Center **F**or **S**ex **O**ffender **M**anagement

Recidivism of Sex Offenders

May 2001

Introduction

The criminal justice system manages most convicted sex offenders with some combination of incarceration, community supervision, and specialized treatment (Knopp, Freeman-Longo, and Stevenson, 1992). While the likelihood and length of incarceration for sex offenders has increased in recent years,[1] the majority are released at some point on probation or parole (either immediately following sentencing or after a period of incarceration in prison or jail). About 60 percent of all sex offenders managed by the U.S. correctional system are under some form of conditional supervision in the community (Greenfeld, 1997).

While any offender's subsequent reoffending is of public concern, the prevention of sexual violence is particularly important, given the irrefutable harm that these offenses cause victims and the fear they generate in the community. With this in mind, practitioners making decisions about how to manage sex offenders must ask themselves the following questions:

- What is the likelihood that a specific offender will commit subsequent sex crimes?
- Under what circumstances is this offender least likely to reoffend?
- What can be done to reduce the likelihood of reoffense?

[1] Since 1980, the number of imprisoned sex offenders has grown by more than 7 percent per year (Greenfeld, 1997). In 1994, nearly one in ten state prisoners were incarcerated for committing a sex offense (Greenfeld, 1997).

The study of recidivism—the commission of a subsequent offense—is important to the criminal justice response to sexual offending. If sex offenders commit a wide variety of offenses, responses from both a public policy and treatment perspective may be no different than is appropriate for the general criminal population (Quinsey, 1984). However, a more specialized response is appropriate if sex offenders tend to commit principally sex offenses.

The purpose of this paper is to examine the critical issues in defining recidivism and provide a synthesis of the current research on the reoffense rates of sex offenders. The following sections summarize and discuss research findings on sex offenders, factors and conditions that appear to be associated with reduced sexual offending, and the implications that these findings have for sex offender management. Although studies on juvenile sex offender response to treatment exist, the vast majority of research has concentrated on adult males. Thus, this paper focuses primarily on adult male sex offenders.

Issues in the Measurement of Sex Offender Recidivism

Research on recidivism can be used to inform intervention strategies with sex offenders. However, the way in which recidivism is measured can have a marked difference in study results and applicability to the day-to-day management of this criminal population. The following section explores variables such as the population(s) of sex offenders studied, the criteria used to

Established in June 1997, CSOM's goal is to enhance public safety by preventing further victimization through improving the management of adult and juvenile sex offenders who are in the community. A collaborative effort of the Office of Justice Programs, the National Institute of Corrections, and the State Justice Institute, CSOM is administered by the Center for Effective Public Policy and the American Probation and Parole Association.

measure recidivism, the types of offenses studied, and the length of time a study follows a sample. Practitioners must understand how these and other study variables can affect conclusions about sex offender recidivism, as well as decisions regarding individual cases.

Defining the Sex Offender Population Studied

Sex offenders are a highly heterogeneous mixture of individuals who have committed violent sexual assaults on strangers, offenders who have had inappropriate sexual contact with family members, individuals who have molested children, and those who have engaged in a wide range of other inappropriate and criminal sexual behaviors. If we group various types of offenders and offenses into an ostensibly homogenous category of "sex offenders," distinctions in the factors related to recidivism will be masked and differential results obtained from studies of reoffense patterns. Thus, one of the first issues to consider in reviewing any study of sex offender recidivism is how "sex offender" is defined; who is included in this category, and, as important, who is not.

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Defining Recidivism

Although there is common acceptance that recidivism is the commission of a subsequent offense, there are many operational definitions for this term. For example, recidivism may occur when there is a new arrest, new conviction, or new commitment to custody. Each of these criteria is a valid measure of recidivism, but each measures something different. While the differences may appear minor, they will lead to widely varied outcomes.

- *Subsequent Arrest*—Using new charges or arrests as the determining criteria for "recidivism" will result in a higher recidivism rate, because many individuals are arrested but for a variety of reasons, are not convicted.
- *Subsequent Conviction*—Measuring new convictions is a more restrictive criterion than new arrests, resulting in a lower recidivism rate. Generally, more confidence is placed in reconviction, since this involves a process through which the individual has been found guilty. However, given the process involved in reporting, prosecution, and conviction in sex offense cases, a number of researchers favor the use of more inclusive criteria (e.g., arrests or charges).
- *Subsequent Incarceration*—Some studies utilize return to prison as the criterion for determining recidivism. There are two ways in which individuals may be returned to a correctional institution. One is through the commission of a new offense and return to prison on a new sentence and the other is through a technical violation of parole. The former is by far the more restrictive criterion, since an offender has to have been found guilty and sentenced to prison. Technical violations typically involve violations of conditions of release, such as being alone with minor children or consuming alcohol. Thus, the use of this definition will result in the inclusion of individuals who may not have committed a subsequent criminal offense as recidivists. When one encounters the use of return to prison as the criterion for recidivism, it is imperative to determine if this includes those with new convictions, technical violations, or both.

Underestimating Recidivism

Reliance on measures of recidivism as reflected through official criminal justice system data obviously omit offenses that are not cleared through an arrest or those that are never reported to the police. This distinction is critical in the measurement of recidivism of sex offenders. For a variety of reasons, sexual assault is a vastly underreported crime. The National Crime Victimization Surveys (Bureau of Justice Statistics) conducted in 1994, 1995, and 1998 indicate that only 32 percent (one out of three) of sexual assaults against persons 12 or older are reported to law enforcement. A three-year longitudinal study (Kilpatrick, Edmunds, and Seymour, 1992) of 4,008 adult women found that 84 percent of respondents who identified themselves as rape victims did not report the crime to authorities. (No current studies indicate the rate of reporting for child sexual assault, although it is generally assumed that these assaults are equally underreported.) Many victims are afraid to report sexual assault to the police. They may fear that reporting will lead to the following:

Several studies support the hypothesis that sexual offense recidivism rates are underreported.

- further victimization by the offender;
- other forms of retribution by the offender or by the offender's friends or family;
- arrest, prosecution, and incarceration of an offender who may be a family member or friend and on whom the victim or others may depend;
- others finding out about the sexual assault (including friends, family members, media, and the public);
- not being believed; and
- being traumatized by the criminal justice system response.

These factors are compounded by the shame and guilt experienced by sexual assault victims, and, for many, a desire to put a tragic experience behind them. Incest victims who have experienced criminal justice involvement are particularly reluctant to report new incest crimes because of the disruption caused to their family. This complex of reasons makes it unlikely that reporting figures will change dramatically in the near future and bring recidivism rates closer to actual reoffense rates.

Several studies support the hypothesis that sexual offense recidivism rates are underreported. Marshall and Barbaree (1990) compared official records of a sample of sex offenders with "unofficial" sources of data. They found that the number of subsequent sex offenses revealed through unofficial sources was 2.4 times higher than the number that was recorded in official reports. In addition, research using information generated through polygraph examinations on a sample of imprisoned sex offenders with fewer than two known victims (on average), found that these offenders actually had an average of 110 victims and 318 offenses (Ahlmeyer, Heil, McKee, and English, 2000). Another polygraph study found a sample of imprisoned sex offenders to have extensive criminal histories, committing sex crimes for an average of 16 years before being caught (Ahlmeyer, English, and Simons, 1999).

