099

SEXUAL ASSAULT

Rape-Gun -	1101
Rape With - (Identify weapon)	1102
Rape-Strngarm -	1103
Sex Asslt-Sodomy-Boy-Gun -	1104
Sex Asslt-Sodomy-Man-Gun -	1105
Sex Asslt-Sodomy-Girl-Gun -	1106
Sex Asslt-Sodomy-Woman-Gun -	1107
Sex Asslt-Sodomy-Boy - (Identify weapon)	1108

SEXUAL ASSAULT (continued)

Sex Asslt-Sodomy-Man - (Identify weapon)	1109
Sex Asslt-Sodomy-Girl - (Identify weapon)	1110
Sex Asslt-Sodomy-Woman - (Identify weapon)	1111
Sex Asslt-Sodomy-Boy-Sgarm -	1112
Sex Asslt-Sodomy-Man-Sgarm -	1113
Sex Asslt-Sodomy-Girl-Sgarm -	1114
Sex Asslt-Sodomy-Woman-Sgarm -	1115
Sex Rape-No Force -	1116
Sex Asslt-Carnal Abuse -	1117
Sex Asslt - (free text)	1199

ROBBERY

Robbery-Business-Gun -	1201
Robbery-Business - (Identify weapon)	1202
Robbery-Business-Sgarm -	1203
Robbery-Street-Gun -	1204
Robbery-Street - (Identify weapon)	1205
Robbery-Street-Sgarm -	1206
Robbery-Resid-Gun -	1207
Robbery-Resid - (Identify weapon)	1208
Robbery-Resid-Sgarm -	1209
Forcible Purse Snatching -	1210
Robbery-Banking-Type Inst -	1211
Robbery - (free text)	1299

ASSAULT

Aggrav Asslt-Family-Gun -	1301
Aggrav Asslt-Family - (Identify weapon)	1302
Aggrav Asslt-Family-Sgarm -	1303
Aggrav Asslt-Nonfamily-Gun -	1304
Aggrav Asslt-Nonfamily - (Identify weapon)	1305
Aggrav Asslt-Nonfamily-Sgarm -	1306
Aggrav Asslt-Pub Off-Gun -	1307
Aggrav Asslt-Pub Off - (Identify weapon)	1308
Aggrav Asslt-Pub Off-Sgarm -	1309
Aggrav Asslt-Pol Off-Gun -	1310
Aggrav Asslt-Pol Off - (Identify weapon)	1311
Aggrav Asslt-Pol Off-Sgarm -	1312
Simple Asslt -	1313
Aggrav Asslt-Gun -	1314
Aggrav Asslt - (Identify weapon)	1315
Intimidation -	1316
Asslt - (free text)	1399

ABORTION

Abortional Act On Other -	1401
Abortional Act On Self -	1402
Submission To Abortional Act -	1403
Abortifacient - (selling, mfg., delivering, etc.)	1404
Abortion - (free text)	1499

ARSON

Arson-Business-Endangered Life -	2001
Arson-Resid-Endangered Life -	2002
Arson-Business-Defraud Insurer -	2003
Arson-Resid-Defraud Insurer -	2004
Arson-Business -	2005
Arson-Resid -	2006
Burning Of -	2007

DANGEROUS DRUGS (continued)

Heroin-Sell -	3510
Heroin-Smuggl -	3511
Heroin-Possess -	3512
Heroin - (free text)	3513
Opium Or Deriv-Sell -	3520
Opium Or Deriv-Smuggl -	3521
Opium Or Deriv-Possess -	3522
Opium Or Deriv - (free text)	3523
Cocaine-Sell -	3530
Cocaine-Smuggl -	3531
Cocaine-Possess -	3532
Cocaine - (free text)	3533
Synth Narcotic-Sell -	3540
Synth Narcotic-Smuggl -	3541
Synth Narcotic-Possess -	3542
Synth Narcotic - (free text)	3543
Narcotic Equip-Possess -	3550
Marijuana-Sell -	3560
Marijuana-Smuggl -	3561
Marijuana-Possess -	3562
Marijuana-Producing -	3563
Marijuana - (free text)	3564
Amphetamins-Mfr -	3570
Amphetamins-Sell -	3571
Amphetamins-Possess -	3572
Amphetamins - (free text)	3573
Barbiturate-Mfr -	3580
Barbiturate-Sell -	3581
Barbiturate-Possess -	3582
Barbiturate - (free text)	3583
Dangerous Drugs - (free text)	3599

SEX OFFENSES (Not involving sexual assault or commercialized sex)