Offense Type

For the purpose of their studies, researchers must determine what specific behaviors qualify sex offenders as recidivists. They must decide if only sex offenses will be considered, or if the commission of any crime is sufficient to be classified as a recidivating offense. If recidivism is determined only through the commission of a subsequent sex offense, researchers must consider if this includes felonies and misdemeanors. Answers to these fundamental questions will influence the level of observed recidivism in each study.

Length of Follow-Up

Studies often vary in the length of time they "follow-up" on a group of sex offenders in the community. There are two issues of concern with follow-up periods. Ideally, all individuals in any given study should have the same length of time "at risk"—time at large in the community—and, thus, equal opportunity to commit subsequent offenses. In practice, however, this almost never happens. For instance, in a 10-year follow-up study, some subjects will have been in the community for eight, nine, or 10 years while others may have been out for only two years. This problem is addressed by using survival analysis, a methodology that takes into account the amount of time every subject has been in the community, rather than a simple percentage.

Additionally, when researchers compare results across studies, similar time at risk should be used in each of the studies. Obviously, the longer the follow-up period, the more likely reoffense will occur and a higher rate of recidivism will be observed. Many researchers believe that recidivism studies should ideally include a follow-up period of five years or more.

Effect on Recidivism Outcomes

What are we to make of these caveats regarding recidivism—do they render recidivism a meaningless concept? On the contrary, from a public policy perspective, recidivism is an invaluable measure of the performance of various sanctions and interventions with criminal offenders. However, there is often much ambiguity surrounding what appears to be a simple statement of outcomes regarding recidivism. In comparing the results of various recidivism studies, one should not lose sight of the issues of comparable study samples, criteria for recidivism, the length of the follow-up period, information sources utilized to estimate risk of reoffense, and the likelihood that recidivism rates are underestimated.

Factors Associated with Sex Offender Recidivism

In many instances, policies and procedures for the management of sex offenders have been driven by public outcry over highly publicized sex offenses. However, criminal justice practitioners must avoid reactionary responses that are based on public fear of this population. Instead, they must strive to make management decisions that are based on the careful assessment of the likelihood of recidivism. The identification of risk factors that may be associated with recidivism of sex offenders can aid practitioners in devising management strategies that best protect the community and reduce the likelihood of further victimization.

It is crucial to keep in mind, however, that there are no absolutes or "magic bullets" in the process of identifying these risk factors. Rather, this process is an exercise in isolating factors that *tend* to be associated with specific behaviors. While this association reflects a likelihood, it does not indicate that all individuals who possess certain characteristics will behave in a certain manner. Some sex offenders will inevitably commit subsequent sex offenses, in spite of our best efforts to identify risk factors and institute management and treatment processes aimed at minimizing these conditions. Likewise, not all sex offenders who have reoffense risk characteristics will recidivate.

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This section explores several important aspects in the study of recidivism and identification of risk factors associated with sex offenders' commission of subsequent crimes.

Application of Studies of General Criminal Recidivism

The identification of factors associated with criminal recidivism has been an area of significant research over the past 20 years. This work has fueled the development of countless policies and instruments to guide sentencing and release decisions throughout the criminal justice system. If one assumes that sex offenders are similar to other criminal offenders, then the preponderance of research should assist practitioners in identifying risk factors in this population as well. Gottfredson and Hirschi (1990) argued that there is little specialization among criminal offenders. In this view, robbers also commit burglary and those who commit assaults also may be drug offenders. The extensive research on recidivism among the general criminal population has identified a set of factors that are consistently associated with subsequent criminal behavior. These factors include being young, having an unstable employment history, abusing alcohol and drugs, holding pro-criminal attitudes, and associating with other criminals (Gendreau, Little, and Goggin, 1996).

However, there is some evidence that suggests that sexual offending may differ from other criminal behavior (Hanson and Bussiere, 1998). Although sex offenders may commit other types of offenses, other types of offenders rarely commit sex offenses (Bonta and Hanson, 1995; Hanson, Steffy, and Gauthier, 1995). If this is the case, then a different set of factors may be associated with the recidivism of sex offenders than for the general offender population. This statement is reinforced by the finding that many persistent sex offenders receive low risk scores on instruments designed to predict recidivism among the general offender population (Bonta and Hanson, 1995).

Identification of Static and Dynamic Factors

Characteristics of offenders can be grouped into two general categories. First, there are historical characteristics, such as age, prior offense history, and age at first sex offense arrest or conviction. Because these items typically cannot be altered, they are often referred to as *static* factors. Second are those characteristics, circumstances, and attitudes that can change throughout one's life, generally referred to as *dynamic* factors. Examples of dynamic characteristics include drug or alcohol use, poor attitude (e.g., low remorse and victim blaming), and intimacy problems. The identification of dynamic factors that are associated with reduced recidivism holds particular promise in effectively managing sex offenders because the strengthening of these factors can be encouraged through various supervision and treatment strategies.

Dynamic factors can further be divided into *stable* and *acute* categories (Hanson and Harris, 1998). *Stable dynamic factors* are those characteristics that can change over time, but are relatively lasting qualities. Examples of these characteristics include deviant sexual preferences or alcohol or drug abuse. On the other hand, Hanson and Harris (1998) suggest that *acute dynamic factors* are conditions that can change over a short period of time. Examples include sexual arousal or intoxication that may immediately precede a reoffense.

Understanding Base Rates

Understanding the concept of "base rates" is also essential when studying sex offender recidivism. A base rate is simply the overall rate of recidivism of an entire group of offenders. If the base rate for an entire group is known (e.g., 40 percent), then, without other information, practitioners

would predict that any individual in this group has approximately a 40 percent chance of recidivating. If static or dynamic factors related to recidivism are identified, error rates can be improved and this information can be used to make more accurate assessments of the likelihood of rearrest or reconviction. However, if the base rate is at one extreme or the other, additional information may not significantly improve accuracy. For instance, if the base rate were 10 percent, then practitioners would predict that 90 percent of the individuals in this group would not be arrested for a new crime. The error rate would be difficult to improve, regardless of what additional information may be available about individual offenders. In other words, if we simply predicted that no one would be rearrested, we would be wrong only 10 percent of the time. It is quite difficult to make accurate individual predictions in such extreme situations.

A base rate is simply the overall rate of recidivism of an entire group of offenders.

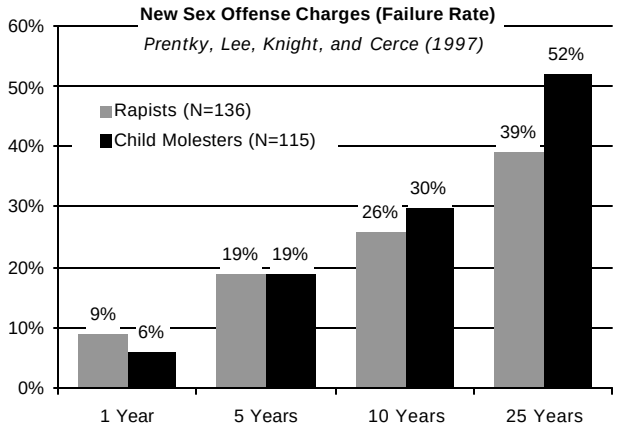
What has come to be termed as "the low base rate problem" has traditionally plagued sex offender recidivism studies (Quinsey, 1980). As noted previously, lack of reporting, or underreporting, is higher in crimes of sexual violence than general criminal violence and may contribute to the low base rate problem. The following studies have found low base rates for sex offender populations:

- Hanson and Bussiere (1998) reported an overall recidivism rate of 13 percent.
- Grumfeld and Noreik (1986) found a 10 percent recidivism rate for rapists.
- Gibbens, Soothill, and Way (1978) reported a 4 percent recidivism rate for incest offenders.

Samples of sex offenders used in some studies may have higher base rates of reoffense than other studies. Quinsey (1984) found this to be the case in his summary of sex offender recidivism studies, as have many other authors who have attempted to synthesize this research. There is wide variation in results, in both the amount of measured recidivism and the factors associated with these outcomes. To a large degree, differences can be explained by variations in the sample of sex offenders involved in the studies. Although this is a simple and somewhat obvious point, this basic fact is "responsible for the disagreements and much of the confusion in the literature" on the recidivism of sex offenders (Quinsey, 1984).

Furthermore, results from some studies indicate that there may be higher base rates among certain categories of sex offenders (Quinsey, Laumiere, Rice, and Harris, 1995; Quinsey, Rice, and Harris, 1995). For example, in their follow-up study of sex offenders released from a psychiatric facility, Quinsey, Rice, and Harris (1995) found that rapists had a considerably higher rate of rearrest/reconviction than did child molesters.

Conversely, Prentky, Lee, Knight, and Cerce (1997) found that over a 25-year period, child molesters had higher rates of reoffense than rapists. In this study, recidivism was operationalized as a failure rate and calculated as the proportion of individuals who were rearrested using survival analysis (which takes into account the amount of time each offender has been at risk in the community). Results show that over longer



periods of time, child molesters have a higher failure rate—thus, a higher rate of rearrest—than rapists (52 percent versus 39 percent over 25 years).

Making Sense of Contradictory Findings

Studies on sex offender recidivism vary widely in the quality and rigor of the research design, the sample of sex offenders and behaviors included in the study, the length of follow-up, and the criteria for success or failure. Due to these and other differences, there is often a perceived lack of consistency across studies of sex offender recidivism. For example, there have been varied results regarding whether the age of the offender at the time of institutional release is associated with subsequent criminal sexual behavior. While Beck and Shipley (1987) found that there was no relationship between these variables, Clark and Crum (1985) and Marshall and Barbaree (1990) suggested that younger offenders were more likely to commit future crimes. However, Grunfeld and Noreik (1986) argued that older sex offenders are more likely to have a more developed fixation and thus are more likely to reoffend. A study by the Delaware Statistical Analysis Center (1984) found that those serving longer periods of incarceration had a lower recidivism rate—while Roundtree, Edwards, and Parker (1984) found just the opposite.

To a large degree, the variation across individual studies can be explained by the differences in study populations. Schwartz and Cellini (1997) indicated that the use of a heterogeneous group of sex offenders in the analysis of recidivism might be responsible for this confusion:

> *"Mixing an antisocial rapist with a socially skilled fixated pedophile with a developmentally disabled exhibitionist may indeed produce a hodgepodge of results."*

Similarly, West, Roy, and Nichols (1978) noted that recidivism rates in studies of sex offenders vary by the characteristics of the offender sample. Such a situation makes the results from follow-up studies of undifferentiated sex offenders difficult to interpret (Quinsey, 1998).

One method of dealing with this problem is to examine recidivism studies of specific types of sex offenders. This approach is warranted, given the established base rate differences across types of sex offenders.[2] Marshall and Barbaree (1990) found in their review of studies that the recidivism rate for specific types of offenders varied:

- Incest offenders ranged between 4 and 10 percent.
- Rapists ranged between 7 and 35 percent.
- Child molesters with female victims ranged between 10 and 29 percent.
- Child molesters with male victims ranged between 13 and 40 percent.
- Exhibitionists ranged between 41 and 71 percent.

In summary, practitioners should recognize several key points related to research studies on sex offender recidivism. First, since sexual offending may differ from other criminal behavior, research specific to sex offender recidivism is needed to inform interventions with sex offenders. Second, researchers seek to identify static and dynamic factors associated with recidivism of sex offenders. In particular, the identification of, and support of, "positive" dynamic factors may help reduce the risk of

[2] Recent research suggests that many offenders have histories of assaulting across genders and age groups, rather than against only one specific victim population. Researchers in a 1999 study (Ahlmeyer, English, and Simons) found that, through polygraph examinations, the number offenders who "crossed over" age groups of victims is extremely high. The study revealed that before polygraph examinations, 6 percent of a sample of incarcerated sex offenders had both child and adult victims, compared to 71 percent after polygraph exams. Thus, caution must be taken in placing sex offenders in exclusive categories.

recidivism. Third, although research studies on recidivism of sex offenders often appear to have contradictory findings, variations in outcomes can typically be explained by the differences in the study populations. Finally, since base rate differences have been identified across types of sex offenses, it makes sense to study recidivism of sex offenders by offense type.

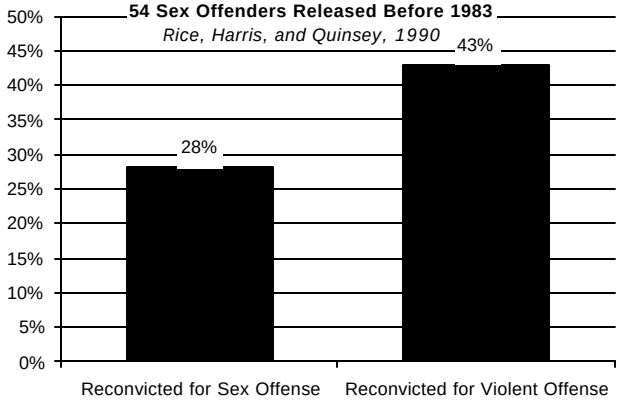
Review of Studies

The following sections present findings from various studies of the recidivism of sex offenders within offense categories of rapists and child molesters.[3] Overall recidivism findings are presented, along with results concerning the factors and characteristics associated with recidivism.

Rapists

There has been considerable research on the recidivism of rapists across various institutional and community-based settings and with varying periods of follow-up. A follow-up study of sex offenders released from a maximum-security psychiatric institution in California found that 10 of the 57 rapists (19 percent) studied were reconvicted of a rape within five years, most of which occurred during the first year of the follow-up period (Sturgeon and Taylor, 1980). These same authors reported that among 68 sex offenders not found to be mentally disordered who were paroled in 1973, 19 (28 percent) were reconvicted for a sex offense within five years.