Sex Offense-Against Child-Fondling -	3601
Homosexual Act With Girl -	3602
Homosexual Act With Boy -	3603
Incest With Minor -	3604
Indecent Exposure -	3605
Bestiality -	3606
Incest With Adult -	3607
Seduction Of Adult -	3608
Homosexual Act With Woman -	3609
Homosexual Act With Man -	3610
Peeping Tom -	3611
Sex Offense - (free text)	3699

OBSCENITY

Obscene Material- Mfr -	3701
Obscene Material-Sell -	3702
Obscene Material-Mailing -	3703
Obscene Material-Possess -	3704
Obscene Material-Distrib -	3705
Obscene Material-Transport -	3706
Obscene Communication -	3707
Obscenity - (free text)	3799

FAMILY OFFENSES

Neglect Family -	3801
Cruelty Toward Child -	3802
Cruelty Toward Wife -	3803
Bigamy -	3804

FAMILY OFFENSES (continued)

Contrib Delinq Minor -	3805
Neglect Child -	3806
Nonpayment Of Alimony -	3807
Nonsupport Of Parent -	3808
Family Offense - (free text)	3899

GAMBLING

Bookmaking -	3901
Card Game-Operating -	3902
Card Game-Playing -	3903
Card Game -	3904
Dice Game-Operating -	3905
Dice Game-Playing -	3906
Dice Game -	3907
Gambling Device-Possess-	3908
Gambling Device-Transport -	3909
Gambling Device-Not Registered -	3910
Gambling Device -	3911
Gambling Goods-Possess-	3912
Gambling Goods-Transport -	3913
Gambling Goods -	3914
Lottery-Operating -	3915
Lottery-Runner -	3916
Lottery-Playing -	3917
Lottery -	3918
Sports Tampering -	3919
Transmit Wager Information -	3920
Establish Gambling Place -	3921
Gambling - (free text)	3922 39 91

COMMERCIALIZED SEXUAL OFFENSES

Keeping House Ill Fame -	4001
Procure For Prostitute - (pimping)	4002
Commercial Sex-Homosexual Prostitution -	4003
Prostitution -	4004
Frequent House Ill Fame -	4005
Trasp Female Interstate For Immoral Purp -	4006
Commercial Sex - (free text)	4099

LIQUOR (Not to include tax and revenue matters or driving under the influence of liquor)

Liquor- Mfr -	4101
Liquor-Sell -	4102
Liquor Transport -	4103
Liquor-Possess -	4104
Misrepresenting Age-Minor -	4105
Liquor - (free text)	4199

DRUNKENNESS

Drunkenness - (free text)	4699
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OBSTRUCTING THE POLICE

Resisting Officer -	4801
Obstruct Criminal Invest -	4802
Making False Report -	4803
Evidence-Destroying -	4804
Witness-Dissuading -	4805

OBSTRUCTING THE POLICE (continued)

Witness-Deceiving -	4806
Refusing To Aid Officer -	4807
Compounding Crime -	4808
Unauth Communication With Prisoner	4809
Illegal Arrest -	4810
Crossing Police Lines -	4811
Failure Report Crime -	4812
Failing To Move On -	4813
Obstruct Police - (free text)	4899

FLIGHT-ESCAPE

Escape - (Identify type institution)	4901
Flight To Avoid-(prosecution, confinement, etc.)	4902
Aiding Prisoner Escape - (Identify type institution)	4903
Harboring - (escapee or fugitive)	4904
Flight-Escape - (free text)	4999

OBSTRUCTING JUDICIARY CONGRESS, LEGISLATURE, OR A COMMISSION

Bail-Secured Bond -	5001
Bail-Personal Recog -	5002
Perjury -	5003
Perjury-Subornation Of -	5004
Contempt Of Court -	5005
Obstructing Justice -	5006
Obstructing Court Order -	5007
Misconduct-Judic Officer -	5008
Contempt Of Congress -	5009
Contempt Of Legislature -	5010
Parole Violation -	5011
Prob Violation -	5012
Condit Release Violation -	5013
Mandatory Release Violation -	5014
Failure To Appear -	5015
Obstruct-(specify Judic. Congr. Legis. Commn) (free text)	5099

BRIBERY

Bribe-Giving -	5101
Bribe-Offering -	5102
Bribe-Receiving -	5103
Bribe - (free text)	5104
Conflict Of Interest -	5105
Gratuity-Giving -	5106
Gratuity-Offering -	5107
Gratuity-Receiving -	5108
Gratuity - (free text)	5109
Kickback-Giving -	5110
Kickback-Offering -	5111
Kickback-Receiving -	5112
Kickback - (free text)	5113
Bribery - (free text)	5199