In a study of 231 sex offenders placed on probation in Philadelphia between 1966 and 1969, 11 percent were rearrested for a sex offense and 57 percent were rearrested for any offense (Romero and Williams, 1985). Rice, Harris, and Quinsey (1990) conducted a more recent study of 54 rapists who were released from prison before 1983. After four years, 28 percent had a reconviction for a sex offense and 43 percent had a conviction for a violent offense.



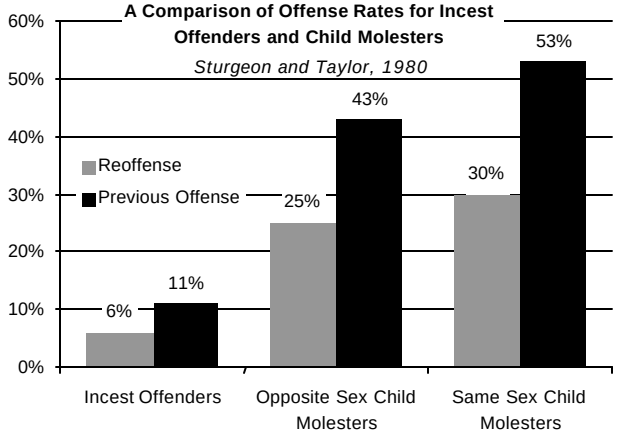
In their summary of the research on the recidivism of rapists, Quinsey, Lalumiere, Rice, and Harris (1995) noted that the significant variation in recidivism across studies of rapists is likely due to differences in the types of offenders involved (e.g., institutionalized offenders, mentally disordered offenders, or probationers) or in the length of the follow-up period. They further noted that throughout these studies, the proportion of offenders who had a prior sex offense was similar to the proportion that had a subsequent sex offense. In addition, the rates of reoffending decreased with the seriousness of the offense. That is, the occurrence of officially recorded recidivism for a nonviolent nonsexual offense was the most likely and the incidence of violent sex offenses was the least likely.

Child Molesters

Studies of the recidivism of child molesters reveal specific patterns of reoffending across victim types and offender characteristics. A study involving mentally disordered sex offenders compared same-sex and opposite-sex child molesters and incest offenders. Results of this five-year

[3] The studies included in this paper do not represent a comprehensive overview of the research on sex offender recidivism. The studies included represent a sampling of available research on these populations and are drawn from to highlight key points.

follow-up study found that same-sex child molesters had the highest rate of previous sex offenses (53 percent), as well as the highest reconviction rate for sex crimes (30 percent). In comparison, 43 percent of opposite-sex child molesters had prior sex offenses and a reconviction rate for sex crimes of 25 percent, and incest offenders had prior convictions at a rate of 11 percent and a reconviction rate of 6 percent (Sturgeon and Taylor, 1980). Interestingly, the recidivism rate for same-sex child molesters for other crimes against persons was also quite high, with 26 percent having reconvictions for these offenses. Similarly, a number of other studies have found that child molesters have relatively high rates of nonsexual offenses (Quinsey, 1984).



Several studies have involved follow-up of extra-familial child molesters. One such study (Barbaree and Marshall, 1988) included both official and unofficial measures of recidivism (reconviction, new charge, or unofficial record). Using both types of measures, researchers found that 43 percent of these offenders (convicted of sex offenses involving victims under the age of 16 years) sexually reoffended within a four-year follow-up period. Those who had a subsequent sex offense differed from those who did not by their use of force in the offense, the number of previous sexual assault victims, and their score on a sexual index that included a phallometric assessment.[4] In contrast to other studies of child molesters, this study found no difference in recidivism between opposite-sex and same-sex offenders.

In a more recent study (Rice, Quinsey, and Harris, 1991), extra-familial child molesters were followed for an average of six years. During that time, 31 percent had a reconviction for a second sexual offense. Those who committed subsequent sex offenses were more likely to have been married, have a personality disorder, and have a more serious sex offense history than those who did not recidivate sexually. In addition, recidivists were more likely to have deviant phallometrically measured sexual preferences (Quinsey, Lalumiere, Rice, and Harris, 1995).

Those who committed subsequent sex offenses were more likely to have been married, have a personality disorder, and have a more serious sex offense history than those who did not recidivate sexually.

In a study utilizing a 24-year follow-up period, victim differences (e.g., gender of the victim) were not found to be associated with the recidivism (defined as those charged with a subsequent sexual offense) of child molesters. This study of 111 extra-familial child molesters found that the number of prior sex offenses and sexual preoccupation with children were related to sex offense recidivism (Prentky, Knight, and Lee, 1997). However, the authors of this study noted that the finding of no victim differences may have been due to the fact that the offenders in this study had an average of three prior sex offenses before their prison release. Thus, this sample may have had a higher base rate of reoffense than child molesters from the general prison population.

[4] Also referred to as plethysmography: a device used to measure sexual arousal (erectile response) to both appropriate (age appropriate and consenting) and deviant sexual stimulus material.

Probationers

Research reviewed to this point has almost exclusively focused upon institutional or prison populations and therefore, presumably a more serious offender population. An important recent study concerns recidivism among a group of sex offenders placed on probation (Kruttschnitt, Uggen, and Shelton, 2000). Although the factors that were related to various types of reoffending were somewhat similar with regard to subsequent sex offenses, the only factor associated with reducing reoffending in this study was the combination of stable employment and sex offender treatment. Such findings emphasize the importance of both formal and informal social controls in holding offenders accountable for their criminal behavior. The findings also provide support for treatment services that focus on coping with inappropriate sexual impulses, fantasies, and behaviors through specific sex offender treatment.

Synthesis of Recidivism Studies

There have been several notable efforts at conducting a qualitative or narrative synthesis of studies of the recidivism of sex offenders (Quinsey, 1984; Furby, Weinrott, and Blackshaw, 1989; Quinsey, Lalumiere, Rice, and Harris, 1995; Schwartz and Cellini, 1997). Such an approach attempts to summarize findings across various studies by comparing results and searching for patterns or trends. Another technique, known as meta-analysis, relies upon a quantitative approach to synthesizing research results from similar studies. Meta-analysis involves a statistically sophisticated approach to estimating the combined effects of various studies that meet certain methodological criteria and is far from a simple lumping together of disparate studies to obtain average effects.

Meta-analyses have certain advantages over more traditional summaries in that through the inclusion of multiple studies, a reliable estimation of effects can be obtained that is generalizable across studies and samples. As noted earlier, the results obtained from individual studies of sex offenders are heavily influenced by the sample of offenders included in the research. Therefore, there is much to be gained through the use of meta-analysis in summarizing sex offender recidivism (see Quinsey, Harris, Rice, and Lalumiere, 1993).

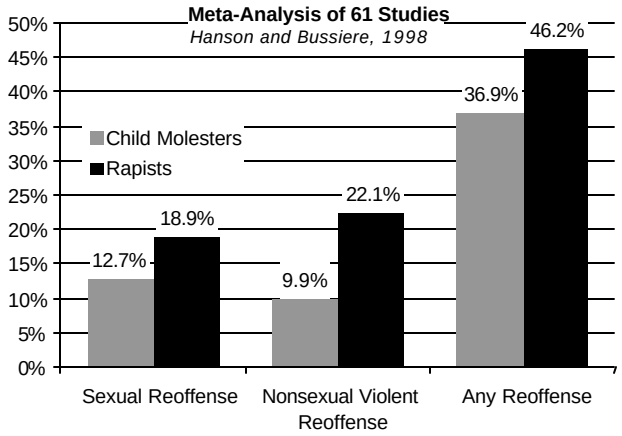
As has also previously been observed, it is imperative to distinguish between sex offense recidivism and the commission of other subsequent criminal behavior, as well as the type of current sex offense. One of the most widely recognized meta-analyses of sexual offender recidivism (Hanson and Bussiere, 1998) was structured around these dimensions.

Meta-Analysis Studies

In Hanson and Bussiere's meta-analysis, 61 research studies met the criteria for inclusion, with all utilizing a longitudinal design and a comparison group. Across all studies, the average sex offense recidivism rate (as evidenced by rearrest or reconviction) was 18.9 percent for rapists and 12.7 percent for child molesters over a four to five year period. The rate of recidivism for nonsexual violent offenses was 22.1 percent for rapists and 9.9 percent for child molesters, while the recidivism rate for any reoffense for rapists was 46.2 percent and 36.9 percent for child molesters over a four to five year period. However, as has been noted previously and as these authors warn, one should be cautious in the interpretation of the data as these studies involved a range of methods and follow-up periods.

Perhaps the greatest advantage of the meta-analysis approach is in determining the relative importance of various factors across

studies. Using this technique, one can estimate how strongly certain offender and offense characteristics are related to recidivism because they show up consistently across different studies.



In the 1998 Hanson and Bussiere study, these characteristics were grouped into demographics, criminal lifestyle, sexual criminal history, sexual deviancy, and various clinical characteristics. Regarding demographics, being young and single were consistently found to be related, albeit weakly, to subsequent sexual offending. With regard to sex offense history, sex offenders were more likely to recidivate if they had prior sex offenses, male victims, victimized strangers or extra-familial victims, begun sexually offending at an early age, and/or engaged in diverse sex crimes.

Sexual interest in children was the strongest predictor of recidivism across all studies.

The factors that were found through this analysis to have the strongest relationship with sexual offense recidivism were those in the sexual deviance category: sexual interest in children, deviant sexual preferences, and sexual interest in boys. Failure to complete treatment was also found to be a moderate predictor of sexual recidivism. Having general psychological problems was not related to sexual offense recidivism, but having a personality disorder was related. Being sexually abused as a child was not related to repeat sexual offending.

Studies that Focus on Dynamic Factors

As noted earlier, the detection of dynamic factors that are associated with sexual offending behavior is significant, because these characteristics can serve as the focus of intervention. However, many recidivism studies (including most of those previously discussed) have focused almost exclusively on static factors, since they are most readily available from case files. Static, or historical, factors help us to understand etiology and permit predictions of relative likelihood of reoffending. Dynamic factors take into account changes over time that adjust static risk and informs us about the types of interventions that are most useful in lowering risk.

In a study focused on dynamic factors, Hanson and Harris (1998) collected data on over 400 sex offenders under community supervision, approximately one-half of whom were recidivists.[5] The recidivists had committed a new sexual offense while on community supervision during a five-year period (1992-1997). A number of significant differences in stable dynamic factors were discovered between recidivists and non-recidivists. Those who committed subsequent sex offenses were more likely to be unemployed (more so for rapists) and have substance abuse problems. The non-recidivists tended to have positive social influences and were more likely to have intimacy problems. There also were considerable attitudinal differences between the recidivists and non-recidivists. Those who committed subsequent sex offenses were less likely to show remorse or concern for the victim. In addition, recidivists tended to see themselves as being at little risk for

[5] For the purposes of this study, recidivism was defined as a conviction or charge for a new sexual offense, a non-sexual criminal charge that appeared to be sexually motivated, a violation of supervision conditions for sexual reasons, and self-disclosure by the offender.

committing new offenses, were less likely to avoid high-risk situations and were more likely to report engaging in deviant sexual activities. In general, the recidivists were described as having more chaotic, antisocial lifestyles compared to the non-recidivists (Hanson and Harris, 1998).

The researchers concluded that sex offenders are:

"…at most risk of reoffending when they become sexually preoccupied, have access to victims, fail to acknowledge their recidivism risk, and show sharp mood increases, particularly anger."

In sum, because meta-analysis findings can be generalized across studies and samples, they offer the most reliable estimation of factors associated with the recidivism of sex offenders. Most meta-analysis studies, however, have focused on static factors. It is critical that more research be conducted to identify dynamic factors associated with sex offender recidivism. These factors will assuredly provide a foundation for developing more effective intervention strategies for sex offenders.

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Characteristics* of recidivists include:

- multiple victims;
- diverse victims;
- stranger victims;
- juvenile sexual offenses;
- multiple paraphilias;
- history of abuse and neglect;
- long-term separations from parents;
- negative relationships with their mothers;
- diagnosed antisocial personality disorder;
- unemployed;
- substance abuse problems; and
- chaotic, antisocial lifestyles.

*It should be noted that these are not necessarily risk factors.

Impact of Interventions on Sex Offender Recidivism

Although not the primary purpose of this document, a few words regarding sex offender treatment and supervision are in order. Factors that are linked to sex offender recidivism are of direct relevance for sex offender management. If the characteristics of offenders most likely to recidivate can be isolated, they can serve to identify those who have the highest likelihood of committing subsequent sex offenses. They can also help identify offender populations that are appropriate for participation in treatment and specialized supervision and what the components of those interventions must include.

Treatment

When assessing the efficacy of sex offender treatment, it is vital to recognize that the delivery of treatment occurs within different settings. Those offenders who receive treatment in a community setting are generally assumed to be a different population than those who are treated in institutions. Thus, base rates of recidivating behavior will differ for these groups prior to treatment participation.

Sex offender treatment typically consists of three principal approaches:

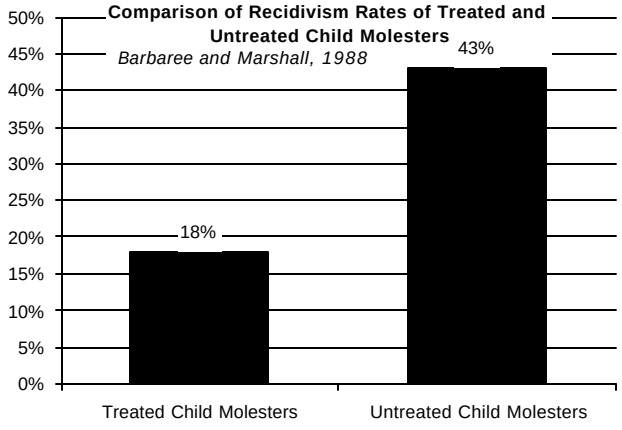
- the *cognitive-behavioral approach*, which emphasizes changing patterns of thinking that are related to sexual offending and changing deviant patterns of arousal;
- the *psycho-educational approach*, which stresses increasing the offender's concern for the victim and recognition of responsibility for their offense; and
- the *pharmacological approach*, which is based upon the use of medication to reduce sexual arousal.