WEAPON OFFENSES

Altering Identification On-(specify wpn)	5201
Carrying Concealed - (specify weapon)	5202
Carrying Prohibited-(specify weapon)	5203
Explosives-Teaching Use-(specify)	5204
Explosives-Transporting-(specify)	5205
Explosives-Using-(specify)	5206
Incendiary Device-Possess-(specify)	5207
Incendiary Device-Using-(specify)	5208
Incendiary Device-Teaching Use-(specify)	5209

(Do not use if ARSON)

WEAPON OFFENSES (continued)

Licensing-Registration-(specify wpn)	5210
Explosives-Possessing-(specify)	5211
Possession Of-(specify)	5212
Firing-(specify weapon)	5213
Selling-(specify weapon)	5214
Threat To Bomb-(specify)	5215
Threat To Burn-(specify)	5216
Weapon Offense-(free text)	5299

PUBLIC PEACE

Anarchism -	5301
Riot-Inciting -	5302
Riot-Engaging In -	5303
Riot-Interfere FIREMAN -	5304
Riot-Interfere Officer -	5305
Riot - (free text)	5305
Assembly-Unlawful -	5307
False Fire Alarm -	5308
Harassing Communication -	5309
Desecrating Flag -	5310
Disord Conduct-(specify conduct)	5311
Disturb Peace-(specify conduct)	5312
Curfew -	5313
Lottering -	5314
Public Peace - (free text)	5399

TRAFFIC OFFENSE

Hit And Run -	5401
Transp Dangerous Material -	5402
Driving Under Influence Drugs -	5403
Driving Under Influence Liquor -	5404
Moving Traffic Viol -	5405
Nonmoving Traffic Viol -	5406
Traffic Offense - (free text)	5499

HEALTH-SAFETY

Drugs-Adulterated -	5501
Drugs-Misbranded -	5502
Drugs - (free text)	5503
Food-Adulterated -	5504
Food-Misbranded -	5511
Food-(free text)	5512
Cosmetics-Adulterated -	5520
Cosmetics-Misbranded -	5521
Cosmetics-(free text)	5522
Health-Safety - (free text)	5599

CIVIL RIGHTS

Civil Rights - (free text)	5699
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INVASION OF PRIVACY

Divulge Eavesdrop Info -	5701
Divulge Eavesdrop Order -	5702
Divulge Message Contents -	5703
Eavesdropping - (free text)	5704
Eavesdrop Equip - (free text)	5705
Opening Sealed Communication -	5706
Trespassing-(free text)	5707
Wiretap-Failure To Report -	5708
Invasd Privacy - (free text)	5799

SMUGGLING

Smuggle Contraband-(specify type)	5801
Smuggle Contraband Into Prison-(specify type)	5802

SMUGGLING (continued)

Smuggle To Avoid Paying Duty-(specify type)	5803
Smuggling-(free text to further describe)	5899

ELECTION LAWS

Election Laws - (free text to further describe)	5999
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ANTITRUST

Antitrust - (free text to further describe)	6099
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TAX REVENUE

Income Tax-(further describe)	6101
Sales Tax - (further describe)	6102
Liquor Tax - (further describe)	6103
Tax Revenue - (free text to further describe)	6199

CONSERVATION

Conservation-Animals-(describe offense further)	6201
Conservation-Fish-(describe offense further)	6202
Conservation-Birds-(describe offense further)	6203
Conservation-License-Stamp-(describe offense)	6204
Conservation-Environment-(describe offense)	6205
Conservation - (free text)	6299

VAGRANCY

Vagrancy - (free text to describe further)	6399
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CRIMES AGAINST PERSON (free text)	7099
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PROPERTY CRIMES - (free text)	7199
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MORALS-DECENCY CRIMES - (free text)	7299
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PUBLIC ORDER CRIMES (free text)	7399
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APPENDIX H

APPENDIX I

RECIDIVISM WORKSHEET
Coding Key

F. Rattenbury, M.A. and M. Kaye, Ph.D.

Type Crime

- 1 = Public order crimes: Traffic violations only.
- 2 = Other public order crimes, including drunkenness, vagrancy, disorderly conduct, prostitution, homosexuality, gambling.
- 3 = Property crimes, including burglary, larceny, auto theft, shoplifting, check forgery, vandalism.
- 4 = Personal crimes: Sex crimes only.
- 5 = Personal crimes: Murder and attempted murder only.
- 6 = Other personal crimes, including assault and robbery.
- 7 = Other, including occupational crimes (e.g., embezzlement, false advertising) and political crimes (e.g., military draft violations, radicalism).
- 9 = Unknown.