In practice, these approaches are not mutually exclusive and treatment programs

are increasingly utilizing a combination of these techniques.

Although there has been a considerable amount of writing on the relative merits of these approaches and about sex offender treatment in general, there is a paucity of evaluative research regarding treatment outcomes. There have been very few studies of sufficient rigor (e.g., employing an experimental or quasi-experimental design) to compare the effects of various treatment approaches or comparing treated to untreated sex offenders (Quinsey, 1998).

Using less rigorous evaluation strategies, several studies have evaluated the outcomes of offenders receiving sex offender treatment, compared to a group of offenders not receiving treatment. The results of these studies are mixed. For example, Barbaree and Marshall (1988) found a substantial difference in the recidivism rates of extra-familial child molesters who participated in a community based cognitive-behavioral treatment program, compared to a group of similar offenders who did not receive treatment. Those who participated in treatment had a recidivism rate of 18 percent over a four-year follow-up period, compared to a 43 percent recidivism rate for the nonparticipating group of offenders.



However, no positive effect of treatment was found in several other quasi-experiments involving an institutional behavioral program (Rice, Quinsey, and Harris, 1991) or a milieu therapy approach in an institutional setting (Hanson, Steffy, and Gauthier, 1993).

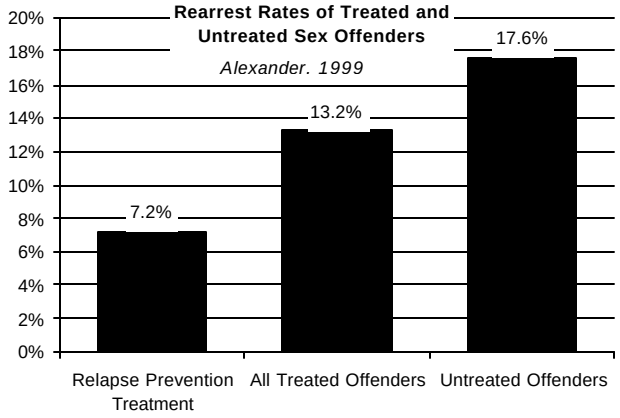
On the other hand, an evaluation of a cognitive-behavioral program that employs an experimental design presented preliminary findings that suggest that participation in this form of treatment may have a modest (though not statistically significant) effect in reducing recidivism. After a follow-up period of 34 months, 8 percent of the offenders in the treatment program had a subsequent sex offense, compared with 13 percent of the control group, who had also volunteered for the program, but were not selected through the random assignment process (Marques, Day, Nelson, and West, 1994).

Some studies present optimistic conclusions about the effectiveness of programs that are empirically based, offense-specific, and comprehensive. A 1995 meta-analysis study on sex offender treatment outcome studies found a small, yet significant, treatment effect (Hall, 1995). This meta-analysis included 12 studies with some form of control group. Despite the small number of subjects (1,313), the results indicated an 8 percent reduction in the recidivism rate for sex offenders in the treatment group.[6]

Recently, Alexander (1999) conducted an analysis of a large group of treatment outcome studies, encompassing nearly 11,000 sex offenders. In this study, data from 79 sex offender treatment studies were combined and reviewed. Results indicated that sex offenders who participated in relapse prevention treatment programs had a combined rearrest rate of 7.2 percent, compared to 17.6 percent for untreated offenders. The overall rearrest rate for

[6] For the purposes of this study, recidivism was measured by additional sexually aggressive behavior, including official legal charges as well as, in some studies, unofficial data such as self-report.

treated sex offenders in this analysis was 13.2 percent.[7]



The Association for the Treatment of Sexual Abusers (ATSA) has established a Collaborative Data Research Project with the goals of defining standards for research on treatment, summarizing existing research, and promoting high quality evaluations. As part of this project, researchers are conducting a meta-analysis of treatment studies. Included in the meta-analysis are studies that compare treatment groups with some form of a control group. Preliminary findings indicate that the overall effect of treatment shows reductions in both sexual recidivism, 10 percent of the treatment subjects to 17 percent of the control group subjects, and general recidivism, 32 percent of the treatment subjects to 51 percent of the control group subjects (Hanson, 2000).[8]

Just as it is difficult to arrive at definitive conclusions regarding factors that are related to sex offender recidivism, there are similarly no definitive results regarding the effect of interventions with these offenders. Sex offender treatment programs and the results of treatment outcome studies may vary not only due to their therapeutic approach, but also by the location of the treatment (e.g., community, prison, or psychiatric facility), the seriousness of the offender's criminal and sex offense history, the degree of self-selection (whether they chose to participate in treatment or were placed in a program), and the dropout rate of offenders from treatment.

Juvenile Treatment Research

Research on juvenile sex offender recidivism is particularly lacking. Some studies have examined the effectiveness of treatment in reducing subsequent sexual offending behavior in youth. Key findings from these studies include the following:

- Program evaluation data suggest that the sexual recidivism rate for juveniles treated in specialized programs ranges from approximately 7 to 13 percent over follow-up periods of two to five years (Becker, 1990).
- Juveniles appear to respond well to cognitive-behavioral and/or relapse prevention treatment, with rearrest rates of approximately 7 percent through follow-up periods of more than five years (Alexander, 1999).
- Studies suggest that rates of nonsexual recidivism are generally higher than sexual recidivism rates, ranging from 25 to 50 percent (Becker, 1990, Kahn and Chambers, 1991, Schram, Milloy, and Rowe, 1991).

In a recently conducted study, Hunter and Figueredo (1999) found that as many as 50 percent of youths entering a community-based treatment program were expelled during the first year of their participation. Those who failed the program had higher overall levels of sexual maladjustment, as measured on assessment instruments, and were at greater long-term risk for sexual recidivism.

Supervision

There has been little research on the effectiveness of community supervision

[7] Length of follow-up in this analysis varied from less than one year to more than five years. Most studies in this analysis indicated a three to five year follow-up period.
[8] Average length of follow-up in these studies was four to five years.

programs (exclusively) in reducing reoffense behavior in sex offenders. The majority of supervision programs for sex offenders involve treatment and other interventions to contain offenders' deviant behaviors. Therefore, it is difficult to measure the effects of supervision alone on reoffending behavior—to date, no such studies have been conducted.

Evaluating the Effects of Interventions

Identification of factors associated with recidivism of sex offenders can play an important role in determining intervention strategies with this population. Yet, the effectiveness of interventions themselves on reducing recidivism must be evaluated if the criminal justice system is to control these offenders and prevent further victimization. However, not only have there been few studies of sufficient rigor on treatment outcomes, less rigorous study results thus far have been mixed. Although one study may find a substantial difference in recidivism rates for offenders who participated in a specific type of treatment, another may find only a modest positive treatment effect, and still other studies may reveal no positive effects. There has been even less research conducted to evaluate the impact of community supervision programs in reducing recidivism. More studies measuring the effects of both treatment and supervision are necessary to truly advance efforts in the field of sex offender management.

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Implications for Sex Offender Management

This paper presented a range of issues that are critical in defining the recidivism of sex offenders. Although there are certainly large gaps in criminal justice knowledge regarding the determinants of recidivism and the characteristics of effective interventions, what is known has significant implications for policy and intervention.

The heterogeneity of sex offenders must be acknowledged. Although sex offenders are often referred to as a "type" of offender, there are a wide variety of behaviors and offender backgrounds that fall into this classification of criminals (Knight and Prentky, 1990). As mentioned earlier, many sex offenders have histories of assaulting across sex and age groups—recent research (Ahlmeyer, Heil, McKee, and English, 2000) found that these offenders may be even more heterogeneous than previously believed.

Criminal justice professionals must continue to expand their understanding of how sex offenders are different from the general criminal population. Although some sex offenders are unique from the general criminal population (e.g., many extrafamilial child molesters), others (e.g., many rapists) possess many of the same characteristics that are associated with recidivism of general criminal behavior. As criminal justice understanding of these offenders and the factors associated with their behavior increases, more refined classification needs to be developed and treatment programs need to be redesigned to accommodate these differences.

Interventions should be based on the growing body of knowledge about sex offender and general criminal recidivism. Research demonstrates that while sex offenders are much more likely to commit subsequent sexual offenses than the general

criminal population, they do not exclusively commit sexual offenses. Therefore, some aspects of intervention with the general criminal population may have implications for effective management of sex offenders. Quinsey (1998) has recommended that in the absence of definitive knowledge about effective sex offender treatment, the best approach would be to structure interventions around what is known about the treatment of offenders in general.

In the realm of interventions with general criminal offenders, there is a growing body of literature that suggests that the cognitive-behavioral approach holds considerable promise.

In the realm of interventions with general criminal offenders, there is a growing body of literature that suggests that the cognitive-behavioral approach holds considerable promise (Gendreau and Andrews, 1990). Cognitive-behavioral treatment involves a comprehensive, structured approach based on sexual learning theory using cognitive restructuring methods and behavioral techniques. Behavioral methods are primarily directed at reducing arousal and increasing pro-social skills. The cognitive behavioral approach employs peer groups and educational classes, and uses a variety of counseling theories. This approach suggests that interventions are most effective when they address the criminogenic needs of high-risk offenders (Andrews, 1982). The characteristics of programs that are more likely to be effective with this population include skill-based training, modeling of pro-social behaviors and attitudes, a directive but non-punitive orientation, a focus on modification of precursors to criminal behavior, and a supervised community component (Quinsey, 1998).

Although these program characteristics may be instructive in forming the basis for interventions with sex offenders, treatment approaches must incorporate what is known about this particular group of offenders. A number of characteristics that are typically associated with the recidivism of sex offenders were identified in this document, including: victim age, gender, and relationship to the offender; impulsive, antisocial behavior; the seriousness of the offense; and the number of previous sex offenses. Also, an influential factor in sex offender recidivism is the nature of the offender's sexual preferences and sexually deviant interests. The discovery and measurement of these interests can serve as a focus for treatment intervention.

Dynamic factors should influence individualized interventions. In addition, dynamic factors associated with recidivism should inform the structure of treatment and supervision, as these are characteristics that can be altered. These factors include the formation of positive relationships with peers, stable employment, avoidance of alcohol and drugs, prevention of depression, reduction of deviant sexual arousal, and increase in appropriate sexual preferences, when they exist.

...dynamic factors associated with recidivism should inform the structure of treatment and supervision...

Interventions that strive to facilitate development of positive dynamic factors in sex offenders are consistent with cognitive-behavioral or social learning approaches to treatment. Such approaches determine interventions based upon an individualized planning process, utilizing standard assessment instruments to determine an appropriate intervention strategy. As Quinsey (1998: 419) noted "with the exception of antiandrogenic medication or castration, this model is currently the only approach that enjoys any evidence of effectiveness in reducing sexual recidivism."

Conclusion

Although there have been many noteworthy research studies on sex offender recidivism in the last 15 to 20 years, there remains much to be learned about the factors associated with the likelihood of reoffense. Ongoing dialogue between researchers and practitioners supervising and treating sex offenders is essential to identifying research needs, gathering information about offenders and the events leading up to offenses, and ensuring that research activity can be translated into strategies to more effectively manage sex offenders in the community. Ultimately, research on sex offender recidivism must be designed and applied to practice with the goals of preventing further victimization and creating safer communities.

Practitioners must continue to look to the most up-to-date research studies on sex offender recidivism to inform their intervention strategies with individual offenders. Researchers can minimize ambiguity in study results by clearly defining measures of recidivism, comparing distinct categories of sex offenders, considering reoffense rates for both sex crimes and all other offenses, and utilizing consistent follow-up periods (preferably five years of follow-up or more). In order to reduce underestimations of the risk of recidivism, they also must strive to gather information about offenders' criminal histories from multiple sources, beyond official criminal justice data. In comparing results of various studies, practitioners should not lose sight of how these issues impact research outcomes.

Researchers must also continue to accumulate evidence about the relationship of static and dynamic factors to recidivism—such data can assist practitioners in making more accurate assessments of the likelihood of reoffending. In particular, researchers must strive to identify dynamic characteristics associated with sex offending behavior that can serve as the focus for intervention. This information can be utilized to categorize the level of risk posed by offenders, and help determine whether a particular offender is appropriate for treatment and specialized supervision. However, in order to make objective and empirically based decisions about the type of treatment and conditions of supervision that would best control the offender and protect the public, more rigorous research is needed to study the effects of various treatment approaches and community supervision on recidivism.

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References

Alexander, M.A. (1999). Sexual offender treatment efficacy revisited. *Sexual Abuse: A Journal of Research and Treatment*, *11 (2)*, 101-117.

Ahlmeyer, S., English, K., & Simons, D. (1999). *The impact of polygraphy on admissions of crossover offending behavior in adult sexual offenders.* Presentation at the Association for the Treatment of Sexual Abusers 18th Annual Research and Treatment Conference, Lake Buena Vista, FL.

Ahlmeyer, S., Heil, P., McKee, B., and English, K. (2000). The impact of polygraphy on admissions of victims and offenses in adult sexual offenders. *Sexual Abuse: A Journal of Research and Treatment, 12 (2),* 123-138.

Andrews, D. A. (1982). *The supervision of offenders: Identifying and gaining control over the factors which make a difference.* Program Branch User Report. Ottawa: Solicitor General of Canada.

Barbaree, H.E. & Marshall, W.L. (1988). Deviant sexual arousal, offense history, and demographic variables as predictors of reoffense among child molesters. *Behavioral Sciences and the Law, 6 (2)*, 267-280.

Beck, A.J. & Shipley, B.E. (1989). *Recidivism of prisoners released in 1983*. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Becker, J.V. (1990). Treating adolescent sexual offenders. *Professional Psychology: Research, and Practice*, *21*, 362-365.

Bonta, J. & Hanson, R.K. (1995). *Violent recidivism of men released from prison.* Paper presented at the 103rd Annual Convention of the American Psychological Association, New York.

Clarke, S.H. & Crum, L. (1985). *Returns to prison in North Carolina*. Chapel Hill, NC: Institute of Government, University of North Carolina.

Delaware Statistical Analysis Center. (1984). *Recidivism in Delaware after release from incarceration.* Dover, DE: Author.