Type Sex

- 1 = Pedophilia
- 2 = Rape
- 3 = Incest
- 4 = Exhibitionism
- 5 = Other
- 9 = Unknown

Physical Sex

- 1 = No physical contact
- 2 = Physical contact
- 9 = Unknown

APPENDIX J

RECIDIVISM SUMMARY

Francine R. Rattenbury, M.A.
Michael Kaye, Ph.D.

Subject Number: _____

Release Date: _____

Months Out: Number of months between release date and 1/1/85,
round up.

Months Out = months

Card Number: 2 7(1- 2)

- I. Number of parole violations (4- 5)
(Number of entries in cols. 6 - 9)
- II. Rearrests
- A. Was subject charged with any new crimes? (8)
1 - No (no entries in col. 25)
2 - Yes (any entries in col. 25)
- B. Was subject charged with any new sex crimes? (9)
1 - No (no entries in col. 26)
2 - Yes (any entries in col. 26)
- III. New convictions - Any crime
- A. Any new convictions? (12)
1 - No
2 - Yes (3 or 4 in col. 15)
- B. Nature of crimes for which subject was reconvicted: See column 25
(Give number of convictions in each category)
- | | | |
|--------------------------------|----------------|-------------|
| Public order - Traffic | (number of 1s) | — — (13-14) |
| Public order - Other | (number of 2s) | — — (15-16) |
| Property | (number of 3s) | — — (17-18) |
| Personal - Sex | (number of 4s) | — — (19-20) |
| Personal - Murder & att murder | (number of 5s) | — — (21-22) |
| Personal - Other | (number of 6s) | — — (23-24) |
| Other | (number of 7s) | — — (25-26) |
| Unknown | (number of 9s) | — — (27-28) |
- IV. New convictions - Sex crimes only
- A. Any new sex convictions? (29)
1 - No ("00" in cols. 19-20 above)
2 - Yes
- B. Nature of sex crimes for which subject was reconvicted: See column 26
(Give number of convictions in each category)
- | | | |
|---------------|----------------|-------------|
| Pedophilia | (number of 1s) | — — (30-31) |
| Rape | (number of 2s) | — — (32-33) |
| Incest | (number of 3s) | — — (34-35) |
| Exhibitionism | (number of 4s) | — — (36-37) |
| Other | (number of 5s) | — — (38-39) |
| Unknown | (number of 9s) | — — (40-41) |

RECIDIVISM SUMMARY

Page 2

- C. Was physical contact involved in commission of any new sex crime? (See col. 27) (Leave blank if no new sex convictions) _____ (42)
 1 = No
 2 = Yes
 9 = Unknown
- V. Number of revocations without new conviction _____ (43-44)
 (Number of "2"s entered in col. 15)
- VI. Reinstitutionalizations
- | | | |
|---|-------|---------|
| A. Number of new jail terms served | _____ | (45-46) |
| B. Duration of new time in jail (in months) | _____ | (47-49) |
| C. Number of new hospital admissions | _____ | (50-51) |
| D. Duration of new time in hospital (in months) | _____ | (52-54) |
| E. Number of new prison terms served | _____ | (55-56) |
| F. Duration of new time in prison (in months) | _____ | (57-59) |
| G. Total number of reinstitutionalizations (A+C+E) | _____ | (60-61) |
| H. Total length of reinstitutionalization (B+D+F) | _____ | (62-64) |
| I. Opportunity to reoffend, in months
(Months Out) - (H) | _____ | (65-67) |
- VII. In an institution 1/1/85? (col. 32) _____ (68)
 1 = No
 2 = Yes, correctional
 3 = Yes, mental health
 9 = Unknown
- VIII. Time Until Recidivism (IN MONTHS; round up)
- | | | |
|---|-------|---------|
| A. Months between release and first conviction.
Any crime; if first conviction is sex crime,
A = B(below).
(Leave blank if a)no reconviictions of any type,
or b)date of first reconviiction is unknown.) | _____ | (69-71) |
| B. Months between release and first sex conviction.
(Leave blank if a)no sex reconviictions, or
b)date of first sex reconviiction is unknown.) | _____ | (72-74) |
| Months Out: | _____ | (75-77) |
| Subject Number: | _____ | (78-80) |

APPROVAL SHEET

The dissertation submitted by Francine R. Rattenbury has been read and approved by the following committee:

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Date

10/1/85

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