English, K., Pullen, S., & Jones, L. (Eds.) (1996). *Managing adult sex offenders: A containment approach*. Lexington, KY: American Probation and Parole Association.

Furby, L., Weinrott, M.R., & Blackshaw, L. (1989). Sex offender recidivism: A review. *Psychological Bulletin, 105 (1),* 3-30.

Gottfredson, M.R. & Hirschi, T. (1990). *A general theory of crime.* Stanford, CA: Stanford University Press.

Gendreau, P. & Andrews, D.A. (1990). What the meta-analysis of the offender treatment literature tell us about what works. *Canadian Journal of Criminology, 32,* 173-184.

Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult criminal recidivism: What works. *Criminology, 34,* 575-607.

Gibbens, T.C.N., Soothill, K.L., & Way, C.K. (1978). Sibling and parent-child incest offenders. *British Journal of Criminology, 18,* 40-52.

Greenfeld, L.A. (1997). *Sex offenses and offenders: An analysis of data on rape and sexual assault*. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Grunfeld, B. & Noreik, K. (1986). Recidivism among sex offenders: A follow-up study of 541 Norwegian sex offenders. *International Journal of Law and Psychiatry, 9*, 95-102.

Hall, G.C.N. (1995). Sex offender recidivism revisited: A meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology, 63 (5),* 802-809.

Hanson, R.K. (2000). *The effectiveness of treatment for sexual offenders: Report of the Association for the Treatment of Sexual Abusers Collaborative Data Research Committee.* Presentation at the Association for the Treatment of Sexual Abusers 19th Annual Research and Treatment Conference, San Diego, CA.

Hanson, R.K. & Bussiere, M. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology, 66 (2),* 348-362.

Hanson, R.K. & Harris, A. (1998). *Dynamic predictors of sexual recidivism*. Ottawa: Solicitor General of Canada.

Hanson, R.K., Scott, H., & Steffy, R.A. (1995). A comparison of child molesters and nonsexual criminals: Risk predictors and long-term recidivism. *Journal of Research in Crime and Delinquency, 32 (3),* 325-337.

Hanson, R.K., Steffy, R.A., & Gauthier, R. (1993). Long-term recidivism of child molesters. *Journal of Consulting and Criminal Psychology, 61 (4)*, 646-652.

Hunter, J.A. & Figueredo, A.J. (1999). Factors associated with treatment compliance in a population of juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment, 11,* 49-68.

Kahn, T.J. & Chambers, H.J. (1991). Assessing reoffense risk with juvenile sexual offenders. *Child Welfare, 19*, 333-345.

Kilpatrick, D.G., Edmunds, C.N., & Seymour, A. (1992). *Rape in America: A report to the nation.* Washington, D.C.: National Center for Victims of Crime and Crime Victims Research and Treatment Center.

Knight, R.A. & Prentky, R.A. (1990). Classifying sexual offenders: The development and corroboration of taxonomic models. In W.L. Marshall, D.R. Laws, and H.E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 23-52). New York: Plenum.

Knopp, F.A., Freeman-Longo, R., & Stevenson, W.F. (1992). *Nationwide survey of juvenile and adult sex offender treatment programs and models*. Orwell, VT: Safer Society Press.

Kruttschnitt, C., Uggen, C., & Shelton, K. (2000). Predictors of desistance among sex offenders: The interactions of formal and informal social controls. *Justice Quarterly, 17 (1),* 61-87.

Marques, J.K., Day, D.M., Nelson, C., & West, M.A. (1994). Effects of cognitive-behavioral treatment on sex offenders' recidivism: Preliminary results of a longitudinal study. *Criminal Justice and Behavior, 21*, 28-54.

Marshall, W.L. & Barbaree, H.E. (1990). Outcomes of comprehensive cognitive-behavioral treatment programs. In W.L. Marshall, D.R. Laws, and H.E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 363-385). New York: Plenum.

Prentky, R., Knight, R., & Lee, A. (1997). Risk factors associated with recidivism among extra-familial child molesters. *Journal of Consulting and Clinical Psychology, 65 (1)*, 141-149.

Prentky, R., Lee, A., Knight, R., & Cerce, D. (1997). Recidivism rates among child molesters and rapists: A methodological analysis. *Law and Human Behavior, 21,* 635-659.

Quinsey, V.L. (1980). The base-rate problem and the prediction of dangerousness: A reappraisal. *Journal of Psychiatry and the Law, 8*, 329-340.

Quinsey, V.L. (1984). Sexual aggression: Studies of offenders against women. In D.N. Weisstub (Ed.). *Law and Mental Health: International Perspectives* (pp. 140-172), Vol. 2. New York: Pergamon.

Quinsey, V.L. (1998). Treatment of sex offenders. In M. Tonry (Ed.), *The handbook of crime and punishment* (pp. 403-425). New York: Oxford University Press.

Quinsey, V.L., Harris, G.T., Rice, M.E., & Lalumiere, M. (1993). Assessing treatment efficacy in outcome studies of sex offenders. *Journal of Interpersonal Violence, 8*, 512-523.

Quinsey, V.L., Lalumiere, M.L., Rice, M.E., & Harris, G.T. (1995). Predicting sexual offenses. In J.C. Campbell (Ed.), *Assessing dangerousness: Violence by sexual offenders, batterers, and child abusers* (pp. 114-137). Thousand Oaks, CA: Sage.

Quinsey, V.L., Rice, M.E., & Harris, G.T. (1995). Actuarial prediction of sexual recidivism. *Journal of Interpersonal Violence, 10 (1)*, 85-105.

Rice, M.E., Harris, G.T., & Quinsey, V.L. (1990). A follow-up of rapists assessed in a maximum security psychiatric facility. *Journal of Interpersonal Violence, 5 (4)*, 435-448.

Rice, M.E., Quinsey, V.L., & Harris, G.T. (1991). Sexual recidivism among child molesters released from a maximum security institution. *Journal of Consulting and Clinical Psychology, 59,* 381-386.

Romero, J. & Williams, L. (1985). Recidivism among convicted sex offenders: A 10-year follow-up study. *Federal Probation, 49,* 58-64.

Roundtree, G.A., Edwards, D.W., & Parker, J.B. (1984). A study of personal characteristics of probationers as related to recidivism. *Journal of Offender Counseling, 8,* 53-61.

Schram, D.D., Milloy, C.D., & Rowe, W.E. (1991). *Juvenile sex offenders: A follow-up study of reoffense behavior*. Olympia, WA: Washington State Institute for Public Policy.

Schwartz, B.K. & Cellini, H.R. (1997). *Sex offender recidivism and risk factors in the involuntary commitment process.* Albuquerque, NM: Training and Research Institute Inc.

Sturgeon, V.H. & Taylor, J. (1980). Report of a five-year follow-up study of mentally disordered sex offenders released from Atascadero State Hospital in 1973. *Criminal Justice Journal, 4*, 31-63.

West, D.J., Roy, C., & Nichols, F.L. (1978). *Understanding sexual attacks: A study based upon a group of rapists undergoing psychotherapy*. London: Heinemann.

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